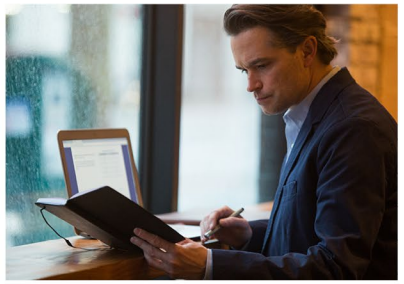
Pacific Power
2024 California Electric Reliability Report

December 4, 2025 – 6 PM PST





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Meeting Information

This presentation is to review Pacific Power's annual reliability report submitted to the California Public Utilities Commission on July 15, 2025.

The meeting will take place virtually via the web link below but can also be attended via audio only.

Microsoft Teams meeting
Join on your computer or mobile app
CA Reliability Meeting Thursday, December 4, 2025
Meeting ID: 280 708 708 441 0
Passcode: J33Mh37HD

Or call in (audio only)
tel:+15632755003,,88964114 United States, Davenport
Phone Conference ID: 889 641 14#

PACIFIC POWER
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Introduction and Welcome

Jill Drinkwater, Regional Business Manager

Pacific Power California Service Territory

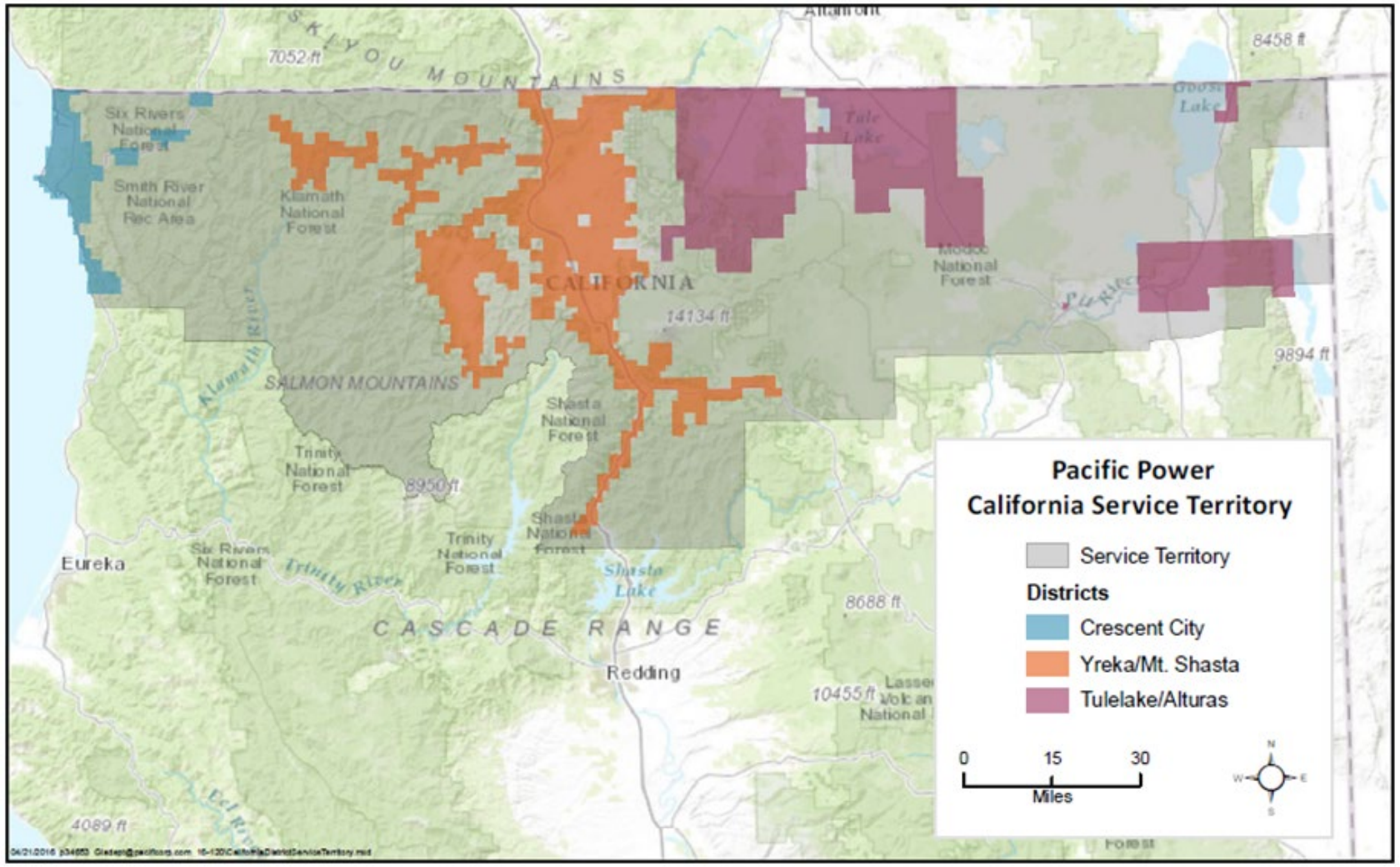
Service Area

- Number of Customers in the state: **47,309**
- California service area: **11,292** square miles

