COMMERCE DEPARTMENT

June 1, 2018

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-18-247

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 Annual Safety, Reliability and Service Quality Report and Proposed SAIFI, SAIDI and CAIDI Reliability Standards for 2018.

The 2018 report was filed on April 2, 2018 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) report and set OTP's 2018 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/lt
Attachment

COMMERCE DEPARTMENT

Before the Minnesota Public Utilities Commission

Comments of the Minnesota Department of Commerce
Division of Energy Resources

Docket No. E017/M-18-247

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 October 19, 2017 Order in Docket No. E017/M-16-276 and E017/M-17-256 froze Otter Tail Power Company's (OTP or the Company) goals at the 2013 levels, and required the Company to include the following in its next annual filing:

a. Benchmarking of Otter Tail's performance using the Institute of Electrical and Electronics Engineers reliability standards

b. a discussion of impacts of reliability by customer class; and

c. a discussion of the work the Company is doing to withstand and recover from longer term outage events

On April 2, 2018, OTP filed its 2018 Annual Safety, Reliability and Service Quality Reports and Proposed SAIFI, SAIDI an CAIDI Reliability Standards (2018 Annual Report) in Docket No. E017/M-18-247 to comply with the Commission's October 19, 2017 Order and the requirements of Minnesota Rules Chapter 7826.

II. SUMMARY OF REPORT AND DEPARTMENT ANALYSIS

The Minnesota Department of Commerce, Division of Energy Resources (Department) reviewed OTP's 2018 Annual Report to assess compliance with Minnesota Rules, Chapter 7826 and the Commission's October 19, 2017 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 12 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
2017	0	1	1	10

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
2017	41	11

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
2017	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
2017	3	Crop and property damage	$2,882.00

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. OTP did not report 2017 reliability performance for its Wahpeton work center, stating that "Due to the lack of [Interruption Monitoring System] data as we are transitioning our North Dakota IMS system from Sensus to Next Gen, Wahpeton CSC results are 0 for 2017."[1]

The following table shows the Company's 2017 reliability performance compared with the goals set by the Commission in Docket No. E017/M-17-256.[2]

Table 5: OTP's 2017 Reliability Performance Compared with Goals[3]

Work Center		2017 Performance	2017 Goals
Bemidji	SAIDI	63.58	70.64
	SAIFI	0.78	1.26
	CAIDI	81.65	56.06
Crookston	SAIDI	58.71	69.33
	SAIFI	1.21	1.19
	CAIDI	48.63	58.26
Fergus Falls	SAIDI	41.62	66.97
	SAIFI	0.72	1.11
	CAIDI	58.1	60.33
Milbank	SAIDI	118.44	75.49
	SAIFI	2.84	1.82
	CAIDI	41.67	41.48
Morris	SAIDI	88.24	55.78
	SAIFI	1.58	1.01
	CAIDI	55.88	55.23
Wahpeton	SAIDI	N/A	57.24
	SAIFI	N/A	1.13
	CAIDI	N/A	50.65
All MN Customers	SAIDI	60.06	64.95
	SAIFI	1.01	1.13
	CAIDI	59.31	57.48

[1] 2018 Annual Report, page 11.
[2] The Department notes that SAIDI = SAIFI * CAIDI.
[3] SAIDI – System Average Interruption Duration Index
SAIFI – System Average Interruption Frequency Index

Shaded cells in Table 5 indicate reliability goals that were not met in 2017. See Section II.B.3 below for a discussion of OTP's 2017 reliability performance.

With the exception of the Wahpeton work center, the Department acknowledges OTP's fulfillment of the requirements of Minnesota Rules, part 7826.0500, subp. 1A, B, and C. It appears that OTP complied to the extent feasible.

2. Storm-Normalization Method

OTP calculated its 2017 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, one day met the criteria to be considered a Major Event Day. The Company provided the following details about that day:[4]

> On June 13, 2017, high-intensity thunderstorms, in two waves, moved across North and South Dakotas then into Minnesota causing extensive damage and interrupting electric service to over 13,000 customers. The storm systems carried heavy rain, hail, and strong winds that damaged trees and downed poles. Over 23 minutes of system SAIDI would have accumulated due to this event had it not been storm normalized.

