

August 12, 2020

Mr. Will Seuffert
Executive Secretary
Minnesota Public Utilities Commission
121 Seventh Place East, Suite 350
St. Paul, Minnesota 55101

RE: **Comments of the Minnesota Department of Commerce, Division of Energy Resources**
Docket No. E015/M-20-404

Dear Mr. Seuffert,

On April 20, 2020, the Minnesota Public Utilities Commission (Commission) issued a *Notice of Comment* Period In the Matter of Minnesota Power's Compliance with Annual Safety, Reliability, and Service Quality Metrics for 2019.

Attached are the comments of the Minnesota Department of Commerce, Division of Energy Resources (Department). The Department recommends that the Commission **accept Minnesota Power's 2019 Service Quality Report, and maintain the 2019 performance goals in 2020**. The Department is available to answer any questions the Commission may have.

Sincerely,

/s/SUSAN L. PEIRCE
Rate Analyst Coordinator

SLP/ar
Attachment



Before the Minnesota Public Utilities Commission

Comments of the Minnesota Department of Commerce Division of Energy Resources

Docket No. E015/M-20-404

I. BACKGROUND

Minnesota Rules Chapter 7826 (effective January 28, 2003) were developed as a means for the Minnesota Public Utilities Commission (Commission) to establish safety, reliability and service quality standards for “utilities engaged in the retail distribution of electric service to the public” and to monitor performance as measured against those standards. There are three main annual reporting requirements set forth in the rule. These are:

1. The annual safety report (Minnesota Rules, part 7826.0400);
2. The annual reliability report (Minnesota Rules, part 7826.0500, subp 1; and
3. The annual service qualify report (Minnesota Rules, part 7826.1300)

On January 28, 2020, the Commission issued its *Order Accepting Reports, Establishing Reliability Standards and Requiring Additional Filings* (Docket No. E015/M-19-254). In its Order, the Commission set Minnesota Power’s (MP or the Company) reliability standards at 2016 levels as follows:

	SAIDI ¹	SAIFI ²	CAIDI ³
2016 Standard	98.19	1.02	96.26

The Commission also directed MP to include the following information in its 2019 Safety, Reliability and Service Quality (SRSQ) Report:

- Provide reporting requirements as detailed in the Commission’s March 19, 2019 Order and listed in Attachment B to its January 28, 2020 Order;
- An update on the Colbyville 240 feeder and whether there has been an improvement to reliability; and
- Provide data on the specific number of calls received and calls answered within 20 seconds, both for business and non-business hours and by type.

On April 1, 2020, MP submitted its SRSQ Report for 2019.

¹ System Average Interruption Duration Index.

² System Average Interruption Frequency Index.

³ Customer Average Interruption Duration Index.

II. FILING SUMMARY AND DEPARTMENT ANALYSIS

A. SAFETY STANDARDS

1. Summary of Minnesota Safety Standards

Minn. Rules pt. 7826.0400 requires the utility to file annual safety information including:

- A. Summaries of all reports filed with the U.S. Occupational Safety and Health Administration and the Occupational Safety and Health Division of the Minnesota Department of Labor and Industry for the calendar year; and
- B. A description of all incidents during the calendar year in which an injury requiring medical attention or property damage resulting in compensation occurred as a result of downed wires or other electrical system failures and all remedial action taken as a result of injuries or property damage.

2. 2020 Safety Performance

MP reported 19 injuries in 2019, none of which required medical attention. The injuries resulted in a total of 95 lost work days, or approximately 32 days per injury. The Company has not had a death reported since 2010.

In 2019, MP experienced 13 property damage claims totaling \$111,048. While the total amount of claims in 2019 was significantly higher than 2018's \$22,374 in claims, a single claim for damage to a rented truck represented 78 percent of the 2019 total.