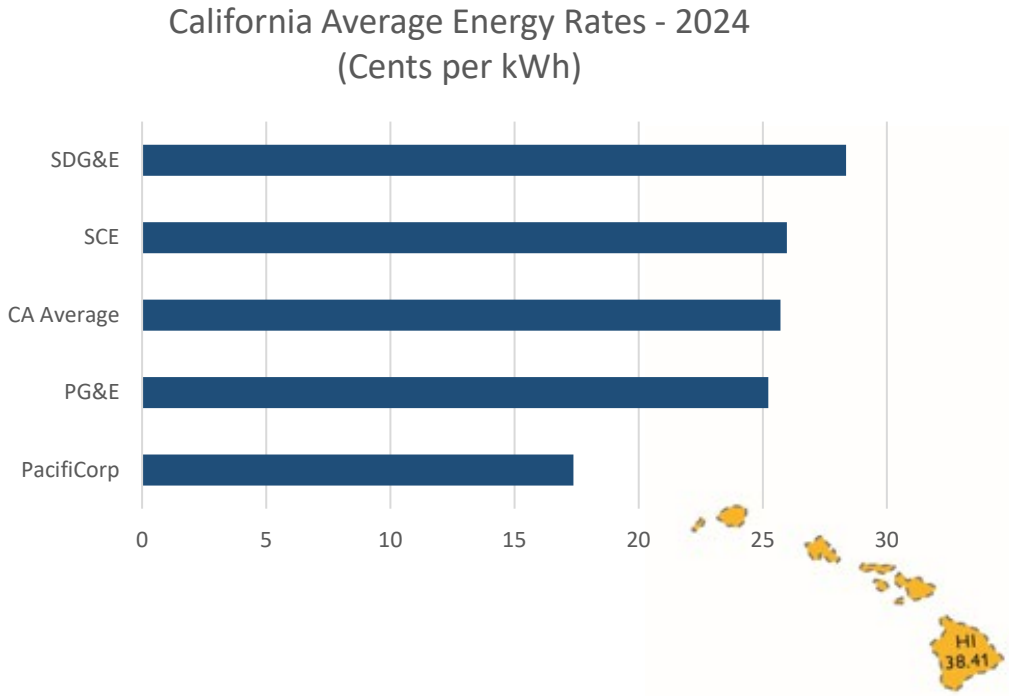
Line Miles

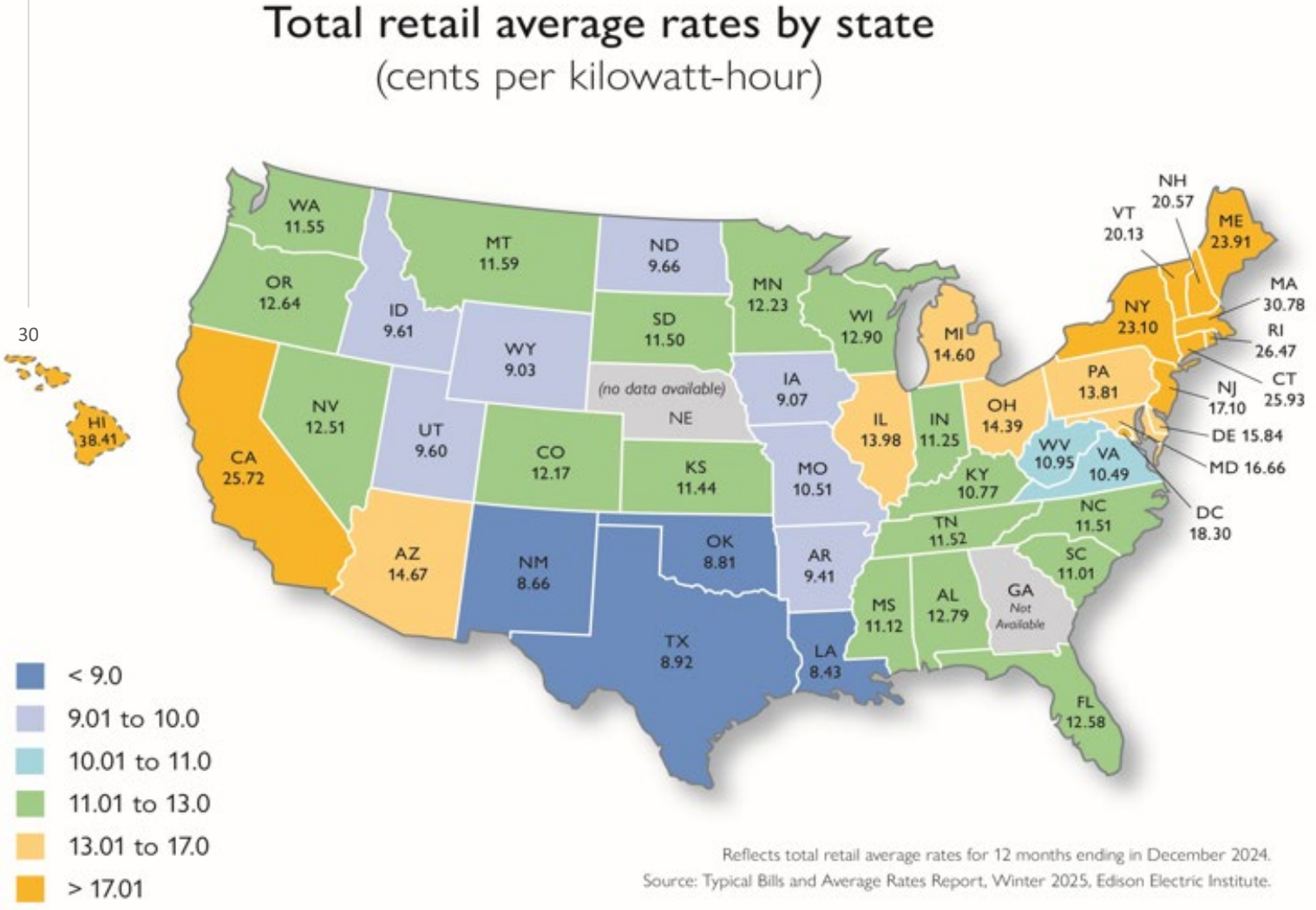
- **721** transmission line miles
- **3,156** distribution line miles

