215 South Cascade Street
PO Box 496
Fergus Falls, Minnesota 56538-0496
218 739-8200
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April 2, 2018

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

RE: In the Matter of Otter Tail Power Company 2017 Annual Safety, Reliability and Service Quality Report and Proposed SAIFI, SAIDI and CAIDI Reliability Standards for 2018
Docket No. E017/M-18-

Dear Mr. Wolf:

Otter Tail Power Company (Otter Tail) submits the enclosed Annual Report pursuant to Minn. Rules 7826.0400, 7826.0500, and 7826.1300. This Annual Report presents our safety, reliability, and service quality performance for the year 2017 and proposed reliability standards for 2018 pursuant to Minn. R. 7826.0600. Otter Tail's proposed reliability standards for 2018 are found in Table 1 in Section IV, of the attached 2017 Report and Proposed 2018 Reliability Standards Petition.

Otter Tail has electronically filed this document with the Commission. In compliance with Minn. Rule 7829.1300, subp. 2, Otter Tail is serving a copy of this filing on the Department of Commerce – Division of Energy Resources and Office of Attorney General – Antitrust & Utilities Division. A Summary of the filing has been served on all persons on Otter Tail's general service list. A Certificate of Service is also enclosed.

We are available to provide any additional information or respond to any questions you may have. Feel free to contact me at (218) 739-8395 or email me at jfyhrie@otpco.com.

Sincerely,

/s/ JESSICA FYHRIE
Jessica Fyhrie
Supervisor, Regulatory Proceedings

ljh
Enclosures
By electronic filing
c: Service List

STATE OF MINNESOTA
BEFORE THE
MINNESOTA PUBLIC UTILITIES COMMISSION

In the Matter of Otter Tail Power Company's 2017 Annual Safety, Reliability and Service Quality Report and Proposed SAIFI, SAIDI and CAIDI Reliability Standards for 2018	Docket No. E017/M-18-

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2017 REPORT AND PROPOSED 2018 RELIABILITY STANDARDS

Summary of Filing

Please take notice that on April 2, 2018, Otter Tail Power Company (Otter Tail or the Company), filed with the Minnesota Public Utilities Commission (Commission) its annual Safety, Reliability and Service Quality Report for 2017 pursuant to Minnesota Rules 7826.0400, 7826.0500 and 7826.1300. Pursuant to Minnesota Rule 7826.0600, subp. 1, Otter Tail proposes SAIFI, SAIDI and CAIDI reliability standards for 2018.

STATE OF MINNESOTA
BEFORE THE
MINNESOTA PUBLIC UTILITIES COMMISSION

In the Matter of Otter Tail Power Company's 2017 Annual Safety, Reliability and Service Quality Report and Proposed SAIFI, SAIDI and CAIDI Standards for 2018	Docket No. E017/M-18-

2017 REPORT AND PROPOSED 2018 RELIABILITY STANDARDS

I. INTRODUCTION

Otter Tail Power Company (Otter Tail or the Company), submits this filing in compliance of Minnesota Rules 7826.0400, 7826.0500, 7826.0600, subp. 1, and 7826.1300.

II. GENERAL FILING INFORMATION

Pursuant to Minnesota Rule 7829.1300, subp. 4, Otter Tail provides the following general information.

A. Name, Address, and Telephone Number of Utility

Otter Tail Power Company
215 South Cascade Street
P. O. Box 496
Fergus Falls, MN 56538-0496
(218) 739-8200

B. Name, Address, and Telephone Number of Utility Attorney

Cary Stephenson
Associate General Counsel
Otter Tail Power Company
215 South Cascade Street
P. O. Box 496
Fergus Falls, MN 56538-0496
(218) 739-8956

C. Date of Filing and Effective Date

This Report is being filed on April 2, 2018. The proposed reliability standards will be effective for the calendar year 2018.

D. Title of Utility Employee Responsible for Filing

Jessica Fyhrie
Supervisor, Regulatory Proceedings
Otter Tail Power Company
215 South Cascade Street
P. O. Box 496
Fergus Falls, MN 56538-0496
(218) 739-8395

III. MISCELLANEOUS INFORMATION

A. Service on Other Parties

Pursuant to Minn. Rule 7829.1300, subp. 2 and Minn., Stat. §216.17, subd. 3, Otter Tail has electronically filed this Report and Proposed 2018 Reliability Standards. A summary of the filing has been served on all parties on the attached service list.

B. Summary of Filing

A one-paragraph summary of the Report is attached pursuant to Minnesota Rule 7829.1300, subp. 1.

IV. DESCRIPTION AND PURPOSE OF FILING

A. Annual Reporting

Minnesota Commission Rules 7826.0400, 7826.0500 and 7826.1300 require electric utilities to file reports on safety, reliability, and service quality performance for the prior year. Otter Tail's 2017 Safety, Reliability, and Service Quality Report is attached.

B. Proposed reliability standards for 2018

Minnesota Commission Rules 7826.0600 subp. 1, requires electric utilities to propose reliability performance standards for each of its work centers. The rule requires the performance

standards be filed on or before April 1 of each year. The utility is to propose standards for the following reliability indices:

1. System average interruption duration index or SAIDI
2. System average interruption frequency index or SAIFI
3. Customer average interruption duration index or CAIDI

In compliance with the Commission Rules 7826.0600 Subpart 1, Otter Tail's proposed 2018 reliability performance standards for each of Otter Tail's work centers. As ordered in **Docket No. E017/M-15-322 dated August 14, 2015**, Otter Tail's reliability standards have been frozen at 2013 levels until the Company has shown sufficient improvement in indices' performance. Otter Tail proposes to maintain the performance standards at the 2013 levels as shown in **Table 1** below.

Table 1

Proposed 2018 Standards by CSC			
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**

V. CONCLUSION

Otter Tail hereby submits its annual Safety, Reliability, and Service Quality Report for 2017, and proposed reliability standards for 2018.

Date: April 2, 2018

Respectfully submitted,

By: /s/ JESSICA FYHRIE

Jessica Fyhrie
Supervisor, Regulatory Proceedings
Otter Tail Power Company
215 South Cascade St., PO Box 496
Fergus Falls, MN 56537
(218) 739-8395

BEFORE THE
MINNESOTA PUBLIC UTILITIES COMMISSION

Docket No. E017/M-18-

Otter Tail Power Company's
Safety, Reliability, and Service Quality
Report for 2017,
and
Proposed SAIFI, SAIDI, and CAIDI
Reliability Standards for 2018,

Including Additional Information Required
by Commission Orders

April 2, 2018

TABLE OF CONTENTS

I. OTTER TAIL EXECUTIVE MANAGEMENT'S VIEW OF RELIABILITY

This section provides the view of Otter Tail's executive management towards reliability and customer satisfaction.

Reliability at Otter Tail Power Company (Otter Tail) continues to be best summarized in the Company's mission statement:

"To produce and deliver electricity as reliably, economically, and environmentally responsibly as possible to the balanced benefit of customers, shareholders, and employees and to improve the quality of life in the areas in which we do business."

Otter Tail provides electricity to 422 communities and to rural areas in western Minnesota, northeastern South Dakota, and the eastern two-thirds of North Dakota. The average population of the communities we serve is approximately 630, and over one-half of the communities we serve have populations of fewer than 200. Only three of our communities have populations exceeding 10,000: Fergus Falls, Minnesota (pop. 13,138), Bemidji, Minnesota (pop. 13,431), and Jamestown, North Dakota (pop. 15,427). We operate 9 Customer Service Centers (CSC) throughout our service territory. Otter Tail is committed to utilizing proactive efforts to communicate, investigate, and resolve reliability issues across our approximately 70,000 square-mile service territory. This is roughly the size of North Dakota.

The integrity of Otter Tail's entire transmission and distribution system is directly related to interruption frequency; thus, the accountability lies within our Asset Management area. Otter Tail's Asset Management area is accountable for the quality, availability and delivery of materials and engineering associated with providing electric service to Otter Tail customers. At Otter Tail, we employ a system of Key Performance Indicators (KPIs), for the purpose of providing additional focus on achievement in particular areas of our operations. Two of Asset Management's KPIs are reliability indices dealing with interruption frequency: the Momentary Average Interruption Frequency Index (MAIFI) and System Average Interruption Frequency Index (SAIFI).

Otter Tail's Customer Service area is accountable for responding to all interruptions. Thus, Otter Tail's Customer Service area is accountable for the cost effective and efficient deployment of field personnel, trucks, and equipment as quickly and safely as possible, necessary for restoring service to customers when interruptions occur. One of the Customer Service area's KPIs is Customer Average Interruption Duration Index (CAIDI.) Additionally, the Reliability indices, SAIDI, SAIFI, CAIDI, and MAIFI are companywide KPI's. These indices are communicated and reviewed with all employees, on a monthly basis, with the expectation that all employees remain cognizant of our company's reliability performance.

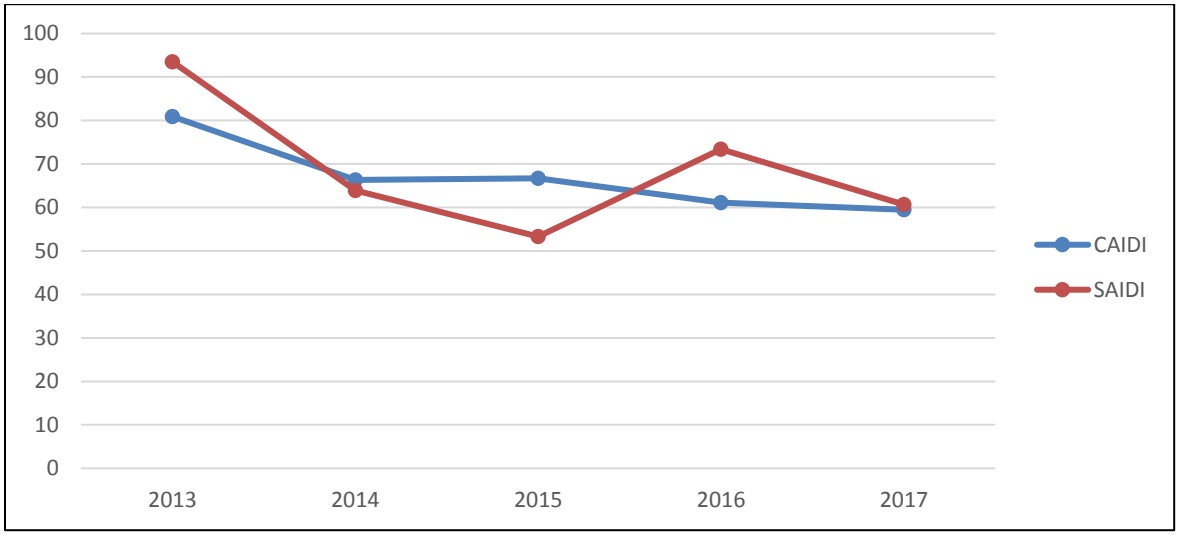
The Asset Management and Customer Service areas have a common goal, which is to improve the overall system reliability. Each area recognizes the overall system improvement cannot be accomplished without collaboratively working with the other area. Each area also recognizes system reliability improvements are based on cost effective decisions and overall system improvements over longer periods of time.

Customer experience (including service reliability) and satisfaction are among top priorities for our company. Otter Tail scored higher than average when compared to our peer group in several power quality and reliability metrics in the 2017 J.D. Power Electric Utility Residential Customer Satisfaction study. Promptly restoring power after an outage, supplying electricity during extreme temperatures, and avoiding lengthy outages, are areas rated high by our customers. Otter Tail customers rated our company higher than all of our peers in infrastructure maintenance as well. Otter Tail has been rated in the top 3 of the Midwest Midsize Region in Overall Customer Satisfaction since qualifying in 2015 for a nationally recognized survey.

II. OTTER TAIL 2017 SUMMARY GRAPHS

As previously included Otter Tail provides a summary table that allows the reader to more easily assess the overall reliability of the system and identify the main factors that affect reliability. Figure 1 through **Figure 6** below provides a brief summary of Otter Tail's overall reliability and service quality for the years 2013 through 2017.

Figure 1 - Historic Minnesota SAIDI and CAIDI



Otter Tail Power MN Customers saw improvement in both CAIDI and SAIDI for 2017 compared to 2016 results.

