**Directions:** Submit all documents and submittal questions to Energy Division Central Files via email <a href="mailto:EnergyDivisionCentralFiles@cpuc.ca.gov">EnergyDivisionCentralFiles@cpuc.ca.gov</a>

- 1. Fill out coversheet completely. Coversheet can be embedded as page 1 of the electronic compliance filing or can be submitted as a separate document that is attached to the email that delivers the compliance filing.
- 2. If the coversheet is submitted as separate document, please name the coversheet file with the same document name used in your primary document (see Section A) + plus the word "cov" (for coversheet). For example, the name of the coversheet file will be something like: *West Coast Gas Company Monthly Gas Report 201602 COV.docx*
- 3. If the document is confidential add CONF (for confidential). For example, the name of the coversheet file will be something like: West Coast Gas Company Monthly Gas Report 201602 CONF.docx and West Coast Gas Company Monthly Gas Report 201602 COV CONF.docx
- 4. All documents are required to be submitted in an electronically *searchable* format.
- 5. Documents need to reference the reason for the mandate that ordered the filing in Section B or C. If you are unable to reference a proceeding or explain the origin of your filing, please contact Energy Division Central Files.
- 6. To find a proceeding number (if you only have a decision number), go to <a href="http://docs.cpuc.ca.gov/DecisionsSearchForm.aspx">http://docs.cpuc.ca.gov/DecisionsSearchForm.aspx</a>; enter the decision number, and the results shown include the proceeding number.

NOTE: It is Energy Division's preference to have document components combined into one PDF document with the top sheets being the cover sheet, the next an executive's letter (as applicable), and the compliance data as the third element.

#### A. Document Name

- 1. **Utility Name**: PacifiCorp
- 2. Document Submission Frequency (Annual, Semi-Annual, YTD, Quarterly, Monthly, Weekly, Ad-hoc, Once, Other Event): Annual
- 3. Report Name: California Electric Reliability Report
- 4. Reporting Interval (for this submission, e.g., 2015 Q1 that data date): 2023
- 5. Document File Name (format as 1+2 + 3 + 4): PacifiCorp Annual California Electric Reliability Report 2023
- 6. Append the confidential and/or cover sheet notation, as appropriate. Confidential and Public Versions submitted

#### Sample Document Names:

Utility Name + Submittal Frequency + Report Name + Year + Reporting Interval + (COV or CONF or both or neither)

SCE Annual Procurement Report 2015	West Coast Gas Company Monthly Gas Report 201602 CONF
SDG&E Quarterly DR Forecast 2015Q1	West Coast Gas Company Daily Gas Report 20160230 COV
West Coast Gas Company Monthly Gas Report	West Coast Gas Company Monthly Gas Report 201602 COV
201602	CONF
West Coast Gas Company Daily Gas Report	SCE Annual Procurement Report 2015 LTR
20160230	

- 7. Identify whether this filing is  $\boxtimes$  original or  $\square$  revision to a previous filing.
  - a. If revision, identify date of the original filing: Click here to enter text.



#### **B.** Documents Related to a Proceeding

All submittals should reference both a proceeding and a decision, if applicable. If not applicable, leave blank and fill out Section C.

- 1. Proceeding Number (starts with R, I, C, A, or P plus 7 numbers): R. 14-12-014
- 2. Decision Number (starts with D plus 7 numbers): D.16-01-008
- 3. Ordering Paragraph (OP) Number from the decision OP 1

#### B (i). Documents Related to a Data Request Only

1. Data Request with **not affiliated** Proceeding Number/Decision Number or Ordering Paragraph: Click here to enter text.

#### C. Documents Submitted as Requested by Other Requirements

If the document submitted is in compliance with something other than a proceeding, (e.g., Resolution, Ruling, Staff Letter, Public Utilities Code, or sender's own motion), please explain: Click here to enter text.

#### **D. Document Summary**

Provide a Document Summary that explains why this report is being filed with the Energy Division. This information is often contained in the cover letter, introduction, or executive summary.

Click here to enter text.

D.16-01-008 requires utilities to submit annual information about planned outages to the Commission's Energy and the Safety and Enforcement Divisions.

#### **E. Sender Contact Information**

- 1. Sender Name: Pooja Kishore
- 2. Sender Organization: PacifiCorp
- 3. Sender Phone: 503-813-7314
- 4. Sender Email: pooja.kishore@pacificorp.com

#### F. Confidentiality

- 1. Is this document confidential?  $\square$  No  $\square$  Yes
  - a. If Yes, provide an explanation of why confidentiality is claimed and identify the expiration of the confidentiality designation (e.g. Confidential until December 31, 2020), and a signed declaration of confidentiality. Click here to enter text.

In D.16-01-008, the Commission updated the electric reliability reporting requirements for California electric utilities, requiring annually information about planned outages to the Commission's Energy and the Safety and Enforcement Divisions on a confidential basis. As noted in D.16-01-008, "making planned outage data public poses a potential risk as the data could expose grid vulnerabilities. Therefore, planned outage data should be confidential to protect the public from potential harmful activities that could damage the grid and electric reliability."

#### **G. CPUC Routing**

Energy Division's Deputy Executive Director, Leuwam Tesfai, requests that you <u>not</u> copy her on filings sent to Energy Division Central Files. Identify below any Commission staff that were copied on the submittal of this document.

1. Names of Commission staff that sender copied on the submittal of this Document: Click here to enter text.

Julian Enis, <u>Julian.Enis@cpuc.ca.gov</u>
Forest Kaser, <u>Forest.Kaser@cpuc.ca.gov</u>
Leslie Palmer, <u>Leslie.Palmer@cpuc.ca.gov</u>



July 29, 2024

# VIA ELECTRONIC FILING AND OVERNIGHT DELIVERY

Leuwam Tesfa, Deputy Executive Director, Energy & Climate Policy Leslie Palmer, Director, Safety and Enforcement Division California Public Utilities Commission 505 Van Ness Avenue San Francisco, California 94102-3298

EnergyDivisionCentralFiles@cpuc.ca.gov

Leslie.Palmer@cpuc.ca.gov

# RE: PacifiCorp (U 901-E) 2023 Annual Electric Reliability Report in Compliance with D.16-01-008

In compliance with California Public Utilities Commission Decision (D.) 16-01-008, enclosed is PacifiCorp's Annual Electric Reliability Report for January 1, 2023 – December 31, 2023.

Please note that the planned outage data is considered confidential subject to California Public Utilities Code Section 583, General Order 66-D and D.16-01-008. PacifiCorp's request for an extension to submit this filing by July 29, 2024 was approved on July 15, 2024 by Executive Director Rachel Peterson. In compliance with D.16-01-008, this information is submitted under seal. A signed declaration supporting the request for confidential treatment is also provided with this submission.

If you have any questions, please contact Joshua Jones, Vice President, Asset Management, at (801) 220-4212, or Pooja Kishore, Regulatory Affairs Manager, at (503) 813-7314.

Sincerely,

Matthew McVee

Vice President, Regulatory Policy and Operations

m nlen

Enclosure

cc: Julian Enis, Julian. Enis@cpuc.ca.gov

Forest Kaser, Forest.Kaser@cpuc.ca.gov



# PacifiCorp, d/b/a Pacific Power

Annual California Electric Reliability Report

(PUBLIC VERSION)

Calendar Year 2023 Review (January 1 – December 31, 2023)

## **Table of Contents**

Introduction	3
Outage Data Collection Process	4
Data Collected: Conventions, Indices and Certain Definitions	5
Cost Effective Improvements	6
Worst Performing Circuits	7
Service Territory Map	9
State Reliability Underlying Indices - Excluding Planned Outages: CAIDI Results	
Distribution	10
Transmission	13
Combined Transmission and Distribution	16
District Reliability Underlying Indices - Excluding Planned Outages:	
Results	
Crescent City	
Yreka/Mt. Shasta	
Tulelake/Alturas	
State and District Reliability Underlying Indices - Including Planned CSAIFI and CAIDI Results	
State	28
Crescent City	31
Yreka/Mt. Shasta	34
Tulelake/Alturas	37
CONFIDENTIAL DATA SUBJECT TO PUBLIC UTILITIES CODE SECTION D.16-01-008	
Planned Outage by District	40
Top Ten Unplanned Power Outage Events for 2023	43
Major Event Summary	44
Historical Top Ten Unplanned Power Outage Events – 2023 through	<b>2014</b> 45
Customer Inquiries and Response	48
Customer Reliability Communications	48
Reliability Inquiry and Complaint Process Overview	48
Customer Reliability Inquiry/Complaint Tracking	49
2023 Customer Reliability Inquiry Responses	49

#### Introduction

In rulemaking (R.)14-12-014, the California Public Utilities Commission developed rules regarding changes to the state's required reliability reporting requirements for California investor-owned electric utilities (IOUs), as outlined in Decision (D.) 16-01-008¹ (the Order). The report is being filed in compliance with those rules. The scope of the rulemaking included the following tasks:

- 1. Review of current reliability reporting requirements.
- 2. Develop revised annual reporting requirements that include information about frequency and duration of outages.
- 3. Define the term "local area" for reliability reporting.
- 4. Clarify the term "major event day" (to align with definition of local area for reliability reporting);
- 5. Develop criteria and methodology for identifying worst performing circuits.
- 6. Develop an approach for demonstrating cost-effective remediation and determining cost recovery procedures.
- 7. Consider whether the IOUs should be allowed to set up memorandum accounts for remediation costs; and
- 8. Develop an annual outreach plan and related reporting to inform customers about planned and unplanned outages.

#### The Order includes the following requirements:

- 1. IOUs shall submit system level and district or division level electric reliability information to the Commission on July 15 of each year.
- 2. IOUs shall submit draft copies of the reports prepared for July 15, 2016, and July 15, 2017, to the Energy Division Director in electronic format at least 45 days prior to the July 15 deadline. Draft copies for subsequent reporting years shall be required at the discretion of the Energy Division Director.
- 3. Commission staff, in consultation with the IOUs, has the authority to require any necessary revisions to the draft reports before they are made public.
- 4. Pacific Gas and Electric Company shall combine in one single report the electric reliability reporting requirements pursuant to Decision (D.) 96-09-045 and D.04-10-034.
- 5. IOUs shall use the electric reliability reporting template at Appendix B of the Order to create their annual reports.
- 6. IOUs shall publish on their internet websites or provide to customers via U.S. mail, procedures for making requests about electric circuits that serve their homes or businesses.
- 7. IOUs shall conduct at least one annual public in-person presentation about the information in their annual electric reliability reports.
- 8. IOUs shall make webinar participation available for their annual in-person events so that their customers can attend the presentation remotely or in-person.
- 9. Pacific Gas and Electric Company, Southern California Edison Company and San Diego Gas & Electric Company shall annually report the worst performing one percent of the circuits among all the electric circuits in their respective service territories.
- 10. Bear Valley Electric Service, Liberty Utilities, LLC, and PacifiCorp shall report the following number of circuits on their list of worst performing circuits: three circuits for PacifiCorp; two circuits for Liberty Utilities, LLC; and one circuit for Bear Valley Electric Service.
- 11. IOUs shall provide reliability data at both the system and the district level. Whatever major event days are determined for calculations at the system level shall also be used for reliability calculations at the district or division level.