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 2017 reliability goals. The Company missed goals in four of five work centers, or customer service centers (CSCs), in 2017, while the sixth work center, Wahpeton, was unable to be measured. Specifically, in 2017 OTP indicated that its Milbank and Morris CSCs failed to meet their SAIDI standards due to strong storms. Additionally, the Company stated that it is continuing to the efforts identified in past reports.

OTP included a table showing the causes of sustained outages by CSC. The following summarizes the top 3 causes by CSC:

CAIDI – Customer Average Interruption Duration Index

[4] 2018 Annual Report, p. 10.

Table 6: Top Causes of Sustained Outages

	Bemidji	Crookston	Fergus Falls	Milbank	Morris	Wahpeton
Weather-Related	28	27	18	2	46	1
Equipment Failure	13	16	11	9	41	1
Human Error		6			19	
Arrestor/Insulator Failure	4	16	8		2	

While the Department supports OTP's efforts to improve detection and quick response to outages, it appears that an additional area of focus may be on reducing equipment failure. The Department invites OTP to address this topic in Reply Comments.

4. Bulk Power Supply Interruptions

OTP reported that it did not have any sustained interruptions to a bulk power supply facility in Minnesota for the 2017 calendar year.

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 nine major service interruptions in 2017. The largest major service interruption affected 1,114 customers and lasted two hours and 42 minutes, which was due to strong storms. Other causes for major service interruptions included equipment failure and maintenance work.

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 American National Standards Institute (ANSI) voltage range B in 2017. 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, 2017. The following table summarizes total staffing levels over the past 13 years.

Table 7: 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
2017	111	43	154

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 2018 Annual Report[5] 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, which was fully implemented in 2005. The new system (Next Gen IMS) will provide added tools and analysis features that will allow OTP to continue its reliability efforts. The Company noted that reliability metrics may be impacted by the greater granularity of the new IMS.

- 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 continues to explore ways to assess reliability performance, including using the Customers Experiencing Multiple Interruptions ($CEMI_n$) index where n = 5 interruptions and where n = 7 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 2018

OTP proposed the following reliability goals for 2018:

Table 8: OTP's Proposed 2018 Goals

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**

[5] 2018 Annual Report, pages 24-25.

OTP proposed 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, the Commission's December 12, 2014 Order froze OTP's SAIDI, SAIFI, and CAIDI goals at the 2013 levels until the Company improves its reliability performance. The 2013 goals have been in place from 2013 through 2017. Thus, the Department reviewed whether the Company's reliability performance improved to the extent that moving back to the 5-year average goal-setting method would be appropriate. Table 8 below shows how many of its eighteen annual goals[6] OTP has met since 2007.

Table 9: OTP's Reliability Goals[7]

		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	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

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 and 2017 saw the Company return to disappointing performance with success

[6] The eighteen goals are SAIDI, SAIFI, and CAIDI for all six of the Company's CSCs.
[7] Shading indicates unmet goal.

in only 39 and 44 percent of its CSC goals, respectively.[8] 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 2008-2017, 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.

