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May 31, 2017

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. E017/M-16-276; Docket No. E017/M-17-256

Dear Mr. Wolf:

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

 Otter Tail Power Company's 2015/2016 Annual Safety, Reliability and Service Quality Reports and Proposed SAIFI, SAIDI and CAIDI Reliability Standards for 2017.

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

 Jessica Fyhrie
 Supervisor, Regulatory Proceedings
 Otter Tail Power Company
 215 South Cascade Street
 PO Box 496
 Fergus Falls, Minnesota 56538-0496

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

 Jessica Fyhrie
 Supervisor, Regulatory Proceedings
 Otter Tail Power Company
 215 South Cascade Street
 PO Box 496
 Fergus Falls, Minnesota 56538-0496

The Department recommends that the Commission **accept** Otter Tail Power's (OTP) reports and set OTP's 2017 SAIFI, SAIDI and CAIDI goals at the 2013 levels until the Company demonstrates further improvement in meeting its performance goals.

Sincerely,

/s/ DANIEL W. BECKETT
Rates Analyst

DWB/ja
Attachment

BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

**COMMENTS OF THE
MINNESOTA DEPARTMENT OF COMMERCE
DIVISION OF ENERGY RESOURCES**

Docket No. E017/M-16-276

Docket No. E017/M-17-256

I. BACKGROUND

Minnesota Rules, Chapter 7826 (effective January 28, 2003) 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:

- (1) the annual safety report (Minnesota Rules, part 7826.0400),
- (2) the annual reliability report (Minnesota Rules, parts 7826.0500, subp. 1 and 7826.0600, subp. 1), and
- (3) 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. E017/M-14-279 froze Otter Tail Power Company’s (OTP or the Company) goals at the 2013 levels, and required the Company to:

1. Include in its next filing a description of the policies, procedures and actions the Company has implemented, and plans to implement, to ensure reliability, including information demonstrating proactive management of the system as a whole, increased reliability and active contingency planning.
2. Include in 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.
3. Include in its next filing a report on the major causes of outages for major event days.

On April 1, 2015, OTP filed a petition (2015 Annual Report) in Docket No. E017/M-15-322 to comply with the Commission’s December 12, 2014 Order and the requirements of Minnesota Rules Chapter 7826.

In its August 14, 2015 Order, the Commission accepted OTP’s 2015 Annual Report and again set the Company’s SAIDI, SAIFI and CAIDI goals at the 2013 levels.

II. SUMMARY OF REPORT AND DEPARTMENT ANALYSIS

The Minnesota Department of Commerce, Division of Energy Resources (Department) reviewed OTP’s 2015 and 2016 Annual Reports to assess compliance with Minnesota Rules, Chapter 7826 and the Commission’s December 12, 2014 Order. The Department used information from past annual reports to facilitate identification of issues and trends regarding OTP’s performance.

A. ANNUAL SAFETY REPORT

The annual safety report consists of two parts:

- 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.

The following tables are a compilation of OTP’s summaries of the reports the Company filed with OSHA and OSHD for the previous 11 years.

Table 1: Number of Cases

	Number of Deaths	Number of Cases with Days Away from Work	Number of Cases with Job Transfer or Restriction	Other Recordable Cases
2006	0	3	0	22
2007	0	6	0	17
2008	0	0	2	12
2009	0	2	0	15
2010	0	4	0	23
2011	0	3	1	15
2012	0	1	7	11
2013	0	3	4	6
2014	0	2	2	16
2015	0	3	7	17
2016	0	3	1	8

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Analyst assigned: Daniel W. Beckett

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Table 2: Number of Days

	Days of Job Transfer or Restriction	Days Away from Work
2006	0	12
2007	0	83
2008	25	0
2009	0	14
2010	0	98
2011	6	39
2012	6	39
2013	147	15
2014	48	14
2015	349	90
2016	240	10

Table 3: Injury & Illness Types

	Injuries	Skin Disorders	Respiratory Conditions	Poisonings	All Other Illnesses
2006	24	0	0	0	0
2007	21	0	0	0	0
2008	14	0	0	0	0
2009	16	0	0	0	1
2010	20	0	0	2	1
2011	18	1	0	0	0
2012	19	0	0	0	0
2013	13	0	0	0	0
2014	20	0	0	0	0
2015	23	0	0	0	1
2016	12	0	0	0	0

In each report since the inception of Minnesota Rules, Chapter 7826 reporting requirements, OTP has reported that no incidents in which an injury requiring medical attention due to system failure have occurred.

The following table summarizes OTP's most recent and past reports regarding property damage claims that occurred as a result of downed wires or other electrical system failures.

Table 4: Property Damage Claims

	Claims	Cause	Total Amount Paid
2004	3	failed/damaged cable	information not provided
2005	1	failed insulator	information not provided
2006	4	faulty cable	information not provided
2007	1	low clearance	\$1,203.63
2008	3	equipment failure (2) pole fire/tree (1)	\$6,560.59
2009	4	truck pulled line down (2) underground cable failure overhead wire failure	\$7,058.34
2010	1	Farm implement pulled overhead service down	\$220.00
2011	0	N/A	N/A
2012	0	N/A	N/A
2013	1	Downed Power Lines	\$632.97
2014	5	Bad Connection, wrong voltage, bad cable, power surge (2)	\$9,383.44
2015	2	Bad connection; voltage fluctuations	\$1,552.70
2016	1	Faulty secondary wire	\$277.50

The Department acknowledges OTP's fulfillment of the requirements of Minnesota Rules, part 7826.0400.

B. ANNUAL RELIABILITY REPORT

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

1. reliability performance,
2. storm-normalization method,
3. action plan for remedying any failure to comply with the reliability standards,
4. bulk power supply interruptions,
5. major service interruptions,
6. circuit interruption data (identify worst performing circuit),
7. known instances in which nominal electric service voltages did not meet American National Standards Institute (ANSI) standards,
8. work center staffing levels, and
9. any other relevant information.

1. Reliability Performance

OTP's assigned service territory consists of six work centers. The following table shows the Company's 2015 and 2016 reliability performance compared with the goals set by the Commission in Docket No. E017/M-15-322.¹

¹ For ease of reference, the Department attaches to these comments Minnesota Rules chapter 7826. Minnesota Rules, part 7826.0200 defines SAIDI, SAIFI and CAIDI. The Department notes that SAIDI = SAIFI * CAIDI.