B. RELIABILITY

1. Reliability Standards

Minn. Rules pt. 7826.0500 requires utilities to report reliability performance for the previous calendar year including:

- A. The utility's SAIDI for the calendar year, by work center and for its assigned service area as a whole;
- B. The utility's SAIFI for the calendar year, by work center and for its assigned service area as a whole;
- C. The utility's CAIDI for the calendar year, by work center and for its assigned service area as a whole;
- D. An explanation of how the utility normalizes its reliability data to account for major storms;

- E. An action plan for remedying any failure to comply with the reliability standards set forth in part 7826.0600 or an explanation as to why non-compliance was unavoidable under the circumstances;
- F. 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;
- G. A copy of each report filed under part 7826.0700;
- H. To the extent technically feasible, 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;
- I. 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;
- J. Data on staffing levels at each work center, including the number of full-time equivalent (FTE) positions held by field employees responsible for responding to trouble and for the operation and maintenance of distribution lines; and
- K. Any other information the utility considers relevant in evaluating its reliability performance over the calendar year.

In its March 19, 2019 Order⁴, the Commission directed MP to file the following information in future annual reports:

- a. Non-normalized SAIDI, SAIFI, and CAIDI values;
- b. SAIDI, SAIFI and CAIDI values calculated using the IEEE⁵ 2.5 beta method;
- c. CEMI⁶ – at normalized and non-normalized outage levels of 4, 5 and 6;
- d. CELI⁷ – at intervals of greater than 6 hours, 12 hours and 24 hours;
- e. CELI;
- f. Estimated restoration times;
- g. IEEE benchmarking;
- h. Performance by customer class; and
- i. More discussion of leading causes of outages and mitigation strategies.

⁴ In the Matter of Minnesota Power's 2018 Safety, Reliability and Service Quality Standards Report, *Order Accepting Report, Setting 2018 Reliability Standards and Setting Future Reporting Requirements*, Docket No. E015/M-18-250, March 19, 2019.

⁵ Institute of Electrical and Electronics Engineers

⁶ Customers Experiencing Multiple Interruptions.

⁷ Customers Experiencing Lengthy Interruptions.

Finally, in its January 2020 Order in Docket No. E015/M-19-254,⁸ MP was directed report on the Colbyville 240 feeder, and whether or not work on the feeder has improved reliability.

2. MP Reliability Performance

The Department notes that MP considers its entire service area as one work center.

a. *Reliability Performance (SAIDI, SAIFI and CAIDI)*

MP reports three measures of reliability performance:

- System Average Interruption Duration Index (SAIDI) measures the average outage duration per customer served.
- System Average Interruption Frequency Index (SAIFI) measures the average number of interruptions per customer.
- Customer Average Interruption Duration Index (CAIDI) measures the average interruption duration per customer interrupted.