Figure 1: Bemidji CSC

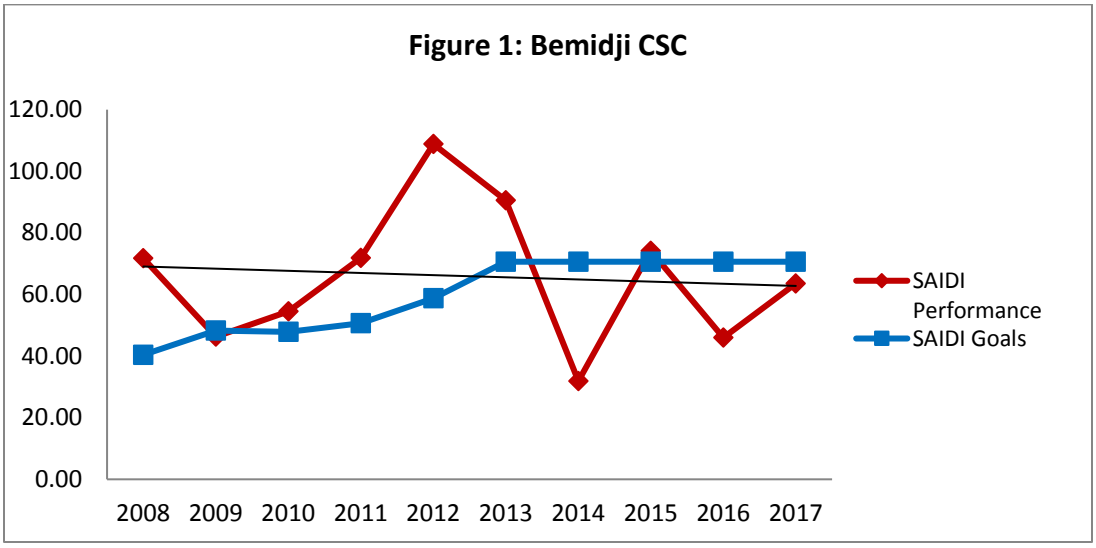
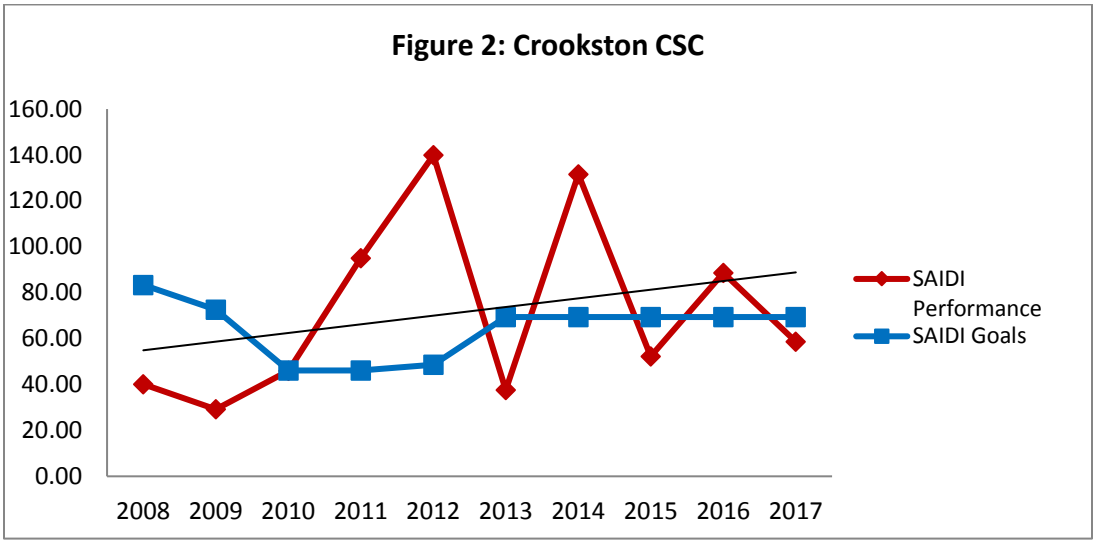


Figure 2: Crookston CSC



[8] The 44 percent number includes a 5-year average for each of the metrics as a placeholder for the Wahpeton customer service center as the Company lacked data during its transitioning to a new IMS.

