COMMERCE DEPARTMENT

June 28, 2024

Will Seuffert
Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, Minnesota 55101-2147

RE: **Comments of the Minnesota Department of Commerce**
Docket No. E015/M-24-29

Dear Mr. Seuffert:

Attached are the comments of the Minnesota Department of Commerce (Department) in the following matter:

> Minnesota Power's 2023 Annual Safety, Reliability, and Service Quality Standards Report and Proposed SAIFI, SAIDI, and CAIDI Reliability Standards for 2024.

Minnesota Power (MP or the Company) filed the Petition on April 1, 2024.

The Department:

- Recommends the Commission **accept** Minnesota Power's 2023 Safety Report.
- Requests MP provide the following information in reply comments:
    - Provide an explanation for the degradation in Estimated Time of Restoration accuracy (both initial and final) that was seen in 2023 and describe any changes in tracking restoration time accuracy.
    - Provide the error rate percentage for payment services, including a break down for unexpected errors, errors outside of the customer's control and/or other meaningful categorization if available.
- Requests MP make the following updates to future SRSQ reports:
    - Add work center as a data point to the Distribution System Outage Notifications (included as Appendix A of the 2023 Annual Report) in future SRSQ reports.

  - Regarding the Remote-Reconnect Pilot Program, provide the overall average time to reconnect using the remote-reconnect program compared to the standard reconnection process, as required in the December 9, 2020 Order in Docket No. E015/M-19-766.

- Will make final recommendations on the Company's 2023 Service Quality Report after reviewing MP's reply comments.

- Requests that in its compliance filing, once the Institute of Electrical and Electronic Engineers (IEEE) Benchmark Year 2024 Results for 2023 Data are published, MP include second quartile reliability standards for **both** medium and small utilities.

- Will provide a recommendation on the Company's 2023 Reliability Report after reviewing the Company's future Supplemental Filing on IEEE 2023 benchmarking data that MP will file later in 2024.

- Recommends the Commission set the 2024 statewide reliability standards at the IEEE benchmarking 2nd quartile for medium utilities and the work center reliability standards at the IEEE benchmarking 2nd quartile for small utilities.

The Department is available to answer any questions the Commission may have.

Sincerely,

/s/ Dr. SYDNIE LIEB
Assistant Commissioner of Regulatory Analysis

MBK/KS/ad
Attachment

COMMERCE DEPARTMENT

# Before the Minnesota Public Utilities Commission

## Comments of the Minnesota Department of Commerce

Docket No. E015/M-24-29

## I. INTRODUCTION

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

1. the annual safety report (Minnesota Rules 7826.0400),
2. the annual reliability report (Minnesota Rules 7826.0500, subp. 1 and 7826.0600, subp. 1), and
3. the annual service quality report (Minnesota Rules 7826.1300).

In addition to the rule requirement, the Commission has issued seven recent Orders that include additional reporting requirements. The Department lists these Orders chronologically.

The Commission's January 28, 2020 Order in Docket No. E015/M-19-254 required Minnesota Power (MP or the Company) to include the following in its next annual filing:[1]

a. Non-normalized SAIDI, SAIFI, and CAIDI[2] values;
b. SAIDI, SAIFI, and CAIDI values calculated using the IEEE (Institute of Electrical and Electronics Engineers) 2.5 beta method;
c. MAIFI (Momentary Average Interruption Frequency Index), normalized and non-normalized;
d. CEMI (Customers Experiencing Multiple Interruptions) – at normalized and non-normalized outage levels of 4, 5, and 6 interruptions;
e. The highest number of interruptions experienced by any one customer (or feeder);
f. CELI (Customers Experiencing Lengthy Interruptions) – at normalized and non-normalized intervals of greater than 6, 12, and 24 hours;
g. The longest experienced interruption by any one customer (or feeder);
h. A breakdown of field versus office staff required;
i. Estimated restoration time accuracy;
j. IEEE benchmarking;
k. Performance by customer class; and
l. More discussion of leading causes of outages and mitigation strategies.

[1] E015/M-19-254 Order dated January 28, 2020, Order Point 2 and Attachment B provide clarification to the March 19, 2019 Order from E015/M-18-250. Attachment B from the Order is included as Department Attachment 1.

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

On December 9, 2020, the Commission issued its Order approving the Remote-Reconnect Pilot Program in Docket No. E015/M-19-766.[3] MP committed to providing the following data in its annual SRSQ Reports:

a. Number of customers participating in the remote-connect program;
b. Total number of MP customers receiving lower-income home energy assistance program (LIHEAP) assistance;
c. Number of remote-connect participants receiving LIHEAP assistance;
d. Number of customers who have opted out of the remote-connect program;
e. Estimated annual cost savings from the remote-connect program;
f. Average time to reconnect using the remote-reconnect program compared to the standard reconnection process; and
g. Number of reconnections restored within 24 hours of disconnection, distinguishing between standards and remote reconnections.

The Commission's December 18, 2020 Order in Docket No. E015/M-20-404 required the Company to propose a transition to the full benchmarking approach to setting reliability standards, including a discussion of the definition of work centers, benchmarking for individual work centers, and other considerations. The Commission also required the Company to report information on the number of website visits, logins to electronic customer communication platforms, emails from customers, and types of emails from customers. The Commission set service territory-wide reliability standards for MP based on the IEEE benchmarking second quartile for medium utilities.

In its December 2, 2021 Order in Docket No. E015/M-21-230, the Commission required the Company to provide additional information regarding:

1. Electronic utility-customer interaction beginning with the reports filed in April 2023.
2. Percentage uptime and error rate percentage information in their annual reports for the next three reporting cycles, to build baselines for web-based services.
3. To continue to provide information on electronic utility-customer interaction such that baseline data are collected:
   a. Yearly total number of website visits;
   b. Yearly total number of logins via 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 programs and disconnections as part of reporting under Minnesota Rules 7826.1700.
4. Public-facing summaries with their annual Safety, Reliability, and Service Quality reports.

[3] The Remote-Reconnect Pilot Program was extended from three to five-years, running from August 2021 – July 2026, through the Commission's January 9, 2024 Consent agenda (Order not yet available).

On March 2, 2022, the Commission issued its Order Accepting Reports and Setting 2021 Reliability Standards in Docket No. E015/M-21-230, establishing three work centers for Minnesota Power's service territory, setting statewide reliability standards at the IEEE benchmark for the second quartile for medium utilities and setting MP's reliability standards for its work centers at the IEEE benchmark for the second quartile of small utilities.

In its January 18, 2023 Order in Docket No. E015/M-22-163, the Commission eliminated the standalone Annual Summary of Customer Complaints docket (YY-13) and required the Company to include customer complaint data from Minnesota Rules 7820.0500 in its Annual Service Quality reports with data filed as a part of Minnesota Rules 7826.2000.

Lastly, the December 5, 2023 Order in Docket No. E015/M-23-75 maintained the benchmarking standards that were initially ordered March 2, 2022 in the 2021 Report's order. The order in the 2023 Report clarified that MP is required to provide CEMI (3, 4, 5, 6) and CELI (6, 12, 24), storm included, and storm excluded for their overall system as well as the individual service regions.

On April 1, 2024, MP filed its *2023 Annual Safety, Reliability, and Service Quality Report* (2023 SRSQ Report or Annual Report) in Docket No. E015/M-24-29 to comply with the Commission's recent Orders referenced above and the requirements of Minnesota Rules Chapter 7826.

On April 26, 2024, the Commission filed a *Notice of Comment Period* requesting that parties respond to the following questions.

1. Should the Commission accept Minnesota Power, Otter Tail Power, and Xcel Energy's 2023 Annual Safety, Reliability, and Service Quality Reports?
2. Should the Commission approve Minnesota Power, Otter Tail Power, and Xcel Energy's proposed reliability standards for 2024?
3. Did Xcel Energy fully report the metrics regarding its Emergency Medical Account as ordered in Docket No. 23-233?
4. Are there other issues or concerns related to this matter?

## II. SUMMARY OF REPORT AND DEPARTMENT ANALYSIS

The Minnesota Department of Commerce (Department) reviewed MP's Annual Report to assess compliance with Minnesota Rules, Chapter 7826 and the Commission's various Orders. The Department used information from past annual reports to facilitate identification of issues and trends regarding MP's performance.

The Department provides:

- Responses to the Commission's questions;
- A summary of the Department's review of MP's 2023 Safety, Reliability, and Service Quality Reports;
- A discussion of the Company's reliability standards for 2024; and
- A discussion of the Company's compliance with other Commission Orders.

*A. RESPONSE TO COMMISION QUESTIONS*

*1. Should the Commission accept MP's 2023 Safety Reliability, and Service Quality Metrics Reports?*

The Department recommends that the Commission accept Minnesota Power's 2023 Safety Report. The Department is awaiting additional information regarding the Service Quality and Reliability portions of the Company's 2023 Annual Report before making a recommendation regarding those aspects of the filing.

MP will be supplementing its petition in the fall of 2024, which will include reliability goals developed using the IEEE benchmarking methodology for calendar year 2023. The Department plans to file supplemental comments regarding its review of that information soon after the supplemental filing is received and will provide a recommendation on the Reliability Report at that time.

*2. At what level should the Commission set MP's 2024 Reliability Standards?*

The Department recommends the Commission continue the current process of using the IEEE Distribution Reliability Group's annual benchmarks for MP's 2024 Reliability Standards by setting the 2024 statewide reliability standards at the IEEE benchmarking 2nd quartile for medium utilities and the work center reliability standards at the IEEE benchmarking 2nd quartile for small utilities. Additionally, the Department recommends that the Commission require MP to file a supplement to its 2024 SRSQ report 30 days after IEEE publishes the Benchmark Year 2025 Results for 2024 Data, with an explanation for any standards the utility did not meet.

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

The Department does not have any additional concerns at this time.

*B. ANNUAL SAFETY REPORT*

The annual safety report consists of two parts in accordance with Minnesota Rules 7826.0400:

A. A summary of all reports filed with the United States Occupational Safety and Health Administration (OSHA) and the Occupational Safety and Health Division of the Minnesota Department of Labor and Industry (OSHD) during the calendar year; and
B. A description of all incidents during the calendar year in which an injury requiring medical attention or property damage resulting in compensation occurred as a result of downed wires or other electrical system failures and all remedial action taken as a result of any injuries or property damage described.

The following tables are a compilation of MP's summaries of the reports the Company filed with OSHA and OSHD for the last ten years.

**Table 1: Case Data from Reports Filed with OSHA and OSHD (2014 – 2023)**

| | Number of Deaths | Number of Cases | | | Number of Days | |
|---|---|---|---|---|---|---|
| | | with Days Away from Work | with Job Transfer or Restriction | Other Recordable Cases | Job Transfer or Restriction | Away from Work |
| 2014 | 0 | 3 | 8 | 10 | 267 | 26 |
| 2015 | 0 | 5 | 4 | 8 | 115 | 26 |
| 2016 | 0 | 8 | 5 | 15 | 171 | 107 |
| 2017 | 0 | 10 | 6 | 15 | 629 | 139 |
| 2018 | 0 | 1 | 3 | 14 | 87 | 2 |
| 2019 | 0 | 3 | 4 | 12 | 319 | 95 |
| 2020 | 0 | 5 | 11 | 13 | 762 | 102 |
| 2021 | 1 | 6 | 1 | 10 | 259 | 287 |
| 2022 | 0 | 5 | 9 | 10 | 369 | 51 |
| 2023[4] | 0 | 4 | 10 | 12 | 687 | 91 |
| **10-Year Average** | **0.1** | **5.0** | **6.1** | **11.9** | **366.5** | **92.6** |
| **Variance** | **-0.1** | **-1.0** | **3.9** | **0.1** | **320.5** | **-1.6** |

The above table suggests that the number of cases has been relatively consistent over the last ten years while there was a significant increase in number of days of job transfer or restriction in 2023 from the average.

**Table 2: Injury & Illness Types in Reports filed with OSHA and OSHD (2014 – 2023)**

| | Injuries | Skin Disorders | Respiratory Conditions | Poisonings | All Other Illnesses |
|---|---|---|---|---|---|
| 2014 | 21 | 0 | 0 | 0 | 0 |
| 2015 | 17 | 0 | 0 | 0 | 0 |
| 2016 | 28 | 0 | 0 | 0 | 0 |
| 2017 | 31 | 0 | 0 | 0 | 0 |
| 2018 | 18 | 0 | 0 | 0 | 0 |
| 2019 | 19 | 0 | 0 | 0 | 0 |
| 2020 | 29 | 0 | 0 | 0 | 0 |
| 2021 | 18 | 0 | 0 | 0 | 0 |
| 2022 | 20 | 3 | 1 | 0 | 0 |
| 2023[5] | 22 | 3 | 0 | 0 | 1 |
| **Average** | **22.3** | **0.6** | **0.1** | **0** | **0.1** |
| **Variance** | **-0.3** | **2.4** | **-0.1** | **0** | **0.9** |

[4] Petition, page 39.
[5] Petition, page 39.

MP reported three skin disorder injuries or illnesses in both 2022 and 2023, following eight years without any reports of this type. In response to a Department Information Request (IR), MP explained that the six skin disorder injuries reported in 2022 and 2023 were all confirmed or suspected to have been caused by poison ivy while staff were working in the field. The Company has provided training on hazard identification (including poison ivy) and how to treat poison ivy exposures.[6]

For other injuries and illnesses, the reporting for 2023 is consistent with the recent ten-year history for the Company.