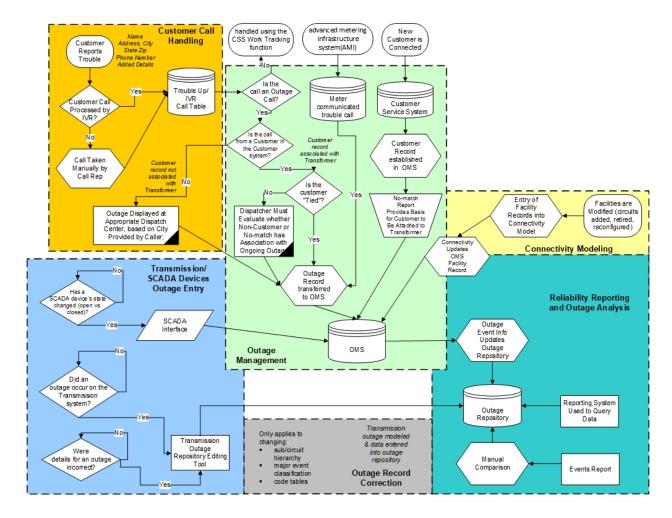
<sup>&</sup>lt;sup>1</sup> D.16-01-008 http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M157/K724/157724560.PDF

- 12. Pacific Gas and Electric Company, Southern California Edison Company and San Diego Gas & Electric Company shall respond to customer inquiries about electric reliability within 15 business days.
- 13. Bear Valley Electric Service, Liberty Utilities, LLC, and PacifiCorp shall respond to customer inquiries about electric reliability within 30 business days.
- 14. IOUs should meet and confer to consolidate unidentified reliability reporting requirements from Commission decisions and General Orders into a single Commission decision and general order.
- 15. IOUs shall submit a single joint proposal for a proposed consolidated decision and general order to the directors of the Energy Division and the Safety and Enforcement Division within one year from the date of the Order.

This report serves to fulfill the foregoing reporting requirements of the Order. In addition, this report includes a description of PacifiCorp's outage data collection process, the applicable conventions, indices and definitions, methods used by PacifiCorp to determine cost-effective reliability improvement opportunities, PacifiCorp's worst performing circuits and PacifiCorp's service territory map.

#### **Outage Data Collection Process**

PacifiCorp operates automated outage management and reporting systems; a diagram of the data flow process is shown below. Customer trouble calls and SCADA events are interfaced with the Company's real-time network connectivity model, its CADOPS system (Computer Aided Distribution Operations System). Upon implementation of the company's advanced metering infrastructure system (AMI), which occurred since the last annual report, meters also communicate trouble calls into CADOPS. By overlaying these events onto the network model, the program infers outages at the appropriate devices (such as a transformer, fuse, or other interrupting device) for all customers down line of the interrupting device. The outage is then routed to appropriate field operations staff for restoration and the outage event is recorded in the Company's Prosper/US outage repository. In addition to this real-time model of the system's electrical flow, the Company relies heavily upon the SCADA system it has in place. This includes the Dispatch Log System (an SQL database application) which serves to collect all events on SCADA-operable circuits. That data is then analyzed for momentary interruptions to establish state-level and circuit-level momentary interruption indices. Only those circuits (and the customers who are served from those devices) outfitted with SCADA equipment are considered within the calculations.



Data Collected: Conventions, Indices and Certain Definitions

SAIDI, SAIFI, CAIDI, and MAIFI are the most common performance indicators or indices used by utilities across the nation for measuring and reporting reliability. Along with other indices, they were first rigorously documented in Institute of Electrical and Electronics Engineers (IEEE) Standard 1366-1998 and were since modified in IEEE 1366-2003/2012/2022, IEEE Guide for Electric Power Distribution Reliability Indices.

For performance reporting, as contained within this document, PacifiCorp uses the current standard IEEE indices, applied both at the state level and to each of the districts in which it provides service. These districts serve as "local areas" as defined within reporting requirements. Major event days are calculated at the state level and then applied at each of these districts consistent with the requirements of D.16-01-008.

PacifiCorp collects outage data on all outages on the source side of the electric meter. When it is required to interrupt power in order to perform work on the system, it records these outages with a separate designation to identify whether they were taken with (pre-arranged or planned) or without notice. For the purposes of the data provided in this report, planned outages are those in which either the customer or the Company arranged for the power interruption to occur. Generally, they are outages that can be scheduled. In certain situations, the notice may be short, while generally two days' notice is the goal. These may also often be referred to as 'maintenance outages.' Certain other outages may be performed intentionally by employees, without notice (e.g., when a car strikes a utility pole and the crew replacing the damaged pole takes an operational outage for public safety), though they are not generally classified as planned outages because they happen abruptly and cannot be scheduled.

As part of the Company's wildfire mitigation program, the Company may implement public safety power shutoff (PSPS), use protection coordination settings, referred to as "elevated fire risk" (EFR) settings, or de-energize lines related to wildfire encroachment on Company assets. In 2021, the Company developed a method to estimate the reliability impacts of the device setting changes. EFR settings are generally applied when fire weather conditions, such as high winds, low fuel moisture, high temperature, low relative humidity, and volatile fuel are greatest. When EFR settings are used, certain operational responses may also differ, and this may result in more sustained outage events and longer outage durations. Encroachment events refer to instances where fires are in close proximity to Company assets and lines are de-energized for the safety of emergency responders, protection of Company assets, and mitigation of potential ignition risk. The underlying metrics reported exclude outages where PSPS, EFR settings, and encroachment protocols were applied.

Additionally, the Company collects information about outages that happen on equipment at voltages higher than distribution level, specifically the transmission or generation system; transmission voltages within PacifiCorp are those more than 34.5 kilovolt (kV). If an interruption occurs to distribution customers because of events at those facilities, it designates these outages as 'loss of supply' outages and denotes them in this report as transmission.

#### Cost Effective Improvements

PacifiCorp uses its reliability data in a variety of ways that are designed to improve reliability to its customers. It has devised methods that are contained in the industry guide for electric reliability, IEEE 1782-2014/2022.<sup>2</sup> Some of these analytical methods render the outage data in a tabular, graphical, or geospatial manner. All of them serve as inputs to identify and develop projects that improve reliability using the Company's fuse coordination program (commonly referred to as "fuse it or lose it" or FIOLI), its circuit hardening program (saving SAIDI), and its capital construction program (network initiatives).

PacifiCorp evaluates the history of outages within a circuit and at specific devices (fuses, reclosers, circuit breakers) across the entire service area and determines the probability of avoiding outages of specific cause categories. The programs (FIOLI, Saving SAIDI, and Network Initiatives) are evaluated for their forecast improvements to network reliability, as measured by the avoidance of customer interruptions, customer minutes interrupted, and momentary customer interruptions. Each project has a value calculated for the cost of the project divided by the avoided interruptions.

PacifiCorp uses this cost per avoided customer interruption and customer minute interrupted to identify cost-effective reliability improvement projects. It assembles each of these candidate projects and their cost to benefit value into a project priority listing which rank orders the projects and based upon the most cost-effective projects, prepares a suite of projects that align with metric improvement and budget targets. As projects are completed the list is re-evaluated to determine whether reliability performance or funding levels have changed and warrant modifications to the plan.

4175410.1

<sup>&</sup>lt;sup>2</sup> 1782 (PE/T&D) Guide for Collecting, Categorizing and Utilization of Information Related to Electric Power Distribution Interruption Events was approved on March 27, 2014, and contains many of the approaches used by PacifiCorp to evaluate system reliability and determine areas where improvements should be deployed.

## **Worst Performing Circuits**

To calibrate and assess circuit performance, PacifiCorp uses a method to calculate a "Circuit Performance Indicator," which is a blended multi-year metric for the circuit, applying weighted circuit SAIDI, SAIFI, MAIFI and breaker lockout events. This metric attempts to set all outage metrics on equal footing and provide that no one index is emphasized for overall reliability. So, customers experiencing a mix of sustained and momentary interruptions are more likely to have their circuit under consideration for improvement. This metric excludes outages that are Planned, Loss of Supply (Transmission), or Major Events. We identify this metric as CPI99. The equation and weightings are detailed below.

#### **CP199**

CPI99 is an acronym for Circuit Performance Indicator, which uses key reliability metrics of the circuit to identify underperforming circuits. The variables and equation for calculating CPI are:

```
CPI = Index * ((SAIDI * WF * NF) + (SAIFI * WF * NF) + (MAIFI<sub>E</sub> * WF * NF) + (Lockouts * WF * NF))
```

Index: 10.645

SAIDI: Weighting Factor 0.30, Normalizing Factor 0.029 SAIFI: Weighting Factor 0.30, Normalizing Factor 2.439 MAIFI<sub>E</sub>: Weighting Factor 0.20, Normalizing Factor 0.70 Lockouts: Weighting Factor 0.20, Normalizing Factor 2.00

Therefore, 10.645 \* ((3-year SAIDI \* 0.30 \* 0.029) + (3-year SAIFI \* 0.30 \* 2.439) + (3-year MAIFI<sub>E</sub>\* 0.20 \* 0.70) + (3-year breaker lockouts \* 0.20 \* 2.00)) = <u>CPI Score</u>

A higher CPI Score is worse than a lower CPI Score. Those circuits whose scores are poorer (higher) than may be warranted, given factors such as the number of customers they serve, the exposure, and the location of the circuit are identified as candidates worst performing circuits. Within five years of selection, the score must be improved (lowered) by a targeted amount. If that improvement has not been achieved, additional work may be implemented to further improve the circuit's performance.

The Order directs utilities in the following manner regarding worst performing circuit selection.<sup>3</sup>

b. Any circuit appearing on this list of "deficient" (WPC) circuits that also appeared on the previous year's list would be marked by an asterisk. For each asterisked circuit, each utility shall provide the following information:

- i. An explanation of why it was ranked as a "deficient" circuit, i.e., the value of the metric used to indicate its performance.
- ii. A historical record of the metric.
- iii. An explanation of why it was on the deficiency list again.
- iv. An explanation of what is being done to improve the circuit's future performance and the anticipated timeline for completing those activities (or an explanation why remediation is not being planned); and
- v. A quantitative description of the utility's expectation for that circuit's future performance.

<sup>&</sup>lt;sup>3</sup> D.16-01-008 p. 3.

Below are the circuits selected as worst performers for 2023. Since no circuit was a repeat selection<sup>4</sup> the details listed above are not required.

Top 3 Wo	Top 3 Worst Performing Circuits									
Program Year 24: (CY2023)										
Circuit Name	South (5G99)	Patrick's Creek (6R3)	Redwood (5R195)							
District	Yreka/Mt. Shasta	Crescent City	Crescent City							
Customer Count	65	15	551							
Substation Name	Shotgun Creek	Patrick's Creek	Redwood							
Circuit-Miles	16 miles	7 miles	26 miles							
% OH	91%	~100%	72%							
% UG	9%	<1%	28%							
# Breaker/Recloser Operations <sup>5</sup>	89	-	214							
# Fault Counts <sup>6</sup>	11	-	43							
CPI99 Baseline	345	270	185							
Preferred Baseline	276	216	148							
Designated as Worst Performer in Prior Year <sup>7</sup> ?	No	No	No							

<sup>&</sup>lt;sup>4</sup>In 2023, the three circuits identified as WPCs were Mill (5L62), South (5G31), and East (5L82). In 2022, the three circuits identified as WPCs were Sawmill (5R171), Shasta Spr (5G69), and Red Rock (4L3). In 2021, the three circuits identified as WPCs were Crescent Ctr (5R160), Nutgale, (8G95), and Shastina (5G45). In 2020, the three circuits identified as WPCs were Florence Ave (7G71), Seiad Crk (5G39), and Snowbush (6G101). In 2019, the three circuits identified as WPCs were Bell-Air (5G83), Peach Orchard (5G2), and Southbank (5R165).

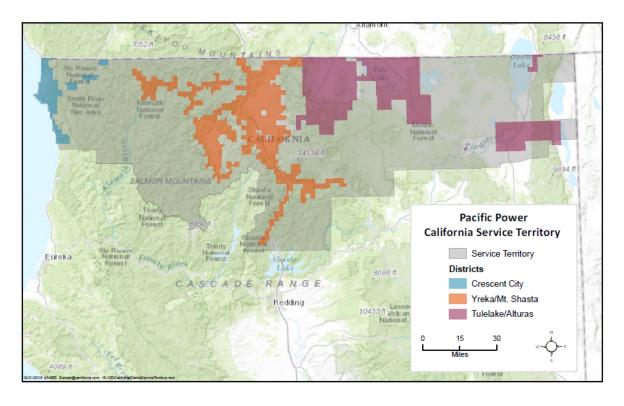
<sup>&</sup>lt;sup>5</sup> 2023 Operation counters are a physical counter on the equipment that ticks off an operation every time the breaker is operated regardless of how or why it is operated.

