



*Pacific Gas and
Electric Company®*

2024 Annual Electric Reliability Report

Prepared for:

California Public Utilities Commission
Pursuant to Decision 16-01-008

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Executive Summary

Pacific Gas and Electric Company (PG&E) is committed to providing safe, reliable, affordable, and clean energy to our customers. This report provides detailed information on the reliability of our electric service during the 2024 calendar. Most notably, our measurement of the average duration (in minutes) of a sustained outage experienced by a PG&E customer in a given year declined in 2024 over 2023.

PG&E's electric service reliability performance in 2024 was challenged by several weather events, including severe winter storms, extreme summer heat waves and continued changes in load profiles from the lingering effect of the pandemic. Given the continued and growing threat of extreme weather and wildfires, PG&E utilized a suite of mitigations within its Community Wildfire Safety Program to further reduce wildfire risks and help keep our customers and the communities we serve safe. This includes our Public Safety Power Shutoff (PSPS) program during the 2024 wildfire season for all electric lines located in or that pass through High Fire-Threat Districts (HFTDs) and High Fire- Risk Areas (HFRA). In addition, PG&E carried out its Enhanced Powerline Safety Settings (EPSS) program that provides for fast tripping of line protection devices within 1/10 of a second and recloser disabling to further help reduce wildfire risk. In 2022, PG&E enhanced EPSS by installing Down Conductor Detection (DCD) technology on EPSS protection devices to capture previously undetectable low amperage, high impedance faults. These wildfire mitigation efforts have driven a significant reduction in ignitions, but they have impacted our customers as they experience longer sustained outages, especially in the HFTD and HFRA areas. PG&E's electric system has evolved with today's new environment where wildfire risks are elevated due to changing climatological factors. Our operating strategies for wildfire prevention are balanced with electric service reliability for California businesses and residents. As a result of both the significant weather events that we have experienced, coupled with the implementation of protection strategies to reduce wildfire ignitions, PG&E's reliability performance has declined in 2024 when compared to 2022 and 2023.

Electric utilities measure reliability in many ways: duration of customer outages; frequency of customer outages; average restoration time; counting only unplanned outages; counting planned outages; excluding unusual events such as major storms (typically referred to as Major Event Days or "MEDs"); or including or excluding certain types of outages, among other distinctions. This report explains the different measures and includes the various metrics required by CPUC Decision 16-01-008. For the purposes of



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this Executive Summary, PG&E is focusing on metrics that include planned outages but exclude Major Event Days. These metrics are found in Section 3. These are common benchmark metrics across the electric utility industry, and PG&E also believes these metrics best reflect the typical customer experience.



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Table 1 below displays the electric reliability metrics SAIDI, SAIFI, MAIFI and CAIDI from 2015 through 2024.

Table 1 – Combined Transmission and Distribution System Indices (2015-2024)
(Excludes MED and Independent System Operator (ISO) outages, and includes planned outages)

Year	Major Events Excluded			
	SAIDI	SAIFI	MAIFI	CAIDI
2015	96.0	0.871	1.594	110.2
2016	108.9	1.021	1.494	106.7
2017	113.4	0.958	1.489	118.3
2018	126.3	1.080	1.361	117.0
2019	148.8	1.128	1.282	131.9
2020	153.2	1.179	1.316	130.0
2021	218.2	1.318	1.327	165.5
2022	255.7	1.630	1.320	156.9
2023	256.1	1.558	1.215	164.4
2024	276.4	1.832	1.205	150.9

Chart A below shows the amount of time the average PG&E customer experienced a sustained outage or outages each year in graphical form and includes a linear trend line:

2015-2024 Transmission & Distribution System SAIDI Performance Results

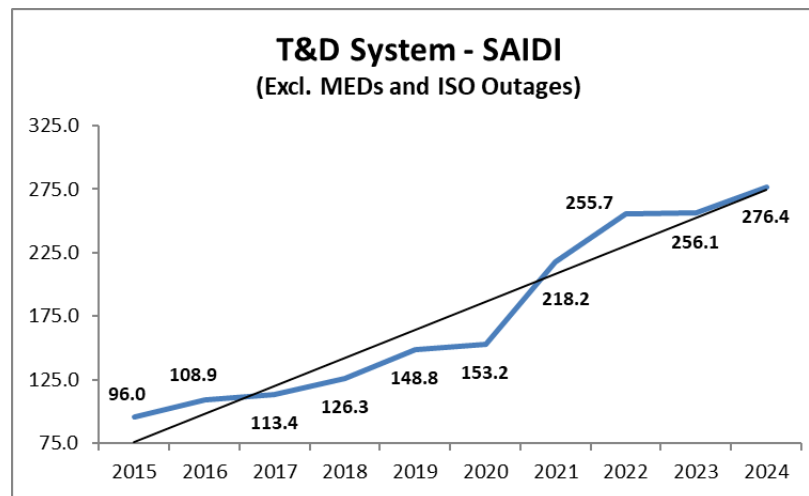


Chart A - (Excludes Major Event Days and ISO Outages)¹

¹ See Table 59 as shown in Section 3.



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How PG&E Measures Reliability

PG&E uses four metrics commonly used in the electric utility industry to measure reliability for both unplanned and planned outages: the System Average Interruption Duration Index (SAIDI), the System Average Interruption Frequency Index (SAIFI), the Momentary Average Interruption Frequency Index (MAIFI), and the Customer Average Interruption Duration Index (CAIDI).

- SAIDI is the amount of time the average PG&E customer experiences a sustained outage or outages (being without power for more than five minutes) in a given year. **In 2024, PG&E's SAIDI was 276.4 minutes per customer.**
- SAIFI is the number of times the average PG&E customer experiences a sustained outage in a given year. **In 2024, PG&E's SAIFI was 1.832.**
- MAIFI² is the number of times the average customer is interrupted by momentary outages each year. Momentary outages are outages lasting 5 minutes or less. **In 2024, PG&E's MAIFI was 1.205.**
- CAIDI is the average duration of sustained outages. It is determined by taking the total outage minutes for all customer outages³ (SAIDI) and dividing it by the total number of customer outages (SAIFI). **In 2024, PG&E's CAIDI was 150.9 minutes.**

² PG&E's outage reporting tools were originally designed to track momentary outages as defined in D96-09-045. Under D.16-01-008, this method of tracking momentary outages corresponds to the MAIFI_E definition contained in the IEEE Guide for Electric Power Distribution Reliability Indices (IEEE 1366 standard), which counts multiple outage interruptions that occur close to each other in time as a single momentary outage event. This metric is equal to the total number of customer momentary interruption events divided by the total number of customers served and does not include the events immediately preceding a sustained interruption.

³ Measures sustained outage events and excludes momentary outage events.



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SAIDI	=	Total minutes every customer was without power due to sustained outages	÷	Total number of customers
SAIFI	=	Number of sustained customer outages experienced by all PG&E customers	÷	Total number of customers
CAIDI	=	System Average Interruption Duration Index (SAIDI)	÷	System Average Interruption Frequency Index (SAIFI)
MAIFI	=	Number of customers who experience Momentary Outages	÷	Total number of customers

What follows is the 2024 Electric Reliability Report for Pacific Gas and Electric Company as required by Decision 16-01-008. This report includes system reliability data based on the Institute of Electrical and Electronic Engineers (IEEE) Standard 1366 methodology, as required by D.16-01-008. The report includes very specific details, including reliability numbers for each of PG&E's 19 divisions. It also includes a list of Worst-Performing circuits in Section 5.



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Introduction

This is the 2024 Electric Reliability Report for Pacific Gas and Electric Company as required by Decision 16-01-008. This report includes system reliability data based on the Institute of Electrical and Electronic Engineers (IEEE) Standard 1366 methodology. This report consists of the following:

Section	Description
1.	System Indices for the Last 10 Years (2015-2024)
2.	Division Reliability Indices (2015-2024) Including and Excluding Major Event Days (MED)
3.	System and Division Indices Based on IEEE 1366 (2015-2024) Including Planned Outages and Including and Excluding MED
4.	Service Territory Map Including Divisions
5.	Top 1% of Worst-Performing Circuits (WPC) Excluding MED
6.	Top 10 Major Unplanned Power Outage Events in 2024
7.	Summary List of MED per IEEE 1366
8.	Historical Ten Largest Unplanned Outage Events (2015-2024)
9.	The Number of Customer Inquiries on Reliability Data and the Number of Days per Response
10.	Appendix A – Definitions, Acronyms and Abbreviations



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As noted in previous reports, PG&E implemented a new outage reporting system in 2015 that included the data conversion of its legacy (DART/OUTAGE) database. This new system consists of two main components that are typically referred to as PG&E's Integrated Logging and Information System (ILIS) and its Operations Database (ODB), also called ILIS-ODB for short. ILIS models the actual electric switching operations reported during the circuit restoration process (which is useful for determining accurate customer outage minutes for calculating SAIDI and CAIDI). PG&E maintains account specific information for customers affected by outages that are recorded and stored in PG&E's ODB. This system tracks outages at various levels (generation, transmission, substation, primary distribution, and individual transformers), and the most current outage data was used to compile the information contained in this report.

Distribution operators log outage information in PG&E's ILIS tool, which uses minutes as the smallest time increment to record the outage start, switching operations, and outage end times. Smart Meters measure outage duration in seconds and are used to automatically report momentary outages beyond non-SCADA auto-reclosing devices. Momentary outages for SCADA-related and other events are logged by distribution operators using the ILIS tool, which does not have the benefit of measuring the outage duration in seconds. Consequently, and although infrequent, it is possible that an outage duration is recorded as 5 minutes when the actual outage duration was up to 5 minutes and 59 seconds. In 2015, PG&E updated its reporting tools and processes to help minimize this occurrence and allow the operator in these situations to log this event as a 6-minute sustained outage.

We have added a list of Definitions, Acronyms and Abbreviations at the end of Appendix A to help the reader who is not familiar with the jargon used in reliability reporting.



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1. System Indices for the Last Ten Years

a. System Indices (2015-2024)

Table 2 lists the required SAIDI, SAIFI, MAIFI⁴, and CAIDI with MED included and excluded as directed in Appendix B of D.16-01-008⁵:

Table 2 – Combined Transmission and Distribution System Indices (2015-2024)
(Excludes planned and ISO outages)

Year	Major Events Included				Major Events Excluded			
	SAIDI	SAIFI	MAIFI	CAIDI	SAIDI	SAIFI	MAIFI	CAIDI
2015	131.8	0.966	1.812	136.4	80.7	0.786	1.585	102.6
2016	106.7	1.021	1.596	104.5	93.8	0.940	1.487	99.8
2017	357.8	1.466	2.295	244.1	97.3	0.878	1.487	110.8
2018	282.3	1.053	1.423	268.0	99.6	0.960	1.356	103.8
2019	1,363.3	1.872	1.780	728.2	117.7	1.009	1.270	116.6
2020	450.6	1.443	1.546	312.1	125.8	1.068	1.292	117.8
2021	588.4	1.689	1.897	348.4	182.8	1.178	1.317	155.2
2022	283.8	1.617	1.398	175.5	213.5	1.470	1.309	145.2
2023	669.4	2.065	1.998	324.2	213.9	1.402	1.207	152.6
2024	460.1	1.965	1.518	234.1	226.7	1.637	1.196	138.5

Note: Includes Generation, Transmission, Substation, and Distribution related outages

⁴ Momentary outage events are either reported automatically or manually logged by control center operators typically based on outage information collected from Smart Meters, SCADA, or other devices.

⁵ Per D.16-01-008, this report excludes the June 10th, 2022 load curtailment related outages initiated by CAISO due to the high demand on the Electric power grid.



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i. Distribution System Indices

Table 3 – Distribution System Indices (2015-2024)

(Excludes planned outages, transmission, substation, and generation related outages)

Year	Major Events Included				Major Events Excluded			
	SAIDI	SAIFI	MAIFI	CAIDI	SAIDI	SAIFI	MAIFI	CAIDI
2015	99.4	0.804	1.606	123.6	72.5	0.689	1.391	105.3
2016	95.5	0.896	1.401	106.6	83.1	0.819	1.304	101.5
2017	302.8	1.274	1.996	237.7	90.0	0.792	1.275	113.6
2018	263.4	0.905	1.211	291.1	90.7	0.842	1.154	107.6
2019	1,322.9	1.673	1.550	790.9	103.1	0.877	1.101	117.5
2020	417.9	1.237	1.364	338.0	111.2	0.933	1.146	119.2
2021	529.0	1.495	1.646	353.9	160.0	1.033	1.172	154.9
2022	240.6	1.407	1.269	171.0	184.5	1.282	1.184	143.9
2023	622.9	1.879	1.833	331.5	198.9	1.277	1.102	155.7
2024	422.9	1.802	1.409	234.6	210.7	1.509	1.104	139.7

Note: PG&E defines its distribution system as line voltage less than 60 kilovolts (kV)

ii. Transmission System Indices

Table 4– Transmission System Indices (2015-2024)

(Excludes planned outages, distribution, and generation related outages)
(Includes substation outages)

Year	Major Events Included				Major Events Excluded			
	SAIDI	SAIFI	MAIFI	CAIDI	SAIDI	SAIFI	MAIFI	CAIDI
2015	32.1	0.160	0.205	201.0	7.8	0.095	0.193	82.7
2016	11.2	0.125	0.195	89.5	10.7	0.121	0.184	88.3
2017	54.9	0.191	0.299	286.9	7.3	0.085	0.212	85.4
2018	17.9	0.146	0.211	122.1	7.9	0.115	0.201	68.7
2019	40.2	0.198	0.226	202.7	14.5	0.131	0.165	110.5
2020	32.6	0.206	0.181	158.4	14.5	0.134	0.145	108.3
2021	59.0	0.192	0.227	307.9	22.5	0.143	0.135	156.7
2022	43.2	0.208	0.130	207.4	28.9	0.186	0.125	155.5
2023	46.2	0.185	0.170	249.8	14.8	0.124	0.109	119.3
2024	37.2	0.163	0.108	228.7	16.0	0.128	0.092	124.5

Note: PG&E defines its transmission system as line voltage 60 kilovolts (kV) and above



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b. Separate System Charts of SAIDI, SAIFI, MAIFI, and CAIDI for the Past 10 Years with Linear Trend Line (MED Excluded)

i. SAIDI Performance Results (MED Excluded)

Chart 1: Transmission & Distribution System SAIDI Indices

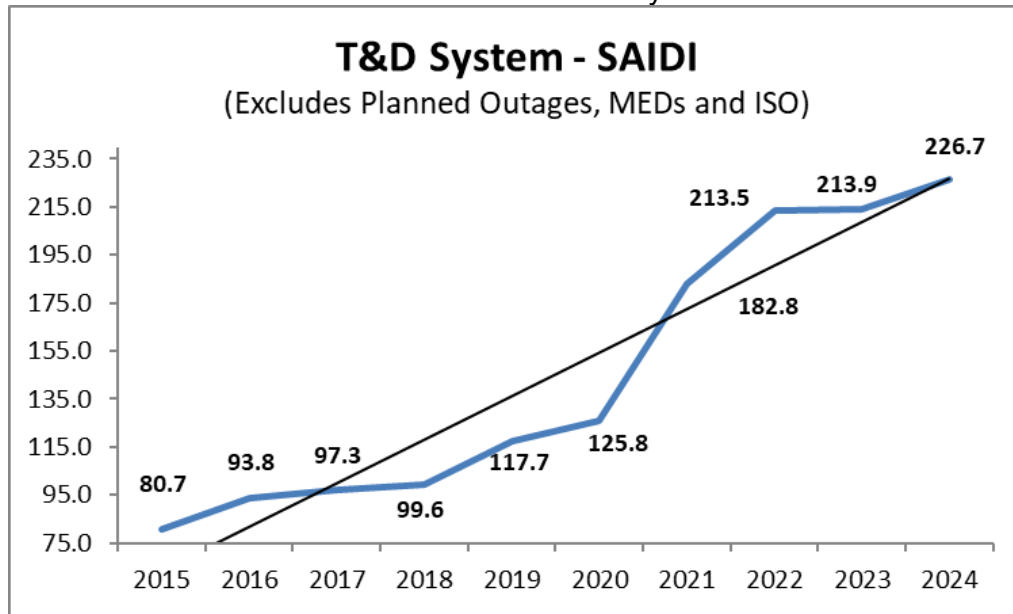


Chart 2: Distribution System SAIDI Indices

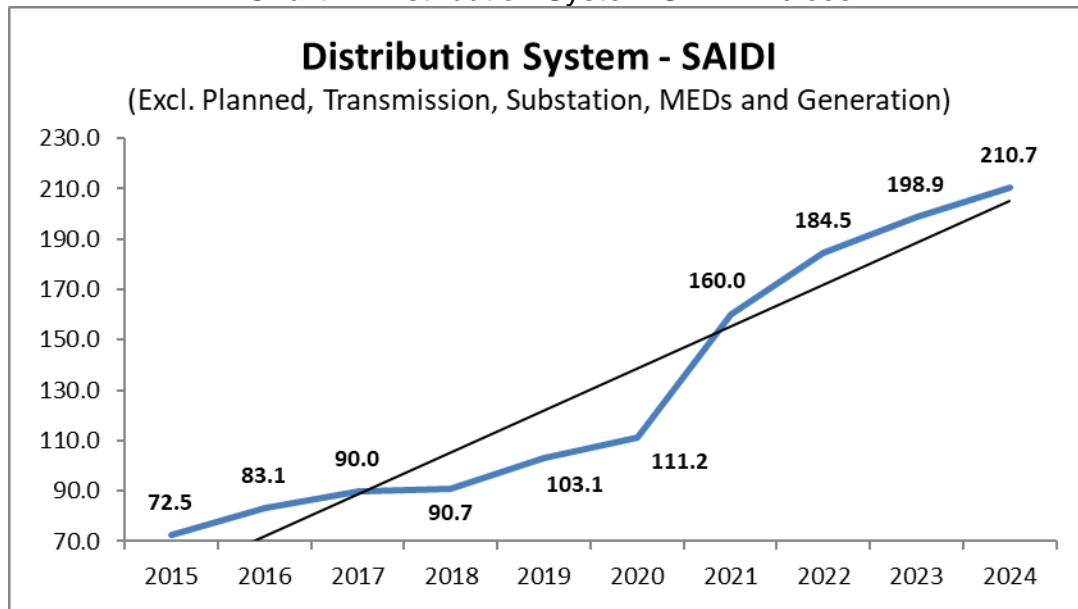
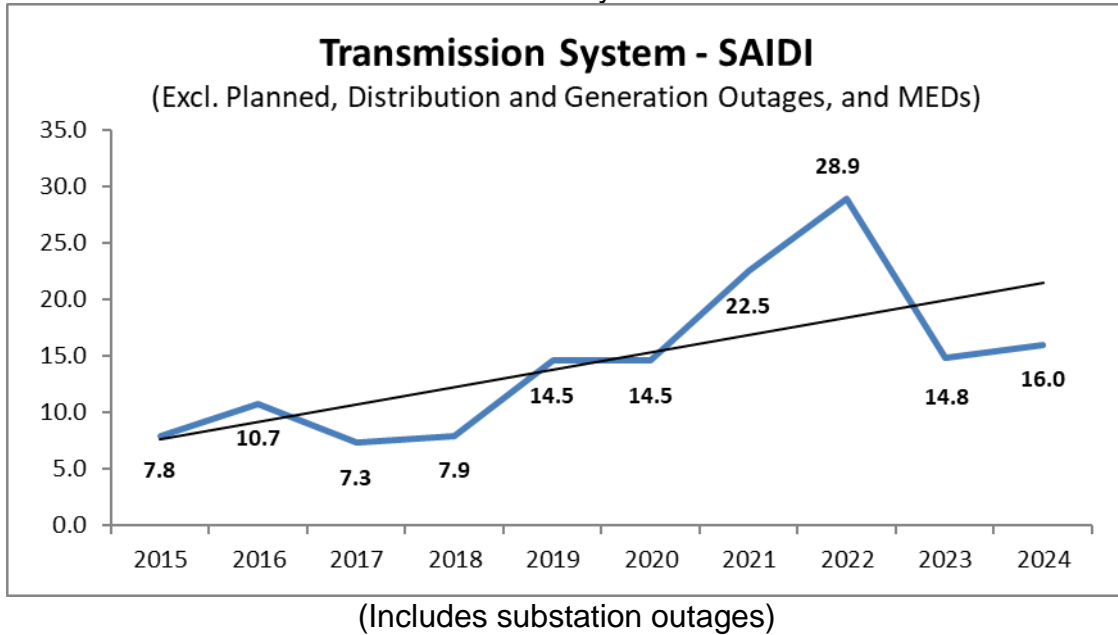


Chart 3: Transmission System SAIDI Indices



ii. SAIFI Performance Results (MED Excluded)

Chart 4: Transmission & Distribution System SAIFI Indices

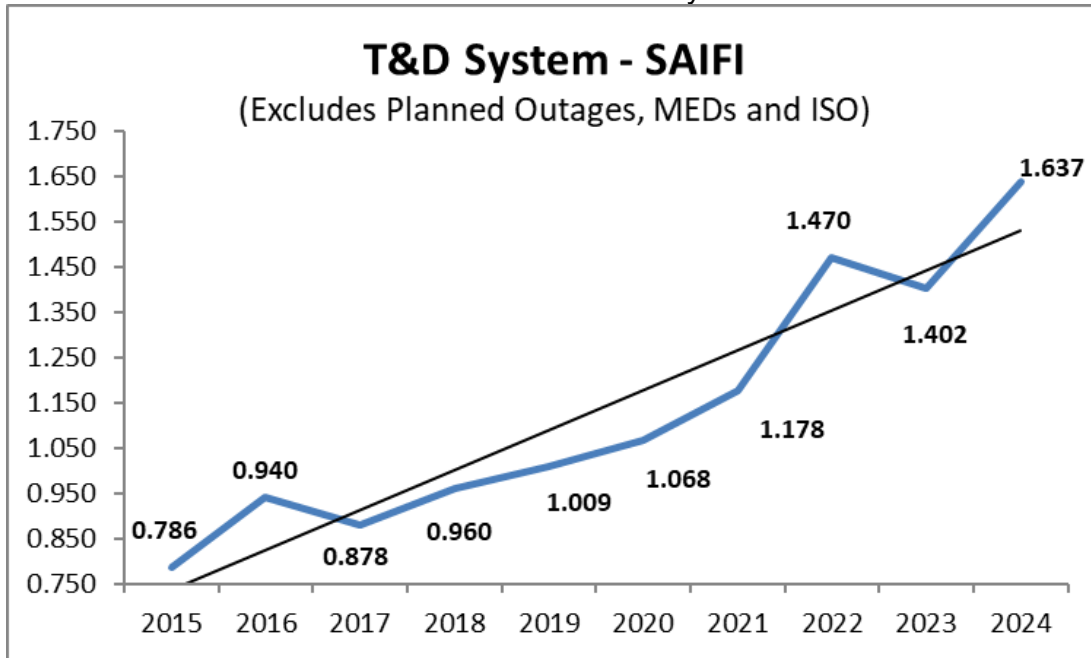


Chart 5: Distribution System SAIFI Indices

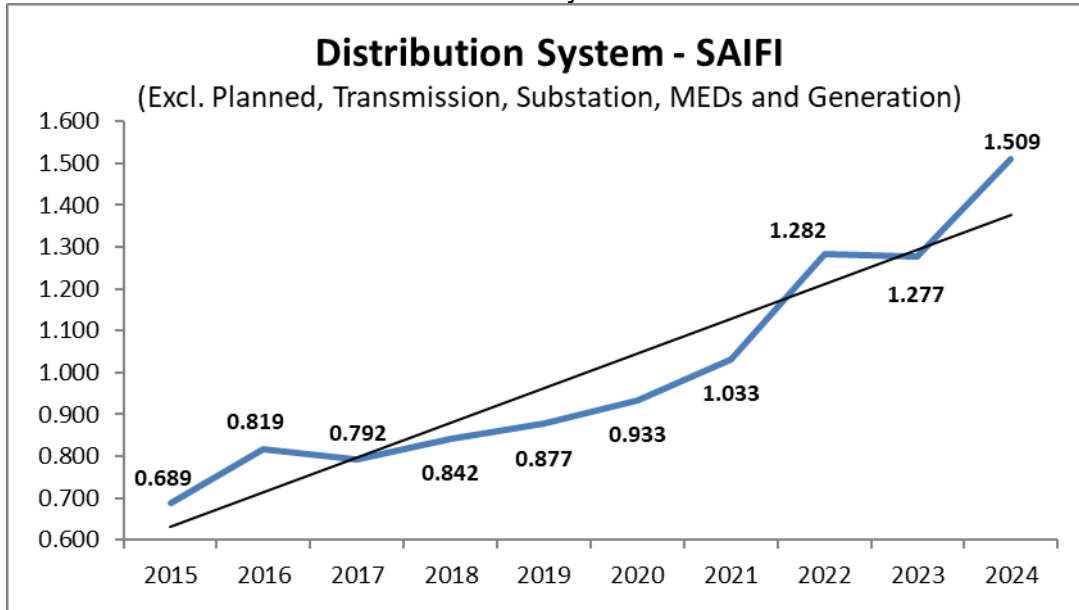
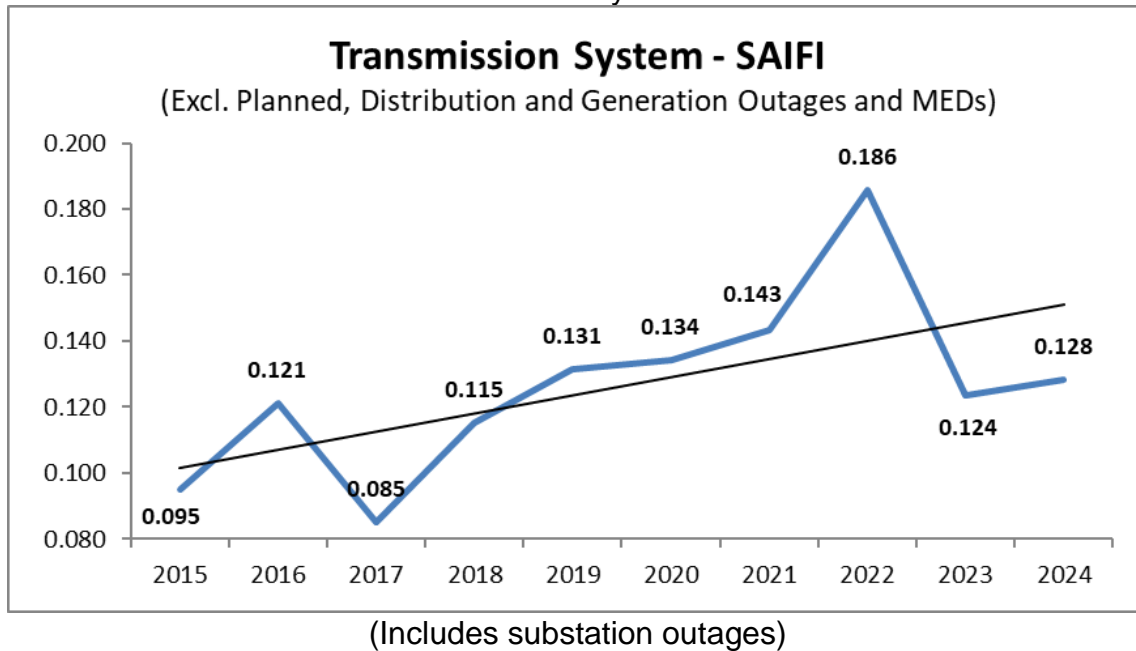
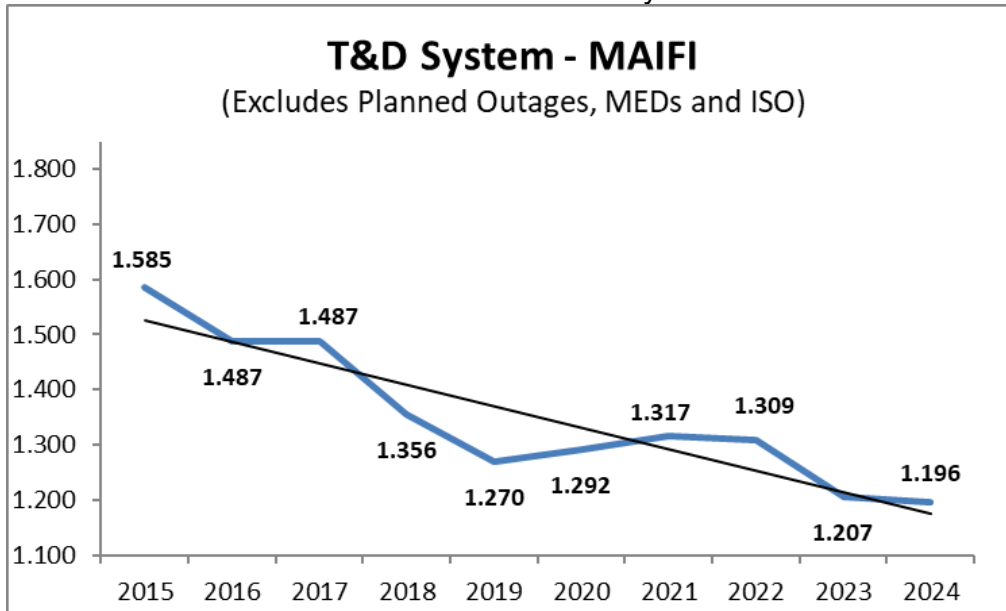


Chart 6: Transmission System SAIFI Indices



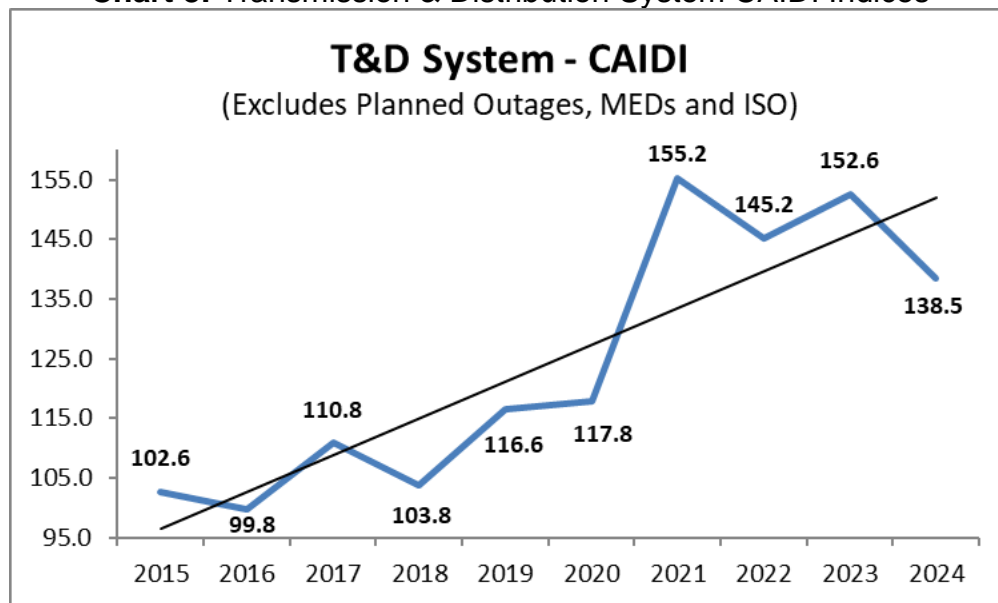
iii. MAIFI⁶ Performance Results (MED Excluded)

Chart 7: Transmission & Distribution System MAIFI Indices



iv. CAIDI Performance Results (MED Excluded)

Chart 8: Transmission & Distribution System CAIDI Indices



⁶

See footnote 4.

Chart 9: Distribution System CAIDI Indices

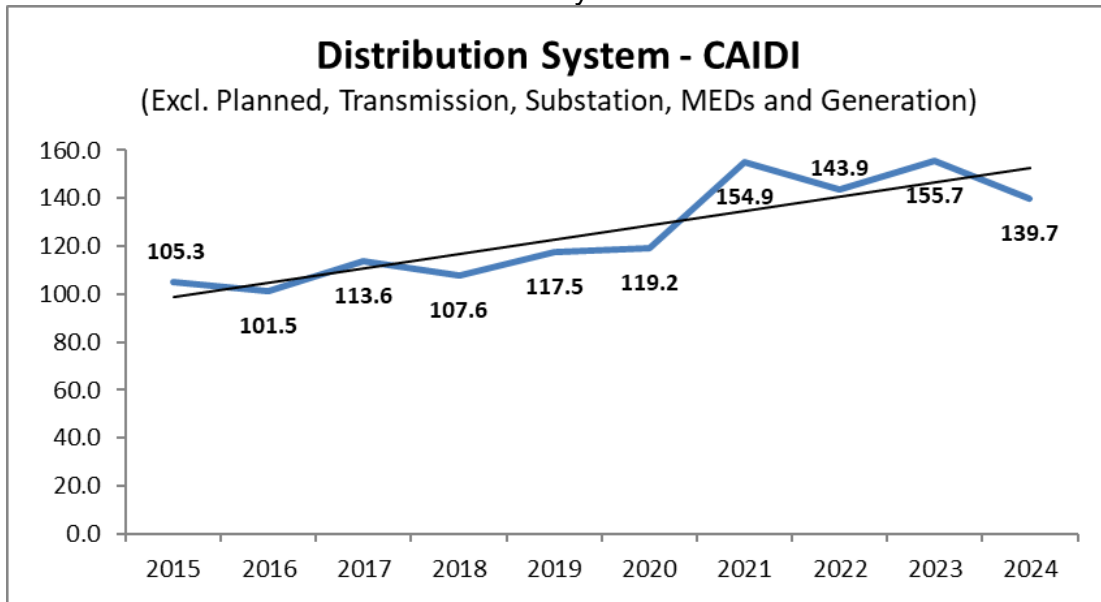
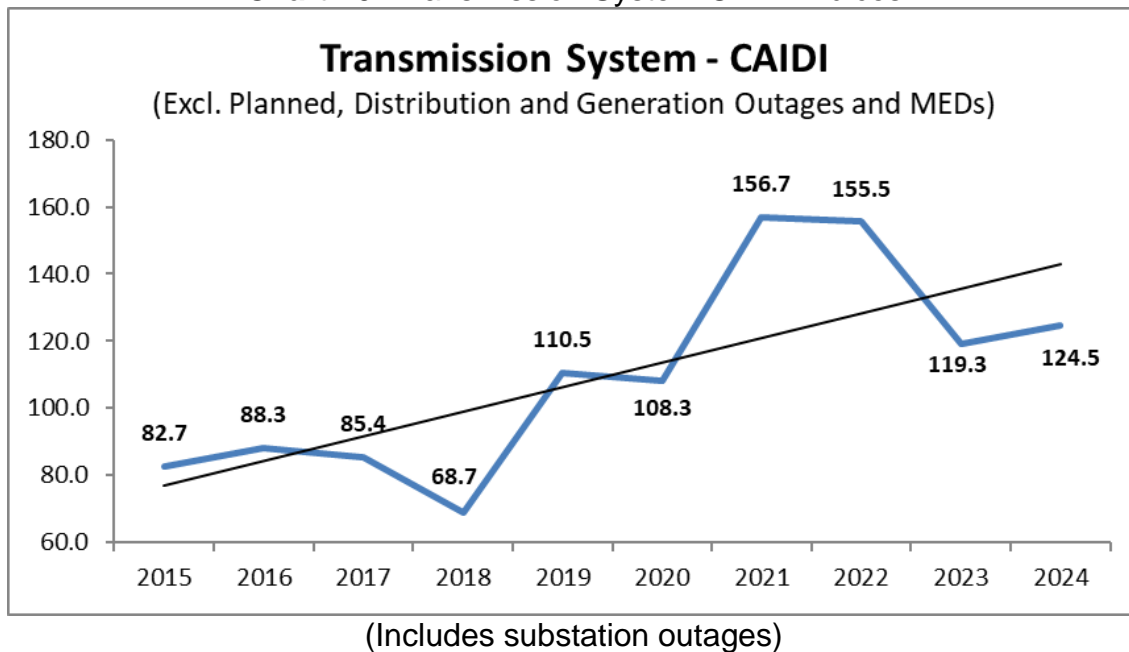


Chart 10: Transmission System CAIDI Indices





2024 Annual Electric Reliability Report

2. Division Reliability Indices for the Past 10 Years Excluding Planned Outages, ISO Outages

a. Including Major Event days

b. Excluding Major Event Days

Table 5: Division Reliability Indices

Division/System	Year	Major Events Included				Major Events Excluded			
		SAIDI	SAIFI	MAIFI	CAIDI	SAIDI	SAIFI	MAIFI	CAIDI
CENTRAL COAST	2015	253.0	1.289	2.173	196.3	102.0	0.847	1.844	120.4
CENTRAL COAST	2016	188.6	1.637	2.730	115.2	166.1	1.471	2.476	112.9
CENTRAL COAST	2017	807.8	2.462	4.576	328.2	146.3	1.293	2.589	113.1
CENTRAL COAST	2018	186.8	1.598	2.502	117.0	162.4	1.447	2.242	112.2
CENTRAL COAST	2019	1,294.9	2.584	3.149	501.2	203.6	1.470	2.231	138.5
CENTRAL COAST	2020	395.9	2.129	1.888	185.9	159.1	1.724	1.600	92.3
CENTRAL COAST	2021	711.0	2.379	2.543	298.9	289.2	1.643	1.906	176.0
CENTRAL COAST	2022	484.1	2.981	2.997	162.4	377.6	2.657	2.868	142.1
CENTRAL COAST	2023	1,768.0	3.848	3.741	459.5	413.0	2.465	2.158	167.6
CENTRAL COAST	2024	1,185.9	3.191	2.251	371.7	374.7	2.471	1.648	151.6
Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI	SAIDI	SAIFI	MAIFI	CAIDI
DE ANZA	2015	63.4	0.594	1.281	106.7	51.2	0.476	1.171	107.6
DE ANZA	2016	109.6	0.924	1.414	118.6	87.3	0.753	1.336	116.0
DE ANZA	2017	315.4	1.503	1.792	209.8	97.9	0.985	1.150	99.4
DE ANZA	2018	86.8	0.836	1.426	103.8	84.0	0.789	1.402	106.4
DE ANZA	2019	402.2	1.385	2.008	290.4	91.3	0.873	1.657	104.6
DE ANZA	2020	226.3	0.958	1.597	236.2	83.1	0.711	1.213	117.0
DE ANZA	2021	294.6	1.189	1.784	247.8	121.0	0.787	0.987	153.8
DE ANZA	2022	179.3	1.216	1.114	147.4	120.8	1.004	1.065	120.3
DE ANZA	2023	1,491.8	2.419	3.002	616.7	173.3	1.002	1.469	173.0
DE ANZA	2024	471.1	2.020	1.806	233.2	211.3	1.580	1.292	133.7
Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI	SAIDI	SAIFI	MAIFI	CAIDI
DIABLO	2015	84.0	0.981	1.878	85.6	74.0	0.856	1.671	86.5
DIABLO	2016	79.0	1.008	1.729	78.4	76.5	0.995	1.694	76.9
DIABLO	2017	140.7	1.218	2.138	115.5	78.0	0.876	1.620	89.1
DIABLO	2018	89.5	1.112	1.540	80.4	78.3	1.004	1.496	78.0
DIABLO	2019	612.7	1.601	1.855	382.7	78.8	0.935	1.212	84.3
DIABLO	2020	249.6	1.433	1.823	174.1	110.8	1.206	1.621	91.9
DIABLO	2021	163.6	1.430	1.671	114.4	112.0	1.177	1.352	95.2
DIABLO	2022	208.3	1.697	1.382	122.7	179.2	1.566	1.295	114.4
DIABLO	2023	459.8	2.161	1.582	212.8	183.9	1.384	1.080	132.9
DIABLO	2024	321.6	2.170	1.650	148.2	198.4	1.919	1.344	103.4



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		Major Events Included				Major Events Excluded			
Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI	SAIDI	SAIFI	MAIFI	CAIDI
EAST BAY	2015	59.6	0.723	1.179	82.5	45.0	0.586	1.085	76.9
EAST BAY	2016	128.2	1.205	1.242	106.4	101.4	1.050	1.079	96.6
EAST BAY	2017	147.3	1.217	1.983	121.1	73.8	0.903	1.528	81.7
EAST BAY	2018	87.6	0.990	1.131	88.4	78.8	0.901	1.080	87.5
EAST BAY	2019	459.7	1.346	1.216	341.6	84.5	0.854	0.956	99.0
EAST BAY	2020	222.4	1.116	1.647	199.3	95.5	0.838	1.453	114.0
EAST BAY	2021	238.5	1.679	1.683	142.0	154.2	1.250	1.368	123.4
EAST BAY	2022	159.7	1.244	1.681	128.4	147.4	1.158	1.661	127.3
EAST BAY	2023	413.4	1.575	1.566	262.4	110.7	1.000	0.782	110.7
EAST BAY	2024	166.5	1.302	0.900	127.9	134.4	1.108	0.699	121.3
Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI	SAIDI	SAIFI	MAIFI	CAIDI
FRESNO	2015	100.3	1.151	2.057	87.2	70.0	0.849	1.829	82.4
FRESNO	2016	85.1	1.127	1.975	75.5	83.4	1.105	1.951	75.4
FRESNO	2017	102.5	0.986	1.863	104.0	72.3	0.799	1.546	90.5
FRESNO	2018	113.9	1.046	1.415	108.9	73.5	0.861	1.368	85.4
FRESNO	2019	120.7	0.994	1.695	121.4	78.8	0.828	1.477	95.2
FRESNO	2020	116.9	1.136	1.452	102.9	86.5	0.865	1.352	100.0
FRESNO	2021	213.2	1.354	1.698	157.4	142.0	1.081	1.468	131.3
FRESNO	2022	182.3	1.295	1.793	140.8	175.3	1.244	1.731	140.9
FRESNO	2023	283.5	1.509	1.977	187.8	173.0	1.178	1.488	146.9
FRESNO	2024	194.0	1.520	1.561	127.6	190.0	1.486	1.511	127.9
Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI	SAIDI	SAIFI	MAIFI	CAIDI
HUMBOLDT	2015	695.2	2.234	2.736	311.2	276.3	1.621	2.423	170.5
HUMBOLDT	2016	219.4	1.637	2.055	134.0	203.0	1.537	1.995	132.1
HUMBOLDT	2017	919.8	2.362	3.510	389.5	275.1	1.306	2.280	210.6
HUMBOLDT	2018	402.6	2.144	1.570	187.8	225.9	1.789	1.502	126.3
HUMBOLDT	2019	6,899.5	4.365	2.423	1,580.7	274.4	1.616	1.850	169.7
HUMBOLDT	2020	968.7	2.161	1.304	448.3	191.6	1.336	1.181	143.5
HUMBOLDT	2021	1,602.5	2.815	2.079	569.4	461.3	2.005	1.415	230.0
HUMBOLDT	2022	1,008.1	3.052	1.407	330.3	469.2	2.497	1.329	187.9
HUMBOLDT	2023	2,410.3	4.231	3.576	569.6	610.8	2.729	1.636	223.8
HUMBOLDT	2024	1,247.2	3.831	2.211	325.5	711.7	3.271	1.706	217.6
Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI	SAIDI	SAIFI	MAIFI	CAIDI
KERN	2015	92.0	0.947	1.925	97.1	80.4	0.862	1.850	93.2
KERN	2016	89.8	0.932	2.072	96.3	89.2	0.916	2.066	97.4
KERN	2017	138.9	1.072	1.958	129.6	78.1	0.733	1.403	106.5
KERN	2018	72.4	0.789	1.747	91.8	71.6	0.783	1.720	91.4
KERN	2019	162.0	1.325	2.079	122.2	106.6	1.101	1.743	96.8
KERN	2020	129.7	1.157	1.955	112.1	114.6	1.060	1.831	108.1
KERN	2021	179.3	1.397	1.855	128.4	138.4	1.101	1.503	125.7
KERN	2022	272.5	1.494	1.287	182.4	269.4	1.461	1.209	184.4
KERN	2023	193.3	1.399	2.112	138.1	145.2	1.195	1.794	121.5
KERN	2024	225.1	1.416	2.138	159.0	186.0	1.298	1.698	143.3



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		Major Events Included				Major Events Excluded			
Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI	SAIDI	SAIFI	MAIFI	CAIDI
LOS PADRES	2015	132.2	0.844	1.783	156.6	72.2	0.687	1.408	105.1
LOS PADRES	2016	114.1	1.172	1.672	97.4	112.3	1.147	1.671	97.9
LOS PADRES	2017	315.7	1.574	2.127	200.6	106.7	0.944	1.442	113.0
LOS PADRES	2018	141.8	1.277	1.153	111.1	130.5	1.195	1.010	109.3
LOS PADRES	2019	225.9	1.533	1.134	147.4	150.7	1.188	0.798	126.8
LOS PADRES	2020	198.1	1.296	0.915	152.9	139.3	1.141	0.836	122.1
LOS PADRES	2021	300.8	1.621	1.935	185.5	195.0	1.125	1.314	173.4
LOS PADRES	2022	319.6	2.029	1.000	157.5	233.3	1.824	0.870	128.0
LOS PADRES	2023	438.4	2.407	1.785	182.1	221.1	1.831	1.176	120.7
LOS PADRES	2024	352.9	2.517	1.220	140.2	242.6	2.208	1.005	109.9
Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI	SAIDI	SAIFI	MAIFI	CAIDI
MISSION	2015	62.6	0.596	1.150	105.1	56.7	0.543	1.054	104.4
MISSION	2016	82.7	0.763	0.961	108.4	72.7	0.702	0.916	103.7
MISSION	2017	137.9	1.012	1.470	136.4	60.2	0.602	1.002	99.9
MISSION	2018	67.1	0.672	0.839	99.9	62.0	0.644	0.815	96.4
MISSION	2019	296.5	0.948	0.939	312.6	65.8	0.669	0.693	98.4
MISSION	2020	219.2	1.201	1.387	182.5	91.1	0.766	1.060	119.0
MISSION	2021	156.3	1.215	1.216	128.6	113.5	0.957	0.913	118.6
MISSION	2022	127.5	0.839	0.917	152.1	109.9	0.784	0.879	140.2
MISSION	2023	166.1	1.083	1.092	153.3	102.8	0.787	0.796	130.6
MISSION	2024	177.6	1.390	1.120	127.8	147.4	1.200	1.012	122.9
Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI	SAIDI	SAIFI	MAIFI	CAIDI
NORTH BAY	2015	135.4	1.059	2.161	127.9	97.4	0.904	1.977	107.8
NORTH BAY	2016	110.3	0.920	1.434	119.8	83.9	0.767	1.209	109.4
NORTH BAY	2017	733.3	1.761	2.810	416.5	148.5	0.955	1.832	155.5
NORTH BAY	2018	164.6	0.982	1.837	167.6	116.3	0.921	1.771	126.3
NORTH BAY	2019	3,518.1	3.182	2.272	1,105.7	148.2	1.312	1.647	112.9
NORTH BAY	2020	509.3	1.718	2.521	296.4	143.3	1.235	2.093	116.0
NORTH BAY	2021	352.5	1.627	2.289	216.6	160.0	1.063	1.551	150.5
NORTH BAY	2022	217.1	1.496	1.153	145.1	212.6	1.459	1.100	145.7
NORTH BAY	2023	477.2	1.886	1.889	253.1	191.6	1.291	0.951	148.5
NORTH BAY	2024	745.6	2.471	1.744	301.7	239.5	1.856	1.056	129.0
Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI	SAIDI	SAIFI	MAIFI	CAIDI
NORTH VALLEY	2015	479.6	1.787	2.528	268.3	132.8	1.062	1.930	125.0
NORTH VALLEY	2016	175.1	1.265	2.173	138.4	146.4	1.128	1.937	129.8
NORTH VALLEY	2017	398.6	1.672	3.163	238.5	112.3	0.863	2.007	130.2
NORTH VALLEY	2018	4,287.0	1.629	1.393	2,631.8	187.1	1.364	1.325	137.2
NORTH VALLEY	2019	4,886.2	3.961	2.501	1,233.6	205.0	1.506	1.458	136.1
NORTH VALLEY	2020	1,979.0	2.563	1.654	772.2	269.0	1.546	1.369	174.0
NORTH VALLEY	2021	2,098.1	2.899	3.243	723.8	427.7	1.752	2.192	244.1
NORTH VALLEY	2022	353.8	2.252	1.311	157.1	337.6	2.178	1.206	155.0
NORTH VALLEY	2023	724.9	2.764	2.146	262.2	377.5	2.108	1.333	179.1
NORTH VALLEY	2024	738.4	2.468	1.413	299.2	374.8	2.053	1.147	182.6