The following table summarizes MP's most recent and past reports regarding property damage claims that occurred because of downed wires or other electrical system failures.

**Table 3: Property Damage Claims (2014 – 2023)[7]**

| | Claims | Total Amount Paid |
|---|---|---|
| 2014 | 23 | $26,939 |
| 2015 | 29 | $76,376 |
| 2016 | 16 | $15,466 |
| 2017 | 4 | $4,364 |
| 2018 | 10 | $22,374 |
| 2019 | 13 | $111,048 |
| 2020 | 13 | $40,594 |
| 2021 | 16 | $67,487 |
| 2022 | 20 | $120,097 |
| 2023 | 17 | $35,323 |
| **Average** | **16.9** | **$52,007** |
| **Variance** | **0.9** | **-$16,684** |

The Company's paid out property damage claims were down in 2023 from 2022 and from the ten-year average. Just over half of the property damage claims in 2023 were related to power surges and approximately 25% were related to vehicle damage.

The Department acknowledges MP's fulfillment of the requirements of Minnesota Rules 7826.0400.

*C. ANNUAL RELIABILITY REPORT*

Minnesota Rules 7826.0500 through 7826.0700 succinctly delineate the:

- Reliability reporting requirements;
- Reliability standards; and
- Reporting requirements for major service interruptions.

[6] Department Attachment 2 (Company Response to Department IR 5).
[7] Petition, page 40.

The Department provides a brief summary and analysis of the reliability reporting requirements from statute and as modified by Commission Orders below.

*1. Reliability Performance*

In accordance with Minnesota Rules 7826.0500, MP reports the utility's SAIDI, SAIFI, and CAIDI[8] by work center and system-wide for each calendar year.

The Commission established a benchmarking approach to setting reliability standards for investor-owned utilities,[9] and has set MP's statewide reliability standards at the IEEE benchmarking second quartile for medium utilities and the work center reliability standards at the IEEE benchmarking second quartile for small utilities.[10]

IEEE does not publish its benchmarking results for the prior year until August of the following year, so MP does not yet know how the 2023 performance metrics compare to the 2023 benchmarks. The Company will make a supplemental filing within 30 days of when IEEE Benchmark Year 2024 results for 2023 Data are published.[11]

*i. 2022 Performance and Benchmarks*

In Docket No. E015/M-23-75, MP filed the Company's reliability benchmarks as informed by the 2022 IEEE Benchmark Reliability Survey that was published in August 2023.

[8] SAIDI = System Average Interruption Duration Index, SAIFI = System Average Interruption Frequency Index, CAIDI = Customer Average Interruption Duration Index.
[9] The new benchmarking methodology was first adopted in the Docket No. E015/M-20-404 Order dated December 18, 2020 for service territory-wide reliability standards, Order point 7. This benchmarking methodology was extended to the work-center level in the Docket No. E015/M-21-230 Order dated March 2, 2022, Order point 5. Additionally, this order established three work centers for MP (Order point 4): Central, Northern, and Western.
[10] The Docket No. E015/M-23-75 Order dated December 5, 2023 is the most recent Annual Report's order, and maintains the IEEE benchmarking methodology for MP's reliability standards.
[11] Petition, page 44.

**Table 4: MP 2022 Reliability Performance vs IEEE Benchmark[12]**

| Work Center | Metric | 2022 IEEE Benchmark | 2022 MP Performance | Met Benchmark? |
|---|---|---|---|---|
| Central | SAIDI | 193.00 | 94.77 | Yes |
| | SAIFI | 1.39 | 0.96 | Yes |
| | CAIDI | 125.00 | 99.01 | Yes |
| Northern | SAIDI | 193.00 | 121.10 | Yes |
| | SAIFI | 1.39 | 0.89 | Yes |
| | CAIDI | 125.00 | 135.39 | No |
| Western | SAIDI | 193.00 | 140.89 | Yes |
| | SAIFI | 1.39 | 1.53 | No |
| | CAIDI | 125.00 | 92.15 | Yes |
| System | SAIDI | 143.00 | 112.70 | Yes |
| | SAIFI | 1.11 | 1.12 | No |
| | CAIDI | 134.00 | 100.89 | Yes |

The Company's 2022 results are good overall, with performance better than the IEEE benchmarks for nine of the twelve metrics listed. The Company stated that weather, vegetation, and overhead equipment failures were the largest contributors to outage causes in 2022.[13] Minnesota Power noted that it organized a Distribution Grid Modernization team in 2022 and anticipates that the Company's actions on their recommendations should result in improvements in reliability.[14]

The Company narrowly missed the 2022 benchmark for the territory-wide SAIFI. The Company also did not meet the 2022 work center benchmarks for the Northern work center's CAIDI or Western work center's SAIFI.

*ii. 2023 Performance*

Since 2023 IEEE Benchmark Reliability Survey results will not be available until August, the Department reviewed 2023 performance against the 2022 IEEE benchmarks to serve as a useful proxy for the yet-to-be-calculated 2023 benchmarks. The following table shows the Company's 2023 reliability performance compared with the 2022 goals set for the system at IEEE second quartile benchmarks for medium utilities and for work centers at IEEE second quartile benchmarks for small utilities.

[12] 2022 Actuals from Initial Filing in Docket No. E015/M-23-75 at page 18. The IEEE Benchmarks from instant Petition, Table 2 at page 16.
[13] Docket No. E015/23-75 Compliance Filing dated August 24, 2023 at page 1.
[14] Ibid at page 2.

**Table 5: MP's 2023 Reliability Performance Compared with 2022 IEEE Benchmark[15]**

| Work Center | Metric | 2022 IEEE Benchmark | 2023 MP Performance |
|---|---|---|---|
| Central | SAIDI | 193.00 | 78.68 |
| | SAIFI | 1.39 | 0.90 |
| | CAIDI | 125.00 | 87.60 |
| Northern | SAIDI | 193.00 | 149.07 |
| | SAIFI | 1.39 | 1.07 |
| | CAIDI | 125.00 | 139.21 |
| Western | SAIDI | 193.00 | 124.40 |
| | SAIFI | 1.39 | 1.68 |
| | CAIDI | 125.00 | 73.83 |
| System | SAIDI | 143.00 | 103.60 |
| | SAIFI | 1.11 | 1.16 |
| | CAIDI | 134.00 | 89.33 |

In Table 5, the text highlighted in green indicates that the 2023 performance met the 2022 IEEE benchmark while red highlighted text indicates that the 2023 performance did not meet the 2022 benchmark.

The Department notes that this comparison is meant to provide a point of reference for MP's actual 2023 reliability performance compared to the most-recent available goals. The Department will provide an updated letter reviewing the 2023 performance against the 2023 benchmarks after the Company submits its supplemental filing with the 2023 IEEE Benchmark Results Survey.

Based on its review of Minnesota Power's 2023 system-wide reliability requirements reporting, the Department concludes the Company appears to have fulfilled the requirements of Minnesota Rules 7826.0500 subpart 1.A., 1.B., and 1.C. along with the work center reporting required by Commission orders.

Historically, MP has only provided the IEEE second quartile standards for medium utilities in its fall compliance filing to the reliability report. The Department asks that MP include the 2024 IEEE Benchmark Year/2023 Data Year reliability standards second quartile standards for **both** medium and small utilities in its upcoming compliance filing. The territory-wide standard is based on the IEEE benchmarking 2nd quartile for medium utilities while the work center standard is based on the IEEE benchmarking 2nd quartile for small utilities, so both figures are needed to review the Company's achievement of reliability standards.

[15] Performance data for 2023 is from the petition's Table 2 at page 16.

*iii. Trends in Performance*

The Commission Order in Docket No. E015/M-21-230 requires Minnesota Power to report reliability metrics at both the system-wide and work center level.

The Department provides Figures 1 – 6 below, showing MP's SAIFI, SAIDI, and CAIDI normalized performance rates and goals for the system overall and by work center.[16]

**Figure 1: SAIDI for Overall System (2014 – 2023)**

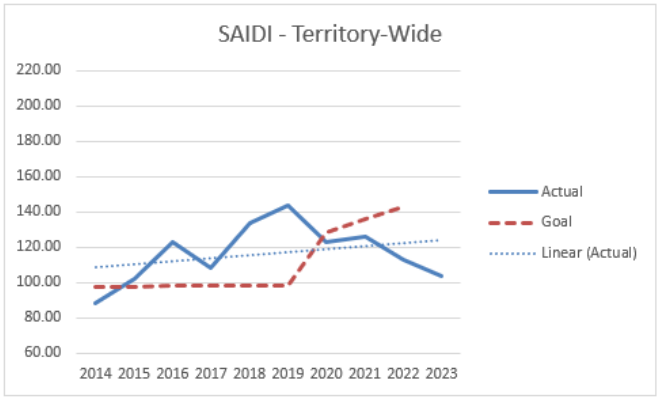



**Figure 2: SAIDI by Work Center (2019 – 2023)**

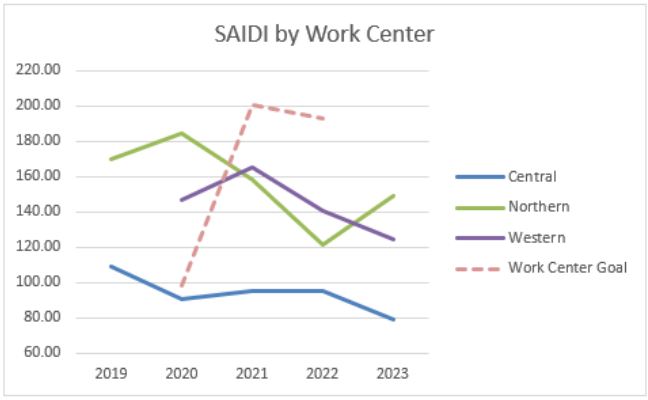



**Figure 3: SAIFI for Overall System (2014 – 2023)**

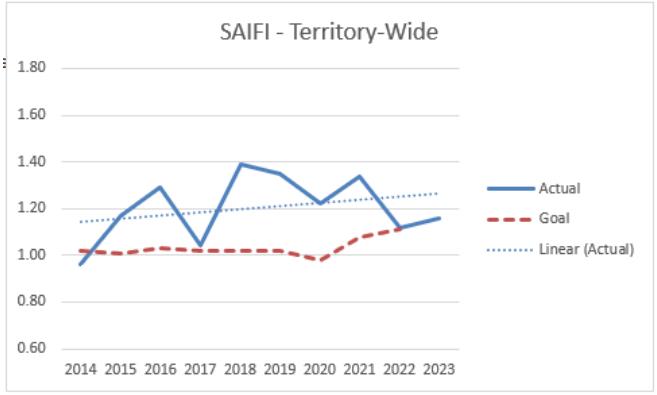
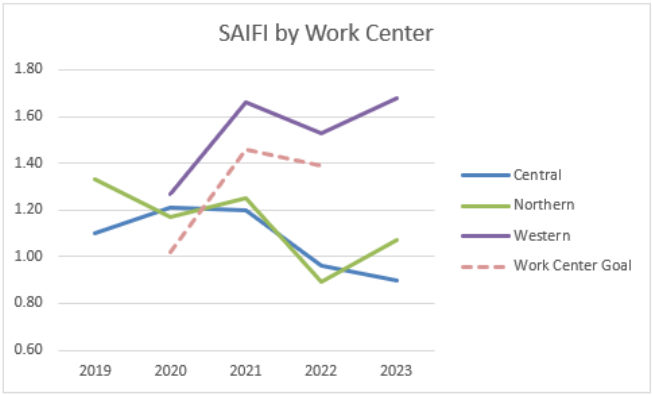



**Figure 4: SAIFI by Work Center (2019 – 2023)**




[16] The 2023 data was retrieved from Petition, Table 2 on page 16. Department Attachment 3 reflects MP confirmation of 2020 – 2022 IEEE standards to resolve discrepancies identified when reviewing historic reliability reports and compliance filings. Note that the 2020 work center goals were set by the Commission Order in Docket No. E015/M-20-404 rather than the IEEE standards.

**Figure 5: CAIDI for Overall System (2014 – 2023)**

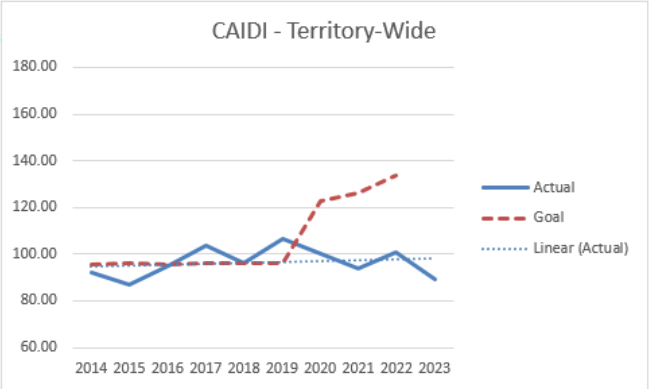
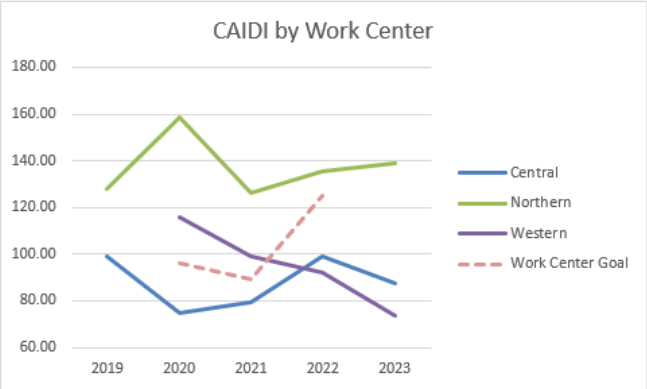



**Figure 6: CAIDI by Work Center (2019 – 2023)**




On an overall system level, MP's SAIDI and SAIFI values have been trending up over the last ten years, while they've seen improvements in the last five years. The overall CAIDI performance has been relatively flat over the last ten years, again with improvements in the last five years.

