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April 1, 2021

William Seuffert
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 2020 Annual Safety, Reliability and Service Quality Report and Proposed SAIFI, SAIDI and CAIDI Reliability Standards for 2021
Docket No. E017/M-21-**

Dear Mr. Seuffert:

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 2020 and proposed reliability standards for 2021 pursuant to Minn. Rule 7826.0600. Otter Tail's proposed reliability standards for 2021 are found in Section IV, B, in the attached Annual Report and 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 – Residential 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) 739-8699 or email me at wolson@otpc.com.

Sincerely,

/s/ WENDI OLSON
Wendi Olson
Regulatory Compliance Specialist

cjh
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 2020 Annual Safety,
Reliability and Service Quality Report and
Proposed SAIFI, SAIDI and CAIDI
Reliability Standards for 2021

Docket No. E017/M-21-

SUMMARY OF FILING

Please take notice that on April 1, 2021, Otter Tail Power Company (Otter Tail), filed with the Minnesota Public Utilities Commission its annual Safety, Reliability and Service Quality Report for 2020 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 2021.

**STATE OF MINNESOTA
BEFORE THE
MINNESOTA PUBLIC UTILITIES COMMISSION**

In the Matter of Otter Tail Power
Company's 2020 Annual Safety,
Reliability and Service Quality Report and
Proposed SAIFI, SAIDI and CAIDI
Standards for 2021

Docket No. E017/M-21-

**ANNUAL REPORT
AND PETITION**

I. INTRODUCTION

Otter Tail Power Company (Otter Tail or the Company), submits this filing in compliance with Minnesota Rules 7826.0400, 7826.0500, 7826.0600, subp. 1, and 7826.1300. This filing also includes compliance items from previous Minnesota Public Utilities Commission (Commission) Orders.

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 1, 2021. The proposed reliability standards will be effective for the calendar year 2021.

D. Title of Utility Employee Responsible for Filing

Wendi Olson
Regulatory Compliance Specialist
Otter Tail Power Company
215 South Cascade Street
P. O. Box 496
Fergus Falls, MN 56538-0496
(218) 739-8699

III. MISCELLANEOUS INFORMATION

A. Service on Other Parties

Pursuant to Minnesota Rule 7829.1300, subp. 2 and Minnesota Statute §216.17, subd. 3, Otter Tail has electronically filed this Report and Proposed 2021 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 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 2020 Safety, Reliability, and Service Quality Report is attached.

B. Proposed reliability standards for 2021

Minnesota 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 Minnesota Rules 7826.0600 Subpart 1, Otter Tail includes proposed 2020 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 make a change from six service centers to four service centers for its 2021 report. Minnesota customers served by the Wahpeton and Milbank customer service centers will be included in Fergus Falls and Morris customer service centers' (respectively) analysis.

Otter Tail also proposes to set indices' standards at IEEE's Reliability Benchmark Survey median values for medium sized utilities. This report historically is completed, and results posted, the third quarter of the following year. Otter Tail will provide a supplemental filing within 30 days from when IEEE's 2020 Benchmark Reliability Survey results are completed and provide explanations for standards not met.

V. CONCLUSION

Otter Tail appreciates the opportunity to provide this Safety, Reliability, and Service Quality Report for 2020, and requests Commission approval of our proposed reliability standards for 2021.

Date: April 1, 2021

Respectfully submitted,

By: /s/ WENDI OLSON
Wendi Olson
Regulatory Compliance Specialist
Otter Tail Power Company
215 South Cascade St., PO Box 496
Fergus Falls, MN 56537
(218) 739-8699

APRIL 1, 2021



Safety, Reliability, and Service Quality Report for 2020



Proposed SAIFI, SAIDI, and CAIDI
Reliability Standards for 2021
Including Additional Compliance Obligations



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I. EXECUTIVE MANAGEMENT’S VIEW OF RELIABILITY

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

Otter Tail Power Company (Otter Tail or the Company) is committed to providing quality and reliable service for the rural communities we serve. Reliability at 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 approximately 132,500 customers in 422 communities and 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 400, 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 nine Customer Service Centers (CSCs) and are committed to proactive efforts of communicating, investigating, and resolving reliability issues across our approximately 70,000 square-mile - roughly the size of North Dakota - service territory.

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 planning, engineering and design, execution, operation and on-going maintenance and reliability oversight to ensure that we provide reliable and affordable electric service to our 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).

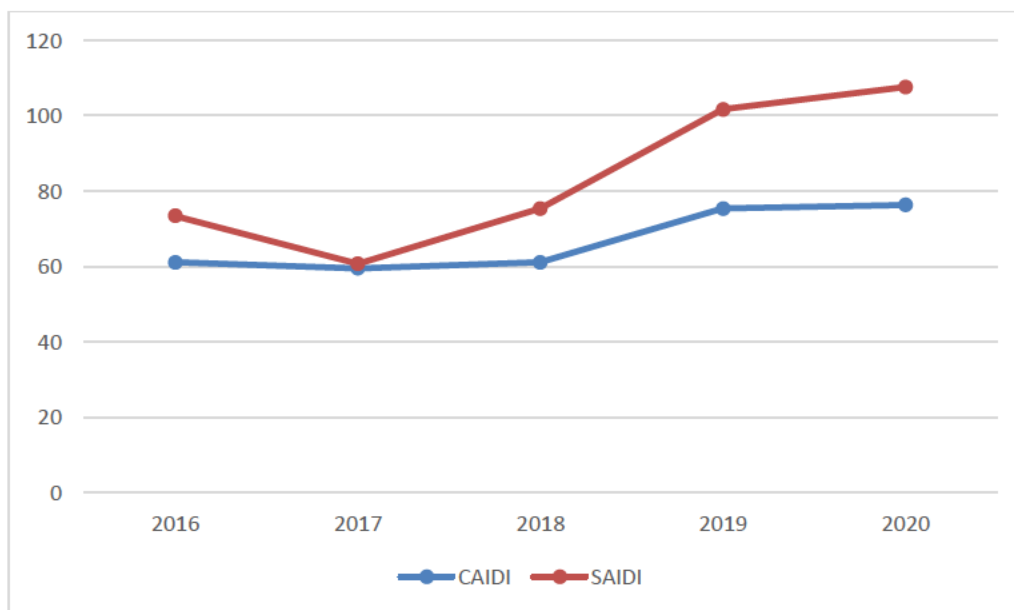
Otter Tail’s Customer Service area is accountable for responding to all interruptions. Thus, Otter Tail’s Customer Service area is accountable for the cost effective and efficient deployment of field personnel, trucks, and equipment as quickly and safely as possible, necessary for restoring service to 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 impacted 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.

II. 2020 SUMMARY GRAPHS

As included in previous reports, 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 5 below provides a summary of Otter Tail's overall reliability and service quality for the years 2016 through 2020. It should also be noted that Otter Tail moved from an outdated/obsolete reporting system to a new Interruption Monitoring System (IMS) in 2019. With this change, more granular SAIDI, CAIDI, and SAIFI information is captured. Thus, comparison of 2019 data to historical data should not be considered like for like.

Figure 1 - Historic Minnesota SAIDI and CAIDI



Otter Tail saw performance levels increase for SAIDI and a slight increase for CAIDI for 2020 compared to 2019 results.

Figure 2 - Minnesota Historic SAIFI

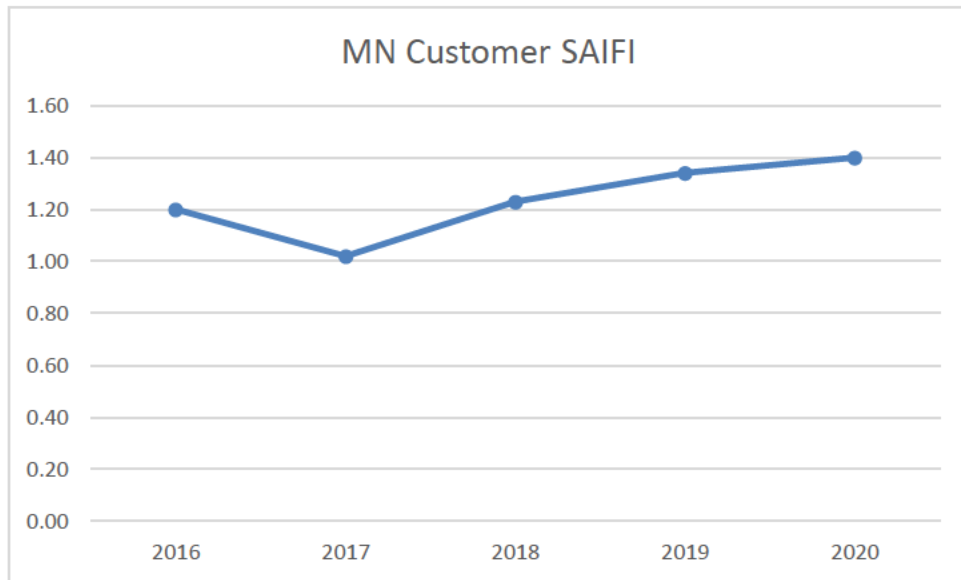


Figure 3 – Minnesota Historic MAIFI

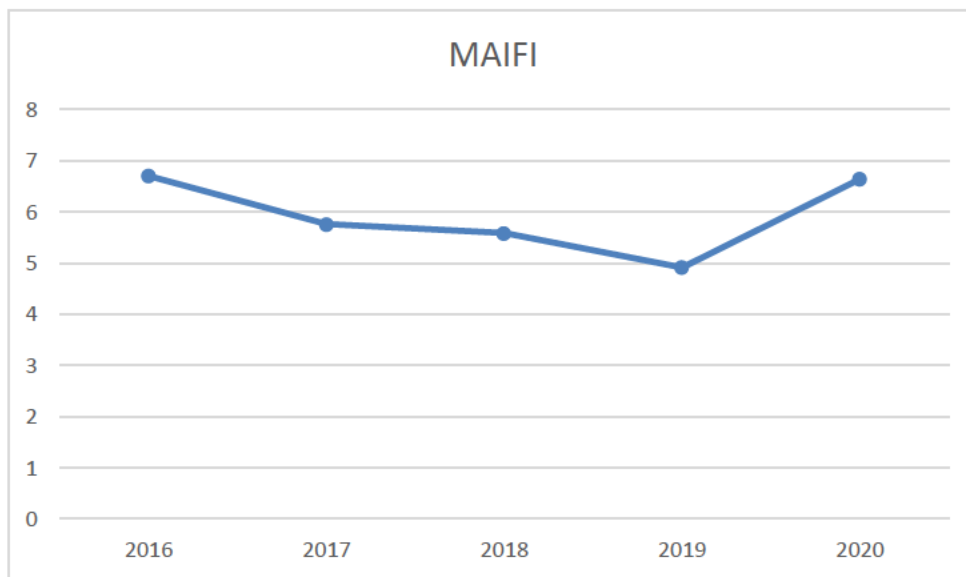


Table 1
MAIFI by Customer Service Center, normalized and non-normalized

CSC 2020	MAIFI
Bemidji	4.99
Crookston	7.3
Fergus Falls	7.65
Milbank	8.48
Morris	5.76
Wahpeton	2.35
MN Total	6.64

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 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. Overall, Otter Tail saw an increase in 2020 results when compared to 2019.

Figure 4 – Full Time Lineworkers available for trouble calls and for the operation and maintenance of Minnesota distribution lines

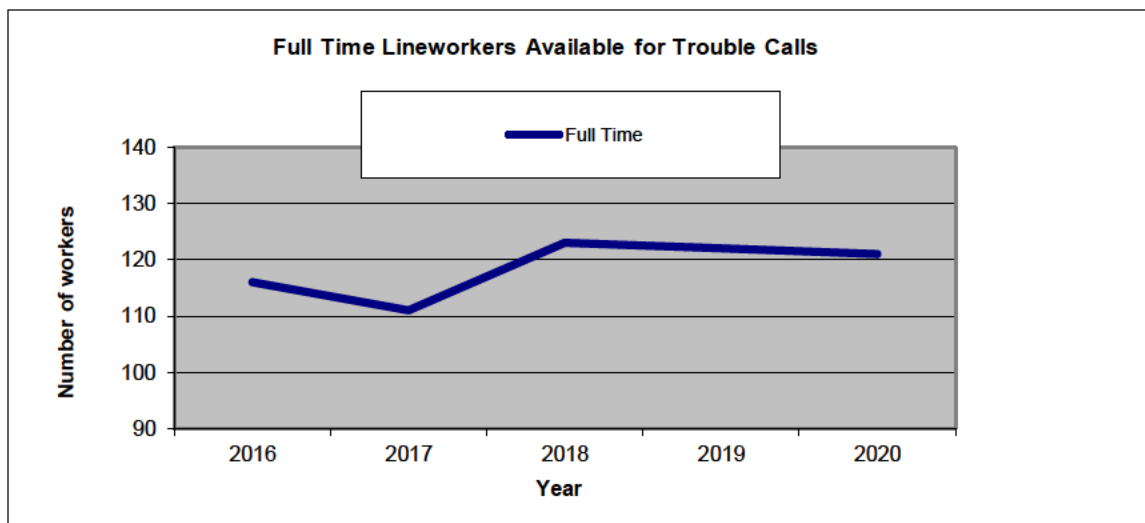
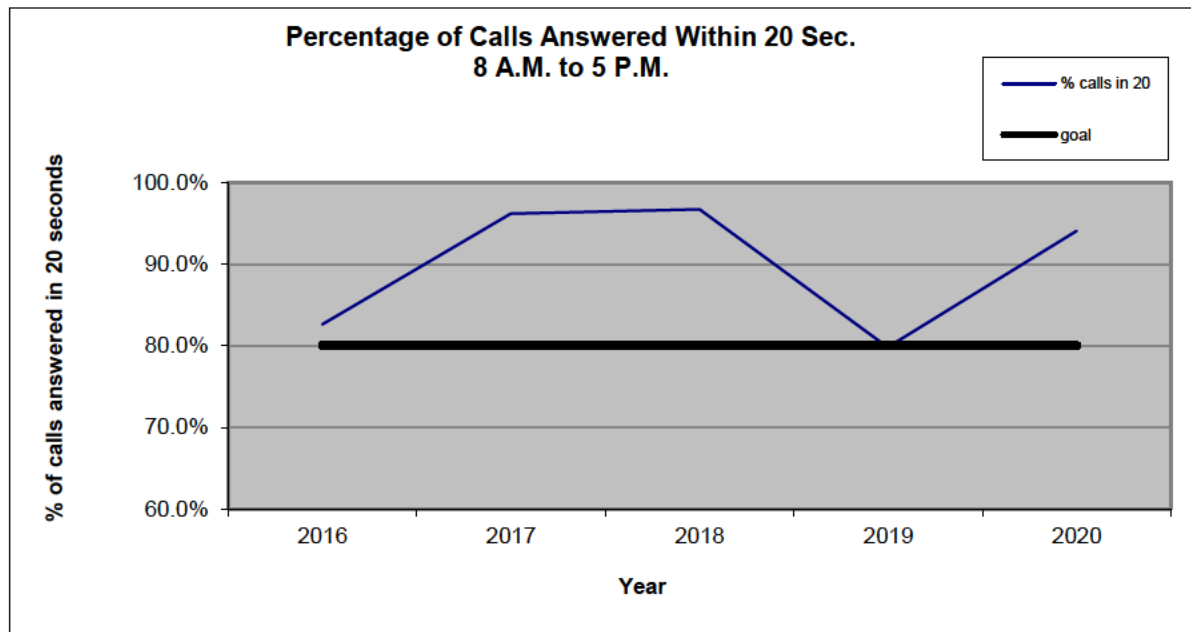