Table 5: OTP's 2015/2016 Reliability Performance Compared with Goals

Work Center		2015 Performance	2015 Goals	2016 Performance	2016 Goals
Bemidji	SAIDI	74.10	70.64	46	70.64
	SAIFI	0.71	1.26	0.97	1.26
	CAIDI	104.10	56.06	47.60	56.06
Crookston	SAIDI	52.20	69.33	88.60	69.33
	SAIFI	1.10	1.19	1.62	1.19
	CAIDI	48.90	58.26	54.53	58.26
Fergus Falls	SAIDI	34.70	66.97	51.30	66.97
	SAIFI	0.61	1.11	0.98	1.11
	CAIDI	56.50	60.33	52.50	60.33
Milbank	SAIDI	66	75.49	320	75.49
	SAIFI	1.30	1.82	2.18	1.82
	CAIDI	51	41.48	146.74	41.48
Morris	SAIDI	52.10	55.78	99.80	55.78
	SAIFI	0.85	1.01	1.30	1.01
	CAIDI	61.30	55.23	77.10	55.23
Wahpeton	SAIDI	179.40	57.24	129.21	57.24
	SAIFI	2.26	1.13	2.33	1.13
	CAIDI	79.40	50.65	55.52	50.65
All MN Customers	SAIDI	53.30	64.95	72.80	64.95
	SAIFI	0.80	1.13	1.20	1.13
	CAIDI	66.70	57.48	60.20	57.48

Shaded cells in Table 5 indicate reliability goals that were not met in 2015 and 2016. See Section II.B.3 below for a discussion of OTP's 2015 and 2016 reliability performance.

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

2. Storm-Normalization Method

OTP calculated its 2015 and 2016 SAIDI, SAIFI, and CAIDI indices using the IEEE 2.5 beta method for storm normalization. OTP reported that under the IEEE 2.5 beta method, no storms met the criteria to be excluded as a major event day in 2015, but there were three days that met the criteria in 2016. The Company provided the following details about those three days:

On July 21, 2016, high-intensity storms with winds reaching 105 mph struck the northeast region of Otter Tail Power Company's Minnesota service area. This storm system caused significant damage to the company's electrical equipment in the Bemidji area. Restoration efforts were complex. Otter Tail had roughly 60 employees deployed for the restoration efforts, including lineman [sic], technicians and supervisory personnel in an area that typically employs sixteen linemen. Additionally, there were 50-100 employees who supported the repair work, including material handlers, line switching efforts,

customer interface employees, and repair trucks, to name a few. Otter Tail had the assistance of 5 tree removal crews, providing about 18 personnel. We noted 300 customer requests for downed trees, thousands of topped or cut down trees. Otter Tail replaced many poles, cross arms and pounds of hardware just for this storm.

On December 25 and 26, severe winds, blinding snow and frightening ice took their toll on our company's lines during the widespread storm that hit our service territory. The storm broke power lines and laid flat many poles. Over 100 minutes in SAIDI were accumulated due to this event over the two-day span. During this holiday storm we peaked at 92 linemen deployed for the restoration effort; that's about one-third of our total company lineman [sic]. Throughout the restoration efforts our social media posts, including Facebook and Twitter [sic] appeared in more than 132,450 newsfeeds and received 914 reactions, 740 shares, and 159 comments. While our crews worked diligently to restore power, our customers responded with an outpouring of support for our employees. They sent words of appreciation, confidence, safety, love and prayers.

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

3. Action Plan to Improve Reliability

OTP provided detailed information regarding its failure to meet its 2015 and 2016 reliability goals. The Company missed goals in four of six work centers, or customer service centers (CSCs), in 2015 and four of six again in 2016. Specifically, in 2015 OTP indicated that its Wahpeton and Bemidji CSCs failed to meet its SAIDI standards due to complications from a private party tree trimmer damaging a distribution line and due to a failed insulator. Other issues in 2015 were attributed to strong storms, transformer failures, transmission line failure, and other equipment failure. OTP indicated that in 2016, major storms were the cause for significant outages and a failure to achieve SAIDI goals at the Crookston, Milbank, and Morris CSCs. Additionally in 2016, birds were a contributing factor in the Wahpeton CSC's failure to achieve its SAIDI goal. As to improvement, the Company stated that reliable service continues to be one of the Company's top priorities and that the application of new technologies and tools, along with their current processes, should provide good results.²

4. Bulk Power Supply Interruptions

OTP reported that it did not have any sustained interruptions to a Minnesota bulk power supply facility for the 2016 calendar year. However, OTP did report that it experienced two sustained interruptions to a Minnesota Bulk Power Supply Facility in the 2015 calendar year. On April 28, 2015, the Graceville circuit breaker relayed to lockout at 4:34 PM. OTP stated that crews were dispatched to the fault location but no cause was found and the line

² 2016 Annual Report, pp. 11-13

was subsequently returned to service at 6:35 PM. Additionally, on April 30, 2015, the Winger Substation locked out on a transformer differential fault indication at 5:20 PM. OTP noted that crews found a dead bird at the transformer, which was identified as the cause. The transformer was returned to normal at 7:45 PM.

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

5. *Major Service Interruptions*

OTP provided copies of each report it filed under Minnesota Rules, part 7826.0700. The Company reported seven major service interruptions in 2015 and 13 in 2016. The largest major service interruption in 2015 impacted 787 customers and lasted one hour and nine minutes, while the largest in 2016 saw 4,184 customers impacted due to strong storms and the longest duration before resolution was nearly eight hours. Other causes for major service interruptions included equipment failure, animal contact, and storm damage.

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

6. *Worst Performing Circuit*

OTP identified the worst performing feeder in each work center, including its SAIDI, SAIFI and CAIDI, the major causes of each feeder's outages, and the remedial measures planned or taken by the Company. The Department notes that, according to OTP's annual reports over the years, there is no apparent trend in terms of outage causes or continuing poor performance for any particular feeder. The Department uses historical data to identify potential areas of concerns regarding any feeders that appear multiple times as a worst performing feeder. After reviewing 12 years of historical data, the Department concludes that there is no concern with any specific feeder at this time.

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

7. *Compliance with ANSI Voltage Standards*

OTP provided a table listing the feeders and number of known occurrences where the voltage fell outside the ANSI voltage range B in 2015 and 2016. OTP noted that most of the feeders with numerous occurrences were feeders serving a single large customer with a very large load (mostly pipelines). The Department observes no significant trend regarding this metric.

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

8. *Work Center Staffing Levels*

OTP provided information on staffing levels by work center as of December 31, 2015 and 2016. The following table summarizes total staffing levels over the past 12 years.

Table 6: OTP Work Center Staffing Levels

	Field	Office	Total
2005	111	34	145
2006	112	34	146
2007	110	37	147
2008	113	39	152
2009	110	38	148
2010	109	35	144
2011	103	32	135
2012	107	33	140
2013	109	33	142
2014	107	33	140
2015	114	29	143
2016	116	32	148

OTP reported that between eight and ten “delivery maintenance” field staff (not included in Table 6) work in substations and can be dispatched to do switching and other work during trouble.

