SPENCER J. COX
Governor

DEIDRE M. HENDERSON
Lieutenant Governor

UTAH DEPARTMENT OF COMMERCE
Division of Public Utilities

MARGARET W. BUSSE
Executive Director

CHRIS PARKER
Division Director

Action Request Response

To: Public Service Commission of Utah

From: Utah Division of Public Utilities

Chris Parker, Director
Brenda Salter, Assistant Director
Doug Wheelwright, Utility Technical Consultant Supervisor
Bob Davis, Utility Technical Consultant
Matthew Pernichele, Utility Analyst

Date: December 1, 2023

Re: **Docket No. 23-035-21,** Rocky Mountain Power's Service Quality Review Report for the Period January through June of 2023

Recommendation (Acknowledge)

The Division of Public Utilities (Division) recommends that the Public Service Commission of Utah (Commission):

1. Acknowledge Rocky Mountain Power's (RMP) January 1, 2023, through June 30, 2023, Service Quality Review Report (Report).[1] The current report complies with all prior Commission Orders[2][3][4][5] and also complies with the requirements of Utah Administrative Code Rule R746-313.
2. Approve RMP's request to start calculating and reporting Major Event Days (MEDs) for Utah by four geographic areas (in addition to the whole state).

[1] Docket 23-035-05, *Rocky Mountain Power's Service Quality Review January 1 – June 30, 2023, Report,* https://pscdocs.utah.gov/electric/23docs/2303521/330553RMPSrvcQltRvwRprtJan1Jun30202311-1-2023.pdf.
[2] Docket No. 08-035-55, *Commission Order*, June 11, 2009, https://pscdocs.utah.gov/electric/08docs/0803555/62486Order%5bDOCKETED%5d.pdf.
[3] Docket No. 13-035-01, *Commission Order,* December 20, 2016, https://pscdocs.utah.gov/electric/13docs/1303501/2908801303501and1503572omrclabnl12-20-2016.pdf.
[4] Docket 15-035-72, *Commission Order*, December 20, 2016, https://pscdocs.utah.gov/electric/13docs/1303501/2908801303501and1503572omrclabnl12-20-2016.pdf.
[5] Docket No. 20-035-22, *Commission Orders*, June 23, 2020, and January 26, 2021, respectively, https://pscdocs.utah.gov/electric/20docs/2003522/3143552003522o6-23-2020.pdf, and https://pscdocs.utah.gov/electric/20docs/2003522/3170962003522omrclabnl1-26-2021.pdf.

3. Approve, with modifications, RMP's request to not include service interruptions resulting from wildfire mitigation efforts in future editions of this report's service reliability metrics. The Division recommends that any such interruptions be tracked and reported separately in all future versions of the report, as described later in these comments.

Issue

On November 1, 2023, RMP filed its Report with the Commission for the January through June 2023 reporting period for its operations in the state of Utah (RMP Utah). On November 1, 2023, the Commission issued an Action Request asking the Division to review RMP's filing for compliance and to make recommendations. The Commission asked the Division to report back by December 1, 2023.

Background

RMP developed its Customer Service Standards and Service Quality Measures nearly 20 years ago. The standards were developed to demonstrate to customers that RMP is serious about serving them well and willing to back its commitments with cash payments in cases where the company falls short. RMP developed these standards by benchmarking its performance against relevant industry reliability and customer service standards. In some cases, RMP has expanded upon these standards. In other cases, largely where the industry has no established standard, RMP "developed its own metrics, targets, and reporting methods.[6]

In Docket No. 20-035-22, the Division reviewed RMP's 2019 service quality and recommended the Commission establish a work group to review RMP's reliability baseline standards related to SAIDI and SAIFI and make recommendations. The Commission accepted this recommendation and directed RMP and the Division to convene a work group, open to interested parties, to examine RMP's reliability baseline standards and to make recommendations. In accordance with the Commission directive, the parties

[6] Docket No. 23-035-21, *Rocky Mountain Power's Service Quality Review Report for January through December of 2022* filed May 1, 2023, at 3, https://pscdocs.utah.gov/electric/23docs/2303521/327830RMPSrvcQltyRvwRprtCY20225-1-2023.pdf.

convened a workgroup that met to discuss new baseline performance standards. These standards were enacted in a Commission order in 2021.[7]

Discussion

The Division reviewed RMP's January 1 through June 30, 2023, Report to confirm its compliance with the Commission's Orders in Docket Nos. 08-035-55, 13-035-01, 15-035-72, and 20-035-22, the Commission Rules, and the Utah Service Quality Review Work Group Report filed with the Commission on September 13, 2006.[8]

RMP's Reported Metrics

RMP's January through June 2023, SAIDI, SAIFI, and CAIDI values appear to be within or below the revised control zone parameters approved by the Commission in Docket No. 20-035-22, on January 26, 2021.[9] A direct comparison of the data provided in the Report to past SAIDI, SAIFI, and CAIDI data would be inaccurate because the past data is calculated based on annual interruption information and the Report contains data based on 6-month interruption information. Simply doubling the SAIDI, SAIFI, and CAIDI numbers presented in the Report would not accurately indicate annual numbers because interruptions don't occur evenly throughout the year.