Figure 5 - Calls Answered within 20 Seconds



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 2020 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	2	6	1	
NUMBER OF DAYS				
Total number of days of job transfer or restriction		Total number of days away from work		
451		17		
INJURY AND ILLNESS TYPES				
Injuries	Skin disorders	Respiratory conditions	Poisonings	All other illnesses
09	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 or 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
<i>There were no instances of personal injury due to system failures in 2020.</i>				

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.

A – D. REPORT OF OTTER TAIL’S SAIDI, SAIFI, AND CAIDI FOR 2020 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 2016, Otter Tail selected Itron to replace Otter Tail’s end of life interruption monitoring system with a new Interruption Monitoring System (IMS), including working with Itron to incorporate the IEEE 2.5 beta method process to normalize reliability data. System installations began in early 2017, with completion in late 2018. 2019 was the first entire year with the new IMS. Otter Tail’s 2.5 Beta process is based on the following assumptions:

- Itron calculates annual system T_{med} (SAIDI/Day threshold) based on all historic data available. The system will utilize five years of data, once the system has achieved that maturity.
- The system T_{med} is utilized to run our indices for Minnesota and individual Minnesota Customer Service Centers (CSCs).

For 2020 data, the 2.5 beta parameter assumptions were as follows:

2.5 Beta Parameters:

Alpha	Beta	Major Event Day
-2.53	2.35	28.13

After applying 2.5 Beta Parameters for 2020, zero days met the criteria to be considered a Major Event Day (MED or med). It is Otter Tail’s belief that due to the small historic data base available in our new IMS, the MED threshold will be artificially high. In 2018, Otter Tail realized a MED on June 29, due to severe weather. That day accumulated 20 minutes of SAIDI due to the event. With a small historic data base to calculate T_{med} , the events of that day raised the bar based on the 2.5 Beta calculation process. It will take more data to lower our threshold levels to applicable values.

Table 4 shows Otter Tail’s 2020 SAIFI, CAIDI and SAIDI results based on the IEEE 2.5 Beta Method for each CSC and the entire Minnesota system. **2020 results were gathered by our new Interruption Monitoring System which captures more customer minutes and sustained customer interruptions.**

The goals used for 2020 are the standards that were established in 2013, consistent with the previous seven years, as set by the Commission until sufficient improvement in results are realized. Based on Otter Tail's 2020 standards **we met 11 percent of our CSC targets in 2020, compared to 22 percent in 2019, however Bemidji SAIFI actual was 1/100th of an interruption from goal.**

Table 4

2.5 Beta				
CSC	2020	SAIFI	SAIDI	CAIDI
Bemidji	OES Goal	1.26	70.64	56.06
	Actual	1.27	55.48	49.22
Crookston	OES Goal	1.19	69.33	58.26
	Actual	1.5	140.47	93.63
Fergus Falls	OES Goal	1.11	66.97	60.33
	Actual	1.42	110.48	77.57
Milbank	OES Goal	1.82	75.49	41.48
	Actual	2	169.89	84.94
Morris	OES Goal	1.01	55.78	55.23
	Actual	1.39	118.19	84.71
Wahpeton	OES Goal	1.13	57.24	50.65
	Actual	4.33	329.5	76.04
MN Total	OES Goal	1.13	64.95	57.48
	Actual	1.4	107.66	76.72

Table 4a shows Otter Tail's 2020 SAIFI, CAIDI and SAIDI non-normalized results for each CSC and the entire Minnesota system. As previously stated, there were no major event days recorded in 2020 from our new IMS.

Table 4a

Non-Normalized				
CSC	2020	SAIFI	SAIDI	CAIDI
Bemidji	OES Goal	1.26	70.64	56.06
	Actual	1.27	55.48	49.22
Crookston	OES Goal	1.19	69.33	58.26
	Actual	1.5	140.47	93.63
Fergus Falls	OES Goal	1.11	66.97	60.33
	Actual	1.42	110.48	77.57
Milbank	OES Goal	1.82	75.49	41.48
	Actual	2	169.89	84.94
Morris	OES Goal	1.01	55.78	55.23
	Actual	1.39	118.19	84.71
Wahpeton	OES Goal	1.13	57.24	50.65
	Actual	4.33	329.5	76.04
MN Total	OES Goal	1.13	64.95	57.48
	Actual	1.4	107.66	76.72

Below, Otter Tail provides a description of events that had the greatest impact on normalized SAIDI, SAIFI and CAIDI indices in 2020.

Otter Tail's 2020 SAIDI standards – In 2020, the Crookston, Fergus Falls, Milbank, Morris, and Wahpeton Customer Service Centers failed to meet the 2020 SAIDI reliability standards.

Crookston CSC: The Crookston CSC experienced 166 sustained interruptions in 2020, resulting in a SAIDI of 140.47 minutes compared to the goal of 69.33. The greatest impact to the SAIDI results in the Crookston CSC was an interruption lasting 2 hours and 20 minutes impacting 834 customers, on the Crookston Barrette Street South Feeder. On April 2, freezing rain and high winds broke a pole and damaged insulators on transmission lines, causing the interruption to the Barrette Street Distribution Sub.

Fergus Falls CSC: The Fergus Falls CSC experienced 127 sustained interruptions in 2020, resulting in a SAIDI of 110.48 minutes compared to the goal of 66.97. The greatest impact to SAIDI results in the Fergus Falls CSC was an interruption lasting 2 hours and 39 minutes, impacting 687 customers on the Fergus Edgetown Buse Express Feeder. On July 8, severe thunderstorms broke off two poles and damaged several cross arms near the city land fill. This caused severe damage to the conductor adding to restoration times. During the same event, a large oak tree, outside the right away/franchise, in another location, came down into the line causing several broken crossarms, damaged insulators, and conductors. All feeders out of the Edgetown Buse substation were trimmed as part of our vegetation management process in 2019.

Milbank CSC: The Minnesota customers served out of the Milbank CSC experienced 2 sustained interruptions in 2020, resulting in a SAIDI of 169.89 minutes compared to the goal of 75.49. The greatest impact to the SAIDI results in the Milbank CSC, impacting Minnesota customers, was due to two separate events, both on the Browns Valley South Feeder. On June 20, lightning struck a transmission pole north of Wilmot, SD, burning the top of it resulting in a 55 minute interruption. On December 23, high winds during a blizzard damaged insulators, again, on the transmission line north of Wilmot, resulting in a 1 hour and 55 minute interruption. Both events impacted 395 customers. This feeder was Milbank's worst performing circuit. An account of circuit improvements is described later in this report, **Minnesota Rule 7826.0500, Subparts 1h.**

Morris CSC: The Morris CSC experienced 150 sustained interruptions in 2020, resulting in a SAIDI of 118.19 minutes compared to the goal of 55.78. The greatest impact to SAIDI results in the Morris CSC was an interruption lasting 2 hours and 25 minutes, impacting 1477 customers. On July 26, lightning struck a 115KV transmission pole feeding the Wheaton Substation, interrupting service to both the North and South Feeders. The line was switched to isolate the fault, which included Wheaton, and the pole and other damaged facilities were replaced.

Wahpeton CSC: The Minnesota customers served out of the Wahpeton CSC experienced 11 sustained interruptions in 2020, resulting in a SAIDI of 329.5 minutes compared to the goal of 57.24. The greatest impact to the SAIDI results in the Wahpeton CSC was an interruption lasting 4 hours and 14 minutes, impacting 118 Minnesota customers. On September 9, just before midnight, extremely high winds broke several transmission insulators, causing the interruption on the Nashua Tintah Substation. The

line had to be patrolled in the dark, which added to the interruption duration. The Nashua Tintah–Tintah Feeder is Wahpeton’s worst performing circuit. An account of circuit improvements is described later in this report, **Minnesota Rule 7826.0500, Subparts 1h.**

Otter Tail 2020 SAIFI standards – In 2020, all six Customer Service Centers failed to meet the 2020 SAIFI reliability standards.

Bemidji CSC: The Bemidji CSC experienced 57 sustained interruptions in 2020, resulting in a SAIFI of 1.27 interruptions compared to a goal of 1.26.

Crookston CSC: The Crookston CSC experienced 166 sustained interruptions in 2020, resulting in a SAIFI of 1.5 interruptions compared to a goal of 1.19.

Fergus Falls CSC: The Fergus Falls CSC experienced 127 sustained interruptions in 2020, resulting in a SAIFI of 1.42 interruptions compared to a goal of 1.11.

Milbank CSC: Minnesota customers served out of the Milbank CSC experienced 2 sustained interruptions in 2020, resulting in a SAIFI of 2 interruptions compared to a goal of 1.82.

Morris CSC: The Morris CSC experienced 150 sustained interruptions in 2020, resulting in a SAIFI of 1.39 interruptions compared to a goal of 1.01.

Wahpeton CSC: Minnesota customers served out of the Wahpeton CSC experienced 11 sustained interruptions in 2020, resulting in a SAIFI of 4.33 interruptions compared to a goal of 1.13.

Otter Tail 2020 CAIDI standards – The Crookston, Fergus Falls, Milbank, Morris, and Wahpeton Customer Service Centers failed to meet the 2020 CAIDI reliability standards.

Crookston CSC: The Crookston CSC experienced 166 sustained interruptions in 2020, resulting in a CAIDI of 93.63 minutes compared to a goal of 58.26 minutes. The most impactful feeder interruption occurred on August 20 due to a severe thunderstorm with high winds, launching trees into our Kennedy Main Feeder distribution circuit. Causing a 6 hour and 58 minute interruption. This feeder was last trimmed, as part of our vegetation management process, in 2017, and is scheduled to be trimmed again in 2022, (pursuant to our five year trim cycle). Following this event, the line was patrolled and additional trimming was conducted due to any pre-cycle over growth.

Fergus Falls CSC: The Fergus Falls CSC experienced 127 sustained interruptions in 2020, resulting in a CAIDI of 77.57 minutes compared to a goal of 60.33 minutes. The most impactful feeder interruptions occurred on July 8. Severe thunderstorms, with straight line winds, broke off trees into the primary distribution lines on the Aurdal Rural Wall Lake–Aurdal Rural North Feeder causing an interruption lasting just over 7 hours. This event saw combined damage to both transmission and distribution voltages. Damage, to both, was severe and included broken insulators, cutouts, cross arms, and conductors. As part of our vegetation management process, these lines had been trimmed

in 2018. Following this event, the line was patrolled and additional trimming was conducted due to any pre-cycle over growth.

Milbank CSC: Minnesota customers served out of the Milbank CSC experienced two sustained interruptions in 2020, resulting in a CAIDI of 84.94 minutes compared to a goal of 41.48 minutes. The most impactful feeder interruption occurred on December 23. Details of this event were documented in the SAIDI analysis portion of this section previously.

Due to regional reorganizations, Milbank CSC now has only two feeders feeding MN customers. Otter Tail proposes that these Minnesota customers be included in the Morris CSC for 2021's report.

Morris CSC: The Morris CSC experienced 128 sustained interruptions in 2020, resulting in a CAIDI of 84.71 minutes compared to a goal of 55.23 minutes. The most impactful interruption occurred on August 27. Otter Tail did a planned substation upgrade that resulted in an eight hour and 26 minute interruption on the Herman Main Feeder, impacting 133 customers.

Wahpeton CSC: Minnesota customers served out of the Wahpeton CSC experienced 11 sustained interruptions in 2020, resulting in a CAIDI of 76.04 minutes compared to a goal of 50.65 minutes. The most impactful feeder interruption occurred on September 9. Details of this event were documented in the SAIDI analysis portion of this section previously.

Due to regional reorganizations, Wahpeton CSC has only two feeders feeding MN customers. Otter Tail proposes that these Minnesota customers will be included in the Fergus Falls CSC for 2021's report.

Reliability Standard Summary

When compared to 2019, Otter Tail's 2020 overall Minnesota reliability performance realized an increase in SAIFI, SAIDI and MAIFI. CAIDI was relatively flat year to year. As described in last year's filing, our new system (first utilized for 2019 recording) captures more interruptions and duration with monitoring meters on all three phases, when compared to our old system. As Otter Tail gathers additional historic data, it will become apparent which appropriate standards and goals to utilize for measuring performance.