Figure 2 - Minnesota Historic SAIFI

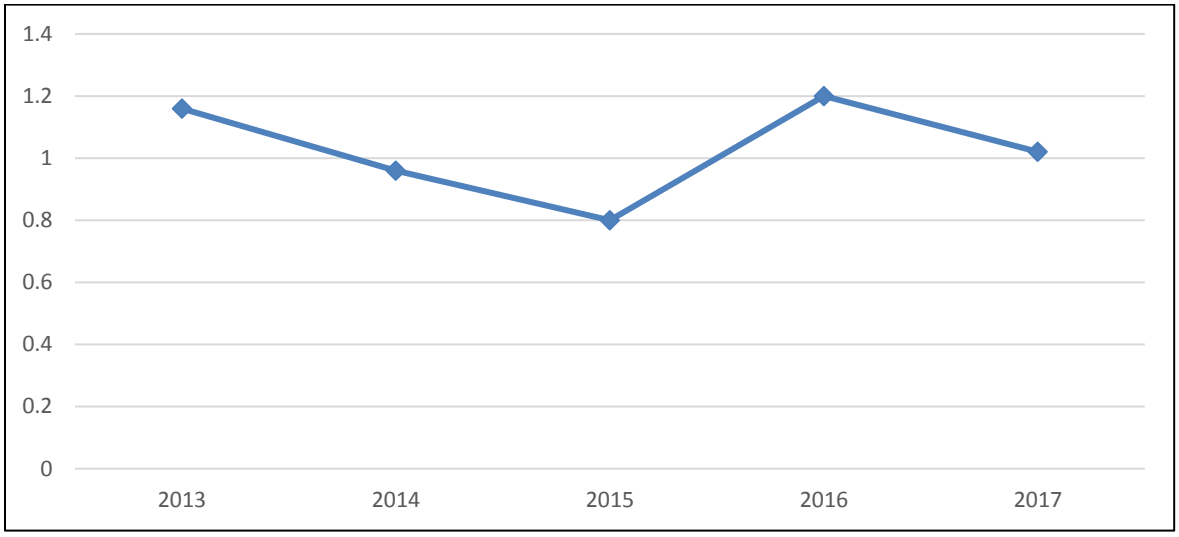


Figure 3 –Historic Expense of Major Critical System Infrastructure Items

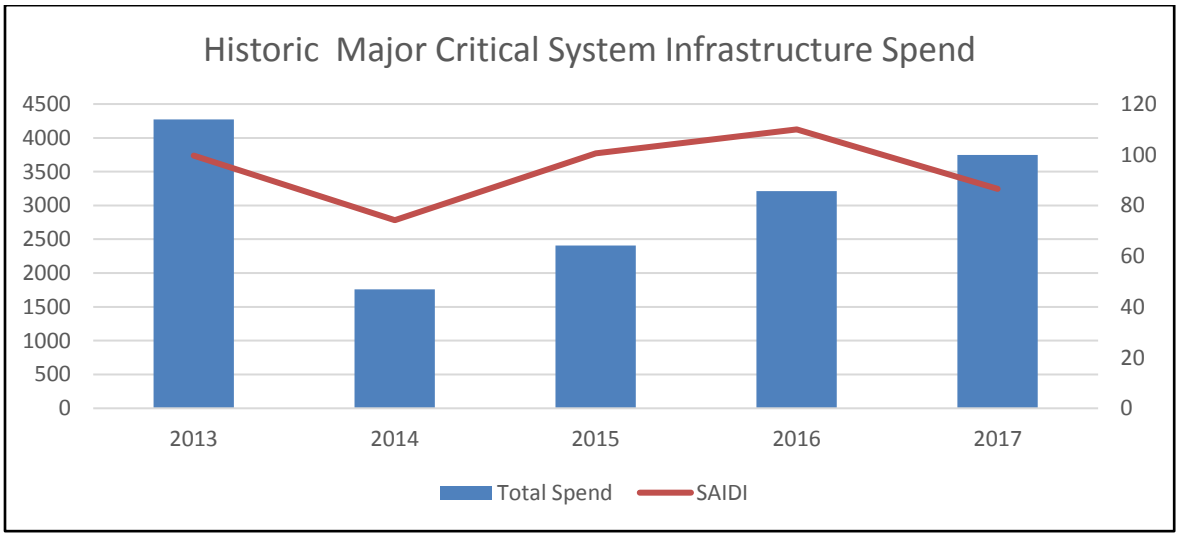


Figure 4 – Minnesota Historic MAIFI

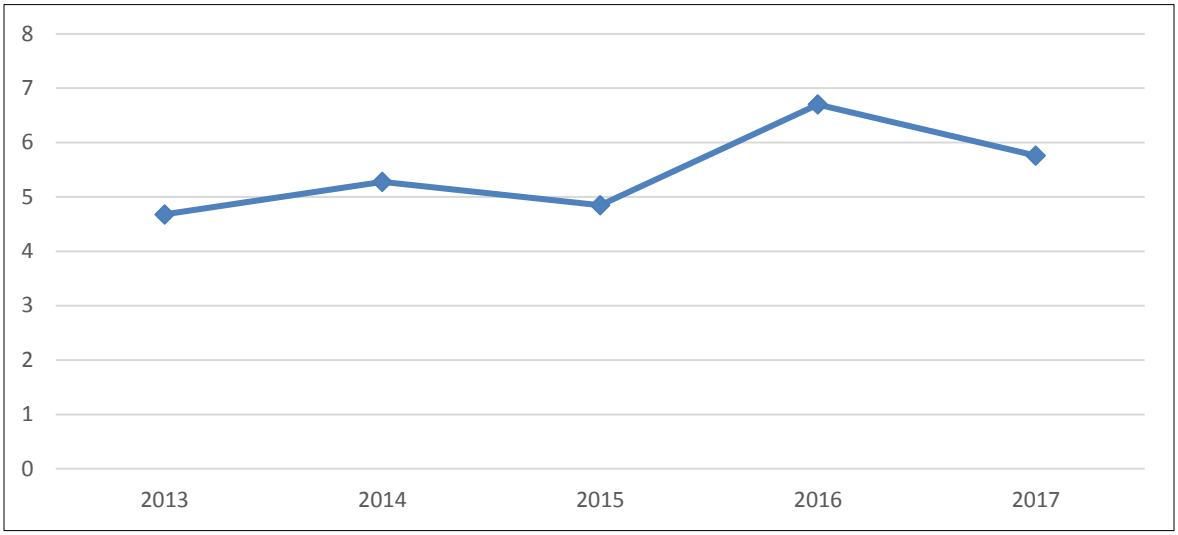


Table 1
MAIFI by Customer Service Center

CSC 2017	MAIFI
Bemidji	3.49
Crookston	5.2
Fergus Falls	5.45
Milbank	9.56
Morris	8.15
Wahpeton	11.95
MN Total	5.76

MAIFI is the momentary average interruption frequency index. It is an indication of the average number of momentary interruptions the average customer received over the course of a year, for a particular region. Otter Tail Power views MAIFI as a leading indicator for future SAIDI and thus tracks and analyzes line sections with excessive momentary interruptions for future capital improvements or possible vegetation management needs. The data for MAIFI calculations is gathered by our current Interruption Monitoring System, IMS. Data from the new system should be available for the 2019 reporting year.

Figure 5 – Full Time Lineworkers available for trouble calls and for the operation and maintenance of Minnesota distribution lines

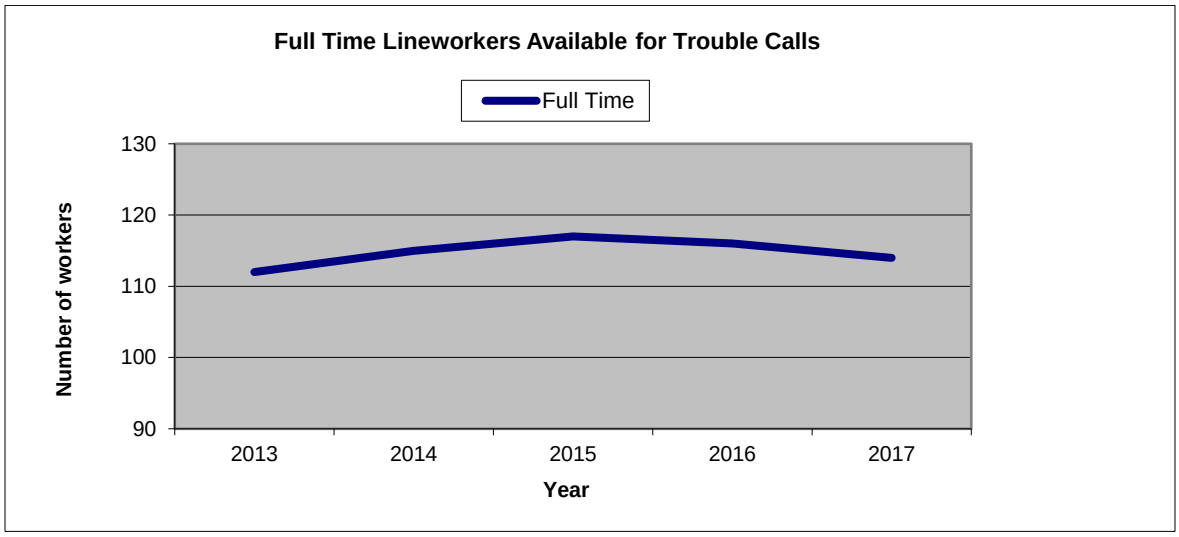
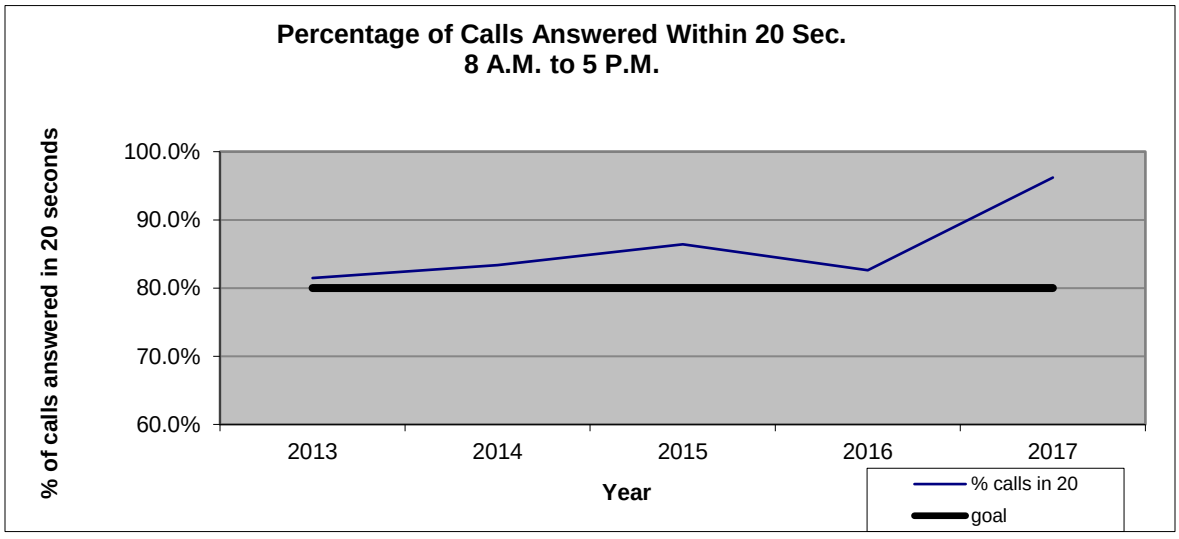


Figure 6 - Calls Answered within 20 Seconds



III. ANNUAL SAFETY REPORT 7826.0400

Pursuant to Minnesota Rule 7826.0400, ANNUAL SAFETY REPORT, each utility shall file a report on its safety performance during the last calendar year. This report shall include the following information.

A. Summary of all reports filed with the United States Occupational Safety and Health Administration and the Occupational Safety and Health Division of the Minnesota Department of Labor and Industry during the 2017 Calendar year.

Table 2

NUMBER OF CASES			
Total number of deaths	Total number of cases with days away from work	Total number of cases with job transfer or restriction	Total number of other recordable cases
0	1	1	10
NUMBER OF DAYS			
Total number of days of job transfer or restriction		Total number of days away from work	
41		11	
INJURY AND ILLNESS TYPES			
Injuries	Skin disorders	Respiratory conditions	Poisonings	All other illnesses
12	0	0	0	0

When an injury or illness involves one or more days away from work, you must record the injury or illness on the OSHA 300 Log with a check mark in the space for cases involving days away and an entry of the number of calendar days away from work in the number of days column. The number of cases with job transfers or restrictions safety metric employers determine how many workplace injuries and illnesses required employees to miss work, perform restricted work activities or transfer to another job within a calendar year. The number of other recordable cases describes the work-related injury of illness that does not involve death, days away from work, or days of restricted work or job transfer, and where the employee receives medical treatment beyond first aid. The total number of days away from work shows the total number of calendar days away from work for all work-related injuries and illnesses.

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 electric system failures and all remedial action taken as a result of any injuries or property damage described, are shown in Table 3.

Table 3

ANNUAL SAFETY REPORT				
Date	**Cause**	**Type**	**Action Taken**	**Expense**
6/13/2017	Storm Restoration	Crop Damage	Paid for damages	$2060.00
6/13/2017	Storm Restoration	Property Damage	Paid for damages	$ 570.00
6/13/2017	Storm Restoration	Property Damage	Paid for damages	$ 252.00
There were no instances of personal injury due to system failures in 2017.				

IV. RELIABILITY REPORTING REQUIREMENTS 7826.0500

Subpart 1. Annual reporting requirements. On or before April 1 of each year, each utility shall file on its reliability performance during the last calendar year.

REPORT OF OTTER TAIL'S SAIDI, SAIFI, AND CAIDI FOR 2017 AND STORM NORMALIZATION OF RELIABILITY DATA

Minnesota Rule 7826.0500, Subparts 1a, 1b, 1c, and 1d requires the utility to file a report on its SAIDI, SAIFI and CAIDI for the calendar year, by work center and for its assigned service area as a whole. Additionally, this rule requires the utility to provide an explanation of how the utility normalized its reliability data to account for major storms.

In 2009, Otter Tail worked with Sensus, Otter Tail's current Interruption Monitoring System (IMS) provider and the underlying software for the system, to make necessary changes to implement the IEEE 2.5 beta method process to normalize reliability data. Otter Tail's 2.5 Beta process is based on the following assumptions:

- Sensus calculates annual system T_{med} (SAIDI/Day threshold) based on the previous five years of data.
- The system T_{med} is utilized to run our indices for Minnesota and individual Minnesota Customer Service Centers (CSCs).

For 2017 data, the 2.5 beta parameters were as follows:

2.5 Beta Parameters:

Alpha	Beta	Major Event Day
-2.096281864	1.856049299	12.728472122

After applying 2.5 Beta Parameters for 2017, one day met the criteria to be considered a Major Event Day. That day was June 13, 2017. The Commission's **December 12, 2014 Order in Docket E017/M-14-279**, required Otter Tail report on the major causes for the major event days.

> 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.

Table 4 shows Otter Tail's 2017 SAIFI, CAIDI and SAIDI results based on the IEEE 2.5 Beta Method for each CSC and the entire Minnesota system. The goals used for 2017 are the standards that were established in 2013, consistent with the previous five years, as set by the Commissions until sufficient improvement in results are realized. Based on Otter Tail's 2017 standards **we met 56 percent of our CSC targets in 2017, compared to 39 percent in 2016.**

Table 4

2.5 Beta

CSC	2017	SAIFI	CAIDI	SAIDI
Bemidji	**Goal**	1.26	56.06	70.64
	Actual	0.78	81.65	63.58
Crookston	**Goal**	1.19	58.26	69.33
	Actual	1.21	48.63	58.71
Fergus Falls	**Goal**	1.11	60.33	66.97
	Actual	0.72	58.1	41.62
Milbank	**Goal**	1.82	41.48	75.49
	Actual	2.84	41.67	118.44
Morris	**Goal**	1.01	55.23	55.78
	Actual	1.58	55.88	88.24
Wahpeton*	**Goal**	1.13	50.65	57.24
	Actual	0	0	0
MN Total	**Goal**	0.97	62	60
	Actual	1.01	59.31	60.06

*Due to the lack of IMS data as we are transitioning our North Dakota IMS system from Sensus to Next Gen, Wahpeton CSC results are 0 for 2017.

Below Otter Tail provides a description of events that had the greatest impact on SAIDI, SAIFI and CAIDI indices in 2017.

