COMMERCE DEPARTMENT

August 12, 2020

Will Seuffert
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-20-401

Dear Mr. Seuffert:

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 2020.

The report was filed on April 1, 2020 by:

> Wendi Olson
> Regulatory Compliance Specialist
> 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 Company's (OTP or the Company) report and set OTP's 2020 SAIFI, SAIDI and CAIDI goals at the 2013 levels until the Company demonstrates further improvement in meeting its performance goals.

Sincerely,

/s/ MICHAEL N. ZAJICEK
Rates Analyst

MNZ/ar

COMMERCE DEPARTMENT

Before the Minnesota Public Utilities Commission

Comments of the Minnesota Department of Commerce Division of Energy Resources

Docket No. E017/M-20-401

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 January 28, 2020 Order in Docket No. E017/M-19-260 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. Non-normalized SAIDI, SAIFI, and CAIDI[1] values;
b. SAIDI, SAIFI, and CAIDI values calculated using the IEEE [Institute of Electrical and Electronics Engineers] 2.5 beta method;
c. MAIFI [Momentary Average Interruption Frequency Index], normalized and non-normalized;
d. CEMI [Customers Experiencing Multiple Interruptions] – at normalized and non-normalized outage levels of 4, 5, and 6;
e. The highest number of interruptions experienced by any one customer;
f. CELI [Customers Experiencing Lengthy Interruptions] – at normalized and non-normalized intervals of greater than 6 hours, 12 hours, and 24 hours;
g. The longest experienced interruption by any one customer (or feeder);
h. A breakdown of field versus office staff required;
i. Estimated restoration times;
j. IEEE benchmarking;
k. Performance by customer class; and
l. More discussion of leading causes of outages and mitigation strategies.

Additionally, the Commission's January 28, 2020 Order required the Company to provide a discussion of transitioning from a five-year rolling average method of proposing reliability standards to standards that are similar to the second quartile rank of similarly sized investor-owned utilities under either the

[1] SAIDI = System Average Interruption Duration Index, SAIFI = System Average Interruption Frequency Index, CAIDI = Customer Average Interruption Duration Index.

IEEE benchmarking study or using United States Energy Information Administration (EIA) reliability data.

On April 1, 2020, OTP filed its *2019 Annual Safety, Reliability and Service Quality Report and Proposed SAIFI, SAIDI an CAIDI Reliability Standards for 2020* (Annual Report) in Docket No. E017/M-20-401 to comply with the Commission's January 28, 2020 Order and the requirements of Minnesota Rules Chapter 7826.

On April 20, 2019, the Commission filed a *Notice of Comment Period* requesting that parties respond to the following questions:

1. Should the Commission accept Minnesota Power's, Otter Tail Power's, and Xcel Energy's 2019 Safety, Reliability, and Service Quality Metrics reports?

2. Should the Commission approve Minnesota Power's, Otter Tail Power's, and Xcel Energy's proposed transition from a rolling five year average to set reliability standards to benchmarking to the IEEE Reliability Working Group? Please discuss:
   a. Time lag of IEEE benchmarking data.
   b. Xcel's proposal to use a 5 year average of IEEE 2nd quartile results vs Otter Tail Power and Minnesota Power's proposals to use the prior year's benchmarking results, and keeping standards consistent between utilities.
   c. The move from reporting reliability results for each work center, to the state as a whole, and whether utilities need a variance to Minn. Rules 7826.0500 Subp 1 A-C, and Subp 2.
   d. The choice of using the IEEE working group vs EIA data for benchmarking.

3. Feedback on utilities' proposed public facing summary of the annual reports. Please discuss:
   a. Whether the information is digestible for members of the general public
   b. If there is any additional content utilities should include in the documents
   c. Potential methods of distributing this information to customers

4. Should the Commission grant Xcel Energy's requested variance to Minn. Rules 7826.0500 Subpart 1.G? Should the Commission vary this rule for all utilities?

5. Are there other issues or concerns related to this matter?

II. SUMMARY OF REPORT AND DEPARTMENT ANALYSIS

The Minnesota Department of Commerce, Division of Energy Resources (Department) reviewed OTP's Annual Report to assess compliance with Minnesota Rules, Chapter 7826 and the Commission's January 28, 2020 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
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
2018	0	1	2	14
2019	0	3	3	4

Table 2: Number of Days

	Days of Job Transfer or Restriction	Days Away from Work
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
2018	152	6
2019	239	60

Table 3: Injury & Illness Types

	Injuries	Skin Disorders	Respiratory Conditions	Poisonings	All Other Illnesses
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
2018	14	0	0	0	0
2019	10	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
2018	1	UG Fault	$100.00
2019	0	N/A	N/A

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 2019 reliability performance compared with the goals set by the Commission in Docket No. E017/M-19-260.[2]

Table 5: OTP's 2019 Reliability Performance Compared with Goals

Work Center		2019 Performance	2019 Goals
Bemidji	SAIDI	127.33	70.64
	SAIFI	1.52	1.26
	CAIDI	83.85	56.06
Crookston	SAIDI	128.55	69.33
	SAIFI	1.86	1.19
	CAIDI	69.11	58.26
Fergus Falls	SAIDI	95.12	66.97
	SAIFI	1.31	1.11
	CAIDI	72.79	60.33
Milbank	SAIDI	244.74	75.49
	SAIFI	3.35	1.82
	CAIDI	73.12	41.48
Morris	SAIDI	51.13	55.78
	SAIFI	1.15	1.01
	CAIDI	44.36	55.23
Wahpeton	SAIDI	33.93	57.24
	SAIFI	0.19	1.13
	CAIDI	180.71	50.65
All MN Customers	SAIDI	93.51	64.95
	SAIFI	1.33	1.13
	CAIDI	70.28	57.48

Shaded cells in Table 5 indicate reliability goals that were not met in 2019. See Section II.B.3 below for a discussion of OTP's 2019 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 2019 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, zero days met the criteria to be considered a Major Event Day.

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

[2] The Department notes that SAIDI = SAIFI * CAIDI.

3. Action Plan to Improve Reliability

OTP provided detailed information regarding its failure to meet its 2019 reliability goals. The Company missed goals in all six work centers, or customer service centers (CSCs), in 2019. As an update to the Commission's December 20, 2012 Order in Docket No. E017/M-12-325, the Company provided a discussion of continuing efforts made to improve reliability.[3] OTP noted that 2019 performance was measured using the Company's new NextGen Interruption Monitoring System (IMS); therefore, 2019 performance results may not be directly comparable to prior years' results.[4]

OTP's action plan consisted of an update to past and continuing efforts. The Company noted that, "Overall system improvements will be realized over longer periods of time."