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 improved results.

Table 5 provides a summary of the different types of interruption causes that affect overall system reliability. As of note, migration into the new IMS has taken place allowing for more cause granularity. Each year we audit cause data to determine additional cause classification to provide better detailed post analysis of our system's performance.

Table 5
2020 MN Sustained Interruption Summary
by CSC and cause

	Bemidji	Crookston	Fergus Falls	Milbank	Morris	Wahpeton	Work Center Totals
Animal	2		5		1		8
Bird							0
Equip Fail Arrester	2	5	3		2		12
Equip Fail Conductor		2	2		8		12
Equip Fail Cutout			2		1		3
Equip Fail Insulator	5	42	25		17	6	95
Equip Fail Other					3		3
Equip Fail Pole	2		1		10	1	14
Equip Fail Substation	2	7	11		4	2	26
Equip Fail Transformer			1		1		2
Equip Fail Underground		2	2				4
Lightning	1		1	1	8		11
Other	1		1				2
Planned	2	14			4		20
Unknown	1	1	3		15	1	21
Vandalism		1					1
Vegetation	1		14		8		23
Vehicle Accident	2	1	1		3		7
Weather	7	32	9		28		76
Unidentified	24	46	28	1	16	1	116
Totals	52	153	109	2	129	11	456

E. 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.

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. **Customer Service and Asset Management Joint Monthly Team Meetings:** This monthly meeting has replaced our former Reliability Improvement Initiative Team Meetings. Otter Tail's Customer Service and Asset Management cross functional team meets monthly for a comprehensive overview of our system's reliability. This process continues to provide increased awareness, focus and attention to reliability related issues through the prioritization of resources. In addition to managers from each of the Customer Service and Asset Management business units, Otter Tail's Vice Presidents of both Customer Service and Asset Management attend these monthly meetings.
2. **Electronic Tracking Process for Transmission Patrol Reports and Maintenance Activities:** Otter Tail continues to improve electronic tracking of internal reports and has integrated the process into our Geographic Information System (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. In addition, specific budget dollars are allocated for mitigating identified reliability concerns.
3. **Lightning Tracking System:** Otter Tail implemented a lightning tracking system eight 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 2019, the integration of the lightning data with our GIS was completed. Now strike data can be tracked in comparison to our asset locations, identifying areas for needed patrol following lightning/storm events.
4. **GIS Data Integration:** Otter Tail continues the integration of critical system data into its GIS. Underground fault data, patrol information, SEL distance relay data, lightning strike location data, and pole inspection data is all 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). Otter Tail 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 and power quality issues. Today, Otter Tail has 125 of these power quality monitors installed and operating in our system. These tools are located in identified problem areas and then redeployed in other areas once the issues are resolved. Data provided is real-time and displayed via a web browser. Continued deployment of this equipment has improved Otter Tail's efforts in identifying power quality problems and issues in the field.
7. **Installation of Grid Monitoring Power Sensors:** In 2020, Otter Tail purchased and installed 15 sets of medium voltage power sensors for monitoring overhead distribution and 41.6KV transmission circuits. They communicate critical power quality attributes via wireless cellular and data is provided real time via a web browser. In the months ahead Otter Tail will learn about this tools application and use its data for continued system optimization.

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.

F. 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 2020 calendar year, Otter Tail reports that there was one sustained interruption to a Minnesota Bulk Power Supply Facility. On May 26, 2020 at 2:56 AM, an insulator failed in the GRE Audubon 230KV Substation. Customers in Audubon, Lake Park, Callaway, Hitterdal, and Syre experienced a five minute and 57 second interruption as a result of this.

G. 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.

Minnesota Rule 7826.0500, Subpart 1g, requires utilities to file a copy of each report filed under part 7826.0700, reporting major service interruptions. On December 18, 2020, the Minnesota Public Utilities Commission issued an order in Docket No. E017/M-20-401 granting a variance to Minnesota Rule 7826.0500, Subpart 1g. Otter Tail provides as required by this variance as Attachment 1, a summary table that includes the information contained in the reports, like Attachment G of Xcel's April 1, 2020 Safety, Reliability, and Service Quality report filing in Docket No. E002/M-20-406.

H. 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 CSCs. Last year, Otter Tail changed the criteria for the purpose of identifying the worst performing circuit. In previous years, we defined a circuit as a distribution feeder and the criterion that was used to identify the worst performing circuit was customer minutes. This year, Otter Tail will continue to define a circuit as a distribution feeder and it will again use customer interruptions, both momentary and sustained, as the criteria for identifying worst performers. We are including momentary customer interruptions as conditions due to the fact that we believe this is "forward looking" and that MAIFI is a predictor of future SAIDI. Also, benchmark surveys show that multiple momentary interruptions have a negative impact on customer satisfaction.

Table 6
2020 MN Worst Performing Feeders

Service Center	Substation Name	Feeder Description	Customer Count	Total Sustained Customer Minutes	SAIFI	CAIDI	SAIDI	MAIFI
BEMIDJI	Twin Valley	Main Feeder	721	61681	4	21.39	85.55	16
CROOKSTON	Holt Junction	Main Feeder	305	78551	2.44	105.72	257.54	15.5
FERGUS FALLS	Otter City	North Feeder	876	72278	1	82.51	82.51	26.06
MILBANK	Browns Valley	South Feeder	322	40275	1.9	84.97	161.85	7.97
MORRIS	Morris NE	Prairie Inn Feeder	1058	10770.44	1	10.18	10.18	9.01
WAHPETON	Nashua Tintah	Tintah Feeder	67	33296	6	82.83	496.95	4.03

Bemidji CSC: The Main Feeder fed from the Twin Valley Substation was the worst performing feeder in 2020 for the Bemidji CSC. This feeder experienced four sustained and 16 momentary interruptions impacting 721 customers in 2020. The causes of momentary interruptions were mainly transmission related and included, animals, birds, weather and unknown. The causes of the sustained interruptions were unknown, weather, and all transmission related.

This feeder was last trimmed in 2016 as part of our vegetation management process. It is scheduled to be trimmed again in 2021. Work was conducted last year on the Fertile transmission breaker which provides service to the Twin Valley Distribution Substation. Several poles were replaced on the transmission system as well. Engineering also began a study, late last year, utilizing our new grid monitoring power sensors which are installed on the transmission system to pinpoint fault locations. Investigations into other proactive maintenance activities continues to improve this feeder's performance in the future.

Crookston CSC: The Main Feeder fed from the Holt Junction Substation was the worst performing feeder in 2020 in the Crookston CSC. This feeder experienced two sustained interruptions and 14 momentary interruptions impacting 305 customers in 2020. The causes of momentary interruptions were mainly transmission related and included vegetation and several occurrences of ice on the lines. Both sustained interruptions were due to failed arrestors. One of those, occurring on June 29, lasted just over 4 hours due to the fact that the ground tail of the blown arrestor was oriented in such a way that it was very difficult to locate.

This feeder was last trimmed in 2018 as part of our vegetation management process. It is scheduled to be trimmed again in 2023. As a result of this circuit's 2020 performance, Otter Tail will continue to monitor this feeder to ensure improved results in the future.

Fergus Falls CSC: The North Feeder fed out of the Ottertail City Substation was the worst performing feeder in 2020 for the Fergus Falls CSC. This feeder experienced 1 sustained and 27 momentary interruptions, impacting 876 customers in 2020. The causes of the momentary interruptions include, vegetation, animals, weather, and older underground primary. On March 19, an insulator failed on the 41.6KV transmission line between Deer Creek and the Ottertail City Substation resulting in a one hour and 23 minute interruption, impacting 876 customers.

This feeder, which resides in a heavily wooded area was last trimmed in 2020 as part of our vegetation management process. During the summer of 2021, the section of old underground primary will be replaced. A project to replace existing overhead primary with underground is being scoped out and budgeted for 2022. Also, work was done at the Ottertail City Substation to address reliability issues with the transmission breaker during the summer of 2020. Investigations into other proactive maintenance activities continues to improve this feeder's performance in the future.

Milbank CSC: The South Feeder fed out of the Browns Valley Substation was the worst performing feeder in 2020 for the Milbank CSC. This feeder experienced two sustained and eight momentary interruptions, impacting 322 customers in 2020. The momentary interruptions were due to weather and birds. Both sustained interruptions were transmission related. On June 20, lightning struck a transmission pole north of Wilmot, burning off the top of the pole, causing a 55 minute interruption. On December 23, high winds in the Wilmot area caused an insulator to fail, resulting in a one hour and 55 minute interruption.

Otter Tail plans to refurbish the transmission line that feeds the Browns Valley Distribution Substation this year. The plans are to replace all old and aging insulators and several poles.

Otter Tail proposes that the Browns Valley Substation will be rolled into the Fergus Falls CSC for 2021 reporting as part of ongoing discussions relating to the 2018 Annual SRSQ January 28, 2020 PUC Order in Docket No. E017/M-19-260.

Morris CSC: The Prairie Inn Feeder fed from the Morris NE Substation was the worst performing feeder in 2020 for the Morris CSC. This feeder experienced one sustained and nine momentary interruptions, impacting 1058 customers in 2020. The momentary interruptions were largely transmission related, due to weather, a vehicle accident, and insulator and arrestor failures. The sustained interruption was due to a failed transmission arrestor.

Otter Tail plans to reinsulate both tangent and corner structures in 2021. Arrestors will also be replaced at the same time.

Otter Tail will continue to monitor this feeder to ensure improved results in the future.

This feeder and its supplying transmission circuit will continue to be monitored to ensure improved performance in the future.

Wahpeton CSC: The Tintah Feeder fed from the Nashua Tintah Substation was the worst performing feeder in 2020 for the Wahpeton CSC. This feeder experienced six sustained and four momentary interruptions, impacting 67 customers in 2020. The momentary interruptions were due to lightning and bad weather. The sustained interruptions were all transmission related and most of them due to broken insulators.

Otter Tail plans to refurbish the Nashua Tintah transmission tap this year. The plans are to replace all old and aging insulators and several poles on this tap feeding the distribution substations.

Otter Tail proposes that the Nashua Tintah Substation will be rolled into the Fergus Falls CSC for 2021 reporting as part of ongoing discussions relating to the 2018 Annual SRSQ January 28, 2020 PUC Order in Docket No. E017/M-19-260.

I. 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 standards of the American National Standards Institute for nominal system voltages greater or less than voltage range B.

Otter Tail provides, in **Table 7** 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 7
MN Feeders and Number of Occurrences – Voltage fell outside the ANSI Voltage Range

Customer Service Center	Feeder	Number of Volt(RMS) Below Threshold	Number of Volt(RMS) Above Threshold
Bemidji CSC	Bejou_MainFeeder	1	3
Bemidji CSC	Bemidji_115_DowntownFeeder	0	52
Bemidji CSC	Bemidji_115_High_SchoolFeeder	0	43
Bemidji CSC	Bemidji_115_South_Lake_IrvingFeeder	0	7
Bemidji CSC	Bemidji_25th_Street_EastFeeder	0	1
Bemidji CSC	Bemidji_Birchmont_NorthFeeder	34	1
Bemidji CSC	Bemidji_Birchmont_SouthFeeder	0	4
Bemidji CSC	Bemidji_Hydro_MainFeeder	0	158
Bemidji CSC	Bemidji_Nymore_East_ExpressFeeder	0	4,303
Bemidji CSC	Bemidji_Potlatch_MainFeeder	0	36
Bemidji CSC	Callaway_MainFeeder	0	81
Bemidji CSC	Cass_Lake_NorthFeeder	0	53
Bemidji CSC	Cass_Lake_SouthFeeder	1	10
Bemidji CSC	Clearbrook_MainFeeder	0	14,554
Bemidji CSC	Clearbrook_MN_Pipeline_MainFeeder	0	56
Bemidji CSC	Erskine_EastFeeder	0	31
Bemidji CSC	Erskine_WestFeeder	0	44
Bemidji CSC	Fertile_NorthFeeder	1	4
Bemidji CSC	Fertile_SouthFeeder	0	5
Bemidji CSC	Gary_MN_MainFeeder	0	58
Bemidji CSC	Gonvick_MainFeeder	0	50
Bemidji CSC	Gully_MainFeeder	0	59
Bemidji CSC	Hitterdal_MainFeeder	0	57
Bemidji CSC	Mahnomen_115_CasinoFeeder	2	0
Bemidji CSC	McIntosh_MainFeeder	0	19