On a work center level, the Department reviewed five years of data. Over the last five years, the Central work center has generally performed the best on SAIDI, SAIFI, and CAIDI. The Western work center has experienced higher SAIDI and SAIFI than the overall system while the Northern work center has experienced higher SAIDI and CAIDI than the overall system.

SAIDI has been trending down for all work centers and for the overall system over the last five years. SAIFI and CAIDI have experienced more fluctuation by work center over the last five years.

*2. Storm Normalization Method*

MP used the IEEE 2.5 beta method for storm normalization, which excludes data due to major events such as large storms. To determine which singular events should be excluded from the reliability metrics data, MP compares the SAIDI for individual events to the IEEE's Major Event Threshold. In cases where a storm or other event MP experienced has a greater SAIDI than the threshold, those events are removed from the data, and this time-period is called a Major Event.[17]

In 2023, MP had one major event excluded. MP's five-year average number of major events is 2.6, with a high of six events in 2022.[18]

*3. Action Plan to Improve Reliability*

MP stated that most of the outages in 2023 were attributed to overhead equipment failures, wildlife, and vegetation.[19] The Company also identified weather as a main contributor to outages in last year's

[17] Petition, page 46-47.
[18] Petition, page 48.
[19] Ibid.

compliance filing.[20] The Company provided updates on its efforts to address these challenges and enhance its reliability performance as described below.

MP is engaging in strategic undergrounding efforts, targeting areas where customers limit access to vegetation management and areas where overhead lines were installed in inaccessible areas with heavy vegetation. The new standard for customer line extensions is to install underground facilities in all feasible locations.[21] The Company states that strategic undergrounding is a key component to improving reliability to harden the system to be more resilient to storms.[22]

The Company has a grid modernization team whose duties were refined in 2022, and in 2023, the team took over the responsibility for all grid modernization devices across the distribution system including smart grid sensors, TripSavers, motor operated switches, reclosers, and IntelliRupters.[23] The Company noted that its preventative maintenance program[24] should increase the reliability of MP's distribution assets going forward.

The Department acknowledges MP's fulfillment of the requirements of Minnesota Rules 7826.0500, subpart 1.E.

*4. Bulk Power Supply Interruptions*

Minnesota Power identified three bulk power interruptions to its system in 2023. These outages occurred on two feeders: 23 Line (Bear Creek) (two interruptions) and 59 Line (Mahtowa – Sandstone).

At the 23 Line (Bear Creek) feeder, one interruption was caused by vegetation and the second interruption's cause was not determined. Routine vegetation maintenance for this line was completed in 2022. The interruption caused by vegetation was the result of a winter storm weighing down a branch that made contact with the line and was resolved by removing the branch.

The interruption at the 59 Line (Mahtowa – Sandstone) feeder was a planned outage to replace a switch and remove three spans of static wire.

The Department acknowledges MP's fulfillment of the requirements of Minnesota Rules 7826.0500, subpart 1.F.

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[20] Docket No. E015/23-75 Compliance Filing dated August 24, 2023 at page 1.
[21] Petition, page 18.
[22] Petition, page 24.
[23] Petition, page 49. See also petition, pages 24-25.
[24] See Docket No. E015/M-23-705 Department Comments, Attachment A for preventative maintenance program details (PDF pages 41-43).

*5. Major Service Interruptions*

Appendix A reports MP's major service interruptions in 2023. Appendix A includes 23 distribution system status outage notifications with an average duration of 183.4 minutes and affecting an average of 1,604 customers. The majority of the interruptions were caused by wildlife or weather.

The Department acknowledges MP's fulfillment of the requirements of Minnesota Rules 7826.0500, subpart 1.G.

*6. Worst Performing Circuit*

Consistent with past reports, MP reported the four worst-performing feeders (two urban and two rural) for each of its three work centers, for a total of 12 feeders. The Department summarizes the 2023 information in Table 6 below.

The Department notes:

- The highest SAIDI results were for two feeders in the Central work area, one in a rural area and one in an urban area.
- The highest CAIDI results were for two feeders in the Northern work area, one in an urban area and one in a rural area.
- The Big Rock 272 feeder in the Central work center had the highest SAIDI of a feeder, with a significant SAIDI increase from the next highest feeder's SAIDI, Silver Bay Townsite.
- Looking back over five years of worst performing circuit data, Fort Ripley (Western work center) is the only repeat worst performer, which was reported in 2019 for high SAIDI.

**Table 6: Summary of Minnesota Power's 2023 Worst-Performing Feeders in Urban and Rural Areas by Work Center[25]**

| | Criteria | Work Center | Circuit | # of Customers | SAIDI | SAIFI | CAIDI |
|---|---|---|---|---|---|---|---|
| Urban | High SAIDI | Central | Silver Bay Townsite 4302 | 448 | 821.39 | 2.29 | 358.69 |
| | | Northern | Hoyt Lakes 2 | 836 | 755.42 | 1.08 | 699.46 |
| | | Western | Fort Ripley | 82 | 439.74 | 7.83 | 56.16 |
| | High CAIDI | Central | Silver Bay Townsite 4301 | 625 | 800.62 | 2.02 | 396.35 |
| | | Northern | Hoyt Lakes 2 | 836 | 755.42 | 1.08 | 699.46 |
| | | Western | Little Falls South 1 | 932 | 176.13 | 2.35 | 74.95 |
| Rural | High SAIDI | Central | Big Rock 272 | 9 | 1,092.11 | 4.33 | 252.22 |
| | | Northern | St. Croix 2 | 530 | 705.80 | 1.50 | 470.53 |
| | | Western | Riverton 530 | 51 | 840.49 | 3.59 | 234.12 |
| | High CAIDI | Central | Ridgeview 253 | 3,048 | 185.33 | 2.01 | 92.20 |
| | | Northern | St. Croix 2 | 530 | 705.80 | 1.50 | 470.53 |
| | | Western | Little Falls 529 | 1,635 | 218.17 | 2.58 | 84.56 |

The Department outlines below the summaries that MP provided of the remediation actions under consideration to address reliability issues on the worst performing feeders in each of its work centers:

- Central Work Center – The Silver Bay Hillside substation (affecting Silver Bay Townsite 4301 and 4302) was replaced and energized in May 2023 after this substation experienced equipment failures and was determined to be near the end of life. The Company also addressed equipment and pole issues and plans to split the Ridgeview 253 feeder into two feeders with IntelliRupters installed to improve future performance.[26]
- Northern Work Center – Equipment failures contributing to the worst-performing feeders' performance have been repaired or replaced. MP stated that the successive issues the Hoyt Lakes 2 feeder experienced emphasize the importance of the Company's preventative maintenance (PM) program to mitigate future performance issues.[27]
- Western Work Center – MP highlighted weather, equipment failures, and planned outages as the leading causes of the performance issues by the Western feeders. Fort Ripley's outage times were tied to the replacement of transformers, insulators, and associated equipment.[28]

The Department acknowledges MP's fulfillment of the requirements of Minnesota Rules 7826.0500, subpart 1.H.

[25] Petition, pages 51 – 53, Tables 11 – 13.
[26] Petition, page 51.
[27] Petition, page 52. See also Petition, page 18 for additional detail on the PM.
[28] Petition, page 53.

*7. Compliance with ANSI Voltage Standards*

MP provided Table 14 listing the 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 (ANSI) for nominal system voltage greater or less than voltage range B. The Company reported 17 instances of voltage violations in 2023 compared to 16 in 2022.[29] The ten-year average is 15.6 violations, but the number has fluctuated year over year without a clear trend. The majority of instances were attributed to overhead equipment (9 instances) and underground equipment (6 instances) in 2023.

In response to a Department IR, MP explained that it identifies instances of ANSI voltage violations by reviewing measurements reported by line workers in trouble orders for values outside the nominal range. MP stated that AMI meters indirectly impact voltage incident reporting as AMI voltage alarms are reported to a trouble crew and the line workers or meter technicians then visit the affected meter, measure voltage, and document it in the trouble order.[30]

The Department acknowledges MP's fulfillment of the requirements of Minnesota Rules 7826.0500, subpart 1.I.

*8. Work Center Staffing Levels*

Minnesota Power provided work center staffing data, including the number of full-time employees by work center in 2023 in Table 15 on page 55 of the filing. This information is summarized, along with a comparison to 2022 reported employee counts below.

[29] Ibid.
[30] Department Attachment 4 (Company response to Department IR 6).

**Table 7a: Comparison of MP's 2022 and 2023 Staffing Levels by Work Center[31]**

| Description | Central[32] | | | Northern | | | Western | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2022 | 2023 | Δ | 2022 | 2023 | Δ | 2022 | 2023 | Δ |
| Line Ops Field – Line | 49 | 48 | -2% | 25 | 25 | 0% | 30 | 31 | 3% |
| Line Ops Field – Substation | 8 | 8 | 0% | 8 | 8 | 0% | 5 | 5 | 0% |
| Line Ops Support – OPS | 1 | 1 | 0% | 1 | 1 | 0% | 1 | 1 | 0% |
| Line Ops Support – Line | 9 | 7 | -22% | 1 | 2 | 100% | 2 | 2 | 0% |
| Line Ops Support – Fleet | 9 | 10 | 11% | 3 | 3 | 0% | 3 | 3 | 0% |
| Line Ops Support – Substation | 2 | 2 | 0% | 1 | 1 | 0% | - | - | - |
| Line Ops Support – Inventory | 7 | 6 | -14% | 3 | 2 | -33% | 3 | 3 | 0% |
| Engineering Support – Distribution | 24 | 22 | -8% | 7 | 8 | 14% | 7 | 10 | 43% |
| Engineering Support – Meter | 13 | 16 | 23% | 1 | 1 | 0% | 4 | 5 | 25% |
| Engineering Support - GIS | 9 | 9 | 0% | 1 | 1 | 0% | 1 | 1 | 0% |
| **Total** | **131** | **129** | **-2%** | **51** | **52** | **2%** | **56** | **61** | **9%** |

**Table 7b: Comparison of MP's 2022 and 2023 Staffing Levels of Common Staff[33]**

| Description | 2022 | 2023 | Δ |
|---|---|---|---|
| Line Ops Support – Service Dispatch | 8 | 8 | 0% |
| Line Ops Support – System Operations | 20 | 21 | 5% |
| Line Ops Support – Veg. Management | 3 | 3 | 0% |
| Engineering Support – Relay | - | 8 | - |
| Engineering Support – Transmission | 6 | 7 | 17% |
| Engineering Support – Substation | 18 | 17 | -6% |
| Contractors – Line | 25 | 52 | 108% |
| Contractors – Groundline | 10 | 10 | 0% |
| Contractors – Vegetation | 68 | 80 | 18% |
| **Total** | **158** | **206** | **30%** |

MP increased overall staffing levels by 52 positions or 13% from 2022 to 2023.

- Engineering Support staffing increased by 15% (14 roles) in 2023.
- MP increased contractors serving the Company by 38% (39 roles) in 2023. In response to a Department IR, MP explained that the Company has utilized contractor roles to mitigate

[31] Petition, page 55, Table 15.
[32] Petition, page 54 notes that though the Central Work Center shows more employees, many of those individuals assist or concentrate their efforts across the entire service territory.
[33] Petition, page 55, Table 15.

staffing challenges for certain roles. Many of the contractors work on the transmission system as well as distribution projects.[34]

The Department acknowledges MP's fulfillment of the requirements of Minnesota Rules 7826.0500, subpart 1.J.

*9. Other Information*

MP provided additional reliability performance data as required by Commission orders beginning on page 55 of its SRSQ Report. The Department reviews this information below, in section F. Compliance with Pertinent Commission Orders.

## *D. RELIABILITY STANDARDS FOR 2024*

Minnesota Power did not propose changes to the current benchmarking methodology for reliability performance.[35] The Department recommends the Commission continue the current process of using the IEEE Distribution Reliability Group's annual benchmarks for MP's 2024 Reliability Standards by setting the 2024 statewide reliability standards at the IEEE benchmarking 2nd quartile for medium utilities and the work center reliability standards at the IEEE benchmarking 2nd quartile for small utilities. The 2024 goals would be based on the IEEE Benchmark Year 2025 Results for 2024 Data, anticipated to become available in August 2025.

Please see section C.1. for further commentary on MP's reliability performance and standards for 2022 and 2023.

## *E. ANNUAL SERVICE QUALITY REPORT*

Minnesota Rules 7826.1300 requires each utility to file information regarding the reporting requirements detailed in Minnesota Rules 7826.1400 through 7826.2000 regarding service quality performance.

The Department provides a brief summary and analysis of the service quality reporting requirements from statute and as modified by Commission Orders below.