The Department notes that in OTP's Integrated Distribution Plan filing, Docket No. E017/M-19-693, the Company indicated that it expects to greatly increase the amount its spending on age-related equipment replacements in the next few years, which may help system reliability in the future.

4. Bulk Power Supply Interruptions

OTP reported that it sustained two interruption to a Minnesota bulk power supply facility in 2019. The Company stated that "[o]n April 11 at 5:06 PM, a 115KV transmission line, Benson and Xcel Energy's Maynard, opened due to wind and icing dropping out Kerkhoven and downstream customers served from 41.6 KV sub transmission."[5] This resulted in approximately 7.5 minutes of interruption to Minnesota customers served off the line. The second event occurred on June 8, 2019 at 4:00 p.m. when the Donaldson 115-kV line locked out due to a broken cross arm causing a 22 minute and 29 second interruption to Minnesota customers.

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 21 major service interruptions in 2019. The largest major service interruption affected approximately 2,770 customers and was due to strong storms. OTP stated that the length of the outage, which began approximately at 3:18 a.m to 3:54 a.m. on September 5, 2019, varied between 37 minutes for some customers and 3 hours and 21 minutes for others. The main causes for major service interruptions included equipment failure and storms.

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

[3] Annual Report, p. 16.
[4] Annual Report, p. 4, 10, 15, 28, etc..
[5] Annual Report, p. 17.

6. Worst Performing Circuit

OTP identified the worst performing feeder in each work center, including its SAIDI, SAIFI, CAIDI, and MAIFI, the major causes of each feeder's outages, and the remedial measures planned or taken by the Company. The Company indicated that it will be determining its worst performing feeder based on MAIFI in the future.

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 14 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 2019. 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, 2019. The following table summarizes total staffing levels over the past 13 years.

Table 7: OTP Work Center Staffing Levels

	Field	Office	Total
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
2018	123	39	162
2019	122	43	165

Given OTP's history of failing to meet many of its reliability goals, the Department is encouraged by the increase in field staff in recent years. 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 Annual Report[6] provided updates on continuing developments from the Company's use of the Interruption Monitoring System (IMS). Specifically, OTP reported that:

- OTP has completed a project to replace its obsolete IMS as it relates to the planned shutdown of cellular 2G service. The implementation of the plan was completed in late 2018.

- OTP's NextGen IMS and the use of power quality meters will continue to provide optimized and focused deployment of vegetation management and maintenance resources to areas that are identified through its interruption data collection process in the Company's efforts to achieve reliability.

- OTP continues to explore ways to assess reliability performance.

- OTP began an initiative to focus on improving electrical network and infrastructure to improve reliability, customer engagement, and business efficiency by addressing aging infrastructure and preparing for new technologies.

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.

[6] Annual Report, pages 28-30.

C. PROPOSED RELIABILITY STANDARDS FOR 2020

OTP proposed the following reliability goals for 2020:

Table 8: OTP's Proposed 2020 Goals

Work Center	SAIDI	SAIFI	CAIDI
All MN Customers	**94**	**1**	**94**

OTP proposed to move to a single work center rather that its previous 6 work centers for different areas of the state. OTP's proposed goals are higher (easier to achieve) than the previous statewide goals for SAIDI and CAIDI, but slightly lower (harder to achieve) for SAIFI.

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 2019. 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 9 below shows how many of its eighteen annual goals[7] OTP has met since 2009.

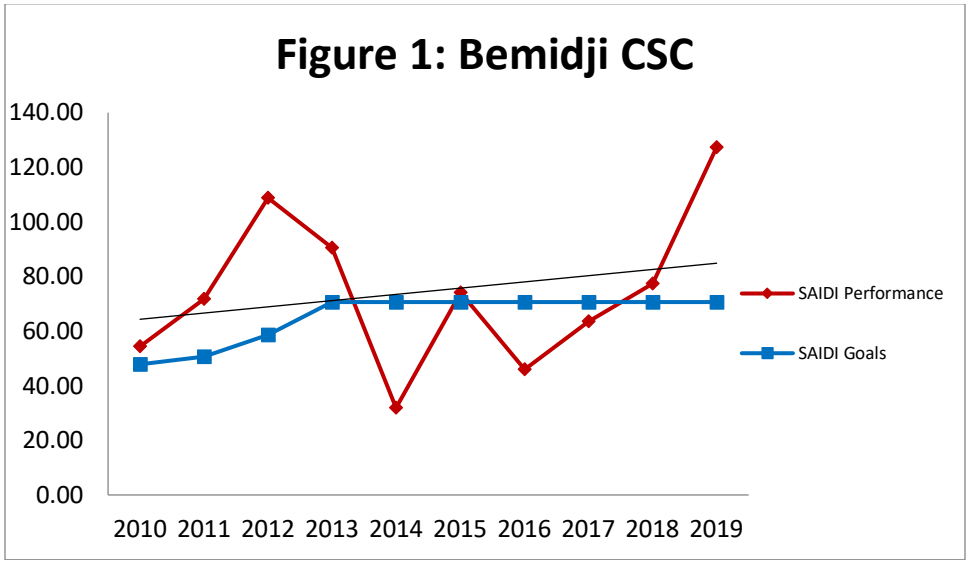
Table 9: OTP's Reliability Goals[8]