Customer Service Center	Feeder	Number of Volt(RMS) Below Threshold	Number of Volt(RMS) Above Threshold
Bemidji CSC	Mentor_MainFeeder	0	4
Bemidji CSC	Ogema_White_Earth_OgemaFeeder	2	17
Bemidji CSC	Ogema_White_Earth_WhiteEarthFeeder	2	20
Bemidji CSC	Oklee_MainFeeder	1	1
Bemidji CSC	Syre_MainFeeder	0	8
Bemidji CSC	Trail_Gravel_Pit_MainFeeder	2	2,222
Bemidji CSC	Trail_MainFeeder	0	2
Bemidji CSC	Twin_Valley_MainFeeder	0	14
Bemidji CSC	Ulen_MainFeeder	0	19
Bemidji CSC	Waubun_MainFeeder	0	16
Bemidji CSC	WiltonMN_MainFeeder	0	1
Bemidji CSC	Winger_MainFeeder	0	583
Crookston CSC	Adams_Milton_AdamsFeeder	0	21
Crookston CSC	Adams_Milton_MiltonFeeder	41	2
Crookston CSC	Argyle_NorthFeeder	0	25
Crookston CSC	Argyle_SouthFeeder	0	5
Crookston CSC	Badger_MainFeeder	0	19
Crookston CSC	Beltrami_and_LockhartFeeder	2	1,209
Crookston CSC	Beltrami_Junction_Beltrami_Rural_EastFeeder	1	2,380
Crookston CSC	Beltrami_Junction_Beltrami_Rural_NorthFeeder	2	2,201
Crookston CSC	Brooks_MainFeeder	0	1
Crookston CSC	Climax_MainFeeder	0	16,148
Crookston CSC	Crookston_Barrette_St_NorthFeeder	0	5
Crookston CSC	Crookston_Barrette_St_SouthFeeder	3	3
Crookston CSC	Crookston_Enbridge_MainFeeder	2	10,598
Crookston CSC	Crookston_Parkview_U_of_M_Feeder	0	8
Crookston CSC	Crookston_Parkview_West_East_and_SouthFeeder	0	14
Crookston CSC	Crookston_South_Main_American_Crystal_SugarFeeder	0	1
Crookston CSC	Crookston_South_Main_CrescentFeeder	0	3
Crookston CSC	Crookston_South_Main_DahlgrensFeeder	0	1
Crookston CSC	Crookston_South_Main_HospitalFeeder	0	1
Crookston CSC	Crookston_South_Main_Industrial_ParkFeeder	0	3
Crookston CSC	Donaldson_MainFeeder	0	4
Crookston CSC	Fisher_MainFeeder	0	28
Crookston CSC	Greenbush_EastFeeder	0	14
Crookston CSC	Greenbush_WestFeeder	0	15
Crookston CSC	Hallock_Northwest_NorthFeeder	1	2
Crookston CSC	Hallock_Northwest_SouthFeeder	0	2

Customer Service Center	Feeder	Number of Volt(RMS) Below Threshold	Number of Volt(RMS) Above Threshold
Crookston CSC	Halma_MainFeeder	0	122
Crookston CSC	Harold_MainFeeder	0	5,860
Crookston CSC	Holt_Junction_MainFeeder	6	26
Crookston CSC	Humboldt_MainFeeder	0	6,371
Crookston CSC	Karlstad_NorthFeeder	0	21
Crookston CSC	Karlstad_SouthFeeder	0	10
Crookston CSC	Kennedy_MainFeeder	0	1,465
Crookston CSC	Lake_Bronson_MainFeeder	2	7
Crookston CSC	Lancaster_MainFeeder	0	6
Crookston CSC	Mountain_MainFeeder	0	5
Crookston CSC	New_Folden_MainFeeder	0	1
Crookston CSC	Northcote_EastFeeder	0	8
Crookston CSC	Northcote_WestFeeder	0	3
Crookston CSC	Oslo_MainFeeder	3	1
Crookston CSC	Oslo_Manvel	6	0
Crookston CSC	Plummer_MainFeeder	0	773
Crookston CSC	Red_Lake_Falls_East_NorthFeeder	0	91
Crookston CSC	Red_Lake_Falls_East_SouthFeeder	0	908
Crookston CSC	Red_Lake_Falls_East_StHilaireFeeder	0	6,622
Crookston CSC	Red_Lake_Falls_SW_DetroitFeeder	0	8
Crookston CSC	Red_Lake_Falls_SW_SoutheastFeeder	0	12
Crookston CSC	Strandquist_MainFeeder	0	4
Crookston CSC	Viking_MainFeeder	0	4
Fergus Falls CSC	Ashby_Line_Jct_MainFeeder	0	6
Fergus Falls CSC	Audubon_NorthFeeder	3	6
Fergus Falls CSC	Audubon_SouthFeeder	5	13
Fergus Falls CSC	Battle_Lake_TownFeeder	3	1
Fergus Falls CSC	Brandon_TownFeeder	0	348
Fergus Falls CSC	Clitherall_MainFeeder	3	64
Fergus Falls CSC	Dalton_Jct_DaltonFeeder	10	0
Fergus Falls CSC	Dalton_Jct_Swan_LakeFeeder	0	1
Fergus Falls CSC	Deer_Creek_MainFeeder	37	1
Fergus Falls CSC	Detroit_Lakes_NW_Rural_MainFeeder	1	536
Fergus Falls CSC	Elbow_Lake_North_Rural_MainFeeder	1	6
Fergus Falls CSC	Erdahl_Melby_Ashby_Erdahl_MainFeeder	0	45
Fergus Falls CSC	Erdahl_Melby_Ashby_MainFeeder	0	95
Fergus Falls CSC	Erhard_MainFeeder	1	0
Fergus Falls CSC	Evansville_EastFeeder	0	7

Customer Service Center	Feeder	Number of Volt(RMS) Below Threshold	Number of Volt(RMS) Above Threshold
Fergus Falls CSC	Evansville_WestFeeder	0	3
Fergus Falls CSC	Fergus_Falls_Edgetown_BuseExpressFeeder	0	227
Fergus Falls CSC	Fergus_Falls_Edgetown_CollegeFeeder	1	22
Fergus Falls CSC	Fergus_Falls_Edgetown_Convention_CenterFeeder	0	2
Fergus Falls CSC	Fergus_Falls_Edgetown_Industrial_ParkFeeder	0	279
Fergus Falls CSC	Fergus_Falls_North_Cleveland_EastFeeder	0	1
Fergus Falls CSC	Fergus_Falls_Northeast_Jensen_AdditionFeeder	0	1
Fergus Falls CSC	Fergus_Falls_Northeast_Springen_AvenueFeeder	0	2
Fergus Falls CSC	Fergus_Falls_Northeast_Water_PlantFeeder	0	270
Fergus Falls CSC	Foxhome_MainFeeder	0	12,748
Fergus Falls CSC	Garfield_HolmesCity_SouthFeeder	63	1,129
Fergus Falls CSC	Garfield_HolmesCity_TownFeeder	0	1,064
Fergus Falls CSC	GRE_Alexandria_ForadaFeeder	0	11
Fergus Falls CSC	Lake_Park_Rest_HomeFeeder	2	9
Fergus Falls CSC	Millerville_Leaf_Valley_MainFeeder	0	32
Fergus Falls CSC	New_York_Mills_NorthFeeder	0	1
Fergus Falls CSC	New_York_Mills_SouthFeeder	0	21,244
Fergus Falls CSC	Otter_Outlet_EastFeeder	3	0
Fergus Falls CSC	Otter_Outlet_NorthFeeder	0	2
Fergus Falls CSC	Ottertail_City_NorthFeeder	1	2,022
Fergus Falls CSC	Ottertail_City_SouthFeeder	0	2,697
Fergus Falls CSC	Perham_BarrelOFunFeeder	0	2
Fergus Falls CSC	Perham_BongardFeeder	0	10
Fergus Falls CSC	Perham_Dent_RichvilleFeeder	0	3
Fergus Falls CSC	Perham_SouthFeeder	0	11
Fergus Falls CSC	Perham_TuffysFeeder	0	9
Fergus Falls CSC	Pokegama_MainFeeder	0	9
Fergus Falls CSC	Pomme_De_Terre_Gravel_Pit_MainFeeder	1	22
Fergus Falls CSC	Rothsay_MainFeeder	3	7,517
Fergus Falls CSC	Urbank_MainFeeder	0	3
Fergus Falls CSC	Vergas_MainFeeder	3	1
Fergus Falls CSC	Vining_MainFeeder	0	30
Fergus Falls CSC	Wendell_MainFeeder	2	10
Morris CSC	Alberta_MainFeeder	0	2
Morris CSC	Appleton_NW_NorthFeeder	3	24
Morris CSC	Appleton_NW_SouthFeeder	0	6
Morris CSC	Barrett_EastFeeder	0	4
Morris CSC	Barrett_WestFeeder	0	2

Customer Service Center	Feeder	Number of Volt(RMS) Below Threshold	Number of Volt(RMS) Above Threshold
Morris CSC	Barry_MainFeeder	0	1
Morris CSC	Beardsley_MainFeeder	25	0
Morris CSC	Burr_MainFeeder	1	0
Morris CSC	Canby_NE_EastFeeder	2	62
Morris CSC	Canby_NE_WestFeeder	0	6
Morris CSC	Canby_S_Rural_MainFeeder	2	4
Morris CSC	Canby_SE_Rural_MainFeeder	0	1
Morris CSC	Canby_SW_EastFeeder	0	5,497
Morris CSC	Canby_SW_ElevatorFeeder	0	4,294
Morris CSC	Canby_SW_WestFeeder	0	6,566
Morris CSC	Chokio_MainFeeder	0	16
Morris CSC	Clontarf_MainFeeder	0	4
Morris CSC	Correll_MainFeeder	0	9
Morris CSC	Cyrus_MainFeeder	0	959
Morris CSC	Danvers_MainFeeder	2	3
Morris CSC	Dawson_AGP_EastFeeder	0	1
Morris CSC	Dawson_AGP_WestFeeder	0	2
Morris CSC	Dawson_EastFeeder	34	1
Morris CSC	Dawson_Rural265	0	3
Morris CSC	Dawson_RuralBoyd	0	2
Morris CSC	DeGraff_MainFeeder	0	4
Morris CSC	Donnelly_MainFeeder	1	110
Morris CSC	Farwell_MainFeeder	0	23
Morris CSC	Ghent_MainFeeder	1	2
Morris CSC	Green_Valley_TownFeeder	1	0
Morris CSC	Green_Valley_Xcel_MainFeeder	2	0
Morris CSC	Hendricks_EastFeeder	3	14
Morris CSC	Hendricks_WestFeeder	3	18
Morris CSC	Herman_MainFeeder	7	35
Morris CSC	Hoffman_MainFeeder	0	58
Morris CSC	Holloway_NorthFeeder	0	8
Morris CSC	Holloway_SouthFeeder	0	22
Morris CSC	Ivanhoe_EastFeeder	5	27
Morris CSC	Ivanhoe_WestFeeder	2	13
Morris CSC	Ivanhoe_WilnoFeeder	0	32
Morris CSC	Johnson_MainFeeder	0	7
Morris CSC	Kensington_MainFeeder	0	20
Morris CSC	Kerkhoven_EastFeeder	30	57

Customer Service Center	Feeder	Number of Volt(RMS) Below Threshold	Number of Volt(RMS) Above Threshold
Morris CSC	Kerkhoven_WestFeeder	0	33
Morris CSC	Louisburg_LacQuiParle_NorthwestFeeder	5	38
Morris CSC	Louisburg_LacQuiParle_SouthFeeder	5	12
Morris CSC	Milan_Jct_West_RuralFeeder	0	6
Morris CSC	Minneota_EastFeeder	1	0
Morris CSC	Minneota_Industrial_MainFeeder	1	941
Morris CSC	Minneota_WestFeeder	1	1
Morris CSC	Morris_NE_PrairieInn	0	14
Morris CSC	Morris_NE_UMMFeeder	0	27
Morris CSC	Morris_S_115_EastFeeder	0	3
Morris CSC	Morris_S_115_EthanolFeeder	0	2
Morris CSC	Morris_S_115_SouthWestFeeder	0	2
Morris CSC	Murdock_MainFeeder	1	2
Morris CSC	Odessa_Bellingham_MainFeeder	4	13
Morris CSC	Odessa_Bellingham_SouthFeeder	3	4,023
Morris CSC	Ortonville_Cold_Spring_Quarry_ColdSpringFeeder	0	4
Morris CSC	Ortonville_Cold_Spring_Quarry_Ortonville_Ston_CompanyFeeder	0	7
Morris CSC	Porter_MainFeeder	1	3
Morris CSC	Taunton_StLeoFeeder	1	0
Wahpeton CSC	Nashua_Tintah_NashuaFeeder	1	1,362
Wahpeton CSC	Nashua_Tintah_TintahFeeder	1	59

J. 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, 2020 are shown in **Table 8** below.

Table 8

	Department	Type	Total
	Bemidji	Field	16
		Office	2
	Bemidji Total		18
	Crookston	Field	17
		Office	1
	Crookston Total		18
	Delivery Maintenance*	Field	11
		Office	1
	Delivery Maintenance Total		12
	Fergus Falls	Field	21
		Office	1
	Fergus Falls Total		22
	Milbank**	Field	18
		Office	2
	Milbank Total		20
	Morris	Field	17
		Office	1
	Morris Total		18
	Operations Support***	Field	5
		Office	1
	Operations Support Total		6
	Wahpeton****	Field	16
		Office	1
	Wahpeton Total		17
	Customer Care & Relations*****		35
12/31/2020 Total			166

*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.

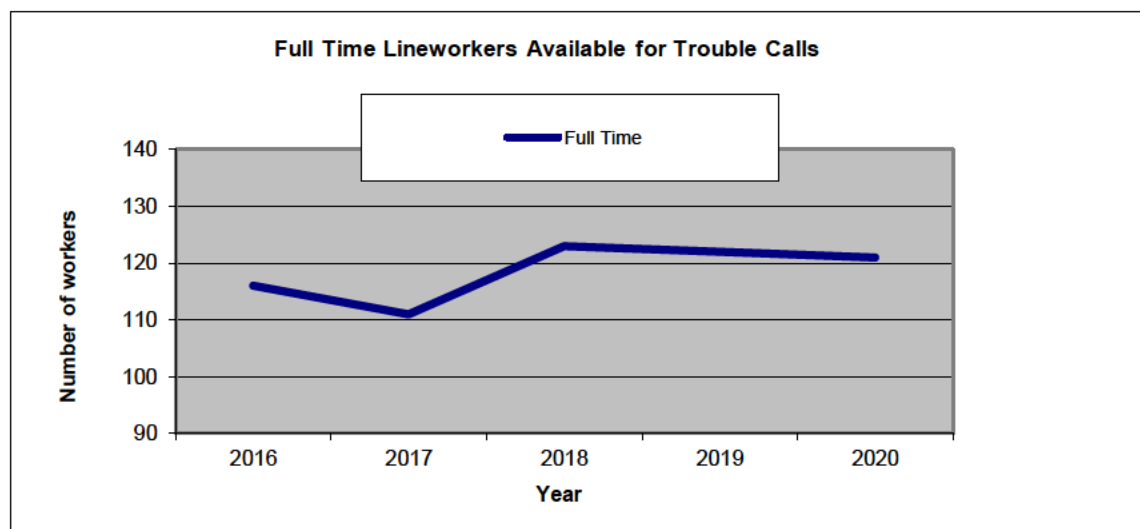
***Operations Support is based in Fergus Falls and the field employees are dispatched to assist CSCs in need throughout the entire system. The office employees coordinate resources.