The Division compared RMP Utah's annual SAIDI, SAIFI, and CAIDI against RMP's other operations by state and other comparable investor-owned utilities. To improve consistency and accuracy, data on other utilities was taken from Energy Information Agency Report EIA-861.[10] The comparisons illustrate the metrics with and without major event days (MED).

---

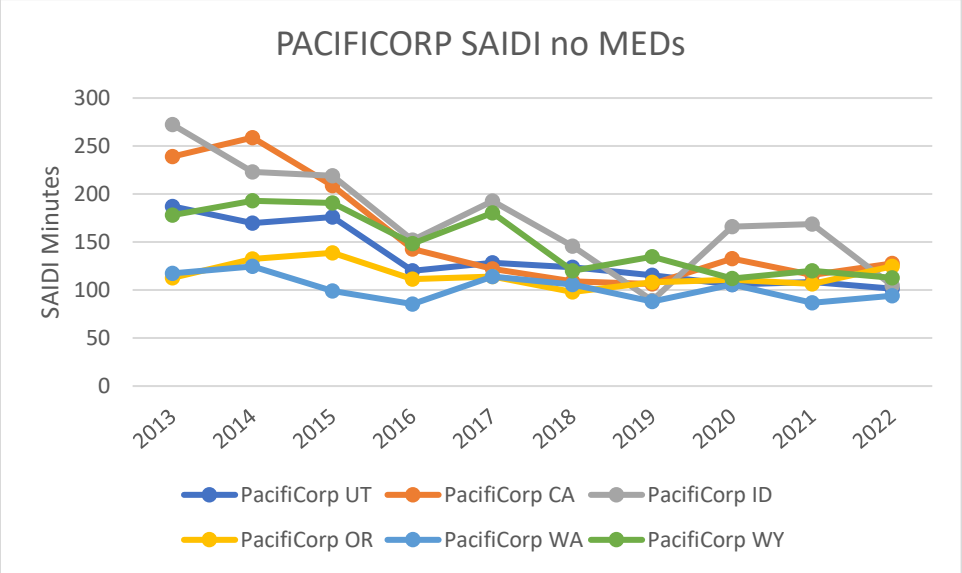
[7] Docket No. 20-035-22, *Order Modifying Reliability Control Limits and Baseline Notification Levels,* January 26, 2021, at 3, https://pscdocs.utah.gov/electric/20docs/2003522/317096200352 2omrclabnl1-26-2021.pdf.

[8] Docket No. 20-035-22, *Division Memorandum* filed December 21, 2020, at 3, and Commission *Order - Sections 1 and 2* filed January 26, 2021. SAIDI control zone of 107 to 157 minutes, SAIDI baseline notification level of 157 minutes, SAIFI control zone of 0.9 to 1.2 events, and a SAIFI baseline notification level of 1.2 events, https://pscdocs.utah.gov/electric/20docs/2003522/316802DPUMemWrkGrp12-21-2020.pdf.

[9] Docket No. 23-035-21, *Supra* note 5, at 4-8, https://pscdocs.utah.gov/electric/23docs/2303521/327830RMPSrvcQltyRvwRprtCY20225-1-2023.pdf.

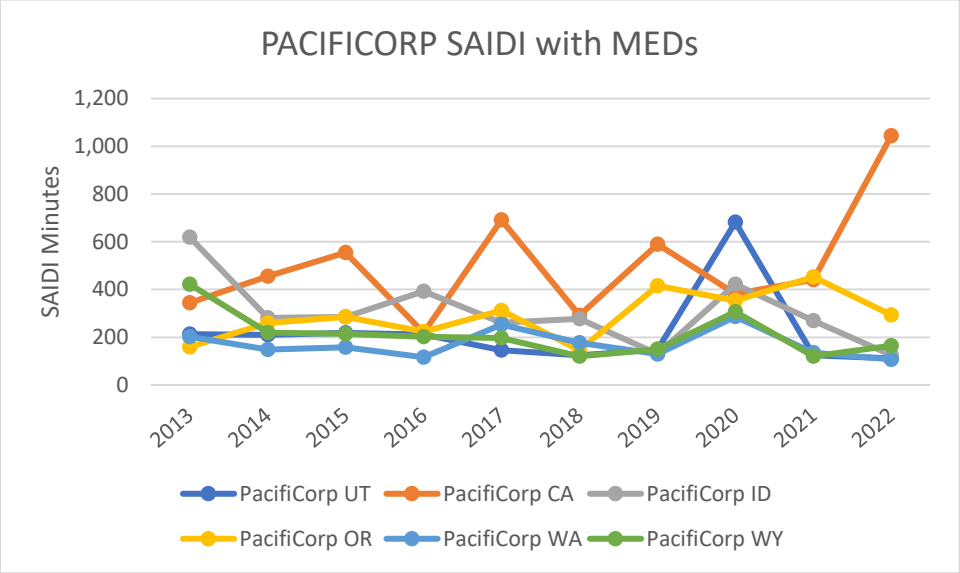
[10] United States Energy Information Administration, *Annual Electric Power Industry Report, Form EIA-861, detailed data files*, data files Reliability 2013 through 2022, https://www.eia.gov/electricity/data/eia861/ (last visited on November 10, 2023).