<sup>&</sup>lt;sup>6</sup> 2023 Fault counters are a manual calculation that is determined by operation counters that are found to have operated with an unknown cause (usually a fault on the line).

<sup>&</sup>lt;sup>7</sup> Designation of WPCs in accordance with this program began in 2017.

# **Service Territory Map**

The graphic below shows PacifiCorp's service territory and identifies the districts used in this report.



# State Reliability Underlying Indices - Excluding Planned Outages: Ten-Year SAIDI, SAIFI, MAIFI and CAIDI Results

PacifiCorp uses the current standard indices for performance reporting, as described within this document, at the state level and at reliability reporting regional levels. System Indices are calculated based on the IEEE 1366 method, which excludes Planned and ISO outages and includes generation outages. Major Events are determined using the "2.5 beta" statistical method to determine the threshold for a major event, as outlined in IEEE 1366 and performance with and without major events are both reported. For more on the reporting period's major events, see Section 7.

#### Distribution

Distribution outages include any outage where the device which operates is downstream of the high side disconnect of the substation down to the customer's meter.

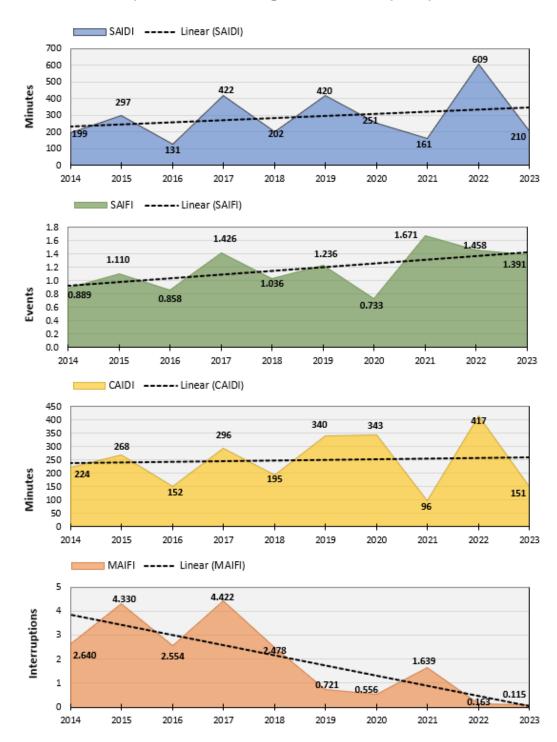
	Distribution System Indices										
		Major Even	ts Included <sup>1</sup>		Major Events Excluded <sup>2</sup> (2.5 ß P1366)						
Year	SAIDI	SAIFI	CAIDI	MAIFI <sup>3</sup>	SAIDI	SAIFI	CAIDI	MAIFI <sup>3</sup>			
2023	209.9	1.391	151	0.115	129.5	1.120	116	0.081			
2022	608.7	1.458	417	0.163	96.7	1.027	94	0.129			
2021	160.9	1.671	96	1.639	78.4	0.814	96	1.639			
2020	251.5	0.733	343	0.556	87.5	0.610	144	0.556			
2019	419.7	1.236	340	0.721	70.2	0.473	149	0.721			
2018	202.5	1.036	195	2.478	72.0	0.688	105	2.478			
2017	421.8	1.426	296	4.422	75.5	0.607	125	4.422			
2016	130.8	0.858	152	2.554	96.2	0.719	134	2.554			
2015	297.5	1.110	268	4.330	100.0	0.674	148	4.330			
2014	199.4	0.889	224	2.640	160.8	0.840	191	2.640			

#### Notes:

- Excludes outages that are customer requested, pre-arranged, emergency damage repair (established 2023), extended as a result of
  "Elevated Fire Risk" settings (established 2021), encroachment (established 2024), public safety power shutoff (established 2021), or
  resulting from a failure of another company's system.
- 2. In 2016, D.16-01-008 approved Major Event designation process. 2015 Local events were reviewed and are excluded from the indices going -forward.
- 3. Momentary indices reflect the operating system of record capturing interruptions less than five minutes and are inclusive of outages that occurred during major events.

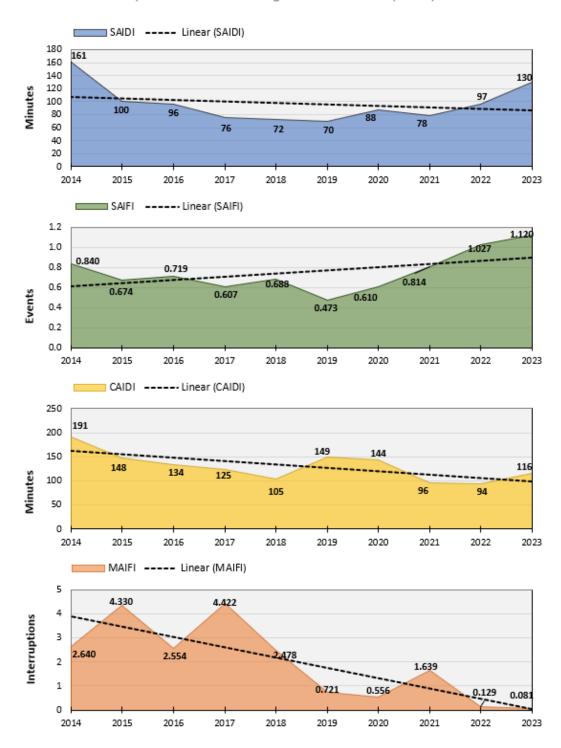
#### Distribution Reliability History - Including Major Events

(excludes customer notice given and customer requested)



#### Distribution Reliability History - Excluding Major Events

(excludes customer notice given and customer requested)



#### Transmission

Transmission outages include any outage where the device that operates is upstream of the substation transformer. This can include outages that are the result of generator operations. Transmission voltages are in excess of 34.5 kilovolt (kV).

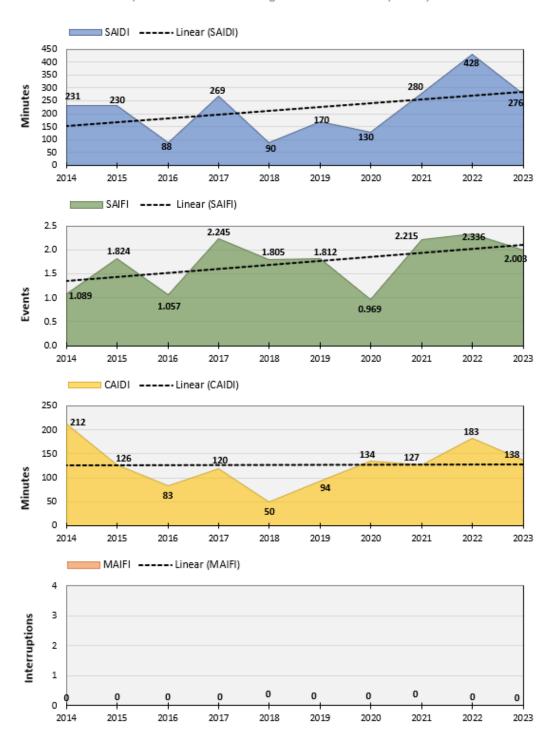
	Transmission System Indices										
		Major Even	ts Included <sup>1</sup>		Major Events Excluded <sup>2</sup> (2.5 ß P1366)						
Year	SAIDI	SAIFI	CAIDI	MAIFI <sup>3</sup>	SAIDI	SAIFI	CAIDI	MAIFI <sup>3</sup>			
2023	275.5	2.003	138	0	32.0	0.257	124	0			
2022	428.4	2.336	183	0	29.7	1.083	27	0			
2021	280.2	2.215	127	0	37.2	0.851	44	0			
2020	129.9	0.969	134	0	45.3	0.488	93	0			
2019	169.9	1.812	94	0	36.1	0.365	99	0			
2018	89.6	1.805	50	0	37.0	1.275	29	0			
2017	269.1	2.245	120	0	46.6	1.144	41	0			
2016	88.1	1.057	83	0	46.5	0.714	65	0			
2015	230.4	1.824	126	0	81.9	1.013	81	0			
2014	230.5	1.089	212	0	72.7	0.586	124	0			

#### Notes:

- Excludes outages that are customer requested, pre-arranged, emergency damage repair (established 2023), extended as a result of "Elevated Fire Risk" settings (established 2021), encroachment (established 2024), public safety power shutoff (established 2021), or resulting from a failure of another company's system.
- 2. In 2016, D.16-01-008 approved Major Event designation process. 2015 Local events were reviewed and are excluded from the indices going -forward.
- 3. Momentary indices reflect the operating system of record capturing interruptions less than five minutes and are inclusive of outages that occurred during major events.

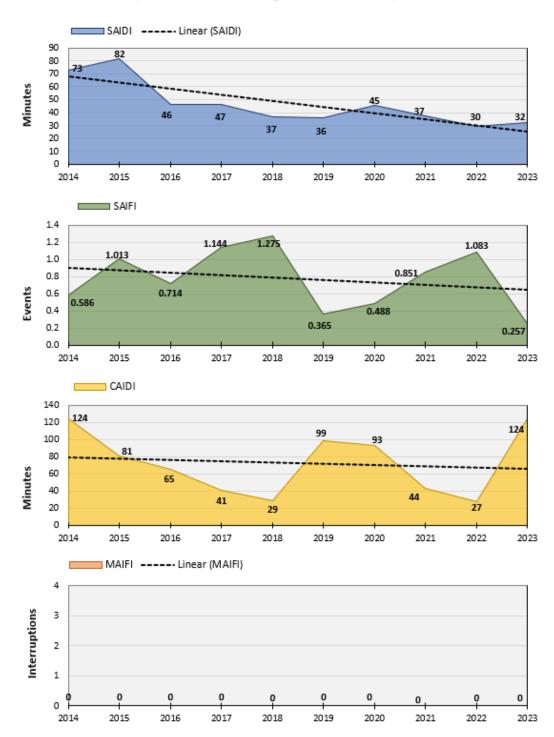
#### Transmission Reliability History - Including Major Events

(excludes customer notice given and customer requested)



#### Transmission Reliability History - Excluding Major Events

(excludes customer notice given and customer requested)



#### **Combined Transmission and Distribution**

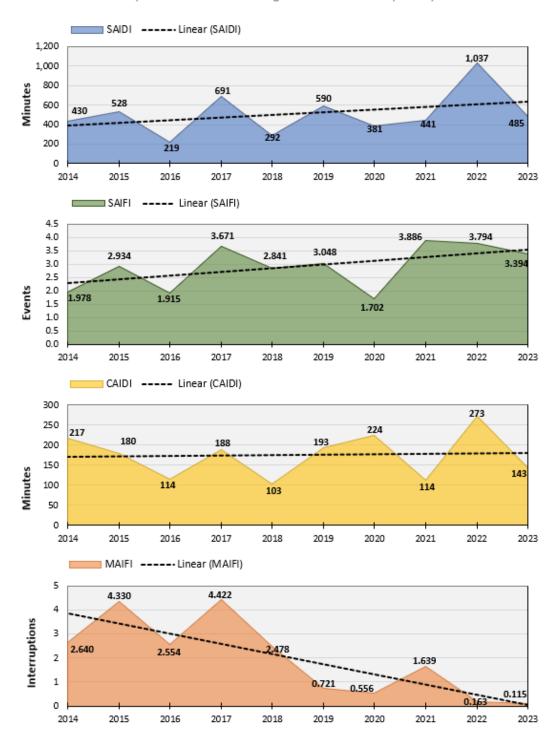
	Combined Transmission and Distribution System Indices										
		Major Even	ts Included <sup>1</sup>		Major Events Excluded <sup>2</sup> (2.5 ß P1366)						
Year	SAIDI	SAIFI	CAIDI	MAIFI <sup>3</sup>	SAIDI	SAIFI	CAIDI	MAIFI <sup>3</sup>			
2023	485.4	3.394	143	0.115	161.5	1.377	117	0.081			
2022	1,037.1	3.794	273	0.163	126.41	2.11	59.91	0.129			
2021	441.1	3.886	114	1.639	115.6	1.665	69	1.639			
2020	381.4	1.702	224	0.556	132.9	1.098	121	0.556			
2019	589.7	3.048	193	0.721	106.3	0.838	127	0.721			
2018	292.1	2.841	103	2.478	108.9	1.963	55	2.478			
2017	690.9	3.671	188	4.422	122.2	1.751	70	4.422			
2016	218.9	1.915	114	2.554	142.7	1.433	100	2.554			
2015	527.8	2.934	180	4.330	181.9	1.687	108	4.330			
2014	430.0	1.978	217	2.640	233.6	1.426	164	2.640			

#### Notes:

- Excludes outages that are customer requested, pre-arranged, emergency damage repair (established 2023), extended as a result of
  "Elevated Fire Risk" settings (established 2021), encroachment (established 2024), public safety power shutoff (established 2021), or
  resulting from a failure of another company's system.
- 2. In 2016, D.16-01-008 approved Major Event designation process. 2015 Local events were reviewed and are excluded from the indices going -forward.
- 3. Momentary indices reflect the operating system of record capturing interruptions less than five minutes and are inclusive of outages that occurred during major events.