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

9. *Other Information*

This section of OTP’s 2016 and 2017 Annual Reports provided updates on continuing developments from the Company’s use of the Interruption Monitoring System (IMS). Specifically OTP reported that:

- OTP has begun a project to replace its current IMS in North Dakota and to have those components help in maintaining the system in Minnesota, which should be completed prior to 2018 yearend. The new system will have several technological advancements and should provide additional capability over the existing system;
- OTP continues to install and utilize wireless power quality monitors in identified problem areas. The monitors have improved the Company’s ability to monitor, identify, and analyze issues in the field;
- OTP’s IMS was improved to allow employees to view interruption activity on a graphical map of the entire OTP service territory and to receive alarms to improve service response time;

- OTP's IMS continues to provide optimized and focused deployment of vegetation management resources to specific areas that are identified by the outage data collected within the IMS;
- OTP's needs to replace its IMS by 2020; and
- OTP continues to explore ways to assess reliability performance, including using the Customers Experiencing Multiple Interruptions (CEMI_n) index where n = 5 interruptions.

The Department appreciates OTP's efforts and additional information and acknowledges OTP's fulfillment of the requirements of Minnesota Rules, part 7826.0500, subp. 1K.

C. PROPOSED RELIABILITY STANDARDS FOR 2017

OTP proposed the following reliability goals for 2017:

Table 7: OTP's Proposed 2017 Goals

Work Center	SAIDI	SAIFI	CAIDI
All MN Customers	64.95	1.13	57.48
Bemidji	70.64	1.26	56.06
Crookston	69.33	1.19	58.26
Fergus Falls	66.97	1.11	60.33
Milbank	75.49	1.82	41.48
Morris	55.78	1.01	55.23
Wahpeton	57.24	1.13	50.65

OTP stated that it proposes the continued use of performance standards at the 2013 levels until further improvement is achieved.

In the past, the Commission has typically set reliability goals at the 5-year average. However, in the case of OTP's 2014 Annual Report, the Commission's December 12, 2014 Order froze OTP's SAIFI, SAIDI, and CAIDI goals at the 2013 levels until the Company improves its reliability performance. The 2013 goals were in place for 2015 as well. Thus, the Department reviewed whether the Company's 2015 and 2016 reliability performance improved to the extent that moving back to the 5-year average goalsetting method would be appropriate. Table 8 below shows how many of its eighteen annual goals³ OTP has met since 2007.

³ The eighteen goals are SAIDI, SAIFI, and CAIDI for all six of the Company's CSCs.

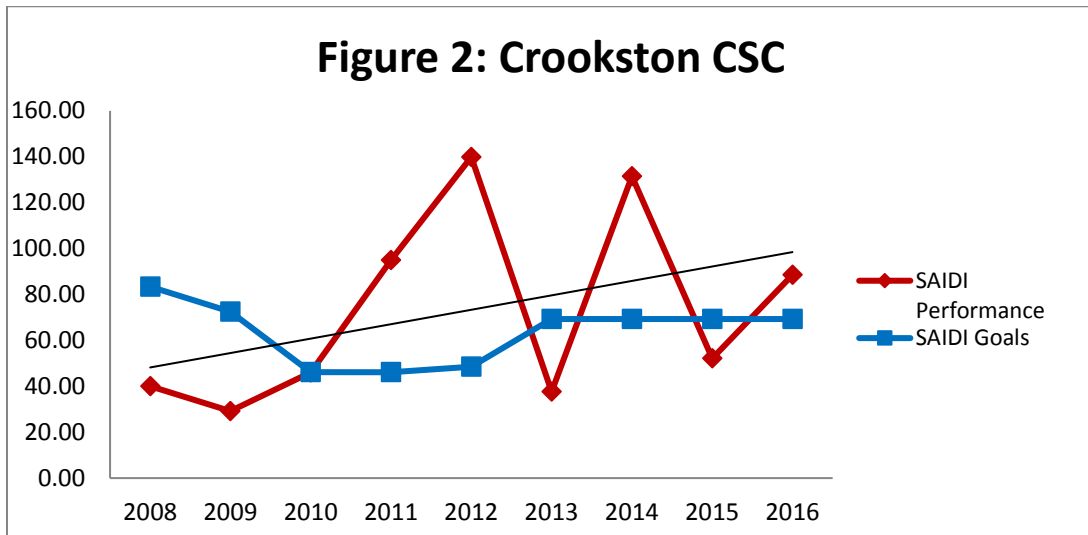
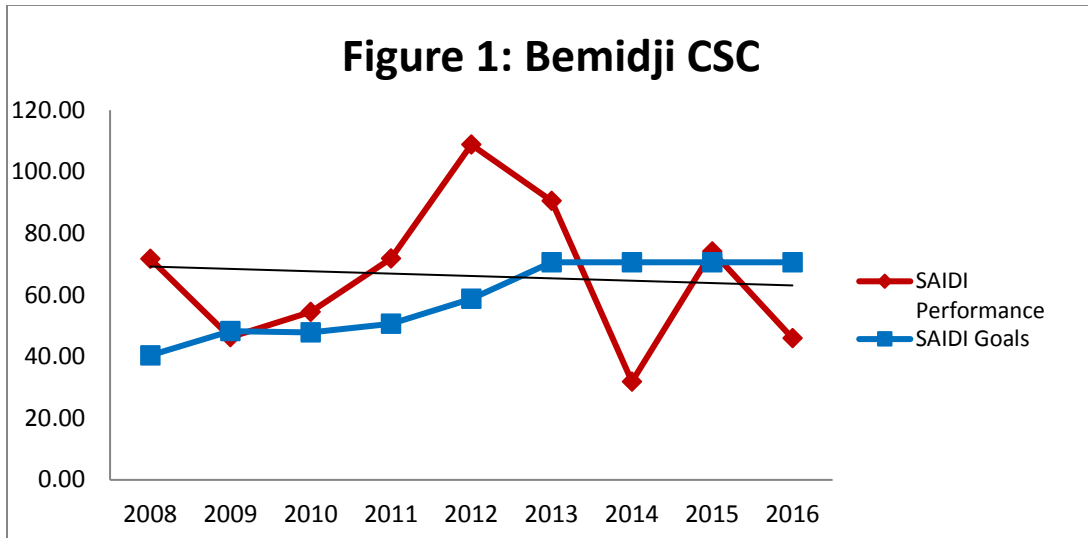
Table 8: OTP's Reliability Goals⁴