SAIDI (System Average Interruption Duration Index) is a measure of the time an average customer spends without power during the measured period. SAIDI is calculated as total customer minutes without power divided by total number of customers to get the duration of the average customer interruption.[11]

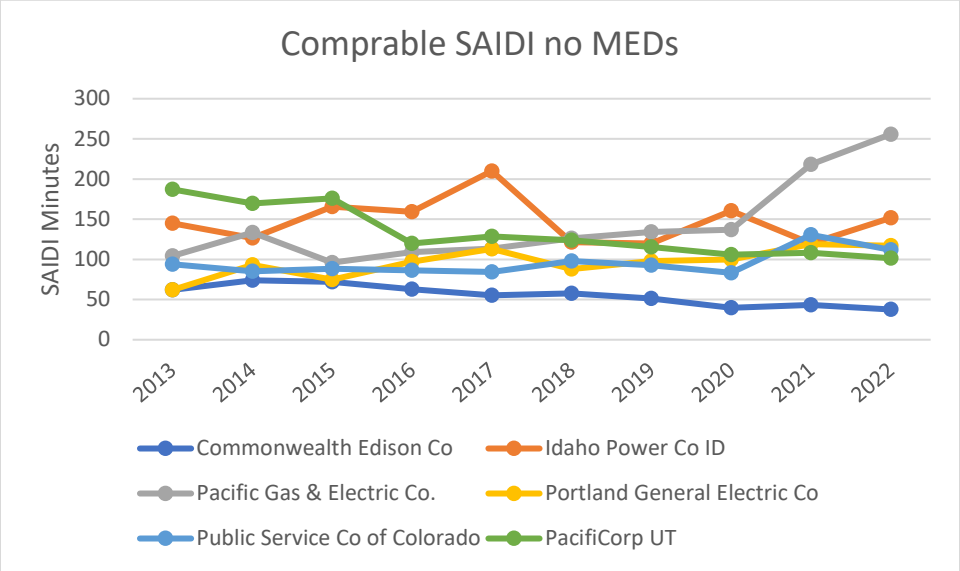


RMP Utah continued to gradually improve its SAIDI without MED's and mostly outperforms PacifiCorp's operations in other states.

[11] "U.S. power customers experience an average of nearly five hours of interruptions in 2019." US Energy Information Administration, November 6, 2020, https://www.eia.gov/todayinenergy/detail.php?id=45796 (last visited on November 13, 2023).



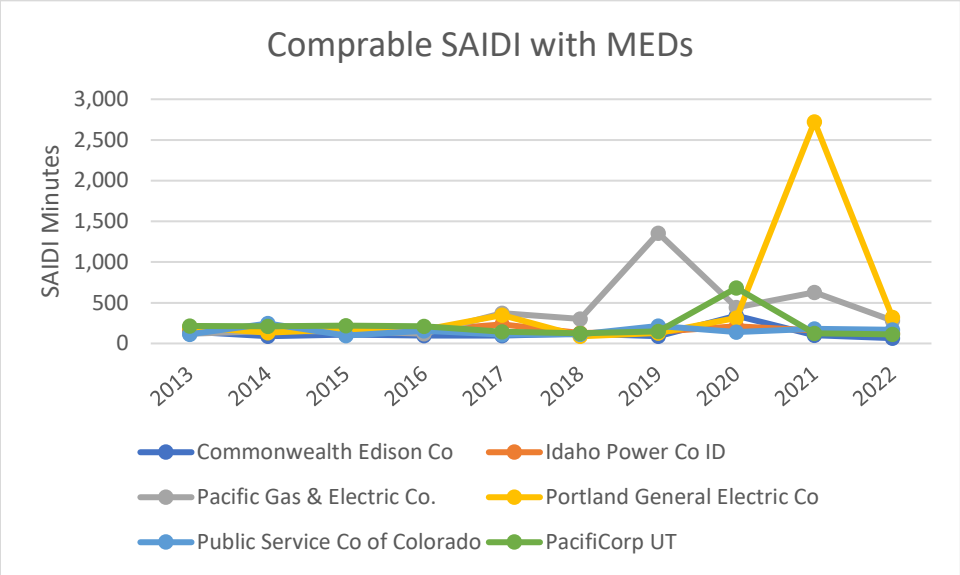
RMP Utah had two MED's during the period covered by the Report, January 1-3 and March 10-11.[12] The Division notes that RMP's trend including MEDs continues to improve with SAIDI near its lowest point in the last 10 years and near the lowest in all of PacifiCorp's service area.