Figure 3: Fergus Falls CSC

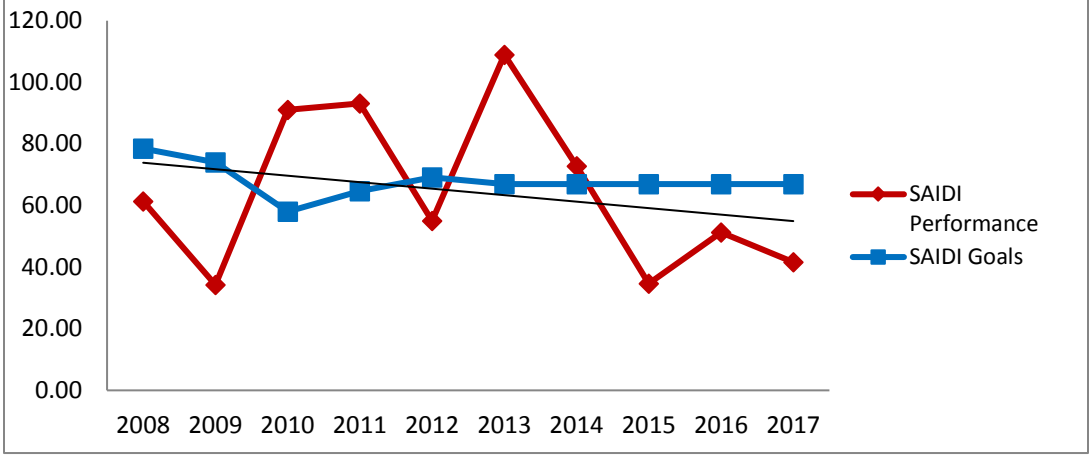


Figure 4: Milbank CSC

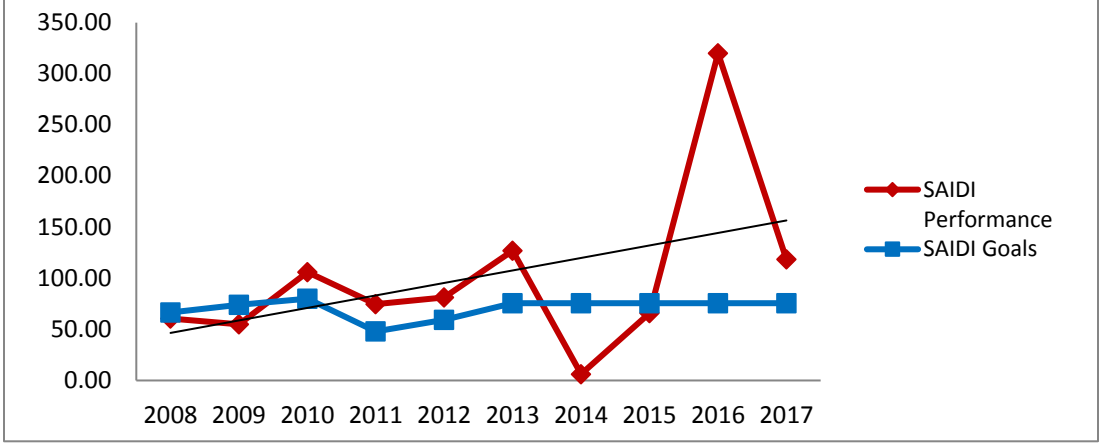


Figure 5: Morris CSC

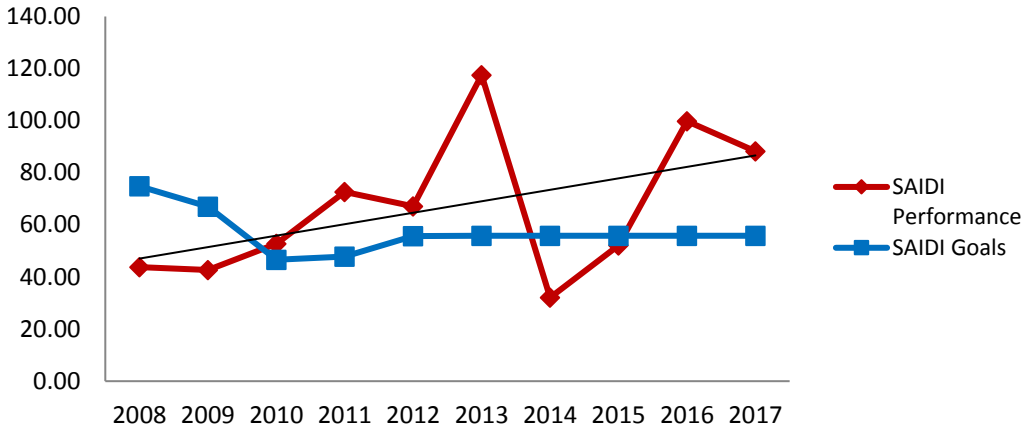
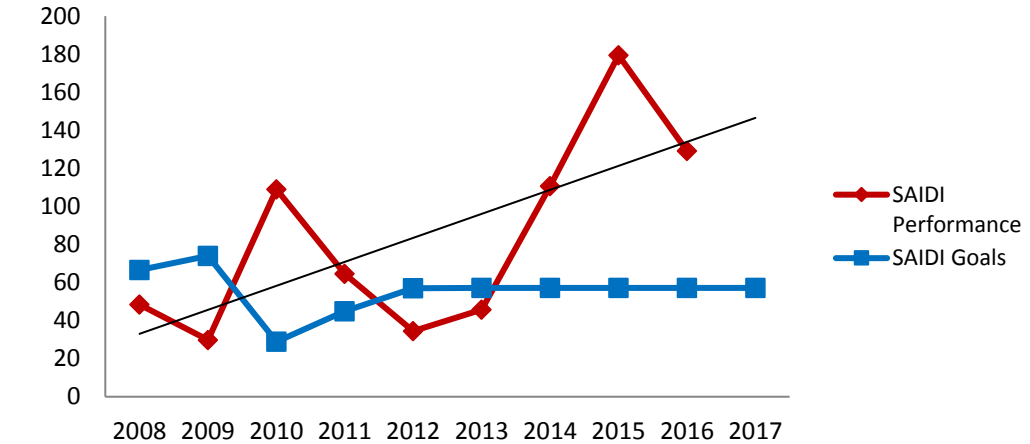