Otter Tail's 2017 SAIDI standards – In 2017, The Milbank and Morris Customer Service Centers failed to meet the 2017 SAIDI reliability standards.

> **Milbank CSC:** The Milbank CSC experienced twenty sustained interruptions in 2017, resulting in a SAIDI of 118 minutes compared to the goal of 75.49. There are five feeders serving Minnesota customer out of this service center. The greatest impact to the SAIDI results in the Milbank CSC was an interruption lasting one hour and thirty-three minutes on July 21st do to a major storm system. This event caused damage to the Browns Valley – South Feeder impacting 241 customers. The damage included several broken poles and cross arms, damaged transformers, damage insulators, as well as several services being torn off area homes.
>
> **Morris CSC:** The Morris CSC experienced 149 sustained interruptions in 2017, resulting in a SAIDI of 88 minutes compared to the goal of 55.78. The greatest impact to the SAIDI results in the Morris CSC was an interruption occurring on June 11 due to a major storm system. This event caused damage to the Kerkhoven – East Feeder: Penncock From OCR Feeder impacting 246 customers. The damage due mainly to high winds, included several broken poles and cross arms, as well as sections of a dairy barn that was uprooted and blown onto the distribution line.

Otter Tail 2017 SAIFI standards –The Crookston, Milbank, and Morris Customer Service Centers failed to meet the 2017 SAIFI reliability standards.

Crookston CSC: The Crookston CSC experienced 71 sustained interruptions in 2017, resulting in a SAIFI of 1.21 interruptions compared to a goal of 1.19.

Milbank CSC: The Milbank CSC experienced 20 sustained interruptions in 2017, resulting in a SAIFI of 2.84 interruptions compared to a goal of 1.82.

Morris CSC: The Morris CSC experienced 149 sustained interruptions in 2017, resulting in a SAIFI of 1.58 interruptions compared to a goal of 1.01.

Otter Tail 2017 CAIDI standards – The Bemidji, Milbank, and Morris Customer Service Centers failed to meet the 2017 CAIDI reliability standards.

Bemidji CSC: The Bemidji CSC experienced 57 sustained interruptions in 2017, resulting in a CAIDI of 81.65 minutes compared to a goal of 56.06 minutes. 24 of these interruptions had durations of greater than the goal of 56.05 minutes. The most impactful interruption occurred on July 21st. On that day, a large storm system with strong winds downed several trees into the 115 KV transmission line causing a nine hour and 46 minute interruption on the Itasca Minn Pipe Main Feeder. The downed trees were located outside of OTP's right away. Rugged terrain and difficult conditions added to restoration timing.

Milbank CSC: The Milbank CSC experienced 20 sustained interruptions in 2017, resulting in a CAIDI of 41.67 minutes compared to a goal of 41.48 minutes (Note that the difference in time between our goal and result here is 11.4 seconds). Seven of these interruptions had durations of greater than the goal of 41.48 minutes. The most impactful interruption occurred on July 21st. On that day, as previously detailed, a large storm system with strong winds caused a one hour and 33 minute interruption to the Browns Valley South Feeder. The feeder breaker operated when a piece of plywood was blown into the line causing the fault.

Morris CSC: The Morris CSC experienced 149 sustained interruptions in 2017, resulting in a CAIDI of 55.88 minutes compared to a goal of 55.23 minutes (Note that the difference in time between our goal and the result here is 39 seconds). Fifty-one of these interruptions had durations of greater than the goal of 55.23 minutes. The most impactful interruption occurred on June 11th. As described in the SAIDI analysis, on June 11th, the region was hit with a major storm system causing a four hour and 47 minute interruption on the Louisburg Junction Northwest Feeder. Damage included broken poles and downed trees in the lines.

Reliability Standard Summary:

When compared to 2016, Otter Tail's 2017 overall Minnesota reliability performance realized an improvement in SAIFI, CAIDI, SAIDI, and MAIFI.

Reliable service continues to be one of Otter Tail's top priorities and we are cognizant that ongoing improvements in reliability will continue to happen over time and must be done cost effectively. We believe the continued maturity of our current processes and the application of new technologies and tools will provide good results.

Table 5 provides a summary of the different types of interruption causes that affect overall system reliability.

Table 5

2017 MN Sustained Interruption Summary by CSC and cause

	Bemidji	Crookston	Fergus Falls	Milbank	Morris	Wahpeton	Work Center Totals
Bulk Power Loss							0
Transmission	1	1	5		8		15
Flood							0
Animal	1		1		2		4
Vehicle Accident	3	1			2		6
Equipment Failure	13	16	11	9	41	1	91
Vandalism							0
Trees	1		6		1		8
Overload							0
Human error		6			19		25
Underground	2	2	1		1		6
Bird	1		4		3		8
Arrestor/Insulator failure	4	16	8		2		30
fuse					3		3
weather related	28	27	18	2	46	1	122
investigated and unknown	1	1	4			1	7
Other					3		3
Unknown	2	1	0	9	18		30

ACTION PLAN FOR REMEDYING ANY FAILURE TO COMPLY WITH RELIABILITY STANDARDS

Minnesota Rule 7826.0500, Subpart 1e, **requires utilities to file an action plan for remedying any failure to comply with reliability standards set forth in part 7826.0600 or an explanation as to why non-compliance was unavoidable under the circumstances.** Overall, Otter Tail Minnesota Customers experienced 444 (358 storm normalized) sustained interruptions in 2017. Otter Tail provides the following information regarding its 2017 results.

In compliance with the Commission's **December 20, 2012 Order in Docket No. E017/M-12-325**, Otter Tail submitted a compliance filing on February 4, 2013 describing Otter Tail's action plans to address not meeting the 2011 reliability standards set by the Commission. In that filing, Otter Tail described several enhanced or new processes adopted by the Company to improve system reliability performance. The following is an update of our action plan:

1. **Reliability Improvement Initiative Team Meetings:** Otter Tail's Reliability Improvement Initiative cross functional team continues to meet monthly for a comprehensive overview of our system's reliability. This process has provided increased awareness, focus and attention to reliability related issues through the prioritization of resources.

2. **Electronic Tracking Process for Transmission Patrol Reports and Maintenance Activities:** Otter Tail continues to improve electronic tracking of internal reports and have integrated the process into our GIS. This allows the Company to more effectively schedule and manage maintenance activities based on historic and current maintenance data. This lends itself for a more efficient prioritization of resources.

3. **Lightning Tracking System:** Otter Tail implemented a lightning tracking system five years ago. It tracks lightning activity within Otter Tail's service territory. This tool has been beneficial in identifying remote areas hit by lightning, assisting in follow-up patrols and inspections to identify damaged equipment. In 2018, progress will continue towards the integration of the lightning data with our GIS providing strike location for patrols and post event analysis.

4. **GIS Data Integration:** Otter Tail has begun integrating critical system data into its GIS. Underground fault data, patrol information, SEL distance relay data, lightning strike location data, and pole inspection data will all be integrated into GIS providing an optimized approach to reliability related activities in the future.

5. **Fault Indicator Installations at Transmission Line Junctions:** Otter Tail continues to install and utilize fault indicators on transmission line junctions (line splits). OTP will continue to monitor and investigate the improvements this equipment provides in our abilities to identify fault location detection.

6. **Installation of Remote Real-Time Voltage, Current, and Power Monitors**: In 2014 Otter Tail began installing remote real-time power monitors in the field to assist with investigating interruption events. Data provided is real-time and displayed via a web

browser. Continued deployment of this equipment has improved Otter Tail's efforts in identifying problems and issues in the field.

7. **Fleet Vehicle Tracking:** Through our pilot (implemented in 2012) we have learned the fleet tracking system without the aid of a larger outage management system will not render added efficiencies. Otter Tail continues to evaluate various solution providers of service vehicle tracking options.

Otter Tail believes this action plan will provide continued contribution towards cost-effective improvement of the Company's overall system reliability. Overall system improvements will be realized over longer periods of time. These improvements will come through new technology, improved efficiencies, disciplined primary cause investigation and analysis, situational awareness, and attention to overall cross-functional accountabilities.

INTERRUPTION OF BULK POWER SUPPLY FACILITY

Pursuant to Minnesota Rule 7826.0500, Subpart 1f, **to the extent feasible, a report on each interruption of a bulk power supply facility during the calendar year, including the reasons for interruption, duration of interruption, and any remedial steps that have been taken or will be taken to prevent future interruption.** For the 2017 calendar year Otter Tail reports that there were no sustained interruptions to a Minnesota Bulk Power Supply Facility.

REPORTING MAJOR SERVICE INTERRUPTIONS

Minnesota Rule 7826.0500, Subpart 1g, **requires utilities to file a copy of each report filed under part 7826.0700, reporting major service interruptions.**

Pursuant to Minnesota Rule 7826.0500, Subpart 1g, Otter Tail provides as Attachment 1, a copy of each report filed under part 7826.0700, reporting major service interruptions.

CIRCUIT INTERRUPTION DATA

Minnesota Rule 7826.0500, Subparts 1h, requires utilities, to the extent technically feasible, to file circuit interruption data, including identifying the worst performing circuit in each work center, stating the criteria the utility used to identify the worst performing circuit, stating the circuit's SAIDI, SAIFI, and CAIDI, explaining the reasons that the circuit's performance is in last place, and describing any operational changes the utility has made, is considering, or intends to make to improve its performance. In compliance with this rule, **Table 6** shows the worst performing circuit for each of Otter Tail's six CSC's. For the purpose of identifying the worst performing circuit, we defined a circuit as a distribution feeder and the criterion that was used to identify the worst performing circuit was total customer minutes. **Table 7** shows the interruptions that contributed to the feeders being the worst performing circuit for each CSC.

Table 6
MN Worst Performing Feeders

Service Center	Substation Name	Feeder Description	Customer Count	Total Sustained Customer Minutes	SAIFI	CAIDI	SAIDI
BEMIDJI	CASS LAKE	SOUTH (32289)	352	163697.6	2	232.53	465.05
CROOKSTON	ARGYLE	NORTH FEEDER OCR 1 (32245)	277	154076.63	2	278.12	556.23
FERGUS FALLS	OTTER OUTLET	EAST FEEDER (32333)	672	121856	2	90.66	181.33
MILBANK	MARIETTA	MARIETTA (33017)	151	36544.52	7	34.57	242.02
MORRIS	ODESSA	SOUTH FEEDER (23518)	172	108466.07	4	157.65	630.62
WAHPETON	HAVANA	MAIN FEEDER (27067)	71	2686.17	3	12.61	37.83

Table 7
MN Worst Performing Feeders Details

Interruption Date	State	Service Center	Substation	Feeder Name	Cause	Duration	Customer Count	Customer Minutes
8/3/2017 3:45	MN	BEMIDJI	CASS LAKE	SOUTH (32289)	Weather - includes: rain, lightning, wind, storm, etc.	1:24:27	352	29,726.40
7/21/2017 17:55	MN	BEMIDJI	CASS LAKE	SOUTH (32289)	Weather - includes: rain, lightning, wind, storm, etc.	6:20:36	352	133,971.20
8/28/2017 11:02	MN	CROOKSTON	ARGYLE	NORTH FEEDER OCR 1 (32245)	Human error	0:24:05	277	6,671.08
6/9/2017 20:36	MN	CROOKSTON	ARGYLE	NORTH FEEDER OCR 1 (32245)	Weather - includes: rain, lightning, wind, storm, etc.	8:52:09	277	147,405.55

Interruption Date	State	Service Center	Substation	Feeder Name	Cause	Duration	Customer Count	Customer Minutes
9/26/2017 20:41	MN	FERGUS FALLS	OTTER OUTLET	EAST FEEDER (32333)	Equipment Failure	0:53:00	672	35,616.00
9/26/2017 4:03	MN	FERGUS FALLS	OTTER OUTLET	EAST FEEDER (32333)	Equipment Failure	2:08:20	672	86,240.00
8/18/2017 16:58	MN	MILBANK	MARIETTA	MARIETTA (33017)	Weather - includes: rain, lightning, wind, storm, etc.	0:06:18	151	951.30
8/13/2017 4:37	MN	MILBANK	MARIETTA	MARIETTA (33017)	Weather - includes: rain, lightning, wind, storm, etc.	0:17:09	151	2,589.65
8/12/2017 23:25	MN	MILBANK	MARIETTA	MARIETTA (33017)	Weather - includes: rain, lightning, wind, storm, etc.	1:09:50	151	10,544.83
6/11/2017 6:08	MN	MILBANK	MARIETTA	MARIETTA (33017)	Weather - includes: rain, lightning, wind, storm, etc.	1:08:02	151	10,273.03
6/2/2017 7:31	MN	MILBANK	MARIETTA	MARIETTA (33017)	Equipment Failure	0:33:15	151	5,020.75
6/2/2017 6:46	MN	MILBANK	MARIETTA	MARIETTA (33017)	Equipment Failure	0:29:27	151	4,446.95
3/14/2017 16:38	MN	MILBANK	MARIETTA	MARIETTA (33017)	Equipment Failure	0:18:00	151	2,718.00
7/11/2017 22:55	MN	MORRIS	ODESSA	SOUTH FEEDER (23518)	Weather - includes: rain, lightning, wind, storm, etc.	1:43:27	172	17,793.40
6/25/2017 2:38	MN	MORRIS	ODESSA	SOUTH FEEDER (23518)	Underground	3:06:31	172	32,080.87

Interruption Date	State	Service Center	Substation	Feeder Name	Cause	Duration	Customer Count	Customer Minutes
6/11/2017 6:23	MN	MORRIS	ODESSA	SOUTH FEEDER (23518)	Weather - includes: rain, lightning, wind, storm, etc.	3:23:42	172	35,036.40
4/10/2017 1:02	MN	MORRIS	ODESSA	SOUTH FEEDER (23518)	Weather - includes: rain, lightning, wind, storm, etc.	2:16:57	172	23,555.40
8/18/2017 3:17	MN	WAHPETON	HAVANA	MAIN FEEDER (27067)	Equipment Failure	0:11:09	71	791.65
8/5/2017 7:42	MN	WAHPETON	HAVANA	MAIN FEEDER (27067)	Weather - includes: rain, lightning, wind, storm, etc.	0:19:28	71	1,382.13
4/25/2017 5:10	MN	WAHPETON	HAVANA	MAIN FEEDER (27067)	investigated and unknown	0:07:13	71	512.38

Bemidji CSC: The South Feeder fed from the Cass Lake Substation was the worst performing feeder in 2017 for the Bemidji CSC. This feeder experienced two sustained interruptions, impacting 352 customers, due to two separate events. On July 21, 2017 the region was hit with a strong storm system. Strong winds took down a tree into the distributions system taking down two poles causing a six hour and 20 minute interruption. On August 3rd, another strong storm system hit the area causing several trees to be blown into the 69 KV transmission line feeding the substation. This resulted in a one hour and 24 minute interruption.