****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 CSCs throughout our service territory. Since Otter Tail operates a Virtual Call Center, all 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 35.

Figure 6 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 6



K. 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's legacy Interruption Monitoring System (IMS) implemented in 2005 was shut down on December 31, 2019. This is Otter Tail's second year utilizing our new interruption monitoring system, IMS, for reliability monitoring/reporting and purposes of data collection. The new system utilizes AMI technology in a bellwether configuration. This system is more granular than our old system, thus, Otter Tail expects current and future recorded results to be different than historic values. Otter Tail provides the following information relating to its IMS and overall reliability.

- 1. IMS obsolescence and adoption of the NextGen IMS:** Otter Tail has completed a project to replace its obsolete IMS. Our implementation plan included the completion of the new system in North Dakota in 2017. Installation in Minnesota and South Dakota was completed in late 2018. The new system provides 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. Monitors also have the ability to gather sub cycle data for transient, harmonic, etc. analysis. These monitors have greatly improved our ability to monitor, identify, and analyze issues in the field. This tool was also 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 NextGen IMS and the use of power quality meters will continue to provide optimized and focused deployment of our vegetation management and maintenance resources to specific areas that are identified through the interruption data collection and analysis processes.
- 3. Measuring reliability:** Otter Tail continues to evaluate alternate indices and the subsequent relationship towards reliability and customer satisfaction tracking. Our new interruption monitoring system has the capability to monitor the following indices: SAIFI, SAIDI, CAIDI, CTAIDI, CAIFI, ASAI, CEMI-5, CELID-s60, MAIFI, MAIFe, CEMSMI-5, and Total sustained customer minutes.

4. **SIRI Initiative:** Through the company’s strategic planning process, Otter Tail’s leadership identified the need for an initiative to focus on improving the electrical network and infrastructure to meet three strategic objectives; improve reliability, improve customer engagement, and improve business efficiency while looking forward to the future. The initiative was developed to help address aging infrastructure, as well as prepare for future system needs and technology. This information is further discussed in Otter Tail’s Integrated Distribution Plan filing.

Figures 7, 8, and 9. The following graphs show Otter Tail’s SAIDI, SAIFI and CAIDI for the period of 2016 through 2020. When compared to 2018 results, Minnesota customers experienced an increase in overall SAIDI, SAIFI, and CAIDI.

Figure 7

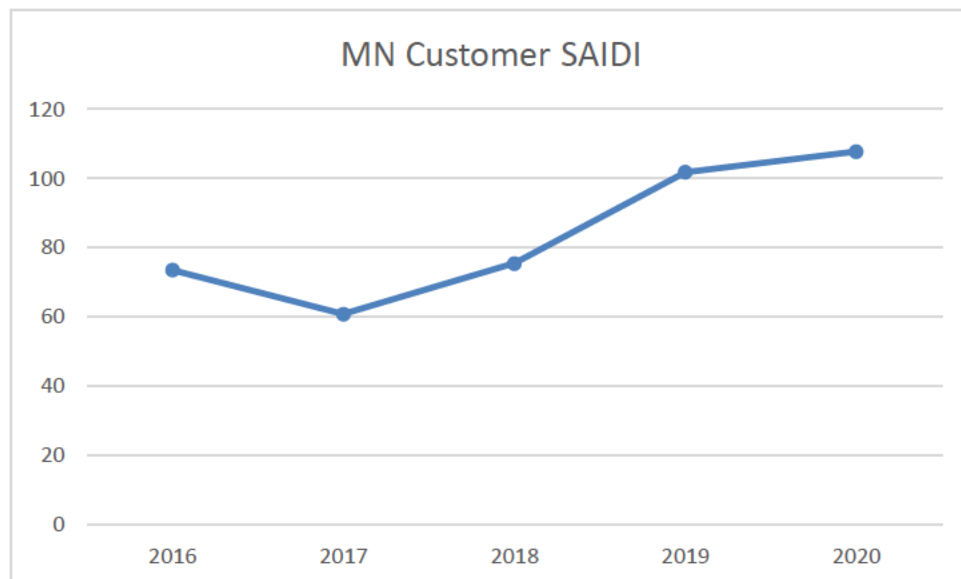


Figure 8

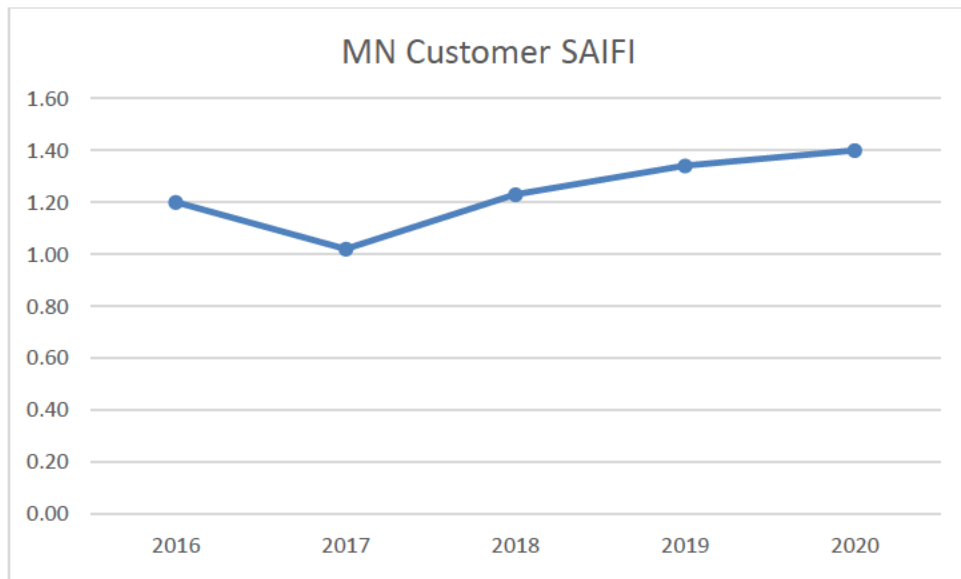
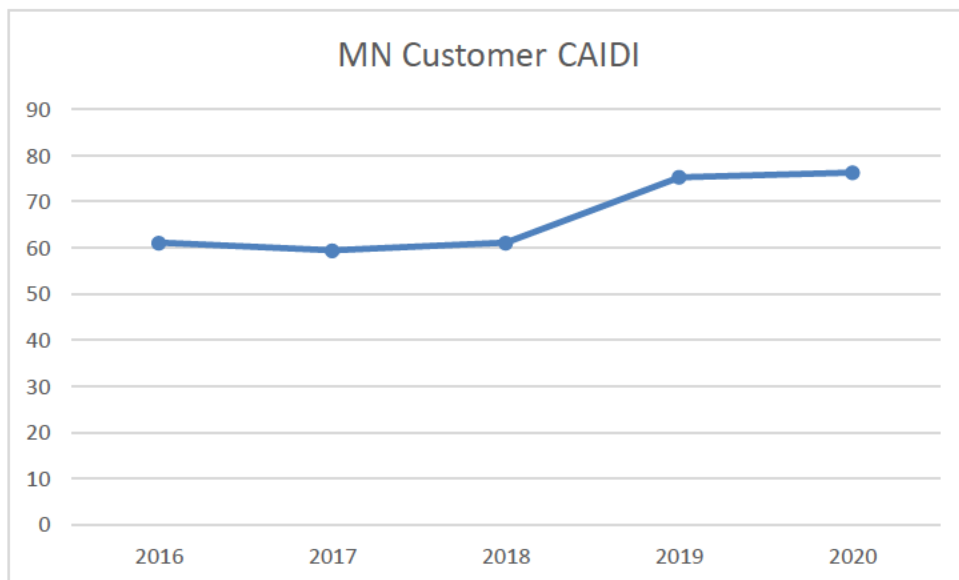


Figure 9



L. OTTER TAIL POLICIES, PROCEDURES, AND ADDITIONAL COMPLIANCE OBLIGATIONS

Otter Tail provides the following description of the policies and procedures that it has previously implemented and continues to utilize to improve reliability. Additional compliance obligation requirements are also provided.

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.
- b. Additional reporting: Otter Tail will continue to evaluate and track other indices in 2020 and develop internal KPI's that are reported and published to Otter Tail's Asset Management and Customer Service Departments.

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 is 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

The following are additional compliance obligation requirements.

3. Attachment B: Updated Annual Reporting Requirements (*Clarifications to March 2019 Order Requirements*) of January 28, 2020 PUC Order in Docket No. E017/M-19-260

- a. *Attachment B paragraph 1: Non-normalized SAIDI, SAIFI, and CAIDI values.*

These are previously shown in section IV, A-D, Table 4a.

- b. *Attachment B paragraph 2: SAIDI, SAIFI, and CAIDI, MAIFI, CEMI, and CELI normalized values calculated using the IEEE 1366 Standard.*

SAIDI, SAIFI, and CAIDI values are previously shown in section IV, A-D, Table 4. MAIFI normalized and non-normalized values are previously shown in section II, Table 1. CEMI, and CELI normalized and non-normalized values follow in Tables 9 and 10.

- c. *Attachment B paragraph 3: MAIFI – normalized and non-normalized.*

These are previously shown in section II, Table 1.

- d. *Attachment B paragraph 4: CEMI – at normalized and non-normalized outage levels of 4, 5, and 6 interruptions.*

Table 9
2020 system normalized and non-normalized CEMI

CEMI4	8.36%
CEMI5	3.16%
CEMI6	0.80%

- e. **Attachment B paragraph 5:** *The highest number of interruptions experienced by any one customer (or feeder, if customer level is not available).*

Since no designation is given regarding the “type” of interruption, the North Feeder fed from the Ottertail City Substation was the feeder experiencing the most interruptions. This Fergus Falls CSC worst performing circuit had 1 sustained and 27 momentary interruptions impacting 876 customers.

- f. **Attachment B paragraph 6:** *CELI – at normalized and non-normalized intervals of greater than 6 hours, 12 hours, and 24 hours.*

Table 10
2020 system normalized and non-normalized CELID

CELID6	1.61%
CELID12	0.19%
CELID24	0.00%

- g. **Attachment B paragraph 7:** *The longest experienced interruption by any one customer (or feeder, if customer level is not available).*

The Main Feeder fed from the Herman Substation experienced the longest duration interruption at 8 hours and 26 minutes, impacting 133 customers. This was a planned outage to upgrade the substation.

- h. **Attachment B paragraph 8:** *A breakdown of field versus office staff as required Minn. Rules 7826.0500, Subp. 1, J, including separate information on the number of contractors for each work center.*

Previously shown in section IV, J, Table 8.

- i. **Attachment B paragraph 9:** *Estimated restoration time accuracy, using the following windows:*
a. *Within -90 minutes to 0 of estimated restoration time*
b. *Within 0 to +30 minutes of estimated restoration time*

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.

- j. **Attachment B paragraph 10:** *IEEE benchmarking results for SAIDI, SAIFI, CAIDI, and MAIFI from the IEEE benchmarking working group.*

Otter Tail located a working group summary of IEEE’s 2019 Benchmark Reliability Survey results and compared its 2020 results with second quartile threshold (median) results in **Table 11** below. As discussed in previous filings, Otter Tail is a member of Edison Electric Institute (EEI) and has been participating in their Reliability Benchmark Survey for the past eight years. Otter Tail also provides the performance

comparison utilizing the second quartile results from the 2019 EEI Reliability Survey.

Table 11

	OTP 2020 MN Normalized Results	OTP 2020 System Normalized Results	2019 IEEE median normalized all respondents	2019 IEEE median normalized medium sized	2019 EEI second quartile normalized
SAIFI	1.4	1.32	1.12	1.17	0.875 – 1.036
SAIDI	107.66	91.27	126	140	82.63 – 113.45
CAIDI	76.72	69.1	116	124	95.28 – 110.01
MAIFI	6.64	5.53	NA	NA	1.228 – 1.542

Otter Tail will provide a supplemental filing within 30 days from when IEEE’s 2020 Benchmark Reliability Survey results are completed. Otter Tail will compare its results with the median values of SAIFI, SAIDI, and CAIDI for “medium” sized utilities as reported in the survey results.

k. *Attachment B paragraph 10: Performance by customer class:*

It is not feasible for Otter Tail to provide performance by customer class at this time. Otter Tail measures reliability at the feeder level. Otter Tail has feeders with more than one class on them.

l. *Attachment B paragraph 11: Causes of sustained customer outages, by work center.*

Previously shown in section IV, A-D, Table 5.

4. December 18, 2020 PUC Order in Docket No. E017/M-20-401 (2019 Annual SRSQ Report)

a. *Ordering paragraph 4: The Commission hereby grants a variance to Minn. R. 7826.0500, subp. 1, item G, applicable to Minnesota Power, Otter Tail, and Xcel. The utilities must file a summary table that includes the information contained in the reports, similar to Attachment G of Xcel’s filing.*

This variance was referenced at section IV, G above and the summary is included as Attachment 1 to this report.

b. *Ordering paragraph 5: The utilities must file the reliability (SAIDI, SAIFI, CAIDI, MAIFI, normalized/non-normalized) for feeders with grid modernization investments such as Advanced Metering Infrastructure or Fault Location Isolation and Service Restoration to the historic five-year*

average reliability for the same feeders before grid modernization investments.

This is not applicable for Otter Tail at this time given the company does not have AMI nor FLISR installed.