Figure 6: Wahpeton CSC



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.

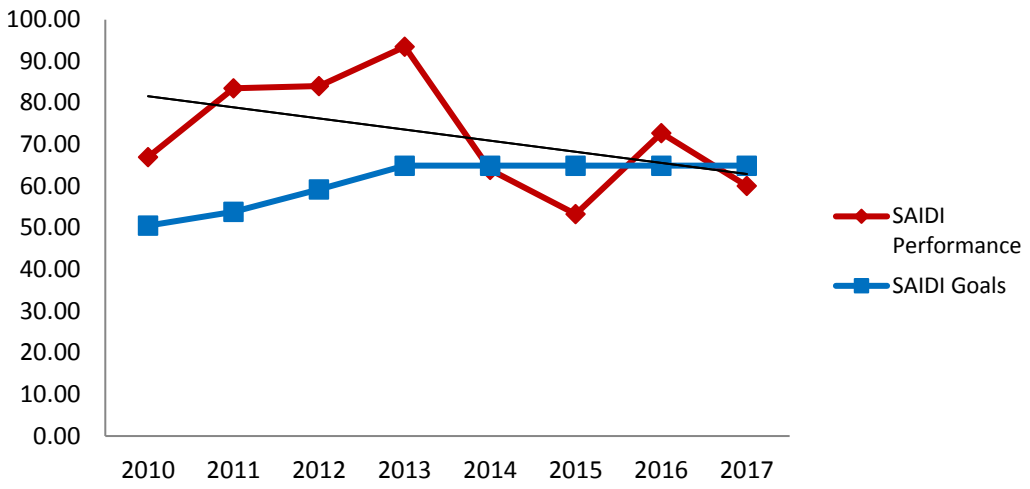
Table 10: OTP's MN Service Area
Goals vs Performance[9]

	2010	2011	2012	2013	2014	2015	2016	2017
Goal SAIDI	50.54	53.84	59.21	64.95	64.95	64.95	64.95	64.95
Goal SAIFI	1.09	1.11	1.11	1.13	1.13	1.13	1.13	1.13
Goal CAIDI	46.55	48.3	53.34	57.48	57.48	57.48	57.48	57.48
Actual SAIDI	67.02	82.66	84.05	93.51	63.93	53.30	72.80	60.06
Actual SAIFI	1.23	1.21	1.30	1.16	0.96	0.80	1.20	1.01
Actual CAIDI	54.51	68.30	64.67	80.86	66.37	66.70	60.20	59.31

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 succeeded in achieving its SAIDI and SAFI goals in 2014 and 2015, failed at all three in 2016, but was successful in achieving its SAIDI and SAIFI goals for 2017.

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 eight years.

Figure 7: All MN Customers SAIDI Performance



[9] Goals highlighted in grey indicate that OTP did not meet its performance goal.