Following both events, extensive patrols were conducted to check for and identify additional damage resulting from the storms. All damage due to these storm events has been permanently repaired. Vegetation management was last conducted in this region in 2013 and is scheduled to be conducted again in early spring of 2018.

Crookston CSC: The North Feeder fed out of the Argyle Substation was the worst performing feeder in 2017 for the Crookston CSC. This feeder experienced two sustained interruptions impacting 277 customers due to two separate events. On June 9, 2017, lightning struck the feeder burning out several insulators and resulting in the interruption of all three feeders fed out of the substation. All three feeders were patrolled to find and identify the problem. Once the issue was located, power was restored to the other two feeders and the failed insulators were

replaced. The resultant interruption duration to the North Feeder was eight hours and 52 minutes. On August 28, 2017, a farmer was tilling and hooked a pole with his farm equipment, pulling it to the ground resulting in a 24 minute interruption. An Otter Tail Service Rep was nearby and thus able to make some switching changes and get customers restored quickly while repairs were being made.

There have been no further issues or interruptions on this line section since these two events. The line will continue to be monitored to ensure improved performance in the future.

Fergus Falls CSC: The East Feeder fed out of the Otter Outlet Substation was the worst performing feeder in 2017 for the Fergus Falls CSC. This feeder experienced two sustained interruptions on the same day, impacting 672 customers, due to two very similar events. On September 26, 2017, at 4 AM during a rainstorm, a line insulator failed, tracked, then started the pole on fire resulting in a two hour and eight minute interruption. At 8:40 PM, a cutout failed causing the pole to catch fire, resulting in a 53 minute interruption.

Following these two events, the line was patrolled and inspected for any additional insulation issues. There have been no further insulation issues or interruptions on this line section since these two events. The line will continue to be monitored to ensure improved performance in the future.

Milbank CSC: The Marietta Feeder fed out of the Marietta Substation was the worst performing feeder in 2017 for the Milbank CSC. This feeder experienced seven sustained interruptions, impacting 151 customers, due to six separate events. On March 14, 2017, an eye bolt gave way on a 41.6 KV angle transmission pole allowing the phase to fall on the guy wire, taking out the transmission line from Big Stone to Burr Junction, causing an 18 minute interruption. On June 2, 2017, metering equipment failed in the Marietta 115KV Substation resulting in two interruptions of durations 29 and 33 minutes. On June 11, 2017, lightning caused damage on the LaBolt stub line resulting in a one hour and 18 minute interruption. On August 12, 2017, a storm system caused arrestor and insulation failures on the LaBolt stub line resulting in a one hour and 10 minute interruption. On August 13, 2017, continuing bad weather caused an additional insulator to fail on the LaBolt stub line, causing a 17 minute interruption. On August 18, 2017, lightning struck the LaBolt stub line several times damaging six insulators and an arrestor, resulting in a seven minute interruption.

With five of the interruptions on this feeder due to the 41.6KV transmission line section between LaBolt and Albee, Otter Tail Power Company is currently studying upgrade options for this span of line to ensure the feeder's performance improves in the future.

Morris CSC: The South Feeder fed from the Odessa Substation was the worst performing feeder in 2017 for the Morris CSC. This feeder experienced four interruptions, impacting 172 customers, due to four separate events. On April 10, 2017, lightning struck a pole resulting in a pole fire causing a two hour and 17 minute interruption. On June 11, 2017, strong winds in a from a storm, blew down a tree taking out the three phase overhead line, resulting in a three hour and 24 minute interruption. On June 25, 2017, there was a fault on the distribution primary underground line resulting in a three hour and six minute interruption. On July 11, 2017, strong winds from a storm blew a tree into the three phase overhead line near Bellingham, resulting in a one hour and 43 minute interruption.

In 2017, Otter Tail Power made several improvements to this feeder to improve performance. The underground section has been replaced along with a new feeder exit. Also, as part of this project, an overhead line section between the south and the west feeder with a normally open switch to allow for future underground fault isolation and alternate sourcing by closing the normally open switch. Vegetation management was conducted in 2017, however, a patrol of the feeder will be conducted in early spring to determine if additional problem areas exist.

Wahpeton CSC: There were no sustained interruptions experienced by Minnesota Customers in the Wahpeton CSC in 2017, thus, there were no worst performing feeders.

REPORT OF NOMINAL ELECTRIC SERVICE VOLTAGES

Minnesota Rule 7826.0500, Subpart 1i, **requires that utilities shall file a report providing data on all known instances in which nominal electric service voltages on the utility's side of the meter did not meet the stands of the American National Standards Institute for nominal system voltages greater or less than voltage range B.** Otter Tail provides, in **Table 8** below, the feeders and number of occurrences where the voltage fell outside the ANSI voltage range B. Most of the feeders, with numerous occurrences, are feeders with a single large customer that has a very large load and are mostly pipelines.

Table 8

Feeders and Number of Occurrences – Voltage fell outside the ANSI Voltage Range

Unit ID	CSC	Feeder	Mid UV Count	Low OV Count
23518	MORRIS	SOUTH FEEDER	0	1
23638	BEMIDJI	SOUTH FEEDER	0	1
26385	BEMIDJI	NORTH FEEDER	0	1
26389	MORRIS	EAST 2	0	10
26394	MORRIS	BOYD 255	0	2
26999	BEMIDJI	MAIN FEEDER	0	317
27006	Bemidji	MAIN FEEDER	7	0
27075	BEMIDJI	MAIN FEEDER	0	525
31586	BEMIDJI	DOWNTOWN OCR #75	0	27
31598	CROOKSTON	MAIN FEEDER	0	404
32130	CROOKSTON	MAIN FEEDER	0	202
32131	CROOKSTON	NORTH OCR 1	0	6
32137	CROOKSTON	MAIN FEEDER	0	169
32156	CROOKSTON	MAIN FEEDER	0	4
32183	CROOKSTON	MAIN FEEDER	0	565
32210	CROOKSTON	MAIN FEEDER	0	607
32260	FERGUS FALLS	MAIN-SF885	0	184
32261	MORRIS	NORTH FEEDER	0	1

Unit ID	CSC	Feeder	Mid UV Count	Low OV Count
32272	FERGUS FALLS	#4-OCR TUFFYS	0	3
32304	FERGUS FALLS	MAIN FEEDER	0	2
32307	FERGUS FALLS	MAIN FEEDER	0	7
32308	FERGUS FALLS	NORTH FEEDER	0	27
32323	FERGUS FALLS	SOUTH FEEDER	0	1
32977	MORRIS	MAIN FEEDER	0	6
32986	MORRIS	MAIN FEEDER	0	30
34352	CROOKSTON	SOUTH OCR 2	0	15
34356	BEMIDJI	MAIN FEEDER	0	281
34358	CROOKSTON	MAIN FEEDER	95	1

STAFFING LEVELS AT EACH WORK CENTER

Minnesota Rule 7826.0500, Reliability Reporting Requirements, Subpart 1j, **requires utilities to file a report providing data on staffing levels at each work center, including the number of full-time equivalent positions held by field employees responsible for responding to trouble and for the operation and maintenance of distribution lines.** In compliance with this rule, Otter Tail reports staffing levels by CSC including the number of full-time equivalent positions held by field employees responsible for responding to trouble and for the operation and maintenance of distribution lines. The staffing levels of Otter Tail's Minnesota CSCs as of December 31, 2017 are shown in **Table 9** below.

Table 9

	Department	Type	Total
	Bemidji	Field Office	15 1
	Bemidji Total		16
	Crookston	Field Office	13 1
	Crookston Total		14
	Delivery Maintenance*	Field Office	8 1
	Delivery Maintenance Total		9
	Fergus Falls	Field Office	23 1
	Fergus Falls Total		24
	Milbank**	Field Office	18 2
	Milbank Total		20
	Morris	Field Office	17 1
	Morris Total		23
	Operations Support	Field Office	4 1
	Operations Support Total		5
	Wahpeton***	Field Office	13 1
	Wahpeton Total		15
	Customer Care & Relations****		33
12/31/2017 Total			**154**

+

*Delivery Maintenance is a department with employees that work in substations and with substation related equipment. During trouble, they are dispatched to do switching and other work associated with substation equipment.

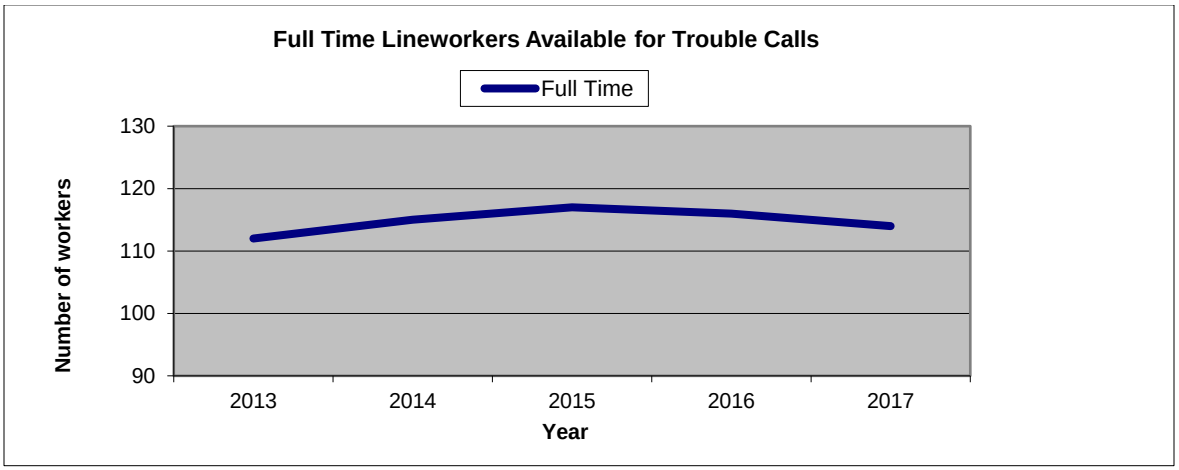
**The Milbank CSC serves customers in both Minnesota and South Dakota and the number of employees indicated represents all employees located in the CSC.
***Operations Support is based in Fergus Falls and the field employees are dispatched to assist CSC's in need throughout the entire system. The office employees coordinate resources.

***The Wahpeton CSC serves customers in Minnesota, North Dakota, and South Dakota and the number of employees indicated represents all employees located in the CSC.

**** Customer Care and Relations is the office staff that is made up of Customer Service Representatives, Lead Customer Service Representatives and Customer Service Management that are located in Customer Service Centers throughout our service territory. In 2015, we reorganized and the office staff into one department. Since OTP operates a Virtual Call Center, all of the office staff located throughout the territory are accountable for answering outage calls in all states. The employee count for Customer Care and Relations is 34. The report is reflecting 33 employees due to one staff member being on leave.

Figure 7 below depicts by year the number of full time line workers available for trouble and for the operation and maintenance of distribution lines. Otter Tail also has a reliability engineer who supports system reliability related functions. This individual is not included in the above staffing level information. Additionally, Otter Tail has engineers in its Asset Management area who, due to the nature of their roles, support reliability on a daily, weekly, monthly, and annual basis.

Figure 7



OTHER INFORMATION RELEVANT IN EVALUATING RELIABILITY PERFORMANCE

Minnesota Rule 7826.0500, Subpart 1k, **requires utilities to file any other information the utility considers relevant in evaluating its reliability performance over the calendar year.** Otter Tail fully implemented an Interruption Monitoring System (IMS) in 2005. Since then, subsequent upgrades and enhancements to the system have increased its capabilities. Due to communication limitations and equipment obsolescence, Otter Tail's IMS has reached its "end of life". On January 1, 2017, AT&T shut down its 2G network, disabling most of the voltage monitors in North Dakota. Sometime after 2018, Verizon's CDMA 1XRTT, will be disabled, shutting down the IMS in both Minnesota, South Dakota, and what's left of North Dakota. Otter Tail has completed the install of the next generation of interruption monitoring solution (NextGen IMS) utilizing AMI technology in North Dakota. Installation in Minnesota and South Dakota is currently in progress and will be completed prior to 2018 yearend. We expect 2019 to be the first complete year with system reliability data. This system is more granular then our current system, thus, Otter Tail Power expects future recorded results to be different then historic values. Otter Tail provides the following information relating to its IMS and overall reliability.

1. **IMS obsolescence status and efforts to implement the NextGen IMS:** Due to the planned shutdown of cellular 2G service and Sensus's decision to discontinue production of the monitors currently used in our system, Otter Tail Power has begun a project to replace its current IMS. Our plan included implementation of a new system in North Dakota, completed in late 2017, while utilizing those components replaced in North Dakota to maintain our current systems in both Minnesota and South Dakota. Completion of the installation in Minnesota and South Dakota has begun and is expected to be completed in late 2018. The new system will provide added tools and analysis features that will allow Otter Tail to continue its reliability focus and efforts in the future.

   Otter Tail continues to install and utilize wireless power quality monitors in identified problem areas. These devices monitor voltage, current, power, voltage unbalance, histograms, profiles, etc. in near real-time. These monitors have greatly improved our ability to monitor, identify, and analyze issues in the field. This tool will also be utilized to fill short term gaps/pockets created during our NextGen IMS implementation during installation and system transfer.

2. **Challenges in achieving reliability:** Otter Tail has the unique challenge of delivering reliable services to its customers across a large rural service territory, which has tremendous exposure to hazards such as vegetation, lightning, wind, and other weather related issues. Our current IMS, the use of power quality meters, and implementation of our NextGen IMS, will continue to provide optimized and focused deployment of our vegetation management and maintenance resources to specific areas that are identified through the outage data collected.

3. **Measuring reliability:** Otter Tail continues to calculate the Customers Experiencing Multiple Interruptions (CEMIn) index. The CEMIn index is an

excellent indicator of how system improvements directly affect customer service. Deployment of resources on worst performing circuits has direct effects on the reliability indices and customer reliability. **Figure 8** shows the system CEMIn (n = 7 interruptions) results from 2013 to 2017. This graph shows how many customers on a company-wide basis experienced seven or more interruptions. For example, in 2017 the percentage of customers experiencing seven or more interruptions was just under 1.9 percent, compared to 2016, which was 3.24 percent.