- c. **Ordering paragraph 6:** *With the 2020 service quality reports due April 2021, the utilities must discuss and propose a transition to a full benchmarking approach to setting reliability standards. In advance of the transition, the Commission hereby delegates authority to the Executive Secretary to continue conversations with utilities and other interested parties on the following topics. a. Definition of “work centers” b. Benchmarking for individual work centers c. Other considerations for the transition to benchmarking.*

Otter Tail addresses this in the next section of this report, Section V.

- d. **Ordering paragraph 9.** *The Commission hereby sets Otter Tail Power’s 2020 Minnesota service territory-wide Reliability Standard at the IEEE benchmarking second quartile for medium utilities. The Company must file a supplemental filing to its 2020 service quality report 30 days after IEEE publishes the 2020 benchmarking results, with an explanation for any statewide standards the utility did not meet.*

Otter Tail will provide a supplemental filing within 30 days from when IEEE’s 2020 Benchmark Reliability Survey results are completed. Otter Tail will compare its results with the median values of SAIFI, SAIDI, and CAIDI for “medium” sized utilities as reported in the survey results and provide explanations for standards not met.

- e. **Ordering paragraph 14.** *Each utility must report over the next two reporting cycles, to the extent feasible, the following:*
- a. *Yearly total number of website visits;*
 - b. *Yearly total number of logins vis electronic customer communication platforms;*
 - c. *Yearly total number of emails or other customer service electronic communications received; and*
 - d. *Categorization of email subject, and electronic customer service communications by subject, including categories for communications related to assistance program and disconnections as part of reporting under Minn. R. 7826.1700.*

If a utility is unable to report the information, the utility must provide an explanation as to why the information is not filed and the plans for reporting the information in the future.

Table 12 below is a count of customer requests from our self-service area within our website. The information within the table is broken out by our categories on our website. These requests create an email to our office team to ultimately to complete the transaction for our customers. We were unable to separate this information by state. The information in this table represents inquiries from our entire service territory.

Table 12

Service Request Type	Count of request type
Change Mailing Address	21
Meter Reading	518
Start Service	67
Grand Total	606

Table 13 below is a count of customer contacts that were submitted through our Contact Us section within our website. Contact Us is the area on our website where customers can ask their questions and engage in dialogue via email. When a customer utilizes the Contact Us feature they are prompted to choose a topic as the subject for their inquiry. Below are the number of Contact Us emails by topic. The information in this table represents inquiries from our entire service territory.

Table 13

Contact Us Topic	Topic Count
Otter Tail Investments	15
Turn on/ turn off/ transfer service	80
Generation interconnection	4
Help with technical issue	35
Business Energy Expert	3
Other	228
Send copy of my last bill	20
Enroll in EMP	290
Payment programs/ arrangements	116
Street light/ security light	69
Energy control	38
Economic development	6
Jobs	12
My account	631
Tree trimming request	46
Rebates/ programs/ financing	81
Tell us how we're doing	14
Grand Total	1688

Table 14 below is a count of our website visits and logins for our various customer communication platforms. The information in this table represents our entire service territory.

Table 14

	Website	Facebook	Twitter	LinkedIn
Jan-20	210,704	1,686	869	404
Feb-20	192,899	645	270	289
Mar-20	184,000	755	709	419
Apr-20	187,013	1,420	1,670	539
May-20	170,404	1,326	775	587
Jun-20	189,199	1,953	684	674
Jul-20	211,137	1,961	935	693
Aug-20	206,283	1,178	326	638
Sep-20	196,574	2,119	539	801
Oct-20	221,139	1,765	287	767
Nov-20	191,355	2,182	257	660
Dec-20	189,088	1,052	553	596
Total	2,349,795	18,042	7,874	7,067

- f. **Ordering paragraph 15.** Within 30 days, each utility must file a compliance filing in which engagement plans related to Emergency Medical Account status are explained. Otter Tail and Xcel must also include a detailed description of the resolution to the reporting problems attributed to their updated Customer Information System/SAP work management system as it pertains to their Service Extension request response times.*

Otter Tail submitted this compliance filing with the Minnesota Public Utilities Commission on January 18, 2021 in Minnesota Docket No. E017/M-20-401.

- g. **Ordering paragraph 16.** After consultation with Department and Commission staff, each utility must file revised categories for reporting complaint data. The Commission hereby delegates authority to the Executive Secretary to approve additional reporting categories, with the goal of establishing them by the April 1, 2021 reporting deadline.*

Commission Staff, including the Consumer Affairs Office, convened a work group meeting on Monday, March, 1, 2021 with the Department of Commerce, Xcel Energy, Minnesota Power, and Otter Tail Power to review and discuss current complaint categories used in annual Safety, Reliability, and Service Quality (“SRSQ”) reports. Minnesota Rule 7826.2000 was reviewed along with the current categories used by each of the utilities and the Consumer Affairs Office. The group agreed to work together to further refine definitions for existing categories to allow for greater specificity and seek consistency, where possible. As part of this review, additional categories may be considered based on emerging topics of interest. Quarterly meetings will continue in 2021 with the objective of establishing a recommendation for use with the next calendar year (2022) to align with SRSQ reporting cycles.

*h. **Ordering paragraph 17.** The Commission hereby delegates to the Executive Secretary the authority to approve Xcel's, Minnesota Power's, and Otter Tail's public-facing summaries. The Executive Secretary may work with the utilities to refine the language and content in the summaries as needed.*

Included with this report as Attachment 2 is Otter Tail's 2020 Public Facing Summary. On March 15, 2021, Otter Tail provided a copy to Commission Staff for review. To improve upon last year's summary, Otter Tail has introduced additional statistics (MN Only) for Safety, Reliability and Customer Service as suggested by staff and others. Also included is information on how customers can reach out to us for assistance.

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.

As anticipated in last year's filing, Otter Tail did realize increases in SAIDI, SAIFI, and CAIDI with the implementation of the new Interruption Monitoring System in 2019. That situation is consistent with Otter Tail's 2020 report results. This was due to the new system's method of feeder data collection, increasing the number of interruptions seen, i.e., greater granularity.

Otter Tail proposes to make a change from six service centers to four service centers for its 2021 report. Minnesota customers served by the Wahpeton and Milbank CSCs will be included in Fergus Falls and Morris CSCs' (respectively) analysis and which includes all Minnesota customers. Otter Tail also proposes to set indices' standards at IEEE's Reliability Benchmark Survey median values for medium sized utilities. This report historically is completed, and results posted, the third quarter of the following year. As stated, Otter Tail will provide a supplemental filing within 30 days from when IEEE's 2020 Benchmark Reliability Survey results are completed and provide explanations for standards not met.

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 15-18 for its meter reading performance for 2020.

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 15
Otter Tail Power Company Meter Reading Performance
January 1, 2020 to December 31, 2020
Residential – MN

	Residential						
Month	Meters Read	%	Meters Estimated	%	Self Read	%	Total Meters
1	62,181	97.64%	706	1.11%	797	0.013	63,684
2	62,324	97.92%	521	0.82%	805	0.013	63,650
3	61,282	96.79%	1,300	2.05%	733	0.012	63,315
4	61,944	97.22%	985	1.55%	784	0.012	63,713
5	61,654	97.84%	536	0.85%	828	0.013	63,018
6	62,948	97.30%	975	1.51%	773	0.012	64,696
7	61,405	96.75%	1,313	2.07%	748	0.012	63,466
8	63,109	97.43%	904	1.40%	760	0.012	64,773
9	63,053	97.24%	1,021	1.57%	770	0.012	64,844
10	62,905	97.48%	838	1.30%	785	0.012	64,528
11	61,508	96.25%	1,604	2.51%	793	0.012	63,905
12	61,669	97.32%	931	1.47%	770	0.012	63,370
	745,982	97.26%	11,634	1.52%	9,346	0.012	766,962

Table 16
Otter Tail Power Company Meter Reading Performance
January 1, 2020 to December 31, 2020
Small Commercial – MN

	Small Commercial						
Month	Meters Read	%	Meters Estimated	%	Self Read	%	Total Meters
1	14,830	96.44%	257	1.67%	290	1.89%	15,377
2	14,884	97.00%	162	1.06%	298	1.94%	15,344
3	14,750	96.45%	255	1.67%	288	1.88%	15,293
4	14,686	95.36%	415	2.69%	299	1.94%	15,400
5	15,084	96.85%	196	1.26%	295	1.89%	15,575
6	15,491	96.69%	240	1.50%	290	1.81%	16,021
7	14,958	96.13%	308	1.98%	294	1.89%	15,560
8	15,434	95.99%	352	2.19%	292	1.82%	16,078
9	15,399	95.77%	388	2.41%	292	1.82%	16,079
10	15,477	96.47%	265	1.65%	301	1.88%	16,043
11	15,254	95.67%	394	2.47%	296	1.86%	15,944
12	14,675	96.13%	304	1.99%	287	1.88%	15,266
	180,922	96.25%	3,536	1.88%	3,522	1.87%	187,980

Table 17
Otter Tail Power Company Meter Reading Performance
January 1, 2020 to December 31, 2020
Large Commercial – MN

	Large Commercial						
Month	Meters Read	%	Meters Estimated	%	Self Read	%	Total Meters
1	915	99.24%	7	0.76%	.	0.00%	922
2	925	99.68%	3	0.32%	.	0.00%	928
3	930	99.79%	2	0.21%	.	0.00%	932
4	924	98.72%	12	1.28%	.	0.00%	936
5	895	99.67%	3	0.33%	.	0.00%	898
6	933	100.00%	.	0.00%	.	0.00%	933
7	893	99.33%	6	0.67%	.	0.00%	899
8	931	98.52%	14	1.48%	.	0.00%	945
9	942	99.68%	3	0.32%	.	0.00%	945
10	933	99.26%	7	0.74%	.	0.00%	940
11	933	99.15%	8	0.85%	.	0.00%	941
12	917	99.14%	8	0.86%	.	0.00%	925
	11,071	99.34%	73	0.66%	.	0.00%	11,144

Table 18
Otter Tail Power Company Meter Reading Performance
January 1, 2020 to December 31, 2020
Total – MN

Month	System						
	Meters Read	%	Meters Estimated	%	Self Read	%	Total Meters
1	77,926	97.43%	970	1.21%	1,087	1.36%	79,983
2	78,133	97.76%	686	0.86%	1,103	1.38%	79,922
3	76,962	96.76%	1,557	1.96%	1,021	1.28%	79,540
4	77,554	96.88%	1,412	1.76%	1,083	1.35%	80,049
5	77,633	97.66%	735	0.92%	1,123	1.41%	79,491
6	79,372	97.21%	1,215	1.49%	1,063	1.30%	81,650
7	77,256	96.66%	1,627	2.04%	1,042	1.30%	79,925
8	79,474	97.16%	1,270	1.55%	1,052	1.29%	81,796
9	79,394	96.98%	1,412	1.72%	1,062	1.30%	81,868
10	79,315	97.31%	1,110	1.36%	1,086	1.33%	81,511
11	77,695	96.17%	2,006	2.48%	1,089	1.35%	80,790
12	77,261	97.11%	1,243	1.56%	1,057	1.33%	79,561
	937,975	97.09%	15,243	1.58%	12,868	1.33%	966,086

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 2020, 52 meters for customers of Otter Tail were not read by utility personnel for a period of 6 months to 12 months. Otter Tail had 0 meters not read for a period greater than 12 months.

In 2020, Otter Tail did see several reasons for estimating meters however most were due to the COVID-19 pandemic. To increase our employee's safety, we did not allow employees to enter living quarters or areas that could be of concern. We also encountered no access situations where we are communicating with the customer on proper remedies. One customer has 30 meters that are accessed by walking through their facility. Due to the customer being within the long-term healthcare industry we are not entering the facility to obtain those readings.

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

Table 19

Count of Location	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Grand Total
Row Labels													
Bemidji	9	9	9	9	9	9	9	9	9	9	9	9	108
Service Representative	9	9	9	9	9	9	9	9	9	9	9	9	108
Crookston	13	13	13	13	13	13	13	13	13	13	13	13	156
Apprentice Service Repres	2	2	1	2	1	1	1	1	1	1	1	1	15
Service Representative	11	11	12	11	12	12	12	12	12	12	12	12	141
Fergus Falls	13	13	13	13	13	13	13	13	13	13	13	13	156
Service Representative	13	13	13	13	13	13	13	13	13	13	13	13	156
Milbank	14	14	14	14	14	14	14	14	14	14	14	14	168
Apprentice Service Repres	2	1	1	1	1	1	1	1	1	1	1	1	13
Service Representative	12	13	13	13	13	13	13	13	13	13	13	13	155
Morris	13	13	12	12	12	13	13	13	13	12	13	13	152
Apprentice Service Repres	1	1	2	1	1	2	2	2	2	2	3	3	22
Journeyman Meter Reader	1	1		1	1	1	1	1	1				8
Service Representative	11	11	10	10	10	10	10	10	10	10	10	10	122
Wahpeton	10	10	10	10	10	10	10	10	10	10	10	10	120
Service Representative	10	10	10	10	10	10	10	10	10	10	10	10	120
Grand Total	72	72	71	71	71	72	72	72	72	71	72	72	860

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:

Amiret MN	Eldred MN	Oklee MN
Argyle MN	Erskine MN	Oslo MN
Audubon MN	Fergus Falls MN	Ottertail MN
Battle Lake MN	Fertile MN	Pelican Rapids MN
Barry MN	Fisher MN	Pennock MN
Beardsley M	Frazee MN	Perham MN
Bejou MN	Foxhome MN	Plummer MN
Bellingham MN	Gentily MN	Porter MN
Beltrami MN	Ghent MN	Red Lake Falls MN
Bemidji MN	Graceville MN	Richville MN
Brooks MN	Green Valley MN	Rothsay MN
Boyd MN	Gonvick MN	Saint Hilaire MN
Burr MN	Gully MN	Shevlin MN
Campbell MN	Hancock MN	Solway MN
Canby MN	Hallock MN	St. Leo MN
Chokio MN	Henning MN	Sunburg MN
Clearbrook MN	Holloway MN	Taunton MN
Climax, MN	Johnson MN	Tenney MN
Clinton MN	Kent MN	Tintah MN
Clitherall MN	Kerkhoven MN	Trail MN
Correll MN	Lockhart MN	Twin Valley MN
Crookston MN	Loouisburg MN	Ulen MN
Cyrus MN	Mahnomen MN	Underwood MN
Dalton MN	Marshall MN (Rural)	Vergas MN
Danvers MN	McIntosh MN	Vining MN
Dawson MN	Milan MN	Waubun MN
Dent MN	Milroy MN	Wendell MN
Deer Creek MN	Minneota MN	Wheaton MN
Degraff MN	Morris MN	Wilton MN
Detroit Lakes MN	Murdock MN	Winger MN
Doran MN	Nashua MN	
Dumont MN	New York Mills MN	

In 2020, we did increase the number of towns being read by our third-party meter reader. Our full-time meter reader retired from the company. A portion of the towns that he was accountable to read were transitioned to our third party contracted meter reader.