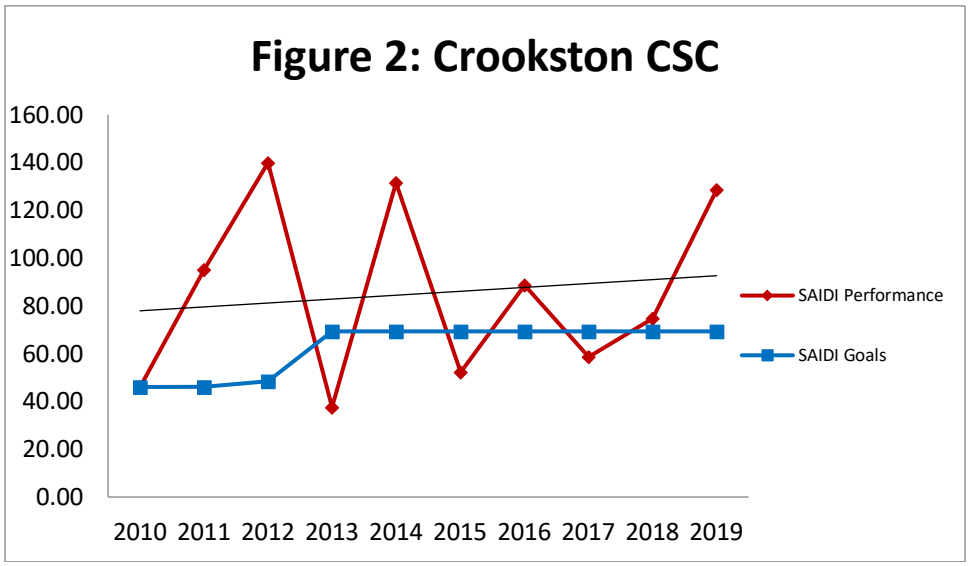
		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Bemidji	SAIDI	48.25	47.85	50.65	58.74	70.64	70.64	70.64	70.64	70.64	70.64	70.64
	SAIFI	0.90	1.08	1.11	1.16	1.26	1.26	1.26	1.26	1.26	1.26	1.26
	CAIDI	53.61	44.31	45.74	50.64	56.06	56.06	56.06	56.06	56.06	56.06	56.06
Crookston	SAIDI	72.55	46.15	46.12	48.58	69.33	69.33	69.33	69.33	69.33	69.33	69.33
	SAIFI	1.48	1.08	1.05	0.93	1.19	1.19	1.19	1.19	1.19	1.19	1.19
	CAIDI	49.02	44.31	43.87	52.24	58.26	58.26	58.26	58.26	58.26	58.26	58.26
Fergus Falls	SAIDI	74.00	58.03	64.63	69.16	66.97	66.97	66.97	66.97	66.97	66.97	66.97
	SAIFI	1.27	1.09	1.15	1.17	1.11	1.11	1.11	1.11	1.11	1.11	1.11
	CAIDI	58.27	53.00	56.21	59.11	60.33	60.33	60.33	60.33	60.33	60.33	60.33
Milbank	SAIDI	74.00	80.00	47.97	59.24	75.49	75.49	75.49	75.49	75.49	75.49	75.49
	SAIFI	1.30	3.00	1.35	1.57	1.82	1.82	1.82	1.82	1.82	1.82	1.82
	CAIDI	56.92	26.67	35.57	37.73	41.48	41.48	41.48	41.48	41.48	41.48	41.48
Morris	SAIDI	67.05	46.62	47.84	55.71	55.78	55.78	55.78	55.78	55.78	55.78	55.78
	SAIFI	1.34	1.10	1.13	1.12	1.01	1.01	1.01	1.01	1.01	1.01	1.01
	CAIDI	50.04	42.47	42.26	49.74	55.23	55.23	55.23	55.23	55.23	55.23	55.23
Wahpeton	SAIDI	74.00	28.91	44.92	57.00	57.24	57.24	57.24	57.24	57.24	57.24	57.24
	SAIFI	1.30	0.43	0.84	1.15	1.13	1.13	1.13	1.13	1.13	1.13	1.13
	CAIDI	56.92	67.07	53.42	49.57	50.65	50.65	50.65	50.65	50.65	50.65	50.65

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

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, the last four years have seen the Company perform poorly in achieving its goals as it has not been above a 50 percent success rate since 2015. 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 2010-2019, 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.





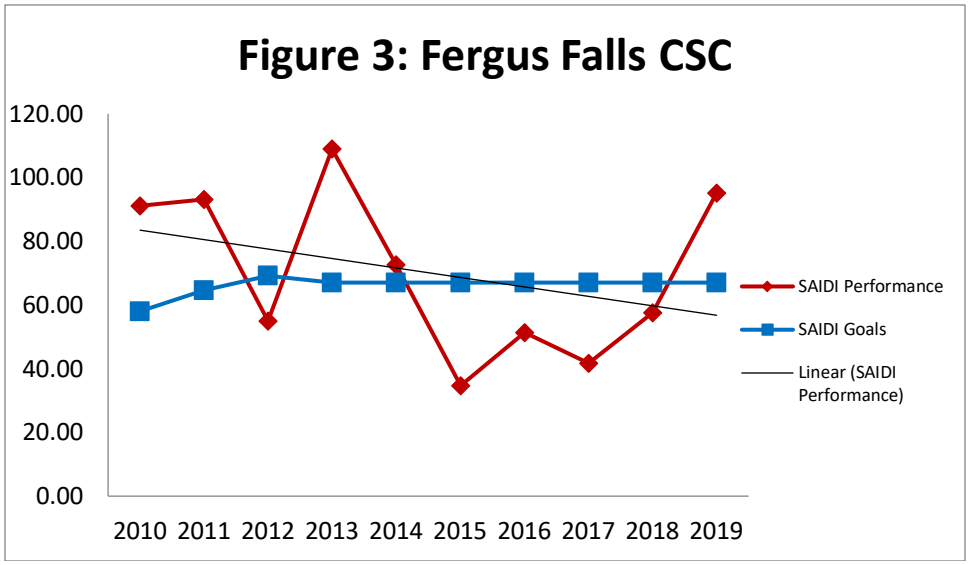


Figure 3: Fergus Falls CSC
120.00
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2010 2011 2012 2013 2014 2015 2016 2017 2018 2019
SAIDI Performance
SAIDI Goals
Linear (SAIDI Performance)