Figure 8: All MN Customers SAIFI Performance

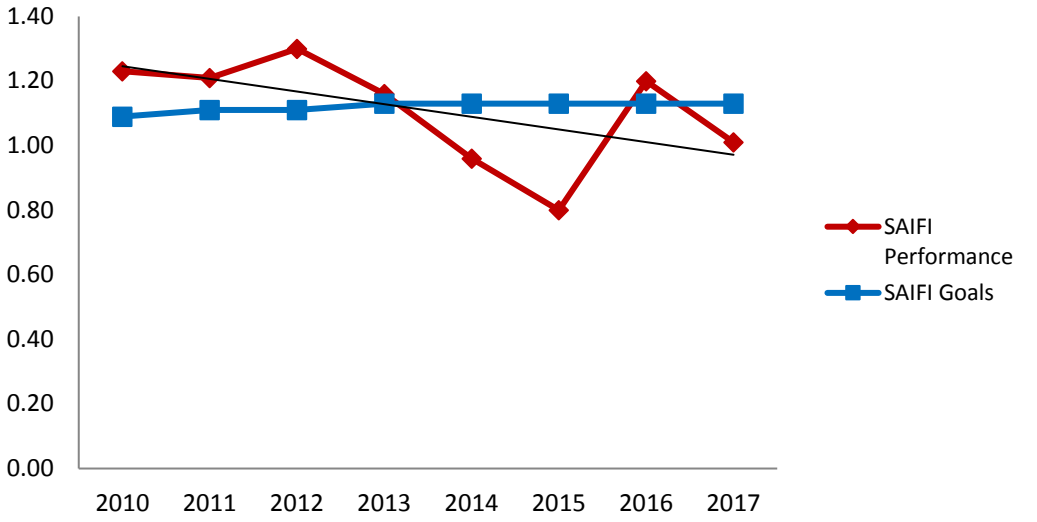
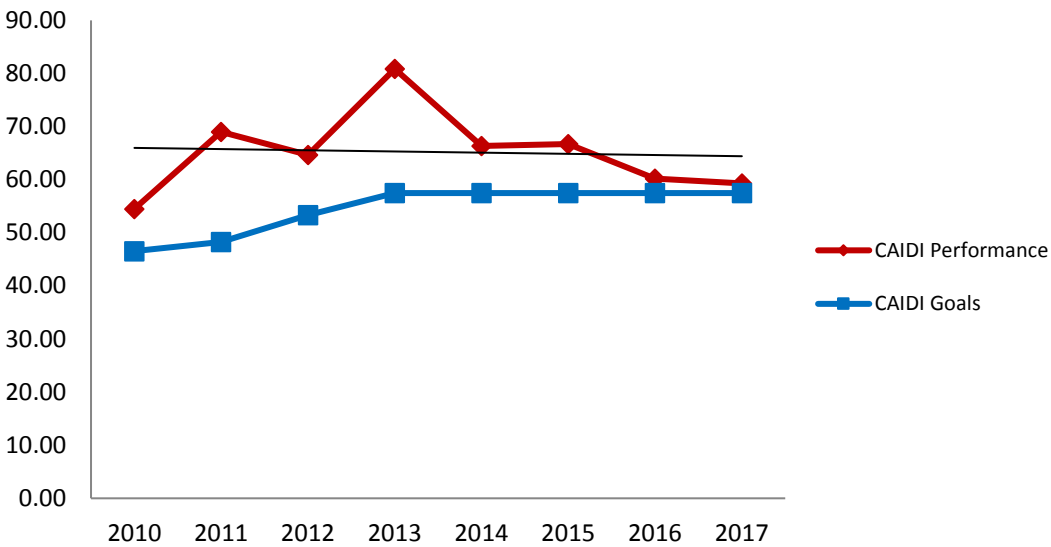