Figure 8

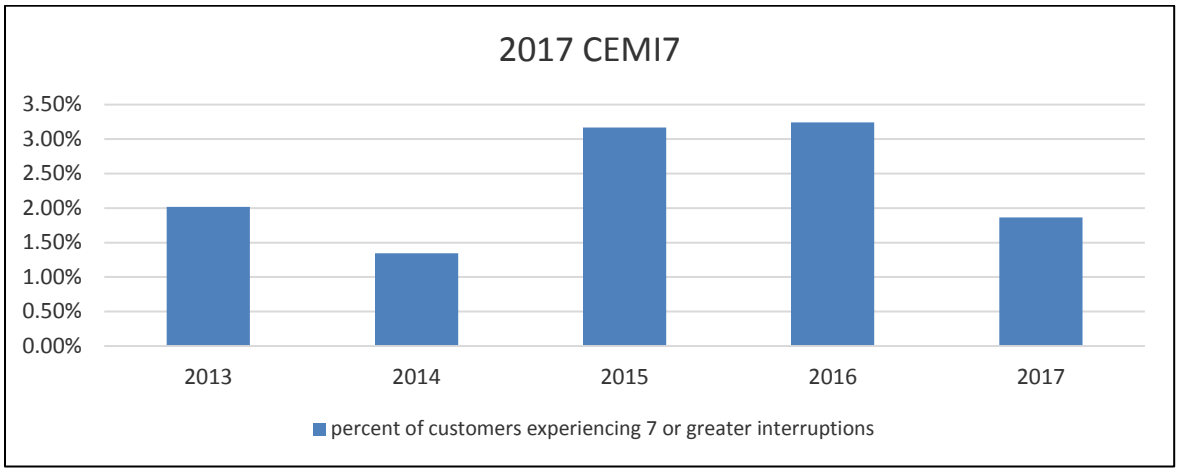
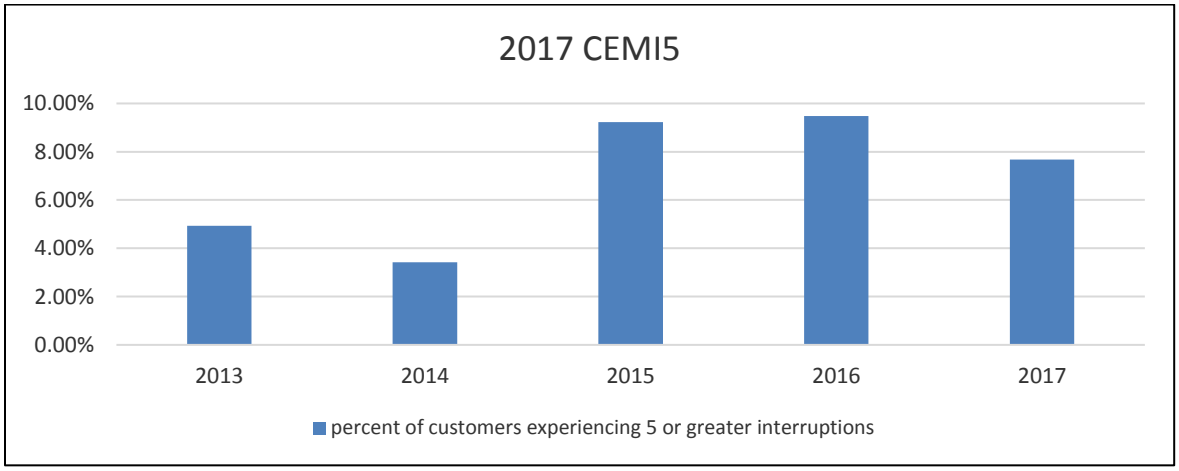


Figure 9 below shows the percentage of customers on a company-wide basis who have experienced five or more sustained interruptions.

Figure 9



Figures 10, 11, and 12. The following graphs show Otter Tail's SAIDI, SAIFI and CAIDI for the period of 2013 through 2017. When compared to 2016 results, Minnesota customers experienced a decrease in overall SAIDI, SAIFI, and CAIDI.

Figure 10

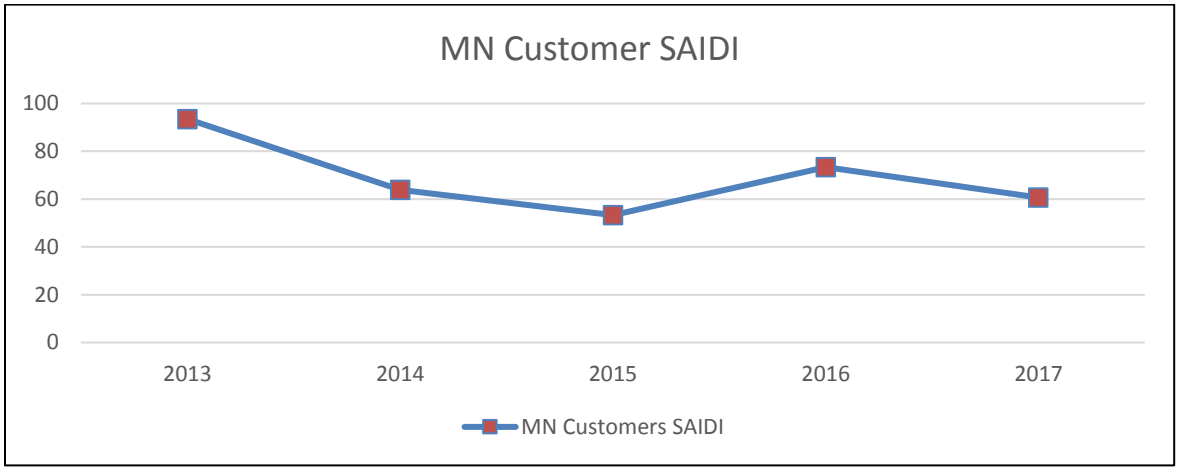


Figure 11

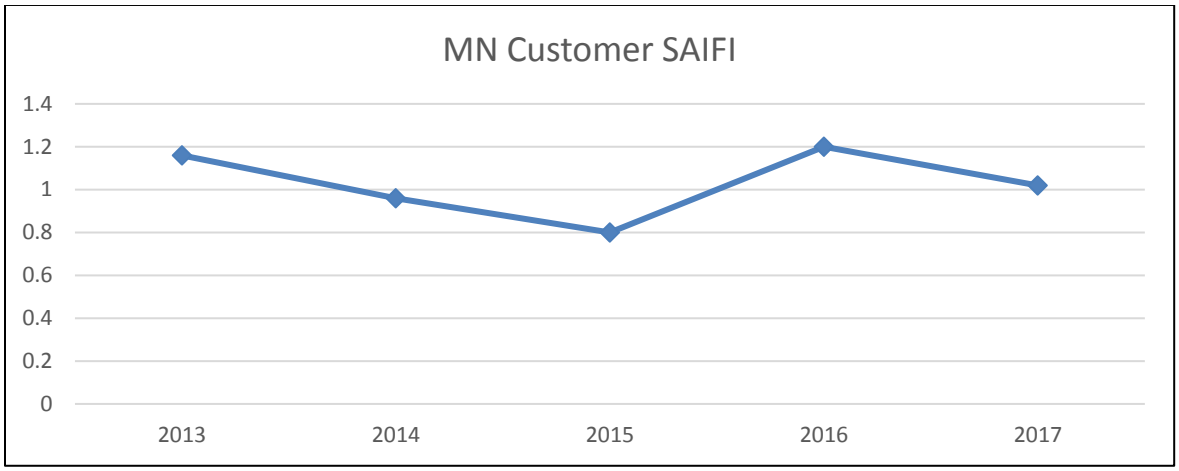
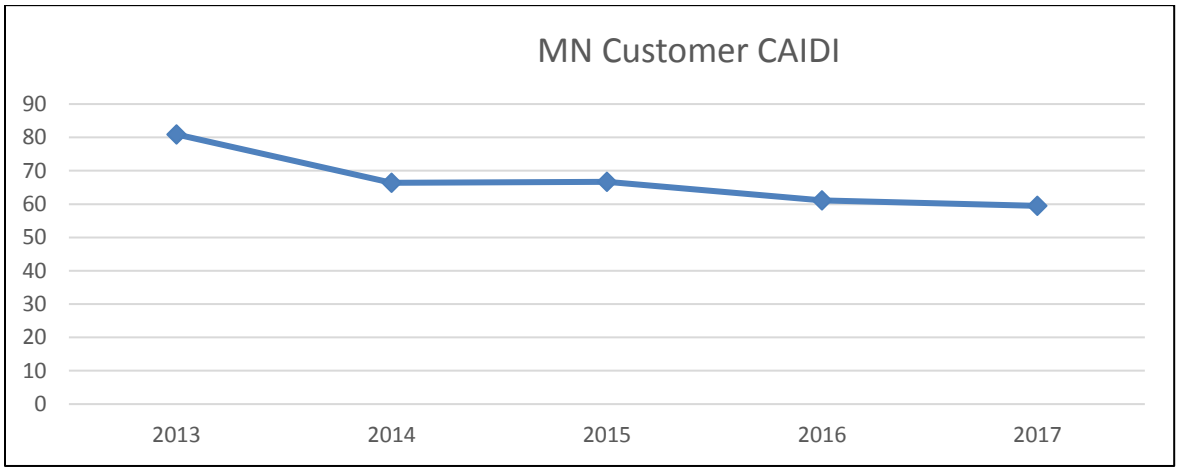


Figure 12



OTTER TAIL POLICIES, PROCEDURES, AND ACTIONS

Otter Tail provides the following description of the policies, procedures, and actions that it has previously implemented, and continues to utilize to improve reliability.

The following is a list of reports that continue to be distributed internally. These reports ensure that Otter Tail employees are aware of issues in the system on a timely basis and can respond quickly to maintain and improve overall system reliability.

1. Internal Reporting:
    a. **Monthly Reliability Report:** Otter Tail distributes to all employees an overall summary of system performance as compared to internal KPI's. This report shows SAIDI, SAIFI, CAIDI, and MAIFI for the system, as well as each CSC.
    b. **Additional reporting:** Otter Tail also tracks CEMI on an annual basis and has internal KPI's that are reported and published to Otter Tail's Asset Management department.

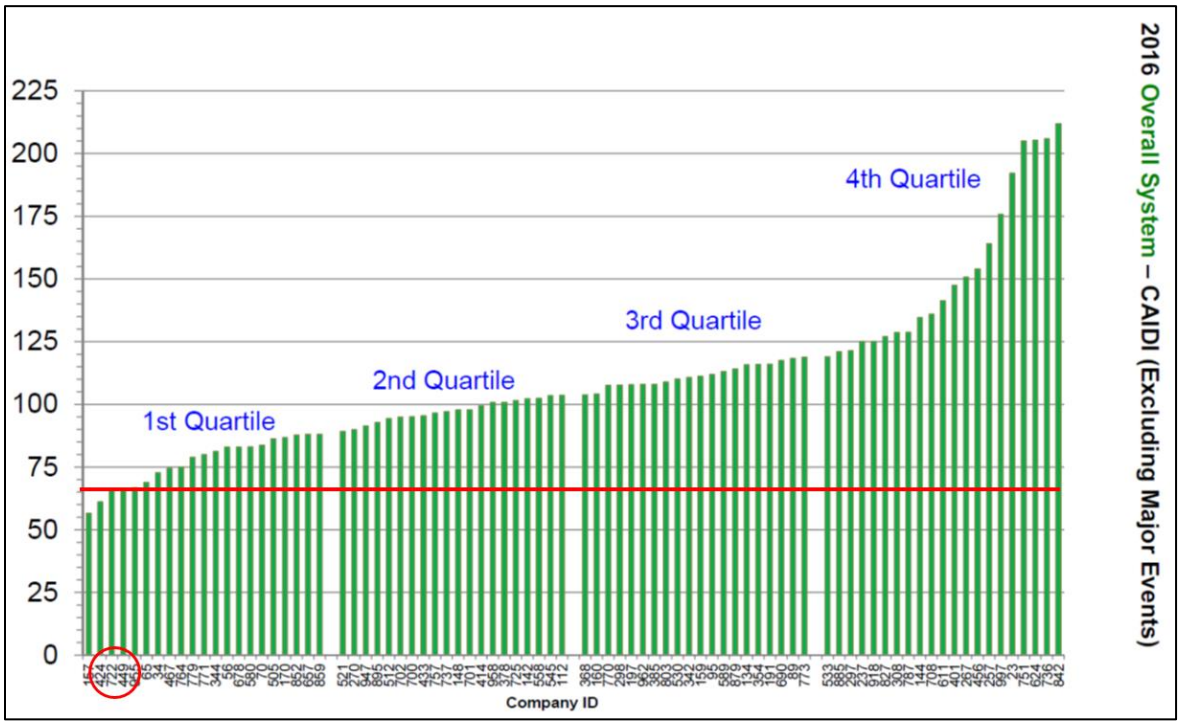
2. Proactive Inspections and Testing:
    a. **Field Inspections:** Otter Tail conducts several periodic patrols and inspections throughout the transmission and distribution system. Transmission substations and lines are inspected and patrolled on an annual basis and more often when issues are identified. Distribution substations are inspected for safety and equipment concerns on a periodic basis. The oil in substation transformers are sampled and tested for dissolved gas. Transformers greater than 10 MVA are tested annually and transformers less than 10 MVA are tested every three years.
    b. **Pole integrity testing:** Otter Tail currently contracts for ground line inspections and treatment work of aged transmission poles for replacement identification.
    c. **Underground Replacement:** Otter Tail continues its focus on replacing outdated and failing underground conductors. The Area Engineers proactively identify areas of concern and budget for replacement during the following year. Potential replacement candidates are identified and included in Otter Tail's Proactive UG Replacement project listing.