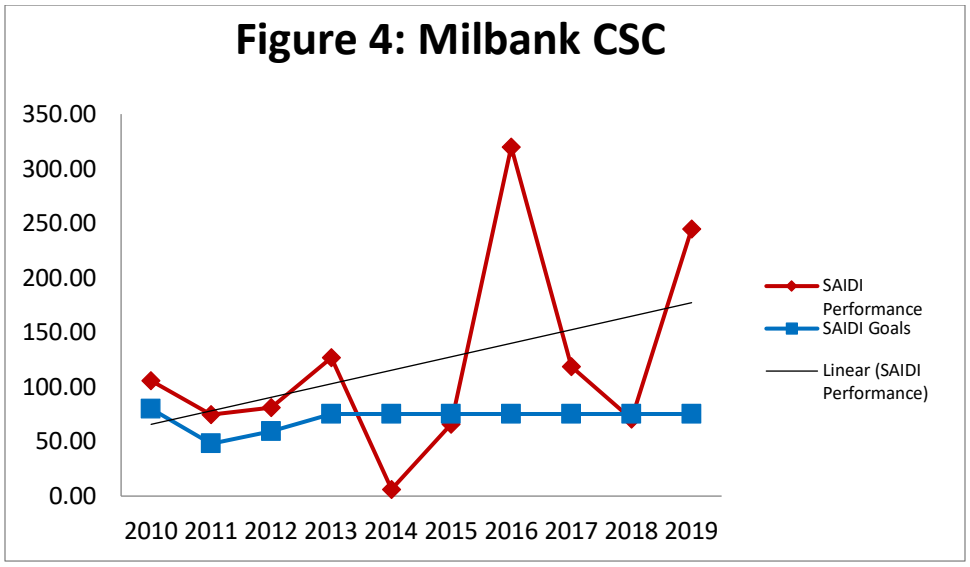
Figure 4: Milbank CSC
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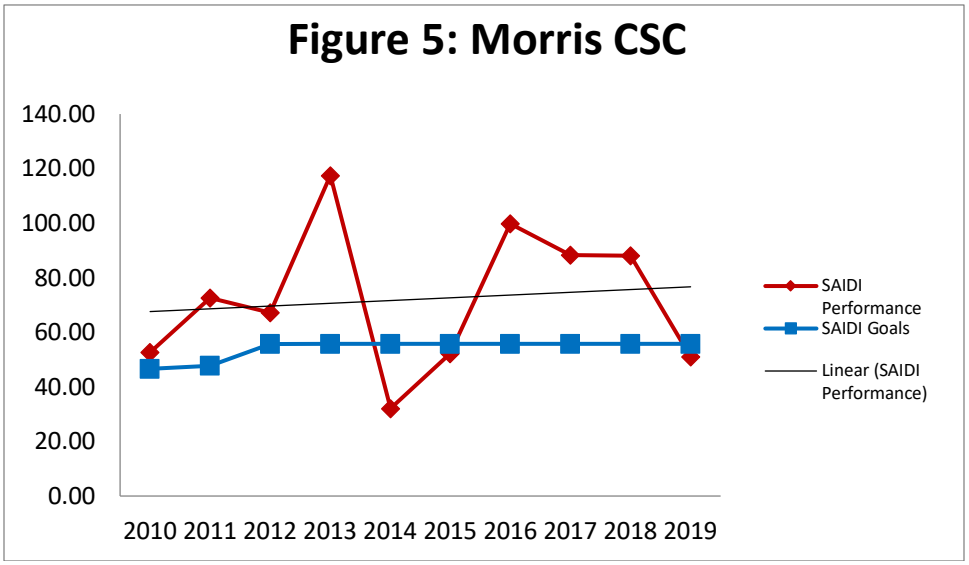
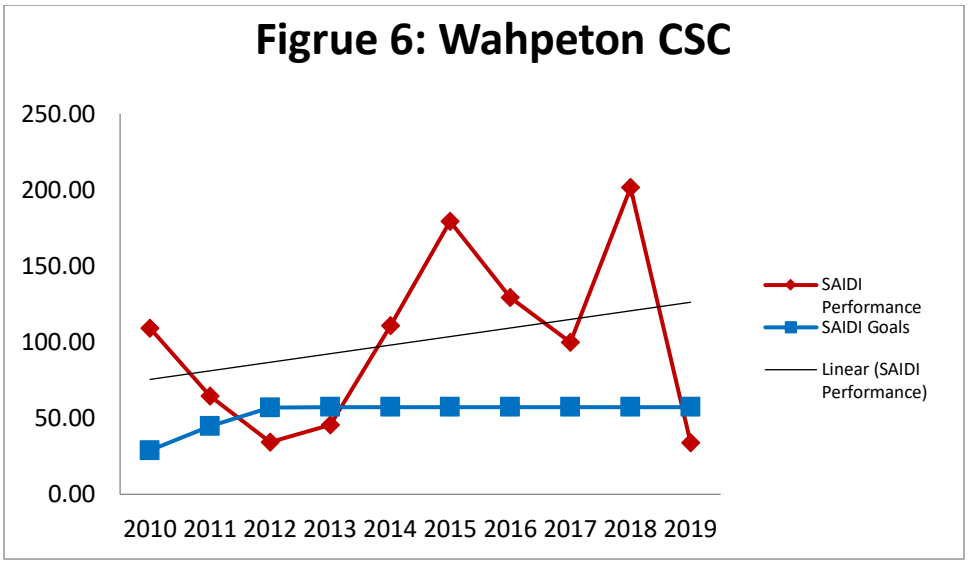




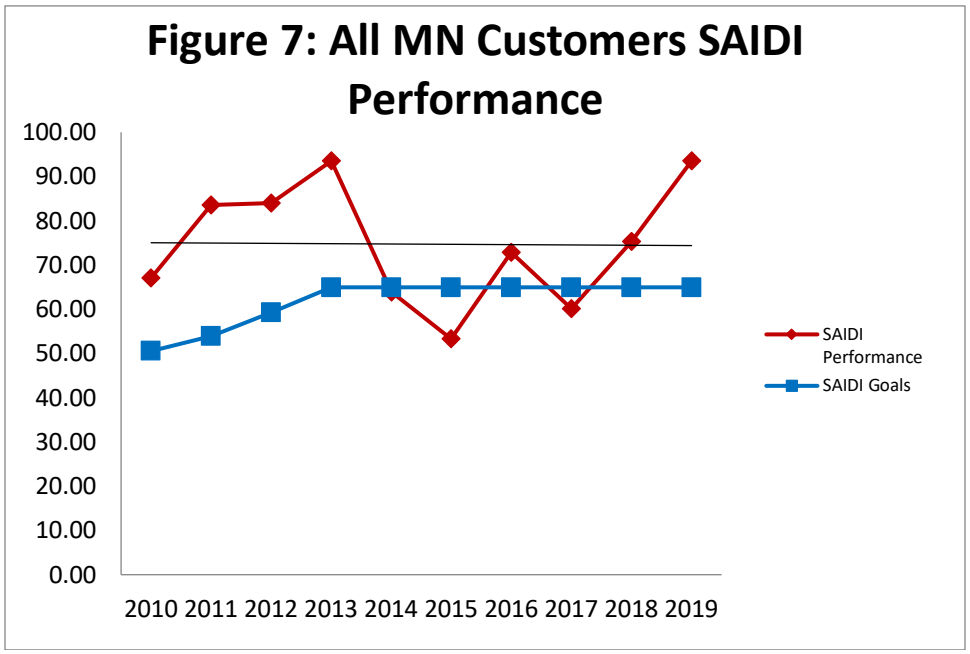
While Minnesota Rules, part 7826.0600 requires reliability performance standards to be set by work center and does not require establishing an overall goal for a utility's entire Minnesota service territory, OTP has provided overall metrics in its annual reports. As an additional check on OTP's reliability 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 10.