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Division/System	Year	Major Events Included				Major Events Excluded			
		SAIDI	SAIFI	MAIFI	CAIDI	SAIDI	SAIFI	MAIFI	CAIDI
PENINSULA	2015	76.2	0.866	1.798	87.9	60.5	0.752	1.601	80.4
PENINSULA	2016	87.1	0.986	1.381	88.3	78.8	0.905	1.195	87.2
PENINSULA	2017	167.0	1.328	2.382	125.7	61.5	0.640	1.176	96.0
PENINSULA	2018	66.4	0.856	1.255	77.5	60.5	0.806	1.204	75.0
PENINSULA	2019	734.2	1.551	1.642	473.2	88.5	0.816	0.983	108.4
PENINSULA	2020	169.5	1.199	1.383	141.4	85.5	0.855	1.042	100.0
PENINSULA	2021	391.0	1.625	1.927	240.6	161.2	1.068	0.944	150.9
PENINSULA	2022	161.4	1.132	1.414	142.5	129.9	1.005	1.351	129.2
PENINSULA	2023	1,241.3	2.432	2.977	510.3	207.9	1.269	1.366	163.7
PENINSULA	2024	597.2	1.970	1.142	303.2	206.7	1.529	0.706	135.2
Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI	SAIDI	SAIFI	MAIFI	CAIDI
SACRAMENTO	2015	92.4	0.894	1.771	103.3	80.1	0.799	1.556	100.3
SACRAMENTO	2016	99.4	1.035	1.803	96.1	83.6	0.944	1.539	88.5
SACRAMENTO	2017	283.0	1.870	3.213	151.3	121.2	1.070	1.708	113.2
SACRAMENTO	2018	108.5	1.059	1.935	102.4	101.0	1.021	1.825	98.9
SACRAMENTO	2019	670.8	1.686	2.349	397.9	98.9	0.866	1.574	114.3
SACRAMENTO	2020	281.9	1.602	1.796	176.0	173.6	1.350	1.499	128.6
SACRAMENTO	2021	579.7	1.740	2.888	333.2	155.4	1.122	1.874	138.4
SACRAMENTO	2022	386.1	1.546	1.719	249.8	175.1	1.294	1.573	135.3
SACRAMENTO	2023	444.3	1.788	2.111	248.4	191.3	1.276	1.436	149.8
SACRAMENTO	2024	500.0	1.835	1.920	272.5	218.5	1.342	1.407	162.8
Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI	SAIDI	SAIFI	MAIFI	CAIDI
SAN FRANCISCO	2015	36.1	0.521	0.537	69.3	33.9	0.504	0.501	67.2
SAN FRANCISCO	2016	40.7	0.537	0.397	75.8	39.7	0.518	0.355	76.7
SAN FRANCISCO	2017	116.4	0.860	0.513	135.4	36.5	0.500	0.372	73.0
SAN FRANCISCO	2018	38.0	0.417	0.298	91.0	35.2	0.378	0.270	93.0
SAN FRANCISCO	2019	71.7	0.718	0.363	99.8	56.8	0.614	0.258	92.4
SAN FRANCISCO	2020	48.5	0.642	0.427	75.5	43.9	0.582	0.386	75.5
SAN FRANCISCO	2021	68.4	0.674	0.595	101.5	49.4	0.530	0.499	93.2
SAN FRANCISCO	2022	53.3	0.528	0.474	101.0	49.6	0.496	0.458	100.0
SAN FRANCISCO	2023	138.3	0.864	0.561	160.1	70.6	0.581	0.366	121.4
SAN FRANCISCO	2024	97.5	0.677	0.259	144.0	68.8	0.601	0.209	114.5
Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI	SAIDI	SAIFI	MAIFI	CAIDI
SAN JOSE	2015	75.6	0.763	1.151	99.1	65.9	0.678	1.008	97.2
SAN JOSE	2016	68.9	0.678	1.200	101.5	65.5	0.644	1.152	101.7
SAN JOSE	2017	179.8	1.241	1.807	144.8	72.3	0.739	1.171	97.8
SAN JOSE	2018	86.9	0.872	1.349	99.6	85.0	0.858	1.322	99.1
SAN JOSE	2019	275.7	1.083	1.422	254.6	81.5	0.747	1.253	109.1
SAN JOSE	2020	177.7	1.074	1.526	165.5	120.9	0.906	1.274	133.5
SAN JOSE	2021	171.7	1.004	1.252	170.9	95.4	0.763	0.909	125.1
SAN JOSE	2022	211.3	1.389	1.329	152.2	152.2	1.150	1.180	132.4
SAN JOSE	2023	309.6	1.376	1.605	225.0	126.5	0.891	1.041	142.0
SAN JOSE	2024	402.7	1.626	1.605	247.7	170.0	1.295	1.261	131.3



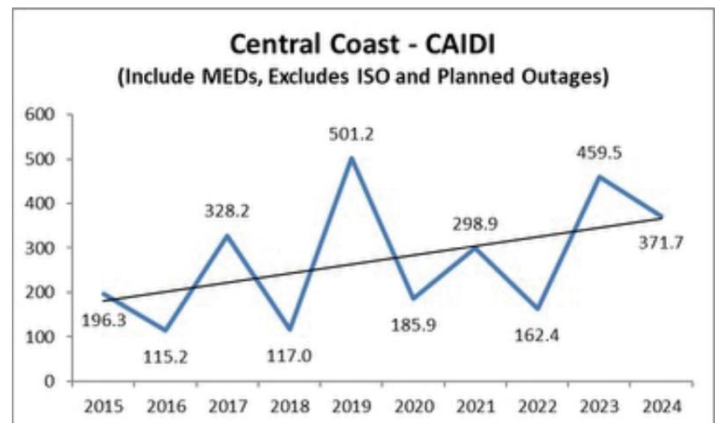
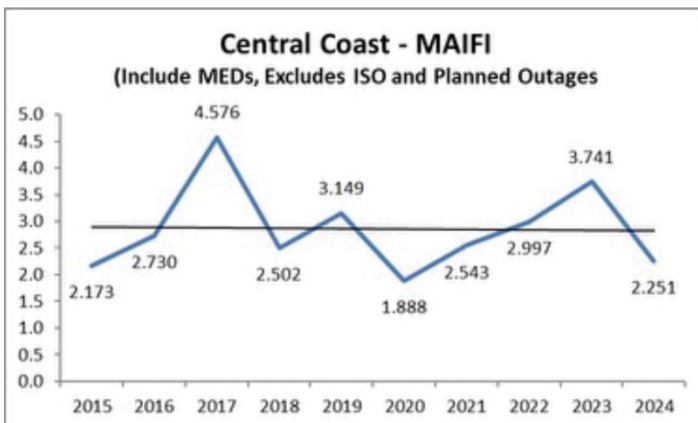
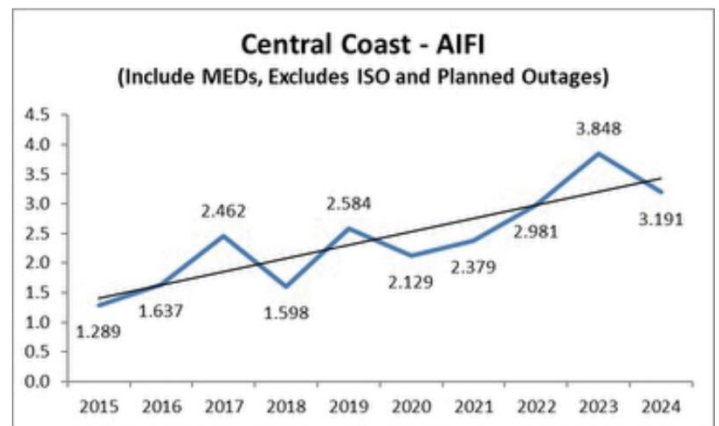
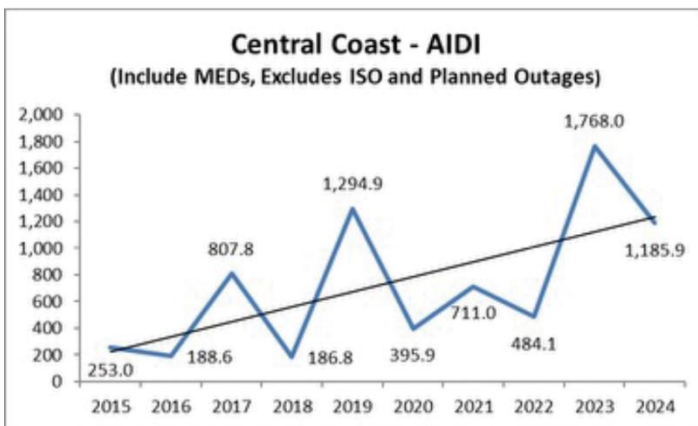
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		Major Events Included				Major Events Excluded			
Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI	SAIDI	SAIFI	MAIFI	CAIDI
SIERRA	2015	181.9	1.274	3.150	142.8	123.2	1.115	2.816	110.5
SIERRA	2016	174.3	1.252	1.864	139.2	121.7	1.029	1.705	118.2
SIERRA	2017	620.1	2.076	3.105	298.7	155.0	1.191	1.856	130.2
SIERRA	2018	399.2	1.450	1.431	275.3	152.9	1.241	1.350	123.2
SIERRA	2019	5,826.0	4.104	2.545	1,419.6	167.5	1.151	1.482	145.6
SIERRA	2020	2,345.1	2.626	1.917	892.9	208.0	1.422	1.169	146.2
SIERRA	2021	3,067.0	2.880	2.461	1,064.9	342.2	1.672	1.022	204.7
SIERRA	2022	703.8	3.314	1.182	212.4	529.6	3.101	1.018	170.8
SIERRA	2023	1,486.1	3.306	2.544	449.5	369.6	2.440	1.153	151.4
SIERRA	2024	942.2	3.358	1.943	280.6	341.0	2.750	1.533	124.0
Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI	SAIDI	SAIFI	MAIFI	CAIDI
SONOMA	2015	119.1	0.868	1.992	137.3	73.0	0.673	1.534	108.5
SONOMA	2016	95.4	0.834	1.605	114.3	88.6	0.792	1.508	111.8
SONOMA	2017	1,850.1	1.951	2.885	948.3	120.7	0.886	1.566	136.2
SONOMA	2018	107.4	0.974	1.240	110.3	105.5	0.956	1.201	110.3
SONOMA	2019	3,871.1	2.540	1.661	1,523.9	145.7	1.070	1.233	136.1
SONOMA	2020	601.0	1.645	1.597	365.3	124.5	1.062	1.327	117.2
SONOMA	2021	396.0	1.738	1.882	227.8	166.3	1.257	1.420	132.3
SONOMA	2022	243.0	1.565	1.453	155.3	232.9	1.526	1.390	152.6
SONOMA	2023	528.1	1.831	1.208	288.4	183.0	1.334	0.662	137.2
SONOMA	2024	798.1	2.319	1.918	344.1	260.1	1.760	1.340	147.8
Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI	SAIDI	SAIFI	MAIFI	CAIDI
STOCKTON	2015	124.5	1.035	2.243	120.3	96.1	0.874	1.947	109.9
STOCKTON	2016	100.0	0.994	1.777	100.6	84.0	0.900	1.663	93.3
STOCKTON	2017	271.1	1.627	1.924	166.6	84.6	0.946	1.264	89.5
STOCKTON	2018	224.8	1.152	1.994	195.1	107.7	1.036	1.872	103.9
STOCKTON	2019	1,579.9	2.366	1.904	667.7	175.3	1.276	1.130	137.4
STOCKTON	2020	661.0	1.595	1.549	414.4	131.8	1.187	1.268	111.0
STOCKTON	2021	1,119.6	2.003	2.410	558.9	176.2	1.151	1.471	153.2
STOCKTON	2022	485.0	1.890	1.190	256.6	247.3	1.665	1.064	148.5
STOCKTON	2023	629.0	2.550	2.136	246.7	278.1	1.896	1.330	146.7
STOCKTON	2024	370.6	1.917	1.630	193.3	235.8	1.603	1.372	147.0
Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI	SAIDI	SAIFI	MAIFI	CAIDI
YOSEMITE	2015	112.4	1.072	3.095	104.8	102.3	0.984	2.638	103.9
YOSEMITE	2016	129.9	1.234	2.156	105.2	123.2	1.178	2.025	104.5
YOSEMITE	2017	310.8	1.720	3.048	180.7	143.0	1.170	2.150	122.2
YOSEMITE	2018	177.4	1.465	1.834	121.1	158.3	1.355	1.773	116.8
YOSEMITE	2019	1,399.3	2.652	2.686	527.5	160.4	1.470	1.603	109.1
YOSEMITE	2020	783.7	1.944	1.588	403.2	197.4	1.411	1.299	139.9
YOSEMITE	2021	1,319.9	3.168	2.637	416.6	434.1	2.180	1.811	199.2
YOSEMITE	2022	354.4	2.232	1.847	158.8	328.9	2.047	1.631	160.7
YOSEMITE	2023	1,105.8	3.111	2.603	355.4	411.1	2.184	1.699	188.2
YOSEMITE	2024	347.9	2.333	1.744	149.1	284.9	2.144	1.548	132.9

c. Charts for Division Reliability Indices for the Past 10 Years

i. Charts for Division Reliability Indices for the Past 10 Years with Linear Trend Line Excluding ISO and Planned Outages and Including MED

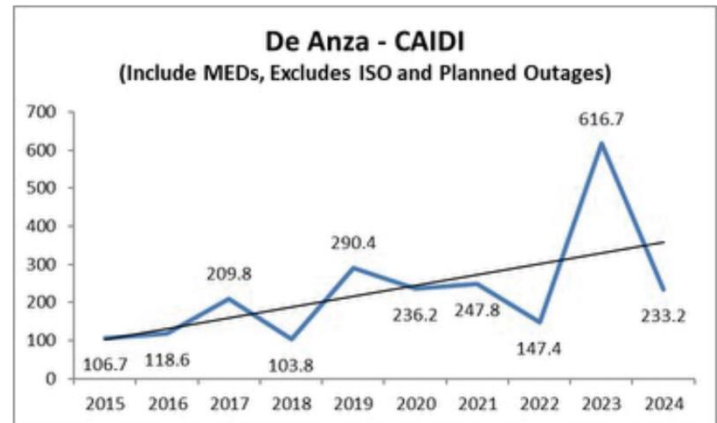
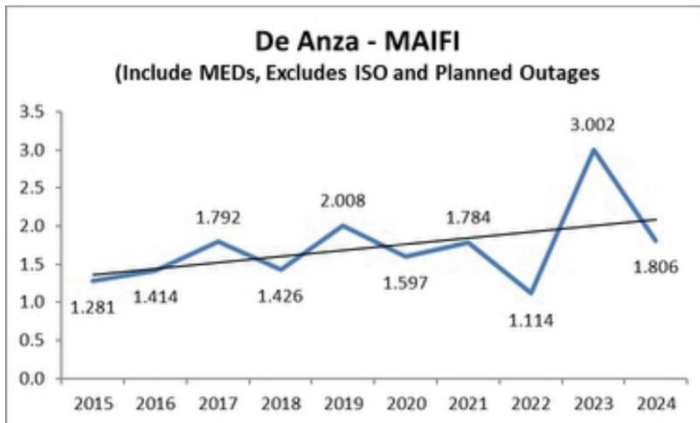
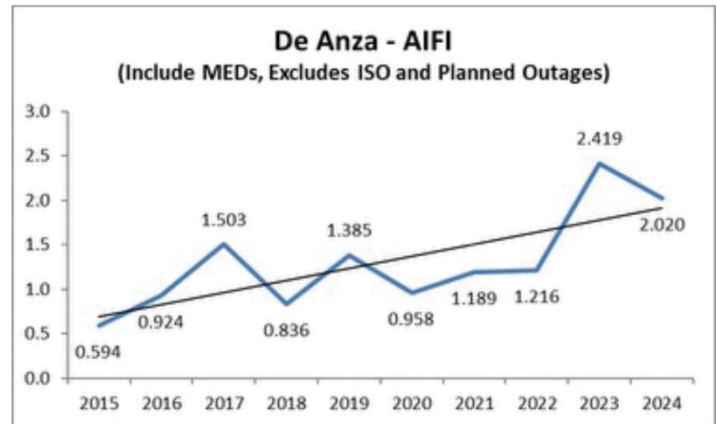
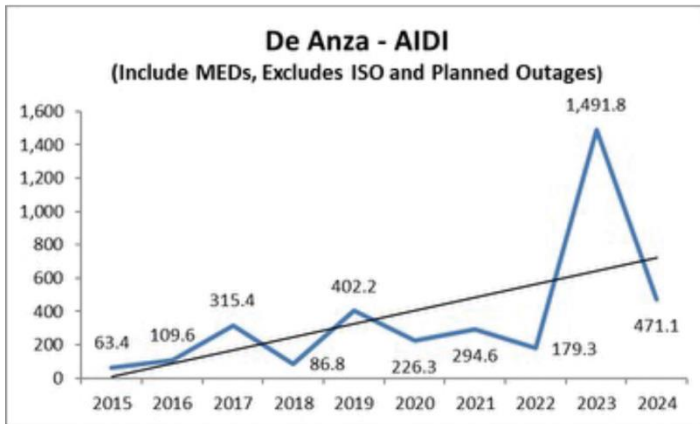
1. Central Coast Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Included)



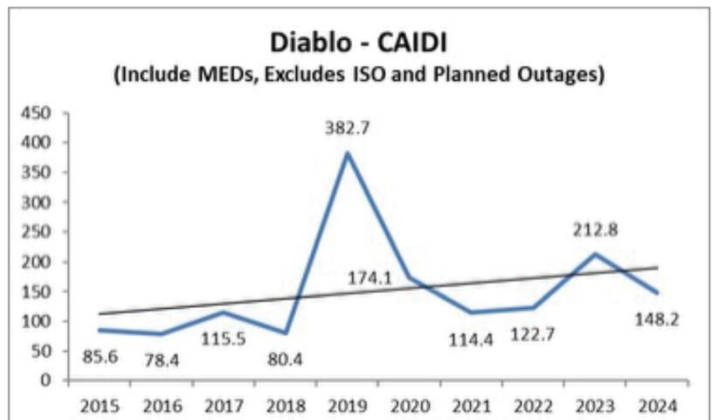
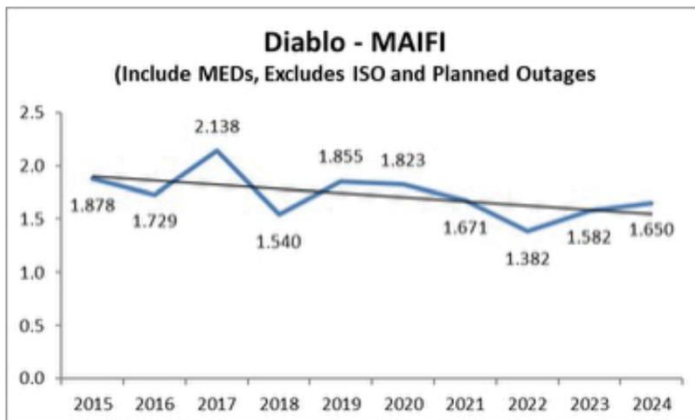
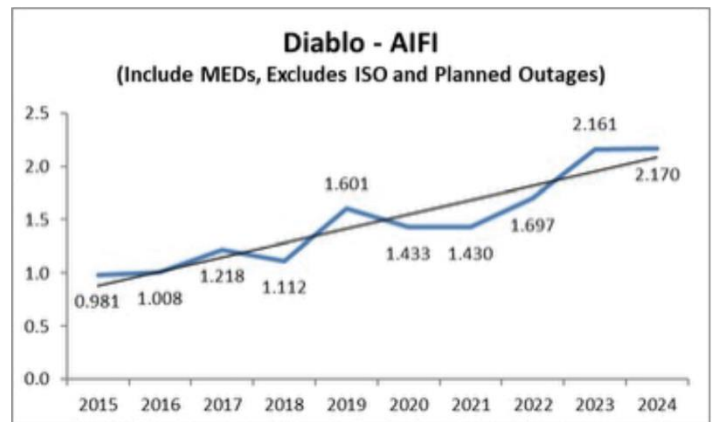
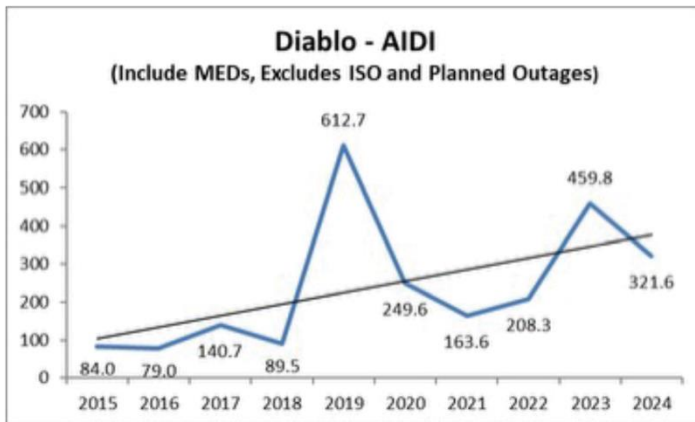


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2. De Anza Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Included)



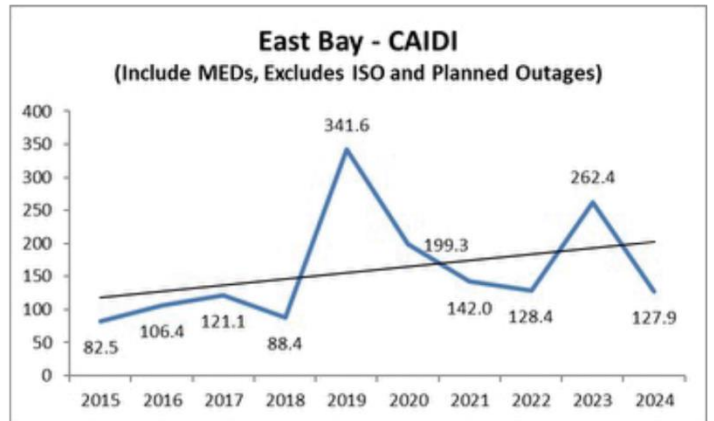
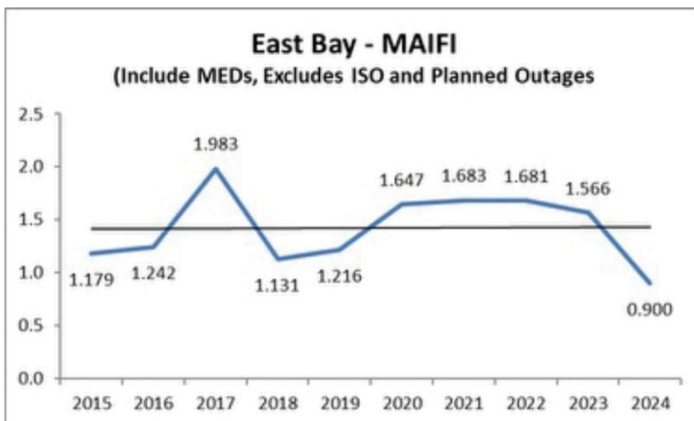
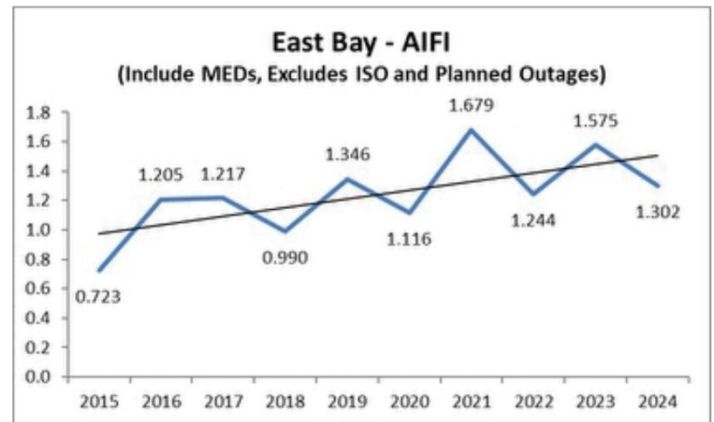
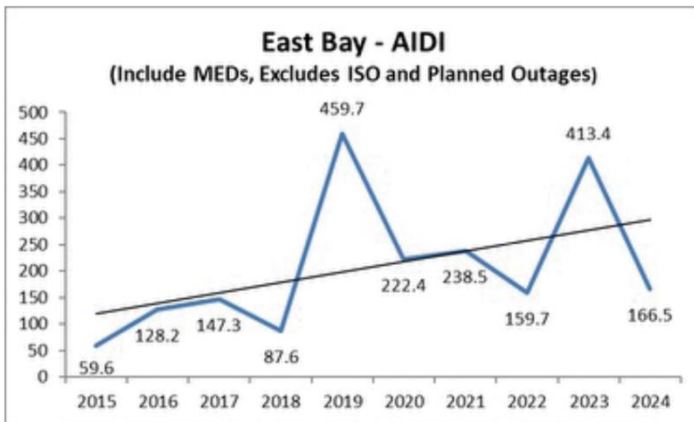
3. Diablo Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Included)





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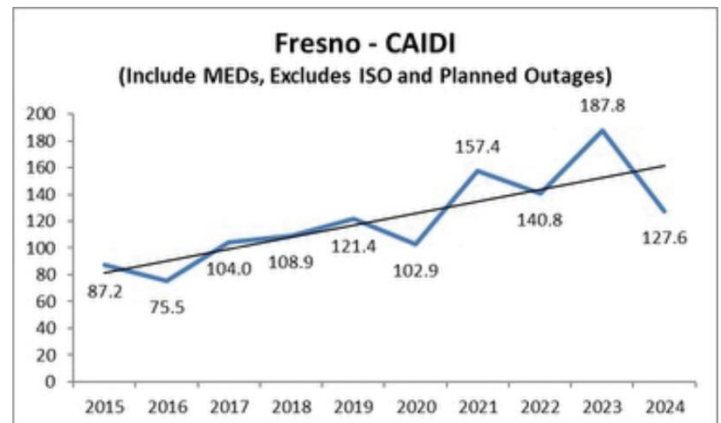
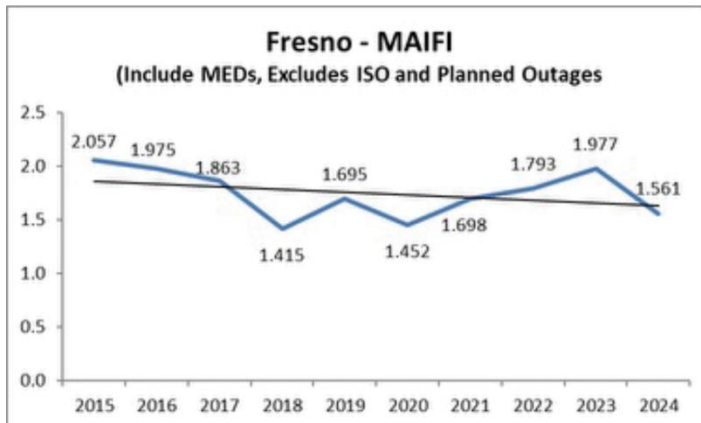
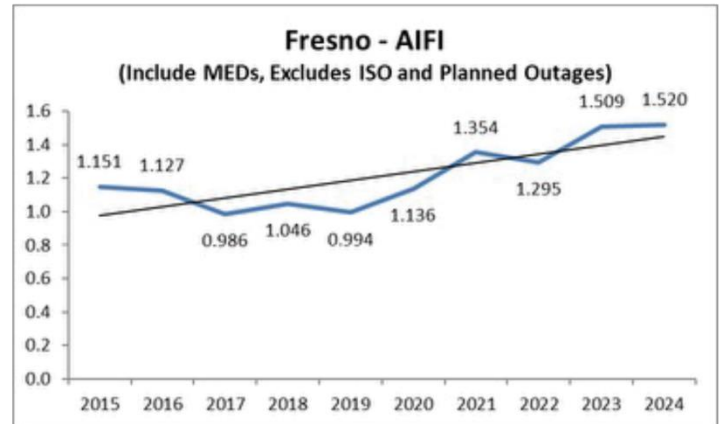
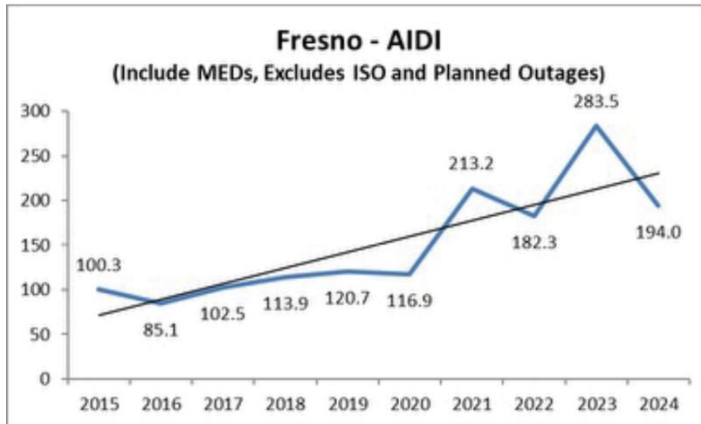
4. East Bay Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Included)





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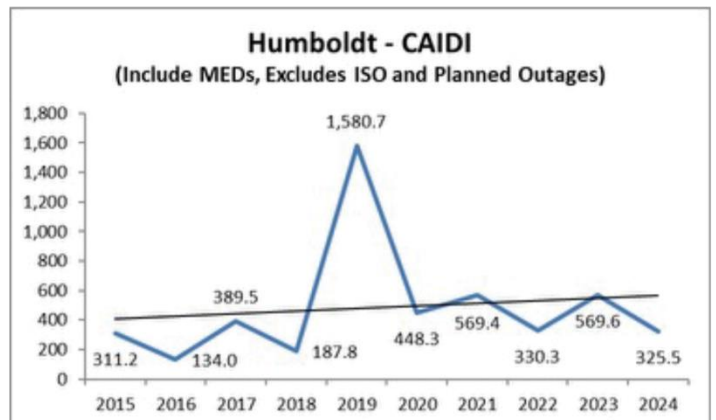
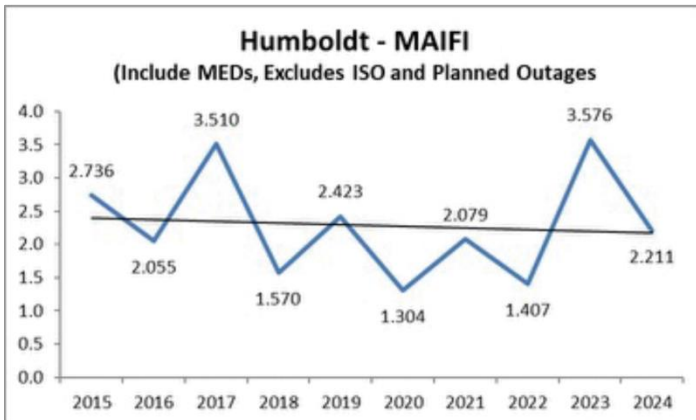
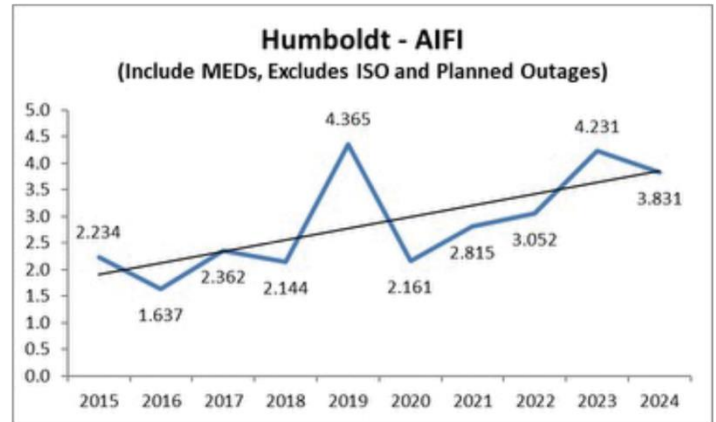
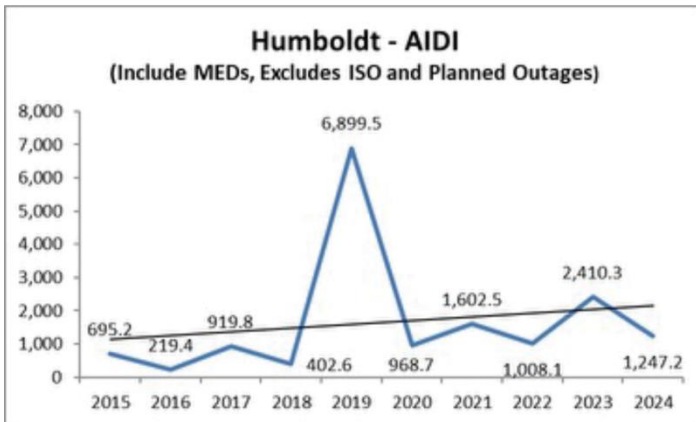
5. Fresno Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Included)





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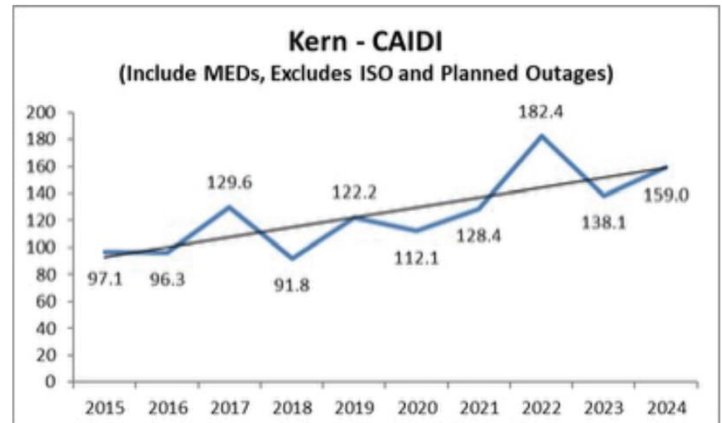
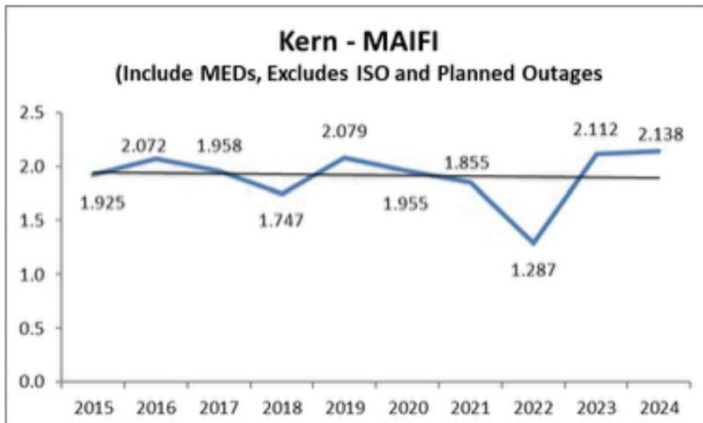
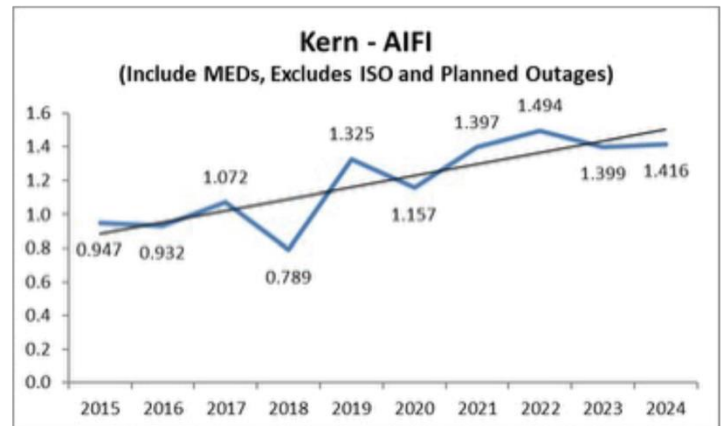
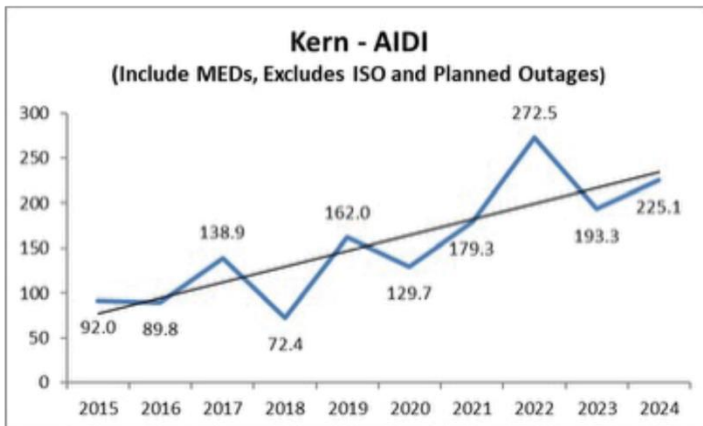
6. Humboldt Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Included)



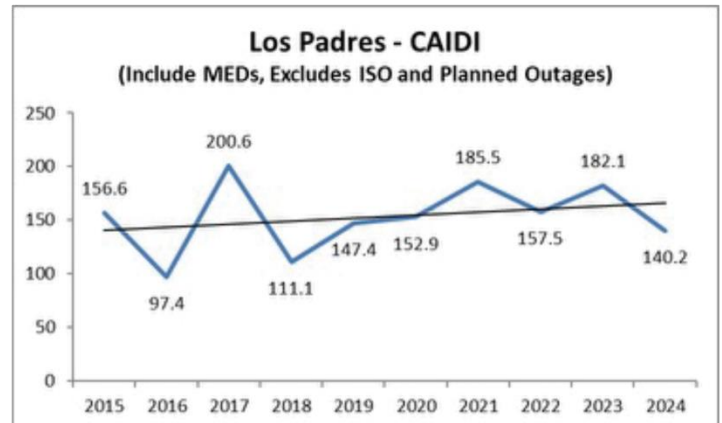
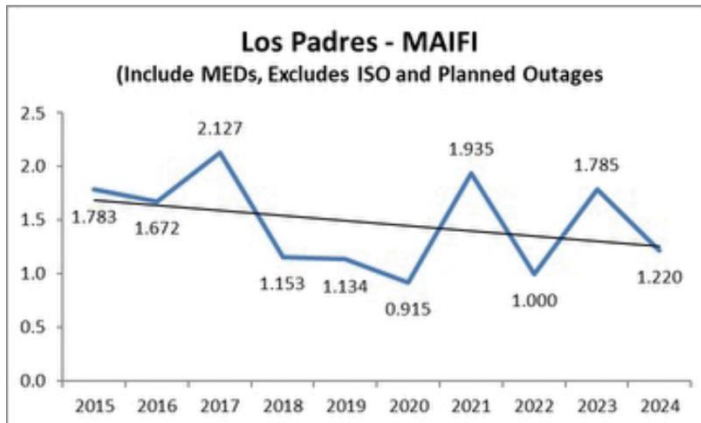
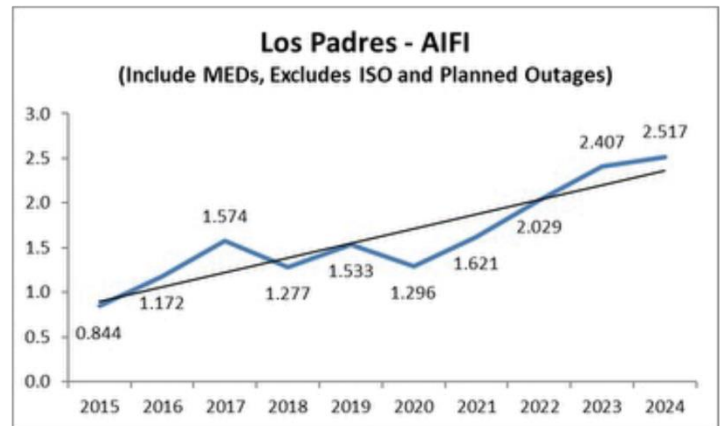
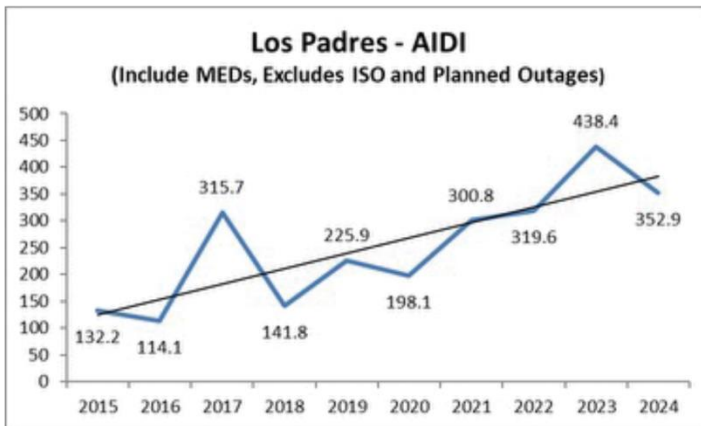


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7. Kern Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Included)



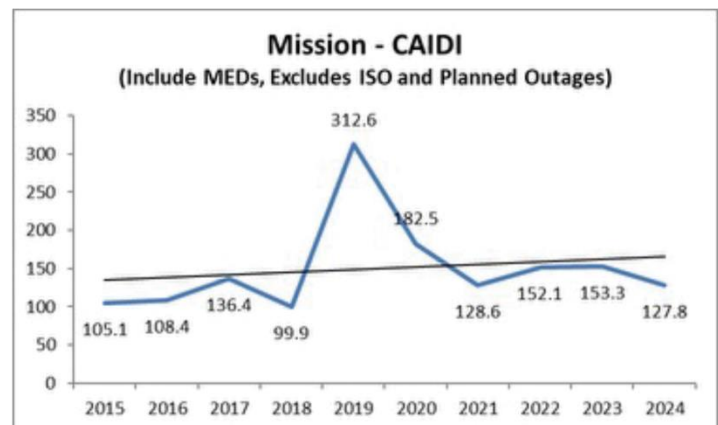
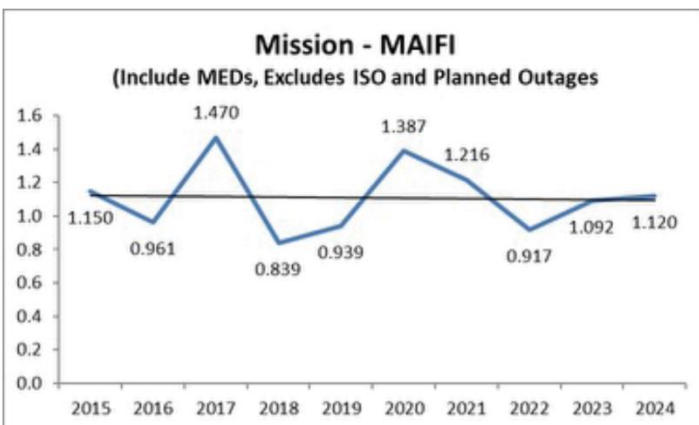
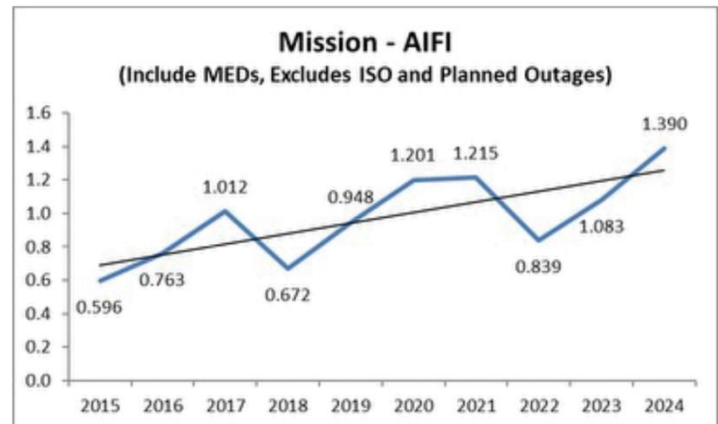
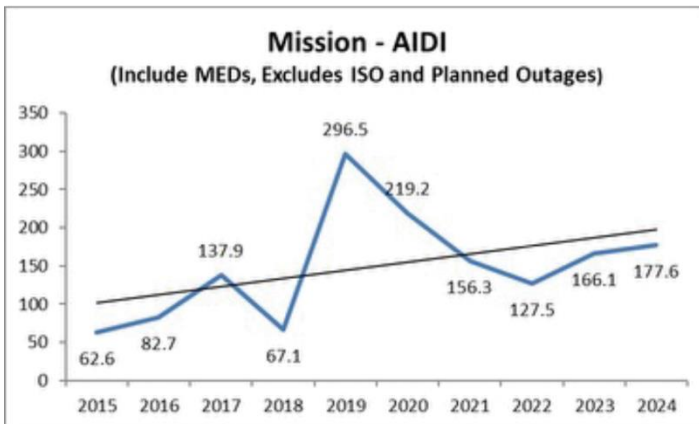
8. Los Padres Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Included)