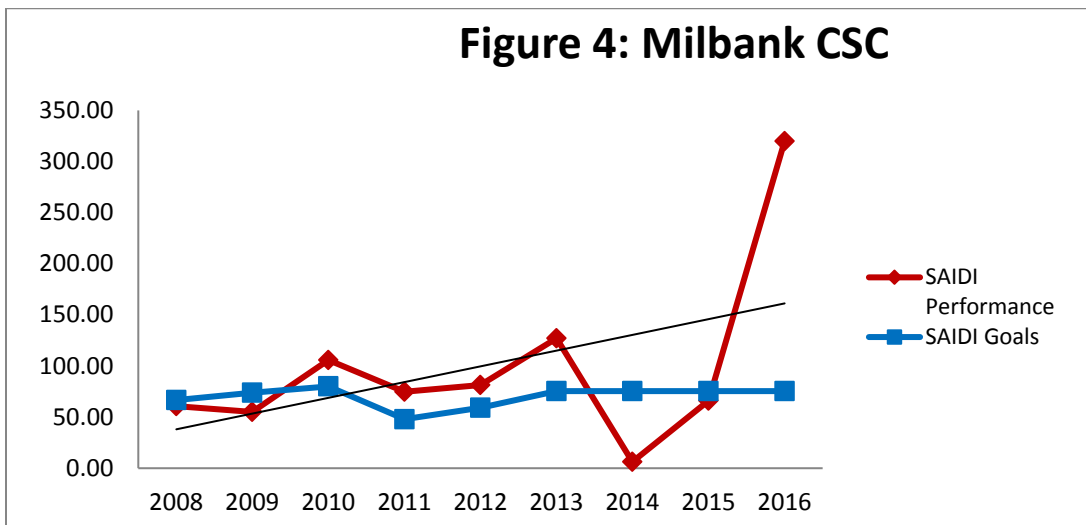
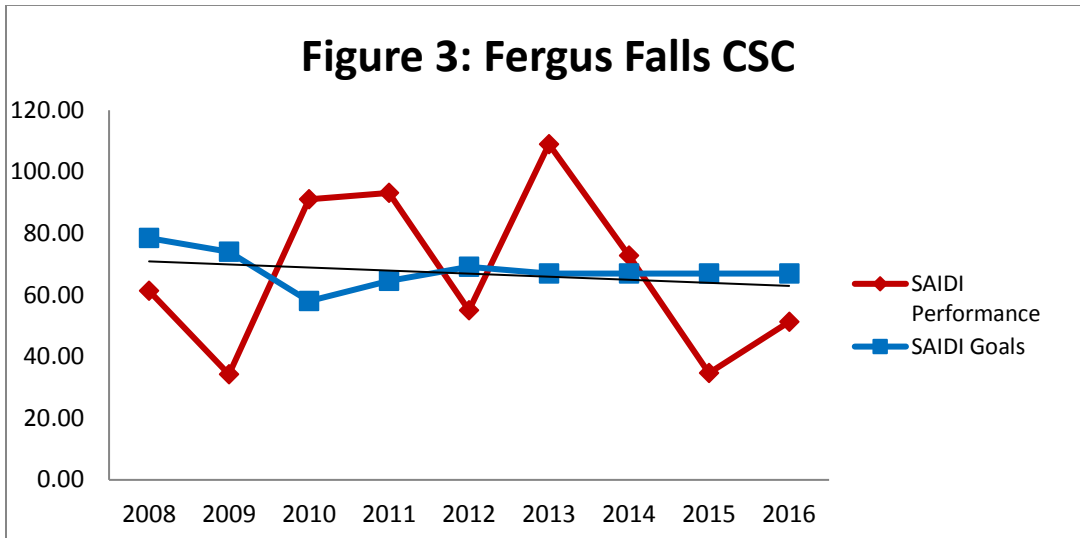
		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Bemidji	SAIDI	68.00	40.42	48.25	47.85	50.65	58.74	70.64	70.64	70.64	70.64
	SAIFI	1.25	0.76	0.90	1.08	1.11	1.16	1.26	1.26	1.26	1.26
	CAIDI	54.00	53.18	53.61	44.31	45.74	50.64	56.06	56.06	56.06	56.06
Crookston	SAIDI	80.00	83.38	72.55	46.15	46.12	48.58	69.33	69.33	69.33	69.33
	SAIFI	1.55	1.71	1.48	1.08	1.05	0.93	1.19	1.19	1.19	1.19
	CAIDI	52.00	48.76	49.02	44.31	43.87	52.24	58.26	58.26	58.26	58.26
Fergus Falls	SAIDI	78.00	78.48	74.00	58.03	64.63	69.16	66.97	66.97	66.97	66.97
	SAIFI	1.35	1.40	1.27	1.09	1.15	1.17	1.11	1.11	1.11	1.11
	CAIDI	58.00	56.06	58.27	53.00	56.21	59.11	60.33	60.33	60.33	60.33
Milbank	SAIDI	66.10	66.64	74.00	80.00	47.97	59.24	75.49	75.49	75.49	75.49
	SAIFI	1.55	1.43	1.30	3.00	1.35	1.57	1.82	1.82	1.82	1.82
	CAIDI	42.65	46.60	56.92	26.67	35.57	37.73	41.48	41.48	41.48	41.48
Morris	SAIDI	80.00	74.82	67.05	46.62	47.84	55.71	55.78	55.78	55.78	55.78
	SAIFI	1.55	1.48	1.34	1.10	1.13	1.12	1.01	1.01	1.01	1.01
	CAIDI	52.00	50.55	50.04	42.47	42.26	49.74	55.23	55.23	55.23	55.23
Wahpeton	SAIDI	66.10	66.64	74.00	28.91	44.92	57.00	57.24	57.24	57.24	57.24
	SAIFI	1.25	1.43	1.30	0.43	0.84	1.15	1.13	1.13	1.13	1.13
	CAIDI	52.88	46.60	56.92	67.07	53.42	49.57	50.65	50.65	50.65	50.65