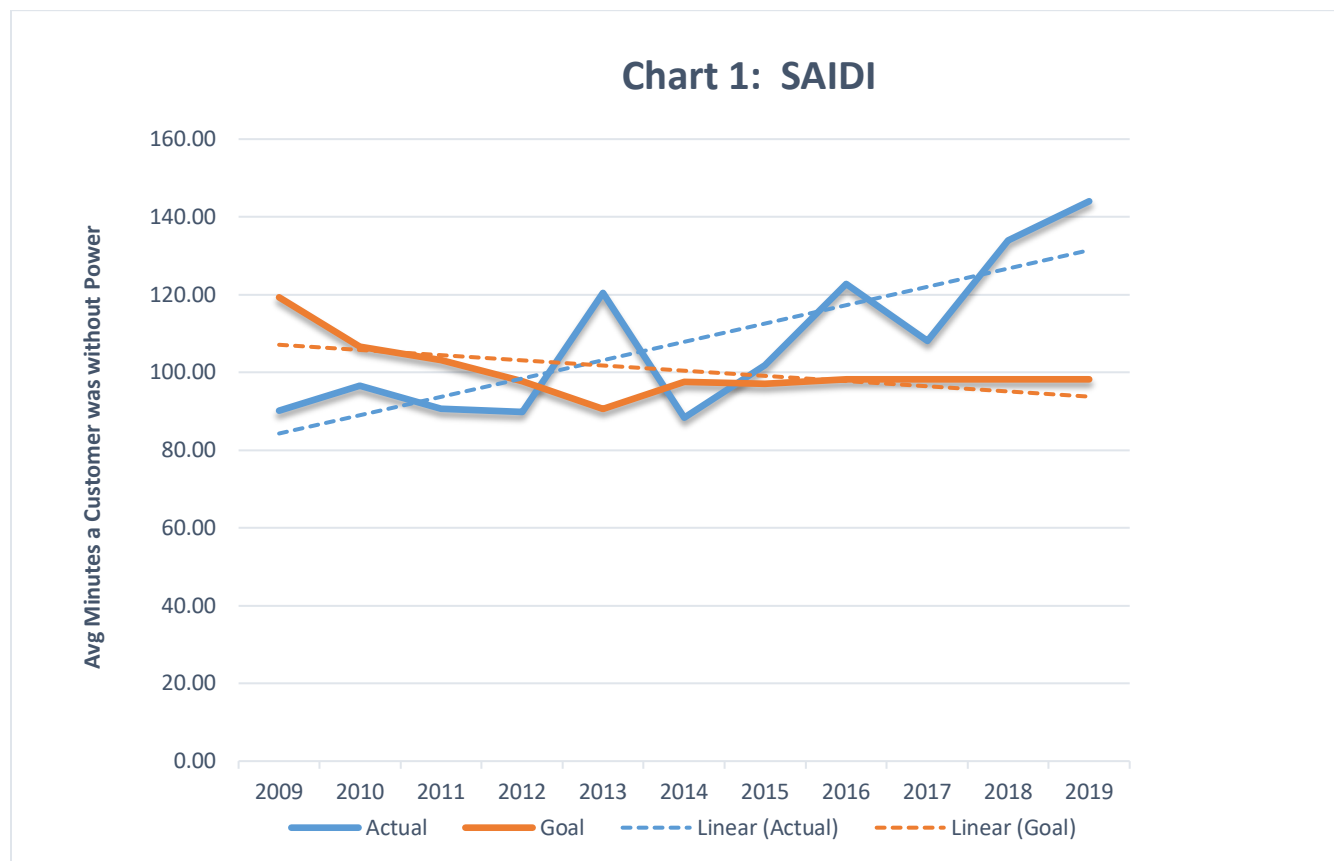
MP's 2019 reliability goals and actual performance for SAIFI, SAIDI and CAIDI are shown in Table 1. In Appendix A to its filing, MP stated that it used the 2.5 beta method defined by the IEEE Standard for Distribution Reliability to normalize its outage data for specific major events such as large storms. Under the IEEE criterion, only a single event was excluded from the data.