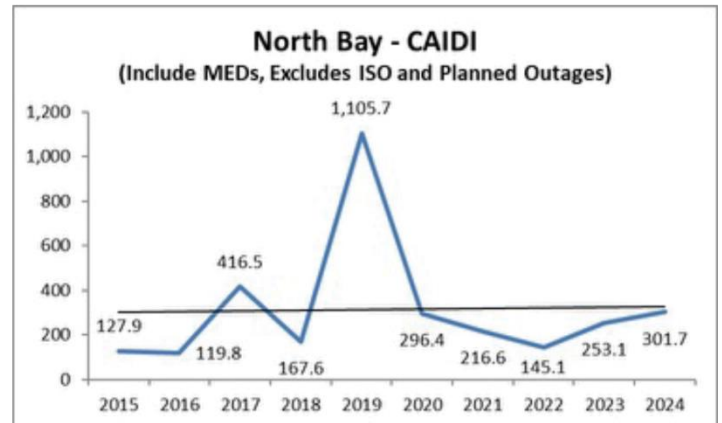
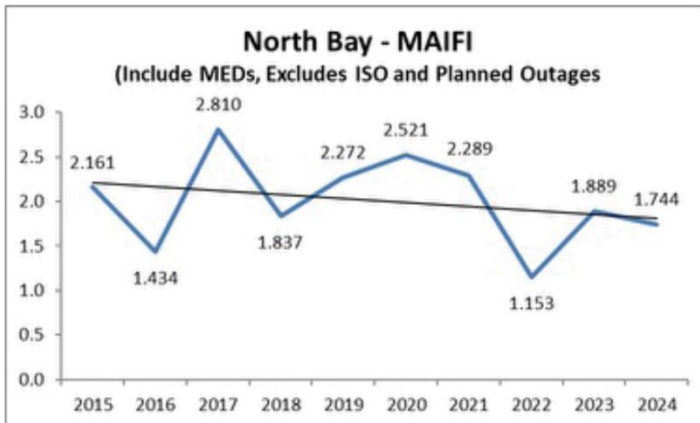
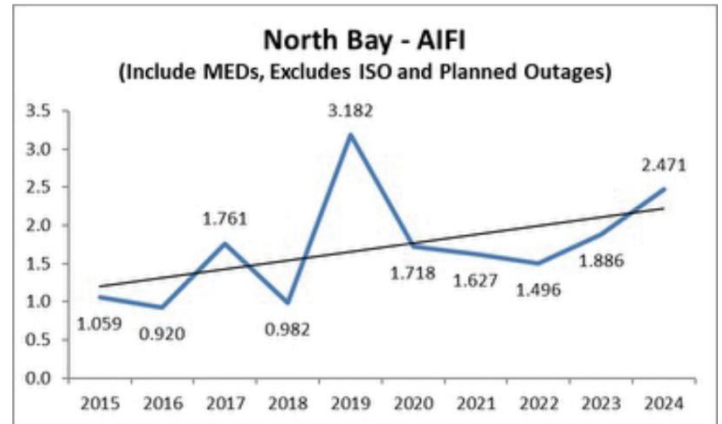
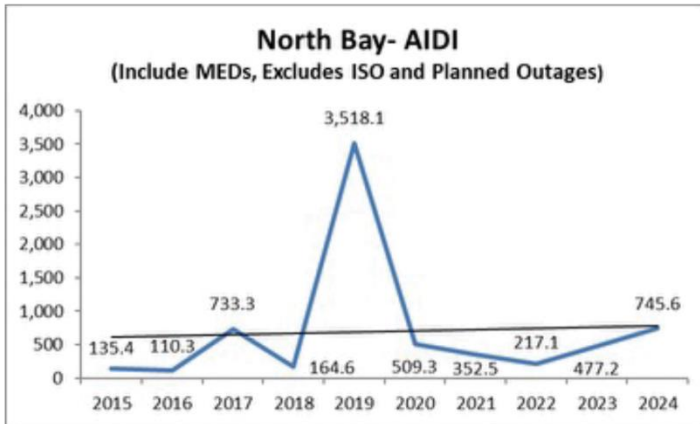


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9. Mission Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Included)



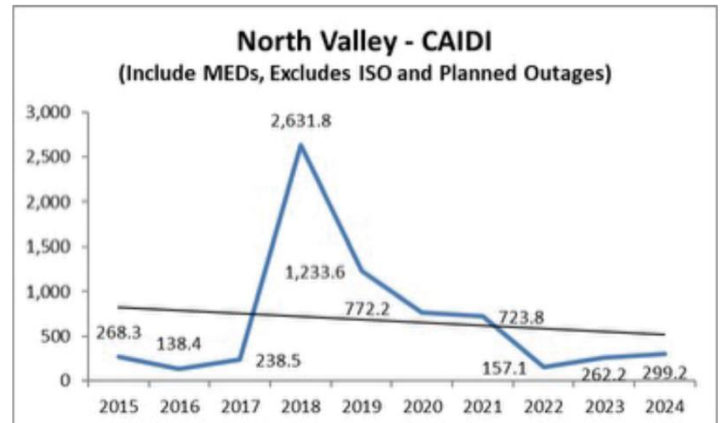
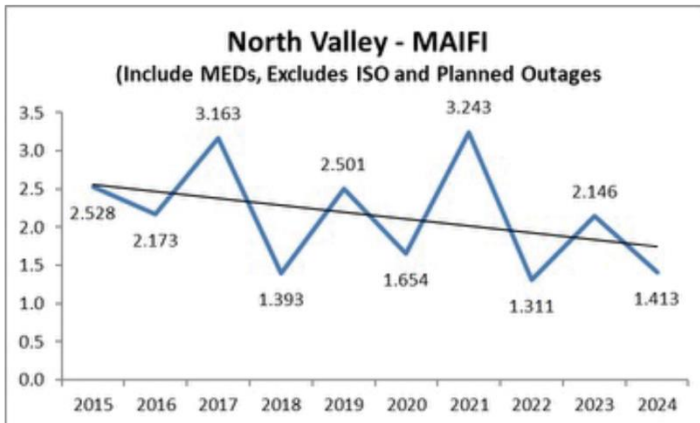
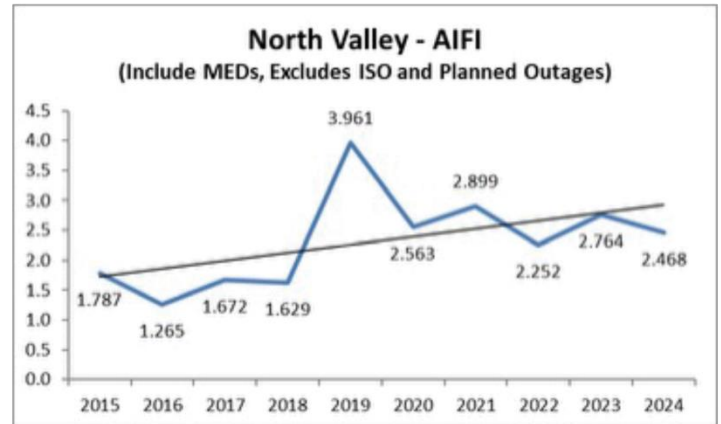
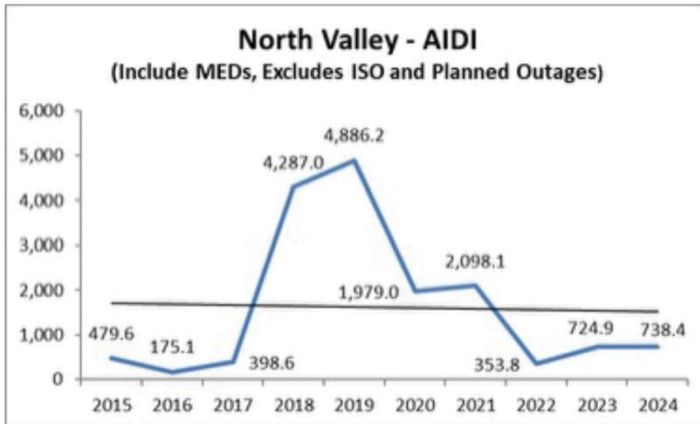
10. North Bay Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Included)





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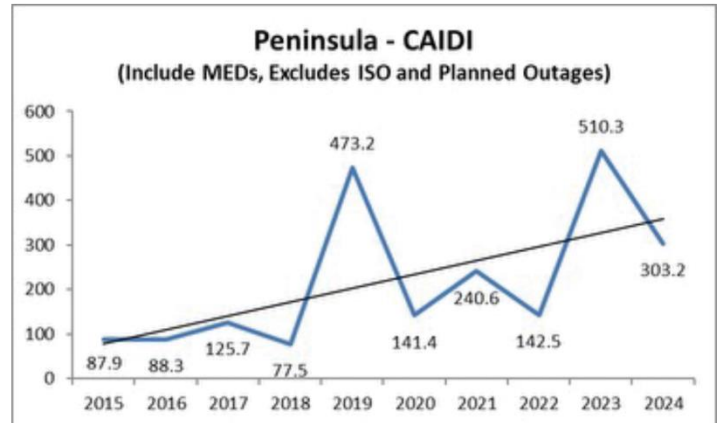
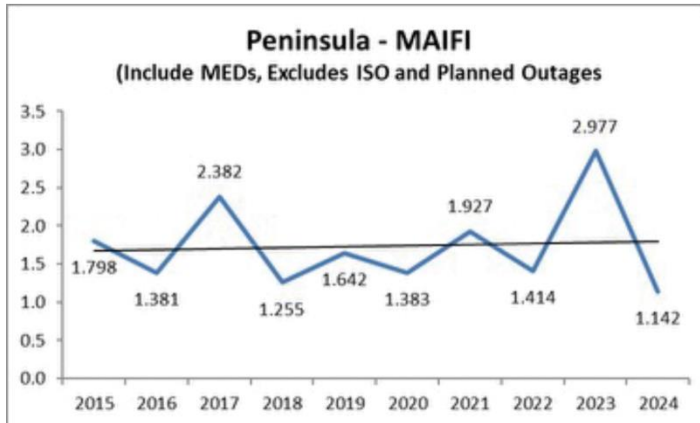
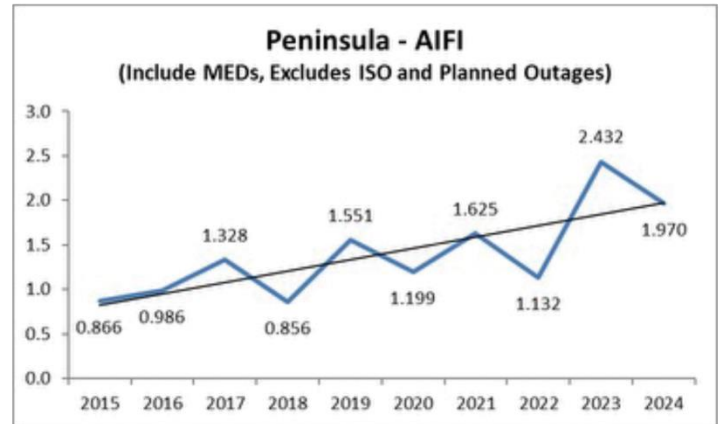
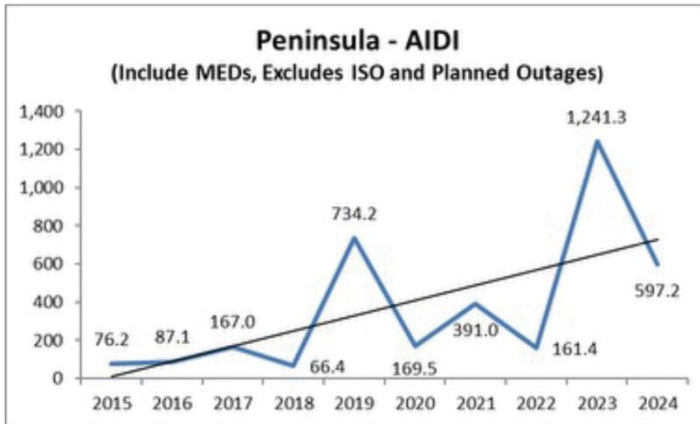
11. North Valley Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Included)



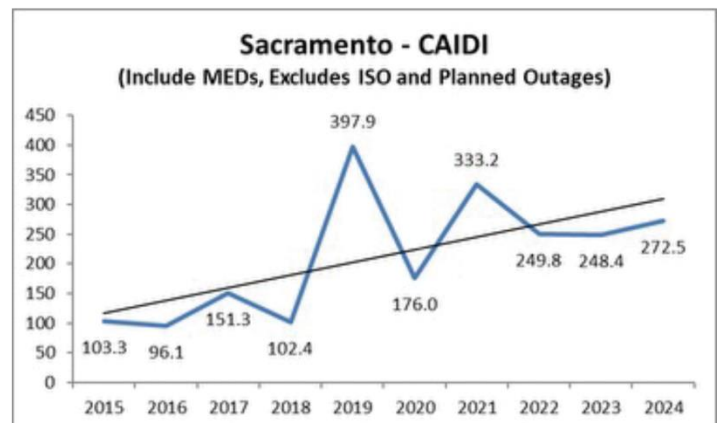
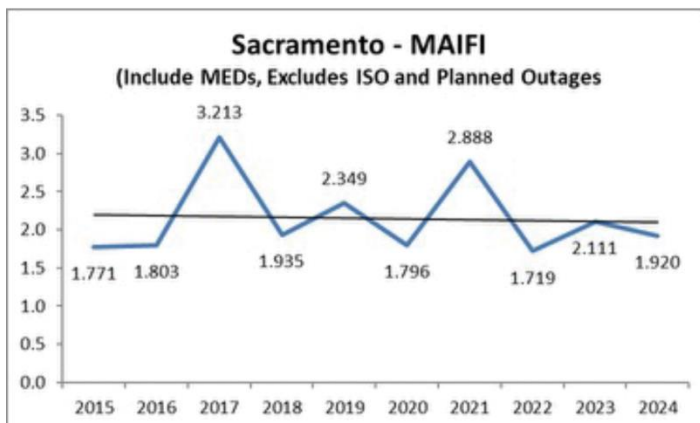
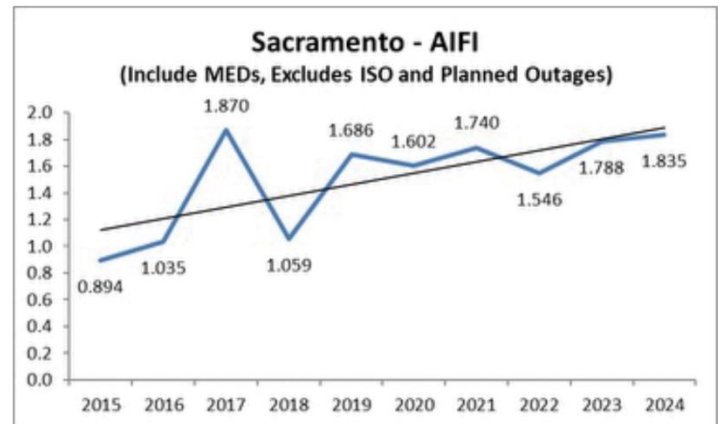
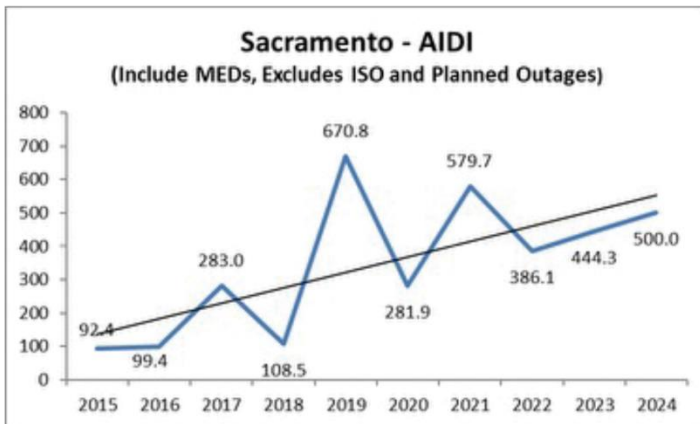


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12. Peninsula Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Included)



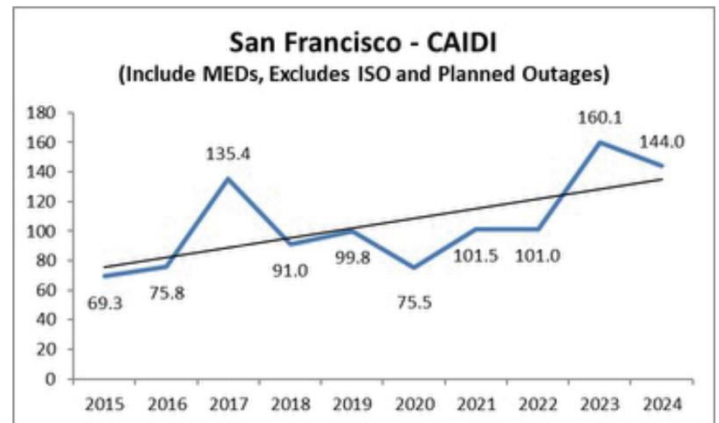
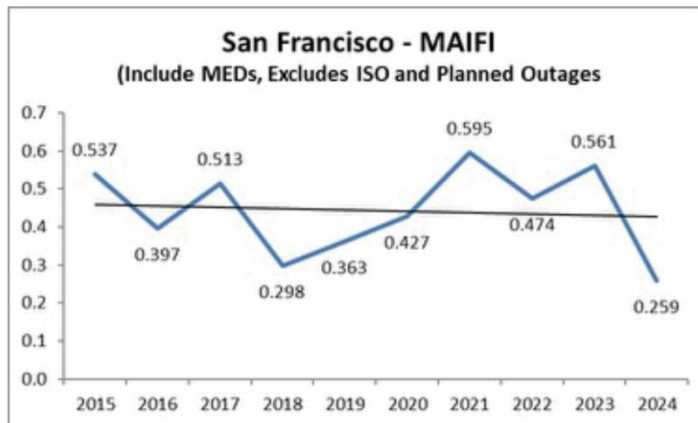
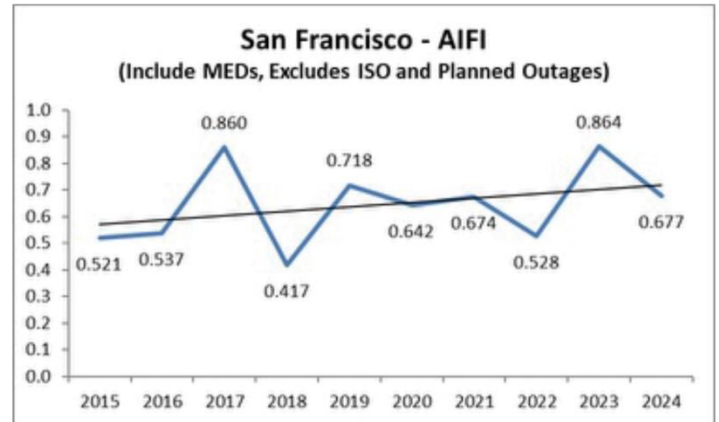
13. Sacramento Performance Results AIDI, AIFI, MIAFI, CAIDI (MED Included)



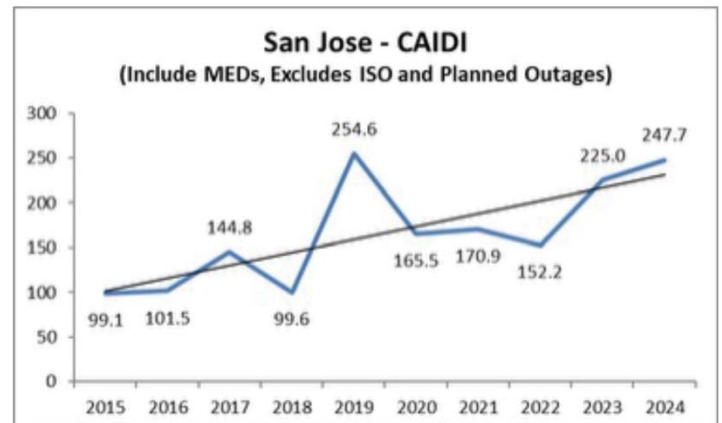
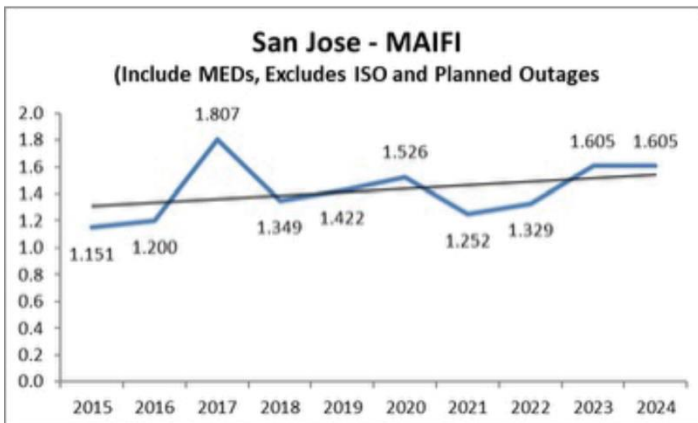
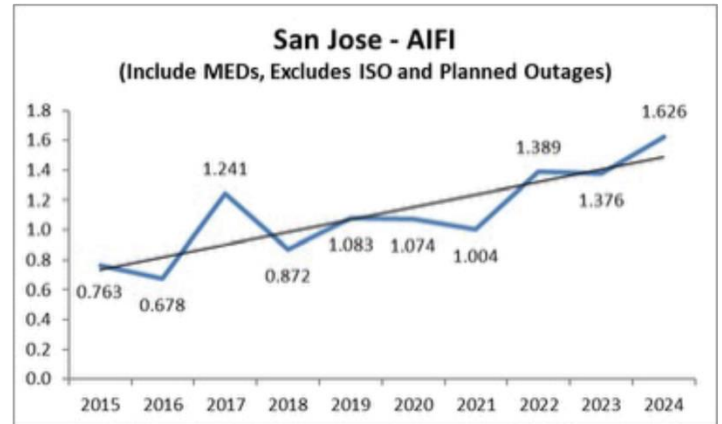
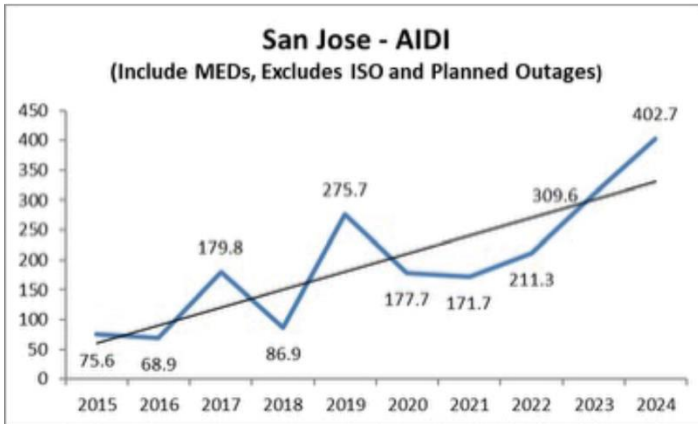


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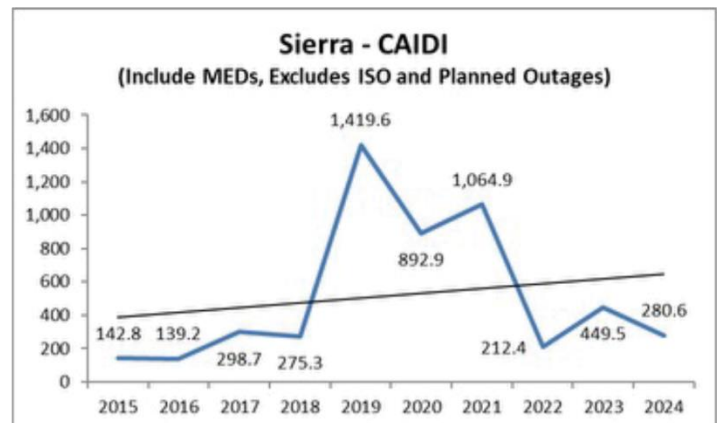
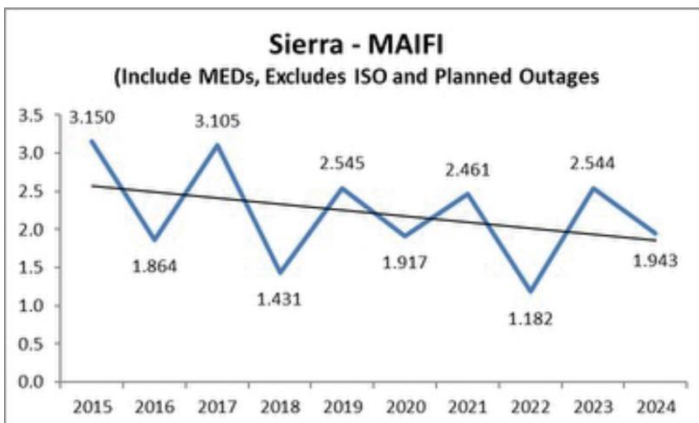
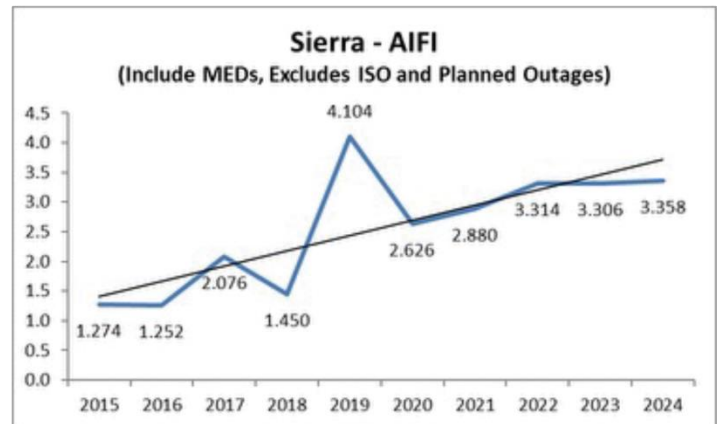
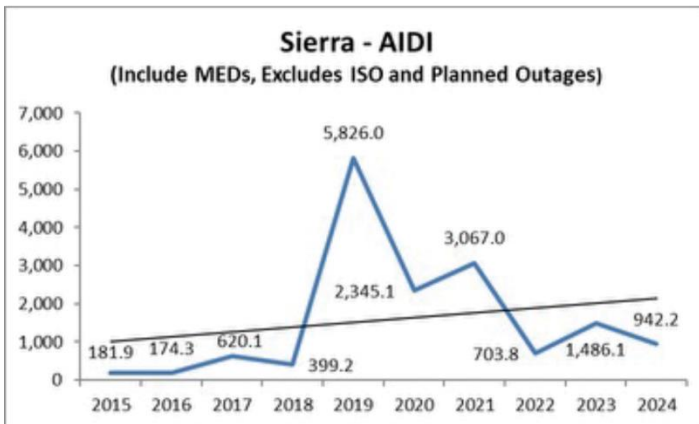
14. San Francisco Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Included)



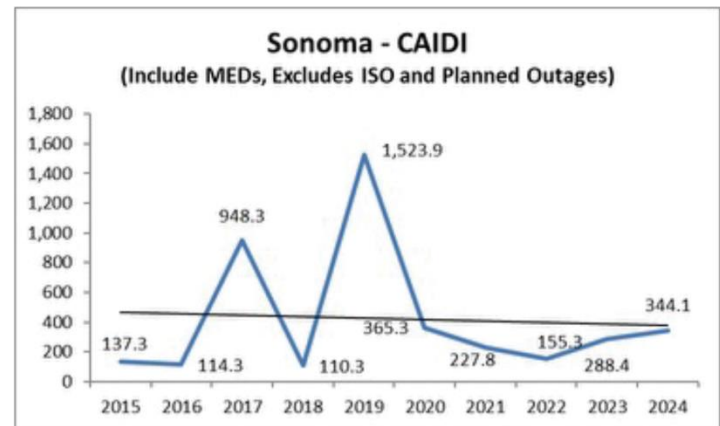
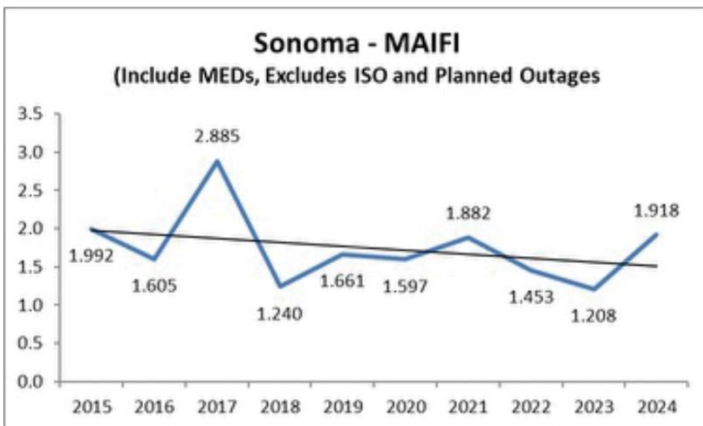
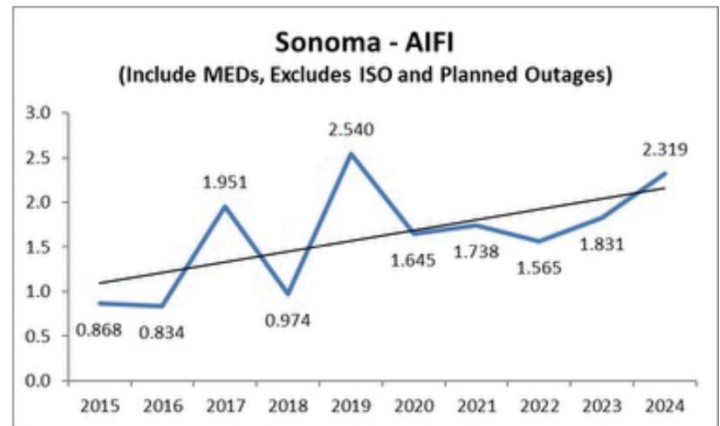
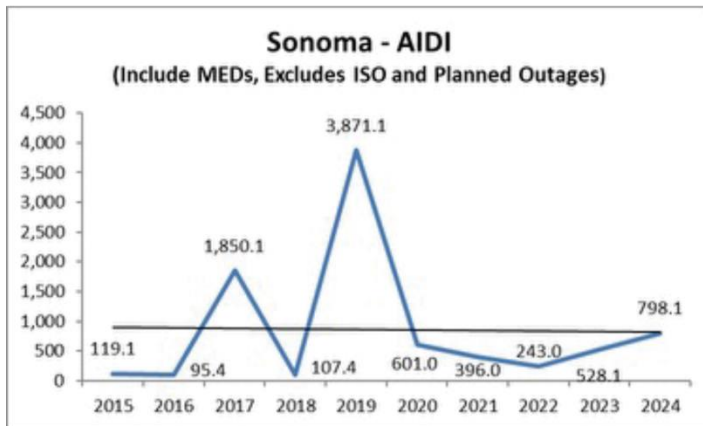
15. San Jose Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Included)



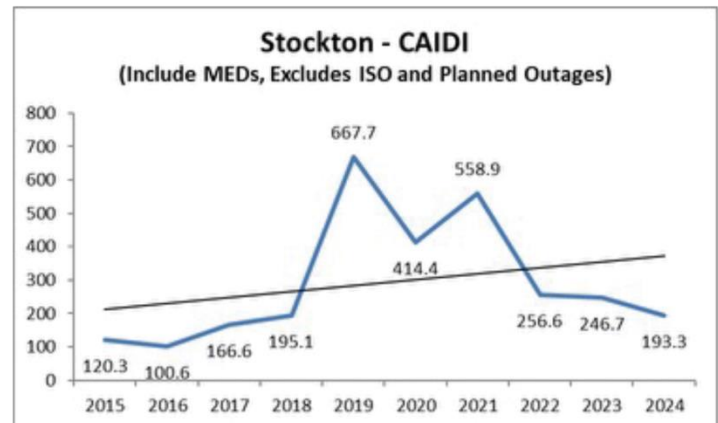
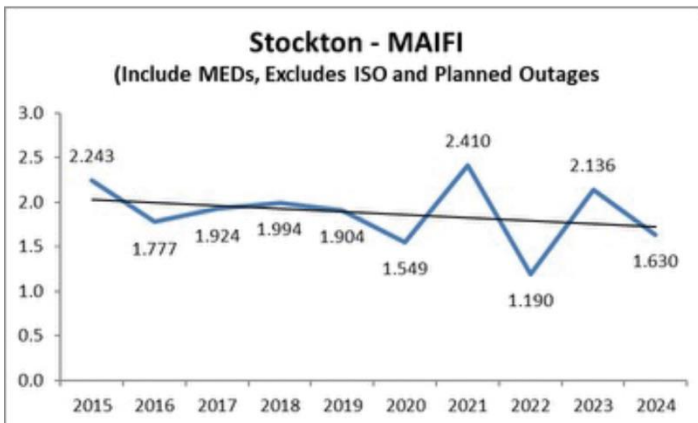
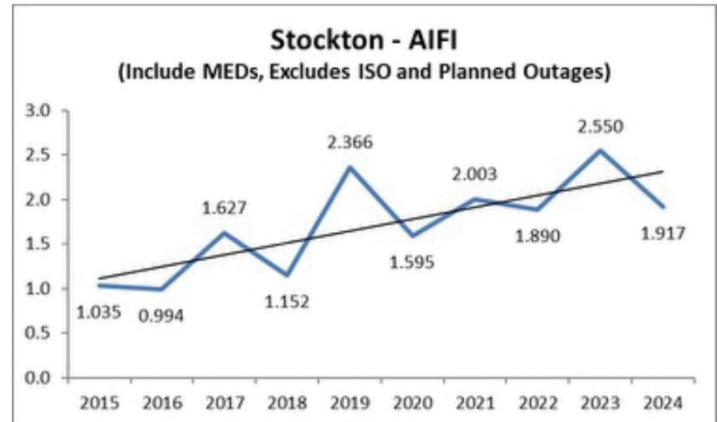
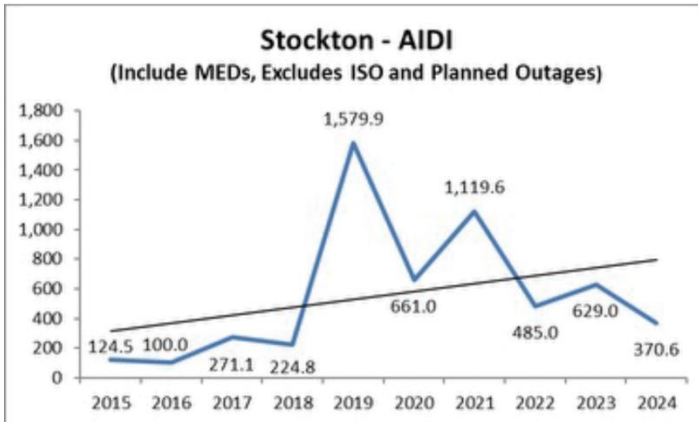
16. Sierra Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Included)



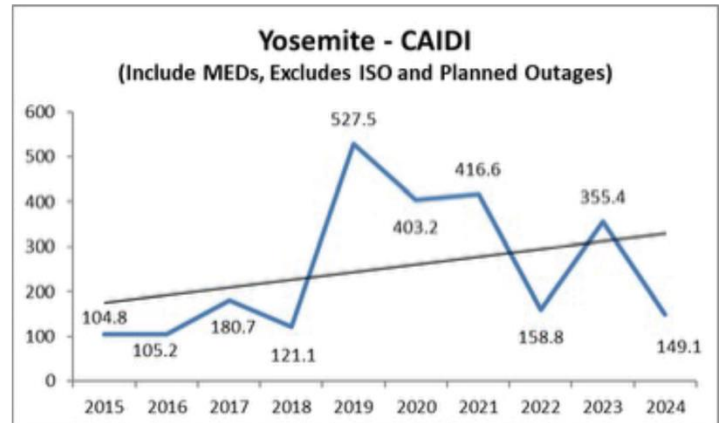
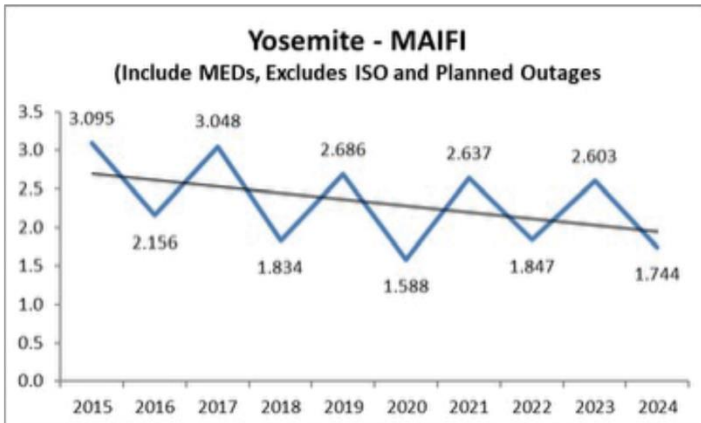
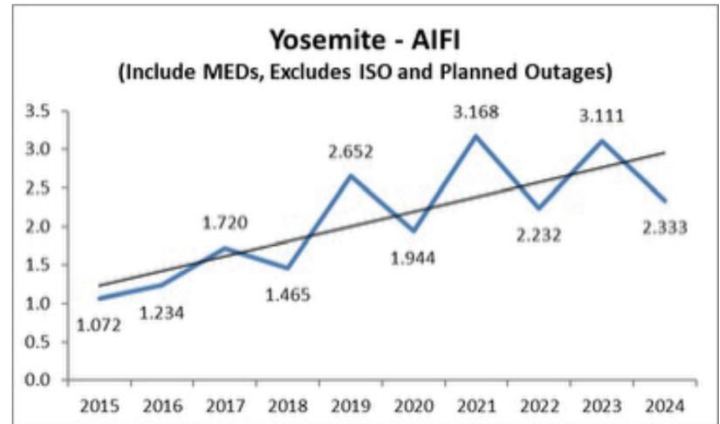
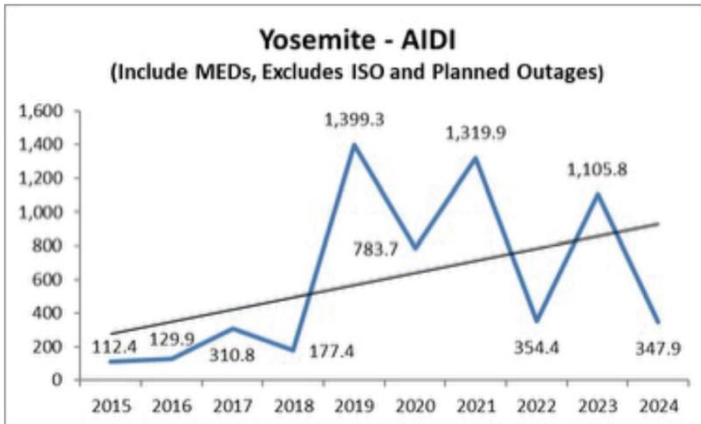
17. Sonoma Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Included)



18. Stockton Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Included)



19. Yosemite Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Included)

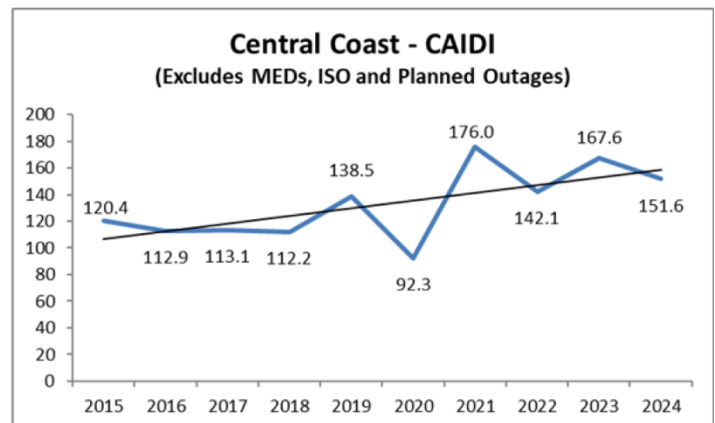
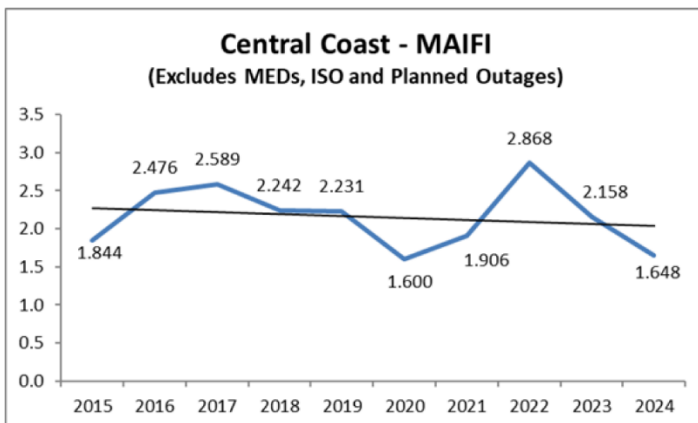
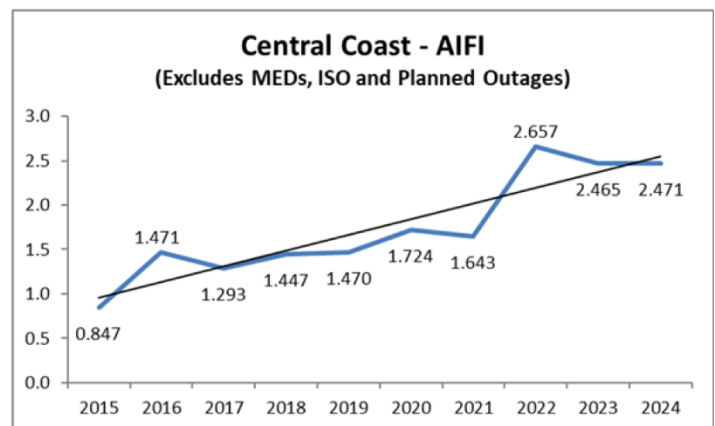
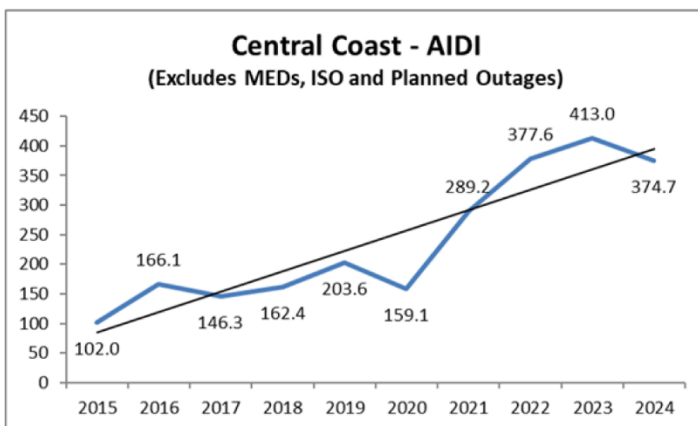




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ii. Charts for Division Reliability Indices for the Past 10 Years with Linear Trend Line Excluding ISO, Planned Outages and MED

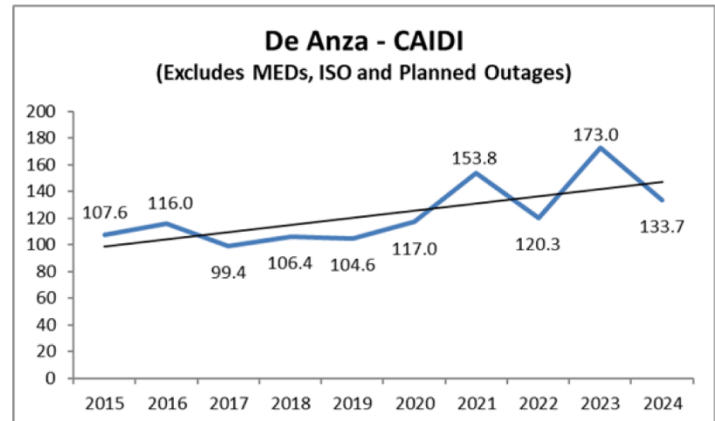
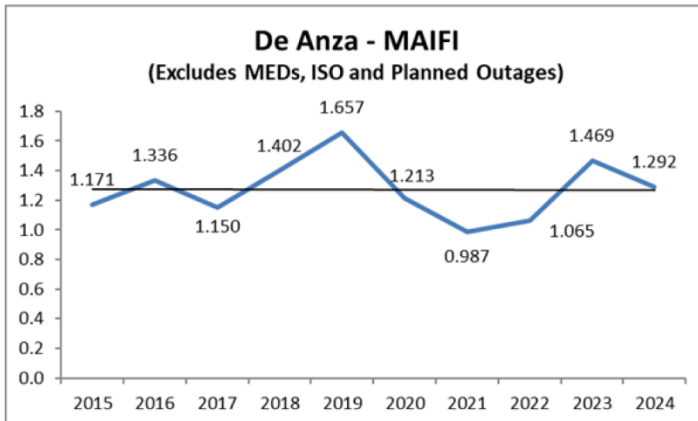
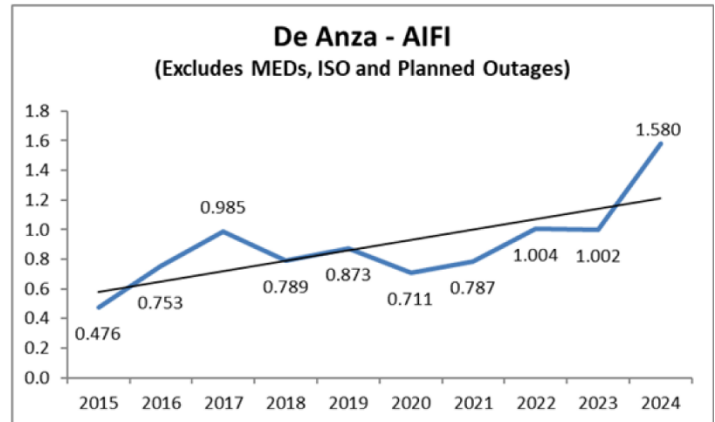
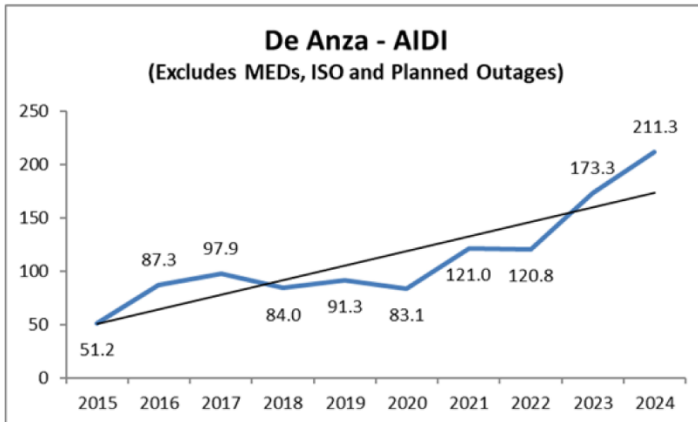
1. Central Coast Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Excluded)