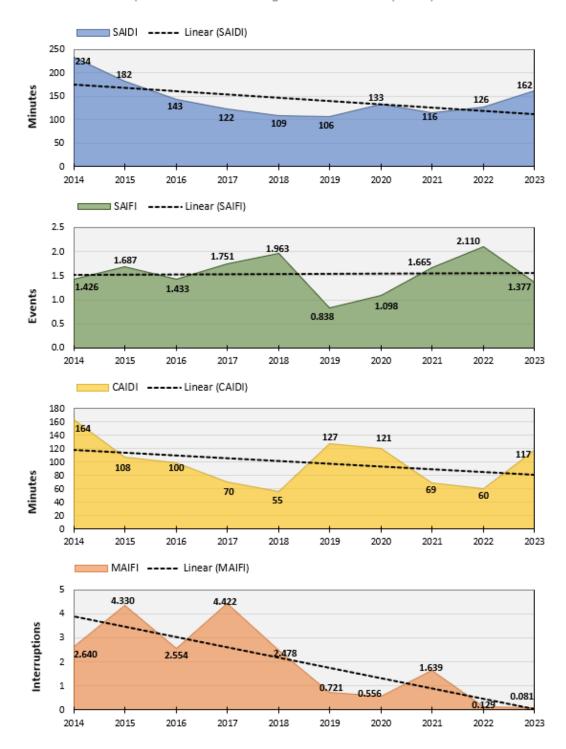
#### Transmission and Distribution Reliability History - Including Major Events

(excludes customer notice given and customer requested)



#### Transmission and Distribution Reliability History - Excluding Major Events

(excludes customer notice given and customer requested)



# District Reliability Underlying Indices - Excluding Planned Outages: Ten-Year SAIDI, SAIFI and CAIDI Results

#### **Crescent City**

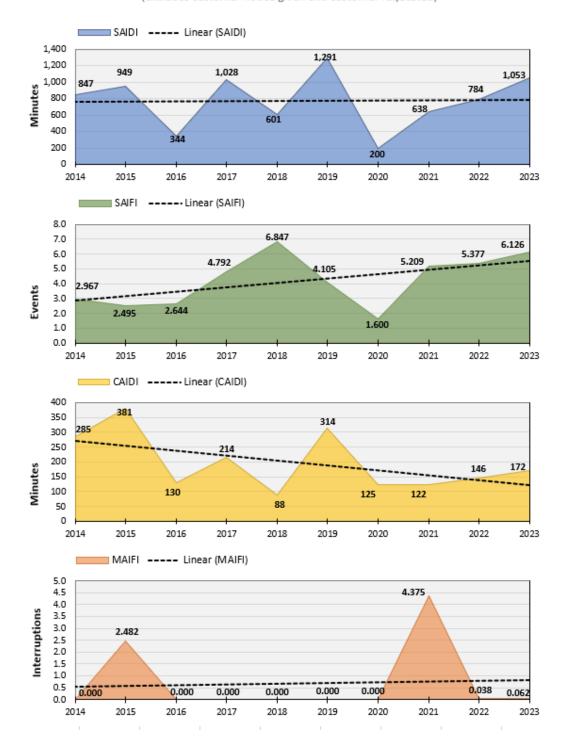
	Crescent City - District System Indices										
		Major Even		Major Events Excluded <sup>2</sup> (2.5 ß P1366)							
Year	SAIDI SAIFI CAIDI MAIFI <sup>3</sup>				SAIDI	SAIFI	CAIDI	MAIFI <sup>3</sup>			
2023	1,052.7	6.126	172	0.062	153.0	1.331	115	0.010			
2022	784.2	5.377	146	0.038	95.2	2.096	45	0.006			
2021	637.6	5.209	122	4.375	112.4	1.596	70	4.375			
2020	199.6	1.600	125	0.000	115.3	1.166	99	0.0			
2019	1,291.0	4.105	314	0.000	96.4	0.881	109	0.0			
2018	600.7	6.847	88	0.000	104.6	3.607	29	0.0			
2017	1,027.6	4.792	214	0.000	124.6	1.178	106	0.0			
2016	343.7	2.644	130	0.000	161.6	1.431	113	0.0			
2015	949.5	2.495	381	2.482	96.7	0.776	125	2.482			
2014	846.7	2.967	285	0.000	318.2	1.592	200	0			

#### Notes:

- Excludes outages that are customer requested, pre-arranged, emergency damage repair (established 2023), extended as a result of
  "Elevated Fire Risk" settings (established 2021), encroachment (established 2024), public safety power shutoff (established 2021), or
  resulting from a failure of another company's system.
- 2. In 2016, D.16-01-008 approved Major Event designation process. 2015 Local events were reviewed and are excluded from the indices going -forward.
- 3. Momentary indices reflect the operating system of record capturing interruptions less than five minutes and are inclusive of outages that occurred during major events.

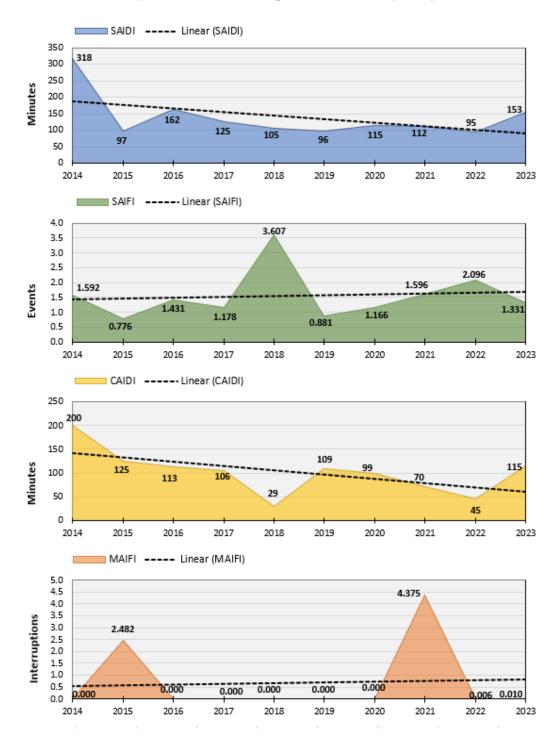
#### Crescent City Reliability History - Including Major Events

(excludes customer notice given and customer requested)



#### Crescent City Reliability History - Excluding Major Events

(excludes customer notice given and customer requested)



## Yreka/Mt. Shasta

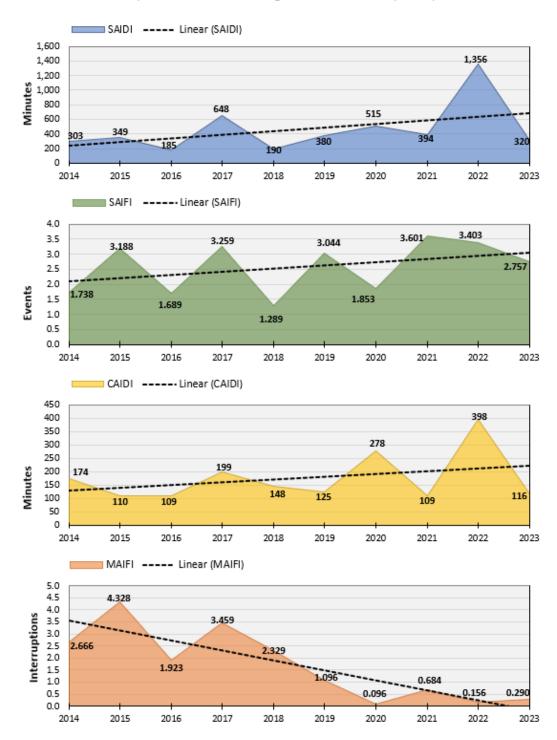
	Yreka/Mt. Shasta - District System Indices										
		Major Even	ts Included <sup>1</sup>		Major Events Excluded² (2.5 ß P1366)						
Year	SAIDI	SAIFI	CAIDI	MAIFI <sup>3</sup>	SAIDI	SAIFI	CAIDI	MAIFI <sup>3</sup>			
2023	319.8	2.757	116	0.290	190.9	1.573	121	0.137			
2022	1,355.9	3.403	398	0.156	122.9	2.078	59	0.113			
2021	393.5	3.601	109	0.684	124.2	1.776	70	0.684			
2020	515.2	1.853	278	0.096	137.9	1.070	129	0.096			
2019	379.9	3.044	125	1.096	116.9	0.784	149	1.096			
2018	190.5	1.289	148	2.329	106.5	1.283	83	2.329			
2017	648.0	3.259	199	3.459	121.8	1.905	64	3.459			
2016	184.6	1.689	109	1.923	146.4	1.455	101	1.923			
2015	349.2	3.188	110	4.328	230.3	2.290	101	4.328			
2014	303.0	1.738	174	2.666	222.0	1.437	155	2.666			

#### Notes:

- Excludes outages that are customer requested, pre-arranged, emergency damage repair (established 2023), extended as a result of
  "Elevated Fire Risk" settings (established 2021), encroachment (established 2024), public safety power shutoff (established 2021), or
  resulting from a failure of another company's system.
- 2. In 2016, D.16-01-008 approved Major Event designation process. 2015 Local events were reviewed and are excluded from the indices going -forward.
- 3. Momentary indices reflect the operating system of record capturing interruptions less than five minutes and are inclusive of outages that occurred during major events.