*1. Meter-Reading Performance (Minn. R. 7826.1400)*

The following information is required for reporting on meter-reading performance by customer class for each month:

A. The number and percentage of customer meters read by utility personnel;

[34] Department Attachment 5 (Company response to Department IR 2).
[35] Petition, page 100.

B. The number and percentage of customer meters self-read by customers;
C. The number and percentage of customer meters that have not been read by utility personnel for periods of six to 12 months and for period of longer than 12 months, and an explanation as to why they have not been read; and
D. Data on monthly meter-reading staffing levels, by work center or geographical area.

Minnesota Power provided detailed meter reading information, including information on its monthly meter reading staffing levels. Table 8 summarizes MP's meter reading statistics.

**Table 8: Meter-Reading Performance 2014 -2023[36]**

| | Company Read | Estimated | % Estimated |
|---|---|---|---|
| 2014 | 133,647 | 32 | 0.02% |
| 2015 | 143,887 | 67 | 0.05% |
| 2016 | 149,832 | 73 | 0.05% |
| 2017 | 149,991 | 73 | 0.05% |
| 2018 | 150,069 | 73 | 0.05% |
| 2019 | 150,157 | 75 | 0.05% |
| 2020 | 153,075 | 1,921 | 1.24% |
| 2021 | 154,705 | 842 | 0.54% |
| 2022 | 154,148 | 471 | 0.30% |
| 2023 | 157,087 | 124 | 0.08% |
| **10-Year Average** | **149,660** | **375** | **0.24%** |

Over the last ten years, MP has increased their total number of meters it reads. The number of meters estimated in 2023 is the lowest (0.08%) since 2019 and is well below the ten-year average. MP began installing Advanced Metering Infrastructure (AMI) meters in 2009 and completed the expansion to AMI meters in 2023; 99.74% of MP's meters are now AMI – Solid State devices. Residential customers who opt out of AMI now pay a monthly fee to read and maintain the meter.[37] In 2023, there was an average of 2.08 self-read meters per month. Going forward, the residential meters which were self-read will be read by Company personnel as part of the AMI opt-out process.

The Company reported six meters at Company-read service points were not read for a period of 6-12 months in 2022 and that no meters were not read for a period greater than 12 months. Customers with Company-read meters that were not read for 6-12 months were left reminder notices at the premises and/or sent reminder letters of the utility's need to access the meter.[38]

[36] Petition, pages 60 – 62, Table 21 – 25.
[37] Petition, pages 58 - 59.
[38] Petition, pages 63 – 64.

The Company reported it maintained an average of approximately 5.83 meter-reading customer service representatives in 2023. This number increased slightly from 5.58 reported in 2022.

The Department acknowledges MP's fulfillment of the requirements of Minnesota Rules, part 7826.1400.

*2. Involuntary Disconnections (Minn. R. 7826.1500)*

The following table summarizes residential customer disconnection statistics reported by MP in its annual reports.

**Table 9: Residential Customer Involuntary Disconnect Information[39]**

| | Received Disconnect Notice | CWR Protection | | | Disconnected Involuntarily | Restored within 24 Hours | | Restored by Entering Payment Plan |
|---|---|---|---|---|---|---|---|---|
| | | Sought | Granted | % Granted | | Count | % | |
| 2014 | 35,796 | 2,852 | 2,852 | 100.0% | 3,257 | 799 | 24.5% | 443 |
| 2015 | 22,537 | 2,173 | 2,173 | 100.0% | 520 | 154 | 29.6% | 56 |
| 2016 | 12,191 | 2,916 | 2,916 | 100.0% | 1,933 | 213 | 11.0% | 634 |
| 2017 | 17,454 | 3,475 | 3,475 | 100.0% | 2,668 | 1,284 | 48.1% | 1,680 |
| 2018 | 18,961 | 4,311 | 4,311 | 100.0% | 2,492 | 1,219 | 48.9% | 1,592 |
| 2019 | 16,049 | 4,232 | 4,232 | 100.0% | 2,138 | 1,056 | 49.4% | 1,357 |
| 2020 | 5,925 | 2,845 | 2,845 | 100.0% | 298 | 149 | 50.0% | 206 |
| 2021 | 17,523 | 1,295 | 1,295 | 100.0% | 1,019 | 566 | 55.5% | 546 |
| 2022 | 21,538 | 2,404 | 2,404 | 100.0% | 2,027 | 1,295 | 63.9% | 1,345 |
| 2023 | 20,927 | 3,968 | 3,968 | 100.0% | 3,035 | 1,991 | 65.6% | 2,111 |
| **10-Yr Avg** | **18,890** | **3,047** | **3,047** | **100.0%** | **1,939** | **873** | **44.7%** | **997** |

MP reported that 22,090 disconnection notices were sent to residential, small commercial, and large commercial customers in 2023 with 20,927 (95%) of these notices being for residential customers. All customers seeking cold weather rule protection were granted it, and the percent of disconnections restored within 24 hours has been increasing over the last ten years.

The eviction moratorium that was in place during the early part of the COVID-19 pandemic ended in 2021,[40] and as anticipated, 2022 and 2023 disconnection notices increased. The 2022 and 2023 levels are higher than the levels immediately preceded the pandemic, so the Department will monitor this figure in future reports.

The Department acknowledges MP's fulfillment of the requirements of Minnesota Rules 7826.1500.

[39] Petition, pages 72 – 75, Tables 34 – 37 and Figure 20.
[40] The disconnection moratorium was in effect from March 2020 to August 2021. See Docket E, G999/CI-20-375.

*3. Service Extension Request Response Times (Minn. R. 7826.1600)*

The following information is required for reporting on service extension request response times by customer class and calendar month:

A. The number of customers requesting service to a location not previously served by the utility and the intervals between the date service was installed and the later of the in-service date requested by the customer or the date the premises was ready for service; and
B. The number of customers requesting service to a location previously served by the utility, but not served at the time of the request, and the intervals between the date service was installed and the later of the in-service date requested by the customer or the date the premises were ready for service.

Table 10 below summarizes MP's 2023 service extension request data.

**Table 10: 2023 Service Extension Requests[41]**

| | New Service | | Previously Served Location | |
|---|---|---|---|---|
| | # of Installations | % Request Date Met | # of Installations | % Request Date Met |
| Residential | 590 | 82.37% | 402 | 99.25% |
| Commercial | 150 | 70.67% | 26 | 96.15% |
| Industrial | - | - | - | - |
| Municipal | 20 | 75% | 1 | 0% |
| **Total** | **760** | **79.9%** | **429** | **98.8%** |
| **5-Yr Avg** | **1,230** | **66.0%** | **1,943** | **94.1%** |

In 2023, MP had fewer service extension requests than in 2022 for both new sites and previously served locations. New connections in 2022 and 2023 were also below the five-year average, and the Company's rate of meeting the requested in-service date is higher in 2023 than the five-year average.

For new service extensions, the primary reason that MP reported not meeting the requested in-service date was customer's contractor/electrician not ready followed by customer not ready (these two reasons account for 70% of in-service date not met for new service extensions).[42] For locations previously served, the primary reason the in-service date was not met was that the customer was not ready.[43]

The Department acknowledges that MP has fulfilled the requirements of Minnesota Rules 7826.1600.

[41] Petition, pages 79 – 85, Figures 24 – 31.
[42] Petition, page 83, Figure 28.
[43] Petition, page 85, Figure 32.

*4. Call Center Response Times (Minn. R. 7826.1200 and 7826.1700)*

The annual service quality report must include a detailed report on monthly call center response times, including calls to the business office and calls regarding service interruptions. Further, Minnesota Rules 7826.1200 requires that 80% of calls during business hours be answered within 20 seconds.

**Table 11: Call Center Response Times**

| | Business Hours | | After Hours | | Combined |
|---|---|---|---|---|---|
| | **Total Calls Offered** | **% Answered within 20 Seconds** | **Total Calls Offered** | **% Answered within 20 Seconds** | **% Answered within 20 Seconds** |
| 2020 | 115,251 | 81.48% | 18,202 | 50.69% | 77.28% |
| 2021 | 123,019 | 50.01% | 19,287 | 48.95% | 49.86% |
| 2022 | 134,035 | 44.85% | 19,572 | 41.42% | 44.42% |
| 2023 | 118,212 | 79.95% | 14,611 | 51.74% | 76.85% |
| **4-Year Average** | **122,629** | **64.07%** | **17,918** | **48.20%** | **62.10%** |

MP did not meet the requirement to answer 80% of calls during business hours within 20 seconds, though the Company did see an improvement from the recent low in 2022.

The Company answered 76.85% of all calls within 20 seconds, and 79.95% of calls during business hours within 20 seconds in 2023. May was the lowest performance month with 66% of calls during business hours answered within 20 seconds, and December was the highest performance month with 89% of calls during business hours (7 am – 5:30 pm) answered within 20 seconds. MP explained that the Company had two experienced Call Center staff move onto other positions in the Company in April and May, and that May usually is a high-volume call month. As new employees gained experienced, MP was able to, on average, answer greater than 80% of calls within 20 seconds during business hours in the second half of the year.[44]

MP noted that nearly 90% of the Company's calls are received during business hours. After hours, the Company has one representative regularly scheduled due to lower call volume. During higher call events (i.e. storms or outages), additional Call Center representatives may be called in if needed.[45]

The Department concludes MP is in compliance with the reporting required under Minnesota Rules 7826.1200 and 7826.1700 and saw an improvement in during business hours call response times in the second half of 2023.

[44] Petition, pages 87-89.
[45] Department Attachment 6 (Company response to Department IR 4).

*5. Emergency Medical Account Status (Minn. R. 7826.1800)*

The reporting on emergency medical accounts must include the number of customers who requested emergency medical account status under Minnesota Statutes section 216B.098, subdivision 5, the number of applications granted, the number of applications denied, and the reasons for each denial.

In 2023, 98 MP customers requested, and all were granted, emergency medical account status.[46] This is a decrease from the 102 customers who requested and were granted emergency medical account status in 2022.

The Department acknowledges MP's fulfillment of the requirements of Minnesota Rules 7826.1800.

*6. Customer Deposits (Minn. R. 7826.1900)*

No customers were required to make a deposit as a condition of receiving service in 2023.

MP refunded all customer deposits in 2014 and the Company generally does not collect deposits, though deposits "may be reconsidered in the future as part of a specific electric service agreement provision for a commercial or industrial customer."[47]

The Department acknowledges MP's fulfillment of the requirements of Minnesota Rules 7826.1900.

*7. Customer Complaints (Minn. R. 7826.2000)*

The reporting on customer complaints must include the following information by customer class and calendar month:

A. The number of complaints received;
B. The number and percentage of complaints alleging billing errors, inaccurate metering, wrongful disconnection, high bills, inadequate service, and the number involving service-extension intervals, service-restoration intervals, and any other identifiable subject matter involved in 5% or more of customer complaints;
C. The number and percentage of complaints resolved upon initial inquiry, within 10 days, and longer than 10 days;
D. The number and percentage of complaints resolved by taking: the action the customer requested, a mutually agreed upon compromise, providing the customer with information that demonstrates the grieved situation is not within the utility's control, or refusing to take the action requested by the customer; and

[46] Petition, page 92.
[47] Report, page 93.

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

MP's report on customer complaints included the required information. Table 12 contains a limited summary of MP's customer complaint history.

**Table 12: Customer Complaint Selected Summary (2019 – 2023)[48]**

| Year | Number of Complaints | # Forwarded by CAO | % Same Day Resolution | % Resolved by Taking Customer-Requested Action | Top Complaint: High Bill |
|---|---|---|---|---|---|
| 2019 | 525 | 40 | 60.0% | 13.9% | 69.3% |
| 2020 | 545 | 30 | 52.0% | 21.5% | 78.7% |
| 2021 | 513 | 27 | 29.6% | 29.0% | 81.5% |
| 2022 | 346 | 32 | 13.9% | 15.6% | 81.9% |
| 2023 | 161 | 25 | 15.5% | 11.2% | 82.6% |
| **5-Year Average** | **418** | **31** | **34.2%** | **18.2%** | **78.8%** |

The number of complaints has been trending down in recent years, and the count in 2023 reflects fewer than half the number of complaints received in 2022. In 2023, 91.3% of complaints were from residential customers.[49]

High bill has consistently been MP's top complaint category, making up a high-of 82.6% of complaints in 2023. The Company explained that it believes the number of complaints in a given year is in large part driven by increases on customer bills through rate cases (interim rates or final rates), other line item changes, and/or bill increases due to increased usage (typically with particularly cold winters). The Company noted that the most recent rate case's interim rates went into effect on January 1, 2024 and it anticipates a higher number of complaints in 2024 compared to 2023.[50]

The Company received 25 customer complaints that were forwarded from the Commission's CAO, below the five-year average of 31.

The Department acknowledges MP's fulfillment of the requirements of Minnesota Rules 7826.2000.

[48] Petition, pages 93 – 96.
[49] Petition pages 93-94. Note also that MP's customer complaint count is limited to Residential and Commercial customer complaints; complaints from other customer classes are handled individually and not recorded in the tracking system.
[50] Department Attachment 7 (Email response from MP regarding customer complaints).

## *F. COMPLIANCE WITH PERTINENT COMMISSION ORDERS*

### *1. Docket No. E015/M-19-254 Order dated January 28, 2020*

The Commission's January 28, 2020 Order in Docket No. E015/M-19-254 included Attachment B: Updated Annual Reporting Requirements.[51] The Department summarizes MP's compliance with each reporting requirement in turn below.