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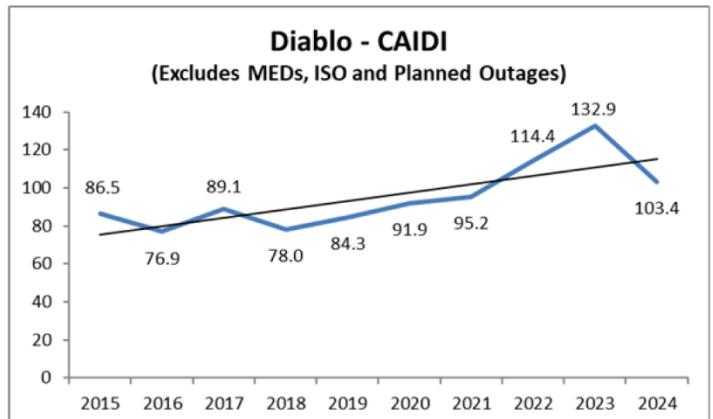
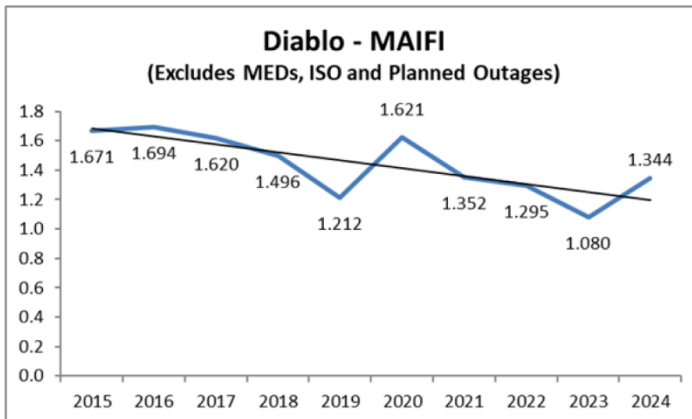
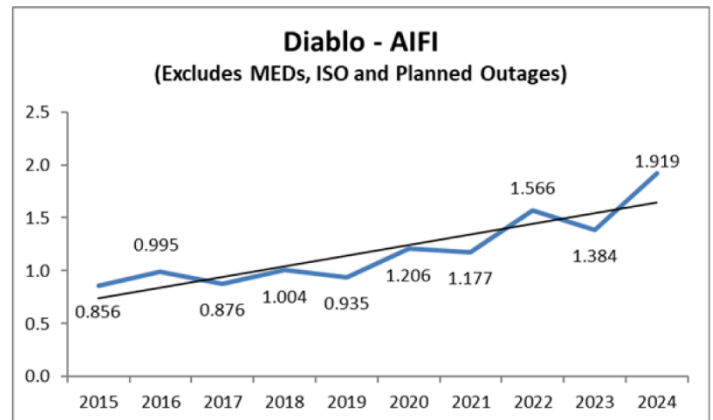
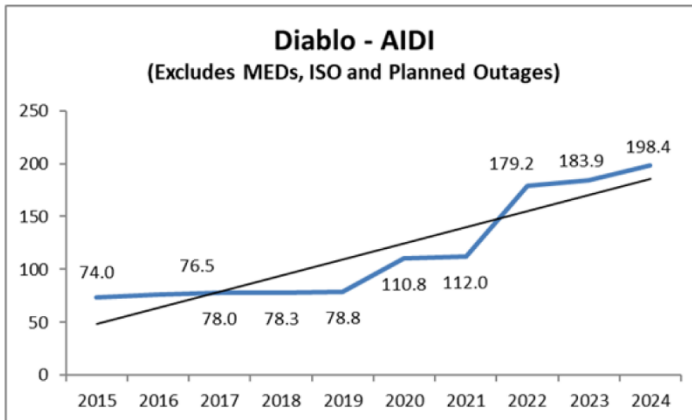
2. De Anza Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Excluded)





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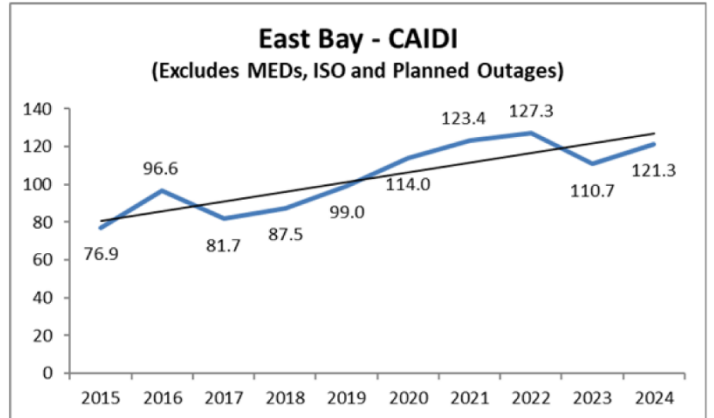
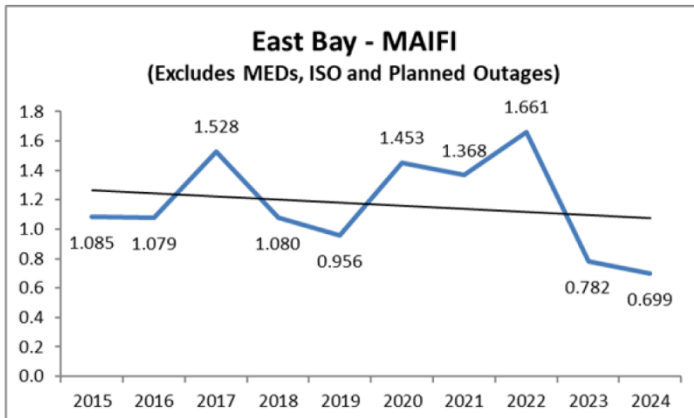
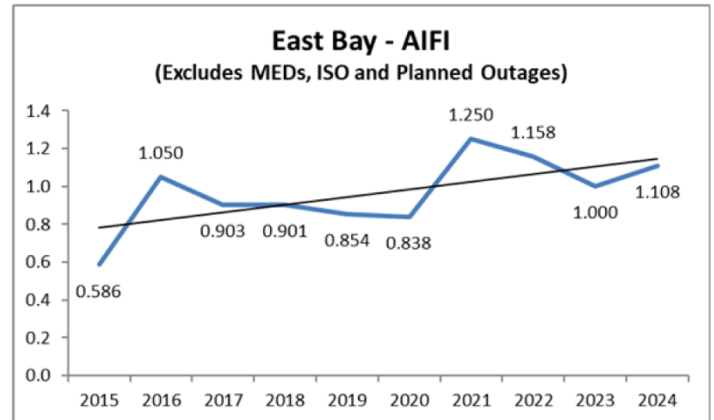
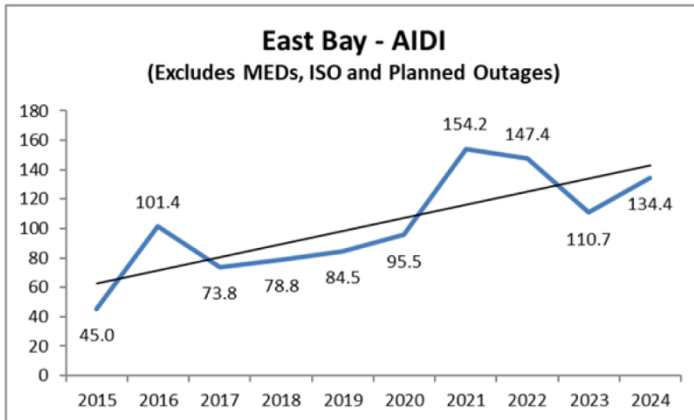
3. Diablo Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Excluded)





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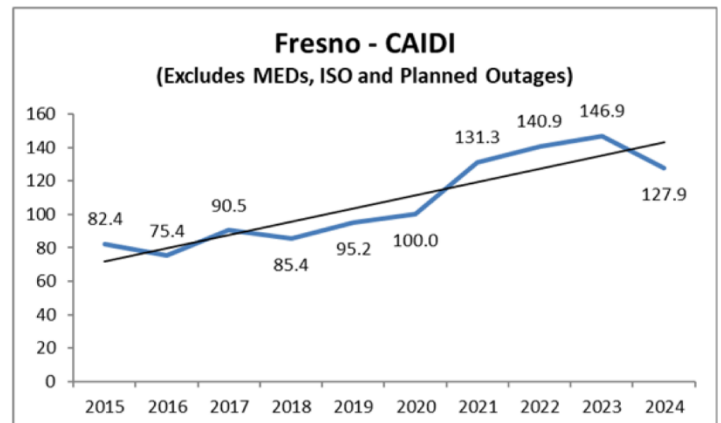
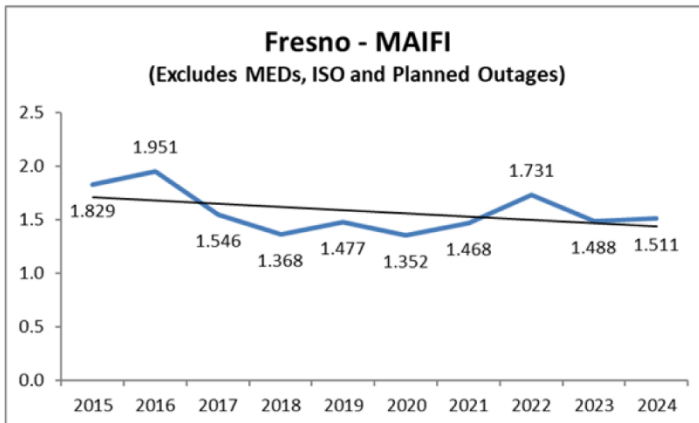
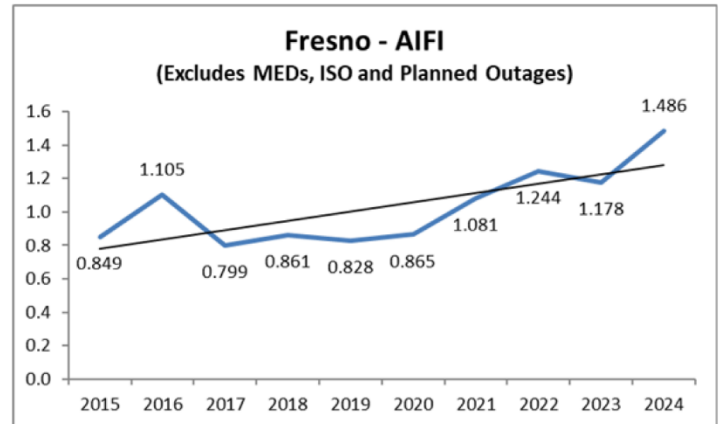
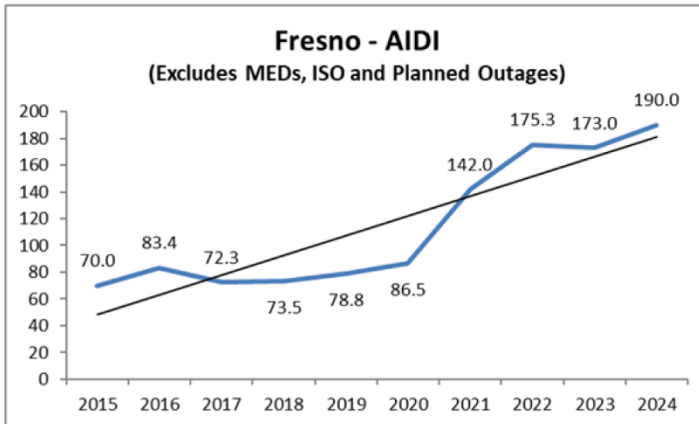
4. East Bay Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Excluded)



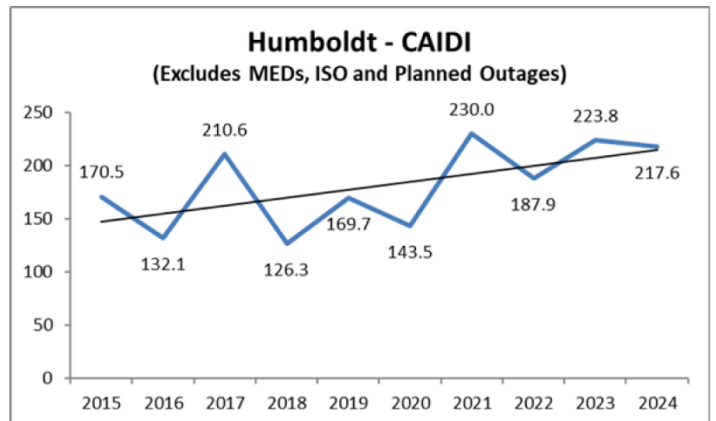
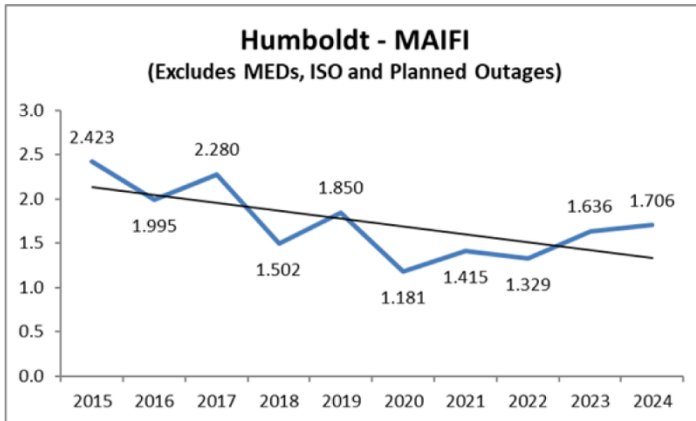
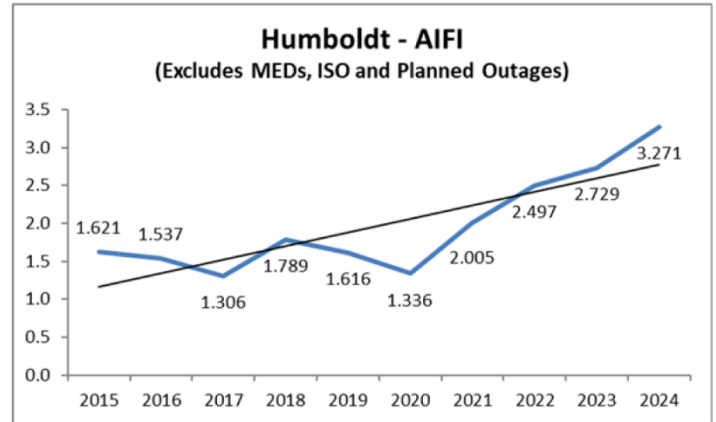
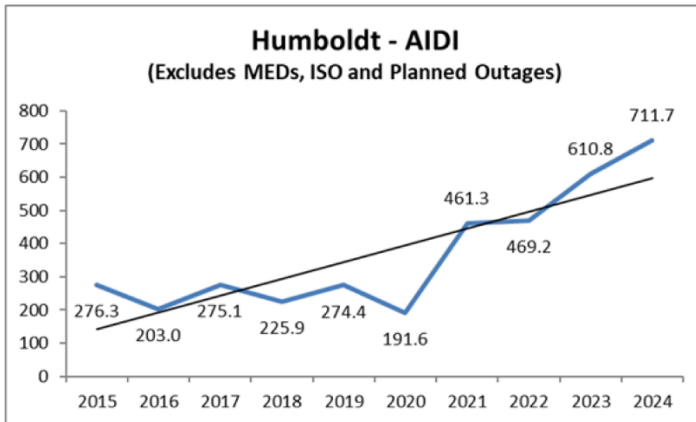


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5. Fresno Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Excluded)



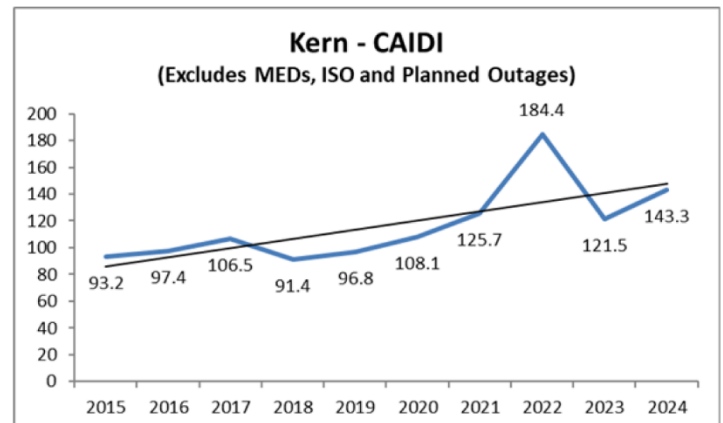
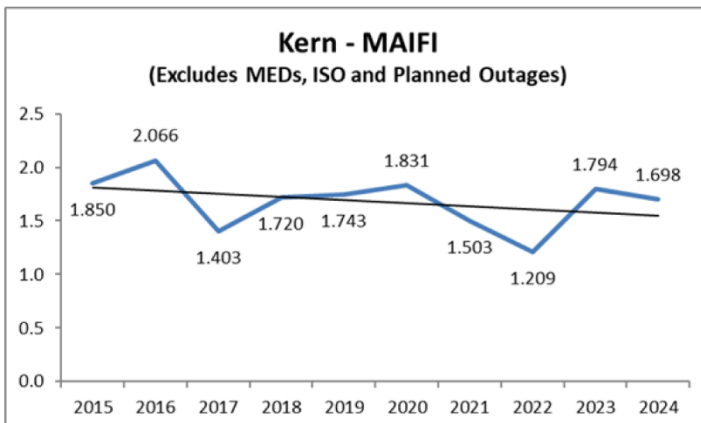
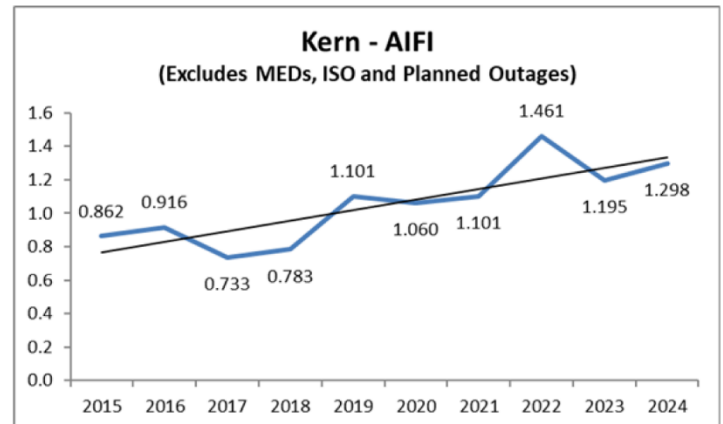
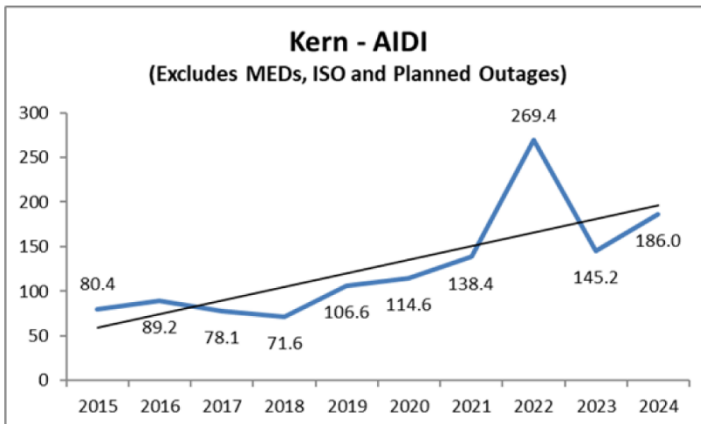
6. Humboldt Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Excluded)



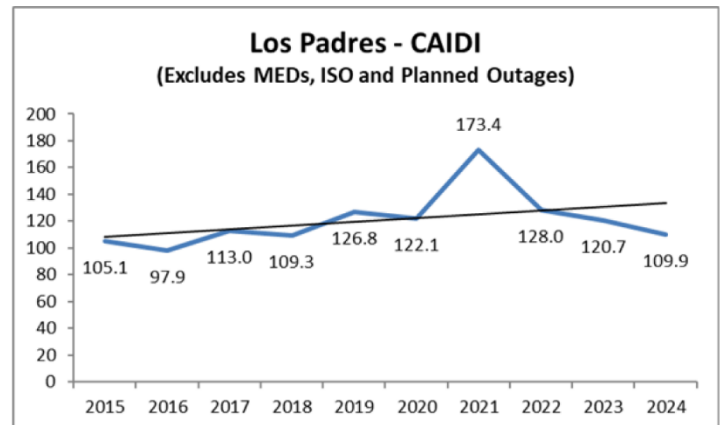
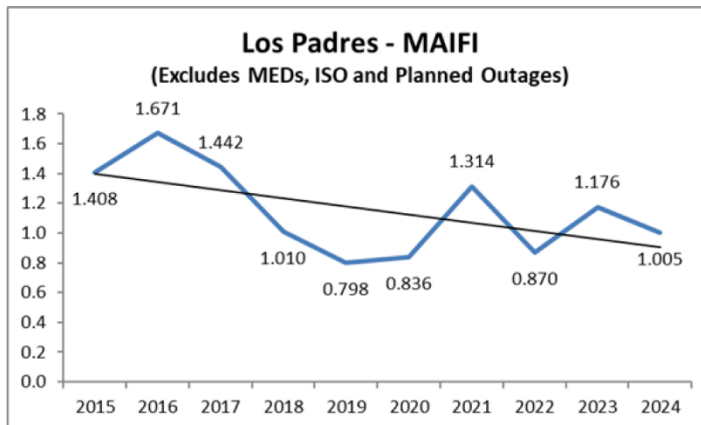
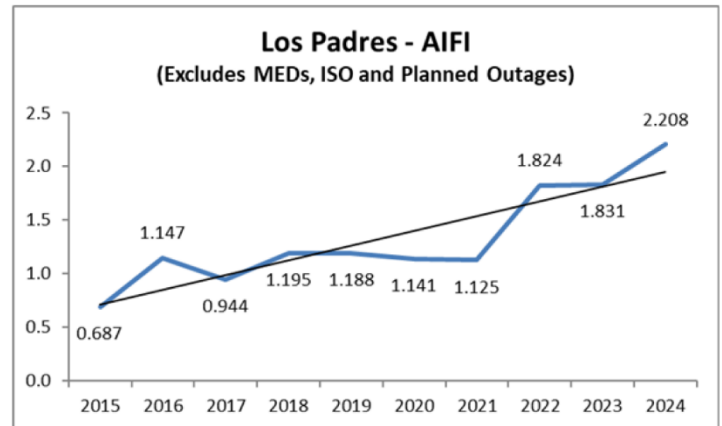
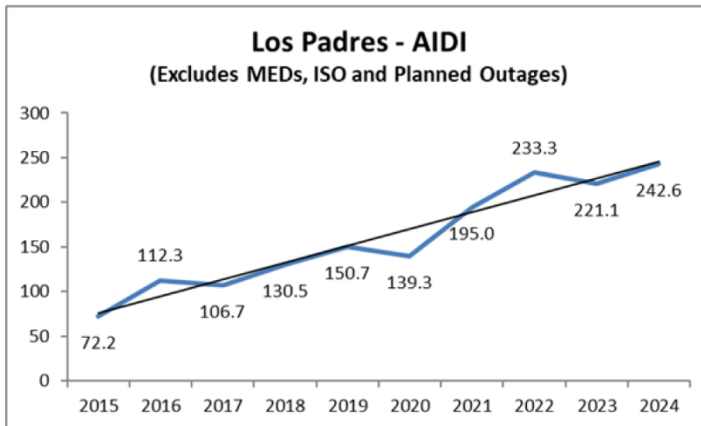


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7. Kern Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Excluded)



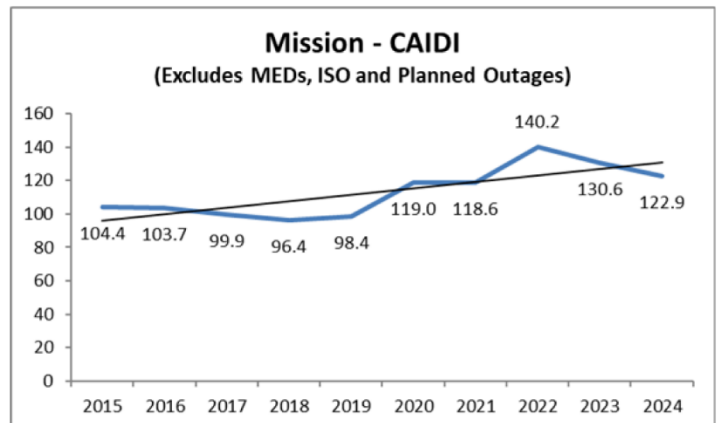
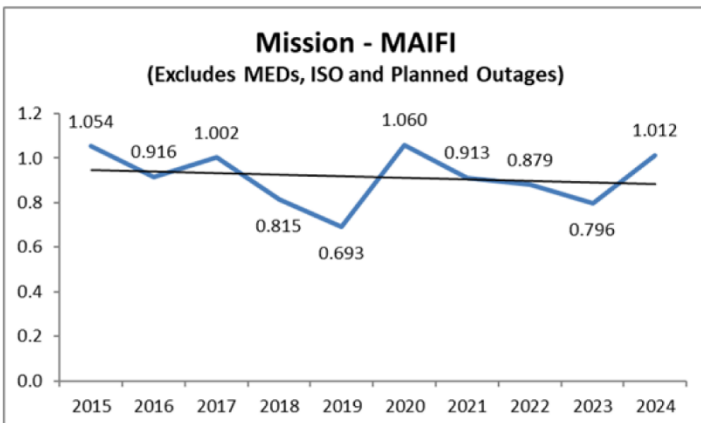
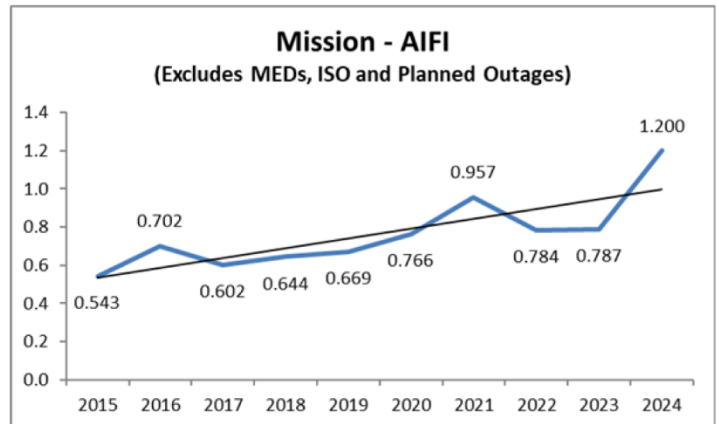
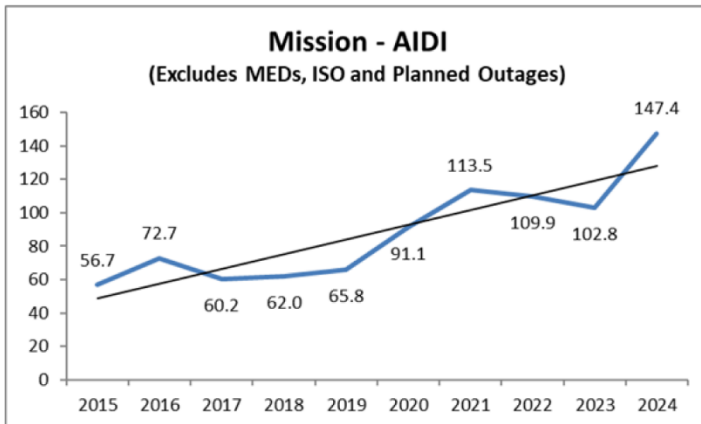
8. Los Padres Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Excluded)





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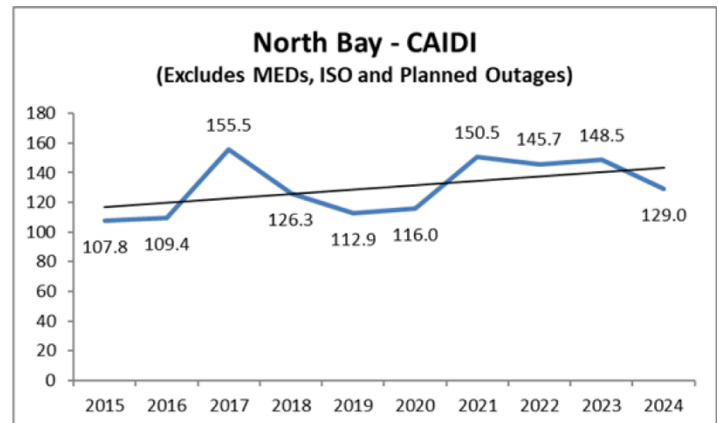
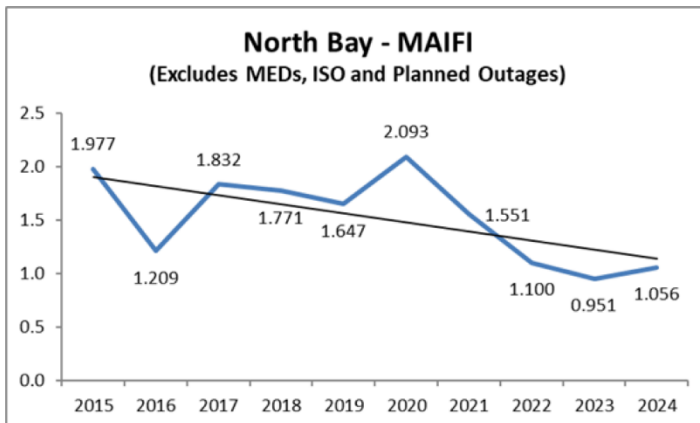
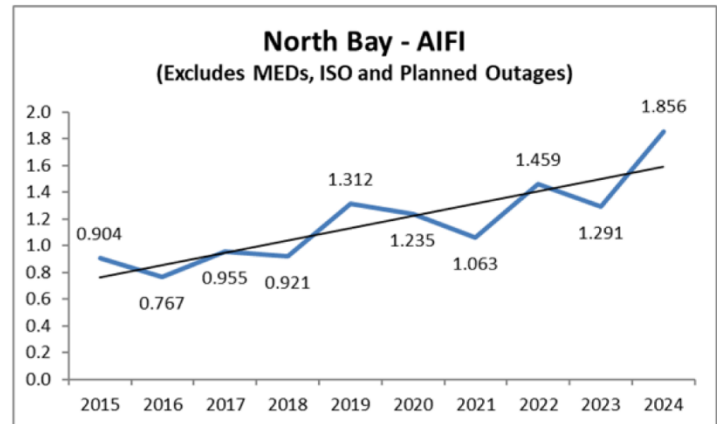
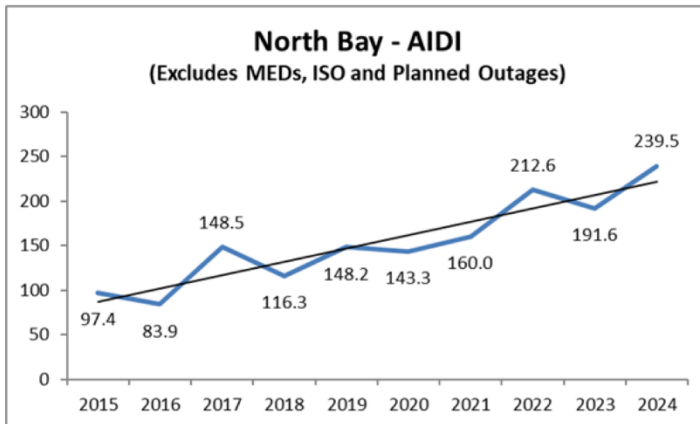
9. Mission Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Excluded)





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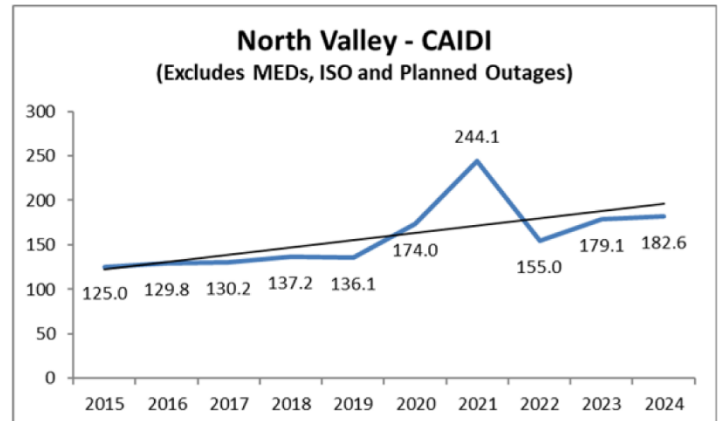
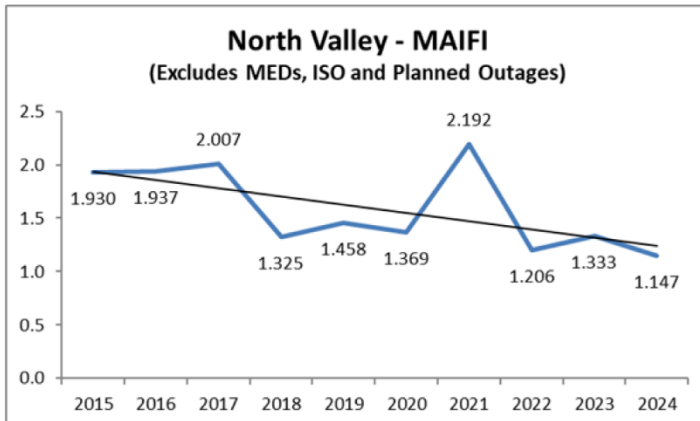
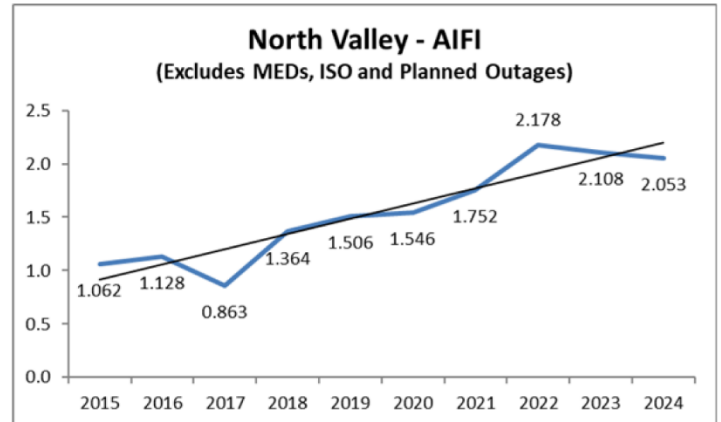
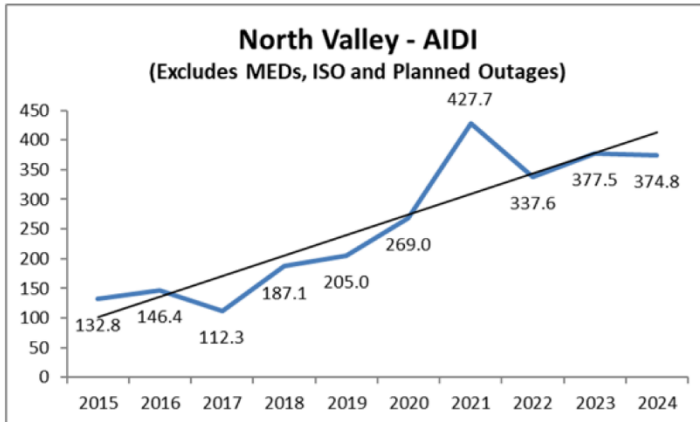
10. North Bay Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Excluded)





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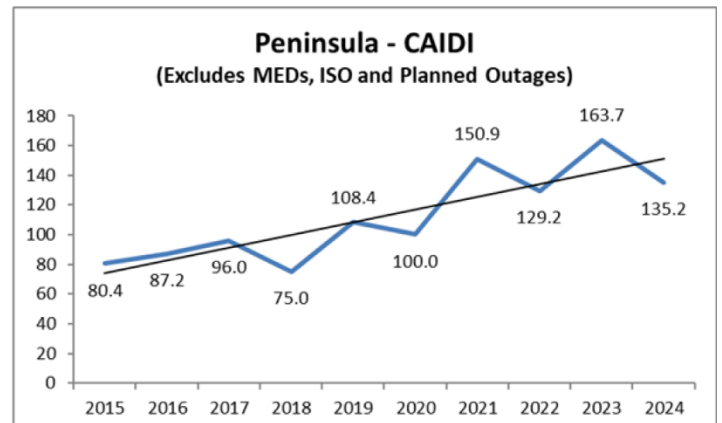
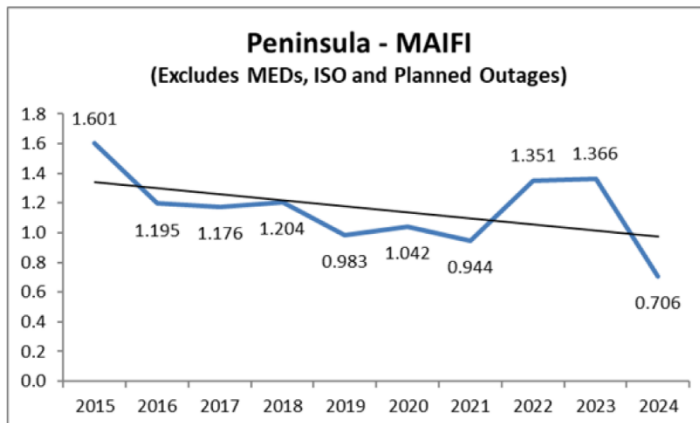
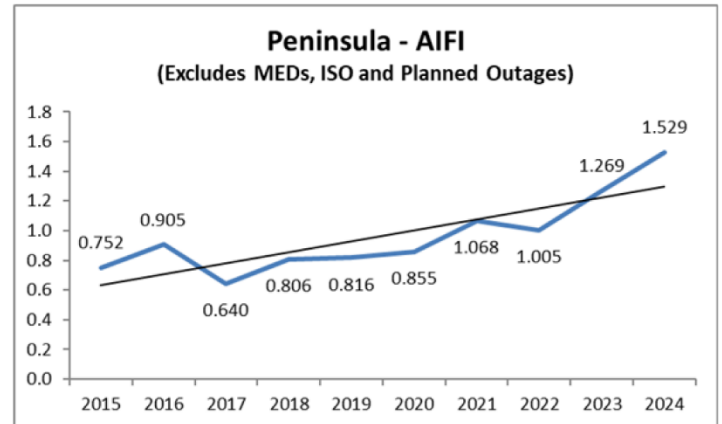
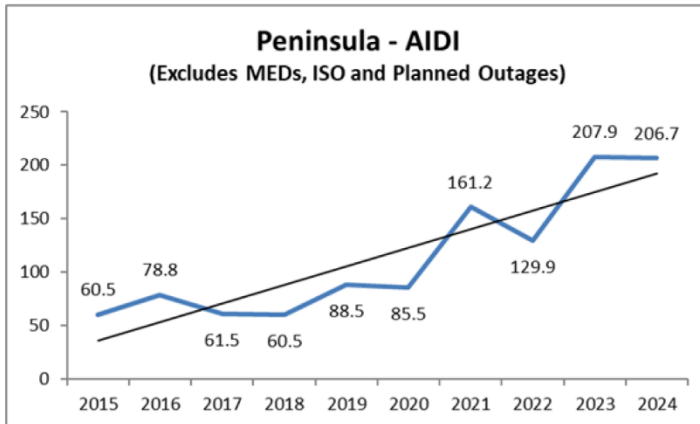
11. North Valley Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Excluded)





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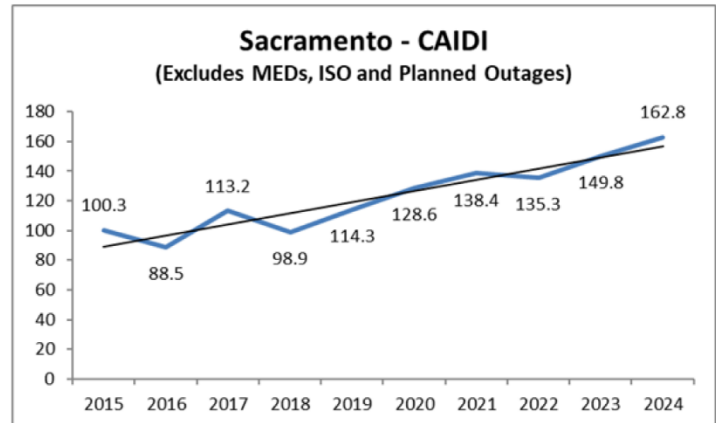
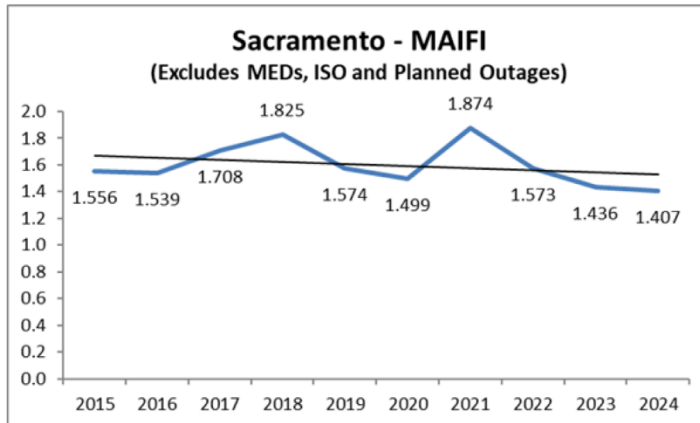
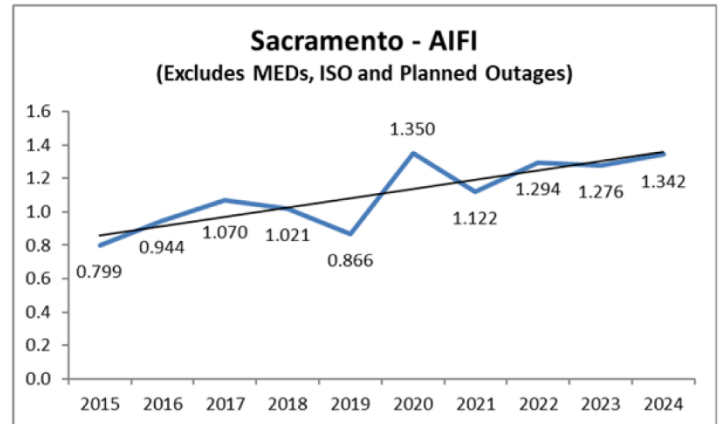
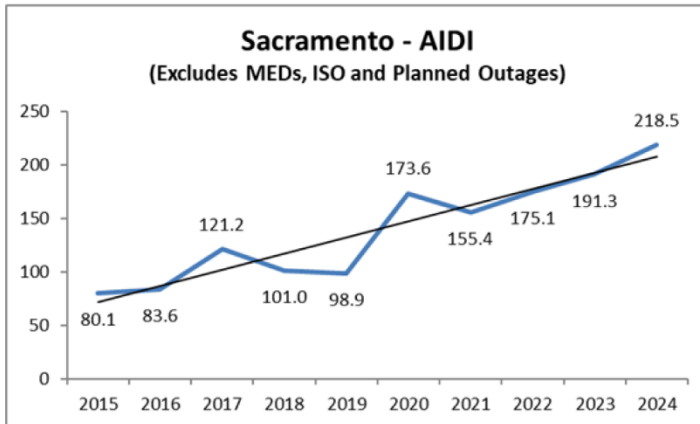
12. Peninsula Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Excluded)





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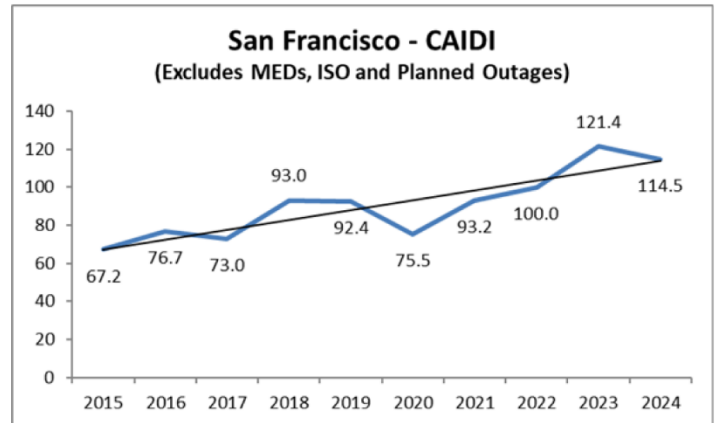
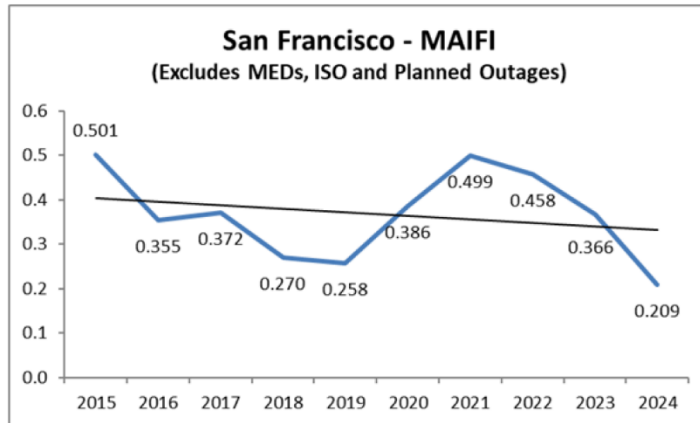
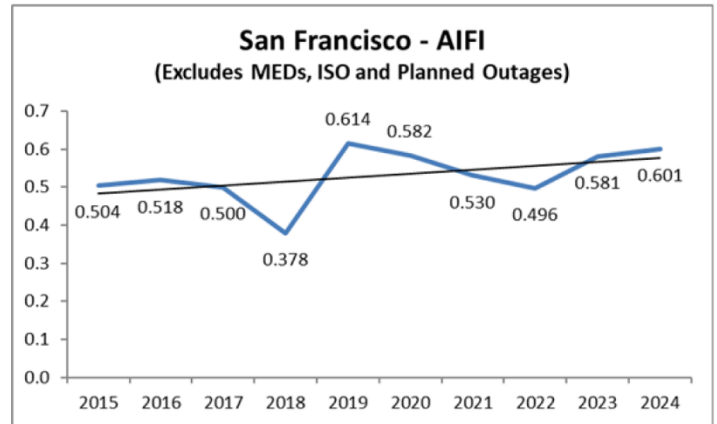
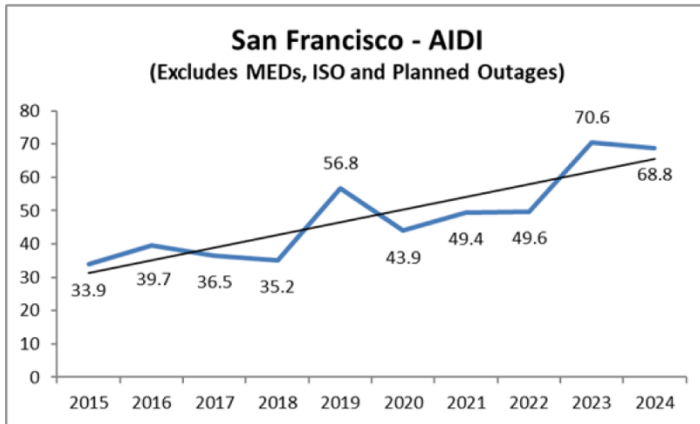
13. Sacramento Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Excluded)