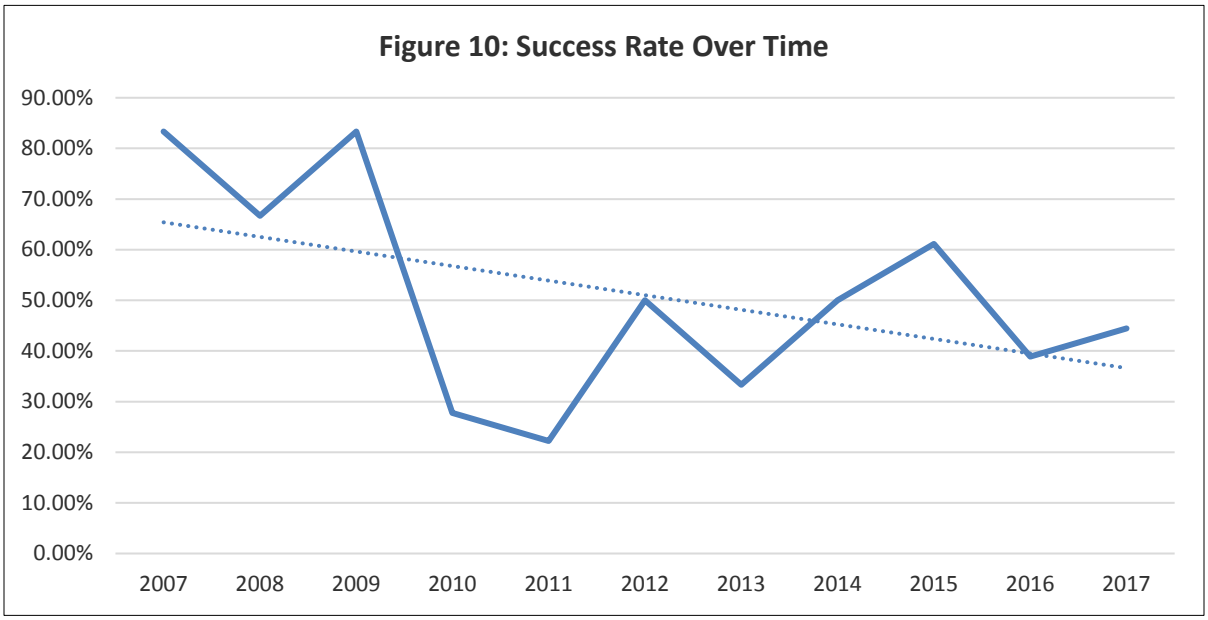
Figure 9: All MN Customers CAIDI Performance



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

Table 11: OTP-Proposed Goal Comparison

Work Center	SAIDI	SAIFI	CAIDI
Bemidji			
2017 Goal	70.64	1.26	56.06
2017 Performance	63.58	0.78	81.65
2018 Proposed Goal	70.64	1.26	56.06
Crookston			
2017 Goal	69.33	1.19	58.26
2017 Performance	58.71	1.21	48.63
2018 Proposed Goal	69.33	1.19	58.26
Fergus Falls			
2017 Goal	66.97	1.11	60.33
2017 Performance	41.62	0.72	58.10
2018 Proposed Goal	66.97	1.11	60.33
Milbank			
2017 Goal	75.49	1.82	41.48
2017 Performance	118.44	2.84	41.67
2018 Proposed Goal	75.49	1.82	41.48
Morris			
2017 Goal	55.78	1.01	55.23
2017 Performance	88.24	1.58	55.88
2018 Proposed Goal	55.78	1.01	55.23
Wahpeton			
2017 Goal	57.24	1.13	57.48
2017 Performance			
2018 Proposed Goal	57.24	1.13	57.48



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.

As can be seen from Figure 10 above, OTP has trended downward over time regarding its ability to meet its goals. On average, since 2007, OTP has achieved approximately 51 percent of its goals, with 2017 coming in lower than that at approximately 44 percent.[10] The Department recommends that the Company's goals remain frozen at 2013 levels until performance improves. The Department notes that data from OTP's new IMS may support revisions to the Company's reliability goals, once sufficient data are available.

[10] The Department notes that, as data for the Wahpeton CSC were not available for 2017, a 5-year average was used as a placeholder to allow for a relevant comparison of the data over time.

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	94.4%	2.6%	3.0%
2011	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%
2017	96.4%	1.5%	2.2%

The Department notes that OTP has improved its meter-reading performance over the years measured.

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 2017. According to OTP, there were no meters that were not read for a period of 6-12 months in 2017. 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 70 customer service representatives in 2017. 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:

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.

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
2017	92,812	817	814	99.63%	1,044	415	33

OTP reported that 97,508 disconnection notices were sent to residential, small commercial and large commercial customers in 2017, 92,812 being for residential customers. This number is significantly larger than the Company's previous numbers. The Department requests that, in Reply Comments, the Company provide some context to this number as to why it is so much larger than the historical figures.