RMP performed well when compared to comparable utilities examined in this report in SAIDI without MEDs. In the Division's group of comparable utilities, only Commonwealth

[12] Docket 23-035-21, *Supra* note 1, at 6-7.

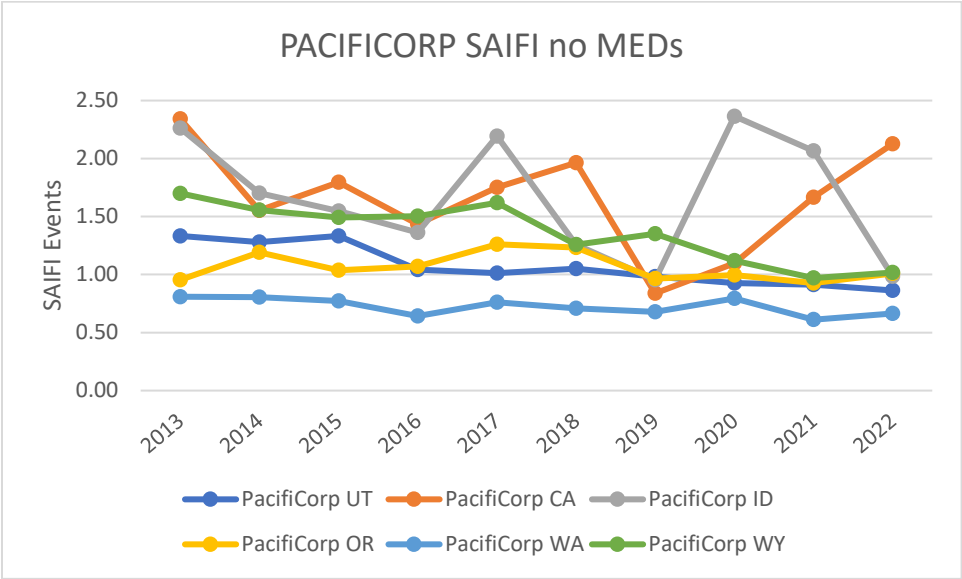
Edison has consistently performed better in this metric than RMP Utah over the time period examined. This may be because it has a significantly larger proportion of its customers in a densely populated, urban area.

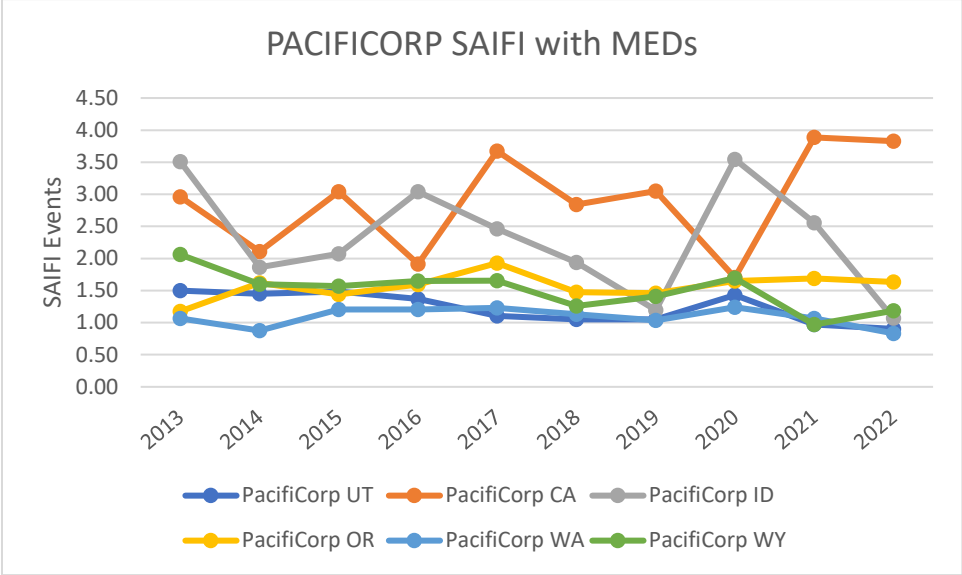


Comparisons of RMP Utah to other utilities are difficult to read due to Portland General Electric's 2021 outlying SAIDI score of 2,724 minutes. This appears to be the result of severe winter storms in the Portland Oregon area in February of 2021.[13] This compares to RMP's 124 minutes and the other comparable utilities average of 267.5 minutes for 2021.