Pacific Power California Service Territory



U.S. Energy Prices

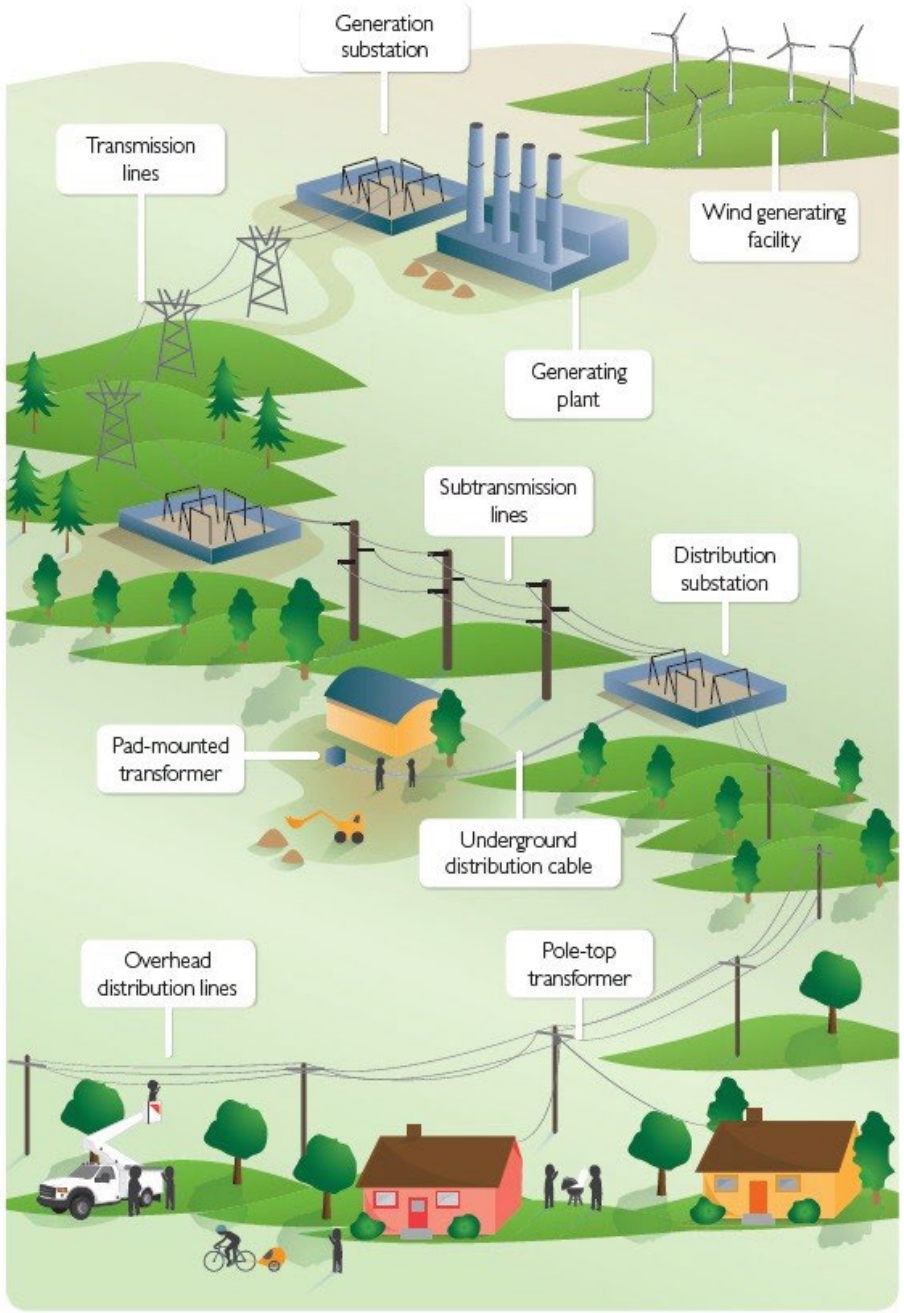




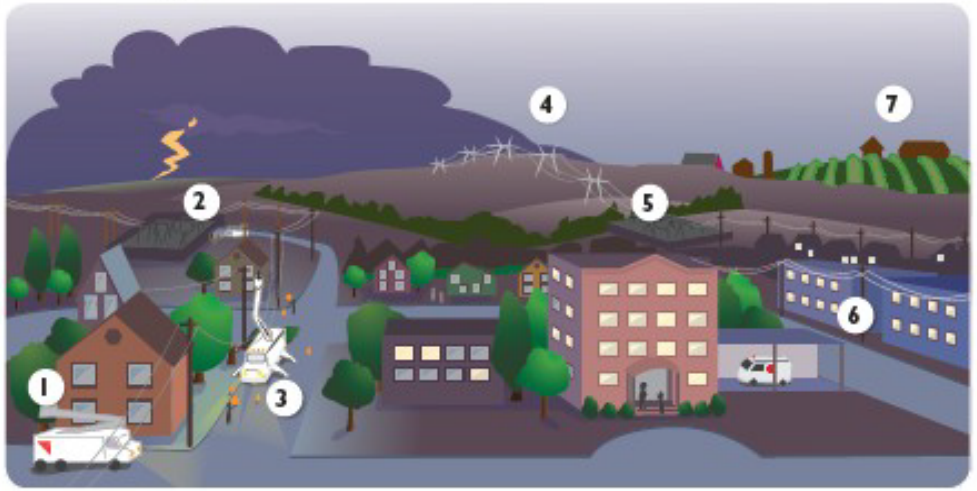
2024 Reliability Report

Chase Talbot, Director of Transmission & Distribution Asset Performance

Power Delivery System



Restoring power



The drawing above depicts our priorities during an outage.

1. Dispatch crews and assess conditions for public and crew safety.
2. Patrol lines and check substations.
3. Clear downed power lines.
4. Restore power to the greatest number of people as quickly as possible through first clearing transmission lines that can serve multiple substations.
5. Restore power to substations that convert high-voltage power to levels people can safely use at home.
6. Restore power to concentrated areas through distribution and tap lines. Distribution lines travel from the substations to neighborhoods and serve between 1,000 and 3,000 customers. Tap lines then feed into pockets of 20 to 30 homes.
7. Restore power to individual (typically suburban or rural) homes and businesses. This task usually takes the longest.

Promising Excellent Service

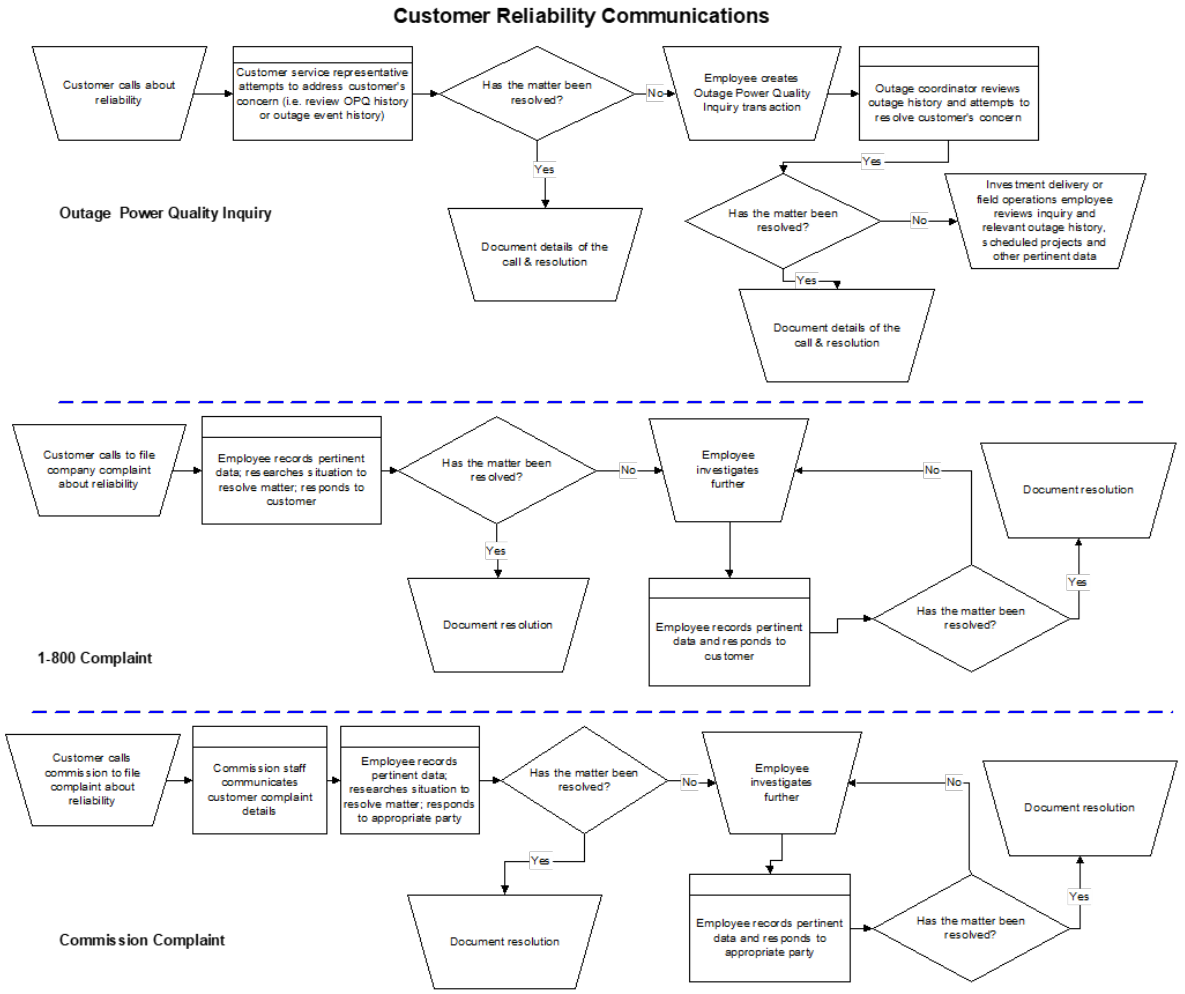
Our Customer Service Guarantees help ensure we're delivering to the highest standards.

Guarantees cover:

- Restoring power after outages
- Keeping appointments
- Switching on power
- Estimates for new power supply
- Billing questions
- Meter problems
- Planned interruptions

Should we fail to meet certain program features, you can file a claim and be eligible for a credit of $50.

2024 Customer Inquiries and Response



Response Time (Days)	Customer Inquiries (non-outage Related)	Customer Outage Inquiries	Response Time (Days)	Customer Inquiries (non-outage Related)	Customer Outage Inquiries
1	32	37	**17**	2	0
2	6	10	**18**	1	0
3	7	3	**19**	1	0
4	8	6	**20**	1	2
5	6	2	**21**	2	0
6	3	6	**22**	1	0
7	5	3	**23**	2	1
8	10	1	**24**	1	0
9	2	3	**25**	0	0
10	1	2	**26**	0	1
11	2	3	**27**	1	3
12	4	1	**28**	0	1
13	4	1	**29**	0	2
14	1	0	**30**	1	1
15	2	0	**31+**	25	12
16	0	0			

- **Customer Reliability Inquiry:** These inquiries are recorded as Outage Power Quality (OPQ) transactions.
- **Customer Complaint:** If customers complaint aren't met through the OPQ transaction, a customer can register a 1-800 Complaint with the company.
- **Commission Complaint:** If a customer's reliability concerns are not met through the 1-800 Complaint process, a customer can register a complaint with the Commission.