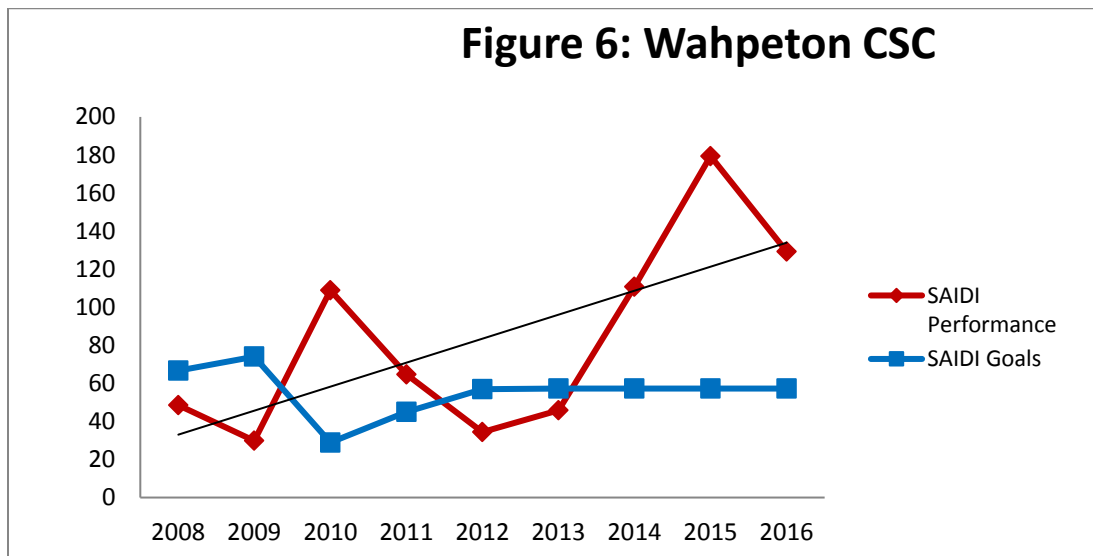
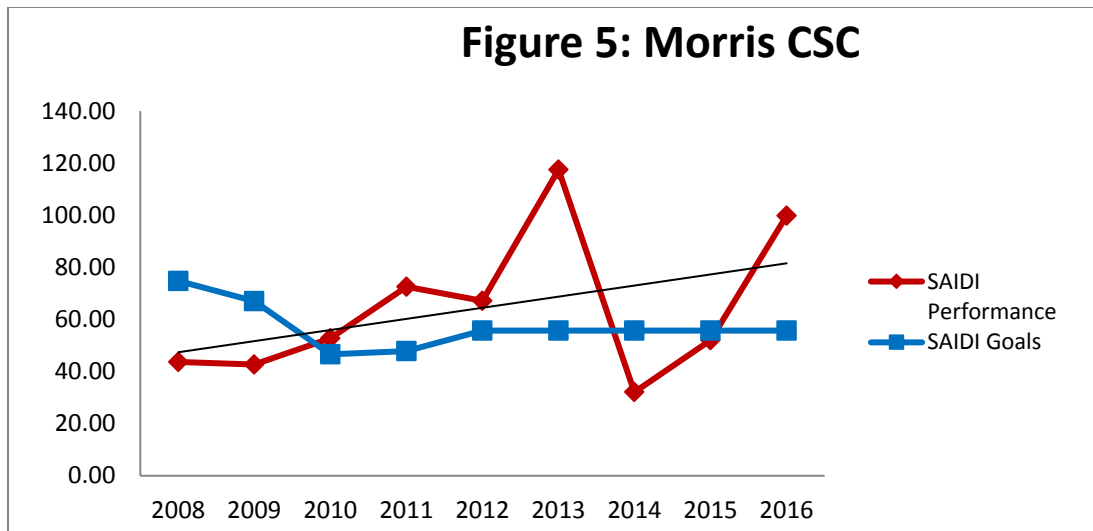
As the above table illustrates, OTP did not have trouble meeting the majority of its goals until 2010. As a result, most of the Company's goals were generally trending downward (becoming harder to achieve) until 2010. While the Company was more successful in meeting its goals in 2012 over the previous two years, that limited success was not maintained in 2013. In 2015, OTP accomplished 61 percent of its CSC goals, the most successful performance since 2009. However, 2016 saw the Company return to disappointing performance with success in only 39 percent of its CSC goals. The Company has consistently reported over the years that its failure to achieve its reliability goals was primarily due to weather and other issues out of its control.

The following figures highlight OTP's SAIDI performance trends for the six CSCs from 2008-2016, including a black trend line to indicate performance patterns overtime. It should be noted that all CSCs other than Bemidji and Fergus Falls show trends of worsening performance.

⁴ Shading indicates unmet goal.







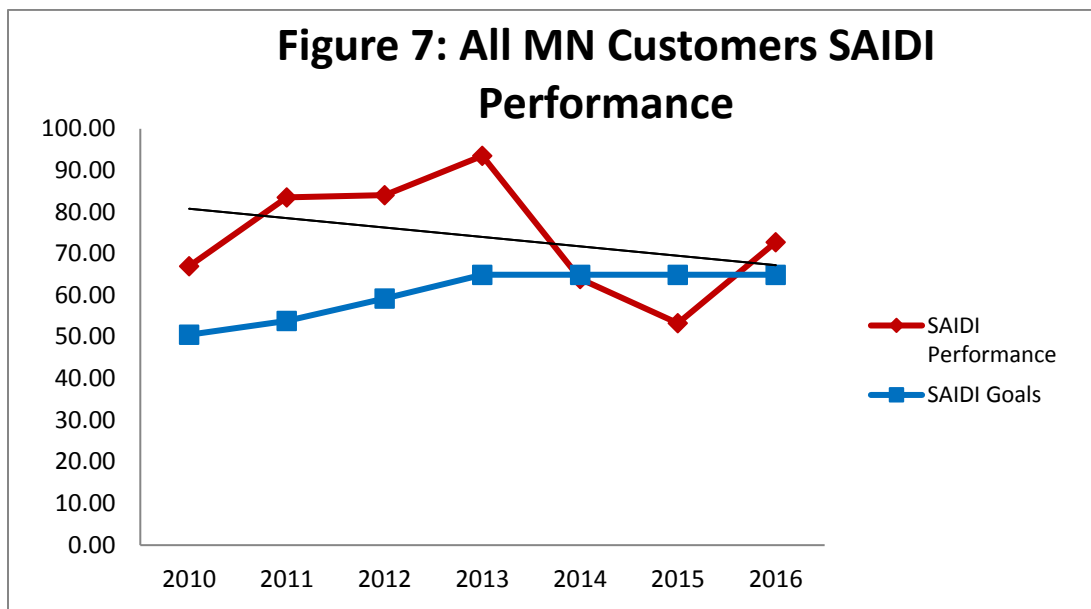
While Minnesota Rules, part 7826.0600 requires reliability performance standards to be set by work center, and does not require establishing an overall goal for a utility's entire Minnesota service territory, OTP has provided overall metrics in its annual reports. As an additional check on OTP's reliability performance trend, the Department examined the extent to which the Company met its overall goals for its Minnesota service area in the past seven years. This information is shown in Table 9.