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

	2011	2012	2013	2014	2015	2016	2017	2018	2019
Goal SAIDI	53.84	59.21	64.95	64.95	64.95	64.95	64.95	64.95	64.95
Goal SAIFI	1.11	1.11	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Goal CAIDI	48.3	53.34	57.48	57.48	57.48	57.48	57.48	57.48	57.48
Actual SAIDI	82.66	84.05	93.51	63.93	53.30	72.80	60.06	75.33	93.51
Actual SAIFI	1.21	1.30	1.16	0.96	0.80	1.20	1.01	1.23	1.33
Actual CAIDI	68.30	64.67	80.86	66.37	66.70	60.20	59.31	61.12	70.28

As can be seen in Table 10, OTP has seen some success in achieving its SAIDI and SAIFI goals at the statewide level. However, in 2018 and again in 2019, the Company failed to achieve all three of its SAIDI, SAIFI, and CAIDI goals.

The Company's retrogression in its SAIDI and SAIFI performance in 2016, 2018, and 2019 have reversed the overall trend of the past nine years that had been moving in an improving direction, as shown in Figures 7, 8, and 9 below. Generally, OTP's performance is relatively flat over the last 9 years.



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

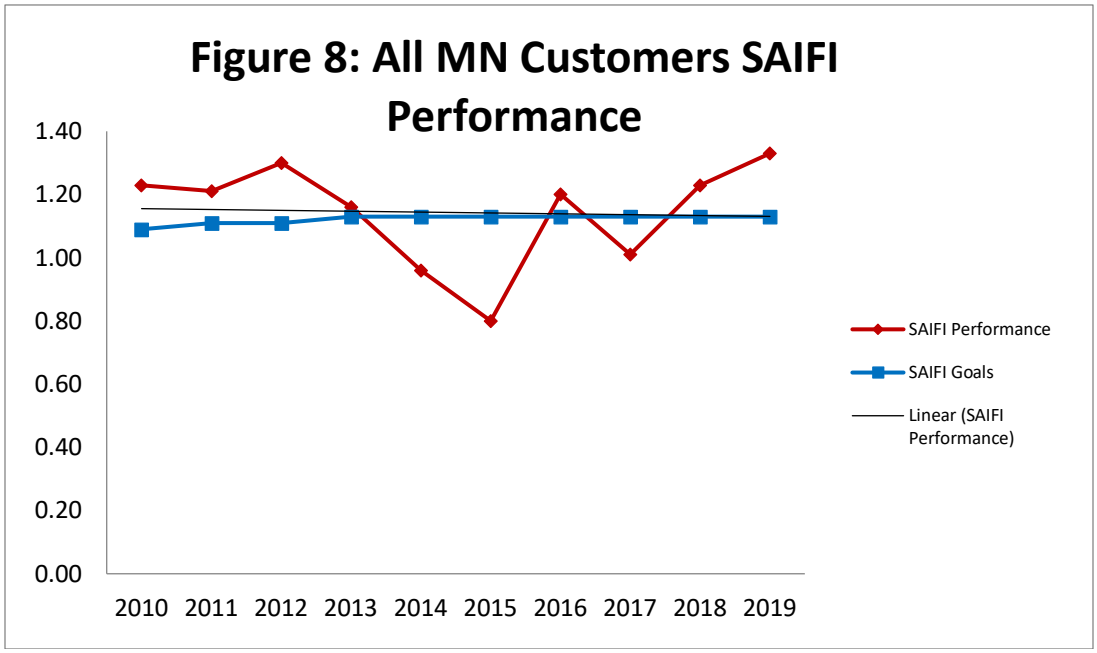


Figure 8: All MN Customers SAIFI Performance
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2010 2011 2012 2013 2014 2015 2016 2017 2018 2019
SAIFI Performance
SAIFI Goals
Linear (SAIFI Performance)

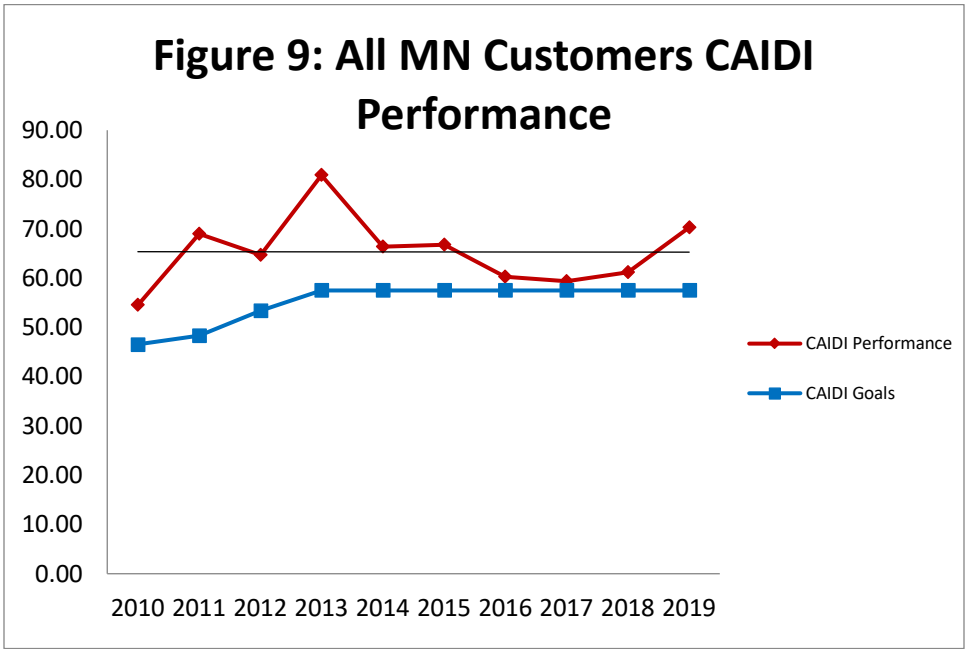
Figure 9: All MN Customers CAIDI Performance
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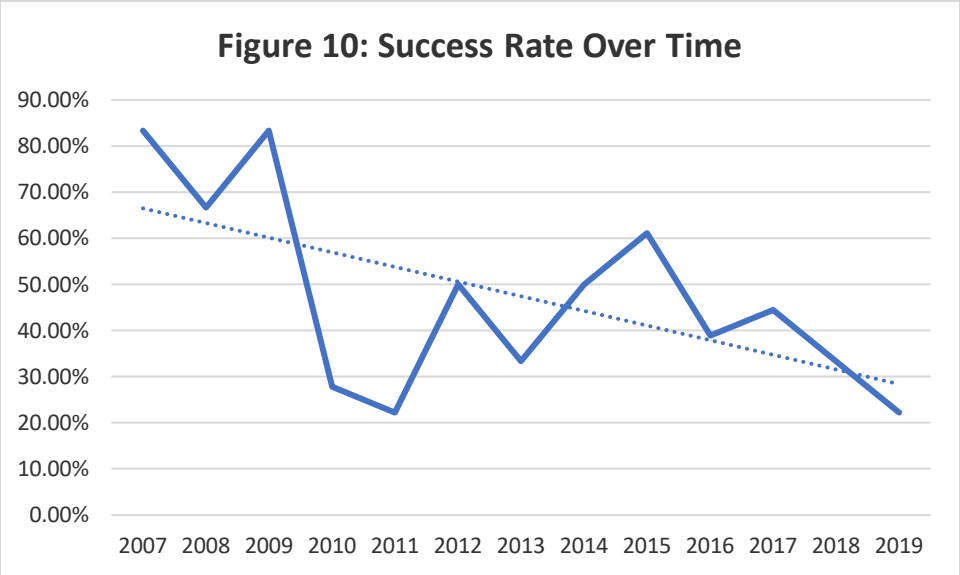
2010 2011 2012 2013 2014 2015 2016 2017 2018 2019
CAIDI Performance
CAIDI Goals