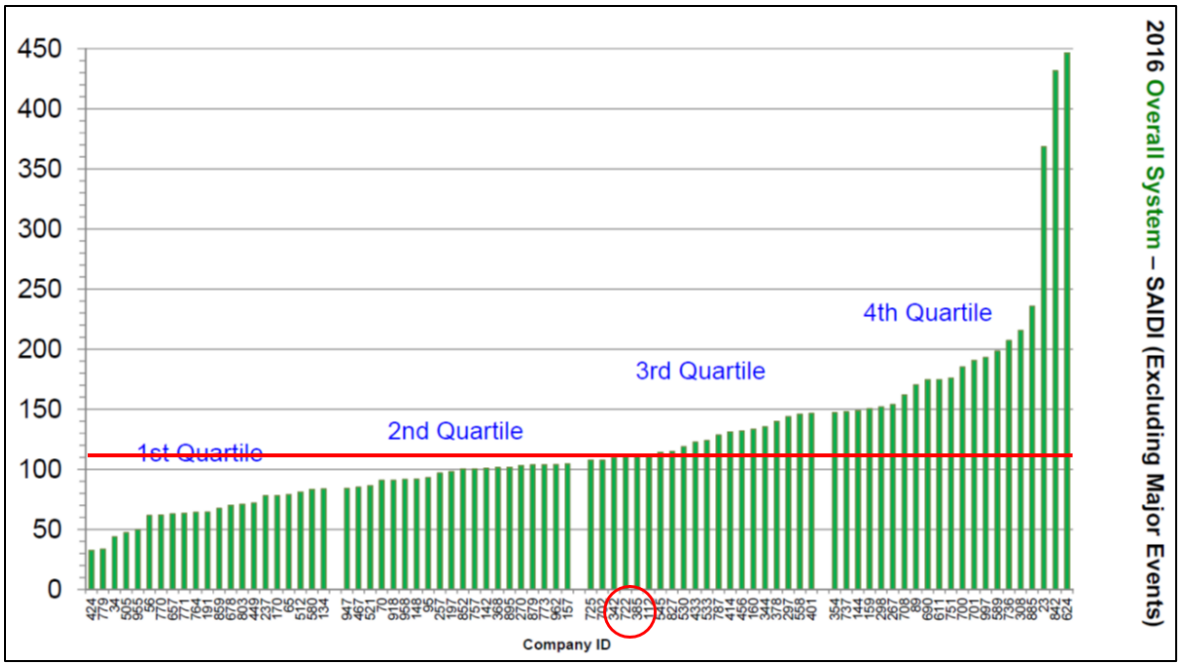
Additional Items: In addition to the above-mentioned items, Otter Tail also employs a number of other policies, procedures, and committees to evaluate reliability and safety concerns that include, but are not limited to:

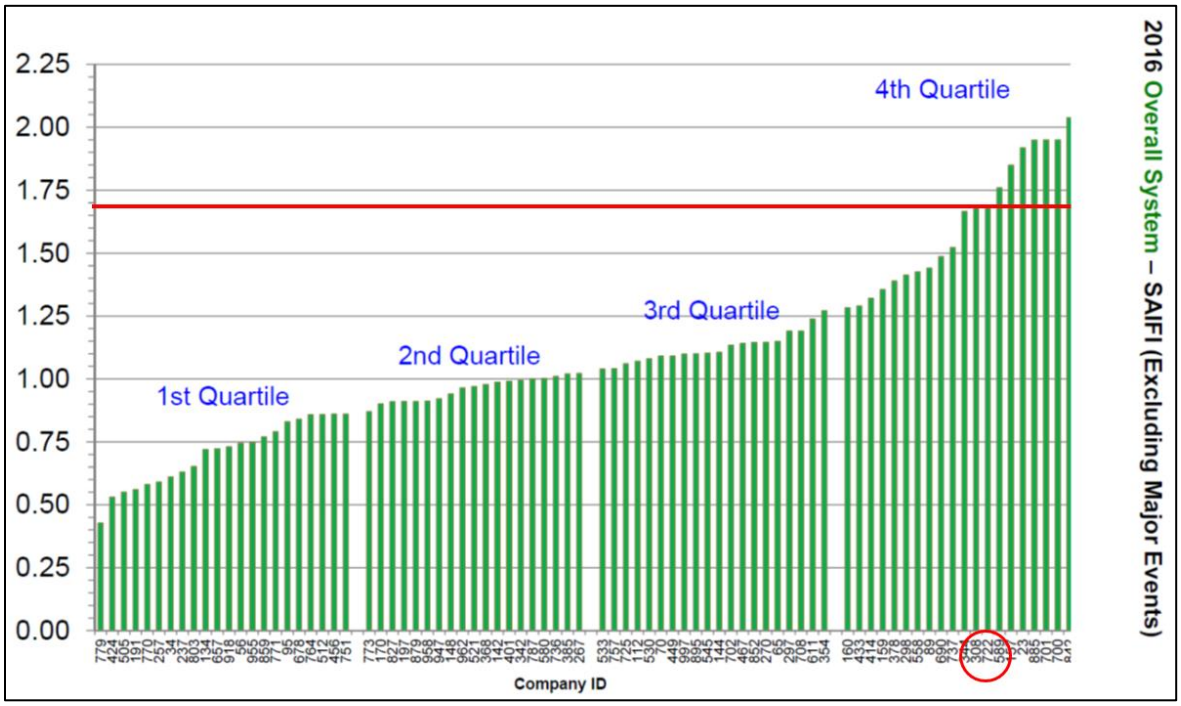
Distribution Standards Committee
Line inspections
Workforce Planning Committee
Transformer Installation and Change-out Loading Guide
Voltage upgrades and evaluations as needed
Mobile underground fault locating vans and associated equipment
Wildlife protection and deterrent devices

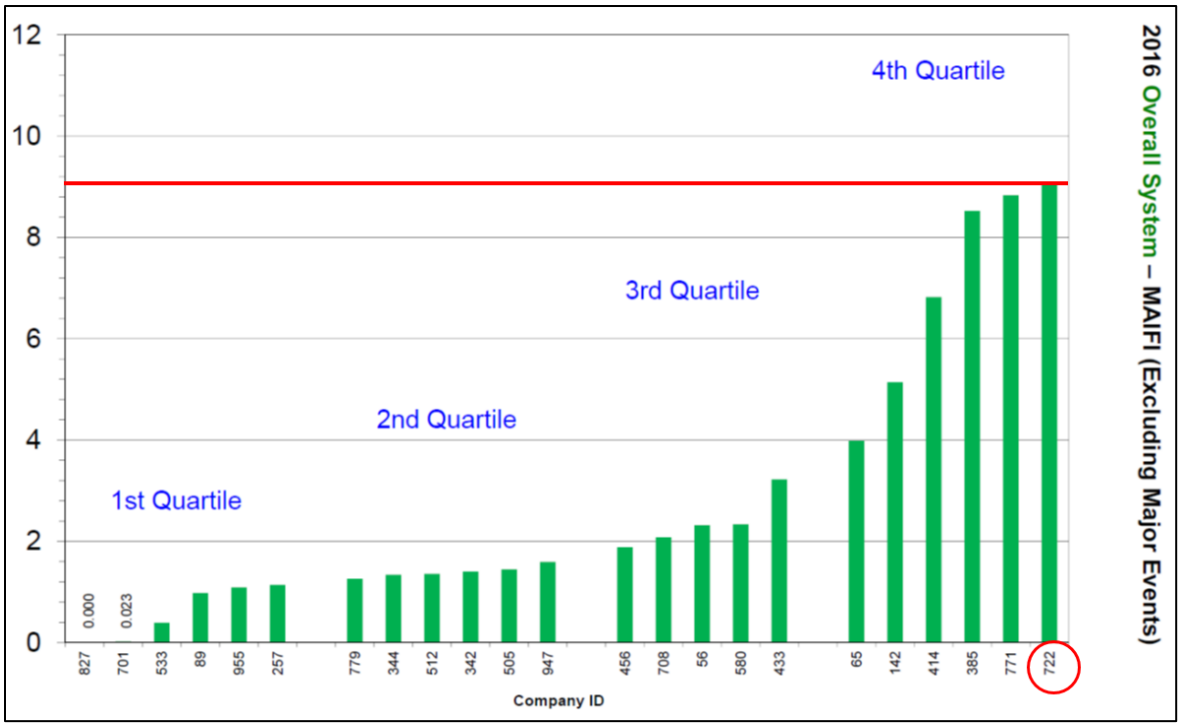
In compliance with the Commissions **Orders in Docket E017/M-16-276 and E017/M-17-256** requiring the Company include in its next annual filing, Otter Tail provides the following.

A. **Benchmarking of Otter Tail's performance using the Institute of Electrical and Electronics Engineers (IEEE) reliability standards**. OTP is a member of Edison Electric Institute (EEI) and has been participating in their Reliability Benchmark Survey for the past five years. OTP provides the performance comparison utilizing the 2016 EEI Reliability Survey. The 2016 EEI Reliability Survey collected data from 92 utility companies. Summarizing, OTP performs in the first quartile for CAIDI, Mid quartiles for SAIDI, and bottom quartiles for SAIFI and MAIFI. Below is a visual summary of charts indicating where OTP fits in terms of the benchmarked results. OTP's results are represented by the red line on the bar graphs. Note that there are fewer respondents for the MAIFI survey due participating utilities lack of reporting regarding this index.




2016 Overall System – SAIDI (Excluding Major Events)
450
400
350
300
250
200
150
100
50
0
1st Quartile
2nd Quartile
3rd Quartile
4th Quartile
Company ID


2016 Overall System – SAIFI (Excluding Major Events)
2.25
2.00
1.75
1.50
1.25
1.00
0.75
0.50
0.25
0.00
1st Quartile
2nd Quartile
3rd Quartile
4th Quartile
Company ID



B. **A Discussion of impacts of reliability by customer class.** Otter Tail Power currently does not have the ability to monitor reliability by customer class. OTP lost this capability two years ago on its old Interruption Monitoring System as vendor support to support monitoring customers by class disappeared. Our new Interruption Monitoring System to be completed in 2018 (2019 first full year of reporting data) will have the ability to create class groups and provide future customer class group analysis.

C. **A discussion of work the Company is doing to withstand and recover from longer term outage events**.

- OTP is part of the Midwest Transmission Assistance Group, MTAG. This is a consortium of eight regional utilities that coordinates and inventories long lead item utility equipment and provides a back pool of service personnel. If and when a major event 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 spend 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.
- 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.

V. RELIABILITY STANDARDS 7826.0600

PROPOSED RELIABILITY PERFORMANCE STANDARDS

Minnesota Rule 7826.0600, Subpart 1, requires utilities to file proposed reliability performance standards in the form of proposed numerical values for the SAIDI, SAIFI, and CAIDI for each of its work centers.

As ordered in **Docket No. E017/M-15-322 dated August 14, 2015**, Otter Tail's reliability standards have been frozen, until the company has shown sufficient improvement in indices' performance. Although OTP saw improvements in 2017 results, OTP proposes to maintain the performance standards at 2013 levels until further improvement is achieved.

Table 10
Proposed Reliability Standards for 2017

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

VI. REPORTING METER-READING PERFORMANCE 7826.1400

Minnesota Rule 7826.1400, **Reporting Meter Reading Performance, requires utilities to provide a detailed report on the utility's meter-reading performance.** In compliance with this rule, Otter Tail provides **Tables 11-15** for its meter reading performance for 2017.

A & B. The number and percentage of customer meters read by utility personnel and the number and percentage of customer meters self-read by the customer.

Table 11
Otter Tail Power Company Meter Reading Performance
January 1, 2017 to December 31, 2017
Residential – MN

	Residential						
Month	**Meters Read**	**%**	**Meters Estimated**	**%**	**Self Read**	**%**	**Total Meters**
1	60,876	97.0%	1,058	1.7%	839	1.3%	62,773
2	60,275	96.0%	1,699	2.7%	813	1.3%	62,787
3	60,537	96.4%	1,465	2.3%	800	1.3%	62,802
4	61,041	97.0%	1,006	1.6%	861	1.4%	62,908
5	61,291	97.1%	993	1.6%	845	1.3%	63,129
6	62,258	97.0%	1,107	1.7%	828	1.3%	64,193
7	61,076	95.2%	2,224	3.5%	831	1.3%	64,131
8	62,373	97.1%	991	1.5%	860	1.3%	64,224
9	62,223	96.8%	1,201	1.9%	825	1.3%	64,249
10	61,677	96.7%	1,221	1.9%	860	1.3%	63,758
11	59,450	94.2%	2,807	4.4%	860	1.4%	63,117
12	60,627	96.2%	1,575	2.5%	789	1.3%	62,991
	733,704	96.4%	*17,347*	2.3%	*10,011*	1.3%	*761,062*

Table 12
Otter Tail Power Company Meter Reading Performance
January 1, 2017 to December 31, 2017
Small Commercial – MN

Small Commercial							
Month	Meters Read	%	Meters Estimated	%	Self Read	%	Total Meters
1	13,884	96.1%	217	1.5%	349	2.4%	14,450
2	13,783	95.3%	356	2.5%	326	2.3%	14,465
3	13,946	96.5%	169	1.2%	341	2.4%	14,456
4	13,961	96.4%	165	1.1%	357	2.5%	14,483
5	14,614	96.8%	136	0.9%	344	2.3%	15,094
6	14,622	96.5%	196	1.3%	341	2.2%	15,159
7	14,410	94.9%	432	2.8%	348	2.3%	15,190
8	14,679	96.2%	237	1.6%	339	2.2%	15,255
9	14,718	96.5%	187	1.2%	341	2.2%	15,246
10	14,625	96.1%	247	1.6%	344	2.3%	15,216
11	14,352	94.7%	469	3.1%	341	2.2%	15,162
12	13,840	95.1%	377	2.6%	331	2.3%	14,548
	171,434	95.9%	*3,188*	1.8%	*4,102*	2.3%	*178,724*

Table 13
Otter Tail Power Company Meter Reading Performance
January 1, 2017 to December 31, 2017
Large Commercial – MN

Large Commercial							
Month	Meters Read	%	Meters Estimated	%	Self Read	%	Total Meters
1	1,394	99.5%	7	0.5%	.		1,401
2	1,378	99.1%	13	0.9%	.		1,391
3	1,390	99.7%	4	0.3%	.		1,394
4	1,394	100.0%		0.0%	.		1,394
5	1,393	99.9%	1	0.1%	.		1,394
6	1,383	99.6%	6	0.4%	.		1,389
7	1,376	99.0%	14	1.0%	.		1,390
8	1,386	99.6%	6	0.4%	.		1,392
9	1,390	99.8%	3	0.2%	.		1,393
10	1,391	99.9%	2	0.1%	.		1,393
11	1,358	97.8%	31	2.2%	.		1,389
12	1,316	97.4%	35	2.6%	.		1,351
	16,549	99.3%	*122*	0.7%	.		*16,671*

Table 14
Otter Tail Power Company Meter Reading Performance
January 1, 2017 to December 31, 2017
Total – MN

System							
Month	Meters Read	%	Meters Estimated	%	Self Read	%	Total Meters
1	76,154	96.9%	1,282	1.6%	1,188	1.5%	78,624
2	75,436	95.9%	2,068	2.6%	1,139	1.4%	78,643
3	75,873	96.5%	1,638	2.1%	1,141	1.5%	78,652
4	76,396	97.0%	1,171	1.5%	1,218	1.5%	78,785
5	77,298	97.1%	1,130	1.4%	1,189	1.5%	79,617
6	78,263	96.9%	1,309	1.6%	1,169	1.4%	80,741
7	76,862	95.2%	2,670	3.3%	1,179	1.5%	80,711
8	78,438	97.0%	1,234	1.5%	1,199	1.5%	80,871
9	78,331	96.8%	1,391	1.7%	1,166	1.4%	80,888
10	77,693	96.7%	1,470	1.8%	1,204	1.5%	80,367
11	75,160	94.3%	3,307	4.2%	1,201	1.5%	79,668
12	75,783	96.1%	1,987	2.5%	1,120	1.4%	78,890
	921,687	96.4%	*20,657*	2.2%	*14,113*	1.5%	*956,457*

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.