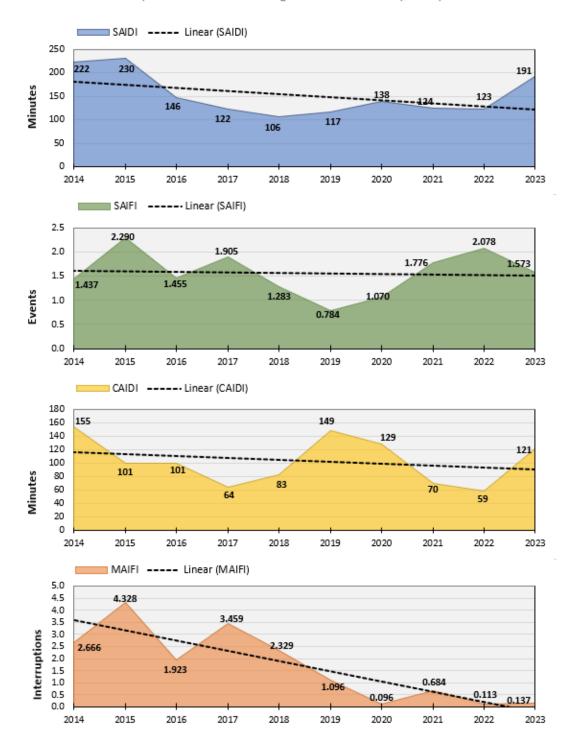
#### Yreka/Mt. Shasta Reliability History - Including Major Events

(excludes customer notice given and customer requested)



## Yreka/Mt. Shasta Reliability History - Excluding Major Events

(excludes customer notice given and customer requested)



## Tulelake/Alturas

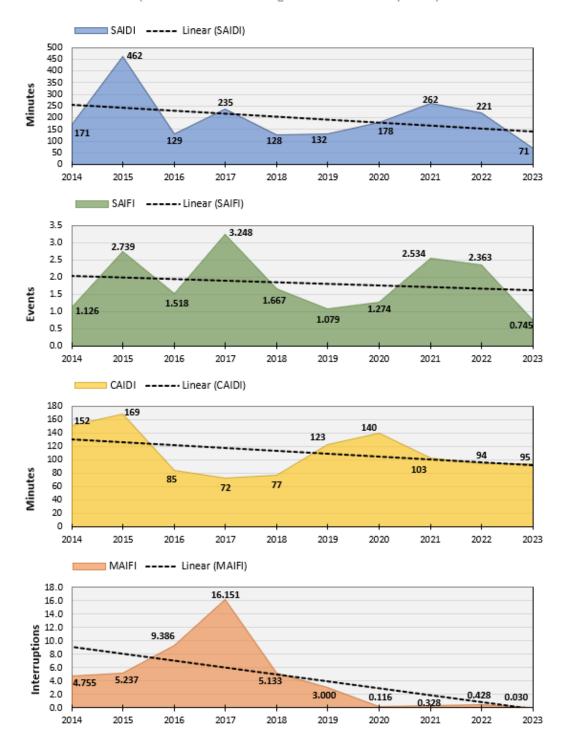
	Tulelake/Alturas - District System Indices										
		Major Even	ts Included <sup>1</sup>		Major Events Excluded <sup>2</sup> (2.5 ß P1366)						
Year	SAIDI	SAIFI	CAIDI	MAIFI <sup>3</sup>	SAIDI	SAIFI	CAIDI	MAIFI <sup>3</sup>			
2023	70.7	0.745	95	0.030	58.9	0.674	87	0.030			
2022	221.0	2.363	94	0.428	200.1	2.267	88	0.428			
2021	262.0	2.534	103	0.328	86.8	1.343	65	0.328			
2020	178.2	1.274	140	0.116	146.4	1.079	136	0.116			
2019	132.4	1.079	123	3.000	81.6	0.978	83	3.000			
2018	128.4	1.667	77	5.133	127.0	1.658	77	5.133			
2017	235.5	3.248	72	16.151	119.3	2.198	54	16.151			
2016	128.7	1.518	85	9.386	95.3	1.389	69	9.386			
2015	462.3	2.739	169	5.237	147.1	0.978	150	5.237			
2014	171.2	1.126	152	4.755	125.0	1.083	115	4.755			

#### Notes:

- Excludes outages that are customer requested, pre-arranged, emergency damage repair (established 2023), extended as a result of
  "Elevated Fire Risk" settings (established 2021), encroachment (established 2024), public safety power shutoff (established 2021), or
  resulting from a failure of another company's system.
- 2. In 2016, D.16-01-008 approved Major Event designation process. 2015 Local events were reviewed and are excluded from the indices going -forward.
- 3. Momentary indices reflect the operating system of record capturing interruptions less than five minutes and are inclusive of outages that occurred during major events.

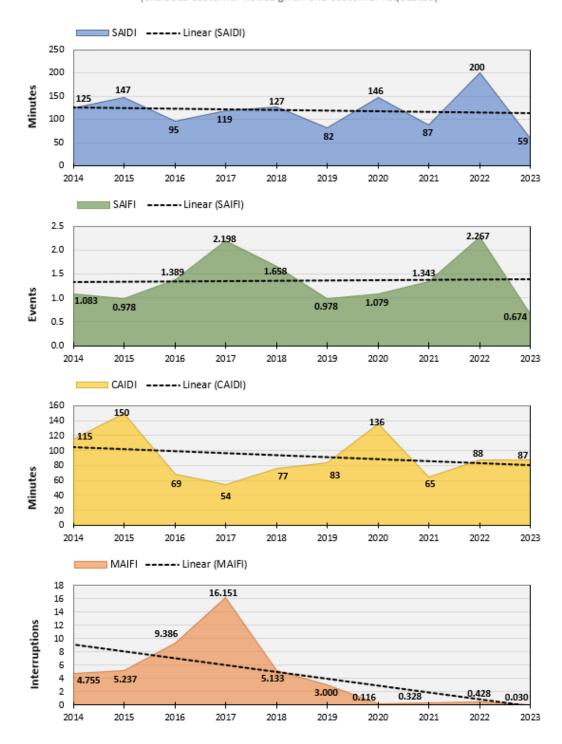
#### Tulelake/Alturas Reliability History - Including Major Events

(excludes customer notice given and customer requested)



#### Tulelake/Alturas Reliability History - Excluding Major Events

(excludes customer notice given and customer requested)



# State and District Reliability Underlying Indices - Including Planned Outages: Ten-Year Year SAIDI, SAIFI and CAIDI Results

#### State

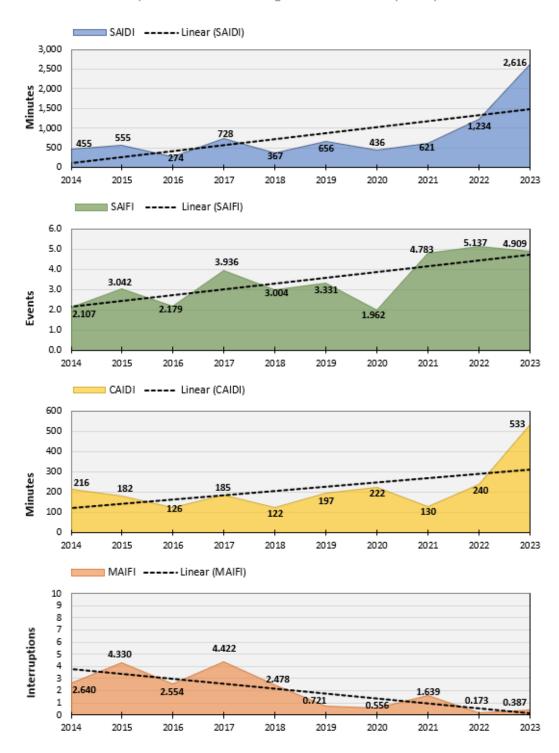
	State - District System Indices										
		Major Even	ts Included <sup>1</sup>		Major Events Excluded <sup>2</sup> (2.5 ß P1366)						
Year	SAIDI	SAIFI	CAIDI	MAIFI <sup>3</sup>	SAIDI	SAIFI	CAIDI	MAIFI <sup>3</sup>			
2023	2,616.2	4.909	533	0.387	379.4	2.527	150	0.181			
2022	1,234.3	5.137	240	0.173	293.8	2.370	124	0.139			
2021	621.1	4.783	130	1.639	284.2	2.514	113	1.639			
2020	436.3	1.962	222	0.556	185.4	1.353	137	0.556			
2019	656.1	3.331	197	0.721	172.7	1.118	154	0.721			
2018	366.8	3.004	122	2.478	183.6	2.126	86	2.478			
2017	727.6	3.936	185	4.422	158.7	2.014	79	4.422			
2016	273.8	2.179	126	2.554	197.6	1.697	116	2.554			
2015	554.5	3.042	182	4.330	208.6	1.795	116	4.330			
2014	455.4	2.107	216	2.640	259.0	1.554	167	2.640			

#### Notes:

- 1. Excludes outages that are extended as a result of "Elevated Fire Risk" settings (established 2021), encroachment (established 2024), public safety power shutoff (established 2021), or resulting from a failure of another company's system.
- 2. In 2016, D.16-01-008 approved Major Event designation process. 2015 Local events were reviewed and are excluded from the indices going -forward.
- 3. Momentary indices are reported within distribution system metrics and are inclusive of outages that occurred during major events.

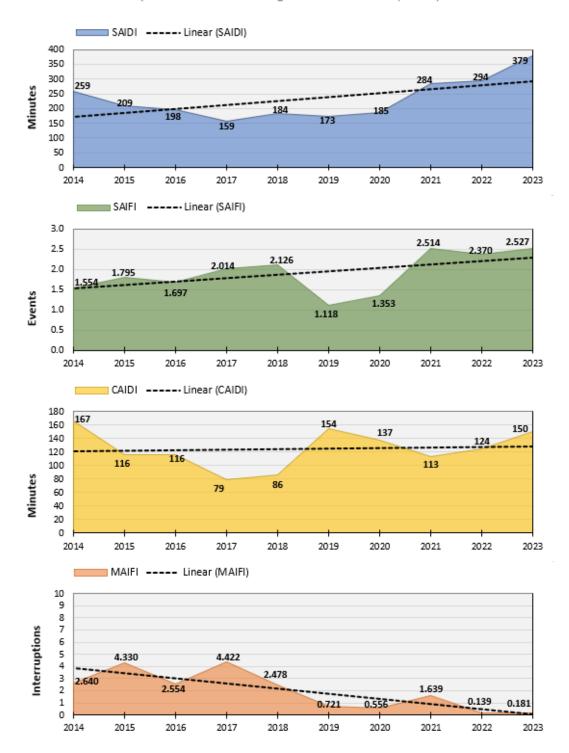
#### State Reliability History - Including Major Events

(includes customer notice given and customer requested)



#### State Reliability History - Excluding Major Events

(includes customer notice given and customer requested)



## **Crescent City**

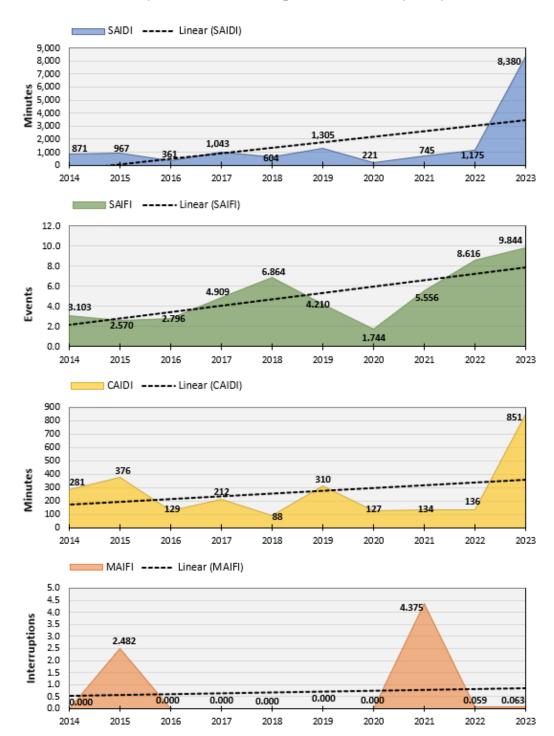
	Crescent City - District System Indices										
	Major Events Included <sup>1</sup>				Major Events Excluded <sup>2</sup> (2.5 ß P1366)						
Year	SAIDI	SAIFI	CAIDI	MAIFI <sup>3</sup>	SAIDI	SAIFI	CAIDI	MAIFI <sup>3</sup>			
2023	8,379.5	9.844	851	0.063	529.7	3.749	141	0.011			
2022	1,175.1	8.616	136	0.059	486.2	5.335	91	0.028			
2021	744.9	5.556	134	4.375	219.6	1.943	113	4.375			
2020	221.1	1.744	127	0.000	136.8	1.311	104	0.000			
2019	1,304.9	4.210	310	0.000	110.2	0.985	112	0.000			
2018	603.6	6.864	88	0.000	107.6	3.624	30	0.000			
2017	1,042.6	4.909	212	0.000	139.4	1.294	108	0.000			
2016	361.4	2.796	129	0.000	179.2	1.583	113	0.000			
2015	966.9	2.570	376	2.482	114.0	0.851	134	2.482			
2014	871.1	3.103	281	0.000	342.6	1.728	198	0.000			

#### Notes:

- 1. Excludes outages that are extended as a result of "Elevated Fire Risk" settings (established 2021), encroachment (established 2024), public safety power shutoff (established 2021), or resulting from a failure of another company's system.
- 2. In 2016, D.16-01-008 approved Major Event designation process. 2015 Local events were reviewed and are excluded from the indices going -forward.
- 3. Momentary indices are reported within distribution system metrics and are inclusive of outages that occurred during major events.