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 2006, OTP has achieved approximately 50 percent of its goals, with 2019 coming in lower than that at approximately 22 percent.

In support of OTP's proposal to eliminate CSC-specific reliability standards, the Company indicated that some of its CSCs have been reorganized, and that CSC boundaries are likely to continue to change. Further, outages in one CSC may be responded to by other CSCs. Finally, OTP anticipated that the Commission would be transitioning from goals set at the 5-year average to a benchmark set by an industry standard. As more fully discussed in section F below, the Department supports the addition of a systemwide goal, but recommends that the Commission also continue to set reliability goals by work center, as required by Minnesota Rules, part 7826.0600.

Table 11 below compares the Company's proposed goals to the rolling 5-year average for all Minnesota customers. The Company's proposed SAIDI and CAIDI goals are significantly easier to achieve than those based on the Company's 5 year rolling average performance.

Table 11: OTP's Proposed 2020 Goals Compared to 5 Year Rolling Average

Work Center	SAIDI	SAIFI	CAIDI
Company Proposed Goals	94.00	1.00	94.00
5 Year Rolling Average	71.00	1.11	63.52

Given these results and the Department's support for continuing to set goals by work center, in addition to establishing a system-wide goal, the Department recommends that the Company's goals remain frozen at 2013 levels until performance improves.

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
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%
2018	97.3%	1.5%	1.2%
2019	97.7%	1.18%	1.1%

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 97 percent of all meters each month during 2019. According to OTP, there were two meters that were not read for a period of 6-12 months in 2018. 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 73 customer service representatives in 2019. 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
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	99.6%	629	232	69
2016	49,368	932	928	99.6%	924	301	42
2017	48,421	817	814	99.6%	1,044	415	33
2018	67,015	659	658	99.9%	1,088	428	32
2019	56,257	441	398	90.3%	317	146	27

OTP reported that 56,257 disconnection notices were sent to residential, small commercial and large commercial customers in 2019, 51,024 being for residential customers. This number is down from 2018, however is still higher than the Company's previous numbers. The Company notes that disconnections were suspended from February 4 through March 11 due to the time needed for the new Customer Information System (CIS) to be implemented so as to allow for future disconnection notices from the new system.

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 2019, 187 customers requested service to a location not previously served, all of which were connected on time. As for locations previously served, OTP reported that 7,387 of these requests were made in 2019, the Company noted that it is attempting to improve its system for determining if connections were late or not, as the current system does not accurately capture those values because the system creates accounts for customers upon initial inquiry, rather than when the customer actually requests the connection be in place. The Department looks for any significant trends in overall service request response times. The Department notes that OTP reported a significant increase in the number of extension requests made in 2019 compared to previous years; however, response times for 2019 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 82.3 percent of calls were answered within 20 seconds in 2019. Therefore, the Department concludes that OTP is in compliance with Minnesota Rules, part 7826.1200.

The Company stated that in February 2019 OTP implemented its new CIS, after which the Company saw an increase in its call response time (a decrease in the number of calls answered within 20 seconds). The Company attributed this to employees taking time to become comfortable with the new system combined with an increase in call volume. The Company saw improvement in response times toward the end of 2019 and believes that familiarity with the new system, plus the hiring of additional call center employees, will improve results in the future.

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 14 Minnesota customers requested emergency medical account status in 2019, 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 fifteen years. The number of customers served by OTP is provided for context.[10]

Table 14: Customer Deposits Required

	Number of Deposits Required	Total Customers Served
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
2018	685	61,888
2019	652	62,105[11]

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.

[10] 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.
[11] The total customers served for 2019 was taken from the Minnesota Jurisdictional 2018 Report in Docket No. 20-4 rather than the Minnesota Rules Chapter 7610 reports as the data were not yet available at the time for filing.

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;

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
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%
2018	34	6%	0%	0%	47%	21%
2019	28	18%	0%	0%	54%	82%

The Department notes that 19 of the 28 complaints from 2019 were listed in the "other" category, which is approximately 68 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."[12]

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

E. COMPLIANCE WITH JANUARY 28, 2020 ORDER

The Commissions January 28, 2020 Order in Docket No. E017/M-19-260 included Attachment B, which updated the annual reporting requirements for the Utility. Attachment B required the following to be reported by OTP:

a. Non-normalized SAIDI, SAIFI, and CAIDI values;
b. SAIDI, SAIFI, and CAIDI values calculated using the IEEE 2.5 beta method;
c. MAIFI, normalized and non-normalized;
d. CEMI – at normalized and non-normalized outage levels of 4, 5, and 6;
e. The highest number of interruptions experienced by any one customer;
f. CELI – at normalized and non-normalized intervals of greater than 6 hours, 12 hours, and 24 hours;
g. The longest experienced interruption by any one customer (or feeder);
h. A breakdown of field versus office staff required;
i. Estimated restoration times;

[12] Annual Report, p. 51

j. IEEE benchmarking;
k. Performance by customer class; and
l. More discussion of leading causes of outages and mitigation strategies.