Outage Classifications

PacifiCorp classifies outages according to industry definitions established by the Institute of Electrical and Electronics Engineers (IEEE) standards.

Momentary Outage

An outage event lasting less than five minutes.

Sustained Outage

An outage event lasting five minutes or longer.

Planned Outage

An outage scheduled in advance, either requested by the customer or public officials, or initiated by the Company with prior notice provided to the customer.

Major Event

A large-scale outage event in which the System Average Interruption Duration Index (SAIDI) exceeds the Major Event Day threshold (TMED). This threshold is calculated using the methodology outlined in IEEE 1366-2022 to identify statistically outlying outage events.

Standard Reliability Measures

System Average Interruption Duration Index (SAIDI)

Measures the total duration of sustained interruptions an average customer experiences in a given calendar year. Typically measured in minutes.

System Average Interruption Frequency Index (SAIFI)

Indicates how often the average customer experiences a sustained interruption during the calendar year. Typically measured in number of events.

Customer Average Interruption Duration Index (CAIDI)

Represents the average time required to restore service. This is typically measured in minutes.

Momentary Interruption Duration Index (MAIFI)

The average frequency of momentary interruption events. Reported MAIFI is calculated using distribution outage records in the company's system of record. Typically measured in number of events.

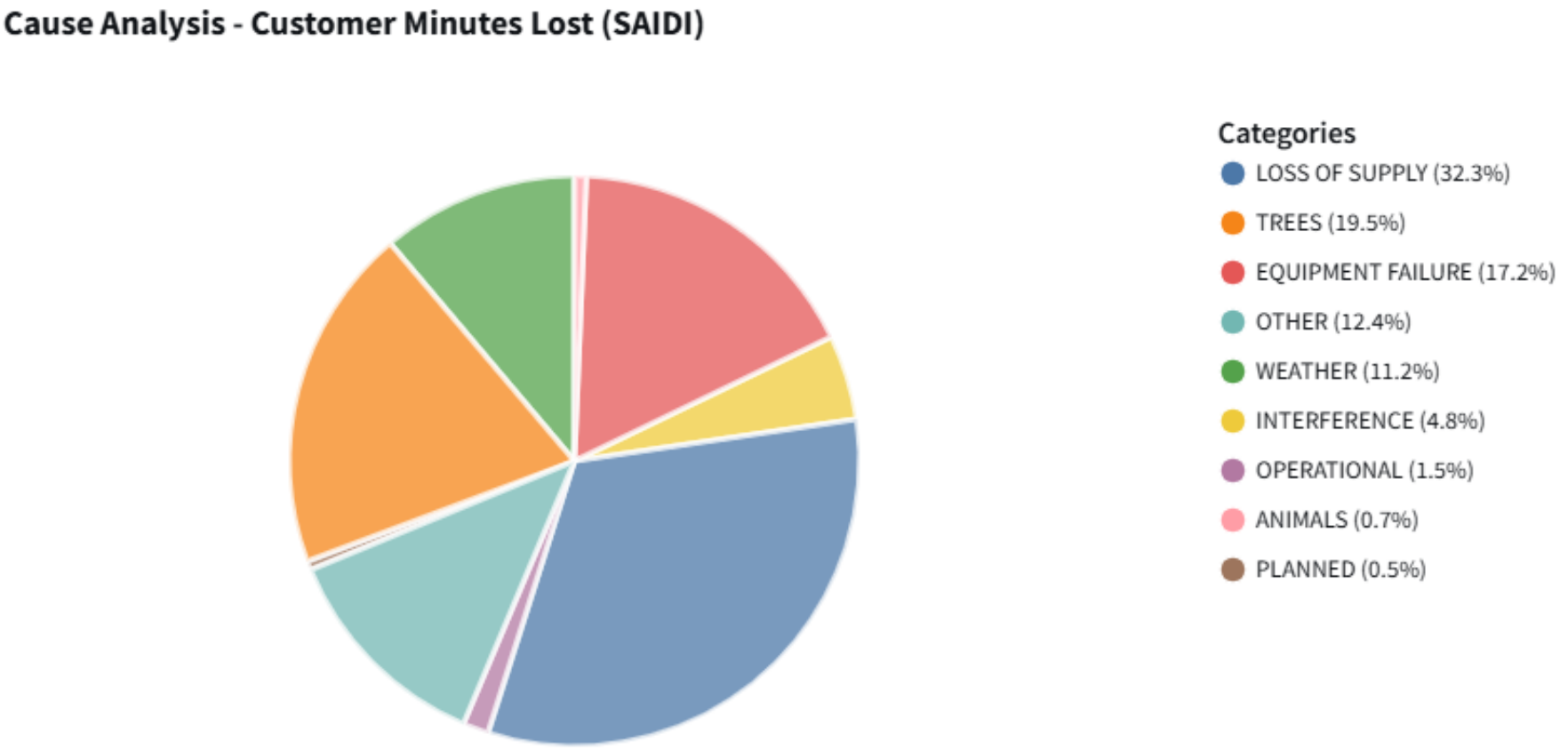
2024 Major Event Summary

2024 Major Event Summary								
Date	**District**	**Cause**	**Customers out for a duration of:**					
			5 min - 3 hrs.	**3 - 24 hrs.**	**24 - 48 hrs.**	**48 - 72 hrs.**	**72 - 96 hrs.**	**96 + hrs.**
January 18, 2024	Crescent City	Wind/Loss of Transmission Line	7	749	0	0	0	0
January 31, 2024	Crescent City	Loss of Transmission Line	10,795	1,362	0	0	0	0
March 1, 2024	Yreka	Severe Weather	1	690	302	0	0	0
April 2, 2024	Tulelake/ Alturas	Loss of Transmission Line	3,918	116	0	0	0	0
May 18, 2024	Crescent City	Equipment Failure	3,981	0	0	0	0	0
November 19-20, 2024	California	Severe Weather	14,646	17,448	1,939	198	86	0