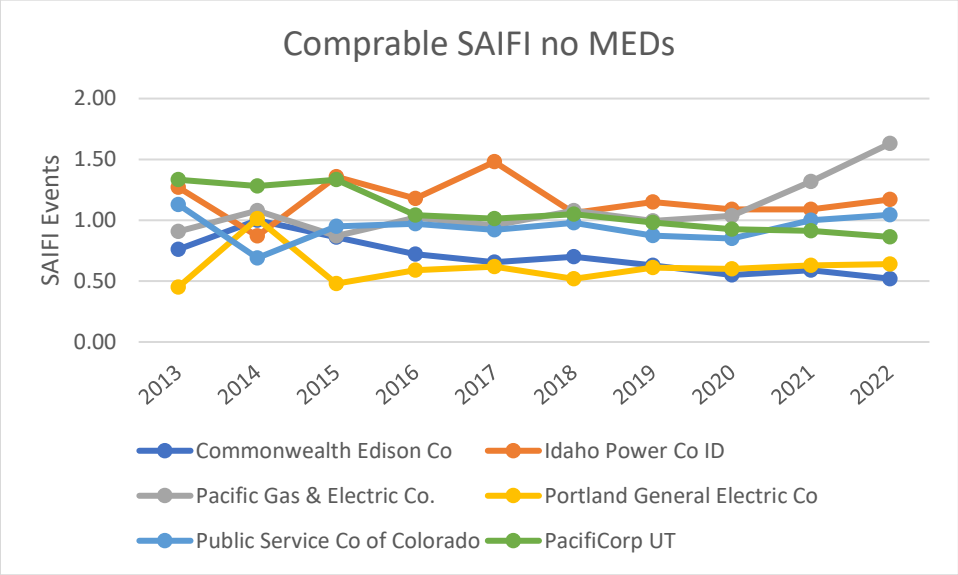
SAIFI (System Average Interruption Frequency Index) is a measure of how often a typical customer experiences an interruption. SAIFI is calculated by dividing all of the customer minutes lost in sustained outages by the number of customers in the service area.[14] The Division used the same sources and compared SAIFI and CAIDI in the same manner as SAIDI.

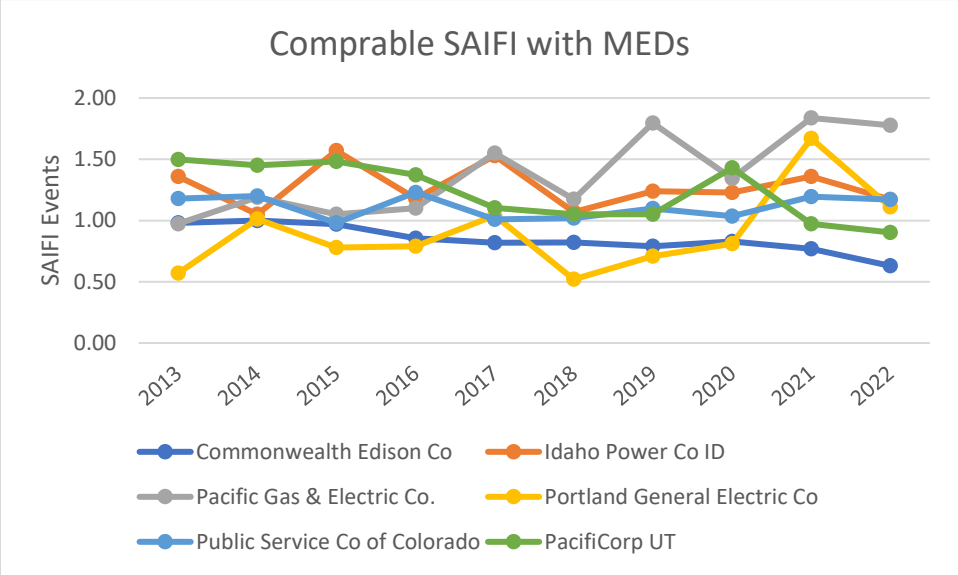
[13] Portland General Electric, *PGE: Restoration complete from February winter storms,* (March 1, 2021), https://portlandgeneral.com/news/2021-03-01-pge-restoration-complete-from-february-winter-storms (last visited on November 10, 2023).
[14] Docket No. 20-035-22, *Supra,* note 1, at 32.