In 2017, no meters for customers of Otter Tail Power were not read by utility personnel for a period of 6 months or greater.

D. Data on monthly meter-reading staffing levels, by work center or geographical area.

Table 15

Row Labels	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
Bemidji	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**9**
Service Representative	9	9	9	9	9	9	9	9	9	9	9	9
Crookston	**9**	**9**	**9**	**9**	**9**	**8**	**8**	**9**	**9**	**9**	**8**	**8**
Service Representative	9	9	9	9	9	8	8	9	9	9	8	8
Fergus Falls	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**
Service Representative	15	15	15	15	15	15	15	15	15	15	15	15
Milbank	**13**	**13**	**13**	**13**	**13**	**13**	**13**	**13**	**13**	**13**	**13**	**13**
Apprentice Service Repres	2	2	2	2	2	2	2	2	2	1	1	1
Service Representative	11	11	11	11	11	11	11	11	11	12	12	12
Morris	**14**	**14**	**14**	**14**	**14**	**14**	**14**	**14**	**15**	**15**	**14**	**14**
Apprentice Service Repres									1	1	1	2
Journeyman Meter Reader	1	1	1	1	1	1	1	1	1	1	1	1
Service Representative	13	13	13	13	13	13	13	13	13	13	12	11
Wahpeton	**10**	**10**	**11**	**10**	**10**	**10**	**10**	**9**	**9**	**9**	**9**	**9**
Service Representative	10	10	11	10	10	10	10	9	9	9	9	9
Grand Total	**70**	**70**	**71**	**70**	**70**	**69**	**69**	**69**	**70**	**70**	**68**	**68**

Note: Milbank - The Milbank CSC serves customers in both Minnesota and South Dakota and the number of employees represents all employees for the CSC.

Note: Wahpeton - The Wahpeton CSC Center serves customers in Minnesota, North Dakota and South Dakota and the number of employees represents all employees for the CSC.

Otter Tail utilizes its Service Representatives to read its meters on a monthly basis except in the following towns where a third party reads the Company's meters:

Argyle, MN	Erskine, MN	Pelican Rapids, MN
Audubon, MN	Fergus Falls, MN	Perham, MN
Battle Lake, MN	Fertile, MN	Plummer MN
Bejou, MN	Fisher, MN	Red Lake Falls MN
Beltrami MN	Frazee, MN	Saint Hilaire MN
Bemidji, MN	Gentily MN	Shevlin, MN
Brooks MN	Gonvick, MN	Solway, MN
Browns Valley MN	Gully, MN	Tenney, MN
Campbell, MN	Hallock, MN	Trail, MN
Clearbrook, MN	Kent, MN	Twin Valley, MN
Climax, MN	Lockhart MN	Ulen, MN
Clitherall, MN	Mahnomen, MN	Vergas, MN
Crookston, MN	McIntosh, MN	Vining, MN
Detroit Lakes, MN	Oklee, MN	Waubun, MN
Doran, MN	Oslo, MN	Wilton, MN
Eldred, MN		Winger, MN

VII. REPORTING INVOLUNTARY DISCONNECTIONS 7826.1500

Minnesota Rule 7826.1500, **Reporting Involuntary Disconnections, requires utilities to provide a detailed report on involuntary disconnections of service.** In compliance with this rule, Otter Tail provides its report of involuntary disconnections of service.

A. Number of customers who received disconnection notices.

Table 16

Month	Large Commercial	Residential	Small Commercial	Grand Total
January	60	7967	664	8691
February	59	8739	774	9572
March	74	9063	863	10000
April	44	7452	224	7720
May	86	8979	218	9283
June	38	6965	178	7181
July	35	6977	186	7198
August	43	8318	220	8581
September	42	7414	183	7639
October	53	8548	204	8805
November	35	5418	161	5614
December	74	6972	178	7224
Grand Total	643	92812	4053	97508

B. Number of customers who sought cold weather rule protection under Minnesota Statutes §216B.096 and §216B.097 and the number who were granted cold weather rule protection.

Table 17

Month	Customers who sought Cold Weather Rule Protection in 2017	Number Granted Cold Weather Protection in 2017
January	171	171
February	150	149
March	114	114
April	37	37
May	0	0
June	0	0
July	0	0
August	0	0
September	0	0
October	148	146
November	130	130
December	67	67

C. Total number of customers whose service was disconnected involuntarily and the number of these customers restored to service within 24 hours.

Table 18

7826.1500 Subpart C - Customers involuntarily disconnected in 2017				
Month	**Customer Class**	**Disconnected For more than 24 hours**	**Service Restored within 24 hours**	**Grand Total**
January	Residential	41	35	76
	Small Commercial	3	1	4
January Total		44	36	80
February	Residential	30	25	55
	Small Commercial	5	2	7
February Total		35	27	62
March	Residential	41	27	68
	Small Commercial	3	2	5
March Total		44	29	73
April	Residential	47	64	111
	Small Commercial	5	1	6
April Total		52	65	117
May	Residential	105	55	160
	Small Commercial	4	0	4
May Total		109	55	164
June	Residential	85	34	119
	Small Commercial	4	1	5
June Total		89	35	124
July	Residential	77	40	117
	Small Commercial	6	1	7
July Total		83	41	124
August	Residential	68	55	123
	Small Commercial	8	0	9
August Total		76	55	131
September	Residential	83	34	117
	Small Commercial	3	1	4
September Total		87	35	121
October	Residential	42	31	73
	Small Commercial	5	4	9
October Total		47	35	82
November	Residential	10	13	23
	Small Commercial	1	1	2
November Total		11	14	25
December	Residential	0	2	2
	Small Commercial	2	0	2
December Total		2	2	4
Grand Total		*678*	429	1107

D. Number of disconnected customers restored to service by entering into a payment plan.

Table 19

Month	Residential	Small Commercial	Large Commercial	Total
January	0	0	0	0
February	5	0	0	5
March	2	0	0	2
April	6	0	0	6
May	7	0	0	7
June	3	0	0	3
July	2	0	0	2
August	2	0	0	2
September	5	0	0	5
October	1	0	0	1
November	0	0	0	0
December	0	0	0	0
Totals	33	0	0	33

VIII. REPORTING SERVICE EXTENSION REQUEST RESPONSE TIMES 7826.1600

Minnesota Rule 7826.1600, Reporting Service Extension Request Response Times, requires utilities to provide a report on service extension request response times. In compliance with this rule, Otter Tail provides in **Table 20** below its report of service extension request response times by customer class for each calendar month, in the following categories:

A. The number of customers requesting service to a location not previously served by Otter Tail 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, shown in Table 20.

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, shown in Table 20.

Table 20

7826.1600 - Otter Tail Power Company Service Extension Request Response Time report - 2017						
Month	**Request Type**	**Days**	**Large Commercial**	**Residential**	**Small Commercial**	**Grand Total**
January	**Locations not previously served**			**13**	**11**	**24**
	Locations previously served	0		65	5	70
January Total				**78**	**16**	**94**
February	**Locations not previously served**			**2**	**3**	**5**
	Locations previously served	0		52	9	61
		3		1		1
February Total				**55**	**12**	**67**
March	**Locations not previously served**		**1**	**65**	**9**	**75**
	Locations previously served	(10)		1		1
		0	1	100	18	119
		1		1		1
March Total			**2**	**167**	**27**	**196**
April	**Locations not previously served**			**10**	**13**	**23**
	Locations previously served	0	1	168	41	210
April Total			**1**	**178**	**54**	**233**
May	**Locations not previously served**			**40**	**8**	**48**
	Locations previously served	0		239	33	272
		1		1		1
May Total				**280**	**41**	**321**
June	**Locations not previously served**			**20**	**26**	**46**
	Locations previously served	0		208	26	234
		11		1		1
June Total				**229**	**52**	**281**
July	**Locations not previously served**			**63**	**5**	**68**
	Locations previously served	0		185	16	201
		2		1		1
July Total				**249**	**21**	**270**

Month	Request Type	Days	Large Commercial	Residential	Small Commercial	Grand Total
August	**Locations not previously served**			**31**	**19**	**50**
	Locations previously served	0	1	195	21	217
		1		2		2
August Total			**1**	**228**	**40**	**269**
September	**Locations not previously served**			**18**	**15**	**33**
	Locations previously served	0		153	22	175
		12		1		1
September Total				**172**	**37**	**209**
October	**Locations not previously served**			**79**	**26**	**105**
	Locations previously served	0	2	131	9	142
October Total			**2**	**210**	**35**	**247**
November	**Locations not previously served**			**18**	**13**	**31**
	Locations previously served	0		93	8	101
		1		1		1
November Total				**112**	**21**	**133**
December	**Locations not previously served**			**34**	**14**	**48**
	Locations previously served	0		51	10	61
December Total				**85**	**24**	**109**
Grand Total		**6**		**2,053**	**384**	**2,443**

IX. REPORTING CALL CENTER RESPONSE TIMES 7826.1700

Minnesota Rule 7826.1700, **Reporting Call Center Response Times, requires utilities to provide a detailed report on call center response times, including calls to the business office and calls regarding service interruptions. The report must include a month-by-month breakdown of information.** In compliance with this rule, Otter Tail provides its report of call center response times for 2017 in **Table 21**. **Figure 13** shows a historical graph showing the percent of Minnesota calls answered within 20 seconds.

Table 21

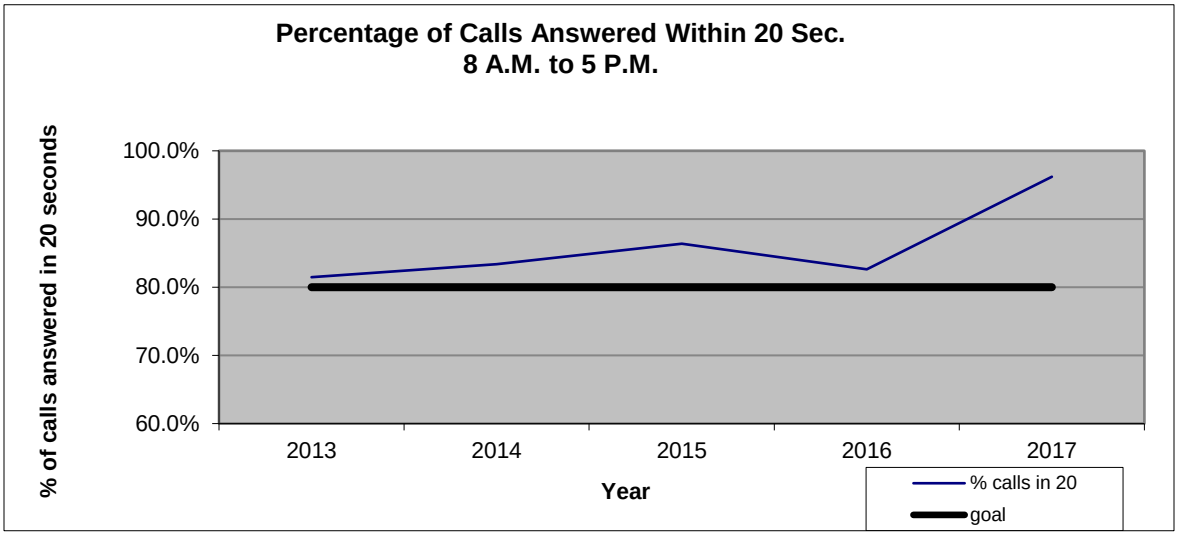
	(A)	(B)	(C)	(D)	(E)
Month	**Offered**	**Calls Abandoned**	**Calls Answered after 20 Seconds**	**Answered within 20 Seconds**	**Percent Answered within 20 seconds[1]**
January-2017	3,358	22	342	3,016	89.82%
February-2017	2,946	9	299	2,647	89.85%
March-2017	4,154	24	279	3,875	93.28%
April-2017	4,453	48	129	4,324	97.10%
May-1910	5,294	39	165	5,129	96.88%
June-2017	5,406	28	263	5,143	95.14%
July-2017	4,853	37	171	4,682	96.48%
August-2017	5,057	29	58	4,999	98.85%
September-2017	4,815	41	135	4,680	97.20%
October-2017	5,526	38	59	5,467	98.93%
November-2017	4,761	32	109	4,652	97.71%
December-2017	4,354	33	79	4,275	98.19%
Total	54,977	380	2,088	52,889	96.20%

[1]Column (D) / Column (A) = Percent answered within 20 Seconds

Otter Tail operates a call center using agents located in nine office locations across our entire service territory. Agents in these office locations answer calls from our Minnesota, North Dakota and South Dakota customers.

On March 13th of 2017, Otter Tail went live with a new telecommunications system. With the new telecommunications system, we implemented an auto attendant that allows customers to select the state in which the account or service the customer is calling to inquire about. The auto attendant for selecting the state is for reporting purposes only. All calls to our customer service number are answered in order in which they are received. We believe the process of the customer selecting the state in which they are calling about will improve the accuracy of Otter Tail's call center response time reporting.