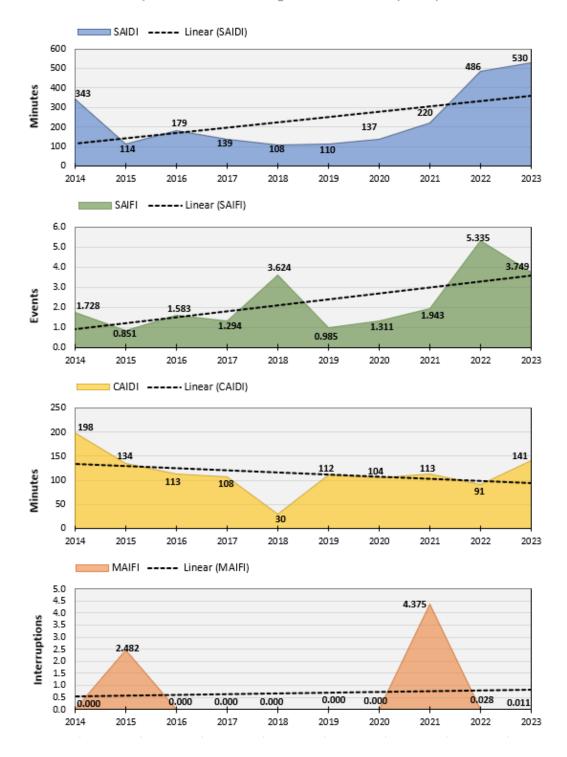
#### Crescent City Reliability History - Including Major Events

(includes customer notice given and customer requested)



## Crescent City Reliability History - Excluding Major Events

(includes customer notice given and customer requested)



# Yreka/Mt. Shasta

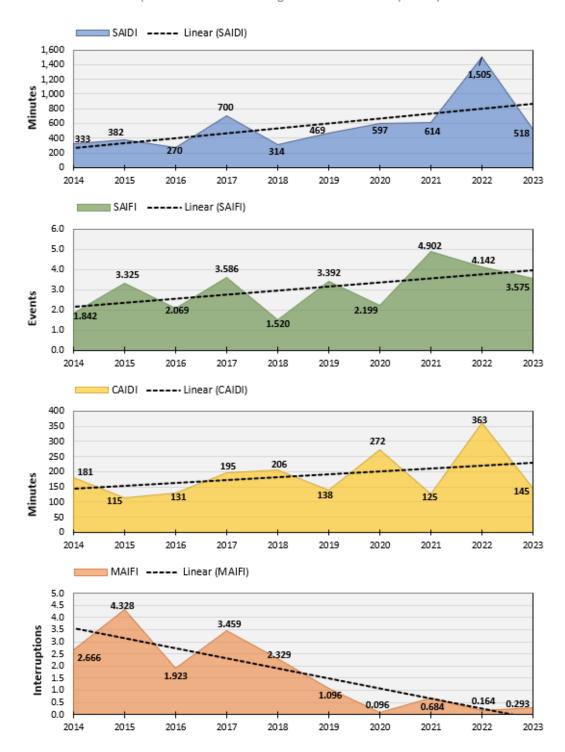
		Yrek	a/Mt. Shas	ta - District	System Ind	ices		
	Major Events Included <sup>1</sup>			Major Events Excluded <sup>2</sup> (2.5 ß P1366)				
Year	SAIDI	SAIFI	CAIDI	MAIFI <sup>3</sup>	SAIDI	SAIFI	CAIDI	MAIFI <sup>3</sup>
2023	518.1	3.575	145	0.293	384.7	2.377	162	0.140
2022	1504.8	4.142	363	0.164	271.7	2.815	97	0.120
2021	614.0	4.902	125	0.684	325.2	2.995	109	0.684
2020	597.5	2.199	272	0.096	216.2	1.409	153	0.096
2019	469.2	3.392	138	1.096	206.2	1.131	182	1.096
2018	313.5	1.520	206	2.329	229.5	1.514	152	2.329
2017	699.9	3.586	195	3.459	173.5	2.231	78	3.459
2016	270.3	2.069	131	1.923	232.2	1.836	126	1.923
2015	382.2	3.325	115	4.328	263.2	2.427	108	4.328
2014	332.6	1.842	181	2.666	251.7	1.540	163	2.666

#### Notes:

- Excludes outages that are extended as a result of "Elevated Fire Risk" settings (established 2021), encroachment (established 2024), public safety power shutoff (established 2021), or resulting from a failure of another company's system.
- 2. In 2016, D.16-01-008 approved Major Event designation process. 2015 Local events were reviewed and are excluded from the indices going -forward.
- 3. Momentary indices are reported within distribution system metrics and are inclusive of outages that occurred during major events.

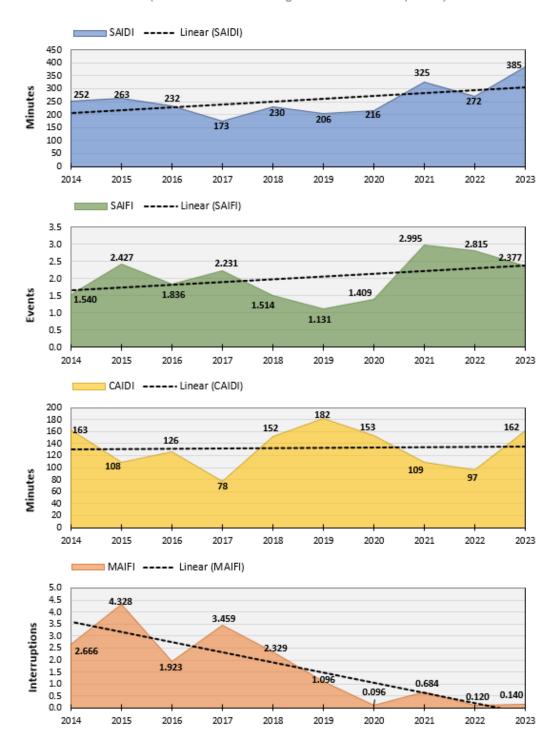
## Yreka/Mt. Shasta Reliability History - Including Major Events

(includes customer notice given and customer requested)



## Yreka/Mt. Shasta Reliability History - Excluding Major Events

(includes customer notice given and customer requested)



# Tulelake/Alturas

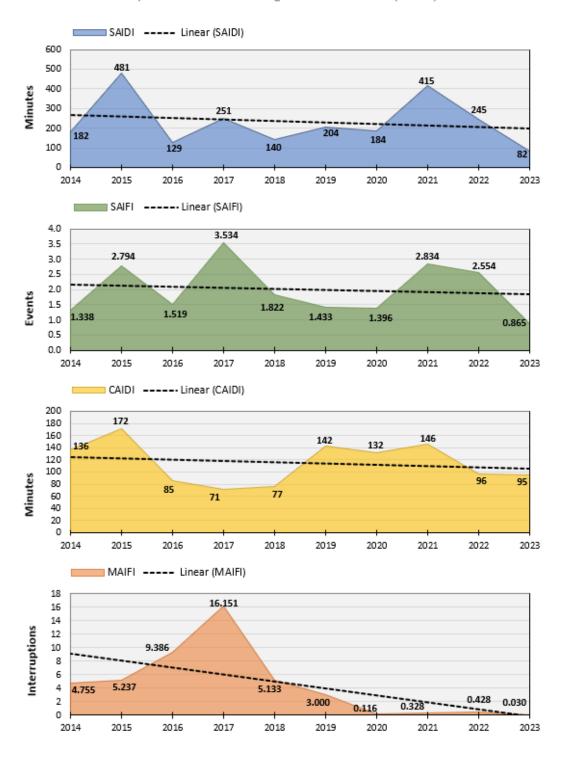
	Tulelake/Alturas - District System Indices								
	Major Events Included <sup>1</sup>			Major Events Excluded <sup>2</sup> (2.5 ß P1366)					
Year	SAIDI	SAIFI	CAIDI	MAIFI <sup>3</sup>	SAIDI	SAIFI	CAIDI	MAIFI <sup>3</sup>	
2023	82.4	0.865	95	0.030	70.6	0.794	89	0.030	
2022	244.7	2.554	96	0.428	223.9	2.458	91	0.428	
2021	415.0	2.834	146	0.328	239.7	1.640	146	0.328	
2020	184.0	1.396	132	0.116	152.2	1.202	127	0.116	
2019	204.2	1.433	142	3.000	153.2	1.313	117	3.000	
2018	140.0	1.822	77	5.133	138.7	1.813	76	5.133	
2017	251.0	3.534	71	16.151	158.7	2.014	79	16.151	
2016	128.9	1.519	85	9.386	95.5	1.390	69	9.386	
2015	481.1	2.794	172	5.237	165.9	1.033	161	5.237	
2014	182.3	1.338	136	4.755	136.0	1.295	105	4.755	

## Notes:

- 1. Excludes outages that are extended as a result of "Elevated Fire Risk" settings (established 2021), encroachment (established 2024), public safety power shutoff (established 2021), or resulting from a failure of another company's system.
- 2. In 2016, D.16-01-008 approved Major Event designation process. 2015 Local events were reviewed and are excluded from the indices going -forward.
- 3. Momentary indices are reported within distribution system metrics and are inclusive of outages that occurred during major events.