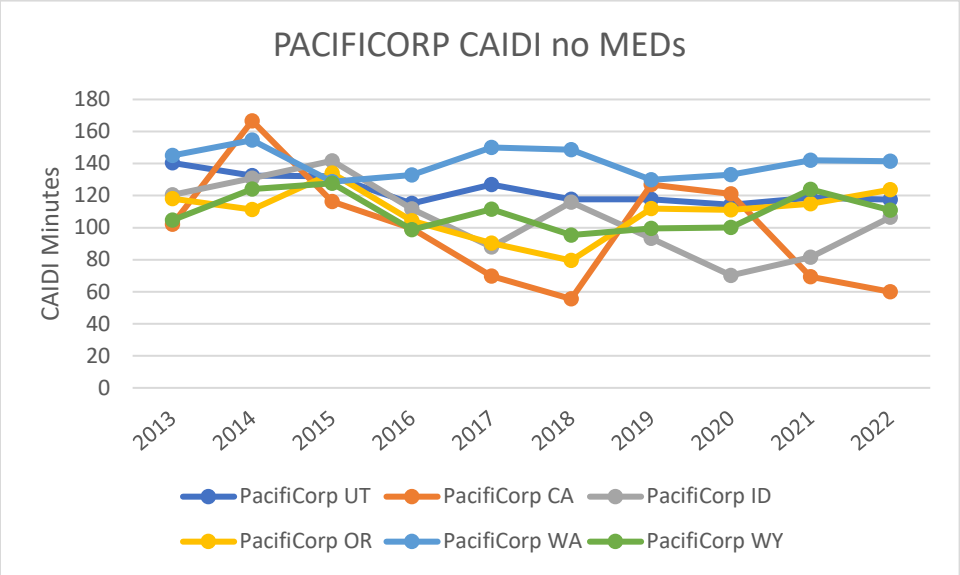
As with SAIDI, PacifiCorp Utah's SAIFI performance is better than average among both peer groups and has continued to gradually improve over the last 10 years.

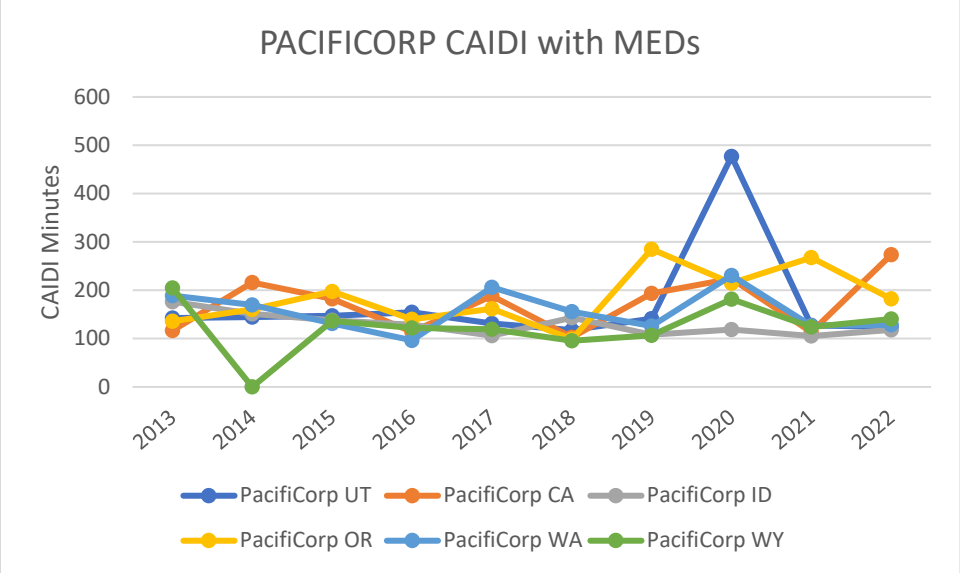




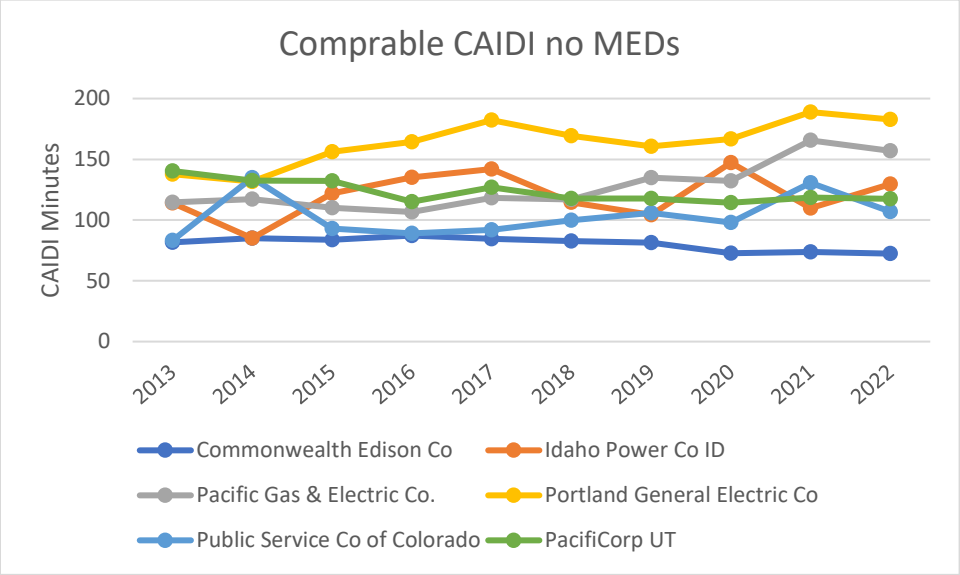
CAIDI (Customer Average Interruption Duration Index) is a measure of the average time required to restore service after an interruption. CAIDI is calculated by dividing the duration of the average customer's sustained outage by the average customer's frequency of outages.[15]