The requirements outlined in Attachment B include some reliability performance metrics that were discussed earlier in these comments as well as some additional metrics.

The Department notes that the Order required utilities to provide normalized and non-normalized data for several metrics. From the Department's perspective, normalizing data may be useful when looking at broad system trends such as SAIDI and SAIFI, and average customer impacts such as CAIDI and MAIFI can be deduced by these system trends. In contrast, the purpose of capturing CEMI and CELI is to better understand extremes (rather than averages), so normalizing this data seems to minimize the impact of multiple or lengthy interruptions experienced by customers by erasing the most extreme examples. With that said, the Department can appreciate the usefulness of being able to compare normalized and non-normalized data, and so will not make a reporting recommendation at this time.

#### *i. Non-normalized SAIDI, SAIFI, and CAIDI values*

There was one major event excluded based on the IEEE 2.5 beta method in 2023, so the normalized and non-normalized values differ. The Department's commentary on reliability performance in section C.1. above is based on normalized data.

MP provided the non-normalized SAIDI, SAIFI, and CAIDI values in Table 9 of its Annual Report.[52] The Central service area appears to have been most strongly affected by 2023's major event, while the Northern service area's normalized and non-normalized SAIDI, SAIFI, and CAIDI are identical and the Western service area's normalized and non-normalized SAIDI and SAIFI are quite close.

#### *ii. Normalized SAIDI, SAIFI, and CAIDI values*

The Department's commentary on normalized SAIDI, SAIFI, and CAIDI values is provided in section C.1. above.

#### *iii. MAIFI[53] – Normalized and Non-normalized*

MP provided the normalized and non-normalized MAIFI on page 46 of its annual report, and the Department provides this information below.

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[51] The Order's Attachment B is included as Department Attachment 1.
[52] Petition, page 46.
[53] MAIFI = Momentary Average Interruption Frequency Index.

**Table 13: 2023 MAIFI[54]**

| Work Center | Non-Normalized (A) | Normalized (B) | Difference (A – B) |
|---|---|---|---|
| Central | 3.07 | 2.84 | 0.23 |
| Northern | 2.71 | 2.71 | - |
| Western | 5.05 | 5.04 | 0.01 |
| System | 3.60 | 3.48 | 0.12 |

Customers in the Western service area experienced the highest rate of momentary outages in 2023. Normalization of data most strongly impacted customers of the Central service area for MAIFI, indicating that the major storm event resulted in increased momentary outages for this area.

*iv. CEMI[55] – Normalized and Non-normalized outage levels of 4, 5, and 6*

MP's CEMI reporting requirements were clarified by a later Commission order to include system and service area reporting for CEMI data, with storm included and storm excluded, at outage levels 3, 4, 5, and 6.[56] The Company provided this information in Table 16 of its report.

**Table 14: Storm Included CEMI for 2023 and 3-Year Average (2021 – 2023)** [57]

| Number of Interruptions | Overall | | Central | | Northern | | Western | |
|---|---|---|---|---|---|---|---|---|
| | 2023 | Avg* | 2023 | Avg | 2023 | Avg | 2023 | Avg |
| 3+ | 4.56% | 7.21% | 4.72% | 8.62% | 2.92% | 5.15% | 5.16% | 10.97% |
| 4+ | 1.59% | 3.05% | 0.34% | 0.33% | 0.02% | 3.92% | 4.74% | 5.42% |
| 5+ | 0.31% | 1.31% | 0.00% | 1.49% | 0.00% | 0.00% | 1.05% | 4.08% |
| 6+ | 0.06% | 1.46% | 0.00% | 2.46% | 0.00% | 0.04% | 0.21% | 1.71% |

**The Overall averages are five-year averages (2019 – 2023).*

MP has been reporting service area-level data since 2021, so the Department reviewed 2023 CEMI rates against the three-year average for 2021 – 2023 for work centers and against the five-year average (2019 – 2023) for the overall system. The 2022 CEMI rates were at the three-year high for all reporting areas (Overall, Central, Northern, and Western), and the 2023 data reflects a decrease from both 2022 and three-year average rates.

[54] Petition, Table 9 on page 46.
[55] CEMI = Customers Experiencing Multiple Interruptions.
[56] Docket No. E015/M-23-75 Order dated December 5, 2023, order point 7.
[57] Petition, page 55 Table 16. See also Department Attachment 8 for historic CEMI of previously unreported data (Company response to Department IR 7).

*v. Highest number of interruptions experienced by any one customer*

MP provided this information on page 56 of its Annual Report by work center:

- Fort Ripley 1: 7.83 outages (Western);
- Big Rock 272: 4.33 outages (Central); and
- OHV Park 1: 4.00 outages (Northern).

*vi. CELI[58] – Normalized and Non-normalized at intervals greater than 6, 12, and 24 hours*

MP's CELI reporting requirements were clarified by a later Commission order to include system and service area reporting for CELI data, with storm included and storm excluded, for outages of 6, 12, and 24 hours.[59] The Company provided this information in Table 17 of its report.

**Table 15: Storm Included CELI for 2023 and 3-Year Average (2021 – 2023)**[60]

| Length of Interruptions | Overall | | Central | | Northern | | Western | |
|---|---|---|---|---|---|---|---|---|
| | 2023 | Avg* | 2023 | Avg | 2023 | Avg | 2023 | Avg |
| 6 hr | 2.73% | 7.19% | 3.76% | 4.68% | 3.73% | 12.25% | 0.30% | 16.13% |
| 12 hr | 0.63% | 3.03% | 0.05% | 2.19% | 3.67% | 2.51% | 0.03% | 8.36% |
| 24 hr | 0.01% | 0.86% | 0.00% | 1.06% | 0.03% | 0.57% | 0.01% | 2.39% |

**The Overall averages are five-year averages (2019 – 2023).*

Similar to CEMI data, CELI was at a recent high in 2022, so 2023's CEMI data reflects a decrease from both 2022 and the recent averages for lengthy interruptions across all regions and each of the reported interruption lengths.

The Western service area had the fewest customers experiencing lengthy interruptions while the Central and Northern service areas had similar percentages of customers experiencing 6 hour interruptions, but those interruptions persisted to 12 hours for more customers in the Northern service area.

*vii. Longest interruption experienced by any one customer*

MP provided this information by work center on page 56 of its Annual Report. The Company reported the longest interruptions experienced at each of its work centers.

[58] CELI = Customers Experiencing Lengthy Interruptions.
[59] Docket No. E015/M-23-75 Order dated December 5, 2023, order point 7.
[60] Petition, page 56 Table 17. See also Department Attachment 8 for historic CELI of previously unreported data (Company response to Department IR 7).

The Company's longest interruption was 6,360 minutes, affecting one customer of the Northern Work Center. A structure fire burned down the secondary wires and damaged the service point on the adjacent customer's property in this outage.

The longest customer outage in the Central Work Center was 5,353 minutes and affected two customers. In this outage, the line crew found that a pole was cut down and the neutral wire had been stolen.

Finally, at the Western Work Center, the longest customer outage was 2,965 minutes, affecting one customer. This outage occurred when the customer hit the meter and service point while clearing snow with a skid steer.

*viii. Breakdown of field versus office staff*

The Department previously discussed staffing and included this information in Tables 7a and 7b of these comments.

*ix. Estimated restoration times*

The Company provided this information on page 57 of its Annual Report and provided clarification in response to a Department IR.

MP provides initial estimates when an outage is reported based on the GIS model and prediction engine in the software. The Company provides a final estimated restoration time after a sight/system assessment is completed in the field. The Petition's Table 19 provides the accuracy of the initial and final estimated restoration times compared to the actual restoration time.[61]

**Table 16: Estimated Time of Restoration (ETR) Accuracy**

| ETR Accuracy % | Earlier than -90 minutes | -90 to 0 minutes | 0 to +30 minutes | Later than 30 minutes |
|---|---|---|---|---|
| Initial | 6.58% | 5.80% | 4.45% | 83.16% |
| Final | 0.00% | 0.00% | 81.70% | 18.30% |

MP noted that accuracy of ETRs in the desired range (MP is using within -90 to zero minutes and zero minutes to +30 minutes of ETR as the "desired range") from 10.26% at initial estimate to 81.70% at final estimate. In the 2022 Annual Report, MP had indicated that initial ETRs were over 87% accurate and final ETRs were over 98% accurate.

The Department asks MP to address in reply comments the degradation in ETR accuracy (both initial and final) that was seen in 2023. Please provide an explanation for the reduced ETR accuracy and describe any changes in tracking restoration time accuracy.

[61] Petition Table 19 is on page 57 of the Annual Report. See also Department Attachment 9 (Company Response to Department IR 3) for clarification on the ETR reporting.

*x. IEEE Benchmarking results for SAIDI, SAIFI, CAIDI, and MAIFI*

This requirement was superseded by a similar requirement in the Commission's Order dated March 2, 2022 in Docket No. E015/M-21-230. Reliability performance and benchmarking is discussed further in section C.1. Reliability Performance of these comments.

*xi. Performance by customer class*

The Company provided this information in Table 18 on page 57 of its Annual Report.

The Average Service Availability Index (ASAI) data for 2023 appears consistent with 2021 and 2022 data. Most other metrics are lower (improved) in 2023 compared to 2022. Non-normalized Residential and Commercial SAIDI and CAIDI show the greatest variance in 2023 from the 2021 – 2023 three-year average.

*xii. Causes of sustained customer outages, by work center*

MP provides a summary of worst performing feeder information including number of customers impacted and causes on pages 50 – 53 of its Annual Report.

MP also provided Appendix A which includes Distribution System Status Outage Notifications including outage details such as outage duration, number of customers affected, and causes of outages. The notifications in Appendix A do not include work centers.

The Department recommends that MP add work center as a data point in the Distribution System Status Outage Notifications, included in Appendix A of the 2023 Annual Report, in future SRSQ reports.

*2. Docket No. E015/M-19-766 Order dated December 9, 2020: Remote-Reconnect Pilot*

The Commission's December 9, 2020 Order in Docket E015/M-19-766 approved the Company's Remote-Reconnect Pilot program and set requirements for pilot program data to be reported in the Company's annual SRSQ report.[62] The Remote-Reconnect Pilot Program was initially approved for three years, but was later extended to five years, running from August 2021 – July 2026.[63]

Table 17, below, summarizes the Remote-Reconnect Pilot program's reporting.

[62] Remote-Reconnect program reporting requirements are noted on page 4 of the Order.
[63] The Remote-Reconnect Pilot Program was extended from three to five-years, running from August 2021 – July 2026, through the Commission's January 9, 2024 Consent agenda.

**Table 17: Remote-Reconnect Reporting (2021 – 2023)[64]**

| Reporting Criteria | 2021[65] | 2022 | 2023 |
|---|---|---|---|
| Number of Participating Customers | 3,731 | 4,437 | 10,178 |
| Number of LIHEAP[66] Customers (monthly average) | 8,100 | 8,876 | 9,518 |
| Number of Self-Declared Low-Income Customers | NA | NA | 564 |
| Number of Remote-Reconnect Participants receiving LIHEAP | 904 | 823 | 2,027 |
| Number of Customers who Opted Out of the Pilot | 15 | 24 | 42 |
| Estimated Annual Cost Savings from Remote-Connect Program | ($464,000) | ($48,000) | ($652,000) |

The Remote-Reconnect program has had increasing participation each year of the pilot, while costs for the program have fluctuated. MP explained that in 2022, fewer remote-capable meters (706) were installed, largely due to meter supply and workforce availability to install. MP added 5,741 remote-capable meters in 2023 and cited this as the primary driver of 2023 cost increases over 2022. The Company estimated that Pilot program net costs in 2024 will be $185,000 (costs continuing to exceed savings), and that approximately 2,000 remote-capable meters will be installed.[67]

Beginning in October 2023, customers who opt out (without documentation of health reasons for opting out) of AMI will be charged $20 per month to cover the costs associated with providing and maintaining old technology. Five customers submitted medical professional documentation and have had their AMI opt-out fees waived.[68]

**Table 17a: Remote-Reconnect Comparison of Reconnections within 24 Hours[69]**

| | 2021 | 2022 | 2023 |
|---|---|---|---|
| Remote | 200 | 600 | 1,102 |
| Standard (Not Remote) | 337 | 695 | 889 |
| % of Reconnects within 24 hours that were Remote | 37.24% | 46.33% | 55.35% |

Table 17a shows that the ratio of reconnections within 24 hours that were reconnected remotely has been increasing over the last three years, and over half of the reconnections were done remotely in 2023.

**Table 17b: Comparison of Reconnection Times (2021 and 2023)[70]**

| | 2021 | 2022 | 2023 |
|---|---|---|---|
| Standard Process | 8+ days | Less than 10 days | 17.5 days |
| Remote-Reconnect Pilot | Less than 6 days | 9+ days | Less than 7 days |

[64] Table data retrieved from Petition pages 77 – 79.
[65] Note that the Pilot began in August 2021, so 2021's data is for a partial year.
[66] LIHEAP = Low-Income Home Energy Assistance Program.
[67] Department Attachment 10 (Company response to Department IR 8).
[68] Petition, pages 77-78. The opt-out fee waiver requires annual renewal of the health exemption.
[69] Petition, page 79.
[70] Department Attachment 11 (Company email providing supplemental information to Petition, Table 38).