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 2017, 393 customers requested service to a location not previously served, all of which were connected on time. As for locations previously served, OTP reported that 1,660 of these requests were made in 2017, eight of which were connected late and one was connected early. The Department looks for any significant trends in overall service request response times. At this time, response times for 2017 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 indicate that an annual average of 96.20 percent of calls were answered within 20 seconds in 2017. Therefore, the Department concludes that OTP is in compliance with Minnesota Rules, part 7826.1200.

The Company stated that, as of March 13, 2017, it went live with a new telecommunications system that should allow for accurate call center response time 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 24 Minnesota customers requested emergency medical account status in 2017, 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 14 summarizes the number of customer deposits required over the past nine years. The number of customers served by OTP is provided for context.[11]

[11] 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.

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
2017	698	61,568[12]

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;

C. the number and percentage of complaints resolved upon initial inquiry, within ten days, and longer than ten days;

[12] The total customers served for 2017 was taken from the Minnesota Jurisdictional 2017 Report in Docket No. 18-4 rather than the Minnesota Rules Chapter 7610 reports as the data were not yet available at the time for filing.

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 15 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%
2017	33	6%	16%	0%	91%	24%

The Department notes that 20 of the 33 complaints from 2017 were listed in the "other" category, which is approximately 59 percent of the total number of complaints. The Company stated that this category includes such complaints as "rebate timing, planned outages and third party meter readers."[13]

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

[13] 2018 Annual Report, p. 43.

E. COMPLIANCE WITH OCTOBER 19, 2017 ORDER

1. Include in its next filing a benchmarking of Otter Tail's performance using the Institute of Electrical and Electronics Engineers reliability standards.

OTP provided a summary of its participation with Edison Electric Institute's (EEI) Reliability Benchmark Survey over the past five years. The Company notes that, from data collected on 92 utility companies, it performs in the first quartile for CAIDI, third quartile for SAIDI, and fourth quartiles for SAIFI and MAIFI.

2. Include in its next filing a discussion of impacts of reliability by customer class.

OTP stated that it currently does not possess the capability of monitoring reliability by customer class as it lost this capability two years ago on its former IMS due to vendor issues. The Company stated that its new IMS, to be completed in 2018 with the first full year of data coming in 2019, will have the ability to create class groups and provide future customer class group analyses.

3. Include in its next filing a discussion of the work the Company is doing to withstand and recover from longer term outage events.

OTP provided the following information regarding its efforts to withstand and recover from longer-term outage events.[14]

- OTP is part of the Midwest Transmission Assistance Group, MTAG. This consortium of eight regional utilities coordinates and inventories long lead item utility equipment and provides a back pool of service personnel. If, and when, a major even occurs, members can solicit both manpower and equipment from members. MTAG meets twice a year to review and update its charter agreements.

- OTP's Innovation 2030 is one of the company's initiatives to review and plan future capital spending on T&D infrastructure, both hardware and software. Systems are being evaluated to improve reliability and provide customers with more information during interruptions. As part of this evaluation, existing standards will be reviewed. Withstanding or preventing outages will be a method to improve reliability as desired through the initiative.

[14] 2018 Annual report, p. 30.

- As part of this initiative, described above, the company will be evaluating a formal Outage Management System, OMS, and a centralized Distribution desk to improve the efficiency of restoration efforts for all interruptions.

III. RECOMMENDATIONS

The Department recommends that the Commission accept OTP's 2018 Annual Report.

The Department also recommends that the Commission keep the Company's reliability standards for 2018 frozen at the level of the 2013 goals until OTP demonstrates further improvement in meeting its performance goals, or at the time sufficient data are available from the Company's new IMS that indicate revisions are reasonable.

Table 16: OTP Proposed and Department Recommended Goals for 2018

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

Finally, the Department requests that, in Reply Comments, the Company address a focus on equipment failure as an opportunity to improve reliability performance and provide information regarding the increased number of disconnection notices issued in 2017 when compared with the number issued in previous years.

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CERTIFICATE OF SERVICE

I Marcella Emeott, 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-18-247

Dated this 1st day of June 2018

/s/Marcella Emeott

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