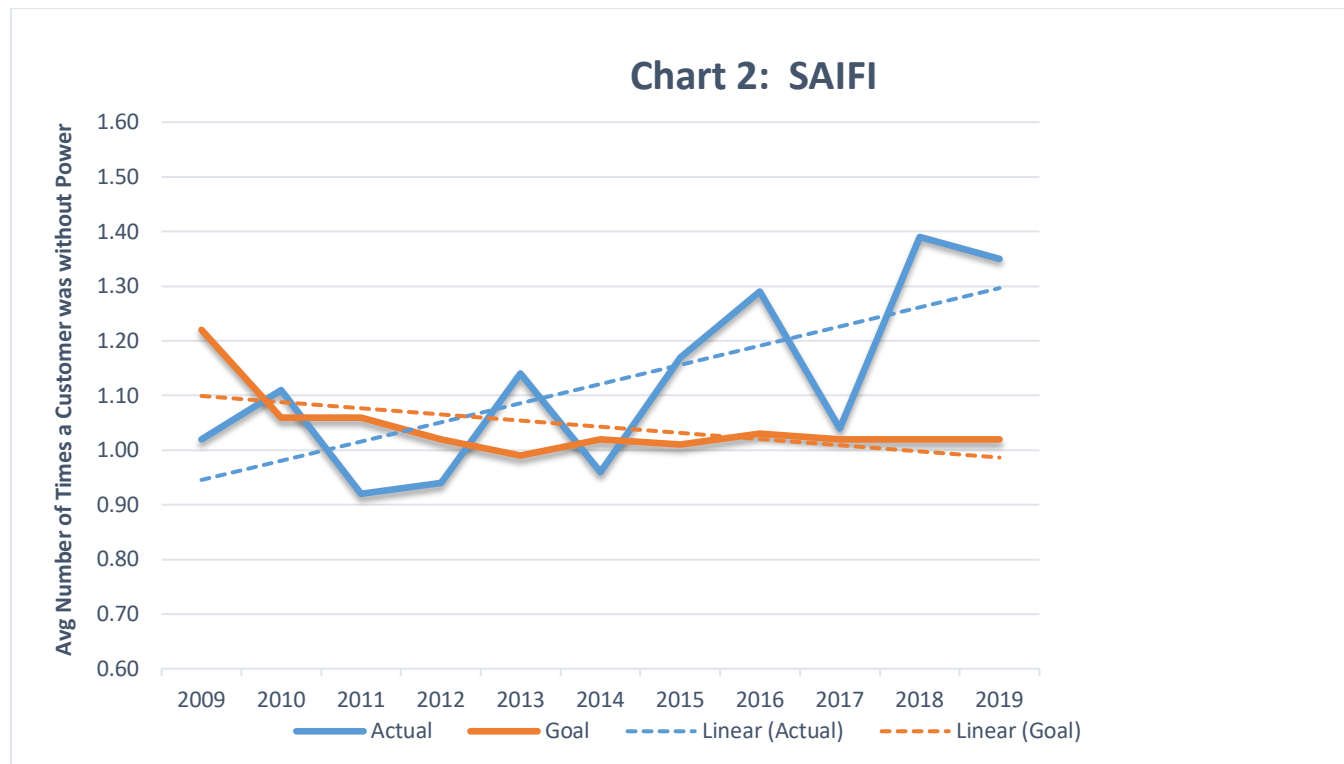
Table 1: Summary of MP's 2019 SAIDI, SAIFI and CAIDI Performance