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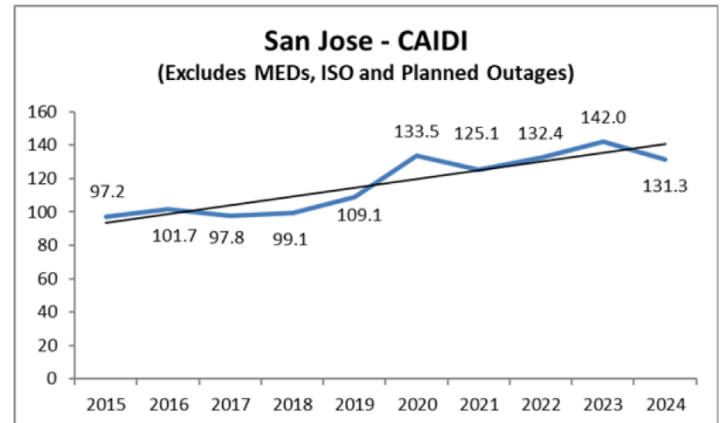
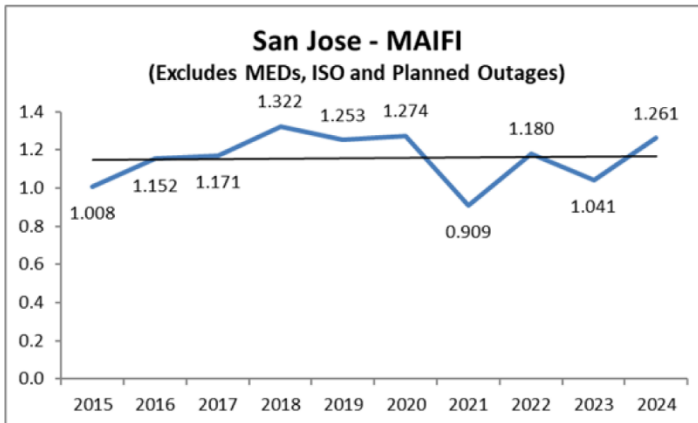
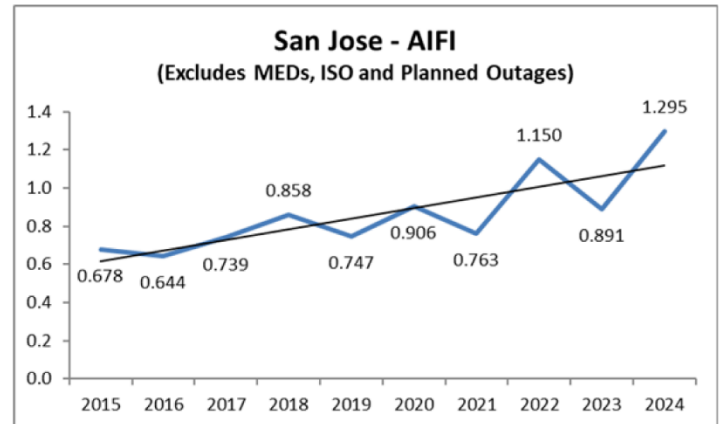
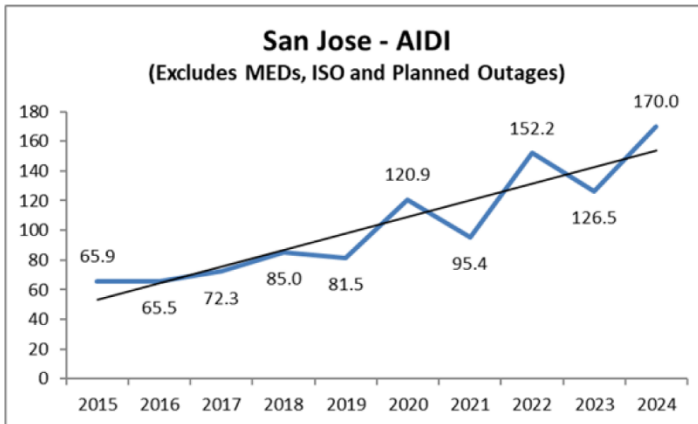
14. San Francisco Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Excluded)





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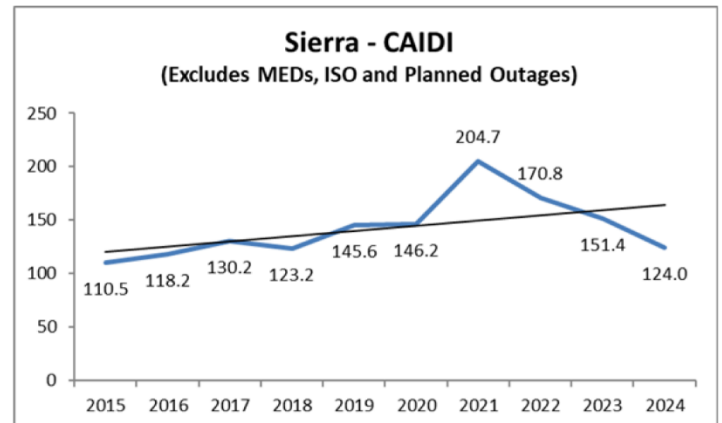
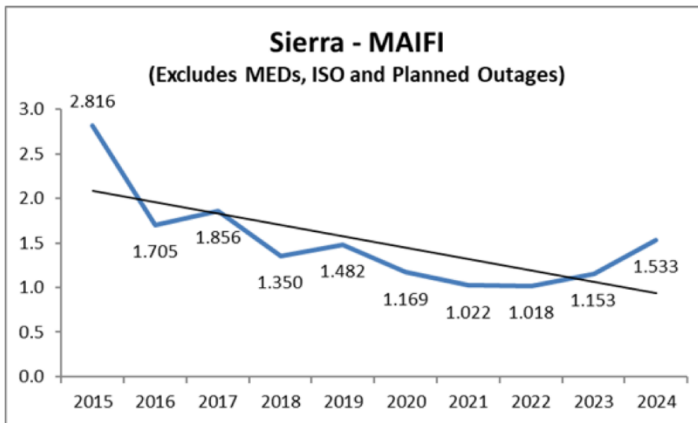
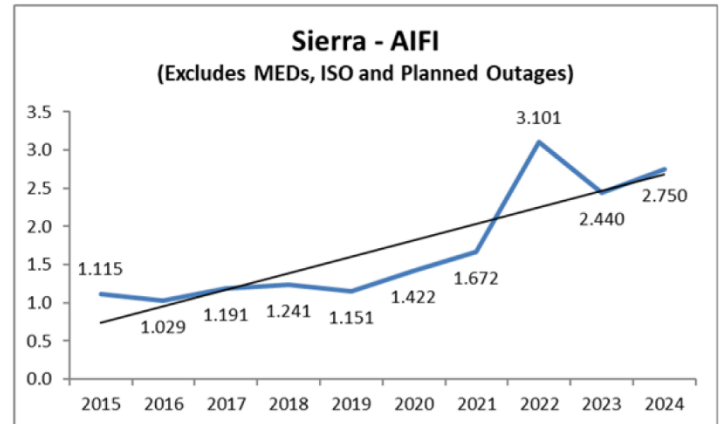
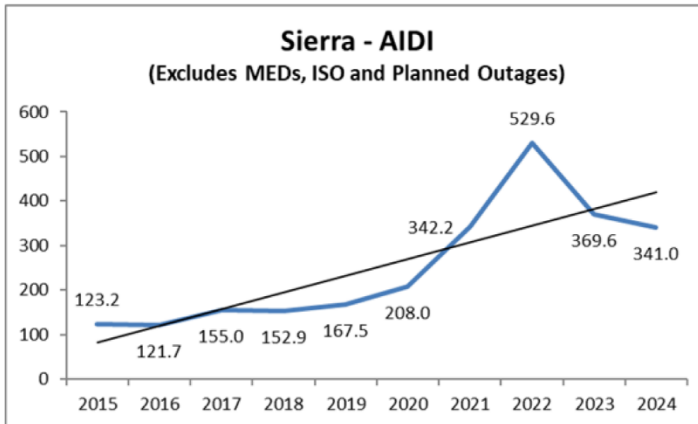
15. San Jose Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Excluded)





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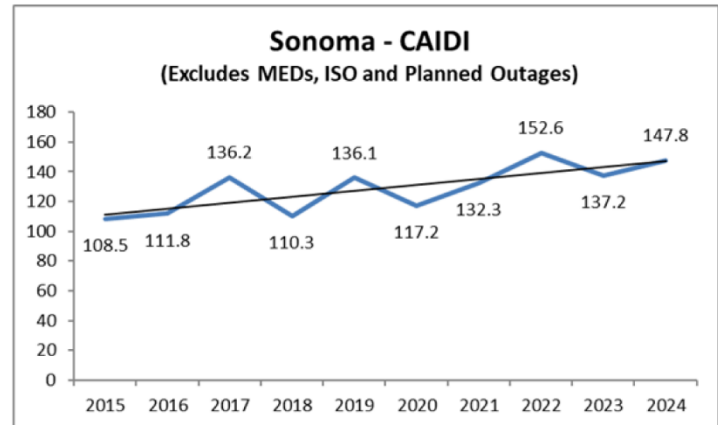
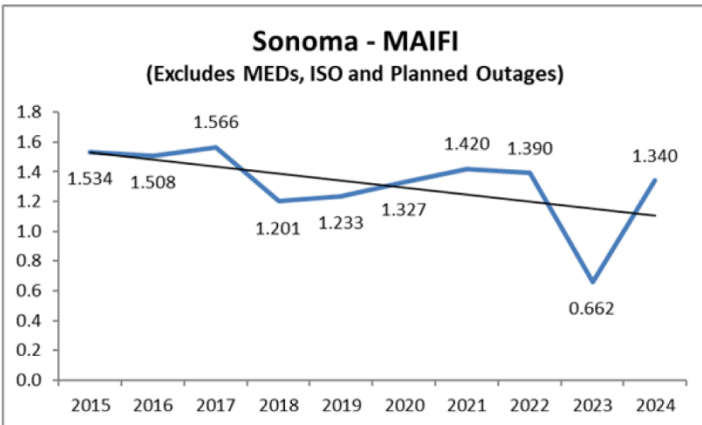
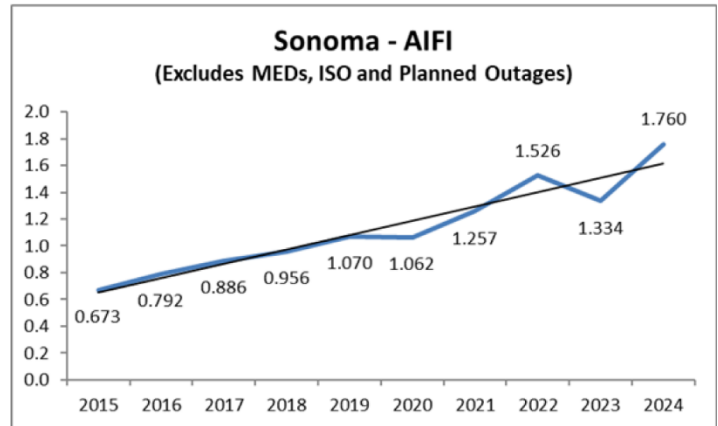
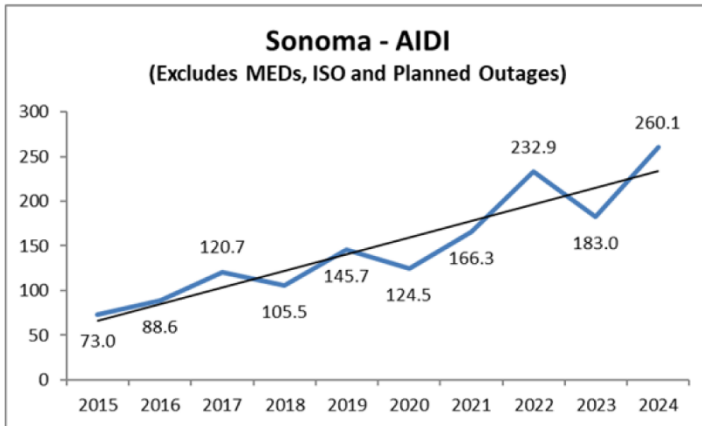
16. Sierra Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Excluded)





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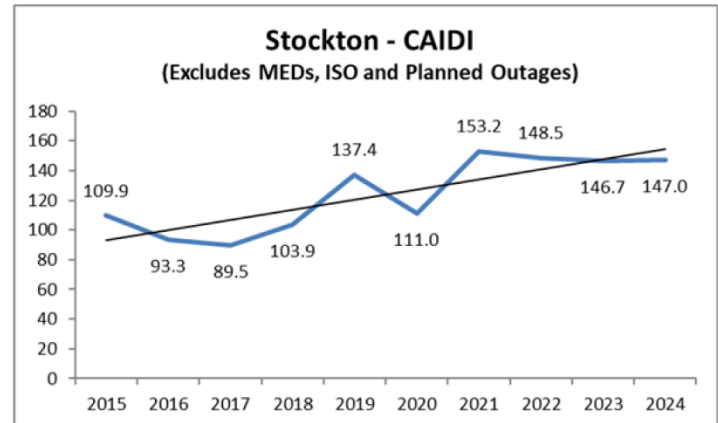
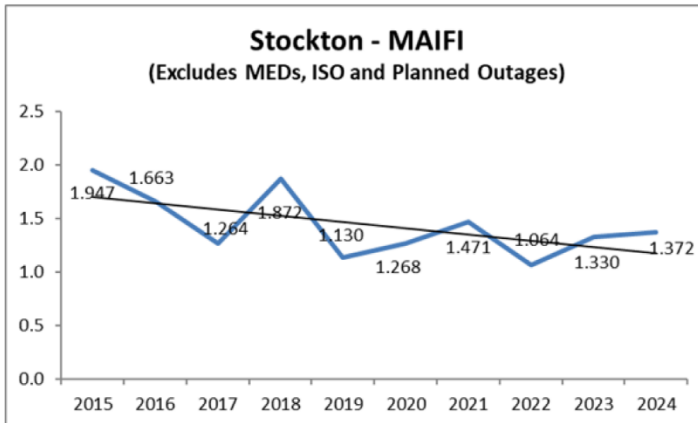
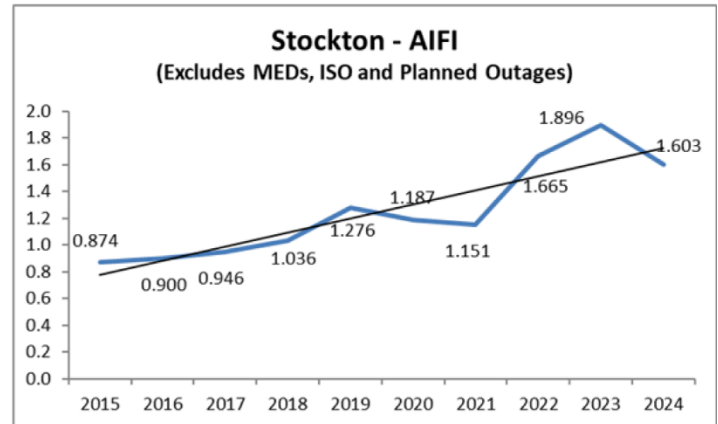
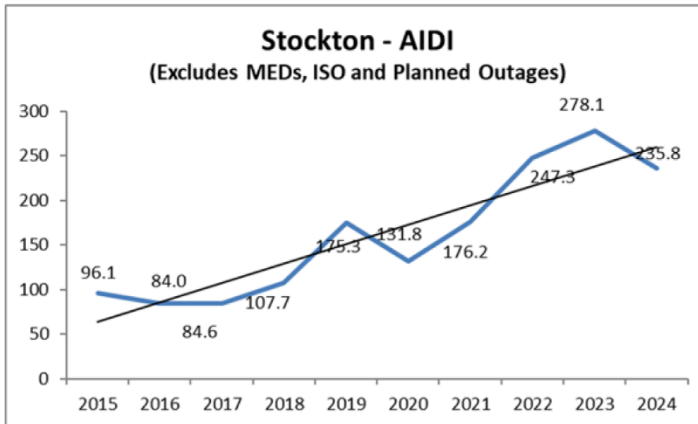
17. Sonoma Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Excluded)





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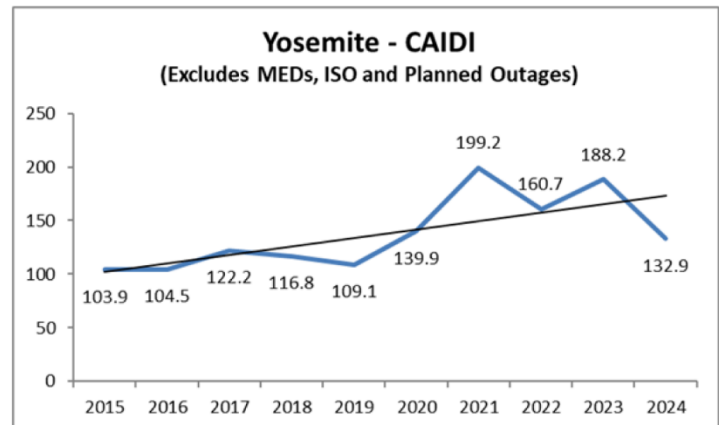
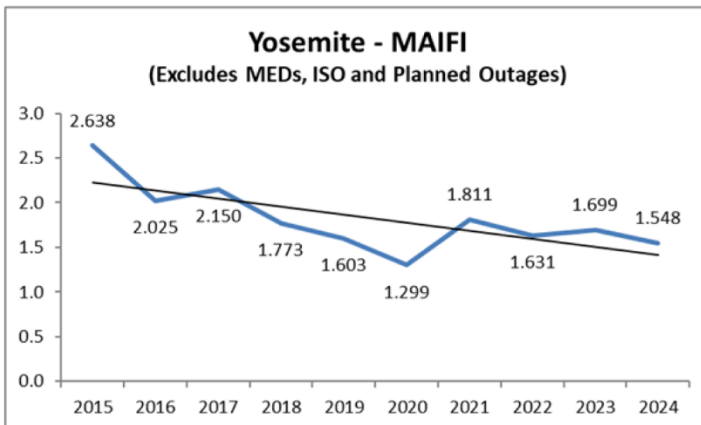
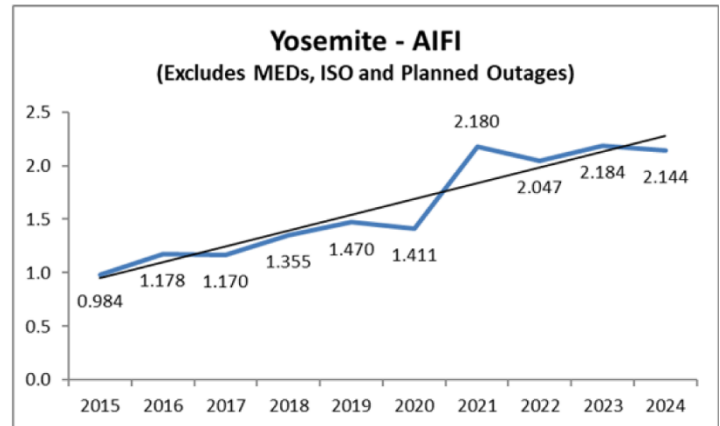
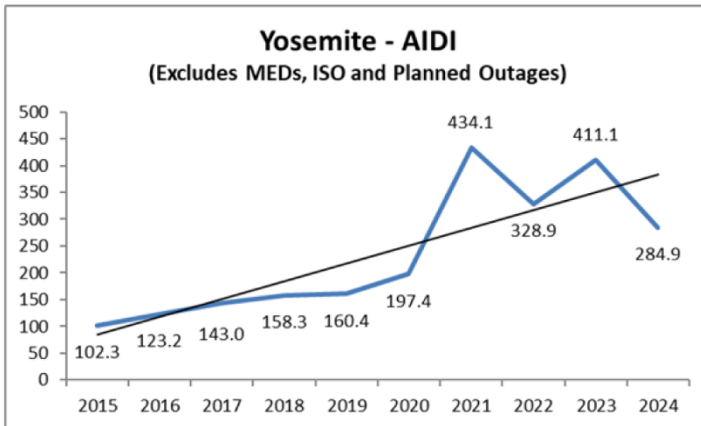
18. Stockton Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Excluded)





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19. Yosemite Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Excluded)





d. Division and System Reliability Indices Performance Variances (Five-Year Average)

This section contains additional division reliability information, as required by Decision 04-10-034, and Decision 16-01-008, Appendix B, footnote 6. This section explains threshold variations (unplanned outages only) in division and/or system reliability indices relative to the prior five-year averages (excluding major events, as defined per the IEEE 1366 methodology). This section also highlights the large outage events in each division that exceeded the reporting threshold.

Table 7 summarizes the 2024 division indices that meet the reporting requirement thresholds of 10 percent or more for the division, and 5 percent or more at the system level, worse than the five-year rolling average of reliability performance per D. 04-10-034.⁷ An “X” indicates that the 2024 Division and system index exceeded the 10 percent and 5 percent threshold, respectively, and is thus discussed in detail in this section.

⁷ As in prior reports, PG&E does not interpret this reporting requirement as applying to those indices where 2024 reliability was better than the prior five-year average.



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Table 6 – 2024 Indices Excluding Major Events
(Meeting the Reporting Requirement Thresholds)

	SAIDI	SAIFI	MAIFI	CAIDI
SYSTEM	X	X		
DIVISION	AIDI	AIFI	MAIFI	CAIDI
CENTRAL COAST	X	X		
DE ANZA	X	X		
DIABLO	X	X		
EAST BAY	X			
FRESNO	X	X		
HUMBOLDT	X	X	X	X
KERN	X			
LOS PADRES	X	X		
MISSION	X	X	X	
NORTH BAY	X	X		
NORTH VALLEY	X	X		
PENINSULA	X	X		
SACRAMENTO	X	X		X
SAN FRANCISCO	X			X
SAN JOSE	X	X	X	
SIERRA		X	X	
SONOMA	X	X	X	
STOCKTON	X	X		
YOSEMITE		X		



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Table 7: Division and System Reliability Indices 2019-2024 - Performance Variances (Excluding MED)

Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
SYSTEM	2019	117.7	1.009	1.270	116.6
SYSTEM	2020	125.8	1.068	1.292	117.8
SYSTEM	2021	182.8	1.178	1.317	155.2
SYSTEM	2022	213.5	1.470	1.309	145.2
SYSTEM	2023	213.9	1.402	1.207	152.6
5-Year Average	19-23 Avg	170.7	1.225	1.279	139.3
SYSTEM	2024	226.7	1.637	1.196	138.5
	%Difference	32.8%	33.6%	-6.5%	-0.6%
Division/System	Year	AIDI	AIFI	MAIFI	CAIDI
CENTRAL COAST	2019	203.6	1.470	2.231	138.5
CENTRAL COAST	2020	159.1	1.724	1.600	92.3
CENTRAL COAST	2021	289.2	1.643	1.906	176.0
CENTRAL COAST	2022	377.6	2.657	2.868	142.1
CENTRAL COAST	2023	413.0	2.465	2.158	167.6
5-Year Average	19-23 Avg	288.5	1.992	2.153	144.8
CENTRAL COAST	2024	374.7	2.471	1.648	151.6
	%Difference	29.9%	24.1%	-23.5%	4.7%
Division/System	Year	AIDI	AIFI	MAIFI	CAIDI
DE ANZA	2019	91.3	0.873	1.657	104.6
DE ANZA	2020	83.1	0.711	1.213	117.0
DE ANZA	2021	121.0	0.787	0.987	153.8
DE ANZA	2022	120.8	1.004	1.065	120.3
DE ANZA	2023	173.3	1.002	1.469	173.0
5-Year Average	19-23 Avg	117.9	0.875	1.278	134.7
DE ANZA	2024	211.3	1.580	1.292	133.7
	%Difference	79.1%	80.5%	1.1%	-0.8%
Division/System	Year	AIDI	AIFI	MAIFI	CAIDI
DIABLO	2019	78.8	0.935	1.212	84.3
DIABLO	2020	110.8	1.206	1.621	91.9
DIABLO	2021	112.0	1.177	1.352	95.2
DIABLO	2022	179.2	1.566	1.295	114.4
DIABLO	2023	183.9	1.384	1.080	132.9
5-Year Average	19-23 Avg	132.9	1.254	1.312	106.0
DIABLO	2024	198.4	1.919	1.344	103.4
	%Difference	49.3%	53.1%	2.4%	-2.5%
Division/System	Year	AIDI	AIFI	MAIFI	CAIDI
EAST BAY	2019	84.5	0.854	0.956	99.0
EAST BAY	2020	95.5	0.838	1.453	114.0
EAST BAY	2021	154.2	1.250	1.368	123.4
EAST BAY	2022	147.4	1.158	1.661	127.3
EAST BAY	2023	110.7	1.000	0.782	110.7
5-Year Average	19-23 Avg	118.5	1.020	1.244	116.2
EAST BAY	2024	134.4	1.108	0.699	121.3
	%Difference	13.5%	8.7%	-43.8%	4.4%



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Division/System	Year	AIDI	AIFI	MAIFI	CAIDI
FRESNO	2019	78.8	0.828	1.477	95.2
FRESNO	2020	86.5	0.865	1.352	100.0
FRESNO	2021	142.0	1.081	1.468	131.3
FRESNO	2022	175.3	1.244	1.731	140.9
FRESNO	2023	173.0	1.178	1.488	146.9
5-Year Average	19-23 Avg	131.1	1.039	1.503	126.2
FRESNO	2024	190.0	1.486	1.511	127.9
	%Difference	44.9%	43.0%	0.5%	1.4%
Division/System	Year	AIDI	AIFI	MAIFI	CAIDI
HUMBOLDT	2019	274.4	1.616	1.850	169.7
HUMBOLDT	2020	191.6	1.336	1.181	143.5
HUMBOLDT	2021	461.3	2.005	1.415	230.0
HUMBOLDT	2022	469.2	2.497	1.329	187.9
HUMBOLDT	2023	610.8	2.729	1.636	223.8
5-Year Average	19-23 Avg	401.5	2.037	1.482	197.1
HUMBOLDT	2024	711.7	3.271	1.706	217.6
	%Difference	77.3%	60.6%	15.1%	10.4%
Division/System	Year	AIDI	AIFI	MAIFI	CAIDI
KERN	2019	106.6	1.101	1.743	96.8
KERN	2020	114.6	1.060	1.831	108.1
KERN	2021	138.4	1.101	1.503	125.7
KERN	2022	269.4	1.461	1.209	184.4
KERN	2023	145.2	1.195	1.794	121.5
5-Year Average	19-23 Avg	154.8	1.184	1.616	130.8
KERN	2024	186.0	1.298	1.698	143.3
	%Difference	20.1%	9.7%	5.1%	9.5%
Division/System	Year	AIDI	AIFI	MAIFI	CAIDI
LOS PADRES	2019	150.7	1.188	0.798	126.8
LOS PADRES	2020	139.3	1.141	0.836	122.1
LOS PADRES	2021	195.0	1.125	1.314	173.4
LOS PADRES	2022	233.3	1.824	0.870	128.0
LOS PADRES	2023	221.1	1.831	1.176	120.7
5-Year Average	19-23 Avg	187.9	1.422	0.999	132.1
LOS PADRES	2024	242.6	2.208	1.005	109.9
	%Difference	29.1%	55.3%	0.6%	-16.8%
Division/System	Year	AIDI	AIFI	MAIFI	CAIDI
MISSION	2019	65.8	0.669	0.693	98.4
MISSION	2020	91.1	0.766	1.060	119.0
MISSION	2021	113.5	0.957	0.913	118.6
MISSION	2022	109.9	0.784	0.879	140.2
MISSION	2023	102.8	0.787	0.796	130.6
5-Year Average	19-23 Avg	96.6	0.793	0.868	121.9
MISSION	2024	147.4	1.200	1.012	122.9
	%Difference	52.5%	51.4%	16.6%	0.8%



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Division/System	Year	AIDI	AIFI	MAIFI	CAIDI
NORTH BAY	2019	148.2	1.312	1.647	112.9
NORTH BAY	2020	143.3	1.235	2.093	116.0
NORTH BAY	2021	160.0	1.063	1.551	150.5
NORTH BAY	2022	212.6	1.459	1.100	145.7
NORTH BAY	2023	191.6	1.291	0.951	148.5
5-Year Average	19-23 Avg	171.1	1.272	1.468	134.5
NORTH BAY	2024	239.5	1.856	1.056	129.0
	%Difference	39.9%	45.9%	-28.1%	-4.1%
Division/System	Year	AIDI	AIFI	MAIFI	CAIDI
NORTH VALLEY	2019	205.0	1.506	1.458	136.1
NORTH VALLEY	2020	269.0	1.546	1.369	174.0
NORTH VALLEY	2021	427.7	1.752	2.192	244.1
NORTH VALLEY	2022	337.6	2.178	1.206	155.0
NORTH VALLEY	2023	377.5	2.108	1.333	179.1
5-Year Average	19-23 Avg	323.4	1.818	1.512	177.9
NORTH VALLEY	2024	374.8	2.053	1.147	182.6
	%Difference	15.9%	12.9%	-24.1%	2.6%
Division/System	Year	AIDI	AIFI	MAIFI	CAIDI
PENINSULA	2019	88.5	0.816	0.983	108.4
PENINSULA	2020	85.5	0.855	1.042	100.0
PENINSULA	2021	161.2	1.068	0.944	150.9
PENINSULA	2022	129.9	1.005	1.351	129.2
PENINSULA	2023	207.9	1.269	1.366	163.7
5-Year Average	19-23 Avg	134.6	1.003	1.137	134.2
PENINSULA	2024	206.7	1.529	0.706	135.2
	%Difference	53.6%	52.5%	-37.9%	0.7%
Division/System	Year	AIDI	AIFI	MAIFI	CAIDI
SACRAMENTO	2019	98.9	0.866	1.574	114.3
SACRAMENTO	2020	173.6	1.350	1.499	128.6
SACRAMENTO	2021	155.4	1.122	1.874	138.4
SACRAMENTO	2022	175.1	1.294	1.573	135.3
SACRAMENTO	2023	191.3	1.276	1.436	149.8
5-Year Average	19-23 Avg	158.9	1.182	1.591	134.4
SACRAMENTO	2024	218.5	1.342	1.407	162.8
	%Difference	37.5%	13.6%	-11.6%	21.1%
Division/System	Year	AIDI	AIFI	MAIFI	CAIDI
SAN FRANCISCO	2019	56.8	0.614	0.258	92.4
SAN FRANCISCO	2020	43.9	0.582	0.386	75.5
SAN FRANCISCO	2021	49.4	0.530	0.499	93.2
SAN FRANCISCO	2022	49.6	0.496	0.458	100.0
SAN FRANCISCO	2023	70.6	0.581	0.366	121.4
5-Year Average	19-23 Avg	54.1	0.561	0.394	96.4
SAN FRANCISCO	2024	68.8	0.601	0.209	114.5
	%Difference	27.3%	7.2%	-46.9%	18.8%



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Division/System	Year	AIDI	AIFI	MAIFI	CAIDI
SAN JOSE	2019	81.5	0.747	1.253	109.1
SAN JOSE	2020	120.9	0.906	1.274	133.5
SAN JOSE	2021	95.4	0.763	0.909	125.1
SAN JOSE	2022	152.2	1.150	1.180	132.4
SAN JOSE	2023	126.5	0.891	1.041	142.0
5-Year Average	19-23 Avg	115.3	0.891	1.131	129.4
SAN JOSE	2024	170.0	1.295	1.261	131.3
	%Difference	47.5%	45.3%	11.5%	1.5%
Division/System	Year	AIDI	AIFI	MAIFI	CAIDI
SIERRA	2019	167.5	1.151	1.482	145.6
SIERRA	2020	208.0	1.422	1.169	146.2
SIERRA	2021	342.2	1.672	1.022	204.7
SIERRA	2022	529.6	3.101	1.018	170.8
SIERRA	2023	369.6	2.440	1.153	151.4
5-Year Average	19-23 Avg	323.4	1.957	1.169	165.2
SIERRA	2024	341.0	2.750	1.533	124.0
	%Difference	5.5%	40.5%	31.2%	-24.9%
Division/System	Year	AIDI	AIFI	MAIFI	CAIDI
SONOMA	2019	145.7	1.070	1.233	136.1
SONOMA	2020	124.5	1.062	1.327	117.2
SONOMA	2021	166.3	1.257	1.420	132.3
SONOMA	2022	232.9	1.526	1.390	152.6
SONOMA	2023	183.0	1.334	0.662	137.2
5-Year Average	19-23 Avg	170.4	1.250	1.206	136.4
SONOMA	2024	260.1	1.760	1.340	147.8
	%Difference	52.6%	40.8%	11.1%	8.4%
Division/System	Year	AIDI	AIFI	MAIFI	CAIDI
STOCKTON	2019	175.3	1.276	1.130	137.4
STOCKTON	2020	131.8	1.187	1.268	111.0
STOCKTON	2021	176.2	1.151	1.471	153.2
STOCKTON	2022	247.3	1.665	1.064	148.5
STOCKTON	2023	278.1	1.896	1.330	146.7
5-Year Average	19-23 Avg	201.8	1.435	1.253	140.6
STOCKTON	2024	235.8	1.603	1.372	147.0
	%Difference	16.9%	11.8%	9.5%	4.5%
Division/System	Year	AIDI	AIFI	MAIFI	CAIDI
YOSEMITE	2019	160.4	1.470	1.603	109.1
YOSEMITE	2020	197.4	1.411	1.299	139.9
YOSEMITE	2021	434.1	2.180	1.811	199.2
YOSEMITE	2022	328.9	2.047	1.631	160.7
YOSEMITE	2023	411.1	2.184	1.699	188.2
5-Year Average	19-23 Avg	306.4	1.858	1.609	164.9
YOSEMITE	2024	284.9	2.144	1.548	132.9
	%Difference	-7.0%	15.4%	-3.8%	-19.4%



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i. System and Division Performance Assessment

1. System Performance Assessment

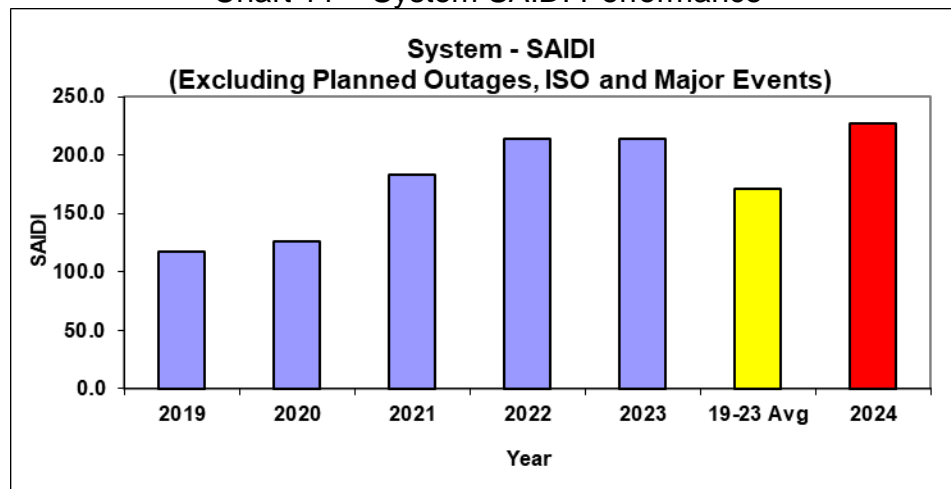
Table 8: System Performance

Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
SYSTEM	2019	117.7	1.009	1.270	116.6
SYSTEM	2020	125.8	1.068	1.292	117.8
SYSTEM	2021	182.8	1.178	1.317	155.2
SYSTEM	2022	213.5	1.470	1.309	145.2
SYSTEM	2023	213.9	1.402	1.207	152.6
5-Year Average	19-23 Avg	170.7	1.225	1.279	139.3
SYSTEM	2024	226.7	1.637	1.196	138.5
	%Difference	32.8%	33.6%	-6.5%	-0.6%

System SAIDI Performance

The system's 2024 SAIDI performance of 226.7 was 55.9 customer-minutes (or 32.8%) higher than the previous 5-year average of 170.7 as shown in the table above and illustrated in the figure below.

Chart 11 – System SAIDI Performance



The higher-than-average 2024 system SAIDI was attributed to the following top contributing factors:

1. On April 12th, a section of a deteriorated overhead distribution conductor failed and resulted in a pole fire causing a line recloser level outage to 4,459 customers served from the Salt Springs 2102 feeder and contributed 1.2



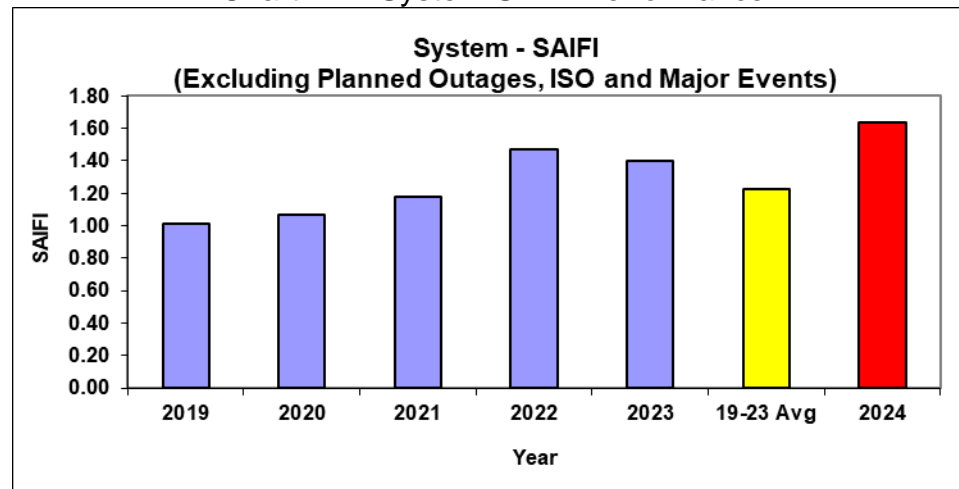
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- customer-minutes to the system's SAIDI performance.
2. On February 8th, a failed splice in a section of the overhead distribution wire on the Peabody 2108 feeder initially caused a breaker level outage which subsequently resulted in a substation level outage affecting 25,354 customers served from the Peabody substation. This outage contributed 1.1 customer-minutes to the system's SAIDI performance.
 3. On October 8th, a flashed jumper on the Sneath Lane – Pacifica 60 kV transmission line caused an outage to 10,058 customers served from the Pacifica substation and contributed 0.8 customer-minutes to the system's SAIDI performance.
 4. On July 2nd, as a result of the Thompson fire, a fault was detected on the Table Mountain – Caribou 230 kV transmission line and the source to six substations (Chester, Gansner, Big Meadows, East Quincy, Grays Flat, Hamilton Branch) were lost. This event caused a sustained outage to 10,814 customers and contributed 0.8 customer-minutes to the system's SAIDI performance.
 5. On November 13th, as a result of a tree falling into the Maple Creek – Hoopa 60 kV transmission line, the source to three substations (Russ Ranch, Willow Creek and Hoopa) were lost. This event caused a sustained outage to 4,451 customers and contributed 0.7 customer-minutes to the system's SAIDI performance.
 6. On October 2nd, as a result of a heat storm, a flashed lightning arrestor on the Stelling Bk#3 resulted in a substation level outage affecting 11,394 customers. This event contributed 0.7 customer-minutes to the system's SAIDI performance.
 7. On November 22nd, Alleghany substation lost power due to a tree falling into the Colgate-Alleghany 60 kV transmission line. This event affected 2,849 customers and contributed 0.6 customer-minutes to the system's SAIDI performance.
 8. On March 30th, Ripon substation lost its source due to a car pole incident that involved a transmission pole. This event affected 11,780 customers and contributed 0.5 customer-minutes to the system's SAIDI performance.
 9. The EPSS and DCD settings installed on the distribution line equipment contributed 58.0 customer-minutes to the System's SAIDI performance.

System SAIFI Performance

The system's 2024 SAIFI performance of 1.637 was 0.412 customer-interruptions (or 33.6%) higher than the previous 5-year average of 1.225 as shown in the table above and illustrated in the figure below.

Chart 12 – System SAIFI Performance



The higher-than-average 2024 system SAIFI was attributed to the following top contributing factors:

1. On February 8th, a failed splice in a section of the overhead distribution wire on the Peabody 2108 feeder initially caused a breaker level outage which subsequently resulted in a substation level outage affecting 25,354 customers served from the Peabody substation. This event contributed 0.005 customer-interruptions to the system SAIFI performance.
2. On July 16th, an animal (bird) related incident on the San Luis Obispo – Oceano 115 kV Transmission line caused an outage to the Oceano substation causing an outage to 28,153 customers and contributed 0.005 customer-interruptions to the system SAIFI performance.
3. On July 21st, a failed substation equipment (switch) at the Westpark substation caused a sustained outage to 26,254 customers and contributed 0.005 customer-interruptions to the system SAIFI performance.
4. On February 29th, a malfunctioning substation equipment (relay) at the El Patio substation caused a sustained outage to 22,484 customers and contributed 0.004 customer-interruptions to the system SAIFI performance.

5. On October 5th, a transmission switch failure on the Jefferson – Stanford 60 kV line caused an outage to three distribution substations (Emerald Lake, Glenwood, Menlo) and caused a sustained outage to 20,746 customers and contributed 0.004 customer-interruptions to the system SAIFI performance.
6. The EPSS and DCD settings installed on the distribution line equipment contributed 0.387 customer-interruptions to the system SAIFI performance.

2. Central Coast Division Performance Assessment

Central Coast Division Performance

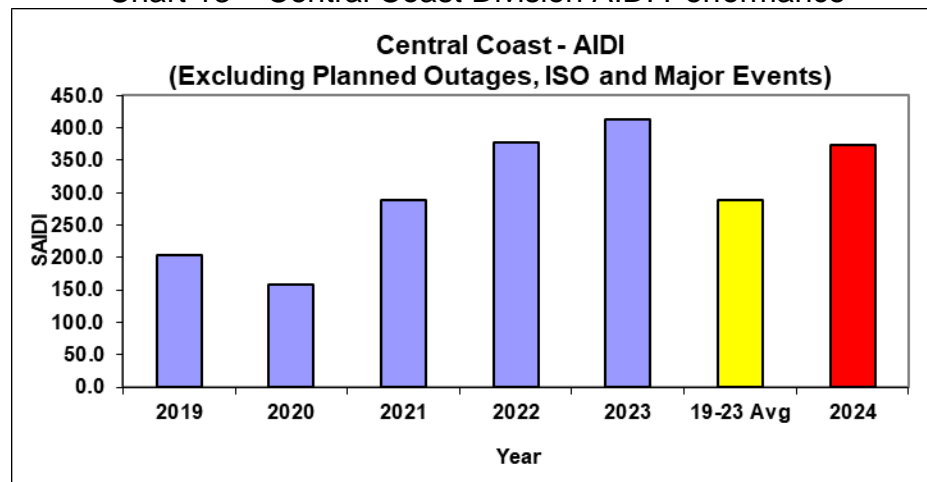
Table 9: Central Coast Performance

Division/System	Year	AIDI	AIFI	MAIFI	CAIDI
CENTRAL COAST	2019	203.6	1.470	2.231	138.5
CENTRAL COAST	2020	159.1	1.724	1.600	92.3
CENTRAL COAST	2021	289.2	1.643	1.906	176.0
CENTRAL COAST	2022	377.6	2.657	2.868	142.1
CENTRAL COAST	2023	413.0	2.465	2.158	167.6
5-Year Average	19-23 Avg	288.5	1.992	2.153	144.8
CENTRAL COAST	2024	374.7	2.471	1.648	151.6
	%Difference	29.9%	24.1%	-23.5%	4.7%

Central Coast Division AIDI Performance

Central Coast Division's 2024 AIDI performance of 374.7 was 86.1 customer-minutes (or 29.9%) higher than the previous 5-year average of 288.5 as shown in the table above and illustrated in the figure below.

Chart 13 – Central Coast Division AIDI Performance





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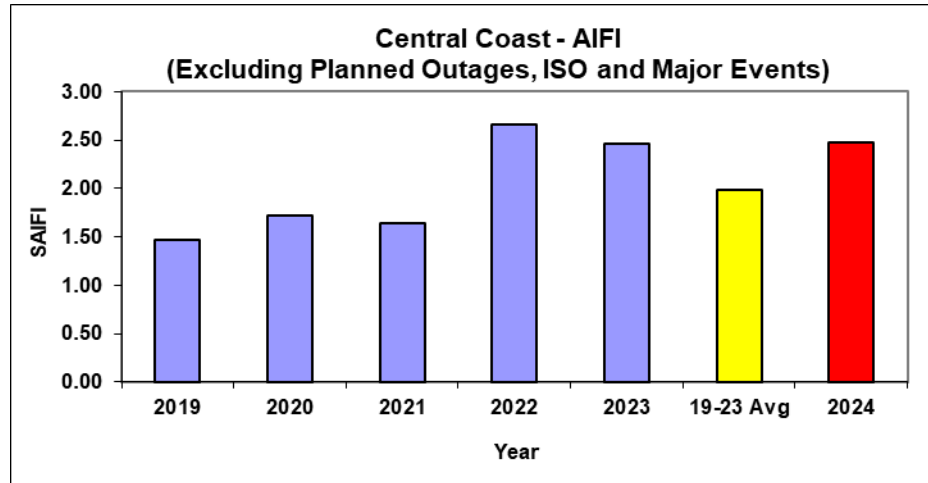
The higher-than-average 2024 division AIDI was attributed to the following:

1. On November 6th, an EPSS settings related breaker level outage occurred due to an unknown cause on the Paul Sweet 2105 feeder. This outage contributed 9.5 customer-minutes to the division's AIDI.
2. On August 14th, a failed splice in a section of the overhead distribution wire on the Paul Sweet 2109 feeder caused a breaker level outage, which subsequently resulted in an outage to the customers served from the Paul Sweet 2105 breaker as a result of a switching error affecting a total of 11,809 customers served from the Paul Sweet substation. This event contributed 8.5 customer-minutes to the division's AIDI performance.
3. On February 6-7th, due to vegetation-caused outages during the February 4th storm on the Viejo 2202 feeder, resulting in wire down events at multiple locations due to trees falling into our distribution line. This event resulted in an outage to 4,569 customers and contributed 9.5 customer-minutes to the division's AIDI performance.
4. On September 10th, a primary overhead distribution conductor broke on the Rob Roy 2105 feeder due to a tree falling into our lines and caused a sustained outage to 8,167 customers and contributed 7.4 customer-minutes to the division's AIDI performance.
5. On October 25th, a primary overhead distribution conductor broke on the Del monte 2104 feeder due to animal (bird) related activity and caused a sustained outage to 4,667 customers and contributed 6.5 customer-minutes to the division's AIDI performance.
6. The EPSS and DCD settings installed on the distribution line equipment contributed 126.5 customer-minutes to the division's AIDI performance.