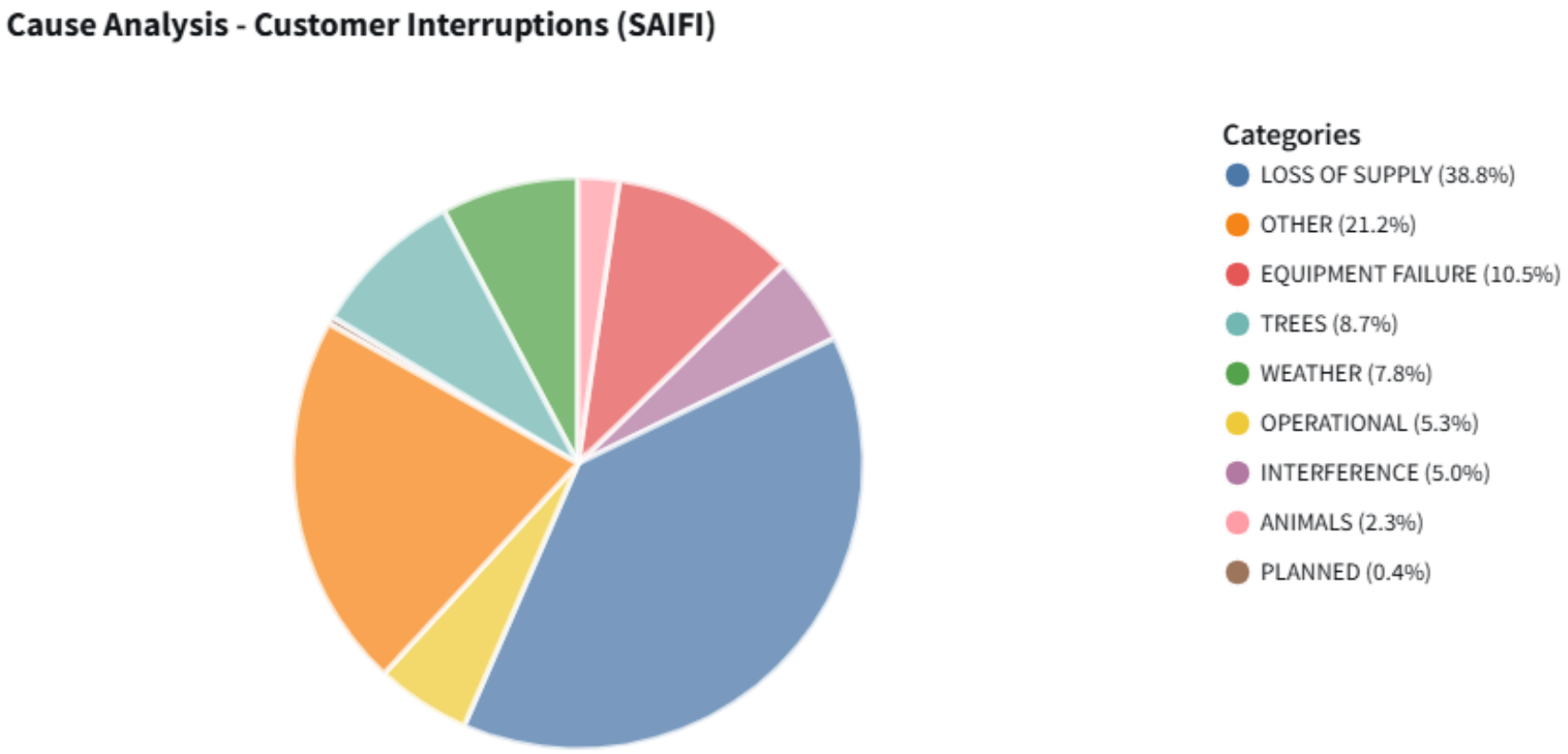
2024 Top Ten Unplanned Outage Events

2024 Top 10 Unplanned Outage Events					
Date	**District**	**Description**	**Major Event?**	**Total Customer Minutes Lost**	**Total Customers in Incident**
11/20/2024	Mt. Shasta	Wind	Y	2,186,929	1,418
11/19/2024	Crescent City	Loss of Transmission	Y	658,743	1,660
11/20/2024	Mt. Shasta	Tree – Non-Preventable	Y	637,202	1,037
11/19/2024	Crescent City	Loss of Transmission	Y	605,567	1,526
11/19/2024	Crescent City	Tree – Non-Preventable	Y	569,579	274
11/20/2024	Crescent City	Wind	Y	567,206	1,526
3/1/2024	Yreka	Loss of Transmission	Y	554,026	236
11/19/2024	Crescent City	Loss of Transmission	Y	553,979	1,396
11/19/2024	Crescent City	Loss of Transmission	Y	540,090	1,361
11/19/2024	Crescent City	Loss of Transmission	Y	479,559	333

2024 California Outages by Cause



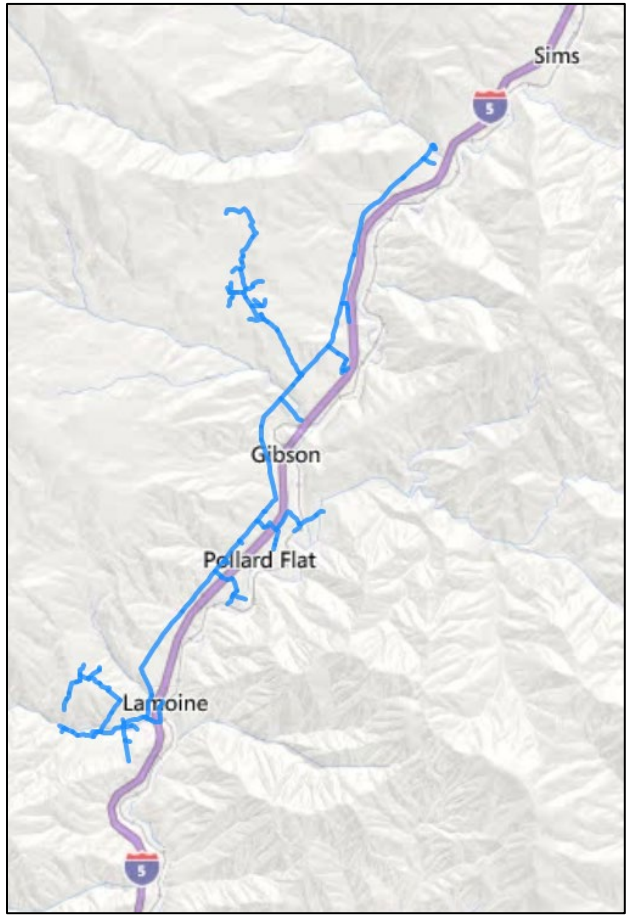
2024 California Outages by Cause



Worst Performing Circuits

Top 3 Worst Performing Circuits			
Program Year 25: (CY2024)			
Circuit Name	**South Shotgun Creek (5G99)**	**Red Rock (4L3)**	**Patrick's Creek (6R3)**
District	Yreka/Mt. Shasta	Tulelake	Crescent City
Customer Count	65	468	14
Substation Name	Shotgun Creek	Macdoel	Patrick's Creek
Circuit-Miles	16 miles	112 miles	7 miles
% OH	91%	97%	~100%
% UG	9%	3%	<1%
# Breaker/Recloser Operations	91	6	-
# Fault Counts	11	3	-
CPI99 Baseline	311	210	184
Preferred Baseline	**249**	**168**	**147**
Designated as Worst Performer in Prior Year?	**Yes**	**No**	**Yes**

Worst Performing Circuits: South Shotgun Creek (5G99)



South Shotgun Creek (5G99)

Circuit Name	South Shotgun Creek (5G99)
District	Yreka/Mt. Shasta
Customer Count	65
Substation Name	Shotgun Creek
Circuit-Miles	16 miles
% OH	91%
% UG	9%
# Breaker/Recloser Operations	91
# Fault Counts	11
CPI99 Baseline	311
Preferred Baseline	**249**
Designated as Worst Performer in Prior Year?	**Yes**

- The South Shotgun Creek (5G99) circuit serves about 65 customers across 16 miles in Shasta County, including areas within the CPUC Tier 2 High Fire Threat District and operates under enhanced safety settings (ESS).
- From 2020–2024, 66 outages were recorded, with 80% of customer minutes interrupted caused by transmission outages and 11% of customer interruptions due to vegetation.
- Circuits 5G99 (South Shotgun Creek) and 5G97 (North Shotgun Creek) are being reconductored with 1/0 ACSR tree wire as part of wildfire mitigation and system hardening efforts in the Sacramento Canyon planning area.
- The project, which includes conductor replacement, covered wire installation, and equipment upgrades, began in June 2025 and is scheduled for completion by June 30, 2026; relay settings at the Shotgun Creek substation were updated in July 2022 to support the new system.
- The project is expected to reduce weather-related outage risks, such as wind, snow, and ice faults, by using covered conductor technology, which has proven more reliable on other PacifiCorp circuits.