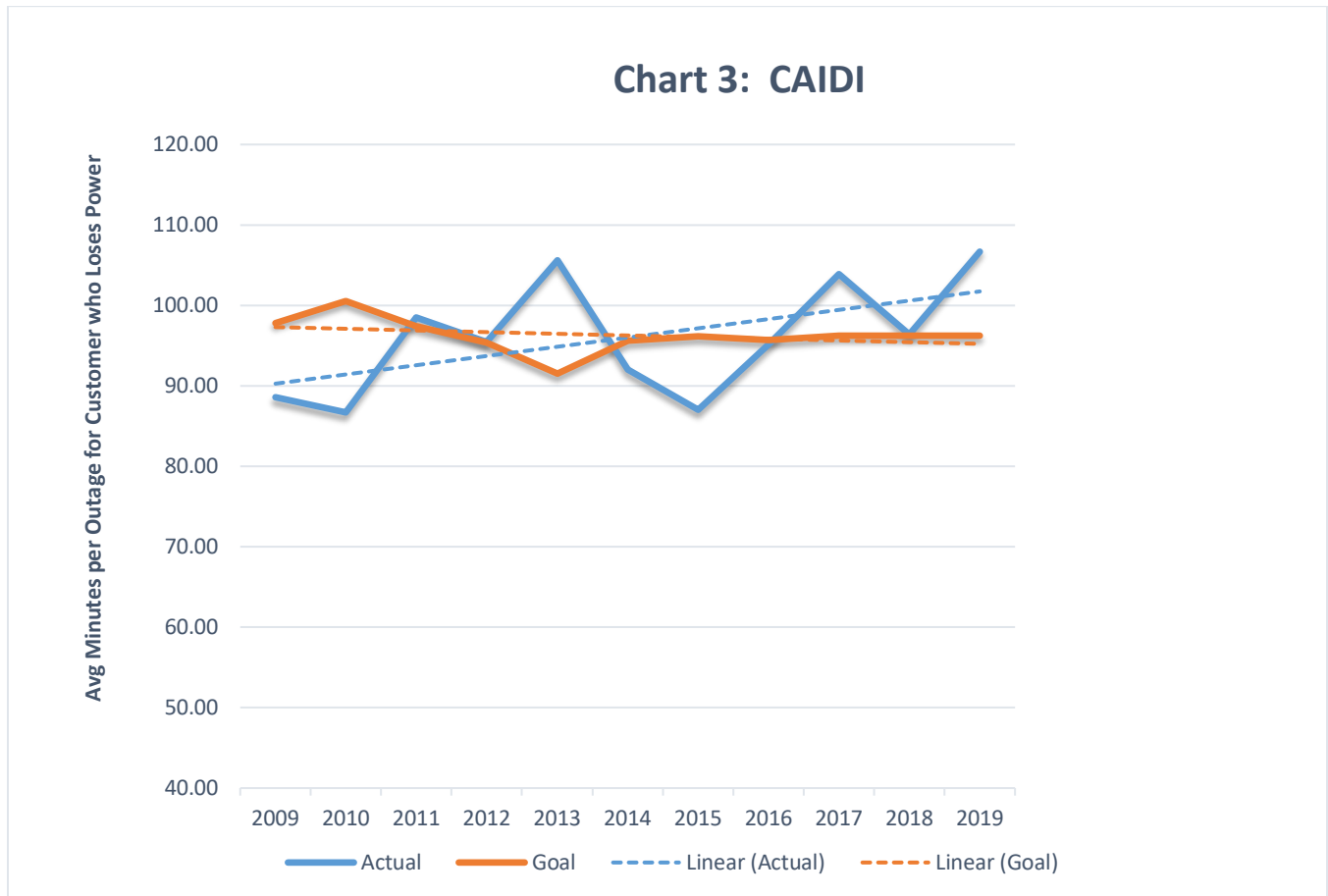
	Performance Goals	Major Event Normalized Performance	Non-Major Event Normalized Performance	Results
SAIDI	98.19	144.02	164.54	Did not meet goal
SAIFI	1.02	1.35	1.53	Did not meet goal
CAIDI	96.26	106.32	107.45	Did not meet goal

Charts 1 through 3 show MP's historical performance on each of the three reliability measures.

⁸ In the Matter of Minnesota Power's 2019 Safety, Reliability and Service Quality Standards Report, *Order Accepting Reports, Establishing Reliability Standards and Requiring Additional Filings*, Docket No. E015/M-19-254, January 29, 2020.







MP experienced its second highest number of outages in 2019 at 5,118, just below 2017’s peak of 5,632. MP stated that it experienced a large number of wind storms particularly in April and September 2019 which affected service, but were not severe enough to warrant a storm-related exclusion. In addition, the Company stated that overhead equipment failure contributed to its 2019 reliability performance. MP targets vegetation management on a 6-year basic cycle. The Company reported that a total of 25 feeders that represent 5.9 percent of its total distribution system have not received routine vegetation maintenance in 6 years. MP indicated that it plans to schedule maintenance on 17 of those feeders in 2020, and the remaining feeders in 2021.

b. Worst Performing Feeders

Because MP considers its entire service territory to be a single work center, it reports the four worst performing feeders (2 urban and 2 rural) in order to more clearly identify different reliability issues that may affect its customers. Table 2 summarizes the four worst performing feeders identified by MP for 2019.