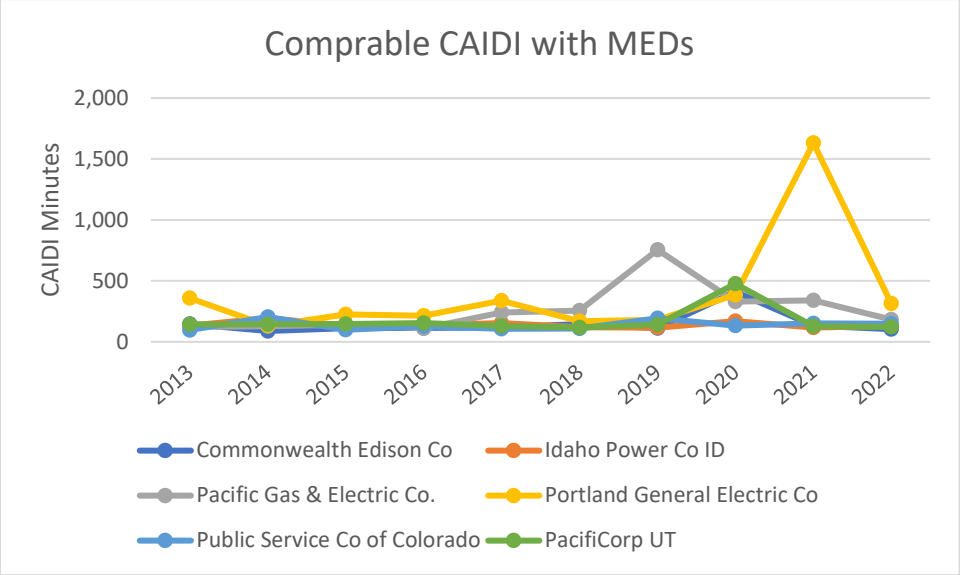
[15] Docket No. 20-035-22, *Supra,* note 1, at 32.





When compared to both peer groups, PacifiCorp Utah's CAIDI performance is closer to the average than its SAIDI and SAIFI metrics are. It also does not show the other metrics improvements, remaining fairly constant throughout the last 10 years. None of the other utilities in this comparison have made significant improvements in restoring service after an outage during the last 10 years.





Major and Significant Event Day Proposed Change

RMP proposes to change how MEDs are defined by calculating the Threshold for Major Event Day (TMED) separately for each of four geographic regions of Utah.[16] The statewide calculation will continue to be reported and calculated as it currently is so that the Commission, other stakeholders, and RMP can keep evaluating these metrics with the

[16] Docket 23-035-21, *Supra* note 1, at 8.

benefit of 20 years' worth of historical data for context. RMP contends that this will allow better visibility into MEDs by exposing data that would otherwise be hidden within the larger dataset of the whole state.

RMP has calculated the TMED separately for each of the 4 regions and the state as a whole based on regional data that it has been collecting since 2020.[17] This calculation provided TMEDs for each region that are different from each other and very different from that of the state as a whole. RMP's table showing its current TMED calculations is reproduced below with significantly different TMEDs by region than the State as a whole.

Reliability Reporting Area	Total Customer Count	Threshold for Major Event Day	Customer Minutes Lost
Utah North Fringe	160,065	13.61	2,178,614
Utah Central	587,492	5.59	3,288,723
Utah Southeast	199,607	11.51	2,297,885
Utah Southwest	62,001	21.36	1,324,521
State of Utah	1,009,615	4.31	4,351,095

RMP states that it created the 4 subregions to "ensure that major events are more equally represented in rural versus urban population areas by eliminating statistical anomalies that may occur in local areas."[18] RMP discussed its request to change to regional reporting with the Division in an informal meeting on October 26, 2023. RMP explained that the change better represents MEDs by designating the regions based on topography, customer counts, statistical differences, and better representation of the system load. However, at this time, the Division lacks the information to accurately evaluate the analytical usefulness of how the regions were structured or how this new reporting structure will affect the regions' metrics. It will also take several years' worth of these new reports to provide the context needed to understand the metrics. At this time, the Division supports the concept of RMP's requested change but intends to evaluate the TMED by region thresholds versus the whole State as information becomes available.

[17] Docket 23-035-21, *Supra* note 1, at 7.
[18] *Id,* at 8.