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 20

Month	Large Commercial	Residential	Small Commercial	Grand Total
January	21	4537	426	4984
February	17	4283	369	4669
March	22	4832	459	5313
April	23	430	110	563
May	25	0	0	25
June	22	0	0	22
July	22	0	0	22
August	16	0	0	16
September	15	0	0	15
October	22	0	0	22
November	13	0	0	13
December	13	0	0	13
Grand Total	231	14082	1364	15677

With the onset of the COVID-19 pandemic, on April 2, 2020 we discontinued sending disconnect noticed to our residential, farm, and small commercial customers.

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 21

Month	Customers who sought Cold Weather Rule Protection in 2020	Number Granted Cold Weather Protection in 2020
January	89	76
February	75	69
March	47	47
April	19	17
May	1	0
June	0	0
July	0	0
August	0	0
September	0	0
October	20	17
November	53	41
December	121	82

In 2020, the number of CWP requests increased throughout the CWP season. The deviation between customers who sought CWP and the customers granted CWP is due to Otter Tail having to access the CWP form within our customer information system to begin our CWP discussion with the customer on the monthly amount of their CWP amount. Customers are not denied CWP but rather the customer chose an alternative payment option.

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

Table 22

7826.1500 Subpart C - Customers involuntarily disconnected in 2020

Month	Customer Class	Disconnected For more than 24 hours	Service Restored within 24 hours	Grand Total
January	Residential	13	3	16
	Small Commercial	3	0	3
January Total		16	3	19
February	Residential	15	7	22
	Small Commercial	0	0	0
February Total		15	7	22
March	Residential	12	5	17
	Small Commercial	0	1	1
March Total		12	6	18
April	Residential	0	0	0
	Small Commercial	0	0	0
April Total		0	0	0
May	Residential	0	0	0
	Small Commercial	0	0	0
May Total		0	0	0
June	Residential	0	0	0
	Small Commercial	0	0	0
June Total		0	0	0
July	Residential	0	0	0
	Small Commercial	0	0	0
July Total		0	0	0
August	Residential	0	0	0
	Small Commercial	0	0	0
August Total		0	0	0
September	Residential	0	0	0
	Small Commercial	0	0	0
September Total		0	0	0
October	Residential	0	0	0
	Small Commercial	0	0	0
October Total		0	0	0
November	Residential	0	0	0
	Small Commercial	0	0	0
November Total		0	0	0
December	Residential	0	0	0
	Small Commercial	0	0	0
December Total		0	0	0
Grand Total		43	16	59

Overall, the total number of disconnections completed is lower when comparing to prior years due to the COVID-19 pandemic and temporary suspension of collection activity.

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

Table 23

Month	Residential	Small Commercial	Large Commercial	Total
January	1	0	0	1
February	12	0	0	12
March	4	0	0	4
April	0	0	0	0
May	0	0	0	0
June	0	0	0	0
July	0	0	0	0
August	0	0	0	0
September	0	0	0	0
October	0	0	0	0
November	0	0	0	0
December	0	0	0	0
Totals	17	0	0	17

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 24** 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 24.**
- 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 24.**

Table 24

**7826.1600 - Otter Tail Power Company
Service Extension Request Response Time Report - 2020**

Request Type	Days	Large Commercial	Residential	Small Commercial	Grand Total
Locations not previously served	0		1		1
	1			1	1
	2		2	5	7
Locations previously served	0		40	2	42
	1		13	1	14
	2		6	2	8
	3		4		4
January Total		0	66	11	77
Locations not previously served	0	1		1	2
	3	1			1
	5			1	1
Locations previously served	0		31		31
	1		19		19
	2		4		4
	3		1		1
February Total		2	55	2	59

Request Type	Days	Large Commercial	Residential	Small Commercial	Grand Total
Locations not previously served	0			5	5
	1		9	2	11
	2		1	2	3
	4		1		1
Locations previously served	0		54	6	60
	1		21	6	27
	2		1		1
	3		2		2
March Total		0	89	21	110
Locations not previously served	0		2	5	7
	1		3		3
	2		17	2	19
	3			2	2
Locations previously served	0		109	19	128
	1		37	6	43
	2		12	3	15
	3		2	6	8
April Total		0	182	43	225
Locations not previously served	0			5	5
	1		12	5	17
	2		5	4	9
	3		2		2
	4		1		1
Locations previously served	0		128	20	148
	1		33	7	40
	2		1		1
	3		1	1	2
May Totals		0	183	42	225
Locations not previously served	0		3	4	7
	1		7	5	12
	2		18	3	21
	3		2		2
	9		1		1
Locations previously served	0	1	91	11	103
	1		28	5	33
	2		7	1	8
	3		1		1
	4		2		2
June Totals		1	160	29	190

Request Type	Days	Large Commercial	Residential	Small Commercial	Grand Total
Locations not previously served	0		4	2	6
	1		11	1	12
	2		17	7	24
	18		1		1
Locations previously served	0		86	7	93
	1		28		28
	2		7	1	8
	3		1		1
July Totals		0	155	18	173
Locations not previously served	0		13	2	15
	1		10	7	17
	2		9	6	15
	3		4	1	5
	4		2		2
Locations previously served	0		94	8	102
	1		15	2	17
	2		1		1
	3		3		3
August Totals		0	151	26	177
Locations not previously served	0		15	7	22
	1		41	4	45
	2		11	3	14
	3		3		3
	4		1		1
Locations previously served	0		58	9	67
	1		28	1	29
	2		4		4
September Totals		0	161	24	185
Locations not previously served	0	1	8	4	13
	1		12	6	18
	2		13	2	15
	3			2	2
Locations previously served	0	1	55	12	68
	1		22	1	23
	2		5	1	6
	3			1	1
October Total		2	115	29	146

Request Type	Days	Large Commercial	Residential	Small Commercial	Grand Total
Locations not previously served	0	1	7	1	9
	1		10	10	20
	2		4	1	5
	3		2	1	3
Locations previously served	0		49	5	54
	1		26	3	29
	2		2	3	5
November Totals		1	100	24	125
Locations not previously served	0	1	70	23	94
	1	1	7	5	13
	2		12	4	16
	3		2	1	3
	4		1	1	2
Locations previously served	0		32	6	38
	1		15	1	16
	2		5		5
	4		1		1
December Totals		2	145	41	188
Grand Total		8	1,562	310	1,880

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 2020 in **Table 25**. **Figure 10** shows a historical graph showing the percent of Minnesota calls answered within 20 seconds.

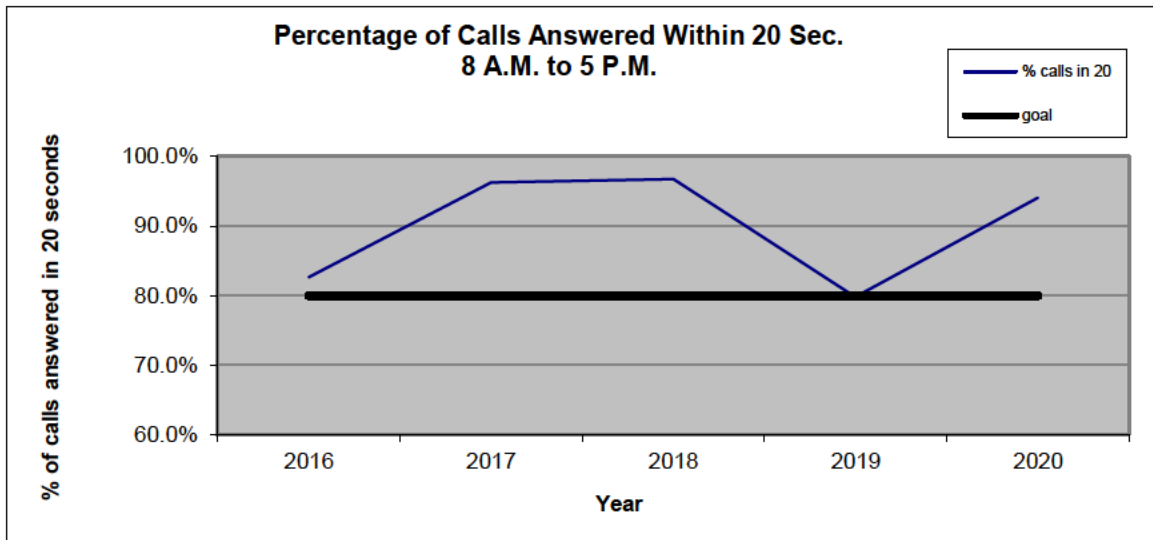
Table 25

Month	Offered	Calls Abandoned	Calls Answered after 20 Seconds	Answered within 20 Seconds	Percent Answered within 20 seconds ¹
January - 2020	4,597	5	100	4,492	97.72%
February - 2020	4,096	0	66	4,030	98.39%
March - 2020	4,320	2	68	4,250	98.38%
April - 2020	4,627	2	114	4,511	97.49%
May - 2020	3,970	0	42	3,928	98.94%
June - 2020	5,660	36	431	5,193	91.75%
July -2020	5,738	12	224	5,502	95.89%
August - 2020	4,906	19	293	4,594	93.64%
September - 2020	4,577	29	467	4,081	89.16%
October - 2020	4,653	49	719	3,885	83.49%
November - 2020	3,830	30	323	3,477	90.78%
December - 2020	4,206	8	250	3,948	93.87%
Total	55,180	192	3,097	51,891	94.04%

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. With our telecommunications system, our auto attendant 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.

In mid-March of 2020, in response to the COVID-19 pandemic, we moved all call center team members to work remotely from home. Our agents were able to maintain a high service standard for our customers to ensure that our transition to working remotely, did not negatively impact our customers.

Figure 10



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 2020 Otter Tail had 6 Minnesota customers request emergency medical account status. Otter Tail granted this status to all 6 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 297 customers were required to make a deposit as a condition of receiving service during 2020. The number of deposit requests decreased by 355 when compared to 2019. The decrease has a direct correlation with suspending collection activities due to the COVID-19 pandemic.

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 2020.

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 26

Complaint Type	Total	Percent of Total
Alleged Billing Errors	0	0.00%
Load Control	0	0.00%
High Bills	9	30.00%
Inaccurate Meter reading	1	3.33%
Tree Trimming	0	0.00%
Other	19	63.33%
Property Damage	1	3.33%
	30	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 in 2020 included such things as, planned outages, third-party meter readers payment or payment options, and reliability.

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

Table 27

2020		
Resolved by	Total	Percentage
(1) Resolved on Initial Inquiry	24	80%
(2) Resolved within 10 days	4	13%
(3) Resolved in greater than 10 days	2	7%
Grand Total	30	100.00%

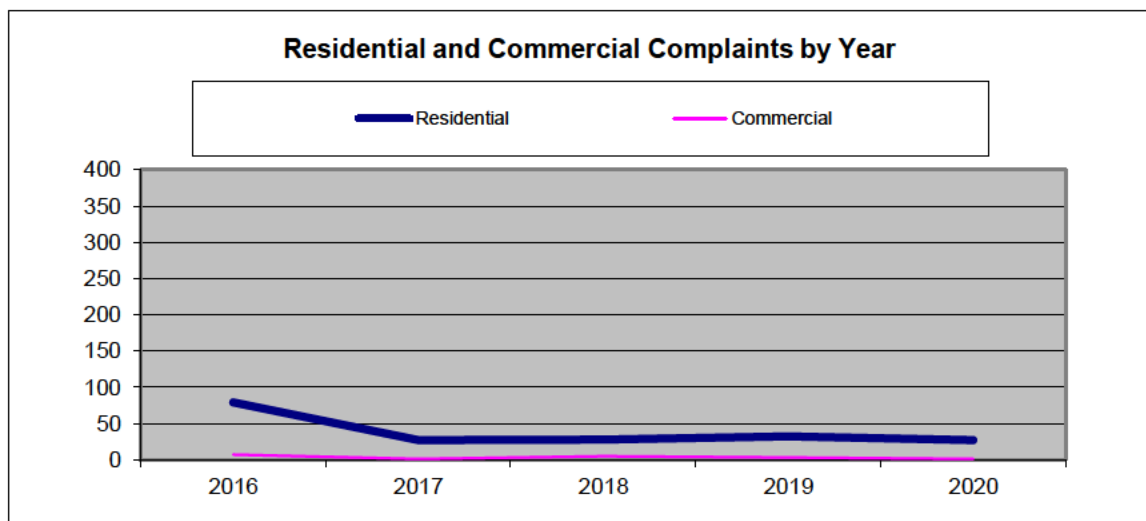
- D. The number and percentage of all complaints resolved by taking any of the following actions: (1) taking the action the customer requested; (2) taking an action the customer and the utility agree is an acceptable compromise, (3) providing the customer with information that demonstrates that the situation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

Table 28

Action Taken	Total	Percentage
(1) Took action the Customer requested	14	46.67%
(2) Provided the customer with information that demonstrates that the situation complained of is not reasonably within the control of Otter Tail	8	26.67%
(3) Took an action the customer and the utility agree is an acceptable compromise	8	26.67%
(4) Refused to take action the customer requested	0	0%
Grand Total	30	100.00%

Figure 11 below is a graph showing complaints by customer class for the previous five years.