Table 2: Summary of Worst Performing Feeders for 2019

Criteria	Circuit	# of Customers	SAIDI	SAIFI	CAIDI
High Feeder SAIDI (Urban)	Fort Ripley 1	79	782.38	6.00	130.40
High Customer Outage Minutes (Urban)	Swan Lake 250	2,593	168.56	1.70	99.15
High Feeder SAIDI (Rural)	Ten Mile Lake 1	245	1034.82	10.56	97.99
High Customer Outage Minutes (Rural)	Wrenshall 411	1251	634.45	3.26	194.62

For each of the four feeders, MP provided information on the events that contributed to the poor performance, and steps it took to improve performance. None of the four feeders have appeared on MP’s list of worst performers over the last ten years. The Department notes that two of the feeders (Fort Ripley 1 and Ten Mile Lake 1) are among the circuits that have fallen outside the standard 6-year tree trimming cycle. Both feeders are scheduled for vegetation maintenance in 2020 or 2021.

c. Colbyville Performance

In its January 2020 Order, the Commission directed MP to report on reliability improvements for its Colbyville 240 feeder. MP stated that it has replaced certain equipment, installed additional equipment to assist in locating faults on the feeder, upgraded an adjacent feeder to better carry the Colbyville feeder in the event of an outage, and is working on a pilot program to install motor operated switches on the feeder in 2020 which will permit the Company to more rapidly isolate faulted feeder sections without needing to dispatch personnel to the location.

MP provided the following reliability data for its Colbyville 240 feeder

Table 3: Summary of Reliability Data for Colbyville 240 Feeder

Year	SAIDI	SAIFI	MAIFI
2015	245.62	2.31	2.02
2016	198.79	2.26	1.00
2017	30.07	0.42	3.87
2018	240.01	2.06	1.00
2019	54.40	0.44	1.00

The Department concludes that MP has taken, and plans to take, appropriate steps to improve reliability on its Colbyville 240 feeder, and that performance tracking on this specific feeder can be suspended.

d. Action Plan for Improved Performance

MP stated that it continues to focus on distribution equipment maintenance and replacement as a means of improving its reliability performance. The Company stated that it hired two assistant engineers in 2017 who are auditing the Company’s system in order to develop a preventive maintenance program throughout the Company’s service territory.

e. Five-Year Benchmarking and IEEE Data

Table 4 summarizes MP’s five-year rolling average, IEEE 2nd quartile numbers for similar-sized companies, and MP’s recent annual reliability performance.

Table 4: Summary of Five-Year Rolling Average and IEEE 2nd Quartile Reliability Data

	MP 2018	MP 2019	MP 5-year Rolling Average	IEEE 2 nd Quartile 5 yr. avg. 2014-2018
SAIDI	134.00	144.02	122.12	124.80
SAIFI	1.39	1.36	1.25	1.12
CAIDI	94.50	106.32	97.81	109.80

The Department will address the proposed transition to using the IEEE 2nd quartile averages as a target performance measure in a section below. At this time, the Department recommends that the Commission maintain the 2019 performance goals in 2020:

- SAIDI 98.19
- SAIFI 1.02
- CAIDI 96.26

C. OTHER SERVICE QUALITY REPORTING

MP’s 2019 SRSQ Report includes the information required by the Commission in its January 28, 2020 Order. The Department highlights performance in several of the areas requested by the Commission in the sections below.

1. CEMI and CELI

In addition to the standard measures of reliability, MP reported the Customer Experiencing Multiple Interruptions (CEMI), and Customer Experiencing Lengthy Interruptions (CELI) on both a normalized and non-normalized basis.

Table 5 and 6, below, summarize the Company’s 2019 CELI and CEMI performance.

**Table 5: Customers Experiencing Multiple Interruptions in 2019
 (Percentage of Customers)**

Interruptions	Non-normalized CEMI	Normalized CEMI
3+	6.84%	5.38%
4+	4.87%	4.93%
5+	0.24%	0.01%
6+	0.83%	0.71%

Table 6: Percentage of Customers Experiencing Lengthy Interruptions (CELI)

	Non-Normalized CELI	Normalized CELI
6 Hours	1.86%	1.46%
12 Hours	0.19%	0.10%
24 Hours	0.02%	0.00%

2. Meter Reading

In compliance with Minn. Rules pt. 7826.1400, MP reported on the number and percentage of customers who had meters read by the Company and who self-reported their meter reading by customer class, as well as the number and percentage of customers who had not had their meter read for a period of six to twelve months or twelve months or longer.