Worst Performing Circuits: Patrick's Creek (6R3)

Patrick's Creek (6R3)

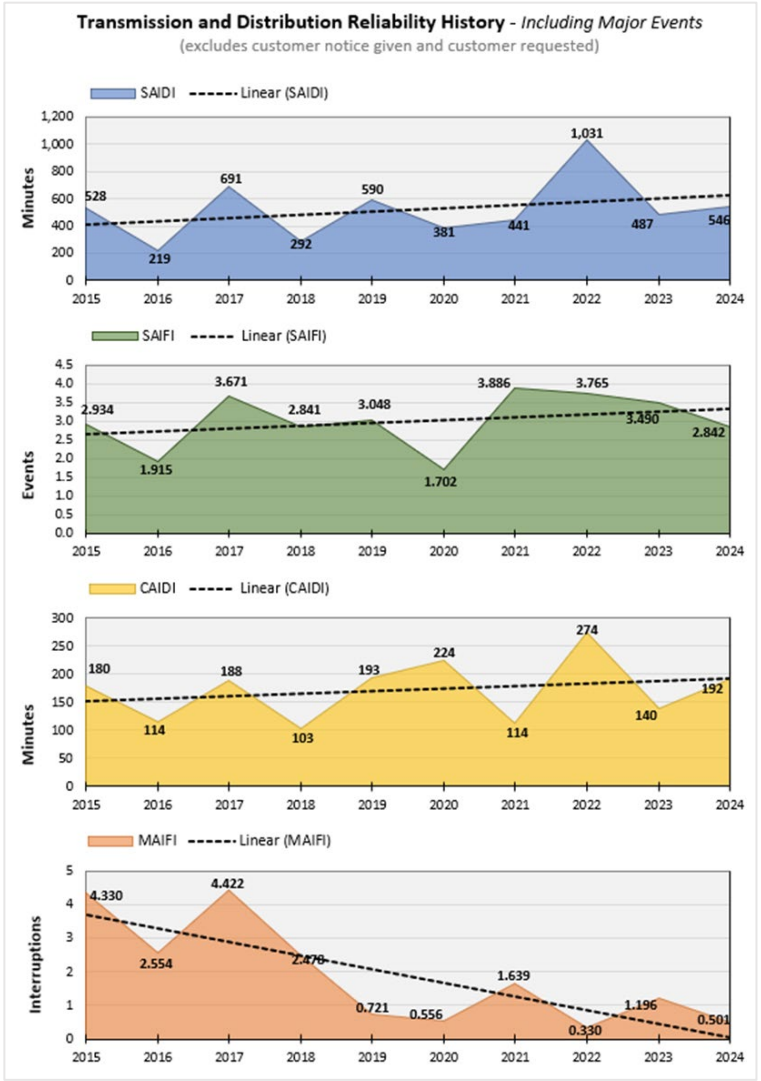
Circuit Name	Patrick's Creek (6R3)
District	Crescent City
Customer Count	14
Substation Name	Patrick's Creek
Circuit-Miles	7 miles
% OH	~100%
% UG	<1%
# Breaker/Recloser Operations	-
# Fault Counts	-
CPI99 Baseline	184
Preferred Baseline	**147**
Designated as Worst Performer in Prior Year?	**Yes**

- The Patrick's Creek (6R3) circuit serves about 14 customers over seven miles in Del Norte County, including areas within the CPUC Tier 2 High Fire Threat District and operates as an enhanced safety setting (ESS) circuit.
- Since 2020, vegetation-related outages have been the main reliability driver, accounting for 10 events and 54% of total customer minutes interrupted.
- The Patrick's Creek (6R3) circuit will be reconductored with 1/0 spacer cable and have 86 wooden poles replaced with steel as part of PacifiCorp's wildfire mitigation system hardening efforts.
- The 2026 project will improve reliability through larger conductors, covered wire, and upgraded distribution equipment.
- The Patrick's Creek line rebuild is expected to improve reliability by reducing vegetation and weather-related outages through the use of covered conductors and steel pole replacements.

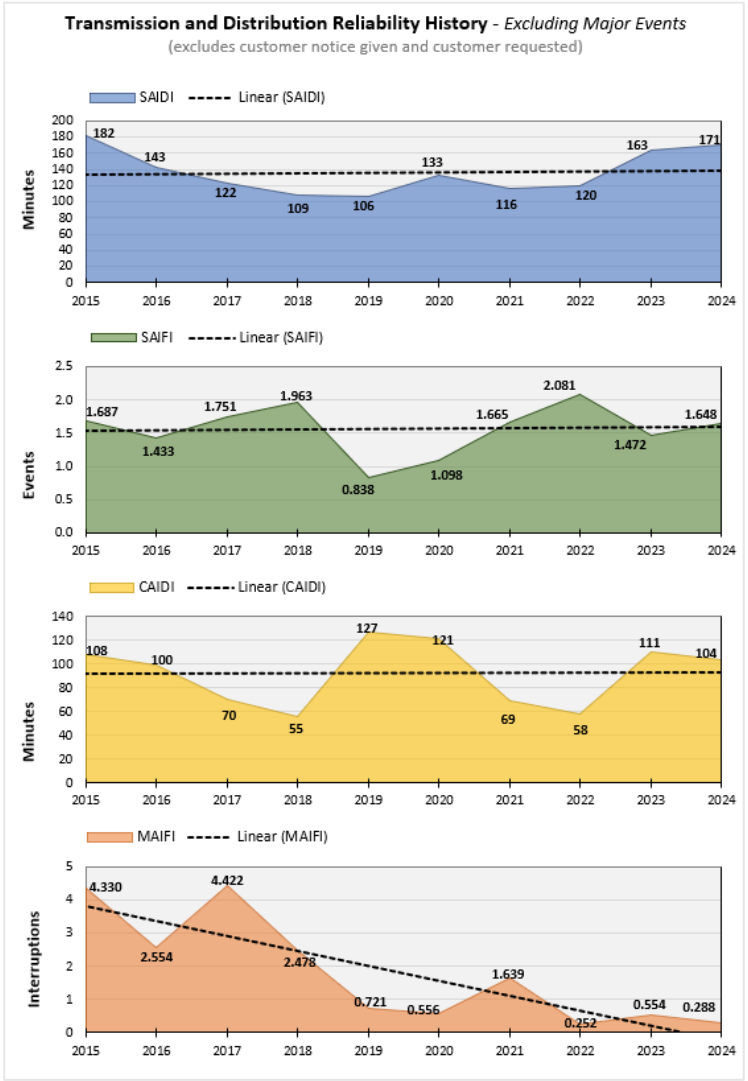
State and District Combined Reliability Performance For The Past 10 Years