Comparable utilities usually report reliability information based on their entire system or, when they serve customers in multiple states, their entire systems within each state. This is how this information is reported to the Energy Information Administration.[19] Statewide reliability data, calculated consistently with how it is in this Report and prior reports, is needed to compare how well RMP is serving its customers and should continue to be included in all future versions of this Report.

The Division recommends that the Commission approve RMP's request to report reliability data by region as long as it is clarified that statewide data reporting be done consistently with past practice and Commission orders.

Wildfire Mitigation Outage Reporting

RMP's increasing emphasis on wildfire mitigation includes measures that may increase power outages and impact reliability metrics. RMP is currently tracking these disruptions separately and not including them in this report.[20] They should be included in the report, even if there are reasons to also report metrics with them separated. Such disruptions may not be a reflection of any failing of the Company, but they do reflect actual conditions encountered by ratepayers. As such, they should be reported. It will be useful to the Commission to see them reported as part of other disruptions and separated from the other disruptions.

The Division suggests that outages related to wildfire mitigation be included in future Reports under Cause Code Analysis so that the Commission and other interested parties can understand and be assured that RMP's efforts to balance wildfire mitigation with minimizing outages are prudent and effective. The Division recommends that future versions of the Report include a list of wildfire mitigation related outages both included with and excluded from the calculation of the standard Customer Service Standards and Quality Measures that are currently part of the Report. Wildfire outage reporting information should include:

1. Date of the outage.

[19] See United States Energy Information Administration, *supra* note 11.
[20] Docket 23-035-21, *Supra* note 1, at 10.

2. Location of the outage.
3. The number of customers affected.
4. Duration of the outage.
5. Cause of the outage. This should include whether the outage is a result of an automatic system such as Elevated Fire Risk Settings (EFR), or a decision made by RMP personnel.

Equipment Failures

Equipment failures continue to be the largest contributor to SAIDI (36 percent), SAIFI (27 percent), and 54 percent of underlying incidents, year-over-year.[21] The Division recognizes RMP's efforts in its continuation to reduce SAIDI values through its Mainline Sectionalizing (MLS) plan.[22] The MLS is designed to lower SAIDI and SAIFI numbers by limiting the number of customers on a feeder and sectionalizing circuits with reclosers to smaller groups of customers. However, the Division has not observed any significant year-over-year improvement in equipment related contributions (controllable distribution events) to the SAIDI and SAIFI metrics given the approximate same amount of capital spending and new connections excluding gateway transmission and local transmission reinforcements reported in 2022.[23] The Division notes that this report represents a partial year but suggests that RMP continue to review its condition-based maintenance program in an effort to reduce equipment failures.

The Division continues to gain a better understanding of the equipment failure related to the underlying cause for the SAIDI and SAIFI metrics reported by RMP each year by compiling a peer-to-peer comparison across the industry. The metrics supporting Table 1 in the Division's report for January 1, 2022, through December 31, 2022,[24] has not changed since the filing of that report and therefore is not included in this report.

[21] Docket No. 23-035-21, Supra, note 1, Cause Analysis – Underlying SAIDI, SAIFI, and Incidents, at 18-19.
[22] Docket No. 22-035-14, *Rocky Mountain Power's Service Quality Review Report* filed November 1, 2022, at 15.
[23] Docket No. 23-035-21, *Supra,* note 1, at 24-27.
[24] Docket No. 23-035-21, *Comments from the Division of Public Utilities*, May 31, 2023, page 6, https://pscdocs.utah.gov/electric/23docs/2303521/327170DPUCmnts5-31-2023.pdf.

The Division plans to continue to collect data for equipment-related failures on a peer-to-peer basis across the industry in an attempt to develop a database as a comparison for system reliability. The Division anticipates that this information might be useful to better inform the reader of the significance of equipment failures as a root cause of the SAIDI, SAIFI, and other reliability metrics that may also lead to power quality issues.

Customer Response

The Division remains concerned with RMP's customer response performance in answering calls within 30 seconds. RMP reports the customer response performance for the first half of 2023 at 75 percent. RMP's goal is 80 percent. RMP states that insufficient staffing remains as the primary reason for the low response time and working to fill open positions in its call center. The Division notes that RMP continues to improve this metric. The Division will continue to monitor this metric and report any findings to the Commission.
Overall, the Division concludes that RMP is putting forth reasonable effort to improve its customer service and reliability and is maintaining an overall customer guarantee performance of 99 percent.

Conclusion

The Division concludes that RMP is following the Commission's Orders and Rules, and recommends that the Commission acknowledge RMP's January 1, 2032, through June 30, 2023, Service Quality Review Report. The Division commends RMP for its steady long-term improvement in the quality and reliability of the service it provides its customers. The Commission should also approve RMP's request to add reporting for the 4 operational regions of Utah and require reporting for wildfire related outages in future reports.

cc: Jana Saba, RMP
Michele Beck, OCS