MP reported that it read 98.95% of residential meters, 98.63% of commercial meters, 99.83% of industrial meters, 99.94% of municipal pumping meters and 99.96% of lighting meters. MP reported that it had a total of 47 customers who had not had their meter read for between six and twelve months, and no customers who went beyond twelve months without having their meter read. In all instances of unread meters, the Company indicated the reason was an inability to access the meter. MP stated that it leaves notices and sends follow-up letters and calls to customers regarding missed meter readings.

The following table summarizes the number of meters not read in one year or more for the past five years.

Table 7. Meters Not Read

	Company Read		Customer Read	
	12 months	Over 12 months	12 months	over 12 months
2015	2	5	0	0
2016	6	12	1	0
2017	0	0	0	0
2018	0	0	0	0
2019	3	0	0	0

3. Involuntary Disconnections

In 2019, MP sent 16,049 disconnection notices to residential customers, 1,051 notices to commercial customers, and 28 notices to industrial customers. A total of 4,232 residential customers sought and received Cold Weather Rule (CWR) protection. MP involuntarily disconnected a total of 2,138 residential customer, 112 commercial and one industrial customer. A total of 1,056 residential customers, or 49.4%, were restored within 24 hours. In addition, a total of 1,357 residential customers had service restored upon entering a payment plan.

Table 8: Residential Customer Involuntary Disconnections

	Received Disconnect Notice	Sought CWR Protection	% Granted	Disconnected Involuntarily	Restored within 24 hours	Restored by Entering Payment Plan
2015	22,537	2,173	100%	520	154	56
2016	12,191	2,916	100%	1,933	213	634
2017	17,454	3,475	100%	2,668	1,284	1,680
2018	18,961	4,311	100%	2,492	1,219	1,592
2019	16,049	4,232	100%	2,138	1,056	1,357

4. Service Extensions

MP reported a total of 771 residential installations, 540 commercial installations, and 3 industrial installations. MP met the requested in-service date for residential installations 44.4% of the time, and its commercial installations 33.9% of the time. Of the 3 industrial installations, MP reported that all but one fell into the 1-20 days overdue category. MP stated that the primary reason for not meeting an in-service date in 2019 was failure to update dates (61.8%), the customer not being ready (17.7%) and weather (8.8%)

Table 9: New Service Extension Requests Combined Residential, Commercial & Industrial

Year	Total Number of Installations	Request Date Met	% Request Date Met
2015	1,800	1,070	59.4%
2016	1,476	835	56.6%
2017	1,747	1,338	76.6%
2018	2,118	1,374	64.9%
2019	1,3314	525	40.0%

5. Call Center Response Times

The business hours for MP’s call center are from 7 am to 5:30 pm Monday through Friday, excluding holidays. MP reported that it answered 84% of 2019 calls to its business center within 20 seconds, exceeding the Minn. Rule pt. 7826.1200 goal of 80% answered within 20 seconds.

6. Emergency Medical Account Status

MP reported it had 234 customers request emergency medical account status, of which 17 were denied. Denial was primarily the result of insufficient documentation. MP stated that it collaborated with other utility representatives and the Energy CENTS Coalition to identify ways to expand outreach efforts, and this group is working on an outreach plan to educate hospital personnel and medical equipment vendors who work with customers who may benefit from the program.