Figure 11



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

Otter Tail received four customer complaints in 2020 that were forwarded from the Commission's Consumer Affairs Office, all of which have been resolved. The number of complaints received in 2020 decreased in comparison to 2019.

Table 29

	2019	2020
Customer Complaints	13	4

Reporting Major Service Interruptions Summary

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

Per PUC order dated December 18, 2020 in E017/M-20-401 PUC granted a variance to MN Rule 7826.0500 Subpart 1.G. Require utilities to file a summary table that includes the information contained in the reports, similar to Attachment G. in Xcel's filing (E002/M-20-406).

	Feeder	Primary Event #	Begin Time	Completion Time	Duration Min.	Customers Out	Region	Email sent to CAO
JANUARY = 1 qualifying event, 0 events with no email								
1	Rush Lake & Otter Tail Lake Feeder		1/11/2020 6:04	1/11/2020 8:44	160	1055		x
FEBRUARY = 0 qualifying events								
MARCH = 0 qualifying events								
APRIL = 4 qualifying events, 0 events with no email								
1	Clitheral Substation		4/1/2020 23:59	4/2/2020 3:30	211	450		x
	Vining Feeder		4/1/2020 23:59	4/2/2020 9:09	550	150		x
2	Crookston Enbridge Substation		4/2/2020 14:47	4/2/2020 18:46	239	5		x
	Crookston Barrette St North Feeder		4/2/2020 14:47	4/2/2020 17:06	139	528		x
	T 13537 Transformer		4/2/2020 14:47	4/2/2020 16:44	117	1		x
3	Red Lake Falls East Substation		4/3/2020 4:26	4/3/2020 6:50	144	819		x
4	Argyle Substation		4/7/2020 6:04	4/7/2020 8:16	132	568		x
MAY = 0 qualifying events								
JUNE = 4 qualifying events, 0 events with no email								
1	Hoot Lake Substation		6/9/2020 14:23	6/9/2020 16:18	115	559		x
	Farwell, Cyrus, and Kensington Substations		6/9/2020 14:28	6/9/2020 19:46	318	572		x
	Fergus Falls Northeast Substation		6/9/2020 14:32	6/9/2020 16:30	118	1172		x
	Fergus Falls Southeast Substation		6/9/2020 14:35	6/9/2020 15:54	79	547		x
	Aurdal Rural Wall Lake Substation		6/9/2020 14:35	6/9/2020 16:42	127	131		x
	Rothsay, Elizabeth, and Erhard Substations		6/9/2020 14:35	6/9/2020 15:57	82	896		x
	Pelican Rapids West Substation		6/9/2020 14:49	6/9/2020 15:53	64	1203		x
2	Otter Outlet Substation		6/15/2020 14:35	6/15/2020 17:28	173	1387		x
3	Argyle Substation		6/17/2020 20:16	6/17/2020 21:43	87	568		x
4	Fertile Substation		6/17/2020 22:37	6/18/2020 12:27	110	796		x
	Beltrami Junction		6/17/2020 22:37	6/18/2020 12:27	110	6		x
	Beltrami and Lockhart Feeder		6/17/2020 22:37	6/18/2020 12:27	110	24		x
	Beltrami Junction Beltrami Rural North Feeder		6/17/2020 22:37	6/18/2020 12:27	110	7		x
JULY = 3 qualifying events, 0 events with no email								
1	Buse South SW Feeder		7/8/2020 16:33	7/8/2020 19:12	159	687		x
	Erdahl Melby Ashby Main Feeder		7/8/2020 16:56	7/8/2020 18:28	92	535		x
2	Fergus Falls NE High School Feeder		7/19/2020 11:41	7/19/2020 12:43	62	1172		x
3	Wheaton		7/26/2020 1:40	7/26/2020 4:05	145	1475		x
	Dumont		7/26/2020 1:40	7/26/2020 4:05	145	122		x
AUGUST = 3 qualifying events, 0 events with no email								
1	Canby NE		8/8/2020 12:40	8/8/2020 16:18	218	718		x
	Canby SW West Feeder		8/8/2020 12:40	8/8/2020 14:23	103	296		x
	Canby SW East Feeder		8/8/2020 12:40	8/8/2020 14:12	92	655		x
	Canby SW Elevator Feeder		8/8/2020 12:40	8/8/2020 14:12	92	327		x
2	Kensington		8/14/2020 16:07	8/14/2020 17:39	92	297		x
	Farwell		8/14/2020 16:07	8/14/2020 17:39	92	41		x
	Cyrus		8/14/2020 16:07	8/14/2020 17:20	73	233		x
3	Kerkhoven East Feeder: East to OCR 635		8/24/2020 3:00	8/24/2020 10:40	460	308		x
	Kerkhoven East Feeder: Pennock		8/24/2020 3:00	8/24/2020 10:40	460	246		x
	Kerkhoven East Feeder: Salem		8/24/2020 3:08	8/24/2020 10:40	452	15		x
	Kerkhoven East Feeder: Sundburg		8/24/2020 3:00	8/24/2020 10:40	460	111		x
	Kerkhoven West Feeder: N Rural		8/24/2020 2:58	8/24/2020 10:40	462	7		x
	Kerkhoven West Feeder: West		8/24/2020 3:00	8/24/2020 10:40	460	141		x
	Hancock		8/24/2020 2:51	8/24/2020 4:02	71	491		x
	Murdock		8/24/2020 2:54	8/24/2020 7:53	299	176		x
	DeGraff		8/24/2020 2:54	8/24/2020 8:18	324	104		x

	Feeder	Primary Event #	Begin Time	Completion Time	Duration Min.	Customers Out	Region	Email sent to CAO
SEPTEMBER = 2 qualifying events, 0 events with no email								
1	Donnelly		9/9/2020 23:48	9/10/2020 1:18	90	227		x
	Herman		9/9/2020 23:48	9/10/2020 1:18	90	617		x
	Nashua Tintah		9/9/2020 23:48	9/10/2020 4:01	253	68		x
2	Buse South - SW Feeder Section (Fergus Falls)		9/27/2020 14:15	9/27/2020 16:01	106	687		x
OCTOBER = 0 qualifying events								
NOVEMBER = 1 qualifying event, 0 events with no email								
1	Red Lake Falls East St. Hilaire Feeder		11/4/2020 17:00	11/4/2020 21:44	284	203		x
	Red Lake Falls East North Feeder		11/4/2020 17:00	11/4/2020 21:44	284	356		x
DECEMBER = 3 qualifying events, 0 events with no email								
1	Winger Substation		12/13/2020 22:21	12/13/2020 23:22	61	211		x
	Bejou Substation		12/13/2020 22:21	12/13/2020 23:22	61	74		x
	Waubun Substation		12/13/2020 22:21	12/13/2020 23:22	61	321		x
2	Otter Outlet Substation		12/19/2020 17:09	12/19/2020 18:11	62	610		x
3	Barry - Main Feeder		12/23/2020 5:00	12/23/2020 7:20	140	22		x
	Beardsley - Main Feeder		12/23/2020 5:00	12/23/2020 7:20	140	179		x
	Browns Valley - North Feeder		12/23/2020 5:00	12/23/2020 7:20	140	214		x
	Browns Valley - South Feeder		12/23/2020 5:00	12/23/2020 7:20	140	241		x

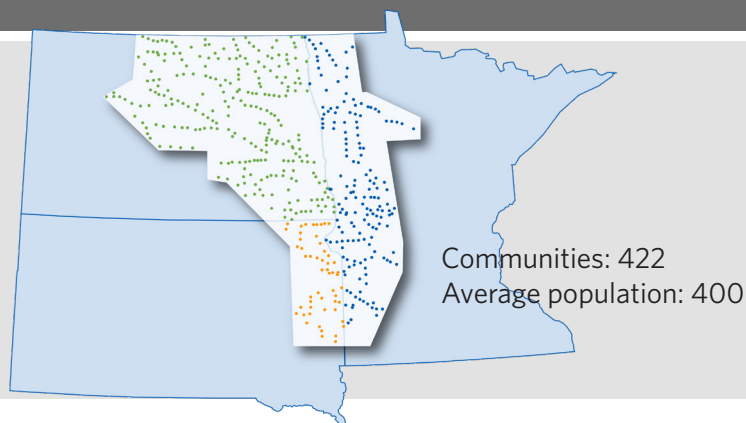


2020 MN SAFETY, RELIABILITY, AND SERVICE QUALITY

Our focus on reliable electricity and timely, courteous customer service

OUR MISSION

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.**



RELIABLE ELECTRICITY CUSTOMERS CAN COUNT ON

We strive to minimize the frequency and duration of service interruptions. And we deploy field personnel as safely and quickly as possible to restore power to customers when interruptions occur.

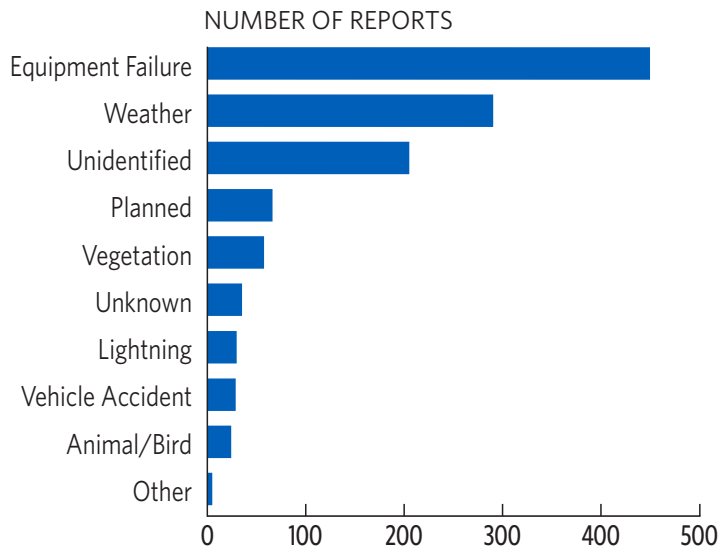
Two of the ways in which we measure our reliability are the average number of interruptions and average length of time our customers were without power.



SAFETY

We reported no incidents in 2020 in which there were injuries that required medical attention as a result of downed wires or other electrical system failures.

WHAT CAUSES INTERRUPTIONS?



In 2020
1.6% of our
customers
experienced
an interruption
greater than
six hours.



Also, **8.4%** of
our customers
experienced
four or more
interruptions
lasting greater
than **five minutes.**

Keeping our lines clear of trees and other vegetation helps ensure safe and reliable service. We trimmed **900 miles** of transmission lines in 2020.



As part of our long-term reliability strategy, we perform critical analyses of our transmission and distribution systems.

We'll continue investing in innovative, resourceful ways to create a more resilient regional transmission grid, including:

- identifying areas requiring proactive maintenance.
- integrating geographic information system data.
- expanding continuous improvement workshops to improve efficiencies and processes.



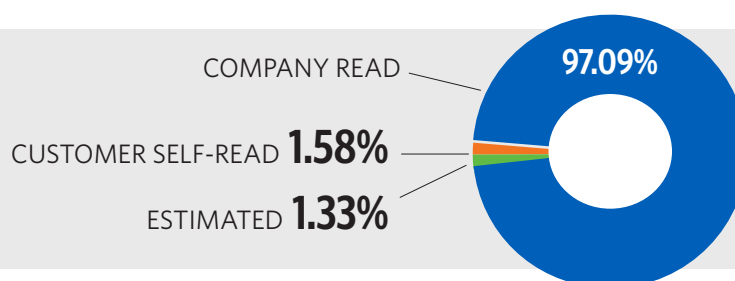
CUSTOMER SERVICE TEAM

We're here so customers can focus on what matters most.

If there is a power outage, our customer service team is dispersed throughout the communities we serve. In 2020 we had **182 linemen and service representatives** throughout our territory available to safely and quickly restore power to our customers.

Company-read meters

Our service representatives and our contracted meter readers read almost all of our residential meters to ensure accuracy in billing.



HIGH SERVICE STANDARDS

Our **29 customer service representatives** and lead customer service representatives are ready to assist our customers.

In 2020 our team received over **55,000 customer calls** during business hours. Of those, we answered **94%** within **20 seconds**.

We promoted several resources on more than **17,000 outbound calls** throughout our service territory to customers in need, offering:

- Payment plans.
- Protections under Cold Weather Protection.
- Energy assistance options.

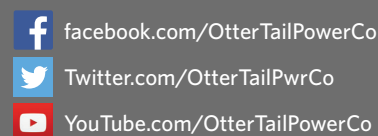


MOVING?
WE TURN ON ELECTRICITY QUICKLY!

93%
of locations we've
previously served
receive electricity
within **24 hours**



Call: **800-257-4044** or **218-739-8877**
or visit **otpc.com**



CERTIFICATE OF SERVICE

**RE: In the Matter of Otter Tail Power Company 2020 Annual Safety, Reliability and Service Quality Report and Proposed SAIFI, SAIDI and CAIDI Reliability Standards for 2021
Docket No. E017/M-21-**

I, Carly Haiby, hereby certify that I have this day served a copy of the following, or a summary thereof, on Will Seuffert 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 **1st** day of **April, 2021**

/s/ CARLY HAIBY

Carly Haiby, Regulatory Filing Coordinator
Otter Tail Power Company
215 South Cascade Street
Fergus Falls MN 56537
(218) 739-8472

Member Name	Email	Company Name	Address	Delivery Method	View Trade Secret
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