Reconnection times for standard process customers have doubled from 2021 to 2023 while remote-reconnect customers' reconnection times have fluctuated more narrowly, as shown in Table 17b above. MP is now able to provide a greater level of detail on reconnection times as shown in Table 17c below.

**Table 17c: Average Reconnection Time Based on Customer Status (2023)[71]**

| | Standard Meter | Remote-Capable Meter |
|---|---|---|
| **From Disconnection** | | |
| LIHEAP Customers | 5 Days, 4:34:44 | 3 Days, 7:21:56 |
| Self-Declare Customers | 5 Days, 5:15:35 | 4 Days, 1:14:57 |
| Standard Customers | 22 Days, 6:6:31 | 9 Days, 3:52:29 |
| All Customers | 17 Days, 12:48:44 | 6 Days, 22:23:08 |
| **From Customer-Request** | | |
| LIHEAP Customers | 0 Days, 4:13:56 | 0 Days, 0:0:53 |
| Self-Declare Customers | 0 Days, 2:59:03 | 0 Days, 0:0:51 |
| Standard Customers | 0 Days, 11:54:00 | 0 Days, 0:9:57 |
| All Customers | 0 Days, 9:44:40 | 0 Days, 0:6:28 |

In 2023, MP provided a finer level of detail on reconnection timelines, differentiating standard and remote customer times to reconnect from disconnect and from when the customer initiated the reconnection (request) as well as customer type (LIHEAP, Self-Declare, and Standard). At the Department's request, MP also provided the average reconnection timelines for all customers with a standard meter and all customers with a remote-capable meters. This information is shown in the Department's Table 17c above.

MP noted that since customer action can significantly impact the reconnection time, the Company provided average reconnection times from disconnect as well as from customer-request to reconnect.[72] For all customers, the average reconnection time from customer-request is less than a day. Customers with standard meters wait approximately nine hours and forty-five minutes to reconnect after request. Customers with remote-capable meters wait approximately six and a half minutes from request to reconnect.

The Department requests that MP include the average time to reconnect using the remote-reconnect program compared to the standard reconnection process in future SRSQ reports, as required in the December 9, 2020 Order in Docket No. E015/M-19-766.

[71] Ibid.
[72] Petition, page 78.

*3. Docket No. E015/M-20-404 Order dated December 18, 2020*

*i.* ***Ordering paragraph 5:*** *The utilities must file the reliability for feeders with grid modernization investments such as Advanced Metering Infrastructure (AMI) or Fault Location Isolation and Service Restoration (FLISR) to the historic five-year average reliability for the same feeders before modernization investments.*

Petition Table 4 on page 26 provides the reliability metrics for feeders with grid modernization investment. The Company also provided a brief narrative on modernization investments and experiences. In this narrative, MP noted that there were also two feeders, SLA-203 and LSP-208, which were built with IntelliRupters (a FLISR technology) and, as a result, these feeders do not have a previous five-year history to compare to 2023 reliability.[73]

*ii.* ***Ordering paragraph 16:*** *After consultation with Department and Commission staff, each utility must file revised categories for reporting complaint data.*

As a result of the 2021 Complaint Category Working Session, parties agreed to provide additional detail for reporting of the "Inadequate Service" category to include four sub-categories: Field/Operations, Customer Service, Programs and Services, and Cold Weather Rule Protection.[74] MP included these new categories in its customer complaint categories for the first time in its 2023 SRSQ Report.[75] MP's Table 43 shows High Bill was the highest complaint category in 2023, accounting for 75.16% of residential customer complaints and 7.45% of commercial customer complaints. Service Restoration was the second highest complaint category for residential customers at 6.21%.

*4. Docket No. E015/M-21-230 Order dated December 2, 2021*

*i.* ***Ordering paragraph 2 and 3:*** Required MP to provide new information regarding electronic utility-customer interactions beginning with its reports filed in 2023 and required to report for three reporting cycles.

MP provided uptime and error rate percentage metrics for its electronic utility-customer interactive platforms in Table 31 -33 of its filing,[76] reproduced here:

[73] Petition, page 27.
[74] Petition, page 98-99.
[75] Petition, Table 43 on pages 94 – 95 shows the Residential and Commercial Complaints by Type for 2023.
[76] Petition, page 70.

**Table 18: Minnesota Power's Uptime Percentage**

| Site | % Uptime | # of Outages | Downtime (Minutes) |
|---|---|---|---|
| General Website – MN Power.com | 99.95% | 109 | 260 |
| MyAccount | 99.99% | 3 | 11 |
| Outage Reporting Form | 100.00% | 17 | 18 |
| Outage Map | 100.00% | 0 | 0 |
| Payment Service through Speedpay.com | 99.96% | - | - |

MP provided the percent uptime for its online payment service through Speedpay.com in Table 31 on page 70 of its Annual Report, but it does not appear to have included the error rate percentage information required under Order paragraph 2. The Department requests MP provide this information in reply comments.

The above data indicates similar uptimes as were reported by MP in 2022. The MNPower.com site had more downtime in 2023 (260 minutes) compared to 2022 (75 minutes); resulting in a 0.03% decrease in the site's percent uptime. Overall, the Company's sites uptime appears consistent in 2023 with what was reported in 2022.

*i.* ***Ordering paragraph 4:*** Required MP to continue to provide information on electronic utility-customer interactions as outlined in the Order.

The Company provided the required information on pages 67 – 70 of its Annual Report. The Department summarizes 2021 – 2023 page view and app installation data in Table 19 below.

**Table 19: Comparison of Minnesota Power's 2021-2023 Page Views and App Installations[77]**

| Description | 2021 Results | 2022 Results | 2023 Results |
|---|---|---|---|
| Website | 1,598,725 | 1,879,499 | 1,667,700 |
| MyAccount | 490,667 | 850,123 | 814,675 |
| Mobile App Installations | 8,506 | 8,332 | 8,162 |
| Facebook | 31,686 | 16,243 | 26,510 |
| Instagram | 30,647 | 1,086 | 2,181 |
| LinkedIn | No data | No data | 14,000 |

Minnesota Power also provided a summary of emails received through its customerservice@mnpower.ocm email address with categorization of email subject. The Department summarizes these annual figures for 2020 through 2023 in the table below.

[77] Petition, Table 29 on Page 67.

**Table 19a: Comparison of Minnesota Power's 2020 - 2023 Annual Number of Emails Received and Approximate Number of Emails Received by Subject Category[78]**

| Email Subject Category | 2020 (approx.) | 2021 (approx.) | 2022 (approx.) | 2023 |
|---|---|---|---|---|
| Fuel Assistance | 5,600 | 7,000 | 7,500 | 8,001 |
| Miscellaneous | 1,300 | 2,000 | 2,200 | 3,045 |
| Billing Inquiry | 1,600 | 1,600 | 1,600 | 1,438 |
| Account Maintenance | 500 | 800 | 650 | 912 |
| Service Start/Stop | 1,050 | 700 | 700 | 662 |
| Phone Transfer | 600 | 1,000 | 1,000 | 652 |
| Not specified | 1,100 | 2,200 | No data | 102 |
| **Total Email Count** | **12,722** | **16,927** | **16,320** | **17,065** |

MP's email tracking has been fairly consistent from 2021 to 2023 and reflects an increase from 2020 email levels. Fuel Assistance and Billing Inquiries have been high-frequency email categories over the last four years, with some variation in the remaining categories making up the top five categories each year.

*ii.* ***Ordering paragraph 7:*** Required MP to include a public-facing summary with its annual SRSQ Report. This requirement was later updated to require the SRSQ summary be published on the website after a single click away from the home page.[79]

The Company includes its 2023 public-facing summary on pages 13 – 14 of its 2023 Report. The summary is published on MP's website, one-click from the homepage at https://minnesotapower.blob.core.windows.net/content/Content/Documents/Company/Transmission/SRSQ_2023.pdf. To access the summary from the home page, the user must scroll to the bottom of the page and select the 2023 Safety, Reliability, and Service Quality Report link under the Energy Portfolio header.

*5. Docket No. E015/M-21-230 Order dated March 2, 2022*

*i.* ***Ordering paragraph 2:*** *Set Minnesota Power's 2021 statewide reliability standards at the IEEE benchmarking 2nd Quartile for medium utilities and sets work center reliability standards at the IEEE benchmarking 2nd quartile for small utilities.*

MP's reliability standards were first set to IEEE benchmarking 2nd quartile for both statewide (medium utilities as standard) and work centers (small utilities as standard) for the 2021 performance year. The Commission has continued to apply this methodology for MP's reliability standards in subsequent SRSQ

[78] Petition, pages 68-69.
[79] Docket No. E015/M-22-163 Order dated November 9, 2022, order point 8.

orders. Reliability performance and benchmarking is discussed further in section C.1. Reliability Performance of these comments.

ii. ***Ordering paragraph 4:*** Established three work centers for MP, as described in the Company's 2020 report.

The work centers include: Central, Northern, and Western.[80]

*6. Docket No. E015/M-22-163 Order dated January 18, 2023*

Eliminated the standalone Annual Summary of Customer Complaints docket (YY-13) and required utilities to include customer complaint data from Minnesota Rules 7826.2000 in the Annual Service Quality Reports.

*7. Docket No. E015/M-23-75 Order dated December 5, 2023*

*i.* ***Ordering paragraph 2:*** *Set Minnesota Power's 2023 Reliability Standard at the IEEE benchmarking 2nd Quartile for medium utilities. Set Minnesota Power's work center reliability standards at the IEEE benchmarking 2nd quartile for small utilities. Required Minnesota Power to file a supplement to its 2023 SRSQ report 30 days after IEEE publishes the 2023 benchmarking results, with an explanation for any standards the utility did not meet.*

The Company noted these requirements in its filing and agreed that it will provide a supplemental filing within 30 days from when the IEEE publishes the 2023 benchmarking results in the second half of 2024.

*ii.* ***Ordering paragraph 7:*** *Clarified MP's CEMI (3, 4, 5, 6) and CELI (6, 12, 24) reporting requirements to include storm included and excluded data for both the overall system and individual service regions.*

The Department provided commentary on MP's CEMI and CELI reporting in section F.1.iv. (CEMI) and F.1.vi. (CELI above).

[80] Docket No. E015/M-21-230 MP Initial Filing, page 25.

## III. DEPARTMENT CONCLUSIONS AND RECOMMENDATIONS

The Department:

- Recommends the Commission **accept** Minnesota Power's 2023 Safety Report.
- Requests MP provide the following information in reply comments:
    - Provide an explanation for the degradation in ETR accuracy (both initial and final) that was seen in 2023 and describe any changes in tracking restoration time accuracy.
    - Provide the error rate percentage for payment services, including a break down for unexpected errors, errors outside of the customer's control and/or other meaningful categorization, if available.
- Requests MP make the following updates to future SRSQ reports:
    - Add work center as a data point to the Distribution System Outage Notifications (included as Appendix A of the 2023 Annual Report) in future SRSQ reports.
    - Regarding the Remote-Reconnect Pilot Program, provide the overall average time to reconnect using the remote-reconnect program compared to the standard reconnection process, as required in the December 9, 2020 Order in Docket No. E015/M-19-766.
- Will make final recommendations on the Company's 2023 Service Quality Report after reviewing its reply comments.
- Requests that in its compliance filing, once the Institute of Electrical and Electronic Engineers (IEEE) Benchmark Year 2024 Results for 2023 Data are published, MP include second quartile reliability standards for **both** medium and small utilities.
- Will provide a recommendation on the Company's 2023 Reliability Report after reviewing the Company's future Supplemental Filing on IEEE 2023 benchmarking data that MP will file later in 2024.
- Recommends the Commission set the 2024 statewide reliability standards at the IEEE benchmarking 2$^{nd}$ quartile for medium utilities and the work center reliability standards at the IEEE benchmarking 2$^{nd}$ quartile for small utilities.

**Attachment B: Updated Annual Reporting Requirements**

1. Non-normalized SAIDI, SAIFI, and CAIDI values
2. SAIDI, SAIFI, and CAIDI, MAIFI, CEMI, and CELI normalized values calculated using the IEEE 1366 Standard.
3. MAIFI – normalized and non-normalized.
4. CEMI – at normalized and non-normalized outage levels of 4, 5, and 6 interruptions.
5. The highest number of interruptions experienced by any one customer (or feeder, if customer level is not available).
6. CELI – at normalized and non-normalized intervals of greater than 6 hours, 12 hours, and 24 hours.
7. The longest experienced interruption by any one customer (or feeder, if customer level is not available).
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.
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
10. IEEE benchmarking results for SAIDI, SAIFI, CAIDI, and MAIFI from the IEEE benchmarking working group
11. Performance by customer class:

| | | ASAI | SAIDI | SAIFI | CAIDI | MAIFI |
|---|---|---|---|---|---|---|
| Residential | Non-normalized | | | | | |
| | Normalized | | | | | |
| Commercial | Non-normalized | | | | | |
| | Normalized | | | | | |
| Industrial | Non-normalized | | | | | |
| | Normalized | | | | | |

    If reporting by class is not yet possible, an explanation of when the utility will have this capability.
12. Causes of sustained customer outages, by work center.