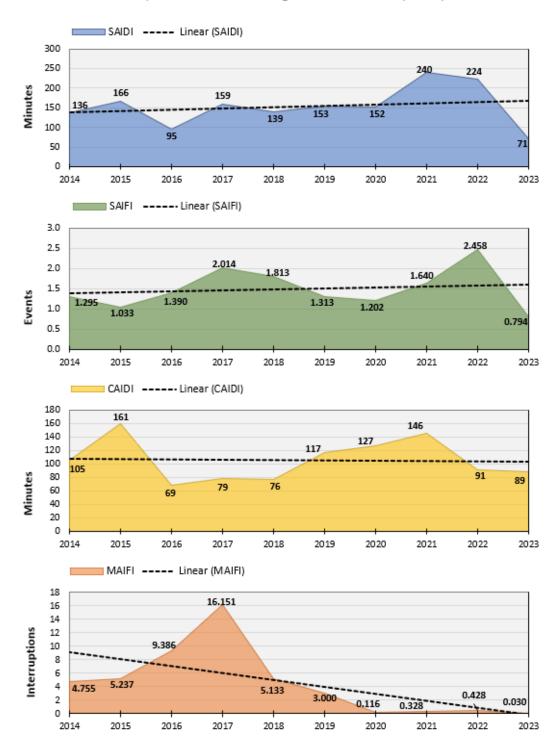
## Tulelake/Alturas Reliability History - Including Major Events

(includes customer notice given and customer requested)



## Tulelake/Alturas Reliability History - Excluding Major Events

(includes customer notice given and customer requested)



## CONFIDENTIAL DATA SUBJECT TO PUBLIC UTILITIES CODE SECTION 583, GENERAL ORDER 66-D AND D.16-01-008

Planned Outage by District

Planned Ou	itage by District			
	Planned	Outages – By Dis	strict and Month	
		Crescent City	Tulelake/ Alturas	Yreka/ Mt.
2023	January			Shasta
2023	February			
	March			
	April			
	May			
	June			
	July			
	August			
	September			
	October			
	November			
	December			
2022	January			
	February			
	March			
	April			
	May			
	June			
	July			
	August			
	September			
	October			
	November			
	December			
2021	January			
	February			
	March			
	April			
	May			
	June			
	July			
	August			
	September October			
	November			
	December			
	December			

		Crescent City	Tulelake/ Alturas	Yreka/ Mt. Shasta
2020	January			
	February			
	March			
	April			
	May			
	June			
	July			
	August			
	September			
	October			
	November			
	December			
2019	January			
	February			
	March			
	April			
	May			
	June			
	July			
	August			
	September			
	October			
	November			
	December			
2018	January			
	February			
	March			
	April			
	May			
	June			
	July			
	August			
	September			
	October			
	November			
	December			

		Crescent City	Tulelake/ Alturas	Yreka/ Mt. Shasta
2017	January			
	February			
	March			
	April			
	May			
	June			
	July			
	August			
	September			
	October			
	November			
	December			
2016	January			
	February			
	March			
	April			
	May			
	June			
	July			
	August			
	September			
	October			
	November			
	December			
2015	January			
	February			
	March			
	April			
	May			
	June			
	July			
	August			
	September			
	October			
	November			
	December			

		Crescent City	Tulelake/ Alturas	Yreka/ Mt. Shasta
2014	January			
	February			
	March			
	April			
	May			
	June			
	July			
	August			
	September			
	October			
	November			
	December			

#### Notes:

Includes outages that are customer requested, pre-arranged (which can include short notice emergency
prearranged outages), emergency damage repair (established 2023), forced outages mandated by public
authority, or resulting from a failure of another company's system.

# **Top Ten Unplanned Power Outage Events for 2023**

The table below displays the top 10 unplanned outages in 2023 based on the total customer minutes lost.

	Top 10 Unplanned Outage Events – 2023								
Date	District	Description	Major Event?	Total Customer Minutes Lost	Total Customers in Incident				
2/23/23	Crescent City	Snow, Sleet, and Blizzard	Υ	1,004,980	1,312				
3/28/23	Crescent City	Loss of Transmission Line	Υ	420,712	1,602				
3/28/23	Crescent City	Loss of Transmission Line	Υ	405,480	1,544				
3/28/23	Crescent City	Loss of Transmission Line	Υ	384,996	1,466				
3/28/23	Crescent City	Loss of Transmission Line	Υ	365,825	1,393				
5/20/23	Crescent City	Deterioration or Rotting	N	357,687	1,568				
7/24/23	Mt. Shasta	Other; Equipment Malfunction	N	355,054	1,927				
2/23/23	Crescent City	Loss of Transmission	Υ	346,688	1,476				
3/28/23	Crescent City	Loss of Transmission	Υ	346,126	1,318				
8/16/23	Yreka	Other	N	338,946	1,614				

# **Major Event Summary**

PacifiCorp's service territory in California consists of the three operating areas: Crescent City, Yreka/Mt. Shasta, and Tulelake/Alturas. Each operating area has been designated as a reliability reporting region in accordance with the Order. Each year the major event threshold for the state is determined using the  $T_{MED}$  methodology, as defined in IEEE P1366 and known as the "2.5 beta" method. The state  $T_{MED}$  is then applied to each operating area. The table below depicts the major events that occurred during 2023.

		2023 Major Event	t Summary	y				
			Customers out for a duration of:					
Date	District	Cause	5 min - 3 hrs.	3 - 24 hrs.	24 - 48 hrs.	48 - 72 hrs.	72 - 96 hrs.	96 + hrs.
January 4, 2023	Crescent City	Wind	891	942	14	-	-	-
January 8, 2023	California (State)	Wind, Snow, Sleet, and Blizzard; Loss of Transmission Line	10,723	2,751	7	-	-	-
February 23-25, 2023	California (State)	Snow, Sleet, and Blizzard; Loss of Transmission Line	16,869	11,830	19	-	-	-
March 7, 2023	Crescent City	Loss of Transmission Line	10,228	-	-	-	-	-
March 9, 2023	California (State)	Wind, Snow, Sleet, and Blizzard; Loss of Transmission Line	14,251	1,878	156	-	-	-
March 28, 2023	California (State)	Loss of Transmission Line	9,628	14,036	305	33	-	-
August 18, 2023 – September 1 ,2023	Crescent City	Emergency Damage Repair	68	802	536	777	3,605	8,028

<sup>&</sup>lt;sup>8</sup> Due to the size and irregularity of outage occurrences by district, it was deemed appropriate to apply the state T<sub>MED</sub> to each district, to better adhere to major event standards throughout the operating areas and state.

# Historical Top Ten Unplanned Power Outage Events – 2023 through 2014

		Historical Top Te	en Unplanned Outage Ev	ents by Ye	ar	
Year	Date	District	Description	Excluded Major Event?	Total Customer Minutes Lost	Total Customers in Incident
	2/23/23	Crescent City	Snow, Sleet, and Blizzard	Υ	1,004,980	1,312
	3/28/23	Crescent City	Loss of Transmission Line	Y	420,712	1,602
	3/28/23	Crescent City	Loss of Transmission Line	Y	405,480	1,544
	3/28/23	Crescent City	Loss of Transmission Line	Υ	384,996	1,466
	3/28/23	Crescent City	Loss of Transmission Line	Υ	365,825	1,393
2023	5/20/23	Crescent City	Deterioration or Rotting	N	357,687	1,568
	7/24/23	Mt. Shasta	Other; Equipment Malfunction	N	355,054	1,927
	2/23/23	Crescent City	Loss of Transmission	Υ	346,688	1,476
	3/28/23	Crescent City	Loss of Transmission	Υ	346,126	1,318
	8/16/23	Yreka	Other	N	338,946	1,614
	9/2/2022	Yreka/Mt. Shasta	Environment - Fire/Smoke (Not due to faults)	Υ	11,350,786	1,908
	7/29/2022	Yreka/Mt. Shasta	Environment - Fire/Smoke (Not due to faults)	Υ	5,684,103	342
	9/2/2022	Yreka/Mt. Shasta	Loss of Transmission Line	Υ	3,698,859	650
	9/2/2022	Yreka/Mt. Shasta	Loss of Transmission Line	Υ	3,151,717	2,458
2022	9/2/2022	Yreka/Mt. Shasta	Loss of Transmission Line	Υ	2,603,179	1,903
	9/2/2022	Yreka/Mt. Shasta	Environment - Fire/Smoke (Not due to faults)	Υ	816,017	686
	8/8/2022	Yreka/Mt. Shasta	Loss of Transmission Line	Υ	732,606	1,415
	12/10/2022	Yreka/Mt. Shasta	Loss of Transmission Line	Υ	691,746	1,034
	12/27/2022	Yreka/Mt. Shasta	Loss of Transmission Line	Υ	588,913	1,160
	3/12/2022	Crescent City	Loss of Transmission Line	Υ	576,219	1,649
	12/15/2021	Yreka/Mt. Shasta	Loss of Transmission Line	Υ	1,867,049	1,037
	1/12/2021	Crescent City	Loss of Transmission Line	Υ	632,979	422
	11/8/2021	Crescent City	Loss of Transmission Line	Υ	606,242	420
	8/23/2021	Yreka/Mt. Shasta	Loss of Transmission Line	Y	511,264	2,458
0004	8/17/2021	Yreka/Mt. Shasta	Unknown trip	N	504,876	1,901
2021	1/12/2021	Crescent City	Loss of Transmission Line	Y	496,483	331
	12/13/2021	Crescent City	Loss of Transmission Line	Υ	488,632	421
	11/8/2021	Crescent City	Loss of Transmission Line	Y	480,663	333
	12/25/2021	Yreka/Mt. Shasta	Loss of Transmission Line	N	436,161	579
	12/15/2021	Yreka/Mt. Shasta	Loss of Transmission Line	Υ	428,131	2,766
	9/8/2020	Yreka/Mt. Shasta	Wildfire	Υ	5,561,782	767
	1/16/2020	Yreka/Mt. Shasta	Loss of Transmission Line	Υ	789,985	1,849
	9/15/2020	Yreka/Mt. Shasta	Loss of Generation	Υ	601,739	548
2020	11/7/2020	Yreka/Mt. Shasta	Loss of Transmission Line	N	461,489	1,039
	1/16/2020	Yreka/Mt. Shasta	Loss of Transmission Line	Υ	436,087	753
	1/25/2020	Crescent City	Loss of Transmission Line	N	212,370	761
	8/15/2020	Yreka/Mt. Shasta	Loss of Transmission Line	Υ	197,690	1,419

		Historical Top Te	n Unplanned Outage Ev	ents by Ye	ar	
Year	Date	District	Description	Excluded Major Event?	Total Customer Minutes Lost	Total Customers in Incident
	11/17/2020	Yreka/Mt. Shasta	Damaged Equipment	N	195,925	1,186
	1/16/2020	Yreka/Mt. Shasta	Wind Blown Tree	Υ	177,667	48
	5/21/2020	Crescent City	Damaged Equipment	N	174,198	2,294
	11/26/2019	Crescent City	Wildfire	Υ	1,135,268	1,447
	11/26/2019	Crescent City	Loss of Substation	Υ	870,310	1,342
	1/17/2019	Crescent City	Loss of Substation	Υ	767,461	424
	11/26/2019	Crescent City	Wildfire	Υ	759,630	1,277
2019	11/26/2019	Crescent City	Wildfire	Y	692,294	1,011
2019	11/26/2019	Crescent City	Loss of Substation	Y	601,838	513
	2/25/2019	Yreka/Mt Shasta	Loss of Substation	Υ	527,481	2,458
	11/26/2019	Crescent City	Loss of Substation	Υ	451,861	1,185
	2/9/2019	Crescent City	Loss of Transmission Line	Υ	442,539	472
	11/26/2019	Crescent City	Loss of Transmission Line	Υ	420,843	862
	9/5/2018	Yreka/Mt Shasta	Wildfire	Υ	1,317,536	140
	11/23/2018	Crescent City	Loss of Substation	Υ	604,033	2,230
	11/22/2018	Crescent City	Loss of Substation	Υ	589,598	3,723
	9/5/2018	Yreka/Mt Shasta	Wildfire	Υ	516,658	290
2010	9/5/2018	Yreka/Mt Shasta	Wildfire	Υ	464,656	76
2018	11/23/2018	Crescent City	Loss of Substation	Υ	453,669	1,672
	11/23/2018	Crescent City	Loss of Substation	Υ	392,788	1,447
	11/23/2018	Crescent City	Loss of Substation	Υ	364,652	1,345
	11/23/2018	Crescent City	Loss of Transmission Line	Υ	276,210	1,023
	12/14/2018	Crescent City	Loss of Transmission Line	Υ	271,134	424
	1/18/2017	Yreka/Mt Shasta	Damaged Equipment	Υ	1,957,567	1,604
	4/7/2017	Crescent City	Wind Blown Tree	Υ	1,119,257	1,474
	4/7/2017	Crescent City	Wind Blown Tree	Υ	987,987	3,396
	1/9/2017	Yreka/Mt Shasta	Heavy Snow Storm	Υ	985,255	1,776
2017	4/7/2017	Crescent City	Wind Blown Tree	Υ	947,025	5,175
2017	1/19/2017	Yreka/Mt Shasta	Loss of Transmission Line	Y	886,326	763
	1/3/2017	Yreka/Mt Shasta	Loss of Transmission Line	Υ	869,891	1,524
	1/19/2017	Yreka/Mt Shasta	Damaged Equipment	Υ	714,873	561
	1/18/2017	Yreka/Mt Shasta	Heavy Snow Storm	Υ	689,554	2,298
	1/18/2017	Yreka/Mt Shasta	Loss of Transmission Line	Υ	674,919	352
	10/17/2016	Crescent City	Loss of Transmission Line	Υ	926,778	10,972
	6/5/2016	Yreka/Mt Shasta	Loss of Transmission Line	Υ	853,260	4,736
	6/17/2016	Yreka/Mt Shasta	Loss of Transmission Line	N	478,225	6,248
	12/21/2016	Crescent City	Wind Blown Tree	Υ	388,500	420
2016	8/28/2016	Yreka/Mt Shasta	Forest Fire	N	363,287	1,404
	12/21/2016	Crescent City	Wind Blown Tree	Y	311,097	336
	2/5/2016	Yreka/Mt Shasta	Loss of Transmission Line	N	302,123	8,349
	4/13/2016	Yreka/Mt Shasta	Wind Storm	N	291,507	6,016
	1/13/2016	Crescent City	Pole Fire	N	278,218	8,577
	2/5/2016	Yreka/Mt Shasta	Loss of Transmission Line	N	274,030	3,724