Table 9: OTP's MN Service Area Goals vs Performance⁵

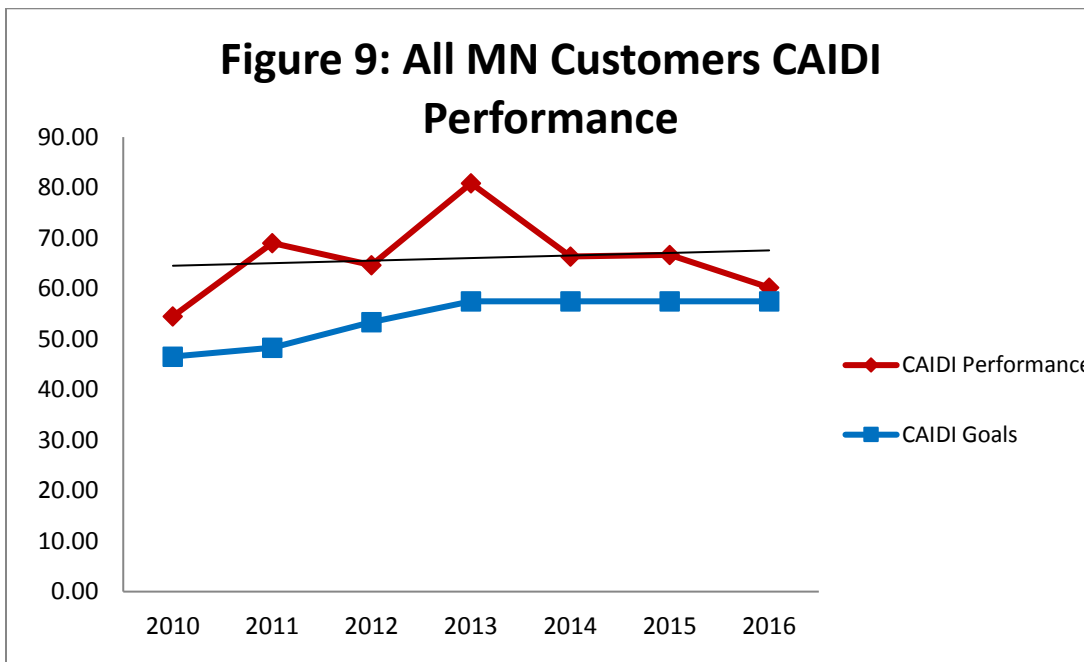
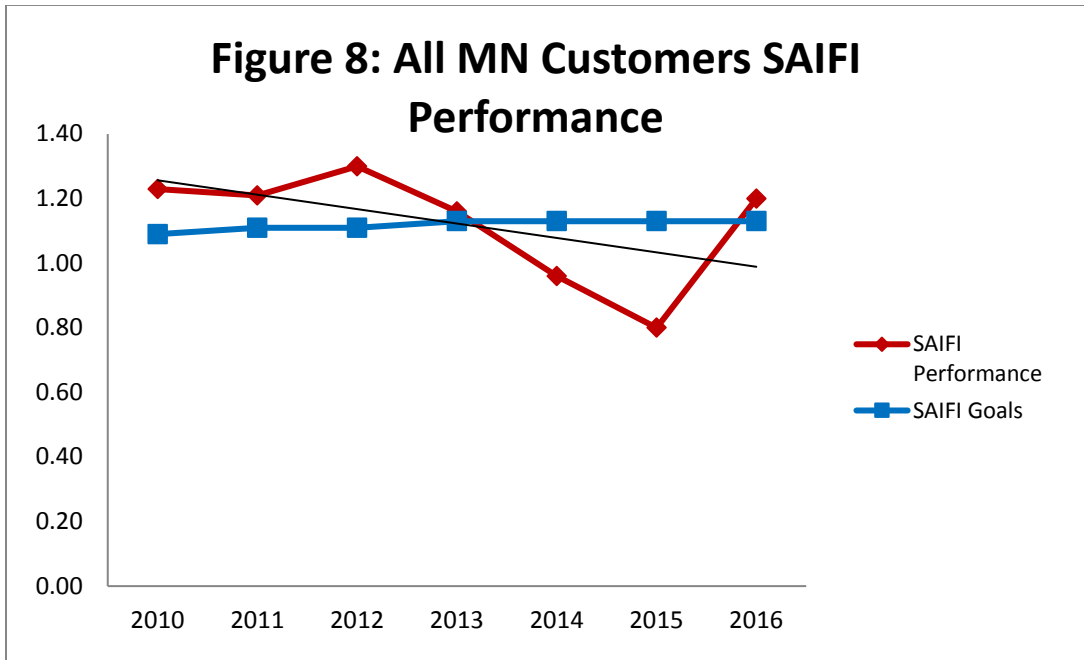
	2010	2011	2012	2013	2014	2015	2016
Goal SAIDI	50.54	53.84	59.21	64.95	64.95	64.95	64.95
Goal SAIFI	1.09	1.11	1.11	1.13	1.13	1.13	1.13
Goal CAIDI	46.55	48.3	53.34	57.48	57.48	57.48	57.48
Actual SAIDI	67.02	82.66	84.05	93.51	63.93	53.30	72.80
Actual SAIFI	1.23	1.21	1.30	1.16	0.96	0.80	1.20
Actual CAIDI	54.51	68.30	64.67	80.86	66.37	66.70	60.20

As can be seen in Table 9, after failing to achieve any of its goals for the Minnesota service area from 2011 through 2013, OTP succeed in achieving its SAIDI and SAIFI goals in 2014 and 2015 but failed in all three again in 2016.

While the Company had seen a retrogression in its SAIDI and SAIFI performance in 2016, the overall trend of the past seven years has been in an improving direction, as shown in Figures 7 and 8 below. The Company's CAIDI performance has remained relatively flat over that time, but has missed its goal in each of the seven years.



⁵ Goals highlighted in grey indicate that OTP did not meet its performance goal.



Finally, the Department compared the Company's 2015 and 2016 performance with its 2015 and 2016 goals and 2017 proposed goals in OTP's six CSCs.

Table 10: OTP-Proposed Goal Comparison

Work Center	SAIDI	SAIFI	CAIDI
Bemidji			
2015/2016 Goal	70.64	1.26	56.06
2015 Performance	31.89	0.46	68.75
2016 Performance	46.00	0.97	47.60
2017 Proposed Goal	70.64	1.26	56.06
Crookston			
2015/2016 Goal	69.33	1.19	58.26
2015 Performance	131.53	1.54	85.36
2016 Performance	88.60	1.62	54.53
2017 Proposed Goal	69.33	1.19	58.26
Fergus Falls			
2015/2016 Goal	66.97	1.11	60.33
2015 Performance	72.75	1.10	66.05
2016 Performance	51.30	0.98	52.50
2017 Proposed Goal	66.97	1.11	60.33
Milbank			
2015/2016 Goal	75.49	1.82	41.48
2015 Performance	6.25	0.05	137.04
2016 Performance	320.00	2.18	146.74
2017 Proposed Goal	75.49	1.82	41.48
Morris			
2015/2016 Goal	55.78	1.01	55.23
2015 Performance	32.10	0.75	42.70
2016 Performance	99.80	1.30	77.10
2017 Proposed Goal	55.78	1.01	55.23
Wahpeton			
2015/2016 Goal	57.24	1.13	57.48
2015 Performance	110.70	2.30	48.23
2016 Performance	129.21	2.33	55.52
2017 Proposed Goal	57.24	1.13	57.48

Table 11 below is a reproduction of Table 8 above with OTP's proposed goals added.