Central Coast Division AIFI Performance

Central Coast Division's 2024 AIFI performance of 2.471 was 0.479 customer-interruptions (or 24.1%) higher than the previous 5-year average of 1.992 as shown in the table above and illustrated in the figure below.

Chart 14 – Central Coast Division AIFI Performance



The higher-than-average 2024 system AIFI was attributed to the following top contributing factors:

1. On August 14th, a failed splice in a section of the overhead distribution wire on the Paul Sweet 2109 feeder caused a breaker level outage, which subsequently resulted in an outage to the customers served from the Paul Sweet 2105 breaker as a result of a switching error affecting a total of 11,809 customers and contributed 0.039 customer-interruptions to the division's AIFI.
2. On September 22nd, a burnt jumper at the Viejo substation caused the feeder breaker 2204 to trip and caused a sustained outage to 8,532 customers and contributed 0.028 customer-interruptions to the division's AIFI.
3. On September 11th, EPSS settings related breaker level outage occurred on the Viejo 2204 feeder due to an unknown cause resulting in a sustained outage to 8,528 customers and contributed 0.028 customer-interruptions to the division's AIFI.
4. On September 10th, a primary overhead distribution conductor broke on the Rob Roy 2105 feeder due to a tree falling into our lines and caused a sustained outage to 8,167 customers and contributed 0.027 customer-interruptions to the division's AIFI.
5. On September 22nd, a primary overhead distribution conductor broke on the Viejo 2204 feeder due to a tree falling into our lines and caused a sustained outage to 7,511 customers and contributed 0.025 customer-interruptions to the division's AIFI.

6. The EPSS and DCD settings installed on the distribution line equipment contributed 0.753 customer-interruptions to the division's AIFI performance.

3. De Anza Division Performance Assessment

De Anza Division Performance

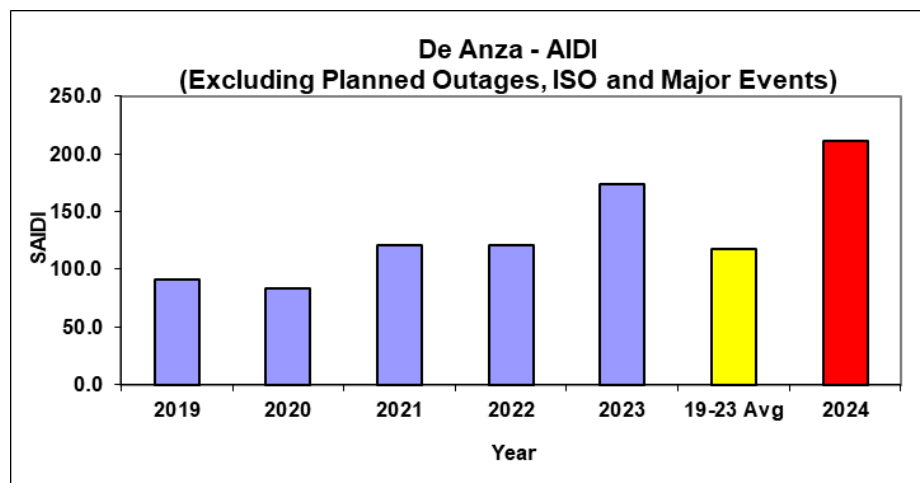
Table 10: De Anza Division Performance

Division/System	Year	AIDI	AIFI	MAIFI	CAIDI
DE ANZA	2019	91.3	0.873	1.657	104.6
DE ANZA	2020	83.1	0.711	1.213	117.0
DE ANZA	2021	121.0	0.787	0.987	153.8
DE ANZA	2022	120.8	1.004	1.065	120.3
DE ANZA	2023	173.3	1.002	1.469	173.0
5-Year Average	19-23 Avg	117.9	0.875	1.278	134.7
DE ANZA	2024	211.3	1.580	1.292	133.7
	%Difference	79.1%	80.5%	1.1%	-0.8%

De Anza Division AIDI Performance

De Anza Division's 2024 AIDI performance of 211.3 was 93.3 customer-minutes (or 79.1%) higher than the previous 5-year average of 117.9 as shown in the table above and illustrated in the figure below.

Chart 15 – De Anza Division AIDI Performance





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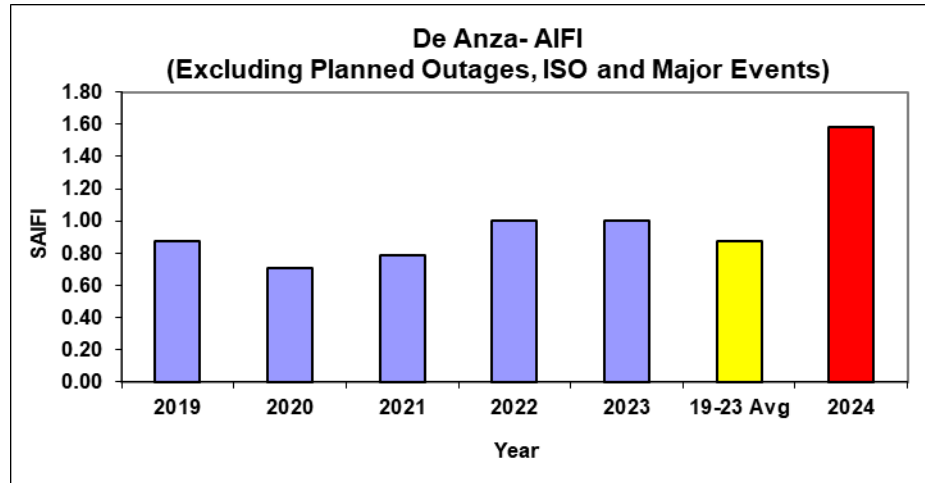
The higher-than-average 2024 De Anza Division AIDI was attributed to the following:

1. On October 2nd, as a result of a heat storm, a flashed lightning arrestor on the Stelling Bk#3 resulted in a substation level outage affecting 11,394 customers. This outage contributed 17.0 customer-minutes to the division's AIDI performance.
2. On July 24th, a section of cable run from the sub to the 1st field device on the Saratoga-1110 feeder failed and caused a breaker level outage to 4,480 customers. This event contributed 10.2 customer-minutes to the division's AIDI performance.
3. On February 29th, a relay malfunction on the Metcalf-EI Patio #2-115kV Transmission line caused a sustained outage to Transformer bank # 2 and 3. This event caused an outage to 22,484 customers served from the EI Patio Substation and contributed 8.4 customer-minutes to the division's AIDI performance.
4. On December 15th, a 3rd party vehicle incident broke our distribution pole causing a breaker level outage on the EI Patio 1107 feeder. This outage affected 9,242 customers and contributed 8.0 customer-minutes to the division's AIDI performance.
5. On December 11th, an underground cable failure caused a breaker level outage on the Saratoga 1111 feeder 1104 feeder caused a breaker level outage to 10,711. This outage contributed 8.0 customer-minutes to the division's AIDI performance.
6. The EPSS and DCD settings installed on the distribution line equipment contributed 33.0 customer-minutes to the division's AIDI performance.

De Anza Division AIFI Performance

De Anza Division's 2024 AIFI performance of 1.580 was 0.705 customer-interruptions (or 80.5%) higher than the previous 5-year average of 0.875 as shown in the table above and illustrated in the figure below.

Chart 16 – De Anza Division AIFI Performance



The higher-than-average 2024 De Anza division AIFI was attributed to the following:

1. On February 29th, a relay malfunction on the Metcalf-EI Patio #2-115kV Transmission line caused a sustained outage to Transformer bank # 2 and 3. This outage affected 22,484 customers and contributed 0.097 customer-interruptions to the division's AIFI.
2. On October 2nd, as a result of a heat storm, a flashed lightning arrestor on the Stelling Bk#3 resulted in a substation level outage affecting 11,394 customers. This outage contributed 0.049 customer-interruptions to the division's AIFI.
3. On December 11th, an underground cable failure caused a breaker level outage on the Saratoga 1111 feeder 1104 feeder caused a breaker level outage to 10,711 customers. This event contributed 0.046 customer-interruptions to the division's AIFI.
4. On December 15th, a 3rd party vehicle incident broke our distribution pole causing a breaker level outage to 9,242 customers served from the EI Patio 1107 feeder. This outage contributed 0.040 customer-interruptions to the division's AIFI.
5. On February 6th, a primary overhead distribution conductor broke on the Mountain View 1108 feeder due to a tree falling into our lines and caused a breaker level sustained outage to 6,100 customers. This event contributed 0.026 customer-interruptions to the division's AIFI.
6. The EPSS and DCD settings installed on the distribution line equipment



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contributed 0.237 customer-interruptions to the system AIFI performance.

4. Diablo Division Performance Assessment

Diablo Division Performance

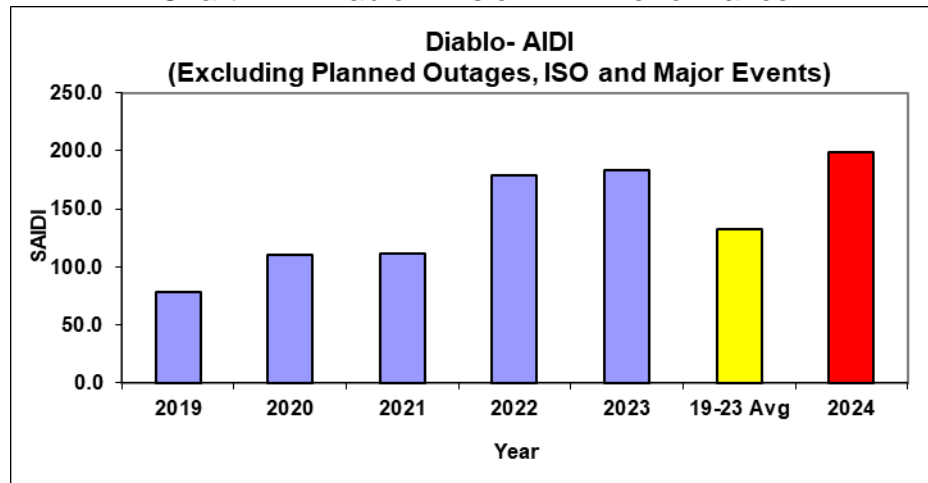
Table 11: Diablo Division Performance

Division/System	Year	AIDI	AIFI	MAIFI	CAIDI
DIABLO	2019	78.8	0.935	1.212	84.3
DIABLO	2020	110.8	1.206	1.621	91.9
DIABLO	2021	112.0	1.177	1.352	95.2
DIABLO	2022	179.2	1.566	1.295	114.4
DIABLO	2023	183.9	1.384	1.080	132.9
5-Year Average	19-23 Avg	132.9	1.254	1.312	106.0
DIABLO	2024	198.4	1.919	1.344	103.4
	%Difference	49.3%	53.1%	2.4%	-2.5%

Diablo Division AIDI Performance

Diablo Division's 2024 AIDI performance of 198.4 was 65.5 customer-minutes (or 49.3%) higher than the previous 5-year average of 132.9 as shown in the table above and illustrated in the figure below.

Chart 17 – Diablo Division AIDI Performance



The higher-than-average 2024 Diablo Division AIDI was attributed to the following:

1. The EPSS settings installed on the distribution line equipment contributed 54.2 customer-minutes to the division's AIDI performance.
2. On July 5th, the largest EPSS related outage due to an underground cable failure that resulted in a breaker level outage on the Tassajara 2107 feeder



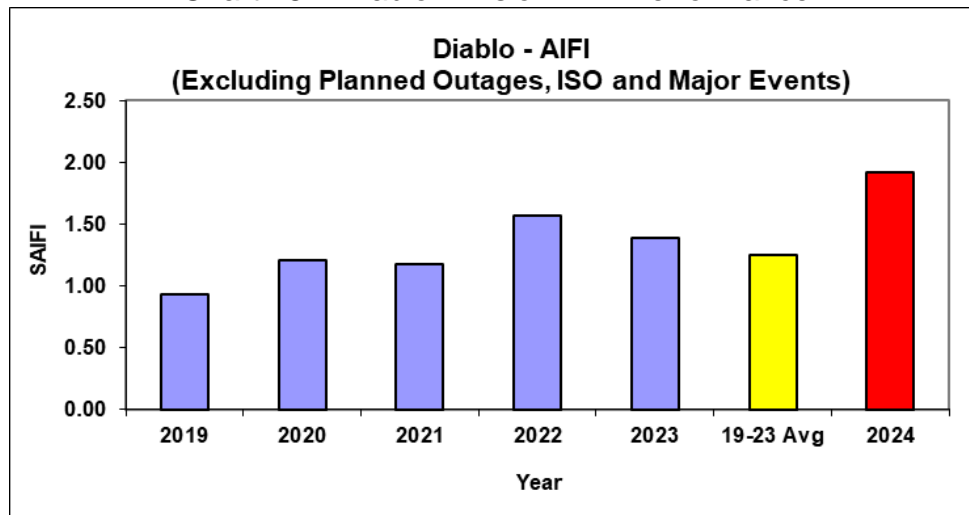
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- caused a sustained outage to 3,761 customers and contributed 6.0 customer-minutes to the division's AIDI performance.
3. On May 12th, an underground equipment failure on Contra Costa 2108 feeder caused a breaker level outage to 3,586 customers. This outage contributed 3.7 customer-minutes to the division's AIDI performance.
 4. On June 23rd, a broken crossarm triggered the EPSS settings and caused a breaker level outage to 5,138 customers served by the Kirker 2104 feeder. This outage contributed 3.0 customer-minutes to the division's SAIDI performance.
 5. On March 16th, a failed underground switch on the Clayton 2213 feeder caused an interrupter level outage to 2,162 customers. This outage contributed 2.7 customer-minutes to the division's AIDI performance.
 6. On August 12th, an EPSS settings related breaker level outage occurred on the Willow Pass 2108 feeder due to an unknown cause resulting in a sustained outage to 5,669 customers. This outage contributed 2.7 customer-minutes to the division's AIDI performance.
 7. On May 14th, a flashed UG equipment on Contra Costa 2110 feeder caused a breaker level outage to 5,194. This outage contributed 2.7 customer-minutes to the division's AIDI performance.

Diablo Division AIFI Performance

Diablo Division's 2024 AIFI performance of 1.919 was 0.666 customer-interruptions (or 53.1%) higher than the previous 5-year average of 1.254 as shown in the table above and illustrated in the figure below.

Chart 18 – Diablo Division AIFI Performance



The higher-than-average 2024 Diablo Division AIFI was attributed to the following:

1. The EPSS installed on the distribution line equipment contributed 0.456 customer-interruptions to the division's AIFI Performance.
2. On October 23rd, a bird related incident caused a breaker level outage on the Contra Costa 2109 feeder affecting 9,773 customers. This outage contributed 0.029 customer-interruptions to the division's AIFI performance.
3. On May 2nd, a breaker level outage occurred on the Contra Costa 2113 feeder due to an underground equipment failure and caused an outage to 8,964 customers. This outage contributed 0.028 customer-interruptions to the division's AIFI performance.
4. On August 8th, a relay miscoordination triggered the EPSS settings in the Rossmoor bus tiebreaker relays leading to a breaker level outage affecting 8,501 customers. Rossmoor feeders 1102, 1103 and 1104 were being fed from Rossmoor 1200 breaker. This outage contributed 0.025 customer-interruptions



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- to the division's AIFI performance.
5. On January 30th, a breaker level outage occurred on the Brentwood 2109 feeder due to an underground equipment failure and caused an outage to 8,366 customers. This outage contributed 0.025 customer-interruptions to the division's AIFI performance.
 6. On November 22nd, a bird nest perched on the center phase of an overhead switch broke the switch causing a breaker level outage to 5,290 customers served from the Contra Costa 2113 feeder. This outage contributed 0.021 customer-interruptions to the division's AIFI performance.
 7. On July 5th, a large EPSS related outage due to an underground cable failure that resulted in a breaker level outage on the Tassajara 2107 feeder caused a sustained outage to 3,761 customers and contributed 0.020 customer-interruptions to the division's AIFI performance.

5. East Bay Division Performance Assessment

East Bay Division Performance

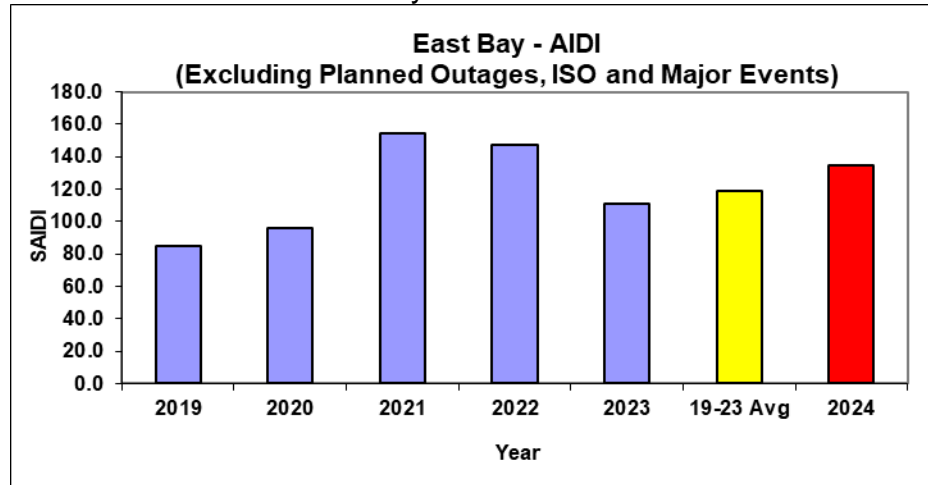
Table 12: East Bay Division Performance

Division/System	Year	AIDI	AIFI	MAIFI	CAIDI
EAST BAY	2019	84.5	0.854	0.956	99.0
EAST BAY	2020	95.5	0.838	1.453	114.0
EAST BAY	2021	154.2	1.250	1.368	123.4
EAST BAY	2022	147.4	1.158	1.661	127.3
EAST BAY	2023	110.7	1.000	0.782	110.7
5-Year Average	19-23 Avg	118.5	1.020	1.244	116.2
EAST BAY	2024	134.4	1.108	0.699	121.3
	%Difference	13.5%	8.7%	-43.8%	4.4%

East Bay Division AIDI Performance

East Bay Division's 2024 AIDI performance of 134.4 was 15.9 customer-minutes (or 13.5%) higher than the previous 5-year average of 118.5 as shown in the table above and illustrated in the figure below.

Chart 19 – East Bay Division AIDI Performance



The higher-than-average 2024 East Bay Division AIDI was attributed to the following:

1. EPSS and DCD installed on the distribution line equipment contributed 19.8 customer-minutes to the division's AIDI performance.
2. On November 6th, a PSPS event was initiated due to strong winds that affected a total of 1,663 customers served from the Oakland K 1102 feeder. This outage contributed 4.6 customer-minutes to the division's AIDI.
3. On May 4th, heavy rains caused a wire down incident that resulted in a breaker level outage on Richmond R-1126 feeder affecting 9,638 customers. This incident contributed 4.2 customer-minutes to the division's AIDI.
4. On August 26th, a pole fire incident caused a breaker level outage on the Oakland J-1102 feeder. This outage contributed 3.4 customer-minutes to the division's SAIDI.
5. On August 19th, a recloser level outage occurred on the Fairview 2207 feeder due to an underground cable failure. This event was an EPSS related outage that affected 1,870 customers and contributed 3.3 customer-minutes to the division's AIDI.
6. On November 6th, an EPSS related outage occurred at breaker level on the El Cerrito G-1105 feeder due to a tree branch falling on our overhead distribution line. This event caused a sustained outage to 5,944 customers and contributed 2.2 customer-minutes to the division's AIDI.



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6. Fresno Division Performance Assessment

Fresno Division Performance

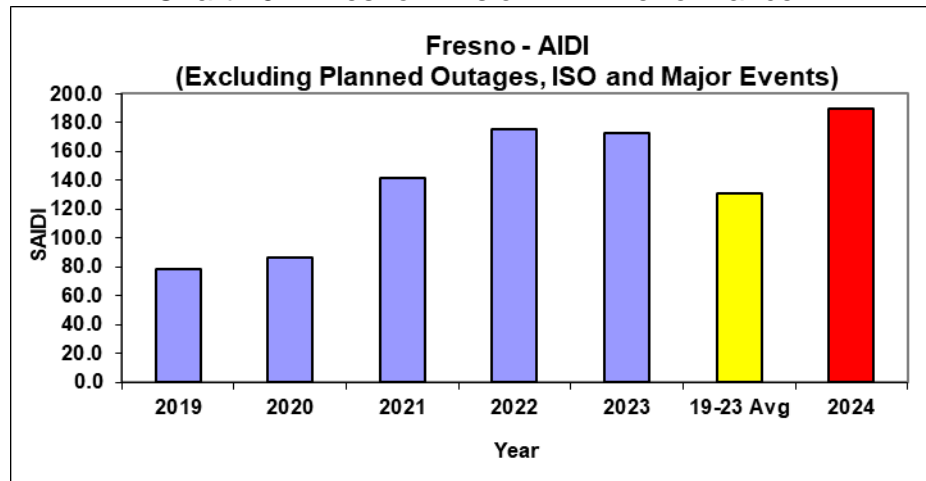
Table 13: Fresno Division Performance

Division/System	Year	AIDI	AIFI	MAIFI	CAIDI
FRESNO	2019	78.8	0.828	1.477	95.2
FRESNO	2020	86.5	0.865	1.352	100.0
FRESNO	2021	142.0	1.081	1.468	131.3
FRESNO	2022	175.3	1.244	1.731	140.9
FRESNO	2023	173.0	1.178	1.488	146.9
5-Year Average	19-23 Avg	131.1	1.039	1.503	126.2
FRESNO	2024	190.0	1.486	1.511	127.9
	%Difference	44.9%	43.0%	0.5%	1.4%

Fresno Division AIDI Performance

Fresno Division's 2024 AIDI performance of 190.0 was 58.8 customer-minutes (or 44.9%) higher than the previous 5-year average of 131.1 as shown in the table above and illustrated in the figure below.

Chart 19 – Fresno Division AIDI Performance



The higher-than-average 2024 Fresno Division AIDI was attributed to the following:

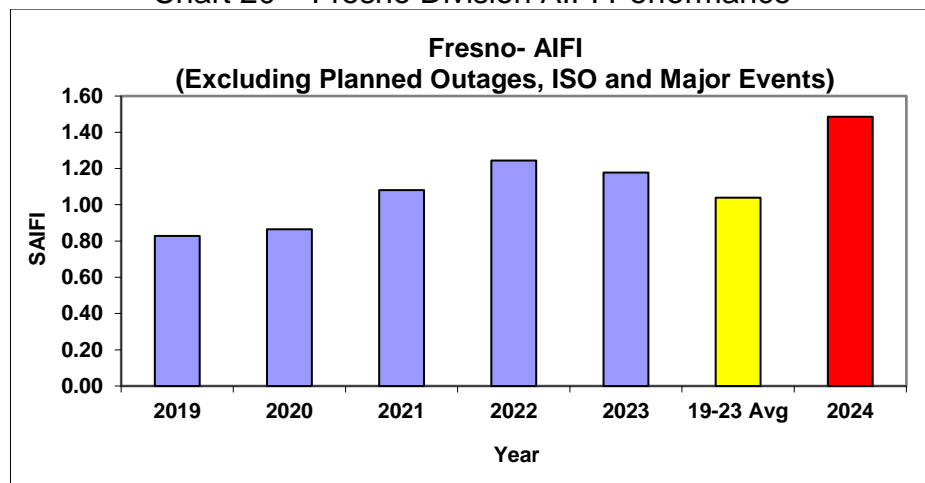
1. EPSS and DCD installed on the distribution line equipment contributed 25.8 customer minutes to the division's AIDI performance.
2. On June 24th, a lightning strike caused an EPSS settings related recloser level

- outage on the Tivy Valley 1107 feeder. This outage affected 753 customers and contributed 3.9 customer-minutes to the division's AIDI.
3. On June 24th, an underground cable failure caused an EPSS settings related recloser level outage on the Dunlap 1103 feeder. This outage affected 554 customers and contributed 3.8 customer-minutes to the division's AIDI.
 4. On July 23rd, a flashed interrupter caused a breaker level outage on the Ashlan Avenue 1109 feeder. This outage affected 3,994 customers and contributed 2.7 customer-minutes to the division's AIDI.
 5. On November 11th, a pole fire incident on the Corcoran 1112 feeder caused a breaker level outage. This outage affected 2,405 customers and contributed 1.8 customer-minutes to the division's AIDI.
 6. On June 24th, a lightning strike caused an EPSS settings related recloser level outage on the Auberry 1101 feeder. This outage affected 630 customers and contributed 1.7 customer-minutes to the division's AIDI.

Fresno Division AIFI Performance

Fresno Division's 2024 AIFI performance of 1.486 was 0.446 customer-interruptions (or 43.0%) higher than the previous 5-year average of 1.039 as shown in the table above and illustrated in the figure below.

Chart 20 – Fresno Division AIFI Performance





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The higher-than-average 2024 Fresno Division AIFI was attributed to the following:

1. EPSS and DCD settings installed on the distribution line equipment contributed 0.061 customer-interruptions to the division's AIFI performance.
2. On June 11th, a section of the overhead distribution conductor wrapped around together due to a 3rd party metallic balloon, and this resulted in a breaker level outage on the Figarden 2102 feeder. This outage affected 5,632 customers and contributed 0.012 customer-interruptions to the division's AIFI performance.
3. On June 24th, a lightning strike caused loss of power to the Rainbow substation due to a fault on the Kings River - Sanger - Reedley 115KV transmission line. This outage affected 5,366 customers and contributed 0.012 customer-interruptions to the division's AIFI performance.
4. On May 10th, bird waste contamination on an insulator along the Wishon-Cooppermine 70KV transmission line caused loss of power to the Auberry substation. This outage affected 5,135 customers and contributed 0.011 customer-interruptions to the division's SAIFI performance.
5. On March 19th, a SCADA communication box on the distribution line fed from Barton 1114 feeder caught on fire and the breaker at the substation had to be forced out dropping 5,002 customers. This outage contributed 0.011 customer-interruptions to the division's AIFI performance.
6. On July 10th, overhead equipment failed on the Figarden 2113 feeder as a result of the heat wave causing an outage to 2,499 customers. This outage contributed 0.011 customer-interruptions to the division's AIFI performance.

7. Humboldt Division Performance Assessment

Humboldt Division Performance

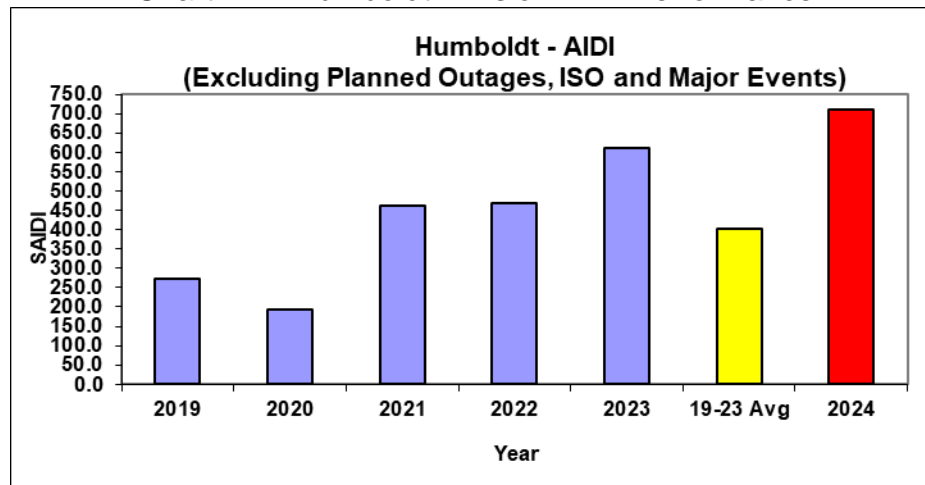
Table 14: Humboldt Division Performance

Division/System	Year	AIDI	AIFI	MAIFI	CAIDI
HUMBOLDT	2019	274.4	1.616	1.850	169.7
HUMBOLDT	2020	191.6	1.336	1.181	143.5
HUMBOLDT	2021	461.3	2.005	1.415	230.0
HUMBOLDT	2022	469.2	2.497	1.329	187.9
HUMBOLDT	2023	610.8	2.729	1.636	223.8
5-Year Average	19-23 Avg	401.5	2.037	1.482	197.1
HUMBOLDT	2024	711.7	3.271	1.706	217.6
	%Difference	77.3%	60.6%	15.1%	10.4%

Humboldt Division AIDI Performance

Humboldt Division's 2024 AIDI performance of 711.7 was 310.2 customer-minutes (or 77.3%) higher than the previous 5-year average of 401.5 as shown in the table above and illustrated in the figure below.

Chart 21 – Humboldt Division AIDI Performance



The higher-than-average 2024 Humboldt Division AIDI was attributed to the following:

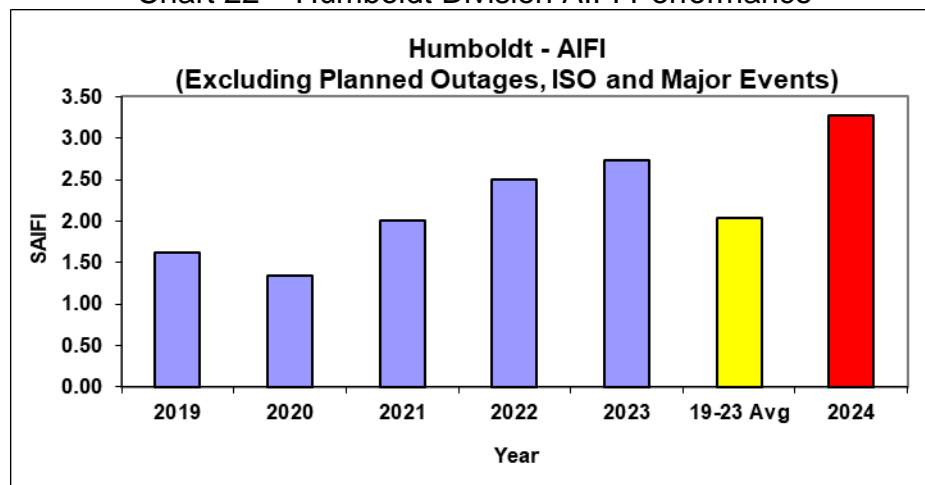
1. EPSS installed on the distribution line equipment contributed 196.3 customer minutes to the division's AIDI performance.
2. On November 13th, as a result of a tree falling into the Maple Creek – Hoopa 60 kV transmission line, the source to three substations (Russ Ranch, Willow Creek and Hoopa) was lost. This event caused a sustained outage to 4,451 customers and contributed 25.3 customer-minutes to the system's AIDI performance.
3. On June 18th, DCD settings related recloser level outage occurred due to an unknown cause on the Lucerne 1106 feeder. This event affected 2,170 customers and contributed 9.5 customer-minutes to the division's AIDI.
4. On April 27th, a bird got into the high side bushings of the Lucerne substation transformer bank #2 causing two of the three transformer high side fuses to blow. This single phasing condition destroyed the Lucerne 1106 feeder breaker. While evaluating the damage, the crew heard a loud buzzing sound coming from Transformer Bank #2. Therefore, the Cortina-Mendocino 115 kV

- transmission line was de-energized to clear both transformer banks at Lucerne substation. This outage affected 5,462 customers and contributed 8.6 customer-minutes to the division's AIDI.
5. On October 12th, a section of a deteriorated conductor failed and fell to the ground causing a recloser level outage on the Garberville 1102 feeder. This event affected 829 customers and contributed 8.5 customer-minutes to the division's AIDI.
 6. On January 31st, a tree fell into our lines and brought the conductor down causing a recloser level outage on the Hoopa 1101 feeder. This outage contributed 8.5 customer-minutes to the division's AIDI.

Humboldt Division AIFI Performance

Humboldt Division's 2024 AIFI performance of 3.271 was 1.235 customer-interruptions (or 60.6%) higher than the previous 5-year average of 2.037 as shown in the table above and illustrated in the figure below.

Chart 22 – Humboldt Division AIFI Performance



The higher-than-average 2024 Humboldt Division AIFI was attributed to the following:

1. EPSS installed on the distribution line equipment contributed 0.076 customer-interruptions to the division's AIFI performance.
2. On September 8th, due to the Boyles Fire in the Clear Lake area, the Highlands substation was de-energized per request from Lake County Fire Department



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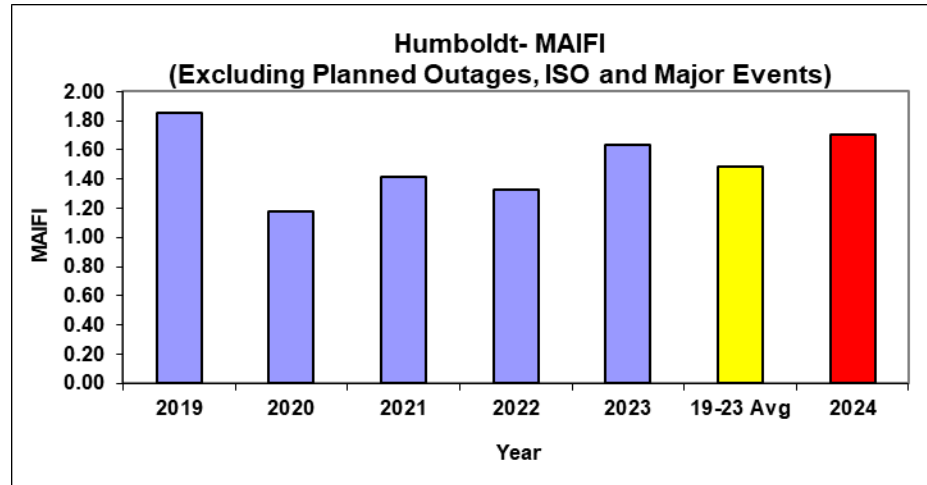
for safety reasons and the non-restorable outage affected 11,888 customers and contributed 0.077 customer-interruptions to the division's AIFI performance.

3. On February 29th, arcing at the Hoopa 1101 breaker disconnect required the breaker 1101 to be forced open. This event affected 6,518 customers and contributed 0.042 customer-interruptions to the division's AIFI performance.
4. On April 27th, a bird got into the high side bushings of the Lucerne substation transformer bank #2 causing two of the three transformer high side fuses to blow. This single phasing condition destroyed the Lucerne 1106 feeder breaker. While evaluating the damage, the crew heard a loud buzzing sound coming from Transformer Bank #2. Therefore, the Cortina-Mendocino 115 kV transmission line was de-energized to clear both transformer banks at Lucerne substation. This event affected 5,462 customers and contributed 0.035 customer-interruptions to the division's AIFI performance.
5. On November 13th, as a result of a tree falling into the Maple Creek – Hoopa 60 kV transmission line, the source to three substations (Russ Ranch, Willow Creek and Hoopa) was lost. This event caused a sustained outage to 4,451 customers and contributed 0.029 customer-interruptions to the division's AIFI performance.
6. On November 19th, equipment failure resulted in an open circuit condition on the Humboldt Bay 1102 feeder. This outage affected 4,269 customers and contributed 0.028 customer-interruptions to the division's AIFI performance.

Humboldt Division MAIFI Performance

Humboldt Division's 2024 MAIFI performance of 1.706 was 0.224 customer-interruptions (or 15.1%) higher than the previous 5-year average of 1.482 as shown in the table above and illustrated in the figure below.

Chart 23 – Humboldt Division MAIFI Performance



The higher-than-average 2024 Humboldt Division MAIFI was attributed to momentary outages as follows:

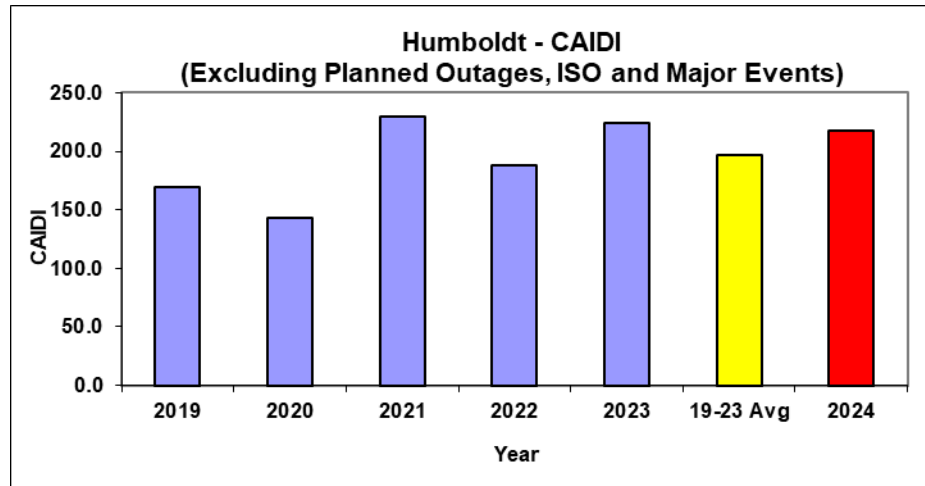
1. A momentary outage on the Transmission line serving Highlands substation due to fire in the area caused a momentary outage on July 20th. This outage affected 9,056 customers and contributed 0.058 customer-interruptions to the division's MAIFI performance.
2. Newburg substation needed to be forced out momentarily on March 11th in order to clear a broken substation regulator (LTC) on Transformer Bank #2. This outage affected 6,465 customers and contributed 0.042 customer-interruptions to the division's MAIFI performance.
3. A momentary outage on the Transmission line serving Lucerne substation due to fire in the area caused a momentary outage on July 20th. This outage affected 5,464 customers and contributed 0.035 customer-interruptions to the division's MAIFI performance.
4. A momentary outage occurred due to an unknown cause on the Harris 1108 breaker on July 30th affecting 5,063 customers. This outage affected 5,063 customers and contributed 0.033 customer-interruptions to the division's MAIFI performance.
5. A momentary outage occurred due to an unknown cause on the Harris 1109 breaker on April 30th, affecting 5,063 customers. This outage affected 4,060 customers and contributed 0.026 customer-interruptions to the division's MAIFI performance.

6. The EPSS and DCD settings installed on the distribution line equipment contributed 0.026 customer-interruptions to the division's MAIFI performance.

Humboldt Division CAIDI Performance

Humboldt Division's 2024 CAIDI performance of 217.6 was 20.5 minutes (or 10.4%) higher than the previous 5-year average of 197.1 as shown in the table above and illustrated in the figure below.

Chart 24 – Humboldt Division CAIDI Performance



The higher-than-average 2024 Humboldt Division CAIDI was attributed to the following:

1. On November 13th, as a result of a tree falling into the Maple Creek – Hoopa 60 kV transmission line, the source to three substations (Russ Ranch, Willow Creek and Hoopa) was lost. This outage contributed 883.2 customer-minutes to the division's CAIDI performance.
2. On June 18th, DCD settings related to recloser level outage occurred due to an unknown cause on the Lucerne 1106 feeder. This outage contributed 680.8 customer-minutes to the division's CAIDI performance.
3. On April 27th, a bird got into the high side bushings of the Lucerne substation transformer bank #2 causing two of the three transformer high side fuses to blow. This single phasing condition destroyed Lucerne 1106 feeder breaker. While evaluating the damage, the crew heard a loud buzzing sound coming from transformer bank #2. Therefore, the Cortina-Mendocino 115 kV



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- transmission line was de-energized to clear both transformer banks at Lucerne substation. This outage contributed 244.7 customer-minutes to the division's CAIDI performance.
4. On October 12th, a section of deteriorated overhead conductor broke and fell on the ground causing a recloser level outage. This outage contributed 1594.8 customer-minutes to the division's CAIDI performance.
 5. On January 31st, a tree fell into our distribution line and broke a section of our overhead distribution line causing a recloser level outage. This outage contributed 1949.9 customer-minutes to the division's CAIDI performance.
 6. Wildfire mitigation work contributed the highest of 1253.1 customer-minutes to the division's CAIDI performance.
 7. The EPSS and DCD settings installed on the distribution line equipment contributed 188.2 customer-minutes to the division's CAIDI performance.

8. Kern Division Performance Assessment

Kern Division Performance

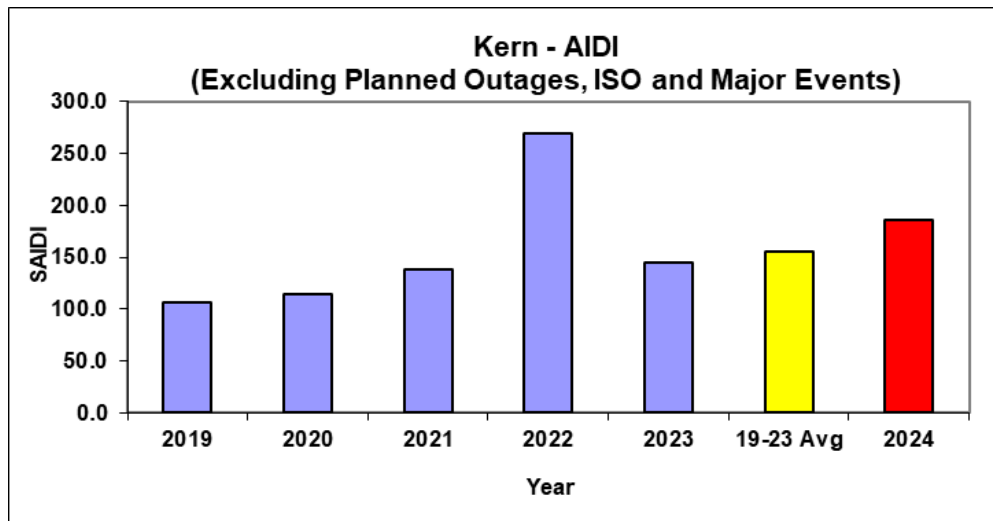
Table 15: Kern Division Performance

Division/System	Year	AIDI	AIFI	MAIFI	CAIDI
KERN	2019	106.6	1.101	1.743	96.8
KERN	2020	114.6	1.060	1.831	108.1
KERN	2021	138.4	1.101	1.503	125.7
KERN	2022	269.4	1.461	1.209	184.4
KERN	2023	145.2	1.195	1.794	121.5
5-Year Average	19-23 Avg	154.8	1.184	1.616	130.8
KERN	2024	186.0	1.298	1.698	143.3
	%Difference	20.1%	9.7%	5.1%	9.5%

Kern Division AIDI Performance

Kern Division's 2024 AIDI performance of 186.0 was 31.1 customer-minutes (or 20.1%) higher than the previous 5-year average of 154.8 as shown in the table above and illustrated below.

Chart 25 – Kern Division AIDI Performance



The higher-than-average 2024 Kern Division AIDI was attributed to the following:

1. EPSS installed on the distribution line equipment contributed 5.3 customer minutes to the division's AIDI performance.
2. On July 21st, a substation equipment failure in the Westpark substation caused a loss of power to the substation. This outage affected 26,254 customers and contributed 11.0 customer-minutes to the division's AIDI.
3. On November 17th, a failed substation relay caused loss of power to the Weedpatch substation. This outage affected 6,493 customers and contributed 5.2 customer-minutes to the division's AIDI.
4. On November 11th, as a result of strong winds, a broken wood pole on the distribution line caused a recloser level outage on the Bakersfield 2109 feeder. This outage affected 3,845 customers and contributed 5.1 customer-minutes to the division's AIDI.
5. On June 26th, a failed underground splice on the distribution line caused a breaker level outage on the Stockdale 2109 feeder. This outage affected 3,786

customers and contributed 4.9 customer-minutes to the division's AIDI.

6. On April 27th, a substation equipment failure in the Kern Power substation caused a loss of power to the substation. This outage affected 4,707 customers and contributed 3.8 customer-minutes to the division's AIDI.

9. Los Padres Division Performance Assessment

Los Padres Division Performance

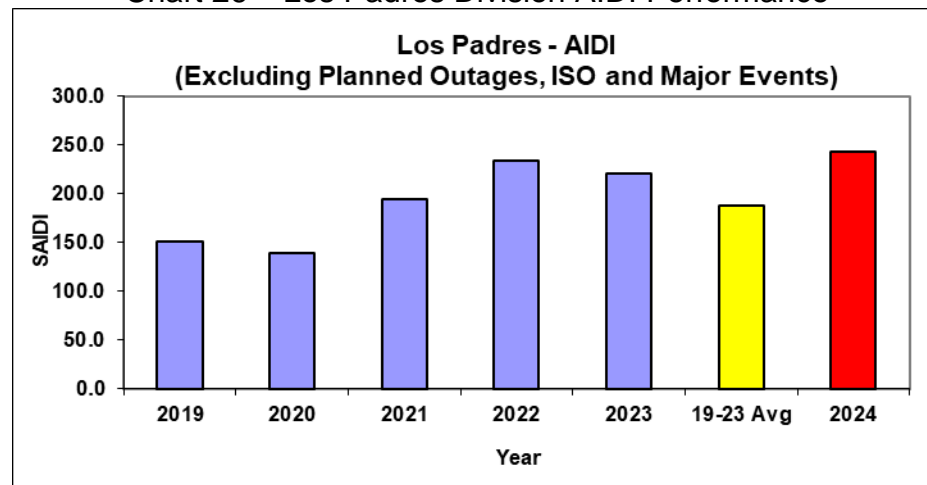
Table 16: Los Padres Division Performance

Division/System	Year	AIDI	AIFI	MAIFI	CAIDI
LOS PADRES	2019	150.7	1.188	0.798	126.8
LOS PADRES	2020	139.3	1.141	0.836	122.1
LOS PADRES	2021	195.0	1.125	1.314	173.4
LOS PADRES	2022	233.3	1.824	0.870	128.0
LOS PADRES	2023	221.1	1.831	1.176	120.7
5-Year Average	19-23 Avg	187.9	1.422	0.999	132.1
LOS PADRES	2024	242.6	2.208	1.005	109.9
	%Difference	29.1%	55.3%	0.6%	-16.8%

Los Padres Division AIDI Performance

Los Padres Division's 2024 AIDI performance of 242.6 was 54.7 customer-minutes (or 29.1%) higher than the previous 5-year average of 187.9 as shown in the table above and illustrated in the figure below.