The Department summarizes OTP's compliance with each reporting requirement in turn.

a. Non-normalized SAIDI, SAIFI, and CAIDI values

OTP provided this information in Tables 4 and 4a on page 11 of its Report. The following tables show the normalized and non-normalized values for SAIDI, SAIFI, and CAIDI as reported by OTP. As there were no major event days during 2019 these numbers are identical.

Table 16: Normalized and Non-normalized SAIDI, SAIFI, and CAIDI

Work Center	SAIDI	SAIFI	CAIDI
Bemidji			
Non-normalized	127.33	1.52	83.85
Normalized	127.33	1.52	83.85
Crookston			
Non-normalized	128.55	1.86	69.11
Normalized	128.55	1.86	69.11
Fergus Falls			
Non-normalized	95.12	1.31	72.79
Normalized	95.12	1.31	72.79
Milbank			
Non-normalized	244.74	3.35	73.12
Normalized	244.74	3.35	73.12
Morris			
Non-normalized	51.13	1.15	44.36
Normalized	51.13	1.15	44.36
Wahpeton			
Non-normalized	33.93	0.19	180.71
Normalized	33.93	0.19	180.71

b. SAIDI, SAIFI, and CAIDI values calculated using the IEEE 2.5 beta method

See Table 16 above.

c. MAIFI – normalized and non-normalized

OTP provided this information on page 34 of its Annual Report. The Department notes that OTP indicated that this information was also included previously in the Report, however the Department was not able to locate the data in the other indicated location. Table 17 below shows the Company's normalized and non-normalized MAIFI for 2019. As there were no major events in 2019, these numbers are identical.

Table 17: 2019 Normalized and Non-Normalized MAIFI

CSC 2019	MAIFI
Bemidji	5.32
Crookston	7.38
Fergus Falls	4.39
Milbank	10.28
Morris	4.99
Wahpeton	1.23
MN Total	4.91

d. CEMI – at normalized and non-normalized outage levels of 4, 5, and 6

OTP provided this information in page 34 of its Annual Report. Regarding CEMI, the Department notes that the Company has seen an improvement in recent years as the percentage of customers experiencing five or greater outages, and customer experiencing seven or greater outages has decreased from highs in 2015 and 2016 to lows in 2018, however there was some regression in 2019.

e. Highest number of interruptions by any one customer

OTP provided this information on page 35 of its Annual Report. OTP stated that the North Feeder fed from the Ottertail City Substation experienced the most interruptions and was the Fergus Falls CSC's worst performing circuit with 2 sustained and 24 momentary interruptions.

f. CELI – at intervals of greater than 6 hours, 12 hours, and 24 hours

OTP provided this information on page 35 of its Annual Report. Table 18 below shows the Company's CELI performance for 2019 at the various intervals.

Table 18: 2019 CELI at 6, 12, and 24 Hours

CELID – 6	5.90%
CELID – 12	1.57%
CELID – 24	1.12%

g. The longest experienced interruption by any one customer

OTP provided this information on page 35 of its Annual Report. OTP stated that the West Feeder fed from the Northcote substation experienced the longest duration interruption at 17 hours and 31 minutes. The second worst feeder was the East Feeder fed from Erskine Substation at 8 hours and 27 minutes.

h. A breakdown of field vs office staff required

OTP provided this information on page 26 of its Annual Report. The Department previously discussed this information above and provided the information in Table 8 of these comments.

i. Estimated restoration times

OTP stated that, "it is not currently feasible for Otter Tail to estimate restoration times. Otter Tail does not have a system (such as an Advanced Distribution Management System or Outage Management System) in which to create, track, and manage estimated restoration times."[13]

j. IEEE benchmarking

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 99 utility companies in 2017, it performs in the first quartile for CAIDI, mid quartile for SAIDI, and fourth quartiles for SAIFI and MAIFI. This performance is essentially unchanged from 2018's results.

k. Performance by customer class

Regarding performance by customer class, OTP stated that it currently does not possess the capability of monitoring reliability by customer class and only has the ability to measure reliability at feeder level. OTP stated that it has feeders with more than one class of customer on them.

The Department notes that in OTP's previous annual report,[14] the Company stated that its new IMS, which was implemented for 2019, will have the ability to create customer class groups subsequently allowing for an analysis of such data. Additionally, OTP stated that it continues to improve on its interruption cause analyses and that it uses these data to help inform both its capital spending forecasts and its maintenance activities. The Company stated that it believes its new IMS will improve analysis granularity in the future and will allow for increased mitigation strategies.

The Department requests that the Company provide in reply comments further discussion on whether its new IMS will allow for performance by customer class information to be gathered, as discussed in last year's annual report, or why this is not possible.

l. More discussion of leading causes of outages and mitigation strategies

[13] Annual Report, p. 35.
[14] Docket No. E-017/M-19-260

OTP provided this information in its discussion of the reliability reporting requirements on pages 10-15 of the Annual Report and in Table 5 of the filing.

F. Response to Commission Questions

a. Should the Commission Accept OTP's Safety, Reliability and Service Quality Metrics Reports?

The Department recommends that the Commission accept OTP's Annual Report as the Company has provided the required information.

b. Proposed Transition to IEEE Reliability Working Group Benchmarking Data

The Department supports including the IEEE benchmarking analysis in the annual reports, but does not support Minnesota Power's, Otter Tail Power's and Xcel Energy's proposed transition from a rolling five-year average to set reliability standards to benchmarking to the IEEE Reliability Working Group survey for the large utility group 2nd quartile performance. The current approach allows the Commission to continue to monitor MP, OTP and Xcel's performance from a company-specific or longitudinal perspective. This is an important perspective for assessing the individual utility's efforts regarding system reliability and it should not be discontinued. Rather, the utilities should be required to provide the IEEE benchmarking analysis in addition to the historical company-specific information. The IEEE analysis is important in that it provides the Commission with a "comparable" group analysis for each of the utilities. This perspective has been lacking historically, so the Department supports the addition of this reporting requirement.