Table 11: OTP's Reliability Goals⁶

		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Proposed 2017
Bemidji	SAIDI	68.00	40.42	48.25	47.85	50.65	58.74	70.64	70.64	70.64	70.64	70.64
	SAIFI	1.25	0.76	0.90	1.08	1.11	1.16	1.26	1.26	1.26	1.26	1.26
	CAIDI	54.00	53.18	53.61	44.31	45.74	50.64	56.06	56.06	56.06	56.06	56.06
Crookston	SAIDI	80.00	83.38	72.55	46.15	46.12	48.58	69.33	69.33	69.33	69.33	69.33
	SAIFI	1.55	1.71	1.48	1.08	1.05	0.93	1.19	1.19	1.19	1.19	1.19
	CAIDI	52.00	48.76	49.02	44.31	43.87	52.24	58.26	58.26	58.26	58.26	58.26
Fergus Falls	SAIDI	78.00	78.48	74.00	58.03	64.63	69.16	66.97	66.97	66.97	66.97	66.97
	SAIFI	1.35	1.40	1.27	1.09	1.15	1.17	1.11	1.11	1.11	1.11	1.11
	CAIDI	58.00	56.06	58.27	53.00	56.21	59.11	60.33	60.33	60.33	60.33	60.33
Milbank	SAIDI	66.10	66.64	74.00	80.00	47.97	59.24	75.49	75.49	75.49	75.49	75.49
	SAIFI	1.55	1.43	1.30	3.00	1.35	1.57	1.82	1.82	1.82	1.82	1.82
	CAIDI	42.65	46.60	56.92	26.67	35.57	37.73	41.48	41.48	41.48	41.48	41.48
Morris	SAIDI	80.00	74.82	67.05	46.62	47.84	55.71	55.78	55.78	55.78	55.78	55.78
	SAIFI	1.55	1.48	1.34	1.10	1.13	1.12	1.01	1.01	1.01	1.01	1.01
	CAIDI	52.00	50.55	50.04	42.47	42.26	49.74	55.23	55.23	55.23	55.23	55.23
Wahpeton	SAIDI	66.10	66.64	74.00	28.91	44.92	57.00	57.24	57.24	57.24	57.24	57.24
	SAIFI	1.25	1.43	1.30	0.43	0.84	1.15	1.13	1.13	1.13	1.13	1.13
	CAIDI	52.88	46.60	56.92	67.07	53.42	49.57	50.65	50.65	50.65	50.65	50.65

Due to OTP's declining performance trend over the last several years in most of its work centers, the Commission has frozen the Company's goals at its 2013 levels to avoid setting goals that would have been progressively easier to achieve if based on a 5-year average of OTP's performance levels. The Commission's January 13, 2014 Order in Docket No. E017/M-13-253 states:

Since improving reliability performance – not just maintaining it – is one of the goals of the standard-setting process, the Commission will continue to require reports on the Company's reliability initiatives in its next annual filing, as well as reports on the causes of outages on major event days.

While OTP achieved more of its goals in 2015 than in 2014, it still only achieved 60 percent of them and subsequently reverted to lower performance in 2016 with a success rate of approximately 39 percent. One year of slight improvement does not definitively reverse the worsening performance trend the Company has exhibited over the last 7 years. Therefore, the Department recommends that the Company's goals remain frozen at the 2013 levels until performance improves.

⁶ Shading indicates unmet goal.

D. ANNUAL SERVICE QUALITY REPORT

Minnesota Rules, part 7826.1300 requires each utility to file the following information:

1. Meter Reading Performance (7826.1400),
2. Involuntary Disconnection (7826.1500),
3. Service Extension Response Time (7826.1600),
4. Call Center Response Time (7826.1700),
5. Emergency Medical Accounts (7826.1800),
6. Customer Deposits (7826.1900), and
7. 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 customers;
- C. the number and percentage of customer meters that have not been read by utility personnel for periods 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.

OTP provided detailed meter reading information, including information on its monthly meter reading staffing levels. Table 12 summarizes OTP's meter reading statistics.

Table 12: OTP Meter-Reading Performance

	Percent Read by OTP	Percent Read by Customer	Percent Not Read
2005	92.2%	2.8%	5.0%
2006	92.9%	2.5%	4.6%
2007	93.4%	2.8%	3.9%
2008	93.8%	2.7%	3.5%
2009	94.1%	2.4%	3.5%
2010 ⁷	94.4%	2.6%	3.0%
2011 ⁸	95.1%	2.6%	2.3%
2012	95.9%	2.1%	2.0%
2013	95.8%	1.9%	2.3%
2014	95.9%	1.8%	2.4%
2015	95.9%	1.7%	2.4%
2016	96.4%	1.5%	2.2%

The Department notes that OTP has continually improved its meter-reading performance. Minnesota Rules, part 7826.0900, subp. 1 requires that at least 90 percent of all meters during the months of April through November and at least 80 percent of all meters during the months of December through March are read monthly. The Company's information reflects that it read at least 94 percent of all meters each month during 2015 and 2016.

According to OTP, there were no meters that were not read for a period of 6-12 months in 2015, but in 2016, there were 13 meters that were not read for a period of 6-12 months. The Company notes that these 13 meters were on four separate accounts where there was no access to read them, but that the Company took steps to communicate with the customers in order to resolve the matter. Additionally, there were no meters that were not read for a period of greater than 12 months.

The Company reported that it maintained an average of approximately 69 service representatives available for meter-reading during 2015 and approximately 70 on average in 2016. OTP also uses third parties to read meters in select cities within the Company's service territory.

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

2. *Involuntary Disconnections*

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

⁷ Percentages in 2010 and 2011 were originally reported erroneously with estimated meter reads classified as company-read meters. In its August 6, 2012 Reply Comments in Docket No. E017/M-12-325, the Company corrected its meter reading data by categorizing estimated meter reads (meters that were not actually read by the Company or the customer) separately. For comparability, this updated data is reflected for 2010 and 2011 in the table above.

⁸ *Id.*

- A. the number of customers who received disconnection notices,
- B. the number of customers who sought cold weather rule protection under Chapter 7820 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.