7. Customer Complaints

MP received a total of 525 customer complaints during 2019, of which 91.05% were from residential customers, and the remaining 8.95% were from commercial customers. A total of 60% of the complaints were resolved on the same day, 27% were resolved in less than 10 days, with the remaining 12% taking more than 10 days to resolve. A total of 40 complaints were forwarded to the Company from the Commission’s Consumer Affairs Office (CAO)

Table 10: Customer Complaint Totals

	Residential	Commercial	Industrial	Total
2015	540	27	0	567
2016	388	46	0	434
2017	641	56	0	697
2018	559	71	0	630
2019	478	47	0	525

D. RESPONSE TO COMMISSION QUESTIONS

1. Should the Commission accept Minnesota Power’s 2019 Safety, Reliability, and Service Quality Metrics report?

The Department has reviewed MP’s SRSQ Report and concludes that it has provided the information required by Minn. Rules pt. 7826, and the Commission’s January 28, 2020 Order in Docket No. E015/M-19-254. The Department recommends the Commission accept Minnesota Power’s 2019 SRSQ report.

2. Proposed Transition to IEEE Reliability Working Group

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

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

MP proposed to use the IEEE 2nd quartile numbers as reliability targets starting with its 2020 report. The Company did not indicate whether it intends to use the calendar year's numbers or if it proposes to use a five-year average. The Department recommends that the Company continue to provide the historical information it currently provides in the existing format. In addition, the Company should provide the IEEE benchmarking data annually in a separate filing.

MP stated that it considers its entire service area as a single work center, and consequently does not provide data by work center. Consequently, the Company does not report data that would enable any analysis of differences in treatment between various areas of the service territory. MP does provide information on its top four worst performing feeders (urban and rural) in order to offer a broader picture of its performance across its territory. The Commission may wish to explore whether MP is able to provide a breakdown in its reliability numbers between Duluth and the rest of its serving territory as a means of disaggregating the Company's performance in its largest urban area from the rest of its service territory.

3. Public facing summary

MP submitted its service quality summary that it provides to its customers as Attachment D to its report. MP provided general information on its call center response times, provision of Cold Weather Rule Protection, causes of outages, and number of staff available to respond to outage calls and provide maintenance on its distribution lines. The Department concludes that the Company has complied with the Commission's Order.

IV. DEPARTMENT RECOMMENDATION

The Department recommends the Commission:

- Accept Minnesota Power's Annual Safety, Reliability, and Service Quality Metrics Report for 2019;
- Set the following performance goals:
 - SAIDI 98.19
 - SAIFI 1.02
 - CAIDI 96.26
- Require Minnesota Power to submit a supplemental filing within 20 days of receiving benchmarking data from IEEE, providing a comparison of the IEEE 2nd quartile benchmarks with the Company's reliability performance.

/ar

CERTIFICATE OF SERVICE

I, Sharon Ferguson, hereby certify that I have this day, served copies of the following document on the attached list of persons by electronic filing, certified mail, e-mail, or by depositing a true and correct copy thereof properly enveloped with postage paid in the United States Mail at St. Paul, Minnesota.

Minnesota Department of Commerce
Comments

Docket No. E015/M-20-404

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

/s/Sharon Ferguson

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Generic Notice	Commerce Attorneys	commerce.attorneys@ag.state.mn.us	Office of the Attorney General-DOC	445 Minnesota Street Suite 1400 St. Paul, MN 55101	Electronic Service	Yes	OFF_SL_20-404_M-20-404
Sharon	Ferguson	sharon.ferguson@state.mn.us	Department of Commerce	85 7th Place E Ste 280 Saint Paul, MN 551012198	Electronic Service	No	OFF_SL_20-404_M-20-404
Generic Notice	Residential Utilities Division	residential.utilities@ag.state.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012131	Electronic Service	Yes	OFF_SL_20-404_M-20-404
Will	Seuffert	Will.Seuffert@state.mn.us	Public Utilities Commission	121 7th PI E Ste 350 Saint Paul, MN 55101	Electronic Service	Yes	OFF_SL_20-404_M-20-404
Jenna	Warmuth	jwarmuth@mnpower.com	Minnesota Power	30 W Superior St Duluth, MN 55802-2093	Electronic Service	No	OFF_SL_20-404_M-20-404