Chart 26 – Los Padres Division AIDI Performance





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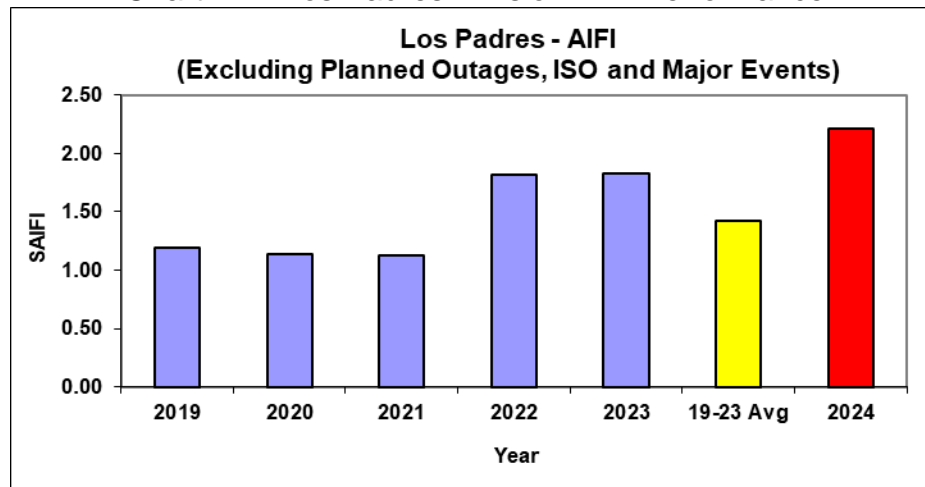
The higher-than-average 2024 Los Padres Division AIDI was attributed to the following:

1. EPSS and DCD settings installed on the distribution line equipment contributed 127.2 customer minutes to the division's AIDI performance.
2. On July 16th, Oceano substation lost power when the 115kV transmission line feeding the Oceano substation relayed due to a bird strike, and as a result the substation lost power. This event affected 28,153 customers and contributed 11.3 customer-minutes to the division's AIDI.
3. On June 12th, an overhead distribution jumper burned and caused an open circuit condition on the Cayucos 1101 feeder causing a recloser level outage. This outage affected 5,033 customers and contributed 6.2 customer-minutes to the division's AIDI.
4. On June 30th, a burnt potential transformer at line recloser V86 caused a breaker level outage on the Morro Bay 1102 feeder while in EPSS settings at the breaker. This outage affected 6,758 customers and contributed 5.0 customer-minutes to the division's AIDI.
5. On August 20th, because of a forest fire, the San Luis Obispo 1101 feeder tripped on EPSS settings. This outage affected 3,609 customers and contributed 4.7 customer-minutes to the division's AIDI.
6. On Jan 13th, an overhead wire down condition occurred due to a failed splice which resulted in a multifunctional device level outage on the Perry 1101 feeder. This outage affected 2,992 customers and contributed 3.7 customer-minutes to the division's AIDI.

Los Padres Division AIFI Performance

Los Padres Division's 2024 AIFI performance of 2.202 was 0.786 customer-interruptions (or 55.3%) higher than the previous 5-year average of 1.422 as shown in the table above and illustrated in the figure below.

Chart 27 – Los Padres Division AIFI Performance



The higher-than-average 2024 AIFI performance is due the following outage events:

1. EPSS and DCD settings installed on the distribution line equipment contributed 1.148 customer-interruptions to the division's AIFI.
2. On July 16th, Oceano substation lost power when the 115kV transmission line feeding the Oceano substation relayed due to a bird strike and as a result the substation lost power. This event affected 28,153 customers and contributed 0.130 customer-interruptions to the division's AIFI.
3. On June 30th, a burnt potential transformer at line recloser V86 caused a breaker level outage on the Morro Bay 1102 feeder while in EPSS settings at the breaker. This outage affected 6,758 customers and contributed 0.031 customer-interruptions to the division's AIFI.
4. On September 20th, lightning strikes in the area caused service transformers to fail that resulted in recloser level outages on the Templeton 2113 triggered by the EPSS settings. This outage affected 6,283 customers and contributed 0.029 customer-interruptions to the division's AIFI.
5. On September 24th, a recloser level outage occurred on the Goldtree 1108

feeder due to an arcing overhead switch. This outage affected 5,852 customers and contributed 0.027 customer-minutes to the division's AIDI.

6. On June 26th, a third-party vehicle broke our wood pole and caused a breaker level outage on the Oceano 1106 feeder and contributed 0.026 customer-minutes to the division's AIDI.

10. Mission Division Performance Assessment

Mission Division Performance

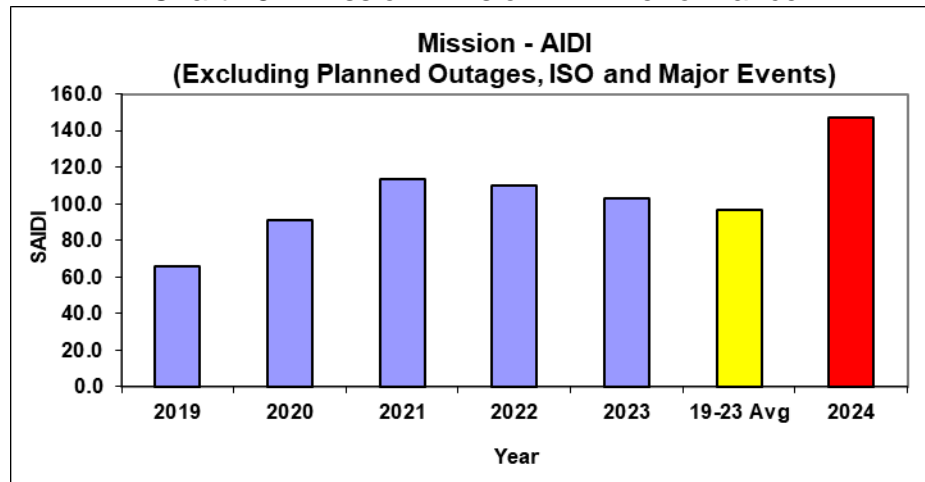
Table 17: Mission Division Performance

Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
MISSION	2019	65.8	0.669	0.693	98.4
MISSION	2020	91.1	0.766	1.060	119.0
MISSION	2021	113.5	0.957	0.913	118.6
MISSION	2022	109.9	0.784	0.879	140.2
MISSION	2023	102.8	0.787	0.796	130.6
5-Year Average	18-22 Avg	96.6	0.793	0.868	121.9
MISSION	2024	147.4	1.200	1.012	122.9
	%Difference	52.5%	51.4%	16.6%	0.8%

Mission Division AIDI Performance

Mission Division's 2024 AIDI performance of 147.4 was 50.8 customer-minutes (or 52.5%) higher than the previous 5-year average of 96.6 as shown in the table above and illustrated in the figure below.

Chart 28 – Mission Division AIDI Performance





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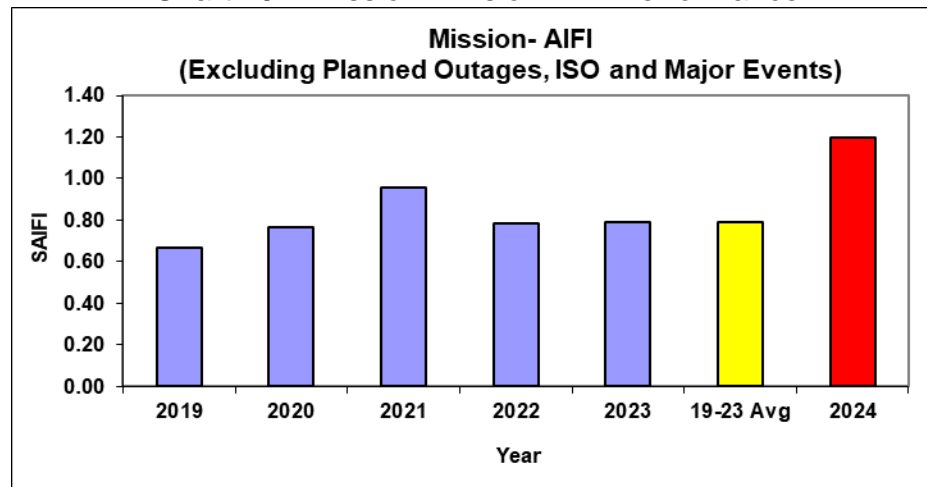
The higher-than-average 2024 Mission Division AIDI was attributed to the following:

1. EPSS and DCD settings installed on the distribution line equipment contributed 42.7 customer minutes to the division's AIDI performance.
2. On June 8th, a breaker level outage occurred due to an underground cable failure on the Las Positas 2110 feeder. This outage affected 4,580 customers and contributed 6.2 customer-minutes to the division's AIDI performance.
3. On July 1st, a burned jumper on our distribution overhead conductor resulted in a breaker level outage on the Vineyard 2108 feeder. This outage affected 4,085 customers and contributed 4.5 customer-minutes to the division's AIDI performance.
4. On July 2nd, a breaker level outage occurred due to an underground cable failure on the San Ramon 2108 feeder triggered by EPSS settings on the breaker. This outage affected 6,191 customers and contributed 4.1 customer-minutes to the division's AIDI.
5. On September 11th, an underground equipment failure caused a breaker level outage on the Fremont 1107 feeder. This outage affected 5,737 customers and contributed 3.3 customer-minutes to the division's AIDI.
6. On September 22nd, a tree branch fell on to our overhead distribution line and broke a splice causing a recloser level outage on the Las Positas 2106 feeder. This outage affected 9,959 customers and contributed 3.2 customer-minutes to the division's AIDI.
7. On November 6th, a wire down event on the overhead distribution line caused a breaker level outage on the San Leandro 1151 feeder. This outage affected 7,559 customers and contributed 3.1 customer-minutes to the division's AIDI.
8. On October 12th, a breaker level outage due to the EPSS settings occurred on the Vineyard 2110 feeder due to an unknown cause. This outage affected 6,917 customers and contributed 2.9 customer-minutes to the division's AIDI.

Mission Division AIFI Performance

Mission Division's 2024 AIFI performance of 1.200 was 0.407 customer-interruptions (or 51.4%) higher than the previous 5-year average of 0.793 as shown in the table above and illustrated in the figure below.

Chart 29 – Mission Division AIFI Performance



The higher-than-average 2024 Humboldt Division AIFI was attributed to the following:

1. EPSS installed on the distribution line equipment contributed 0.280 customer-interruptions to the division's AIFI performance.
2. On September 22nd, a tree branch fell onto the overhead distribution line and broke a splice causing a recloser level outage on the Las Positas 2106 feeder. This outage affected 9,959 customers and contributed 0.024 customer-interruptions to the division's AIFI performance.
3. On November 6th, a wire down event on the overhead distribution line caused a breaker level outage on the San Leandro 1151 feeder. This outage affected 7,559 customers and contributed 0.018 customer-interruptions to the division's AIFI performance.
4. On October 12th, a breaker level outage due to the EPSS settings occurred on the Vineyard 2110 feeder due to an unknown cause. This outage affected 6,917 customers and contributed 0.016 customer-interruptions to the division's AIFI performance.
5. On March 14th, during a routine switching inside the Mt. Eden substation to

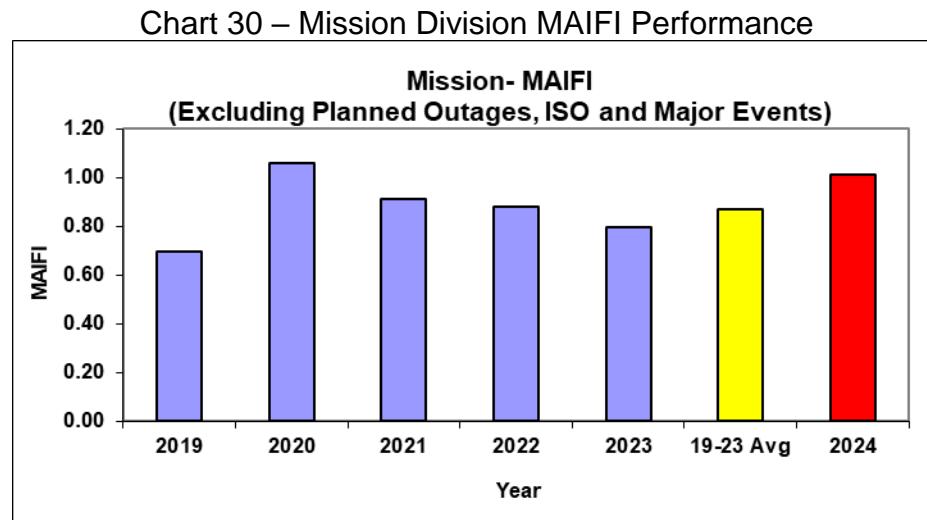


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- offload transformer bank #2, a bus tie breaker failed to separate the parallel between transformer bank #2 and 3, thereby requiring the substation to be forced out. This outage affected 14,165 customers and contributed 0.034 customer-interruptions to the division's AIFI performance.
6. On October 22nd, a broken cross arm on the Newark -2103 feeder caused an overhead source side switch to be manually opened causing a sustained outage to 11,072 customers. This outage contributed 0.026 customer-interruptions to the division's AIFI performance.
 7. On May 23rd, a breaker level outage occurred on the Dumbarton 1107 feeder due to a broken cross arm on the distribution line. This outage affected 7,313 contributed 0.017 customer-interruptions to the division's AIFI performance.

Mission Division MAIFI Performance

Mission Division's 2024 MAIFI performance of 1.012 was 0.144 customer-interruptions (or 16.6%) higher than the previous 5-year average of 0.868 as shown in the table above and illustrated in the figure below.



The higher-than-average 2024 Mission Division MAIFI was attributed to momentary outages as follows:

1. On March 14th, during a routine switching inside the Mt. Eden substation to offload transformer bank #2, a malfunctioning tie breaker caused a momentary



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on the source to Mt. Eden Substation. This momentary affected 20,362 customers and contributed 0.049 customer-interruptions to the division's MAIFI performance.

2. On October 29th, Mt. Eden 1109 feeder breaker relayed due to an unknown cause affecting 6,977 customers. This outage contributed 0.017 customer-interruptions to the division's MAIFI performance.
3. On October 16th, Vineyard 2105 feeder breaker relayed due to unknown cause affecting 6,207 customers. This outage contributed 0.015 customer-interruptions to the division's MAIFI performance.
4. On September 23rd, Grant 1108 feeder breaker relayed due to unknown cause affecting 6,032 customers. This outage contributed 0.014 customer-interruptions to the division's MAIFI performance.
5. On September 23rd, Grant 1108 feeder breaker relayed a second time due to another unknown cause affecting 6,028 customers. This outage contributed 0.014 customer-interruptions to the division's MAIFI performance.
6. On September 23rd, Grant 1108 feeder breaker relayed due to a 3rd party related car pole incident affecting 6,013 customers. This outage contributed 0.014 customer-interruptions to the division's MAIFI performance.
7. The EPSS and DCD settings installed on the distribution line equipment contributed 0.004 customer-interruptions to the division's MAIFI Performance.

11. North Bay Division Performance Assessment

North Bay Division Performance

Table 18: North Bay Division Performance

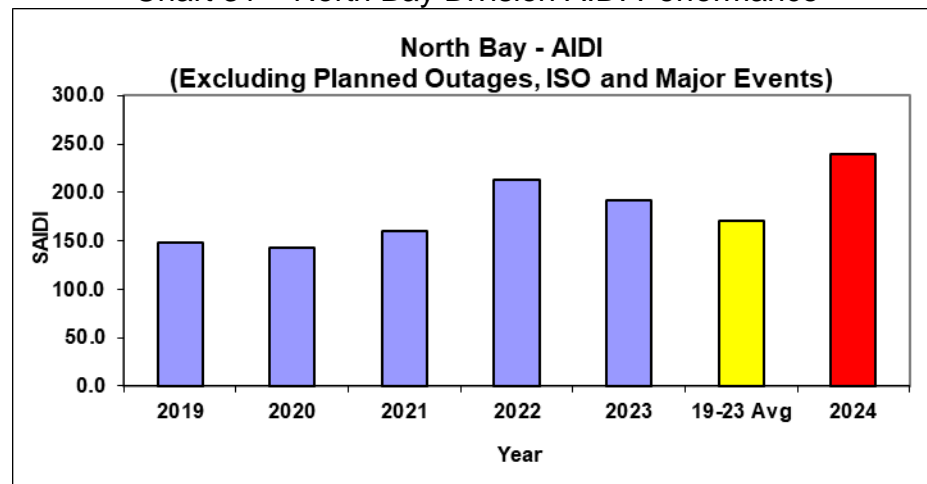
Division/System	Year	AIDI	AIFI	MAIFI	CAIDI
NORTH BAY	2019	148.2	1.312	1.647	112.9
NORTH BAY	2020	143.3	1.235	2.093	116.0
NORTH BAY	2021	160.0	1.063	1.551	150.5
NORTH BAY	2022	212.6	1.459	1.100	145.7
NORTH BAY	2023	191.6	1.291	0.951	148.5
5-Year Average	19-23 Avg	171.1	1.272	1.468	134.5
NORTH BAY	2024	239.5	1.856	1.056	129.0
	%Difference	39.9%	45.9%	-28.1%	-4.1%

North Bay Division AIDI Performance

North Bay Division's 2024 AIDI performance of 239.5 was 68.3 customer-minutes

(or 39.9%) higher than the previous 5-year average of 171.1 as shown in the table above and illustrated in the figure below.

Chart 31 – North Bay Division AIDI Performance



The higher-than-average 2024 North Bay Division AIDI was attributed to the following outage events:

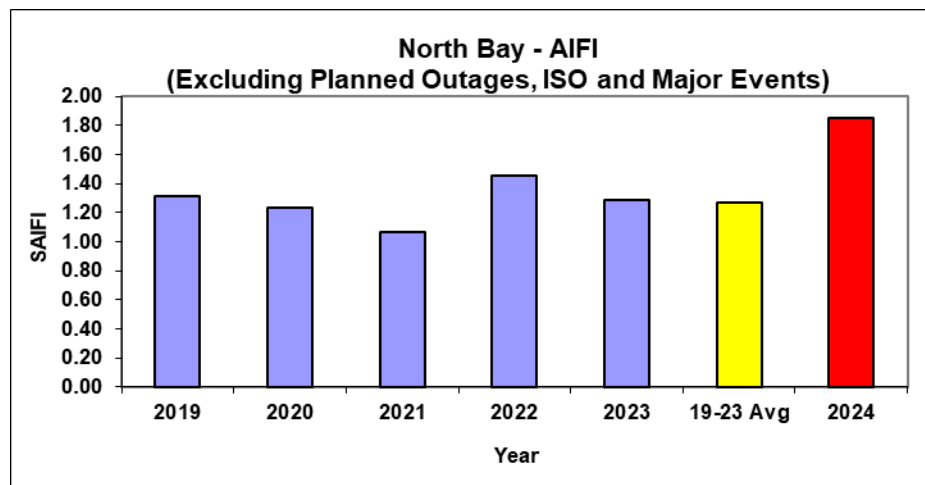
1. EPSS and DCD settings installed on the distribution line equipment contributed 70.6 customer minutes to the division's AIDI performance.
2. On February 8th, a burnt overhead splice on a section of distribution line caused a breaker level outage on the Peabody 2108 feeder. This outage affected 30,915 customers and contributed 25.7 customer-minutes to the division's AIDI performance.
3. On September 3rd, a car pole incident broke a distribution pole breaker level outage occurred on the Peabody 2105 feeder. This outage affected 9,330 customers and contributed 8.1 customer-minutes to the division's AIDI performance.
4. On March 2nd, a malfunctioning oil gauge on the Suisun substation Transformer Bank #2 caused the circuit switcher protecting the transformer bank #2 to trip causing a bank level sustained outage to 9,959 customers. This outage contributed 5.8 customer-minutes to the division's AIDI.
5. On November 1st, a pole fire incident caused a breaker level outage on the Grand Island 2226 feeder. This outage affected 4,517 customers and

- contributed 5.7 customer-minutes to the division's AIDI.
6. On July 2nd, a failed underground switch caused a breaker level outage on the Suisun 1102 feeder. This outage affected 3,774 customers and contributed 5.3 customer-minutes to the division's AIDI.
 7. On July 13th, a failed underground cable caused a breaker level outage on the Peabody 2112 feeder. This outage affected 10,845 customers and contributed 5.2 customer-minutes to the division's AIDI.

North Bay Division AIFI Performance

North Bay Division's 2024 AIFI performance of 1.856 was 0.584 minutes (or 45.9%) higher than the previous 5-year average of 1.272 as shown in the table above and illustrated in the figure below.

Chart 32 – North Bay Division AIFI Performance



The higher-than-average 2024 North Bay Division AIFI was attributed to the following:

1. EPSS and DCD settings installed on the distribution line equipment contributed 0.399 customer-interruptions to the division's AIFI performance.
2. On February 8th, a burnt overhead splice on a section of distribution line caused a breaker level outage on the Peabody 2108 feeder. This outage affected 30,915 customers and contributed 0.112 customer-interruptions to the division's AIFI.
3. On July 13th, a failed underground cable caused a breaker level outage on the



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Peabody 2112 feeder. This outage affected 10,845 customers and contributed 0.043 customer-interruptions to the division's AIFI.

4. On March 2nd, a malfunctioning oil gauge on the Suisun substation transformer bank #2 caused the circuit switcher protecting the transformer bank #2 to trip, causing a bank level sustained outage to 9,959 customers. This outage contributed 0.039 customer-interruptions to the division's AIFI.
5. On September 3rd, a car pole incident broke a distribution pole breaker level outage occurred on the Peabody 2105 feeder. This outage affected 9,330 customers and contributed 0.037 customer-interruptions to the division's AIFI.
6. On April 5th, Napa substation lost its source due to lightning related relay activity on the Tulucay – Napa 60 kV transmission line. This outage affected 20,024 customers and contributed 0.079 customer-interruptions to the division's AIFI performance.

12. North Valley Division Performance Assessment

North Valley Division Performance

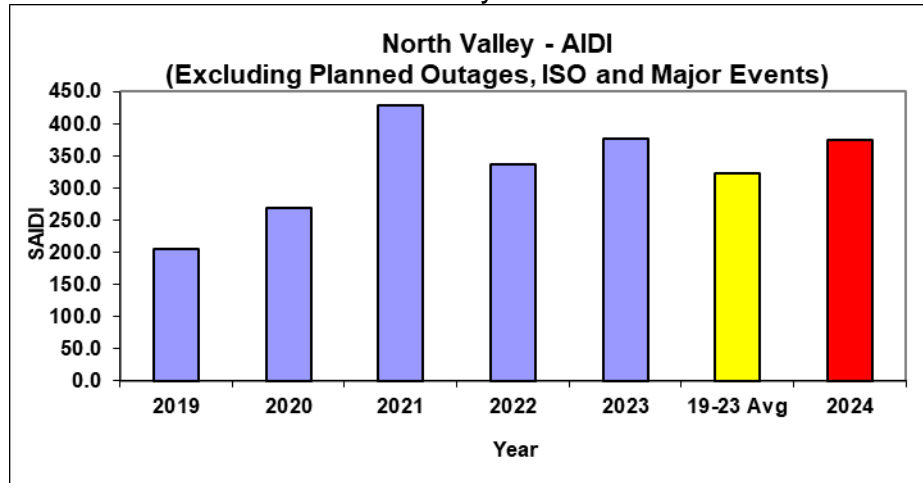
Table 19: North Valley Division Performance

Division/System	Year	AIDI	AIFI	MAIFI	CAIDI
NORTH VALLEY	2019	205.0	1.506	1.458	136.1
NORTH VALLEY	2020	269.0	1.546	1.369	174.0
NORTH VALLEY	2021	427.7	1.752	2.192	244.1
NORTH VALLEY	2022	337.6	2.178	1.206	155.0
NORTH VALLEY	2023	377.5	2.108	1.333	179.1
5-Year Average	19-23 Avg	323.4	1.818	1.512	177.9
NORTH VALLEY	2024	374.8	2.053	1.147	182.6
	%Difference	15.9%	12.9%	-24.1%	2.6%

North Valley Division AIDI Performance

North Valley Division's 2024 AIDI performance of 374.8 was 51.5 customer-minutes (or 15.9%) higher than the previous 5-year average of 323.4 as shown in the table above and illustrated in the figure below.

Chart 33 – North Valley Division AIDI Performance



The higher-than-average 2024 North Valley Division AIDI was attributed to the following outage events:

1. EPSS and DCD settings installed on the distribution line equipment contributed 119.5 customer minutes to the division's AIDI performance.
2. On July 2nd, six substations - Hamilton Branch, Grays Flat, East Quincy, Big Meadows, Gansner and Chester lost power due to an outage on the Table Mtn – Caribou 230KV transmission line. Smoke from the Thompson Fire caused this transmission line outage affecting 10,814 customers. This outage contributed 20.6 customer-minutes to the division's AIDI performance.
3. On November 6th, a Public Safety Power Shutoff (PSPS) activity took place in six recloser zones served from the Corning 1101 feeder. This outage affected 913 customers and contributed 7.6 customer-minutes to the division's AIDI performance.
4. On August 24th, the Colgate-Challenge 60 kV transmission line relayed due to an unknown cause and therefore the source to the Challenge substation was lost. This outage contributed 6.3 customer-minutes to the division's AIDI.
5. On April 26th, six substations - Hamilton Branch, Grays Flat, East Quincy, Big Meadows, Gansner and Chester lost power due to an unknown cause outage on the Table Mtn – Caribou 230KV transmission line. This outage affected 10,746 customers and contributed 5.8 customer-minutes to the division's AIDI performance.



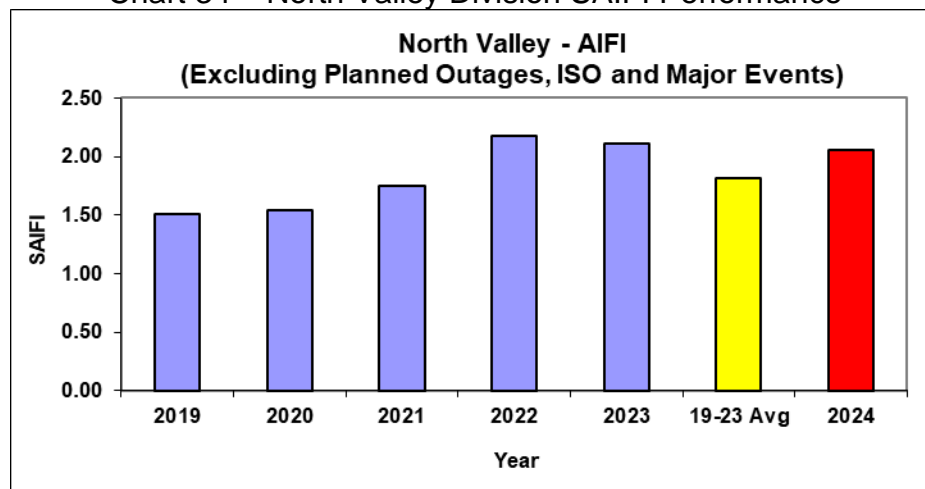
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6. On November 9th, a 3rd party flying a kite caused a recloser on the Cottonwood 1101 feeder to trip on EPSS settings. This outage affected 946 customers and contributed 5.1 customer-minutes to the division's AIDI performance.
7. On October 26th, a 3rd party vehicle hit our transmission pole carrying the Glenn #1 60 kV line with distribution underbuilt and broke our distribution wire that resulted in a caused a wire down condition. This event caused a recloser level outage on the Orland B 1103 feeder and a substation level outage at two substations – Willows A and Elk Creek substations. This outage affected 4,150 customers and contributed 5.0 customer-minutes to the division's AIDI performance.

North Valley Division AIFI Performance

North Valley Division's 2024 AIFI performance of 2.053 was 0.235 customer-interruptions (or 12.9%) higher than the previous 5-year average of 1.818 as shown in the table above and illustrated in the figure below.

Chart 34 – North Valley Division SAIFI Performance



The higher-than-average 2024 North Valley Division AIFI was attributed to the following:

1. EPSS and DCD settings installed on the distribution line equipment contributed 0.640 customer-interruptions to the division's AIFI.
2. On July 2nd, six substations - Hamilton Branch, Grays Flat, East Quincy, Big Meadows, Gansner and Chester lost power due to an outage on the



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Table Mtn – Caribou 230KV transmission line. Smoke from the Thompson fire caused this transmission line outage affecting 10,814 customers. This outage contributed 0.051 customer-interruptions to the division's AIFI.

3. On April 26th, six substations - Hamilton Branch, Grays Flat, East Quincy, Big Meadows, Gansner and Chester lost power due to an unknown cause outage on the Table Mtn – Caribou 230KV transmission line. This outage affected 10,746 customers and contributed 0.051 customer-interruptions to the division's AIFI.
4. On October 26th, a 3rd party vehicle hit our transmission pole carrying Glenn #1 60 kV line with distribution underbuilt and broke our distribution wire that resulted in a wire down condition. This event caused a recloser level outage on the Orland B 1103 feeder and a substation level outage at two substations – Willows A and Elk Creek substations. This outage affected 4,150 customers and contributed 0.020 customer-interruptions to the division's AIFI.
5. On February 2nd, six substations - Hamilton Branch, Grays Flat, East Quincy, Big Meadows, Gansner and Chester lost power due to an outage on the Table Mtn – Caribou 230KV transmission line. Lightning in the area caused this transmission line outage affecting 10,710 customers. This outage contributed 0.050 customer-interruptions to the division's AIFI.
6. On November 21st, a relay failure in the Chico A substation caused a loss of power condition to the Chico A substation. This outage affected 5,489 customers and contributed 0.026 customer-interruptions to the division's AIFI.
7. On February 7th, a tree branch fell into the distribution lines and burnt a fuse holder causing a breaker level outage on the Nord 1103 feeder. This outage affected 4,557 customers and contributed 0.021 customer-interruptions to the division's AIFI.
8. On August 29th, a fire was accidentally started by a vagrant that caused a breaker level outage on the Oroville 1101 feeder. This outage affected 4,508 customers and contributed 0.021 customer-interruptions to the division's AIFI.

13. Peninsula Division Performance Assessment

Peninsula Division Performance

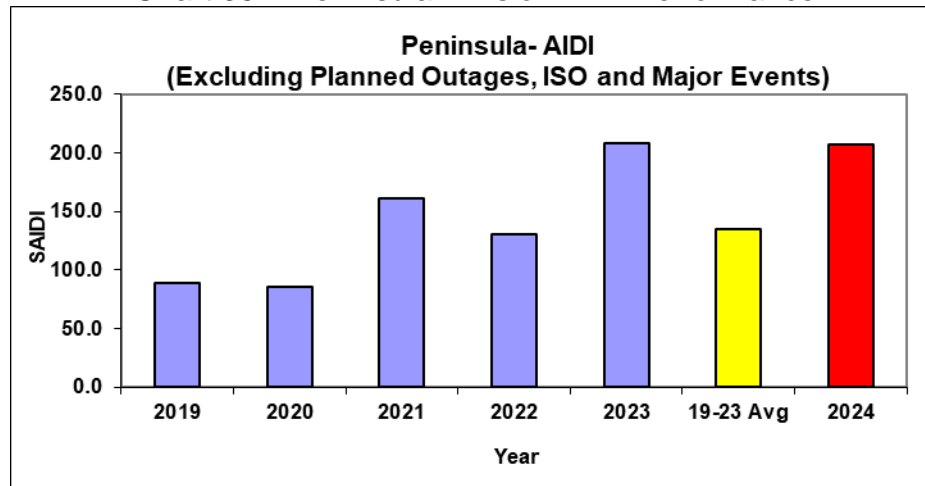
Table 20: Peninsula Division Performance

Division/System	Year	AIDI	AIFI	MAIFI	CAIDI
PENINSULA	2019	88.5	0.816	0.983	108.4
PENINSULA	2020	85.5	0.855	1.042	100.0
PENINSULA	2021	161.2	1.068	0.944	150.9
PENINSULA	2022	129.9	1.005	1.351	129.2
PENINSULA	2023	207.9	1.269	1.366	163.7
5-Year Average	19-23 Avg	134.6	1.003	1.137	134.2
PENINSULA	2024	206.7	1.529	0.706	135.2
	%Difference	53.6%	52.5%	-37.9%	0.7%

Peninsula Division AIDI Performance

Peninsula Division's 2024 AIDI performance of 206.7 was 72.1 customer-minutes (or 53.6%) higher than the previous 5-year average of 134.6 as shown in the table above and illustrated in the figure below.

Chart 35 – Peninsula Division AIDI Performance



The higher-than-average 2024 Peninsula Division AIDI was attributed to the following:

1. EPSS and DCD settings installed on the distribution line equipment contributed 54.8 customer minutes to the division's AIDI performance.
2. On October 8th, a burnt jumper on the Sneath Lane – Half Moon Bay 60 kV transmission line caused a transmission level outage due to EPSS settings, to



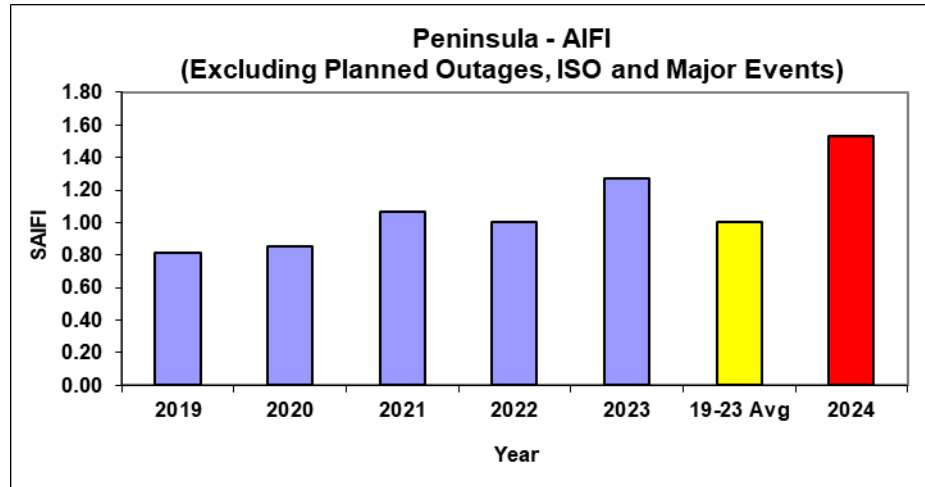
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- the Pacifica substation. This event affected 10,058 customers and contributed 15.0 customer-minutes to the division's AIDI performance.
3. On January 3rd, a tree branch fell into the Half Moon Bay 1102 distribution line causing a wire down event and an open circuit condition. This event affected 3,271 customers and contributed 5.1 customer-minutes to the division's AIDI performance.
 4. On February 22nd, a broken wooden cross arm caused a breaker level outage on the Daly City 1109 feeder. This event affected 9,101 customers and contributed 4.8 customer-minutes to the division's AIDI performance.
 5. On April 2nd, a flashed splice on the overhead distribution line served from Belmont 1110 feeder caused a breaker level outage on the Belmont 1110 feeder. This event affected 9,205 customers and contributed 4.5 customer-minutes to the division's AIDI performance.
 6. On June 3rd, a burned jumper caused a recloser level outage on the Half Moon Bay 1103 feeder. This event affected 3,018 customers and contributed 4.4 customer-minutes to the division's AIDI performance.
 7. On October 5th, a transmission switch failure on the Jefferson – Stanford 60 kV line caused an outage to three distribution substations (Emerald Lake, Glenwood, Menlo) and caused a sustained outage to 20,746 customers. This event contributed 4.3 customer-minutes to the division's AIDI performance.
 8. On January 8th, a section of an underground cable failed due to deterioration and caused a breaker level outage on the Serramonte 1104 feeder. This event affected 8,740 customers and contributed 3.9 customer-minutes to the division's AIDI performance.

Peninsula Division AIFI Performance

Peninsula Division's 2024 AIFI performance of 1.529 was 0.526 customer-interruptions (or 52.5%) higher than the previous 5-year average of 1.003 as shown in the table above and illustrated in the figure below.

Chart 36 – Peninsula Division AIFI Performance



The higher-than-average 2024 Peninsula Division AIFI was attributed to the following:

1. EPSS installed on the distribution line equipment contributed 0.242 customer-interruptions to the division's AIFI performance.
2. On October 5th, a transmission switch failure on the Jefferson – Stanford 60 kV line caused an outage to three distribution substations (Emerald Lake, Glenwood, Menlo) and caused a sustained outage to 20,746 customers. This event contributed 0.066 customer-interruptions to the division's AIFI performance.
3. On October 8th, a burnt jumper on the Sneath Lane – Half Moon Bay 60 kV transmission line caused a transmission level outage due to EPSS settings, to the Pacifica substation. This event affected 10,058 customers and contributed 0.032 customer-interruptions to the division's AIFI performance.
4. On April 2nd, a flashed splice on the overhead distribution line served from Belmont 1110 feeder caused a breaker level outage on the Belmont 1110 feeder. This event affected 9,205 customers and contributed 0.029 customer-interruptions to the division's AIFI performance.
5. On February 22nd, a broken wooden cross arm caused a breaker level outage on the Daly City 1109 feeder. This event affected 9,101 customers and contributed 0.029 customer-interruptions to the division's AIFI performance.
6. On September 11th, a burnt open jumper during a planned outage caused a wire down condition on Sneath Lane 1102 feeder. There was an operating



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error that was involved in this outage as well. This outage affected 9,072 customers and contributed 0.029 customer-interruptions to the division's AIFI performance.

7. On January 8th, a section of an underground cable failed due to deterioration and caused a breaker level outage on the Serramonte 1104 feeder. This event affected 8,740 customers and contributed 0.028 customer-interruptions to the division's AIFI performance.
8. On November 22nd, a burnt jumper on an overhead section of the Daly City 1103 feeder caused an open circuit condition that resulted in an outage to 8,133 customers. This event contributed 0.026 customer-interruptions to the division's AIFI performance.

14. Sacramento Division Performance Assessment

Sacramento Division Performance

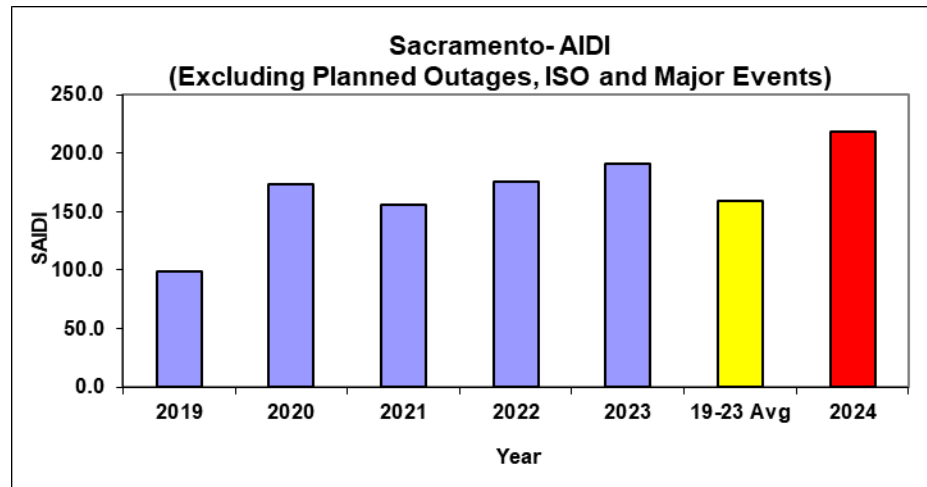
Table 21: Sacramento Division Performance

Division/System	Year	AIDI	AIFI	MAIFI	CAIDI
SACRAMENTO	2019	98.9	0.866	1.574	114.3
SACRAMENTO	2020	173.6	1.350	1.499	128.6
SACRAMENTO	2021	155.4	1.122	1.874	138.4
SACRAMENTO	2022	175.1	1.294	1.573	135.3
SACRAMENTO	2023	191.3	1.276	1.436	149.8
5-Year Average	19-23 Avg	158.9	1.182	1.591	134.4
SACRAMENTO	2024	218.5	1.342	1.407	162.8
	%Difference	37.5%	13.6%	-11.6%	21.1%

Sacramento Division AIDI Performance

Sacramento Division's 2024 AIDI performance of 218.5 was 59.6 customer-minutes (or 37.5%) higher than the previous 5-year average of 158.9 as shown in the table above and illustrated in the figure below.

Chart 37 – Sacramento Division AIDI Performance



The higher-than-average 2024 Sacramento Division AIDI was attributed to the following outage events:

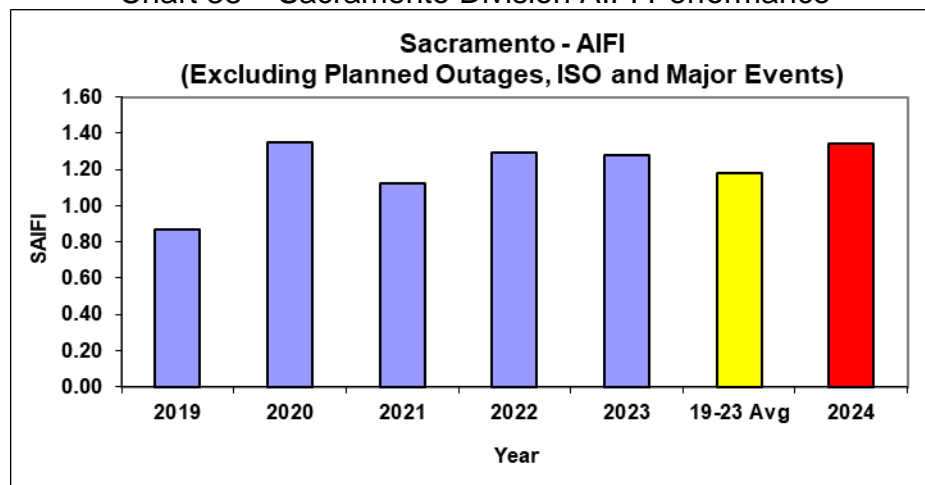
1. EPSS installed on the distribution line equipment contributed 8.0 customer minutes to the division's AIDI performance.
2. On July 11th, a 3rd party vehicle broke our distribution pole and caused a wire down situation that resulted in a breaker level outage on the West Sacramento 1110 feeder. This event affected 2,573 customers and contributed 3.3 customer-minutes to the division's AIDI performance.
3. On June 5th, a burnt open jumper on the Davis 1108 feeder caused a breaker level outage on the Davis 1108 feeder. This event affected 4,086 customers and contributed 2.9 customer-minutes to the division's AIDI performance.
4. On May 8th, a broken elbow in an underground section of the Woodland 1109 feeder caused a breaker level outage. This event affected 4,848 customers and contributed 2.3 customer-minutes to the division's SAIDI performance.
5. On July 24th, a 3rd party vehicle broke a pole carrying a switch and caused a breaker level outage on the West Sacramento 1107 feeder. This event affected 2,493 customers and contributed 2.1 customer-minutes to the division's AIDI performance.
6. On February 5th, a deteriorated wood pole broke and this resulted in a wire down condition and recloser level outage resulted on the Olivehurst 1103 feeder. This event affected 688 customers and contributed 2.0 customer-minutes to the division's AIDI performance.

7. On June 4th, an underground splice failure caused a breaker level outage on the Davis 1102 feeder. This event affected 3,378 customers and contributed 1.9 customer-minutes to the division's AIDI performance.

Sacramento Division AIFI Performance

Sacramento Division's 2024 AIFI performance of 1.342 was 0.160 customer-interruptions (or 13.6%) higher than the previous 5-year average of 1.182 as shown in the table above and illustrated in the figure below.

Chart 38 – Sacramento Division AIFI Performance



The higher-than-average 2024 Sacramento Division AIFI was attributed to the following:

1. EPSS installed on the distribution line equipment contributed 0.068 customer-interruptions to the division's AIFI performance.
2. On May 8th, a broken elbow in an underground section of the Woodland 1109 feeder caused a breaker level outage. This event affected 4,848 customers and contributed 0.015 customer-interruptions to the division's AIFI performance.
3. On June 5th, a burnt open jumper on the Davis 1108 feeder caused a breaker level outage on the Davis 1108 feeder. This event affected 4,086 customers and 0.013 customer-interruptions to the division's AIFI performance.
4. On February 18th, a low hanging single phase primary was touching the secondary in an overhead section and caused a breaker level outage on the

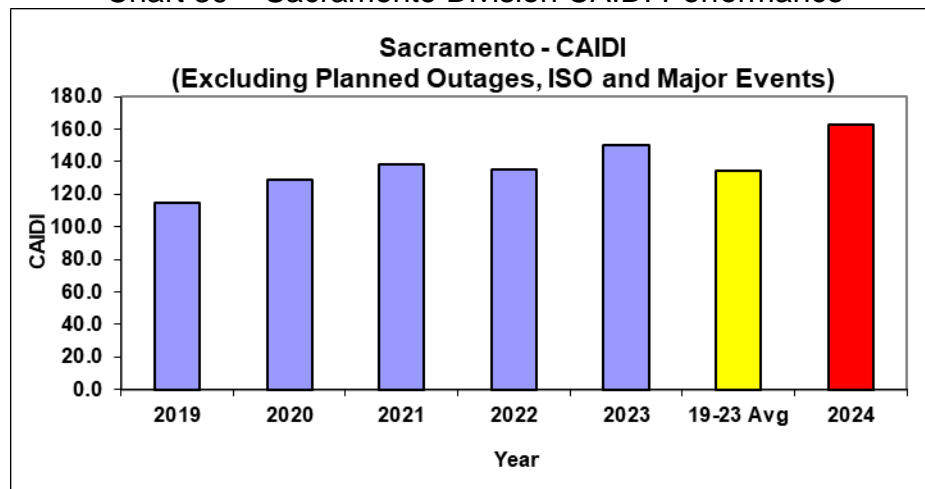
West Woodland 1109 feeder. This event affected 3,500 customers and contributed 0.011 customer-interruptions to the division's AIFI performance.

5. On January 28th, Wheatland substation lost power due to unknown reasons, which resulted in a sustained outage to 3,481 customers. This event contributed 0.011 customer-interruptions to the division's AIFI performance.

Sacramento Division CAIDI Performance

Sacramento Division's 2024 CAIDI performance of 162.8 was 28.4 minutes (or 21.1%) higher than the previous 5-year average of 134.4 as shown in the table above and illustrated in the figure below.

Chart 39 – Sacramento Division CAIDI Performance



The higher-than-average 2024 Sacramento Division CAIDI was attributed to the following:

1. EPSS and DCD settings installed on the distribution line equipment contributed 117.2 minutes to the division's CAIDI performance.
2. On June 5th, a burnt open jumper on the Davis 1108 feeder caused a breaker level outage on the Davis 1108 feeder. This event affected 4,086 customers and contributed 221.0 minutes to the division's CAIDI performance.
3. On June 4th, an underground splice failure caused a breaker level outage on the Davis 1102 feeder. This event affected 3,378 customers and contributed 178.0 minutes to the division's CAIDI performance.
4. On November 22nd, a 3rd party vehicle hit a wooden pole and caused a wire

down condition on the Deepwater 1107 feeder which resulted in a breaker level outage. This event affected 3,004 customers and contributed 152.0 minutes to the division's CAIDI performance.