In addition, given that the IEEE benchmarking data is not available until the 3rd quarter of the following year, the Department supports a process that the utilities make a supplemental filing within 20 days of receiving the benchmarking data from IEEE. The Department and other interested parties would then have an opportunity to respond to that new information, if warranted. Ultimately, the IEEE benchmarking data will add valuable information and context as the annual reports are processed.

c. Xcel's Proposal to use 5-year Average of 2nd Quartile Results vs Otter Tail Power and Minnesota Power's Proposals to use the Prior Year's[15] Benchmarking Results, and Keeping the Standards Consistent among Utilities

OTP did not indicate whether it would prefer to use the calendar year's numbers or a 5-year average. As noted previously, the Department's position is that the utilities should continue to provide the historical information it currently provides in the existing format. In addition, the Department supports setting a system-wide goal, and requiring the utilities to provide the IEEE benchmarking data annually in a separate filing.

d. Reporting Reliability Results for each Work Center, to State as a Whole, and the Need for a Variance from Minn. Rules 7826.0500 Subp 1 A-C, and Subp 2.

[15] OTP proposed to use the 2017 IEEE Second Quartile Normalized Values for its Goals.

The Department does not agree with the proposal to set only one reliability goal for utilities that have historically been assessed based on work-center-specific goals. Eliminating the more granular goals would reduce the Commission's ability to pinpoint potential problem areas, and may allow utilities to deemphasize the areas in their service territories where service reliability is poor by combining them with areas in which service reliability is average or above average. This approach also appears to be in conflict with the Commission's interest in locational reliability and locational equity expressed in Docket No. E002/M-17-401. Maintaining the current process of establishing work center goals would also not require a variance from Minn. Rules 7826.0500 Subp 1 A-C and Subp 2.

e. Proposed Public Facing Annual Report Summary

OTP provided its proposed public facing annual report summary beginning on page 4 of the Annual Report. The document appeared to fulfill the Commission's requirements.

f. Variance to Minnesota Rules, Part 7826.0500, Subpart 1.G?

The Department addresses Xcel's variance request in our comments in Docket No. E002/M-20-406.

III. RECOMMENDATIONS

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

The Department also recommends that the Commission keep the Company's reliability standards for 2020 frozen at the level of the 2013 goals until OTP demonstrates further improvement in meeting its performance goals.

Table 19: Department Recommended Goals for OTP for 2020

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

The Department requests that the Company provide in reply comments further discussion on whether its new IMS will allow for performance by customer class information to be gathered as discussed in the OTP's previous annual report or explain why this is not possible.

The Department supports establishing a systemwide reliability goal based on IEEE Reliability Working Group 2nd quartile results, and to continue to establish work-center-specific goals for OTP.

Finally, should the Commission approve the use of IEEE benchmarking data to establish systemwide reliability goals, the Department supports requiring OTP to make a supplemental filing within 20 days of receiving the benchmarking data from IEEE, providing a comparison of the IEEE 2nd quartile benchmarks with the Company's reliability performance.

/ar

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-20-401

Dated this **12th** day of **August 2020**

/s/Sharon Ferguson

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Christopher	Anderson	canderson@allete.com	Minnesota Power	30 W Superior St Duluth, MN 558022191	Electronic Service	No	OFF_SL_20-401_M-20-401
Ray	Choquette	rchoquette@agp.com	Ag Processing Inc.	12700 West Dodge Road PO Box 2047 Omaha, NE 68103-2047	Electronic Service	No	OFF_SL_20-401_M-20-401
Generic Notice	Commerce Attorneys	commerce.attorneys@ag.state.mn.us	Office of the Attorney General-DOC	445 Minnesota Street Suite 1400 St. Paul, MN 55101	Electronic Service	Yes	OFF_SL_20-401_M-20-401
James C.	Erickson	jericksonkbc@gmail.com	Kelly Bay Consulting	17 Quechee St Superior, WI 54880-4421	Electronic Service	No	OFF_SL_20-401_M-20-401
Sharon	Ferguson	sharon.ferguson@state.mn.us	Department of Commerce	85 7th Place E Ste 280 Saint Paul, MN 551012198	Electronic Service	No	OFF_SL_20-401_M-20-401
Shane	Henriksen	shane.henriksen@enbridge.com	Enbridge Energy Company, Inc.	1409 Hammond Ave FL 2 Superior, WI 54880	Electronic Service	No	OFF_SL_20-401_M-20-401
James D.	Larson	james.larson@avantenergy.com	Avant Energy Services	220 S 6th St Ste 1300 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_20-401_M-20-401
Douglas	Larson	dlarson@dakotaelectric.com	Dakota Electric Association	4300 220th St W Farmington, MN 55024	Electronic Service	No	OFF_SL_20-401_M-20-401
Kavita	Maini	kmaini@wi.rr.com	KM Energy Consulting, LLC	961 N Lost Woods Rd Oconomowoc, WI 53066	Electronic Service	No	OFF_SL_20-401_M-20-401
Andrew	Moratzka	andrew.moratzka@stoel.com	Stoel Rives LLP	33 South Sixth St Ste 4200 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_20-401_M-20-401

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Wendi	Olson	wolson@otpco.com	Otter Tail Power Company	215 South Cascade Fergus Falls, MN 56537	Electronic Service	No	OFF_SL_20-401_M-20-401
Generic Notice	Residential Utilities Division	residential.utilities@ag.state.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012131	Electronic Service	Yes	OFF_SL_20-401_M-20-401
Larry L.	Schedin	Larry@LLSResources.com	LLS Resources, LLC	332 Minnesota St, Ste W1390 St. Paul, MN 55101	Electronic Service	No	OFF_SL_20-401_M-20-401
Will	Seuffert	Will.Seuffert@state.mn.us	Public Utilities Commission	121 7th Pl E Ste 350 Saint Paul, MN 55101	Electronic Service	Yes	OFF_SL_20-401_M-20-401
Cary	Stephenson	cStephenson@otpco.com	Otter Tail Power Company	215 South Cascade Street Fergus Falls, MN 56537	Electronic Service	No	OFF_SL_20-401_M-20-401
Stuart	Tommerdahl	stommerdahl@otpco.com	Otter Tail Power Company	215 S Cascade St PO Box 496 Fergus Falls, MN 56537	Electronic Service	No	OFF_SL_20-401_M-20-401