Figure 13



X. REPORTING EMERGENCY MEDICAL ACCOUNT STATUS 7826.1800

Minnesota Rule 7826.1800, Reporting Emergency Medical Account Status, requires utilities to provide a report that includes the number of customers who requested emergency medical account status under Minnesota Statutes, section 216B.098 subdivision 5, the number whose applications were granted, and the number whose applications were denied and the reason for each denial. In compliance with this rule, Otter Tail reports that during 2017 Otter Tail had 24 Minnesota customers request emergency medical account status. Otter Tail granted this status to all 24 customers.

XI. REPORTING CUSTOMER DEPOSITS 7826.1900

Minnesota Rule 7826.1900, Reporting Customer Deposits, requires utilities to provide a report on the number of customers who were required to make a deposit as a condition of receiving service. In compliance with this rule, Otter Tail reports that 698 customers were required to make a deposit as a condition of receiving service during 2017. The number of deposit requests decreased by 17 when compared to 2016.

XII. REPORTING CUSTOMER COMPLAINTS 7826.2000

Minnesota Rule 7826.2000, Reporting Customer Complaints, requires utilities to provide a detailed report on complaints by customer class and calendar month. In compliance with this rule, Otter Tail provides the following information on complaints the Company received during 2017.

A & 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 the customer complaints.

Table 22

Complaint Type	Total	Percent of Total
Alleged Billing Errors	4	15.63%
Load Control	1	3.13%
High Bills	2	6.25%
Inaccurate Meter reading	1	3.13%
Tree Trimming	4	12.50%
Other	20	59.38%
Property Damage	1	3.13%
	33	100.00%

*Other – this category contains any complaints not included within the various complaint sections in our Customer Information System. The types of complaints included in the "Other" category include such things as rebate timing, planned outages and third party meter readers.

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

Table 23

2017		
Resolved by	Total	Percentage
(1) Resolved on Initial Inquiry	30	91%
(2) Resolved within 10 days	0	7%
(3) Resolved in greater than 10 days	3	9%
Grand Total	33	100.00%

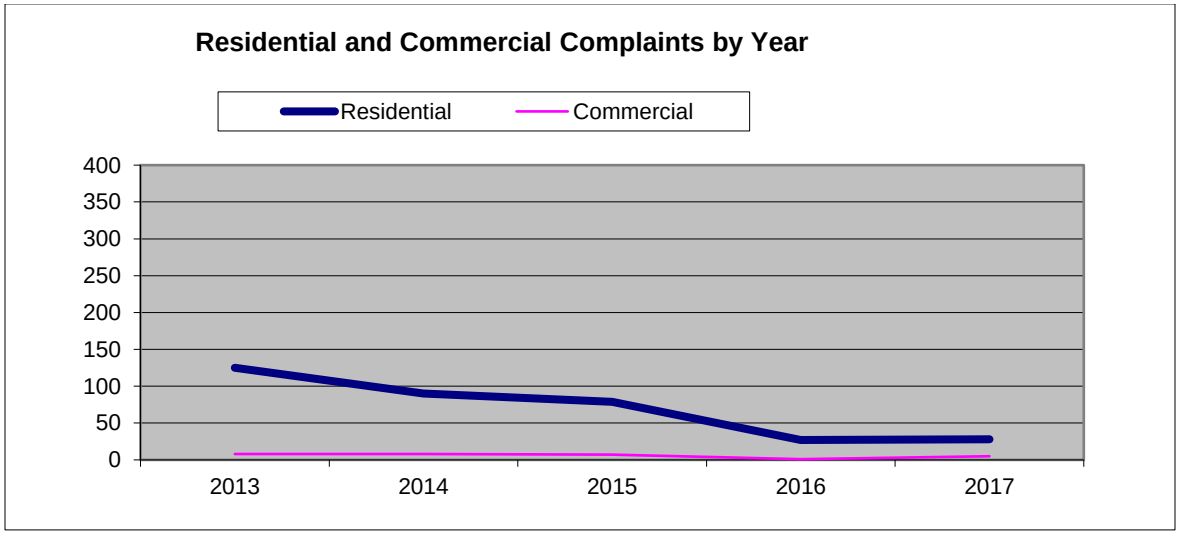
D. The number and percentage of all complaints resolved by taking any of the following actions: (1) taking the action the customer requested; (2) taking an action the customer and the utility agree is an acceptable compromise, (3) providing the customer with information that demonstrates that the situation complained of is not reasonably within the control of the utility or (4) refusing to take the action the customer requested.

Table 24

Action Taken	Total	Percentage
(1) Took action the Customer requested	8	24.24%
(2) Provided the customer with information that demonstrates that the situation complained of is not reasonably within the control of Otter Tail	12	36.36%
(3) Took an action the customer and the utility agree is an acceptable compromise	7	21.21%
(4) Refused to take action the customer requested	6	18.18%
Grand Total	33	100.00%

Figure 14 below is a graph showing complaints by customer class for the previous five years.

Figure 14



E. The number of complaints forwarded to the utility by the Commission's Consumer Affairs Office for further investigation and action.

Otter Tail received two customer complaints in 2017 that were forwarded from the Commission's Consumer Affairs Office, both of which have been resolved. The number of complaints received in 2017 is the same in comparison to 2016.

From: Olson, Wendi
Sent: Wednesday, March 8, 2017 8:41 AM
To: consumer.puc@state.mn.us
Cc: Regulatory
Subject: Otter Tail Power Company Major Service Interruption Report - Fergus Falls

Categories: Minnesota

Otter Tail Power Company Major Service Interruption Report

Location: Fergus Falls, MN

Feeder: Fergus Falls NE Feeder (High School)

Date: March 7, 2017

Cause: Tree fell into primary

Customers affected: 944

Duration: 1 hour 23 minutes (4:36 p.m. – 5:59 p.m.)

Let me know If you have any questions.

Thank you!

Wendi A. Olson
Otter Tail Power Company | Regulatory Compliance Specialist
215 South Cascade Street | Fergus Falls, MN 56538-0496
Phone: 218-739-8699 | wolson@otpco.com

From: Olson, Wendi
Sent: Tuesday, May 9, 2017 8:52 AM
To: 'consumer.puc@state.mn.us'; Regulatory
Subject: Otter Tail Power Company Major Service Interruption Report - May 12, 2017 Planned Outage

Categories: Minnesota

Otter Tail Power Company Major Service Interruption Report (Planned Outage)

Location: Twin Valley, MN

Feeder: Main

Date: May 12, 2017

Cause: Substation maintenance to maintain quality service to customers in this area

Customers affected: 538

Estimated Duration: 5 hours (12:01 a.m. – 5:01 a.m.)

*Customers notified by radio ad, newspaper ad, flyers posted, and personal contact with large/critical customers.

Let me know if you have any questions.

Thank you!

Wendi A. Olson
Otter Tail Power Company | Regulatory Compliance Specialist
215 South Cascade Street | Fergus Falls, MN 56538-0496
Phone: 218-739-8699 | wolson@otpco.com

From: Olson, Wendi
Sent: Monday, June 12, 2017 10:46 AM
To: 'consumer.puc@state.mn.us'; Regulatory
Subject: Otter Tail Power Company Major Service Interruption Report - June 13, 2017 Planned Outage

Categories: Minnesota

Otter Tail Power Company Major Service Interruption Report (Planned Outage)

Location: City of Battle Lake including North Shore Drive and parts of Clitherall Lake

Date: June 13, 2017

Cause: Routine replacement of bottle interrupters on a transmission switch

Customers affected: 717

Estimated Duration: 2 hours (7:00 A.M. – 9:00 A.M.)

*Customers notified by radio ad, newspaper ad, flyers posted, and personal contact.

Let me know if you have any questions.

Thank you!

Wendi A. Olson
Otter Tail Power Company | Regulatory Compliance Specialist
215 South Cascade Street | Fergus Falls, MN 56538-0496
Phone: 218-739-8699 | wolson@otpco.com

From: Olson, Wendi
Sent: Wednesday, June 14, 2017 8:19 AM
To: 'consumer.puc@state.mn.us'
Cc: Regulatory
Subject: Otter Tail Power Company Major Service Interruption Report - Fergus Falls

Categories: Minnesota

Otter Tail Power Company Major Service Interruption Report – Fergus Falls, MN

Location: Fergus N Cleveland – West Feeder

Date: June 13, 2017

Cause: Large strong storm system with heavy rain and strong wind

Customers affected: 615

Estimated Duration: 2 hours 27 minutes (10:15 P.M. – 12:42 A.M.)

Otter Tail Power Company Major Service Interruption Report – Fergus Falls, MN

Location: Fergus Buse- Northwest Feeder

Date: June 13, 2017

Cause: Large strong storm system with heavy rain and strong wind

Customers affected: 1114

Estimated Duration: 2 hours 42 minutes (9:09 P.M. – 11:51 A.M.)

Let me know if you have any questions.

Thank you!

Wendi A. Olson
Otter Tail Power Company | Regulatory Compliance Specialist
215 South Cascade Street | Fergus Falls, MN 56538-0496
Phone: 218-739-8699 | wolson@otpco.com

From: Olson, Wendi
Sent: Friday, June 16, 2017 5:16 PM
To: 'consumer.puc@state.mn.us'
Cc: Regulatory
Subject: RE: Otter Tail Power Company Major Service Interruption Report - Bemidji, MN

Categories: Minnesota

Here is an update to the Bemidji Major Service Interruption.

Otter Tail Power Company Major Service Interruption Report – Bemidji, MN

Location: Bemidji 115KV SUB FEEDER - Downtown
Date: June 16, 2017
Cause: Bad underground
Customers affected: 636
Duration: 2:44 p.m. – 4:46 p.m. (2 hours and 2 minutes)

Let me know if you have any questions.

Wendi

From: Olson, Wendi
Sent: Friday, June 16, 2017 4:16 PM
To: 'consumer.puc@state.mn.us' <consumer.puc@state.mn.us>
Cc: Regulatory <OTPRegulatory@otpco.com>
Subject: Otter Tail Power Company Major Service Interruption Report - Bemidji, MN

Otter Tail Power Company Major Service Interruption Report – Bemidji, MN

Location: Bemidji 115KV SUB FEEDER - Downtown
Date: June 16, 2017
Cause: Unknown (Currently patrolling the line to locate the problem)
Customers affected: 636
Time out: 2:44 p.m.
Time back on: Unknown

We'll send an update as soon as we know more.

Thank you!

Wendi A. Olson

Otter Tail Power Company | Regulatory Compliance Specialist
215 South Cascade Street | Fergus Falls, MN 56538-0496
Phone: 218-739-8699 | wolson@otpco.com

From: Olson, Wendi
Sent: Thursday, August 31, 2017 5:14 PM
To: 'consumer.puc@state.mn.us'
Cc: Regulatory
Subject: Otter Tail Power Company Major Service Interruption Report - Red Lake Falls, MN

Categories: Minnesota

Otter Tail Power Company Major Service Interruption Report – Red Lake Falls, MN

Location: Red Lake Falls Substation BUS# 7969

Date: August 31, 2017

Cause: Equipment Issues

Customers affected: 605

Time out: 4:30 p.m.

Estimated Time back on: 7:30 p.m.

Reps are on seen fixing the issues.

Thank you!

Wendi A. Olson
Otter Tail Power Company | Regulatory Compliance Specialist
215 South Cascade Street | Fergus Falls, MN 56538-0496
Phone: 218-739-8699 | wolson@otpco.com

From: Olson, Wendi
Sent: Tuesday, September 26, 2017 7:30 AM
To: 'consumer.puc@state.mn.us'
Cc: Regulatory
Subject: Otter Tail Power Company Major Service Interruption Report - Rural Battle Lake, MN

Categories: Minnesota

Otter Tail Power Company Major Service Interruption Report – Rural Battle Lake, MN

Location: Otter Outlet – East Feeder

Date: September 26, 2017

Cause: Pole top fire

Customers affected: 672

Time out: 4:04 a.m.

Restored: 6:47 a.m.

Duration: 2 hours and 43 minutes

Thank you!

Wendi A. Olson
Otter Tail Power Company | Regulatory Compliance Specialist
215 South Cascade Street | Fergus Falls, MN 56538-0496
Phone: 218-739-8699 | wolson@otpco.com

CERTIFICATE OF SERVICE

RE: **In the Matter of Otter Tail Power Company 2017 Annual Safety, Reliability and Service Quality Report and Proposed SAIFI, SAIDI and CAIDI Reliability Standards for 2018**
Docket No. E017/M-18-

I, Lindsay Hauer, hereby certify that I have this day served a copy of the following, or a summary thereof, on Daniel P. Wolf and Sharon Ferguson by e-filing, and to all other persons on the attached service list by electronic service or by First Class Mail.

Otter Tail Power Company
Annual Report

Dated this 2nd day of April, 2018

/s/ LINDSAY HAUER
Lindsay Hauer, Regulatory Filing Coordinator
Otter Tail Power Company
215 South Cascade Street
Fergus Falls MN 56537
(218) 739-8376

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	GEN_SL_Otter Tail Power Company_GEN_SL_Otter Tail Power Company_2017 SRSQ Report
Ray	Choquette	rchoquette@agp.com	Ag Processing Inc.	12700 West Dodge Road PO Box 2047 Omaha, NE 68103-2047	Electronic Service	No	GEN_SL_Otter Tail Power Company_GEN_SL_Otter Tail Power Company_2017 SRSQ Report
Generic Notice	Commerce Attorneys	commerce.attorneys@ag.state.mn.us	Office of the Attorney General-DOC	445 Minnesota Street Suite 1800 St. Paul, MN 55101	Electronic Service	No	GEN_SL_Otter Tail Power Company_GEN_SL_Otter Tail Power Company_2017 SRSQ Report
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Shane	Henriksen	shane.henriksen@enbridge.com	Enbridge Energy Company, Inc.	1409 Hammond Ave FL 2 Superior, WI 54880	Electronic Service	No	GEN_SL_Otter Tail Power Company_GEN_SL_Otter Tail Power Company_2017 SRSQ Report
Douglas	Larson	dlarson@dakotaelectric.com	Dakota Electric Association	4300 220th St W Farmington, MN 55024	Electronic Service	No	GEN_SL_Otter Tail Power Company_GEN_SL_Otter Tail Power Company_2017 SRSQ Report
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First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
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Daniel P	Wolf	dan.wolf@state.mn.us	Public Utilities Commission	121 7th Place East Suite 350 St. Paul, MN 551012147	Electronic Service	No	GEN_SL_Otter Tail Power Company_GEN_SL_Otter Tail Power Company_2017 SRSQ Report