**Minnesota Department of Commerce**
**85 7th Place East | Suite 280 | St. Paul, MN 55101**
**Information Request**

**Docket Number:** E015/M-24-29 ☐Nonpublic ☒Public
**Requested From:** Claire Vatalaro, Minnesota Power Date of Request: 6/3/2024
**Type of Inquiry:** General Response Due: 6/13/2024

**SEND RESPONSE VIA EMAIL TO**: Utility.Discovery@state.mn.us as well as the assigned analyst(s).
**Assigned Analyst(s):** Mary Beth Kehrwald and Kyle Straiton
**Email Address(es):** marybeth.kehrwald@state.mn.us and kyle.straiton@state.mn.us
**Phone Number(s):** 651-539-1808 and 651-539-1890

**ADDITIONAL INSTRUCTIONS**:
Each response must be submitted as a text searchable PDF, unless otherwise directed. Please include the docket number, request number, and respondent name and title on the answers. If your response contains Trade Secret data, please include a public copy.

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| | |
|---|---|
| **Request Number:** | **5** |
| Topic: | Safety – Injury & Illness Types in OSHA and OSHD Reports |
| Reference(s): | Petition, page 39 |

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**Request:**

MP reported three skin disorder injury/illnesses each of the last two years after eight years with no injuries of this type.

A. Please explain the circumstances of these injuries.
B. Please describe what/if any risk mitigation the Company has implemented to address this increase in skin disorder injuries.

**Response:**

A. Poison Ivy was identified as the cause of the skin irritations in five of the cases. It was suspected in the sixth case but could not be confirmed as the cause of the skin irritation. All cases happened when working in the woods or the right of way near roadways, while maintaining underground lines and other equipment.

B. The Company has implemented multiple mitigation items to address skin irritation, specifically poison ivy, incidents while working on our equipment. The efforts focus on training for employees and products specially made to protect against the oily resin urushiol that causes allergic reactions.

Training for all field staff that focuses on hazard identification to identify areas where poison ivy is likely to grow, plant identification, and best practices when working in these areas. Training also covers proper

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To be completed by responder

| | |
|---|---|
| Response Date: | 6/13/2024 |
| Response by: | Paul McDonald |
| Email Address: | pmcdonald@mnpower.com |
| Phone Number: | 218-349-3085 |

**Minnesota Department of Commerce**
**85 7th Place East | Suite 280 | St. Paul, MN 55101**
**Information Request**

**Docket Number:** E015/M-24-29 ☐Nonpublic ☒Public
**Requested From:** Claire Vatalaro, Minnesota Power Date of Request: 6/3/2024
**Type of Inquiry:** General Response Due: 6/13/2024

**SEND RESPONSE VIA EMAIL TO**: Utility.Discovery@state.mn.us as well as the assigned analyst(s).
**Assigned Analyst(s):** Mary Beth Kehrwald and Kyle Straiton
**Email Address(es):** marybeth.kehrwald@state.mn.us and kyle.straiton@state.mn.us
**Phone Number(s):** 651-539-1808 and 651-539-1890

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cleaning of tools, so the poison ivy is not transmitted from the job sites. There is also a focus on how to wash away poison ivy from the skin including effective products to remove the poison ivy.

The Company has also added products that help protect against poison ivy, like Ivy X, by making them available at all service centers for employees. These products are aimed to protect employees from getting poison ivy or help minimize the effects from the poison ivy after contact.

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To be completed by responder

Response Date: 6/13/2024
Response by: Paul McDonald
Email Address: pmcdonald@mnpower.com
Phone Number: 218-349-3085

## Kehrwald, Mary Beth (She/Her/Hers) (COMM)

**From:** Lee Gustafson (MP) <lgustafson@mnpower.com>
**Sent:** Monday, June 17, 2024 2:32 PM
**To:** Kehrwald, Mary Beth (She/Her/Hers) (COMM)
**Subject:** RE: [EXTERNAL MAIL] 24-29_Reliability Benchmarks
**Attachments:** 2023-IEEE-Benchmarking-Survey.pdf; 2022-Benchmarking-Survey.pdf

| | Medium Utility 2nd Quartile | | | Small Utility 2nd Quartile | | |
|---|---|---|---|---|---|---|
| | SAIDI | SAIFI | CAIDI | SAIDI | SAIFI | CAIDI |
| IEEE Benchmark 2023 (2022 performance data) | 143 | 1.11 | 134 | 193 | 1.39 | 125 |
| IEEE Benchmark 2022 (2021 performance data) | 136 | 1.08 | 126 | 201 | 1.46 | 89 |
| IEEE Benchmark 2021 (2020 performance data) | 128 | 0.98 | 123 | 187 | 1.42 | 119 |

This table has the correct values. The incorrect numbers came from an excel spreadsheet that was not the official results PDF but had a deceptive title. I have attached the official PDFs for your reference. Page 7 on both attachments contain the correct quartile tables.
Thanks,
Lee Gustafson

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**From:** Kehrwald, Mary Beth (She/Her/Hers) (COMM) <MaryBeth.Kehrwald@state.mn.us>
**Sent:** Monday, June 17, 2024 11:40 AM
**To:** Lee Gustafson (MP) <lgustafson@mnpower.com>
**Cc:** Claire Vatalaro (ALLETE) <cvatalaro@allete.com>
**Subject:** RE: [EXTERNAL MAIL] 24-29_Reliability Benchmarks



Apologies, correction to the 2020 performance year territory-wide goals made in the table below – I missed updating that on the first pass to align with the PUC order.

Mary Beth Kehrwald
Public Utilities Financial Analyst
651-539-1808
mn.gov/commerce
Minnesota Department of Commerce
85 7th Place East, Suite 280 | Saint Paul, MN 55101

**Minnesota Department of Commerce**
**85 7th Place East | Suite 280 | St. Paul, MN 55101**
**Information Request**

**Docket Number:** E015/M-24-29 ☐Nonpublic ☒Public
**Requested From:** Claire Vatalaro, Minnesota Power Date of Request: 6/3/2024
**Type of Inquiry:** General Response Due: 6/13/2024

**SEND RESPONSE VIA EMAIL TO**: Utility.Discovery@state.mn.us as well as the assigned analyst(s).
**Assigned Analyst(s):** Mary Beth Kehrwald and Kyle Straiton
**Email Address(es):** marybeth.kehrwald@state.mn.us and kyle.straiton@state.mn.us
**Phone Number(s):** 651-539-1808 and 651-539-1890

**ADDITIONAL INSTRUCTIONS**:
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**Request Number:** **6**
Topic: Voltage Incidents
Reference(s): Petition, page 53

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**Request:**

A. How does MP identify the instances of ANSI voltage violations?
B. Did MP's implementation of AMI meters impact the reporting capabilities on voltage incidents? If so, how?

**Response:**

A. MP identifies the instances of ANSI voltage violations by searching all trouble orders for the year. Whenever the line workers measure voltages on the system, they document the measurements in the trouble order. The documented values are reviewed and compared to the ANSI Range B. (-8.3% to +5.8% of Nominal Voltage). Any measured value outside the nominal range is added to the table on page 53. Line workers repair any issue causing the deviation before completing the trouble order.

B. AMI meters indirectly impact voltage incident reporting. Staff reviews AMI voltage alarms from the head-end system as they are discovered. These alarms get reported to a trouble crew and the line workers or meter technicians visit the affected meter and measure voltage. The voltage measurements are documented on the trouble orders as part of the review process.

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To be completed by responder

Response Date: 6/13/2024
Response by: Lee Gustafson
Email Address: lgustafson@mnpower.com
Phone Number: 218-355-2399

**Minnesota Department of Commerce**
**85 7th Place East | Suite 280 | St. Paul, MN 55101**
**Information Request**

**Docket Number:** E015/M-24-29 ☐Nonpublic ☒Public
**Requested From:** Claire Vatalaro, Minnesota Power Date of Request: 6/3/2024
**Type of Inquiry:** General Response Due: 6/13/2024

**SEND RESPONSE VIA EMAIL TO**: Utility.Discovery@state.mn.us as well as the assigned analyst(s).
**Assigned Analyst(s):** Mary Beth Kehrwald and Kyle Straiton
**Email Address(es):** marybeth.kehrwald@state.mn.us and kyle.straiton@state.mn.us
**Phone Number(s):** 651-539-1808 and 651-539-1890

**ADDITIONAL INSTRUCTIONS**:
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**Request Number:** **2**
Topic: Staffing Levels
Reference(s): Table 15

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**Request:**

MP's number of contractors increased from 103 total in 2022 to 142 in 2023, with the largest increase in contractors - line. Provide an explanation for the large increase in contractors in 2023.

**Response:**

Minnesota Power's distribution capital budget has increased significantly beginning in 2022 and increased yet again in 2023 with a focus on grid modernization and strategic undergrounding. Minnesota Power has also had difficulties in recent years with the hiring of certain positions. The Company utilized more contractors as a tool to mitigate the increase in capital spending along with the workforce shortage. Many of these contractors also work on the Transmission system as well as Distribution projects.

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To be completed by responder

Response Date: 6/13/2024
Response by: Beau Pocquette – Distribution Supervising Engineer
Email Address: Bpocquette@mnpower.com
Phone Number: (218) 355-2862

**Minnesota Department of Commerce**
**85 7th Place East | Suite 280 | St. Paul, MN 55101**
**Information Request**

**Docket Number:** E015/M-24-29 ☐Nonpublic ☒Public
**Requested From:** Claire Vatalaro, Minnesota Power Date of Request: 6/3/2024
**Type of Inquiry:** General Response Due: 6/13/2024

**SEND RESPONSE VIA EMAIL TO**: Utility.Discovery@state.mn.us as well as the assigned analyst(s).
**Assigned Analyst(s):** Mary Beth Kehrwald and Kyle Straiton
**Email Address(es):** marybeth.kehrwald@state.mn.us and kyle.straiton@state.mn.us
**Phone Number(s):** 651-539-1808 and 651-539-1890

**ADDITIONAL INSTRUCTIONS**:
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**Request Number:** **4**
Topic: Call Answer Times
Reference(s): Petition, pages 86 – 91, Table 40

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**Request:**

A. Please describe how the Company handles after hours calls.
B. Describe any efforts underway to improve the after hours call response time.

**Response:**

A. Minnesota Power defines business hours as 7:00 am to 5:30 pm, Monday through Friday, excluding holidays. The Company staffs the Call Center from 7 am to 7 pm, Monday through Friday, and 8 am to 4 pm on Saturdays. For after hours, there is one representative regularly scheduled due to lower call volume. Service Dispatch, which is staffed 24/7, is available to answer calls outside the Call Center-staffed hours.

B. After-hours calls are approximately 1/10 of total calls received overall for the year. During higher call events such as storms or outages, close coordination occurs with Service Dispatch to determine if Call Center representatives need to be called in to assist with call volume. This is to ensure Service Dispatch can focus on service restoration. At this time, Minnesota Power does not anticipate changes to after-hours staffing levels, but continues to explore automated and online options for self-service that customers can access at their convenience. Examples include the Interactive Voice Response ("IVR") unit, the MyAccount online tool and the outage management system.

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To be completed by responder

Response Date: 6/13/2024
Response by: Amanda Heimbach
Email Address: aheimbach@mnpower.com
Phone Number: 218-355-5917

## Kehrwald, Mary Beth (She/Her/Hers) (COMM)

**From:** Claire Vatalaro (ALLETE) <cvatalaro@allete.com>
**Sent:** Tuesday, June 18, 2024 3:06 PM
**To:** Kehrwald, Mary Beth (She/Her/Hers) (COMM)
**Cc:** Straiton, Kyle (COMM)
**Subject:** RE: [EXTERNAL MAIL] Docket No. 24-29_Customer Complaint Tracking

Mary Beth,

As discussed, here is Minnesota Power response to your below question:

While there were some tracking changes made to the complaint categories, Minnesota Power does not believe this impacted the numbers reported overall. Regarding tracking, after working with the DOC, Xcel Energy, and Otter Tail Power, Minnesota Power made mid-year (2023) changes to the types of complaints to provide more specificity on categories/sub-categories, as required in Order Point 16 of the 2020 SRSQ Order. This is described starting on page 97 of the filing.

The number of complaints has varied from one year to the next, but it has been trending down over the last few years – 545 (2020), 513 (2021), 346 (2022), and 161 (2023). As the majority of complaints have generally been related to high bills, distantly followed by incorrect metering, the number of complaints in a given year are in large part driven by increases on customer bills through rate cases (interim rates or final rates), other line item changes, and/or bill increases due to increased usage (typically with particularly cold winters). The Company believes that this 2023 decrease is partially a result of training with the Call Center on how to effectively resolve inquiries as part of de-escalation efforts, which is an ongoing effort. The Company has also seen less complaints related to incorrect metering as AMI has been fully deployed. Further, there has been training on the revised complaint categories and how to appropriately enter complaints into our billing system. As of 6/13/2024, Minnesota Power estimates a higher number of complaints compared to 2023. Notably, interim rates went into effect January 1, 2024.

Please let me know if you have any additional questions.

Thank you!