		Historical Top Te	n Unplanned Outage Ev	ents by Ye	ar	
Year	Date	District	Description	Excluded Major Event?	Total Customer Minutes Lost	Total Customers in Incident
	2/5/2015	Crescent City	Loss of Transmission Line	Υ	1,852,631	3,150
	2/7/2015	Crescent City	Wind Blown Tree	Υ	1,036,585	1,222
	2/6/2015	Crescent City	Wind Blown Tree	Υ	922,607	1,047
	2/7/2015	Crescent City	Wind Blown Tree	Υ	922,282	1,884
2015	2/7/2015	Crescent City	Wind Blown Tree	Υ	713,868	380
2015	2/5/2015	Crescent City	Loss of Transmission Line	Υ	649,753	2,100
	2/7/2015	Crescent City	Loss of Transmission Line	Υ	636,947	1,719
	7/7/2015	Yreka/Mt. Shasta	Loss of Transmission Line	Υ	538,624	3,156
	4/25/2015	Yreka/Mt. Shasta	Tree	N	528,711	9,320
	2/7/2015	Crescent City	Emergency Damage Repair	Υ	455,081	3,024
	10/25/2014	Crescent City	Loss of Transmission Line	Υ	2,424,849	7,448
	10/25/2014	Crescent City	Loss of Transmission Line	Υ	1,084,725	1,533
	9/15/2014	Yreka/Mt. Shasta	Loss of Transmission Line	Υ	890,396	13,280
	9/15/2014	Yreka/Mt. Shasta	Loss of Transmission Line	Υ	802,134	5,660
2014	10/25/2014	Crescent City	Loss of Transmission Line	Υ	517,764	453
2014	9/15/2014	Yreka/Mt. Shasta	Intentional to Clear Trouble	Υ	498,809	1,205
	3/24/2014	Crescent City	Loss of Transmission Line	N	484,466	798
	10/25/2014	Crescent City	Loss of Transmission Line	Υ	478,808	1,176
	5/5/2014	Yreka/Mt. Shasta	Pole fire	N	472,976	1,875
	8/17/2014	Yreka/Mt. Shasta	Loss of Transmission Line	N	471,399	3,070

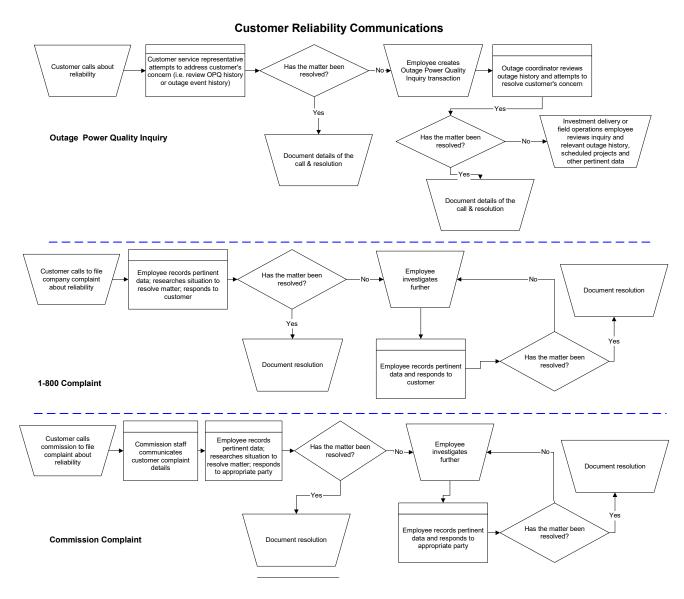
# **Customer Inquiries and Response**

### **Customer Reliability Communications**

PacifiCorp has internet addresses to provide customer guidance on how to request reliability information as well as to view reliability overview metrics and the year's reliability report. The metric information is located at <a href="https://www.pacificpower.net/ca-report">https://www.pacificpower.net/ca-report</a> while the link to request reliability information for a specific customer is located at <a href="https://www.pacificpower.net/reliability">https://www.pacificpower.net/reliability</a>. Further, in compliance with the rules, PacifiCorp will be scheduling its annual meeting in the fall to review these results in the ordered public meeting.

### Reliability Inquiry and Complaint Process Overview

The Company's process for managing customers' concerns about reliability are to provide opportunities to hear customer concerns, respond to those concerns, and where necessary, provide customers an opportunity to elevate those concerns.



## Customer Reliability Inquiry/Complaint Tracking

Listed below are the various avenues available to a customer to resolve concerns about reliability performance.

#### Customer Reliability Inquiry

The company records customer inquiries about reliability as Outage Power Quality transactions in its customer service system, referred to as "OPQ" transactions.

#### • Customer Complaint

If a customer's reliability concerns are not met through the process associated with the OPQ transaction, a customer can register a 1-800 complaint with the company. This is recorded in a complaint repository from which regular reports are prepared and circulated for resolution.

#### • Commission Complaint

If a customer's reliability concerns are not met through the process associated with a 1-800 complaint, a customer can register a complaint with the Commission. This is recorded by the Commission staff and also by the company in a complaint repository. Regular reports are prepared and circulated for resolution of these items.

## 2023 Customer Reliability Inquiry Responses

The table below illustrates PacifiCorp's response periods for each customer reliability inquiry received in 2023. The response time for each inquiry reports calendar days from the date of the initial inquiry to the date on which the company contacts the customer to discuss the specific circumstances associated with the inquiry. Certain outlier records report the duration until investigation was completed because of incomplete customer contact records.

Response Time (Days)	Customer Inquiries (non- outage Related)	Customer Outage Inquiries	Response Time (Days)	Customer Inquiries (non- outage Related)	Customer Outage Inquiries
1	24	28	17	1	0
2	2	8	18	0	0
3	3	4	19	0	0
4	4	3	20	1	1
5	4	0	21	2	0
6	1	5	22	1	0
7	5	2	23	1	0
8	7	0	24	1	0
9	1	3	25	0	0
10	1	2	26	0	0
11	1	2	27	1	3
12	2	1	28	0	1
13	3	1	29	0	1
14	0	0	30	1	1
15	0	0	31+	9	6
16	0	0			

# DECLARATION OF JOSHUA JONES IN SUPPORT OF CONFIDENTIAL TREATMENT OF INFORMATION PROVIDED IN PACIFICORP'S ANNUAL ELECTRIC RELIABILITY REPORT CY 2023

I, Joshua Jones, declare as follows;

- 1. I am the Vice President of Asset Management for PacifiCorp d/b/a Pacific Power (PacifiCorp or the Company). PacifiCorp is a multi-jurisdictional utility providing electric retail service to customers in California, Idaho, Oregon, Utah, Washington, and Wyoming. PacifiCorp serves approximately 46,000 customers in portions of Del Norte, Modoc, Shasta, and Siskiyou Counties in northern California.
- 2. This declaration is based on my information and belief and is submitted for the purpose of requesting confidential treatment of portions of PacifiCorp's Annual Electric Reliability Report CY 2023 (report) submitted to the Commission on July 29, 2024, in accordance with General Order (GO) 66-D of the California Public Utilities Commission (Commission). PacifiCorp submitted both confidential and public versions of the report. Planned outage data is redacted from the public version on pages 40, 41, 42, and 43.
- 3. Information submitted to the Commission is public, unless otherwise protected as confidential.<sup>2</sup>
- 4. Section 3.4(b) of GO 66-D provides that in any proceeding where the Commission issues a decision requiring parties to submit information, the Commission may determine that the information required by the decision is confidential.<sup>3</sup> A confidentiality determination will prevent the release of the information to the public, including in response to a California Public

<sup>&</sup>lt;sup>1</sup> Investor owned utilities must provide the Commission with their annual electric reliability reports by July 15. PacifiCorp received an extension to file its report by July 29, 2024.

<sup>&</sup>lt;sup>2</sup> Cal. Const. Art. I §§ 3(b)(1)–(2); Pub. Util. Code § 583.

<sup>&</sup>lt;sup>3</sup> GO 66-D, § 3.4(b).

Records Act request. Confidential information submitted to the Commission under Section 3.4(b) must designate the relevant decision containing the confidentiality determination.

- 5. Beyond Section 3.4(b), various statutes and Commission decisions detail bases for confidential treatment that parties may include in their request to protect certain information provided to the Commission as confidential.<sup>4</sup> Although Section 3.2 requirements do not apply when information is submitted under Section 3.4 of GO 66-D, they provides helpful guidance for what parties must generally include in a request for confidential treatment of information submitted to the Commission outside of a formal proceeding. Under Section 3.2, parties must identify the information to be protected; describe the basis for protection; provide an appropriate declaration that supports the request; and include appropriate contact information.<sup>5</sup> Information to be protected includes, but is not limited to, "any document, record, account, book, or paper regardless of whether it is in analog or digital format, which is prepared, owned, used, submitted to or retained by the Commission." The Commission protects information as confidential when permitted by relevant California and federal law, and has adopted categories of information that are generally protected as confidential.
- 6. In D.16-01-008, the Commission updated the electric reliability reporting requirements for California electric utilities.<sup>7</sup> D.16-01-008 requires utilities to submit annual information about planned outages to the Commission's Energy and the Safety and Enforcement Divisions on a confidential basis.<sup>8</sup> As noted in D.16-01-008, "making planned outage data public poses a

<sup>&</sup>lt;sup>4</sup> See, e.g., Gov. Code Section 7922.000; Gov. Code § 7930.205; Evid. Code § 1060; GO 66-D.

<sup>&</sup>lt;sup>5</sup> GO 66-D, § 3.2.

<sup>&</sup>lt;sup>6</sup> *Id.* at § 1.5.

<sup>&</sup>lt;sup>7</sup> D.16-01-008.

<sup>&</sup>lt;sup>8</sup> *Id.* at p. 18.

potential risk as the data could expose grid vulnerabilities. Therefore, planned outage data

should be confidential to protect the public from potential harmful activities that could damage

the grid and electric reliability."9

7. Planned outage data included as part of PacifiCorp's report on pages 40-42 is given

confidential treatment under D.16-01-008 and should not be released to the public. 10

8. Planned outage data is also protected by Government Code § 7922.000, which allows an

agency to maintain the confidentiality of a document if the public interest served by not

disclosing it clearly outweighs the public interest served by disclosure. PacifiCorp's planned

outage data contains sensitive information related to PacifiCorp's operations and maintenance of

its electrical system. If disclosed, potential bad actors could take advantage of planned outage

data and cause harm to the grid, PacifiCorp, and PacifiCorp's customers.

9. I declare under penalty of perjury under the laws of the State of California that the

statements and information contained in this declaration are true and correct.

Executed in Salt Lake City, Utah, July 29, 2024.

/S/ Joshua Jones

Joshua Jones

Vice President, Asset Management

PacifiCorp

<sup>9</sup> *Id.* at p. 19.

<sup>10</sup> GO 66-D, § 3.4(b).