OTP reported that 53,785 disconnection notices were sent to residential, small commercial and large commercial customers in 2015 and 53,769 in 2016. The following table summarizes residential customer disconnection statistics reported by OTP in its annual reports.

Table 13: Residential Customer Involuntary Disconnection Information

	Received Disconnect Notice	Sought CWR Protection	Granted CWR Protection	% Granted	Disconnected Involuntarily	Restored within 24 Hours	Restored by Entering Payment Plan
2004	31,043	302	260	86%	679	201	22
2005	33,274	302	260	86%	1,008	351	22
2006	37,980	388	291	75%	873	295	54
2007	39,022	671	573	85%	1,293	416	61
2008	41,764	1,062	970	91%	973	289	28
2009	36,976	1,139	1,139	100%	1,069	432	40
2010	38,119	1,837	1,837	100%	1,122	428	44
2011	38,723	2,118	2,118	100%	1,168	506	38
2012	39,912	2,139	2,137	99.9%	745	558	29
2013	39,913	1,788	1,776	99.3%	745	644	23
2014	44,894	1,430	1,424	99.6%	794	619	104
2015	49,185	1,130	1,125	99.56%	629	232	69
2016	49,368	932	928	99.57%	924	301	42

The Department acknowledges OTP'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.

OTP reported the number of service extension requests received each month by customer class. In 2015 and 2016, 333 and 275 customers, respectively, requested service to a location not previously served. All of these customers were connected on time. As for locations previously served, OTP reported that 1,671 of these requests were made in 2015 and 1,782 in 2016. The Department looks for any significant trends in overall service request response times. At this time, response times for 2015 and 2016 appear to be relatively consistent with past years.

The Department acknowledges that OTP has fulfilled 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. Further, Minnesota Rules, part 7826.1200 requires that 80 percent of calls be answered within 20 seconds.

OTP provided monthly data regarding the number of incoming calls and those calls that were answered and abandoned. The Company's data indicates that an annual average of 86.40 percent of calls were answered within 20 seconds in 2015 and 82.61 percent in 2016. Therefore, the Department concludes that OTP is in compliance with Minnesota Rules, part 7826.1200.

The Department notes that the Company stated that it has moved forward with an implementation of a new telecommunications system in an attempt to improve the accuracy of OTP's call center response time and subsequent reporting.

5. *Emergency Medical Accounts*

The reporting on emergency medical accounts must include the number of customers who requested emergency 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.

OTP reported that 23 Minnesota customers requested emergency medical account status in both 2015 and 2016, all of whom were granted that status.

The Department acknowledges OTP's fulfillment of the requirements of Minnesota Rules, part 7826.1800.

6. *Customer Deposits*

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

Table 13 summarizes the number of customer deposits required over the past nine years. The number of customers served by OTP is provided for context.⁹

Table 14: Customer Deposits Required

	Number of Deposits Required	Total Customers Served
2004	315	57,585
2005	417	58,516
2006	395	58,841
2007	509	59,171
2008	700	59,364
2009	869	59,421
2010	635	59,425
2011	807	59,486
2012	847	59,615
2013	895	59,849
2014	783	61,169
2015	597	60,232
2016	715	61,226 ¹⁰

The Department notes that the previous upward trend appears to be stabilizing in recent years. The Department acknowledges OTP's fulfillment of the requirements of Minnesota Rules, part 7826.1900.

7. *Customer Complaints*

The 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;

⁹ Source: Otter Tail's "Minnesota Electric Utility Annual Report" filed pursuant to Minnesota Rules Chapter 7610. Annual reports are filed by Minnesota utilities on July 1 of each year.

¹⁰ The total customers served for 2016 was taken from the Minnesota Jurisdictional 2016 Report in Docket No. 17-4 rather than the Minnesota Rules Chapter 7610 reports as the data were not yet available at the time for filing.

- 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 for further investigation and action.

OTP’s report on customer complaints includes the required information. Table 14 contains a limited summary of OTP’s customer complaint history.

Table 15: OTP Customer Complaint Selected Summary

	Number of Complaints	High Bills	Billing Error	Service Restoration	Resolved Upon Initial Inquiry	Took Action Customer Requested
2005	286	49%	7%	2%	41%	66%
2006	175	39%	7%	2%	54%	49%
2007	220	27%	29%	5%	66%	46%
2008	325	52%	18%	2%	60%	34%
2009	185	29%	14%	5%	78%	36%
2010	91	26%	11%	11%	78%	25%
2011	110	19%	9%	10%	73%	30%
2012	61	7%	11%	7%	72%	32%
2013	133	9%	17%	5%	92%	21%
2014	98	12%	11%	4%	83%	31%
2015	86	22%	22%	0%	77%	23%
2016	28	0%	14%	0%	93%	54%

The Department notes that the increase in the service restoration complaint category percentage in 2010 and 2011 coincides with the weather challenges reported by OTP.

The Department acknowledges OTP’s fulfillment of the requirements of Minnesota Rules, part 7826.2000.

E. COMPLIANCE WITH JANUARY 13, 2014 ORDER

1. *Include in its next filing a description of the policies, procedures, and actions the Company has implemented, and plans to implement, to ensure reliability, including information demonstrating proactive management of the system as a whole, increased reliability, and active contingency planning.*

OTP provided a summary of the Company's management's view of reliability including how reliability performance is integrated into Key Performance Indicators. OTP provided a list and description of weekly and monthly internal reports used to monitor system reliability and guide capital budget decisions. The Company also summarized its inspection and testing protocols and listed several other policies, procedures, and committees used to evaluate reliability and safety concerns.

2. *Include in its next filing a summary table that allows the reader to more easily assess the overall reliability of the system and to identify main factors that affect reliability.*

OTP provided several graphs showing various aspects of reliability and customer service performance.

3. *Include in its next filing a report on the major causes of outages for major event days.*

Zero days met the criteria to be considered a major event day during 2015, but three did meet the criteria in 2016, as described above.¹¹

III. RECOMMENDATIONS

The Department recommends that the Commission accept OTP's 2017 Annual Report.

The Department also recommends that the Commission keep the Company's reliability standards for 2017 frozen at the level of the 2013 goals until OTP demonstrates further improvement in meeting its performance goals:

Table 16: Recommended Goals for 2017

Work Center	SAIDI	SAIFI	CAIDI
Bemidji	70.64	1.26	56.06
Crookston	69.33	1.19	58.26
Fergus Falls	66.97	1.11	60.33
Milbank	75.49	1.82	41.48
Morris	55.78	1.01	55.23
Wahpeton	57.24	1.13	50.65
All MN Customers	64.95	1.13	57.48

/ja

¹¹ 2017 Annual Report, pp. 8-9.

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. E017/M-16-276 and E017/M-17-256

Dated this 31st day of May 2017

/s/Sharon Ferguson

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