Claire Vatalaro

---

**From:** Kehrwald, Mary Beth (She/Her/Hers) (COMM) <MaryBeth.Kehrwald@state.mn.us>
**Sent:** Tuesday, June 18, 2024 1:50 PM
**To:** Claire Vatalaro (ALLETE) <cvatalaro@allete.com>
**Cc:** Straiton, Kyle (COMM) <kyle.straiton@state.mn.us>
**Subject:** RE: [EXTERNAL MAIL] Docket No. 24-29_Customer Complaint Tracking

**Minnesota Department of Commerce**
**85 7th Place East | Suite 280 | St. Paul, MN 55101**
**Information Request**

**Docket Number:** E015/M-24-29 ☐Nonpublic ☒Public
**Requested From:** Claire Vatalaro, Minnesota Power Date of Request: 6/3/2024
**Type of Inquiry:** General Response Due: 6/13/2024

**SEND RESPONSE VIA EMAIL TO**: Utility.Discovery@state.mn.us as well as the assigned analyst(s).
**Assigned Analyst(s):** Mary Beth Kehrwald and Kyle Straiton
**Email Address(es):** marybeth.kehrwald@state.mn.us and kyle.straiton@state.mn.us
**Phone Number(s):** 651-539-1808 and 651-539-1890

**ADDITIONAL INSTRUCTIONS**:
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**Request Number:** **7**
Topic: CEMI & CELI
Reference(s): Prior year's overall values

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**Request:**

If available, please provide the overall (MP-system) percentage of customers for the following metrics for 2021 and 2022:

A. CEMI (storm included) for 3+, 4+, 5+, and 6+ interruptions; and
B. CELI (storm included) for 6 hour, 12 hour, and 24 hour outages.

**Response:**

A.

| CEMI – Overall MP | Storm Included | Storm Included |
|---|---|---|
| **# of Interruptions** | **2022** | **2021** |
| **6+** | 5.49% | 0.00% |
| **5+** | 4.35% | 1.40% |
| **4+** | 3.57% | 2.10% |
| **3+** | 10.97% | 7.43% |

---

To be completed by responder

Response Date: 6/13/2024
Response by: Lee Gustafson
Email Address: lgustafson@mnpower.com
Phone Number: 2183552399

**Minnesota Department of Commerce**
**85 7th Place East | Suite 280 | St. Paul, MN 55101**
**Information Request**

**Docket Number:** E015/M-24-29 ☐Nonpublic ☒Public
**Requested From:** Claire Vatalaro, Minnesota Power Date of Request: 6/3/2024
**Type of Inquiry:** General Response Due: 6/13/2024

**SEND RESPONSE VIA EMAIL TO**: Utility.Discovery@state.mn.us as well as the assigned analyst(s).
**Assigned Analyst(s):** Mary Beth Kehrwald and Kyle Straiton
**Email Address(es):** marybeth.kehrwald@state.mn.us and kyle.straiton@state.mn.us
**Phone Number(s):** 651-539-1808 and 651-539-1890

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B.

| CELI – Overall MP | Storm Included | Storm Included |
|---|---|---|
| **Duration Intervals** | **2022** | **2021** |
| **6 Hours** | 21.36% | 3.84% |
| **12 Hours** | 11.15% | 0.45% |
| **24 Hours** | 4.10% | 0.01% |

To be completed by responder

Response Date: 6/13/2024
Response by: Lee Gustafson
Email Address: lgustafson@mnpower.com
Phone Number: 2183552399

**Minnesota Department of Commerce**
**85 7th Place East | Suite 280 | St. Paul, MN 55101**
**Information Request**

**Docket Number:** E015/M-24-29 ☐Nonpublic ☒Public
**Requested From:** Claire Vatalaro, Minnesota Power Date of Request: 6/3/2024
**Type of Inquiry:** General Response Due: 6/13/2024

**SEND RESPONSE VIA EMAIL TO**: Utility.Discovery@state.mn.us as well as the assigned analyst(s).
**Assigned Analyst(s):** Mary Beth Kehrwald and Kyle Straiton
**Email Address(es):** marybeth.kehrwald@state.mn.us and kyle.straiton@state.mn.us
**Phone Number(s):** 651-539-1808 and 651-539-1890

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**Because Request Number: 3**
Topic: Estimated Time of Restoration Accuracy
Reference(s): Table 19

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**Request:**

It appears that Table 19 shows a breakdown of estimated restoration times from initial estimate and actual restoration but does not reflect the accuracy of estimates.

A. Please provide an explanation of the initial versus final estimated times of restoration.
B. Clearly provide the accuracy (%) of the ETRs for the following intervals: earlier than -90 minutes of the estimated restoration time, within -90 to 0 minutes of the estimated restoration time, within 0 to +30 minutes of estimated restoration time, and later than 30 minutes from the estimated restoration time.

**Response:**

A. Initial Estimated Restoration Times (ETR) are calculated automatically at trouble order creation by the Outage Management Software (OMS). It is based on the GIS model and prediction engine in the software. Final Estimated Restoration Times are manual adjustments by a Dispatcher or field worker after a sight/system assessment is completed in the field.

B. Table 19 provides accuracy (%) of all stated intervals for both Initial ETR and Final ETR. Initial ETR vs actual restoration time and Final ETR vs actual restoration time is what is displayed by this table.
I have attached the same information in a simplified form with hopes to clarify the table's meaning.

---

To be completed by responder

Response Date: 6/13/2024
Response by: Lee Gustafson
Email Address: lgustafson@mnpower.com
Phone Number: 2183552399

**Minnesota Department of Commerce**
**85 7th Place East | Suite 280 | St. Paul, MN 55101**
**Information Request**

**Docket Number:** E015/M-24-29 ☐Nonpublic ☒Public
**Requested From:** Claire Vatalaro, Minnesota Power Date of Request: 6/3/2024
**Type of Inquiry:** General Response Due: 6/13/2024

**SEND RESPONSE VIA EMAIL TO**: Utility.Discovery@state.mn.us as well as the assigned analyst(s).
**Assigned Analyst(s):** Mary Beth Kehrwald and Kyle Straiton
**Email Address(es):** marybeth.kehrwald@state.mn.us and kyle.straiton@state.mn.us
**Phone Number(s):** 651-539-1808 and 651-539-1890

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| 2023 ETRs Used | Earlier then -90 minutes | -90 to 0 minutes | 0 to +30 minute | Later than 30 minutes |
|---|---|---|---|---|
| **Initial ETR % accuracy** | 6.58% | 5.80% | 4.45% | 83.16% |
| **Final ETR % accuracy** | 0.00% | 0.00% | 81.70% | 18.30% |

---

To be completed by responder

Response Date: 6/13/2024
Response by: Lee Gustafson
Email Address: lgustafson@mnpower.com
Phone Number: 2183552399

**Minnesota Department of Commerce**
**85 7th Place East | Suite 280 | St. Paul, MN 55101**
**Information Request**

**Docket Number:** E015/M-24-29 ☐Nonpublic ☒Public
**Requested From:** Claire Vatalara, Minnesota Power Date of Request: 6/3/2024
**Type of Inquiry:** General Response Due: 6/13/2024

**SEND RESPONSE VIA EMAIL TO**: Utility.Discovery@state.mn.us as well as the assigned analyst(s).
**Assigned Analyst(s):** Mary Beth Kehrwald and Kyle Straiton
**Email Address(es):** marybeth.kehrwald@state.mn.us and kyle.straiton@state.mn.us
**Phone Number(s):** 651-539-1808 and 651-539-1890

**ADDITIONAL INSTRUCTIONS**:
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**Request Number:** **8**
Topic: Remote Reconnect Pilot - costs
Reference(s): Petition, pages 75-79

**Request:**

**Estimated Net Cost Changes Specifically Related to Remote Reconnect Pilot**
**(based on current and past SRSQ Reports)**

| Year | Net Cost Change |
|---|---|
| 2021 | $464,000 |
| 2022 | $48,000 |
| 2023 | $652,000 |

A. Please confirm the 2022 estimated net costs.
B. Please provide an explanation of the 2022 to 2023 cost increases.
C. Provide the estimated net cost change for 2024.

**Response:**

A. $48,000 is correct. There were fewer remote-capable meters installed in 2022, as compared to 2021 and 2023, largely due to meter supply and available workforce to install.

To be completed by responder

Response Date: 6/13/2024
Response by: Amanda Heimbach
Email Address: aheimbach@mnpower.com
Phone Number: 218-355-5917

**Minnesota Department of Commerce**
**85 7th Place East | Suite 280 | St. Paul, MN 55101**
**Information Request**

**Docket Number:** E015/M-24-29 ☐Nonpublic ☒Public
**Requested From:** Claire Vatalara, Minnesota Power Date of Request: 6/3/2024
**Type of Inquiry:** General Response Due: 6/13/2024

**SEND RESPONSE VIA EMAIL TO**: Utility.Discovery@state.mn.us as well as the assigned analyst(s).
**Assigned Analyst(s):** Mary Beth Kehrwald and Kyle Straiton
**Email Address(es):** marybeth.kehrwald@state.mn.us and kyle.straiton@state.mn.us
**Phone Number(s):** 651-539-1808 and 651-539-1890

**ADDITIONAL INSTRUCTIONS**:
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---

B. In 2022, there were 706 remote-capable meters incrementally added, as compared to 5,741 in 2023. This was the driver for cost increases.

C. Based on a total target of 12,250 remote-capable meters through the pilot, just over 2,000 will be installed in 2024. Assuming similar remote reconnections to 2023, the net cost change for 2024 is estimated to be about $185,000.

To be completed by responder

Response Date: 6/13/2024
Response by: Amanda Heimbach
Email Address: aheimbach@mnpower.com
Phone Number: 218-355-5917

## Kehrwald, Mary Beth (She/Her/Hers) (COMM)

**From:** Claire Vatalaro (ALLETE) <cvatalaro@allete.com>
**Sent:** Friday, June 21, 2024 8:35 AM
**To:** Kehrwald, Mary Beth (She/Her/Hers) (COMM)
**Subject:** RE: [EXTERNAL MAIL] 24-49_Remote-Reconnect Pilot questions



Good Morning Mary Beth,

Happy Friday!

I wanted to send along some additional information from the query requested noted below:

This is the information with averages added that are inclusive of all residential customers.

| Average Time to Reconnect from Disconnect | Standard | Remote |
|---|---|---|
| LIHEAP Customers | 5 Days, 4:34:44 | 3 Days, 7:21:56 |
| Self-Declare Customers | 5 Days, 5:15:35 | 4 Days, 1:14:57 |
| Standard Customers | 22 Days, 6:6:31 | 9 Days, 3:52:29 |
| All Customers | 17 Days, 12:48:44 | 6 Days, 22:23:8 |
| | | |
| Average Time to Reconnect from Request | Standard | Remote |
| LIHEAP Customers | 0 Days, 4:13:56 | 0 Days, 0:0:53 |
| Self-Declare Customers | 0 Days, 2:59:3 | 0 Days, 0:0:51 |
| Standard Customers | 0 Days, 11:54:0 | 0 Days, 0:9:57 |
| All Customers | 0 Days, 9:44:40 | 0 Days, 0:6:28 |

Please let me know if you have any additional questions.

Have a wonderful weekend!

Claire Vatalaro

**From:** Claire Vatalaro (ALLETE)
**Sent:** Tuesday, June 18, 2024 1:41 PM
**To:** Kehrwald, Mary Beth (She/Her/Hers) (COMM) <MaryBeth.Kehrwald@state.mn.us>
**Subject:** RE: [EXTERNAL MAIL] 24-49_Remote-Reconnect Pilot questions

Hello!

Below are the responses to the requested information:

***Question:***
In the narrative on the Remote-Reconnect Pilot (Petition pages 75-79), provides participation counts for "Self-Declare" customers but doesn't define what this means. Can you please provide a definition?

**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-24-29**

Dated this **28th** day of **June 2024**

**/s/Sharon Ferguson**

| First Name | Last Name | Email | Company Name | Address | Delivery Method | View Trade Secret | Service List Name |
|---|---|---|---|---|---|---|---|
| Matthew | Brodin | mbrodin@allete.com | Minnesota Power Company | 30 West Superior St<br><br>Duluth,<br>MN<br>55802 | Electronic Service | No | OFF_SL_24-29_Official |
| Generic Notice | Commerce Attorneys | commerce.attorneys@ag.state.mn.us | Office of the Attorney General-DOC | 445 Minnesota Street Suite 1400<br><br>St. Paul,<br>MN<br>55101 | Electronic Service | Yes | OFF_SL_24-29_Official |
| MP Regulatory | Compliance | MPRegulatoryCompliance@mnpower.com | Minnesota Power | 30 W Superior St.<br><br>Duluth,<br>MN<br>55802 | Electronic Service | No | OFF_SL_24-29_Official |
| Sharon | Ferguson | sharon.ferguson@state.mn.us | Department of Commerce | 85 7th Place E Ste 280<br><br>Saint Paul,<br>MN<br>551012198 | Electronic Service | No | OFF_SL_24-29_Official |
| Discovery | Manager | discoverymanager@mnpower.com | Minnesota Power | 30 W Superior St<br><br>Duluth,<br>MN<br>55802 | Electronic Service | No | OFF_SL_24-29_Official |
| Generic Notice | Residential Utilities Division | residential.utilities@ag.state.mn.us | Office of the Attorney General-RUD | 1400 BRM Tower<br>445 Minnesota St<br>St. Paul,<br>MN<br>551012131 | Electronic Service | Yes | OFF_SL_24-29_Official |
| Will | Seuffert | Will.Seuffert@state.mn.us | Public Utilities Commission | 121 7th Pl E Ste 350<br><br>Saint Paul,<br>MN<br>55101 | Electronic Service | Yes | OFF_SL_24-29_Official |
| Claire | Vatalaro | cvatalaro@allete.com | Allete | 30 W Superior St<br><br>Duluth,<br>MN<br>55802 | Electronic Service | No | OFF_SL_24-29_Official |