California Combined Reliability Performance

Including Major Events

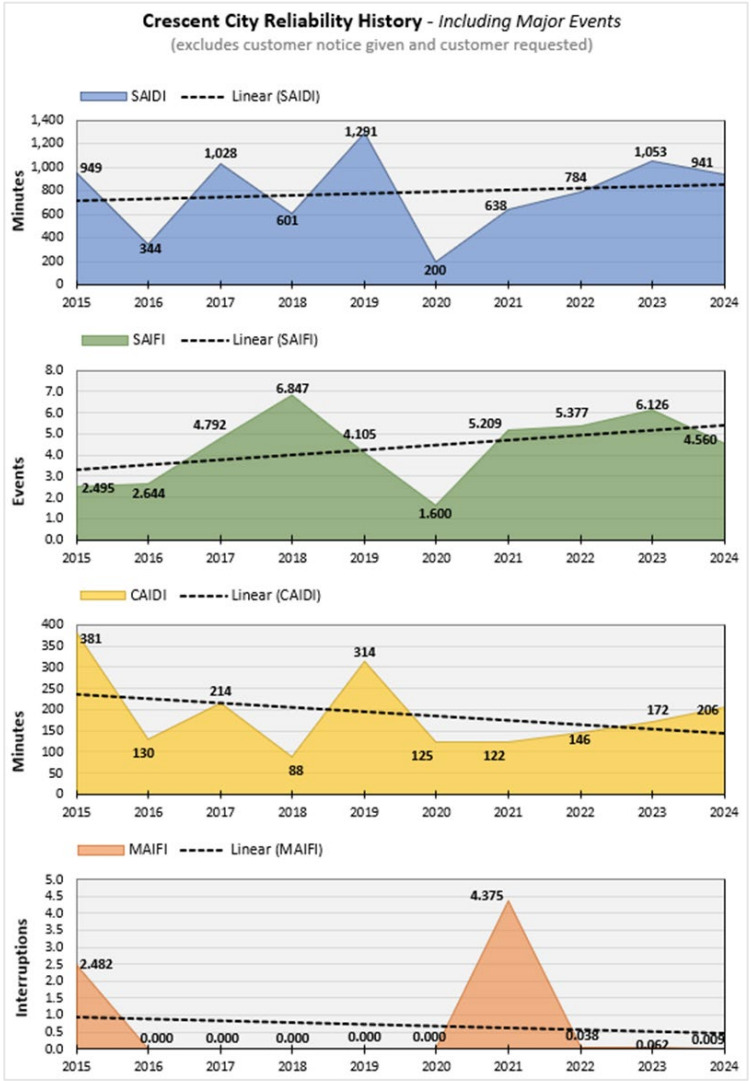


Excluding Major Events

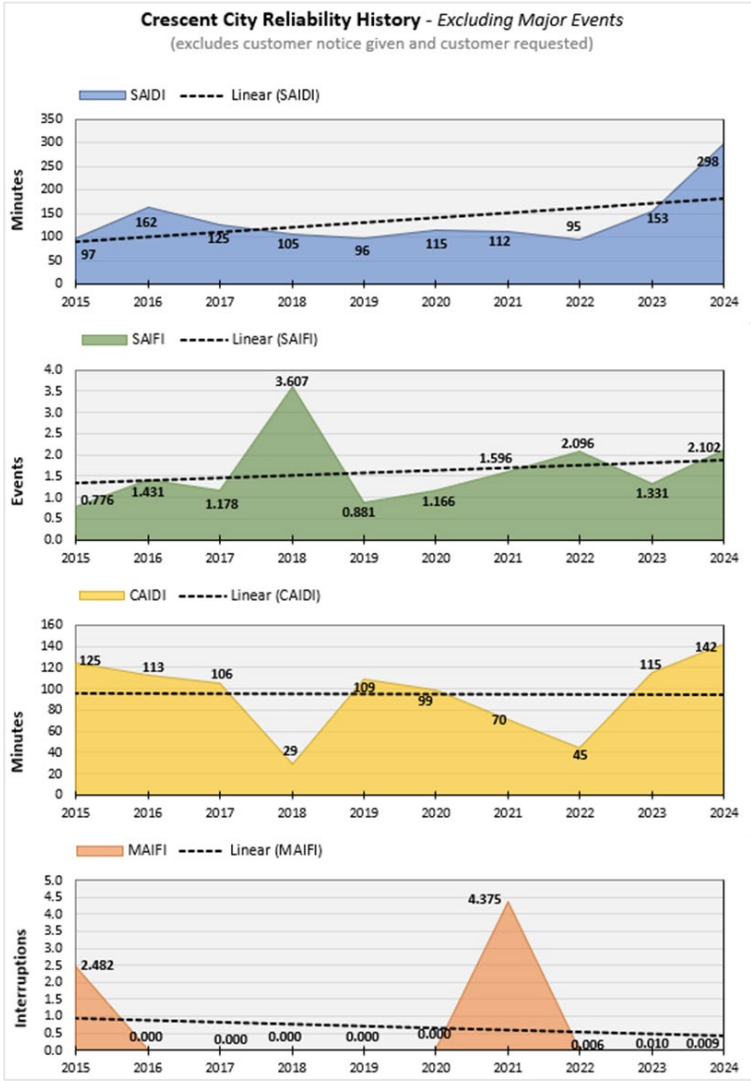


Crescent City Combined Reliability Performance

Including Major Events

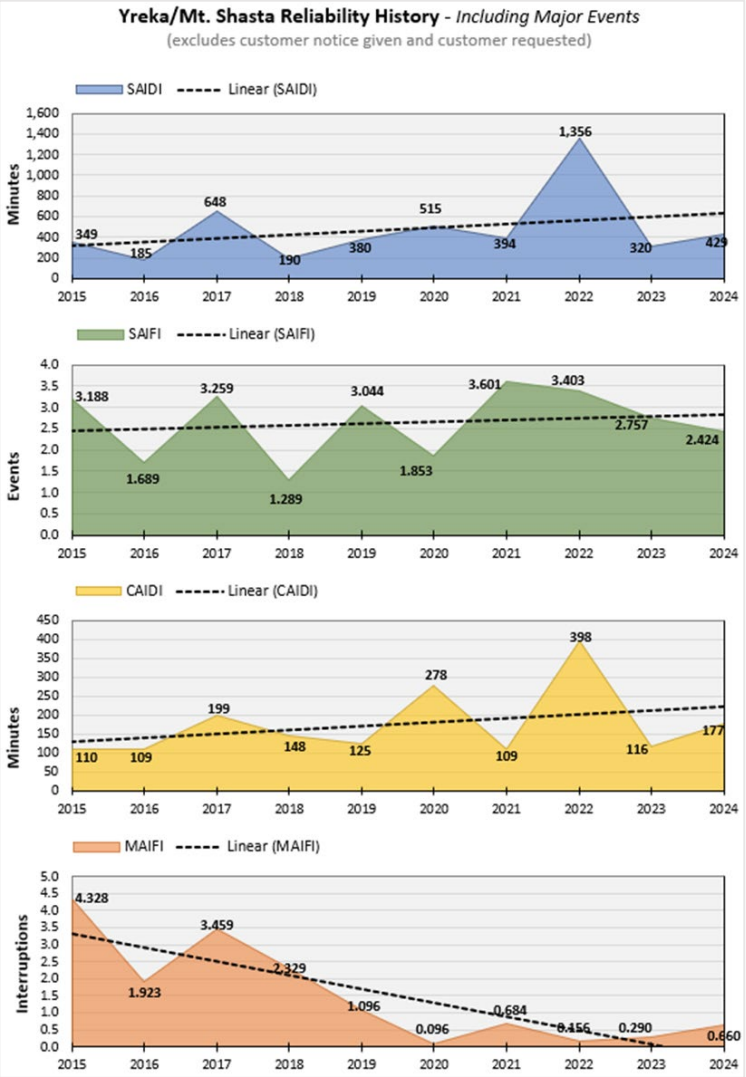


Excluding Major Events

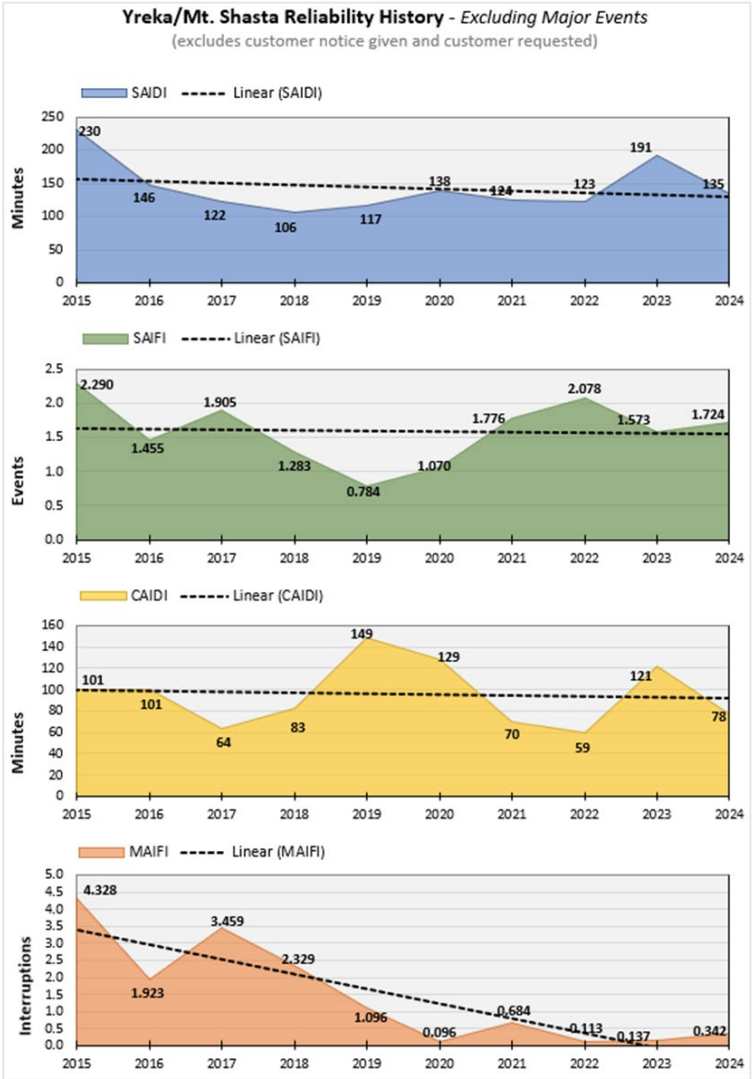


Yreka and Mt. Shasta Combined Reliability Performance

Including Major Events

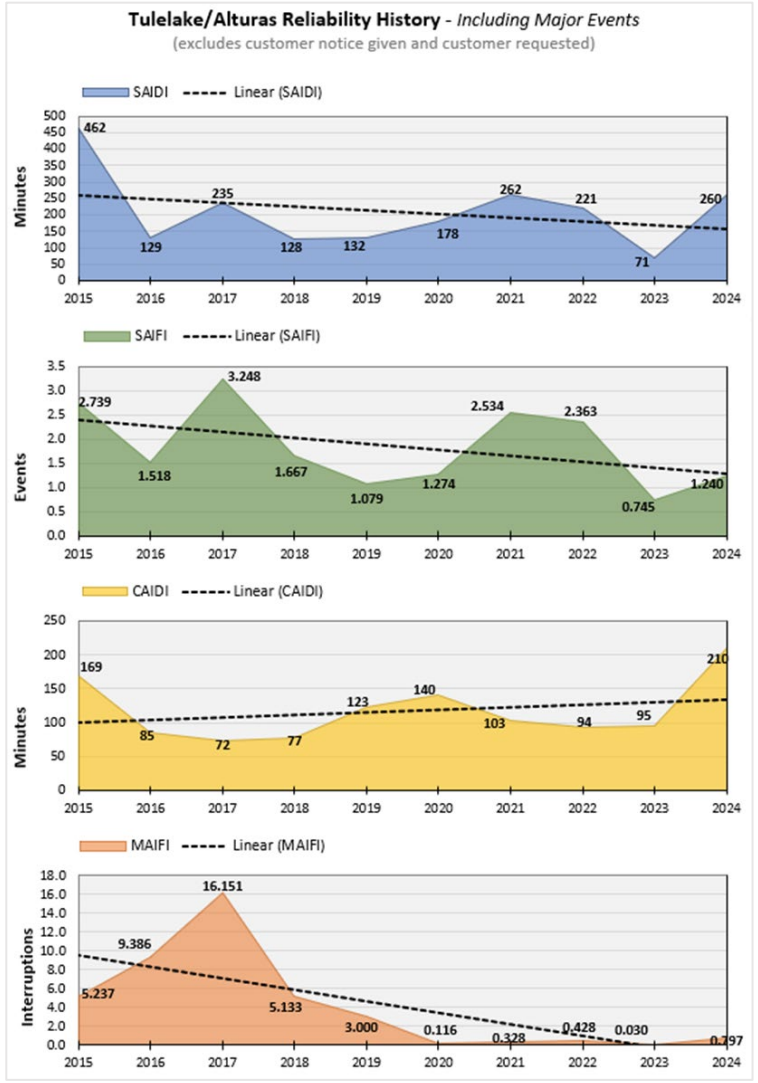


Excluding Major Events

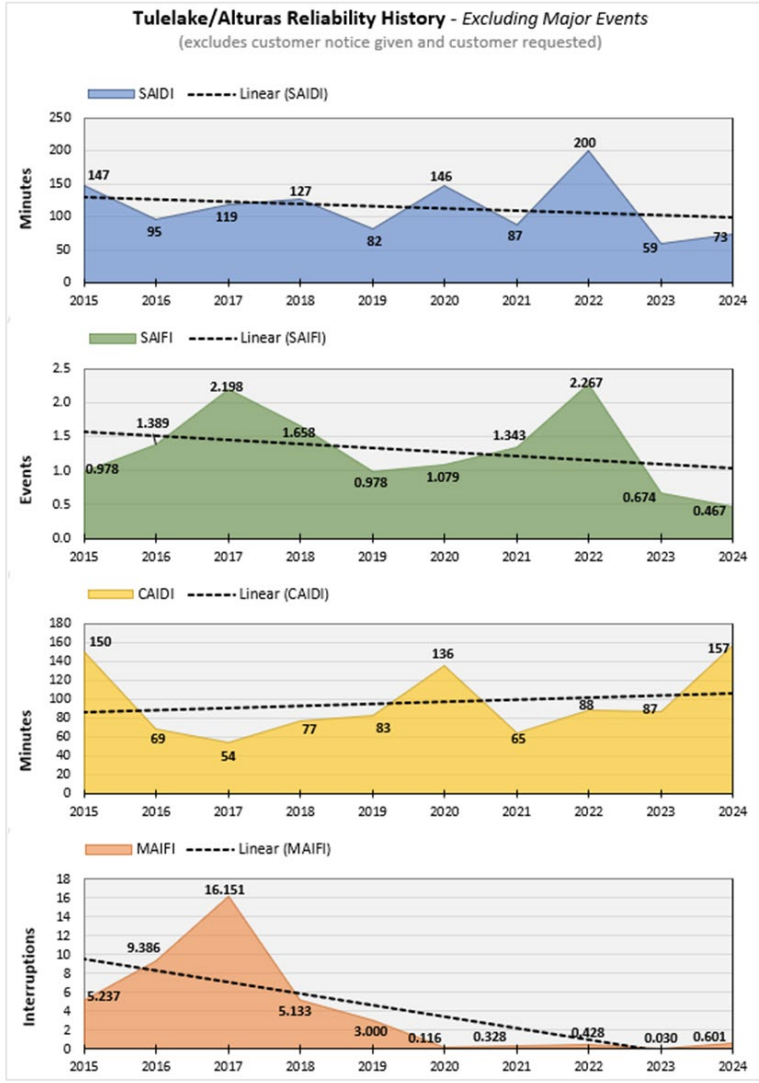


Tulelake and Alturas Combined Reliability Performance

Including Major Events



Excluding Major Events



Additional Information

- Information on reliability and annual reports

  https://www.pacificpower.net/outages-safety/reliability/california-reliability-report.html

- Real-time outage viewer and other outage information

  https://www.pacificpower.net/outages-safety.html

- Contact Us

  https://csapps.pacificpower.net/public/about/contact-us

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