5. On May 8th, a broken elbow in an underground section of the Woodland 1109 feeder caused a breaker level outage. This event affected 4,848 customers and contributed 147.5 minutes to the division's CAIDI performance.
6. On June 16th, a breaker level outage occurred on the West Sacramento 1108 feeder due to an unknown cause. This outage affected 2,998 customers and contributed 136.0 minutes to the division's CAIDI performance.

15. San Francisco Division Performance Assessment

San Francisco Division Performance

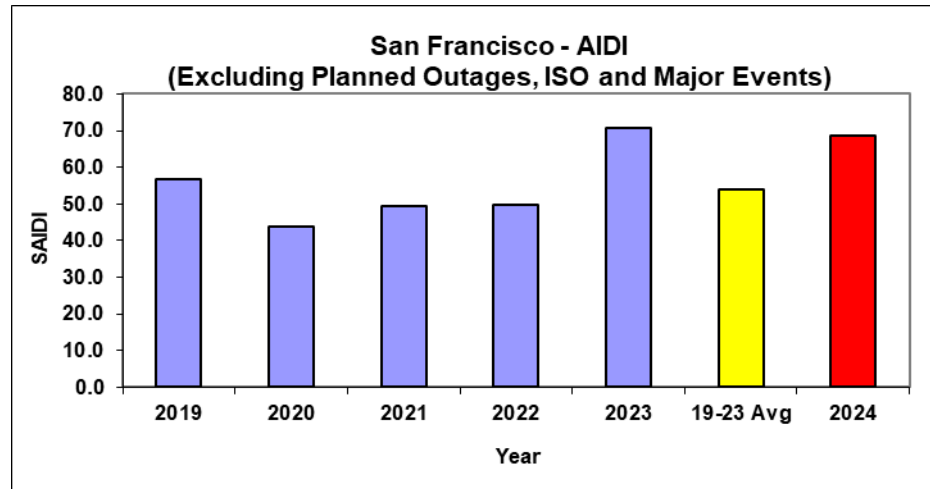
Table 22: San Francisco Division Performance

Division/System	Year	AIDI	AIFI	MAIFI	CAIDI
SAN FRANCISCO	2019	56.8	0.614	0.258	92.4
SAN FRANCISCO	2020	43.9	0.582	0.386	75.5
SAN FRANCISCO	2021	49.4	0.530	0.499	93.2
SAN FRANCISCO	2022	49.6	0.496	0.458	100.0
SAN FRANCISCO	2023	70.6	0.581	0.366	121.4
5-Year Average	19-23 Avg	54.1	0.561	0.394	96.4
SAN FRANCISCO	2024	68.8	0.601	0.209	114.5
	%Difference	27.3%	7.2%	-46.9%	18.8%

San Francisco Division AIDI Performance

San Francisco Division's 2024 AIDI performance of 68.8 was 14.7 customer-minutes (or 27.3%) higher than the previous 5-year average of 54.1 as shown in the table above and illustrated in the figure below.

Chart 40 – San Francisco Division AIDI Performance



The higher-than-average 2024 San Francisco Division AIDI was attributed to the following outage events:

1. On December 15th, a burned open tap caused a recloser level outage on the SF Martin – 1105 feeder causing a sustained outage to 4,546 customers. This event contributed 3.8 customer-minutes to the division's AIDI performance.
2. On March 26th, as a result of a fire in a manhole carrying the feeders SF Y-1107, SF Y-1120, as well as the feeder tie cables Marina-3 (FY-1) and Marina -4 (FY-2) in San Francisco, crew discovered damage to SF Y-1107, SF Y-1120, Marina-3 (FY-1) and Marina -4 (FY-2) underground cables and feeder ties. This event affected 11,943 customers and contributed 2.8 customer-minutes to the division's AIDI performance.
3. On September 26th, an underground splice failure caused a breaker level outage on the SF X-1118 feeder. This event affected 1,560 customers and contributed 2.6 customer-minutes to the division's AIDI performance.
4. On November 18th, there was a bank level outage at the SF P substation due to a malfunctioning relay that affected 14,379 customers. This event contributed 2.4 customer-minutes to the division's AIDI performance.
5. On January 25th, a distribution breaker level outage occurred on the SF X-1118 feeder due to an unknown cause. This event affected 8,897 customers and contributed 2.0 customer-minutes to the division's AIDI performance.
6. On February 21st, a 3rd party generator caused a cable failure that resulted in a sustained outage to 495 customers on the SF X-1153 (X-4 NW) feeder. This

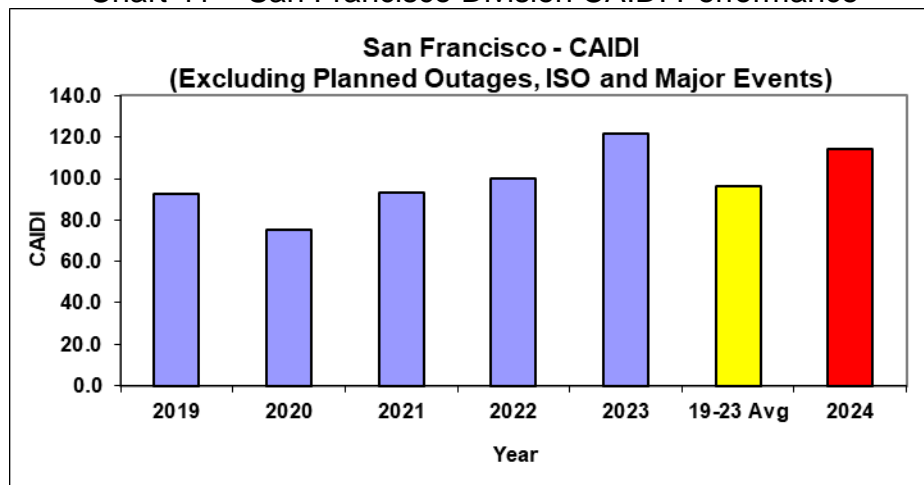
event affected 495 customers and contributed 1.9 customer-minutes to the division's AIDI performance.

7. On February 5th, a burnt open jumper caused an open circuit condition that resulted in an outage to 2,050 customers. This event affected 2,050 customers and contributed 1.6 customer-minutes to the division's AIDI performance.

San Francisco Division CAIDI Performance

San Francisco Division's 2024 CAIDI performance of 114.5 was 18.1 minutes (or 18.8%) higher than the previous 5-year average of 96.4 as shown in the table above and illustrated in the figure below.

Chart 41 – San Francisco Division CAIDI Performance



The higher-than-average 2024 San Francisco Division CAIDI was attributed to the following:

1. On February 21st, a 3rd party generator caused a cable failure that resulted in a sustained outage to 495 customers on the SF X-1153 (X-4 NW) feeder. This event contributed 1,590.0 minutes to the division's CAIDI performance.
2. On September 26th, an underground splice failure caused a breaker level outage on the SF X-1118 feeder. This event affected 1,560 customers and contributed 713.1 minutes to the division's CAIDI performance.
3. On March 9th, an underground cable failure caused an interrupter level failure on the SF L-0402 feeder. This outage affected 1,175 customers and contributed 541.2 minutes to the division's CAIDI performance.

4. On December 15th, a burned open tap caused a recloser level outage on the SF Martin – 1105 feeder causing a sustained outage to 4,546 customers. This event contributed 351.6 minutes to the division's CAIDI performance.
5. On February 5th, a burnt open jumper caused an open circuit condition that resulted in an outage to 2,050 customers. This event contributed 332.8 minutes to the division's CAIDI performance.
6. On March 26th, as a result of a fire in a manhole carrying the feeders SF Y-1107, SF Y-1120, as well as the feeder tie cables Marina-3 (FY-1) and Marina -4 (FY-2) in San Francisco, crew discovered damage to SF Y-1107, SF Y-1120, Marina-3 (FY-1) and Marina -4 (FY-2) underground cables and feeder ties. This event affected 11,943 customers and contributed 98.9 minutes to the division's CAIDI performance.

16. San Jose Division Performance Assessment

San Jose Division Performance

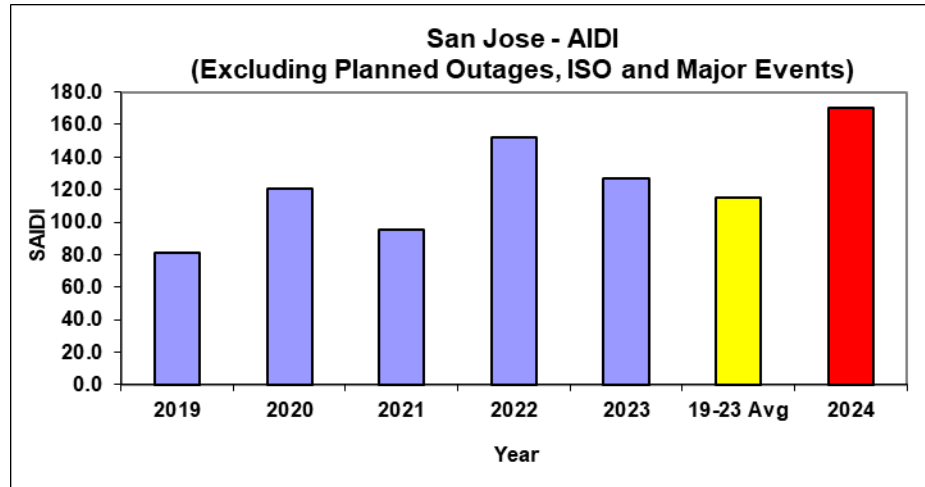
Table 23: San Jose Division Performance

Division/System	Year	AIDI	AIFI	MAIFI	CAIDI
SAN JOSE	2019	81.5	0.747	1.253	109.1
SAN JOSE	2020	120.9	0.906	1.274	133.5
SAN JOSE	2021	95.4	0.763	0.909	125.1
SAN JOSE	2022	152.2	1.150	1.180	132.4
SAN JOSE	2023	126.5	0.891	1.041	142.0
5-Year Average	19-23 Avg	115.3	0.891	1.131	129.4
SAN JOSE	2024	170.0	1.295	1.261	131.3
	%Difference	47.5%	45.3%	11.5%	1.5%

San Jose Division AIDI Performance

San Jose Division's 2024 AIDI performance of 170.0 was 54.7 customer-minutes (or 47.5%) higher than the previous 5-year average of 115.3 as shown in the table above and illustrated in the figure below.

Chart 42 – San Jose Division AIDI Performance



The higher-than-average 2024 San Jose Division AIDI was attributed to the following:

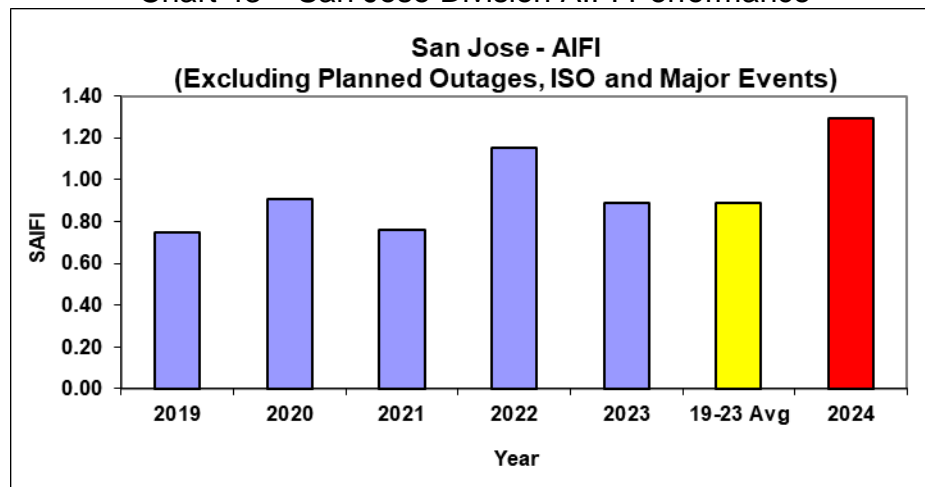
1. EPSS installed on the distribution line equipment that contributed 17.9 customer minutes to the division's AIDI performance.
2. On March 26th, a 3rd party vehicle broke an anchor on the Mc Kee 1107 feeder and caused a breaker level outage. This event affected 7,589 customers and contributed 4.7 customer minutes to the division's AIDI performance.
3. On July 11th, an overhead distribution equipment failure caused a breaker level outage on Morgan Hill 2104 feeder. This outage affected 7,181 customers and contributed 3.3 customer minutes to the division's AIDI performance.
4. On June 30th, an underground splice burnt and caused a breaker level outage on the San Ramon 2113 feeder. This outage affected 7,769 customers and contributed 3.1 customer minutes to the division's AIDI performance.
5. On February 5th, a deteriorated wooden pole broke and caused a breaker level outage on the Hicks 1112 feeder. This event affected 11,468 customers and contributed 3.1 customer minutes to the division's AIDI performance.
6. On August 19th, an underground cable failure caused a recloser level outage at the Evergreen 2105 feeder. This outage affected 6,958 customers and

- contributed 3.0 customer minutes to the division's AIDI performance.
7. On June 11th, an underground cable failure caused a breaker level outage on the Edenvale 2113 feeder. This outage affected 4,817 customers and contributed 2.9 customer minutes to the division's AIDI performance.
 8. On December 24th, a tree grew into our overhead wire and an overhead switch was forced out to make repairs on the Swift 2107 feeder. This outage affected 2,658 customers and contributed 2.8 customer minutes to the division's AIDI performance.
 9. On June 11th, a substation equipment failure at the Montague substation caused a Transformer Bank high side device to open causing an outage to 2,774 customers. This event contributed 2.3 customer minutes to the division's AIDI performance.
 10. On February 16th, underground equipment failed on the Edenvale 2113 feeder causing a breaker level outage. This outage affected 7,178 customers and contributed 2.2 customer minutes to the division's AIDI performance.

San Jose Division AIFI Performance

San Jose Division's 2024 AIFI performance of 1.295 was 0.404 customer-interruptions (or 45.3%) higher than the previous 5-year average of 0.891 as shown in the table above and illustrated in the figure below.

Chart 43 – San Jose Division AIFI Performance





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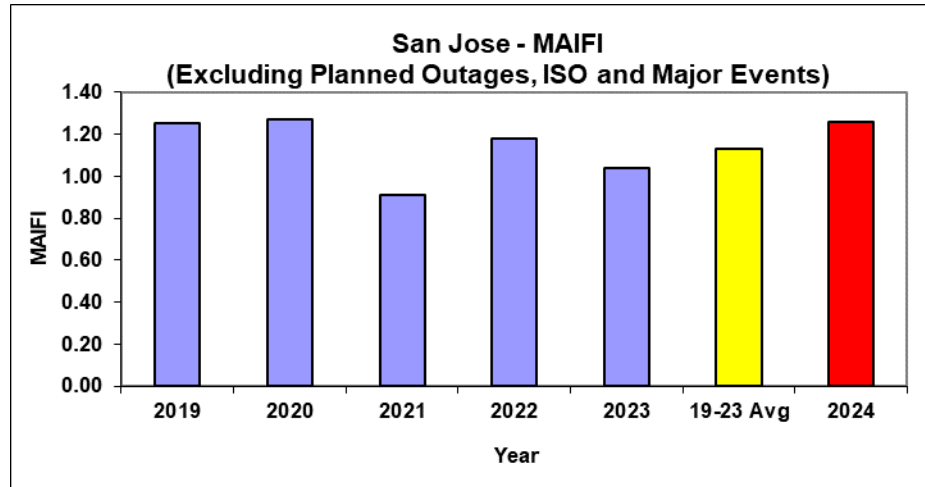
The higher-than-average 2024 San Jose Division AIFI was attributed to the following:

1. EPSS and DCD settings installed on the distribution line equipment contributed 0.125 customer-interruptions to the division's AIFI performance.
2. On February 5th, a deteriorated wooden pole broke and caused a breaker level outage on the Hicks 1112 feeder. This event affected 11,468 customers and contributed 0.026 customer-interruptions to the division's AIFI performance.
3. On October 31st, an overhead switch on Evergreen 2105 was forced out due to a palm tree growing into our line. This event affected 8,176 customers and contributed 0.018 customer-interruptions to the division's AIFI performance.
4. On June 30th, an underground splice burnt and caused a breaker level outage on the San Ramon 2113 feeder. This outage affected 7,769 customers and contributed 0.018 customer-interruptions to the division's AIFI performance.
5. On March 26th, a 3rd party vehicle broke an anchor on the Mc Kee 1107 feeder and caused a breaker level outage. This event affected 7,589 customers and contributed 0.017 customer-interruptions to the division's AIFI performance.
6. On July 11th, an overhead distribution equipment failure caused a breaker level outage on Morgan Hill 2104 feeder. This outage affected 7,181 customers and contributed 0.016 customer-interruptions to the division's AIFI performance.
7. On February 16th, underground equipment failed on the Edenvale 2113 feeder causing a breaker level outage. This outage affected 7,178 customers and contributed 0.016 customer-interruptions to the division's AIFI performance.

San Jose Division MAIFI Performance

San Jose Division's 2024 MAIFI performance of 1.261 was 0.130 customer-interruptions (or 11.5%) higher than the previous 5-year average of 1.131 as shown in the table above and illustrated in the figure below.

Chart 44 – San Jose Division MAIFI Performance



The higher-than-average 2024 San Jose Division MAIFI was attributed to momentary outages as follows:

1. A recloser on the Evergreen 2105 feeder tripped on January 30th due to an unknown reason. This outage contributed 0.016 customer-interruptions to the division's MAIFI performance.
2. A recloser on the Evergreen 2105 feeder tripped on January 31st due to an unknown cause. This outage contributed 0.016 customer-interruptions to the division's MAIFI performance.
3. Edenvale 2108 feeder breaker tripped on March 17th due to an unknown cause. This outage contributed 0.015 customer-interruptions to the division's MAIFI performance.
4. A car pole on the Llagas 2105 feeder caused the feeder breaker to trip momentarily on June 25th. This outage contributed 0.014 customer-interruptions to the division's MAIFI performance.
5. Edenvale 2106 feeder breaker tripped on May 31st due to an unknown cause. This outage contributed 0.014 customer-interruptions to the division's MAIFI performance.

17. Sierra Division Performance Assessment

Sierra Division Performance

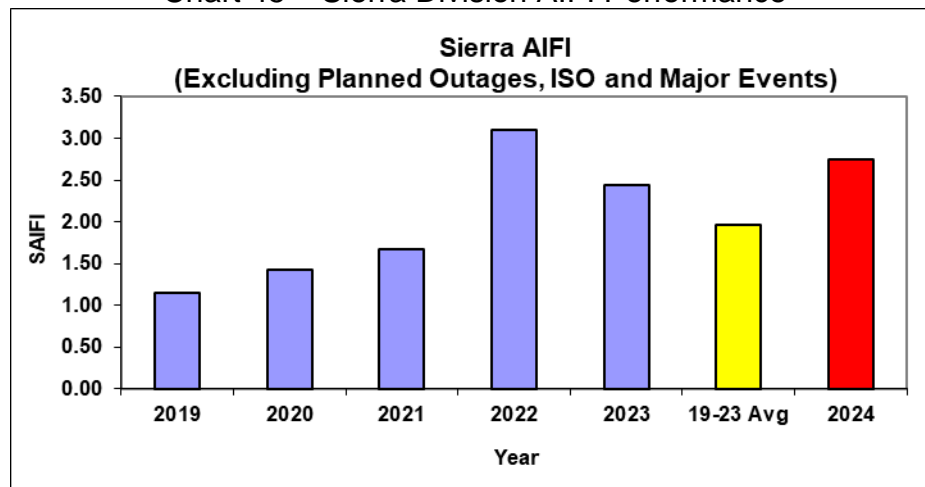
Table 24: Sierra Division Performance

Division/System	Year	AIDI	AIFI	MAIFI	CAIDI
SIERRA	2019	167.5	1.151	1.482	145.6
SIERRA	2020	208.0	1.422	1.169	146.2
SIERRA	2021	342.2	1.672	1.022	204.7
SIERRA	2022	529.6	3.101	1.018	170.8
SIERRA	2023	369.6	2.440	1.153	151.4
5-Year Average	19-23 Avg	323.4	1.957	1.169	165.2
SIERRA	2024	341.0	2.750	1.533	124.0
	%Difference	5.5%	40.5%	31.2%	-24.9%

Sierra Division AIFI Performance

Sierra Division's 2024 AIFI performance of 2.750 was 0.793 customer-interruptions (or 40.5%) higher than the previous 5-year average of 1.957 as shown in the table above and illustrated in the figure below.

Chart 45 – Sierra Division AIFI Performance



The higher-than-average 2024 Sierra Division AIFI was attributed to the following:

1. EPSS and DCD settings installed on the distribution line equipment contributed 1.320 customer-interruptions to the division's AIFI performance.
2. On January 1st, a bird got into the 60 kV bus at the Placer transmission substation relaying the 60 kV and de-energized the Placer-Del Mar 60 kV line as a result of which the Penryn substation lost power. This event affected 8,583 customers and contributed 0.036 customer-interruptions to the

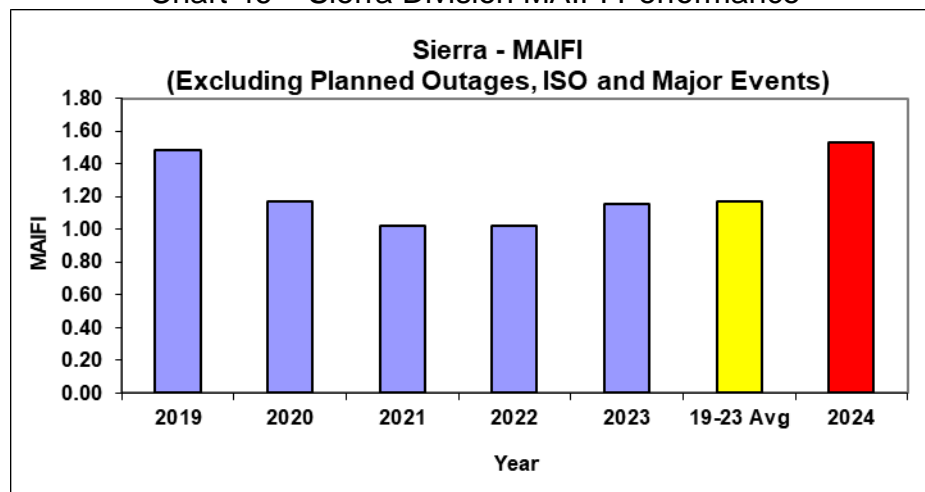
division's AIFI performance.

3. On February 5th, a malfunctioning circuit switcher at the Del Mar substation caused an outage to 8,145 customers and contributed 0.034 customer-minutes to the division's AIDI performance.
4. On June 30th, a failed underground equipment on the Clarksville 2105 feeder tripped the breaker due to the EPSS settings in it and caused an outage to 8,112 customers and contributed 0.034 customer-interruptions to the division's AIFI performance.
5. On December 8th, a company initiated planned work caused a breaker level EPSS outage on the Narrows 2102 feeder. This event contributed 0.017 customer-interruptions to the division's AIFI performance.
6. On October 1st, a breaker level EPSS outage occurred due to a piece of broken underground cable on the Shingle Springs 2108 feeder. This event affected 8,019 customers and contributed 0.034 customer-interruptions to the division's AIFI performance.

Sierra Division MAIFI Performance

Sierra Division's 2024 MAIFI performance of 1.533 was 0.364 customer-interruptions (or 31.2%) higher than the previous 5-year average of 1.169 as shown in the table above and illustrated in the figure below.

Chart 46 – Sierra Division MAIFI Performance



The higher-than-average 2024 Sierra Division MAIFI was attributed to momentary



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outages as follows:

1. Brunswick #1 115 kV transmission line relayed on May 4th twice, due to unknown causes. These two momentary outages affected a total of 18,025 customers and contributed 0.076 customer-interruptions to the division's MAIFI performance.
2. An electrician accidentally bumped into a relay at the Placer substation causing a momentary outage to the Penryn substation, on January 1st. This outage affected 8,583 customers and contributed 0.036 customer-interruptions to the division's MAIFI performance.
3. Apple Hill 2102 feeder breaker on November 22nd tripped due to an unknown cause. This outage affected 4,942 customers and contributed 0.032 customer-interruptions to the division's MAIFI performance.
4. Clarksville 2110 feeder breaker on July 23rd tripped due to an unknown cause. This outage affected 4,583 customers and contributed 0.019 customer-interruptions to the division's MAIFI performance.
5. The EPSS and DCD settings installed on the distribution line equipment contributed 0.031 customer-interruptions to the division's MAIFI performance.

18. Sonoma Division Performance Assessment

Sonoma Division Performance

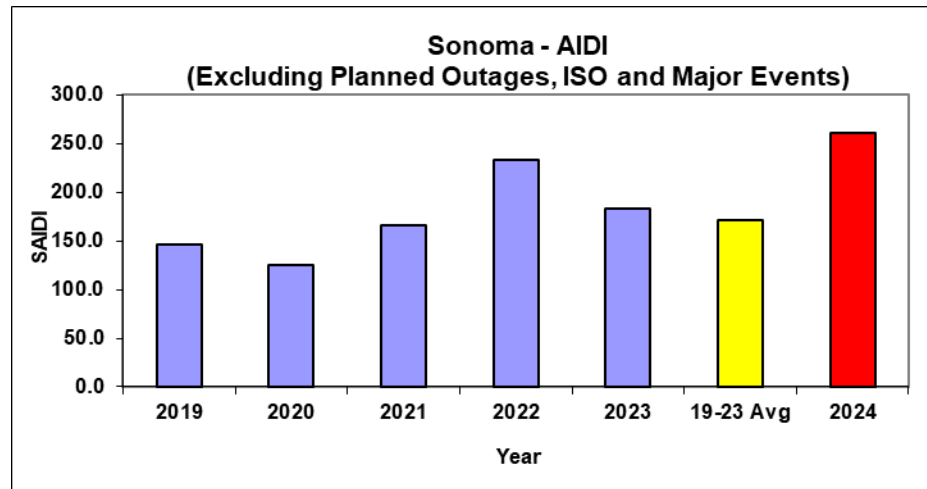
Table 25: Sonoma Division Performance

Division/System	Year	AIDI	AIFI	MAIFI	CAIDI
SONOMA	2019	145.7	1.070	1.233	136.1
SONOMA	2020	124.5	1.062	1.327	117.2
SONOMA	2021	166.3	1.257	1.420	132.3
SONOMA	2022	232.9	1.526	1.390	152.6
SONOMA	2023	183.0	1.334	0.662	137.2
5-Year Average	19-23 Avg	170.4	1.250	1.206	136.4
SONOMA	2024	260.1	1.760	1.340	147.8
	%Difference	52.6%	40.8%	11.1%	8.4%

Sonoma Division AIDI Performance

Sonoma Division's 2024 AIDI performance of 260.1 was 89.6 customer-minutes (or 52.6%) higher than the previous 5-year average of 170.4 as shown in the table above and illustrated in the figure below.

Chart 47 – Sonoma Division AIDI Performance



The higher-than-average 2024 Sonoma Division AIDI was attributed to the following:

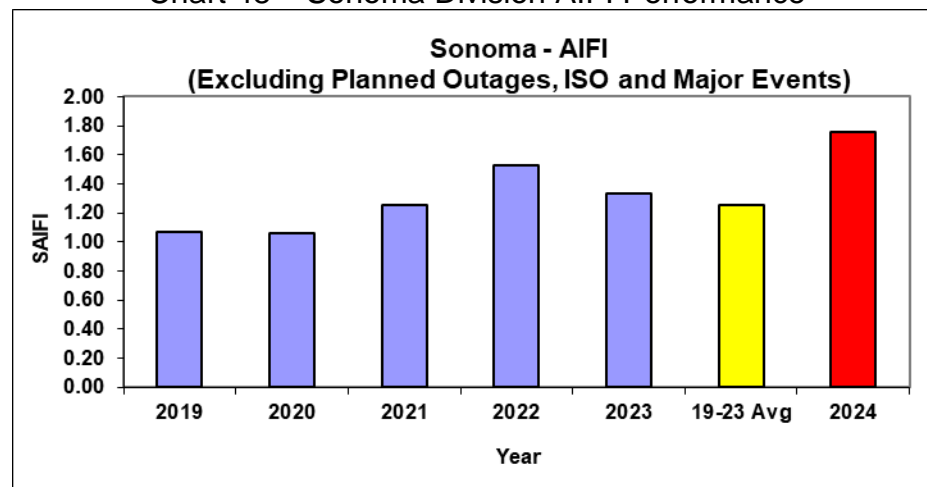
1. EPSS installed on the distribution line equipment that contributed 104.0 customer minutes to the division's AIDI performance.
2. On June 26th, both the circuit switcher as well as the 200A fuses protecting the Fulton – Molino 60 kV line from faults beyond the 60 kV transmission line on the substation side were found open during a routine operating procedure at the Molino substation. This outage affected 17,234 customers and contributed 8.1 customer minutes to the division's AIDI performance.
3. On January 29th, a car pole incident broke a wood pole and caused a recloser level outage on the Molino 1103 feeder. This outage affected 5,179 customers and contributed 6.5 customer minutes to the division's AIDI performance.
4. On June 2nd, an EPSS related breaker level outage occurred due to an unknown cause on the Cotati 1102 feeder. This outage affected 5,339 customers and contributed 6.3 customer minutes to the division's AIDI performance.
5. On May 16th, Rincon substation lost its source as a result of the Fulton-Pueblo 115kV transmission line relaying due to an unknown cause. This outage affected 12,830 customers and contributed 6.1 customer minutes to the division's AIDI performance.
6. On February 3rd, a tree fell into the line and caused a wire down event that

resulted in a recloser level outage on the Cotati 1103 feeder. This outage affected 452 customers and contributed 5.1 customer minutes to the division's AIDI performance.

Sonoma Division AIFI Performance

Sonoma Division's 2024 AIFI performance of 1.760 was 0.510 customer-interruptions (or 40.8%) higher than the previous 5-year average of 1.250 as shown in the table above and illustrated in the figure below.

Chart 48 – Sonoma Division AIFI Performance



The higher-than-average 2024 Sonoma Division AIFI was attributed to the following:

1. EPSS and DCD settings installed on the distribution line equipment contributed 0.865 customer-interruptions to the division's AIFI performance.
2. On June 26th, both devices circuit switcher as well as the 200A fuses protecting the Fulton – Molino 60 kV line from faults beyond the 60 kV transmission line on the substation side were found open during a routine operating procedure at the Molino substation. This outage affected 17,234 customers and contributed 0.073 customer-interruptions to the division's AIFI performance.
3. On May 16th, Rincon substation lost its source as a result of the Fulton-Pueblo 115kV transmission line relaying due to an unknown cause. This outage affected 12,830 customers and contributed 0.055 customer-

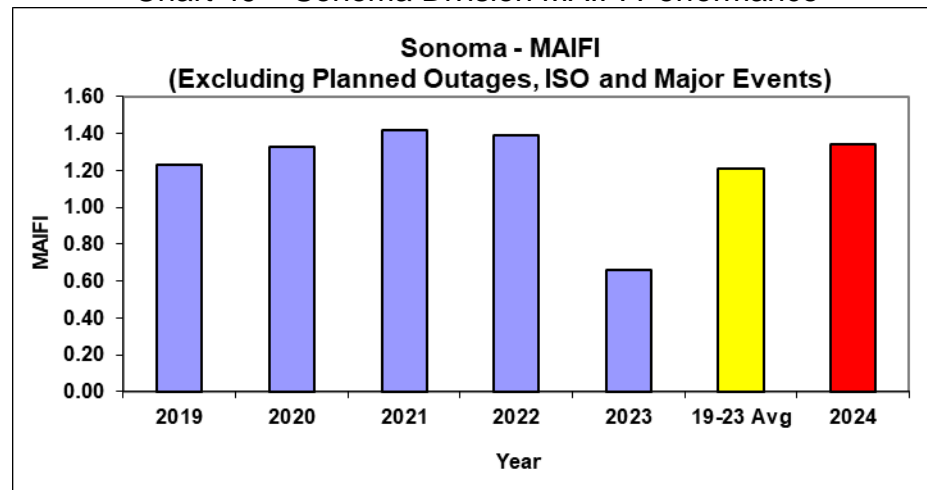
interruptions to the division's AIFI performance.

4. On July 10th, an overhead jumper burned open and caused recloser level outage on the Petaluma C 1109 feeder. This outage affected 6,722 customers and contributed 0.029 customer-interruptions to the division's AIFI performance.
5. On April 23rd, a substation level outage occurred due to an unknown cause on the Lakeville substation. This outage affected 6,370 customers and contributed 0.027 customer-interruptions to the division's AIFI performance.
6. On February 6th, a breaker level outage occurred due to an unknown cause on the Monroe 1106 feeder. This outage affected 6,082 customers and contributed 0.026 customer-interruptions to the division's AIFI performance.

Sonoma Division MAIFI Performance

Sonoma Division's 2024 MAIFI performance of 1.340 was 0.134 customer-interruptions (or 11.1%) higher than the previous 5-year average of 1.206 as shown in the table above and illustrated in the figure below.

Chart 49 – Sonoma Division MAIFI Performance



The higher-than-average 2024 Sonoma Division MAIFI was attributed to momentary outages as follows:

1. Fulton – Molino 60 kV transmission line relayed on February 27th due to an unknown cause. This outage contributed 0.064 customer-interruptions to the division's MAIFI performance.



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2. Fulton – Molino 60 kV transmission line relayed on March 11th due to an unknown cause. This outage contributed 0.064 customer-interruptions to the division's MAIFI performance.
3. Fulton – Molino - Cotati 60kV transmission line relayed on March 11th due to an unknown cause. This outage contributed 0.048 customer-interruptions to the division's MAIFI performance.
4. A car pole incident on the Fulton – Molino - Cotati 60kV transmission line to relay on February 7th, 2024. This outage contributed 0.036 customer-interruptions to the division's MAIFI performance.
5. The EPSS and DCD settings installed on the distribution line equipment contributed 0.019 customer-interruptions to the division's MAIFI performance.

19. Stockton Division Performance Assessment

Stockton Division Performance

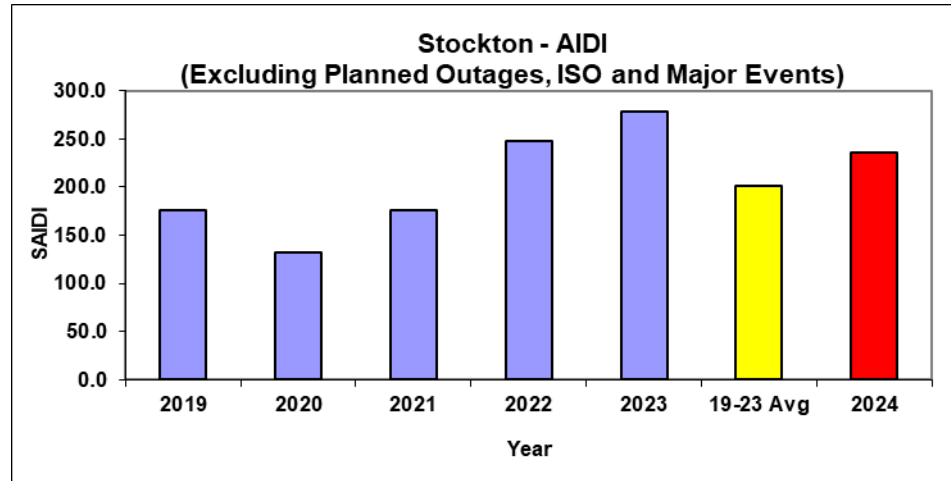
Table 26: Stockton Division Performance

Division/System	Year	AIDI	AIFI	MAIFI	CAIDI
STOCKTON	2019	175.3	1.276	1.130	137.4
STOCKTON	2020	131.8	1.187	1.268	111.0
STOCKTON	2021	176.2	1.151	1.471	153.2
STOCKTON	2022	247.3	1.665	1.064	148.5
STOCKTON	2023	278.1	1.896	1.330	146.7
5-Year Average	19-23 Avg	201.8	1.435	1.253	140.6
STOCKTON	2024	235.8	1.603	1.372	147.0
	%Difference	16.9%	11.8%	9.5%	4.5%

Stockton Division AIDI Performance

Stockton Division's 2024 AIDI performance of 235.8 was 34.0 customer-minutes (or 16.9%) higher than the previous 5-year average of 201.8 as shown in the table above and illustrated in the figure below.

Chart 50 – Stockton Division AIDI Performance



The higher-than-average 2024 Stockton Division AIDI was attributed to the following:

1. EPSS installed on the distribution line equipment that contributed 51.1 customer minutes to the division's AIDI performance.
2. On April 12th, a deteriorated section of the overhead distribution wire fell down on the Salt Springs 2102 feeder causing a recloser level outage. This outage affected 4,459 customers and contributed 21.2 customer minutes to the division's AIDI performance.
3. On March 30th, a 3rd party vehicle incident broke a transmission wooden pole, as a result of which the source to Ripon substation was lost. This event affected 11,780 customers and contributed 9.7 customer-minutes to the division's AIDI performance.
4. On January 17th, a 3rd party vehicle incident broke a transmission wooden pole, as a result of which the source to Temporary Carbona substation was lost. This outage affected 6,366 customers and contributed 8.7 customer minutes to the division's AIDI performance.
5. The February 20th, a broken insulator caused a section of distribution tree wire to sit on a guy wire. This event caused a sustained outage to 4,367 customers served from the Stanislaus 1701 feeder and contributed 5.7 customer-minutes to the division's AIDI performance.
6. On April 21st, the ties holding the conductor and insulator broke, and the conductor was found lying on the down guy. This event caused a recloser



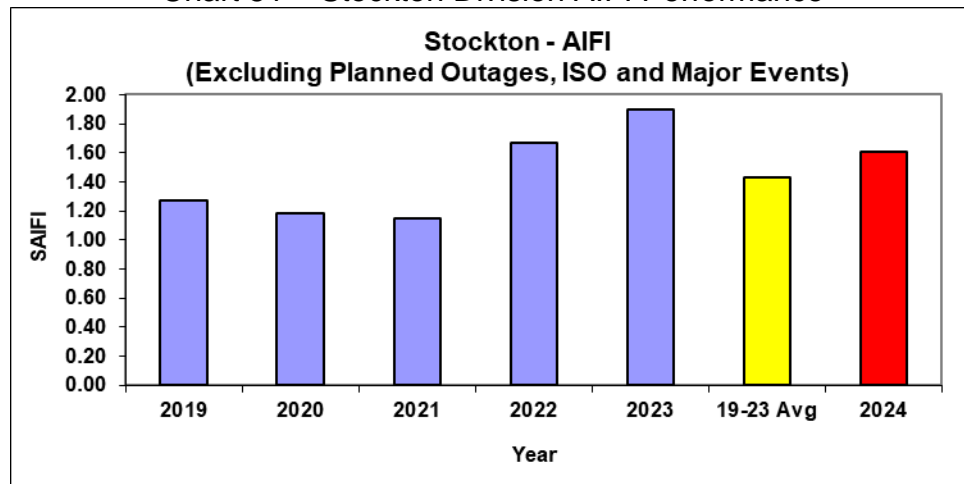
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level outage on Frogtown 1702 feeder affecting 12,282 customers and contributed 4.2 customer-minutes to the division's AIDI performance.

Stockton Division AIFI Performance

Stockton Division's 2024 AIFI performance of 1.603 was 0.169 customer-interruptions (or 11.8%) higher than the previous 5-year average of 1.435 as shown in the table above and illustrated in the figure below.

Chart 51 – Stockton Division AIFI Performance



The higher-than-average 2024 Stockton Division AIFI was attributed to the following:

1. EPSS and DCD settings installed on the distribution line equipment contributed 0.404 customer interruptions to the division's AIFI performance.
2. On March 30th, a 3rd party vehicle incident broke a transmission wooden pole, as a result of which the source to Ripon substation was lost. This event affected 11,780 customers and contributed 0.037 customer interruptions to the division's AIFI performance.
3. On January 17th, a 3rd party vehicle incident broke a transmission wooden pole, as a result of which the source to Temporary Carbona substation was lost. This outage affected 6,366 customers and contributed 0.020 customer interruptions to the division's AIFI performance.
4. On June 17th, due to the Aero Fire in the area, the Stanislaus – Melones SW station – Manteca #1 -115 kV transmission line relayed and caused a



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loss of power condition to the Frogtown and Avena substations. This outage affected 9,727 customers and contributed 0.031 customer-interruptions to the division's AIFI performance.

5. On May 20th, a wood pole on the Weber-Mormon JCT 60KV transmission line broke and transmission wire was found on the ground. This event caused a loss of power to Linden and Mormon substations. EPSS related recloser level outage occurred on the Pine Grove 1102 feeder. This outage affected 6,350 customers and contributed 0.020 customer-interruptions to the division's AIFI performance.
6. On January 10th, a section of the overhead transmission wire was found wrapped together on the Weber-Lockford 60 kV transmission line. This caused a loss of power to the West Lane substation. This outage affected 6,166 customers and contributed 0.020 customer-interruptions to the division's AIFI performance.

20. Yosemite Division Performance Assessment

Yosemite Division Performance

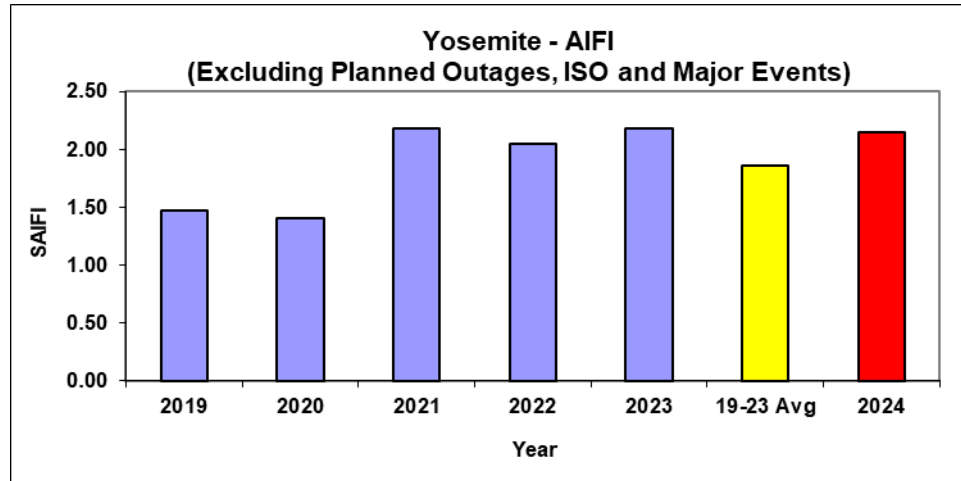
Table 27: Yosemite Division Performance

Division/System	Year	AIDI	AIFI	MAIFI	CAIDI
YOSEMITE	2019	160.4	1.470	1.603	109.1
YOSEMITE	2020	197.4	1.411	1.299	139.9
YOSEMITE	2021	434.1	2.180	1.811	199.2
YOSEMITE	2022	328.9	2.047	1.631	160.7
YOSEMITE	2023	411.1	2.184	1.699	188.2
5-Year Average	19-23 Avg	306.4	1.858	1.609	164.9
YOSEMITE	2024	284.9	2.144	1.548	132.9
	%Difference	-7.0%	15.4%	-3.8%	-19.4%

Yosemite Division AIFI Performance

Yosemite Division's 2024 AIFI performance of 2.144 was 0.286 customer-interruptions (or 15.4%) higher than the previous 5-year average of 1.858 as shown in the table above and illustrated in the figure below.

Chart 52 – Yosemite Division AIFI Performance



The higher-than-average 2024 Yosemite Division AIFI was attributed to the following:

1. EPSS installed on the distribution line equipment contributed 0.615 customer-interruptions to the division's AIFI performance.
2. On October 28th, the Belota-Riverbank-Melones 115KV transmission line relayed and caused a loss of power to the Riverbank substation. This event affected 13,408 customers and contributed 0.053 customer-interruptions to the division's SAIFI performance.
3. On September 26th, the Peoria Flat 1701 substation was forced out due to malfunctioning substation regulator. This outage affected 7,721 customers and contributed 0.030 customer-interruptions to the division's AIFI performance.
4. On April 4th, an overhead conductor failure on a transmission line caused a loss of power to the Stanislaus substation. This outage affected 7,164 customers and contributed 0.028 customer-interruptions to the division's AIFI performance.
5. On April 5th, an unknown cause related outage occurred on the Transmission line as a result of which the Stanislaus substation lost power. An earlier tree branch related fuse level outage on the Stanislaus 1702 feeder became part of this larger outage. This outage affected 7,130 customers and contributed 0.028 customer-interruptions to the division's AIFI performance.
6. On November 24th, a breaker level outage occurred on the Merced 2101 feeder due to a 3rd party vehicle incident that broke a distribution wooden pole.



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This event affected 5,159 customers and contributed 0.020 customer-interruptions to the division's AIFI performance.



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ii. 2024 Excludable Major Event Day (MED) CAIDI Performance

Excludable Major Event Days (MED) In 2024

This section contains PG&E's report on weather related excludable major event days (MED) for each division in which CAIDI⁸ varied by 25 percent or more in the division benchmark, as required by Decision 04-10-034 and Decision 16-01-008, Appendix B, footnote 6. Per D.04-10-034, the division benchmark is calculated from the rolling average of the prior 10 weather-related excludable major events.⁹ PG&E is also required by D.04-10-034 to provide a variance explanation when the system performance varies by more than 10 percent from the rolling average of the prior 10 weather-related system-wide excludable major event days, whichever yields more event days.

There were five weather-related major events resulting in 5 weather-related Major Event Days in 2024. The table below summarizes these major events that also includes wildfire related outages.

Table 28 – Summary MED days

2024 Weather - Related Major Event Days	# of weather related events	MEDS
February 4, 2024	1	1
March 1, 2024	2	1
October 17, 2024	3	1
November 5, 2024	4	1
December 14, 2024	5	1
		5

⁸ Per Decision 16-01-008, Appendix B footnote 6, Decision 04-10-034 only applies to PG&E: Investigate and report on all weather-related excludable major events for each division in which CAIDI varies by 25 percent or more from the division benchmark. The division benchmarks are calculated from the rolling average of the prior 10 weather-related excludable events as defined by IEEE 1366.

⁹ A major event is defined in the IEEE Standard 1366. As in prior reports, PG&E is using the "prior ten weather related excludable major events" prior to the calendar year that is the subject of the report.



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1. February 04, 2024, Major Event Days

The first weather-related major event of the year was related to a major storm and associated strong “atmospheric river” that moved through the territory on February 4th and 5th, bringing strong winds, heavy rain, thunderstorms, and heavy mountain snow. Some of the strongest winds were reported along the coast and through the Sacramento Valley and northern San Joaquin Valley where gusts 40-80+ mph was observed on the February 4th. The highest rainfall totals were reported on the 4th along the North Coast and Central Coast ranging from 2” to 9.50” leading to numerous reports of flooding. Another weather system moved along the coast on the 6th and 7th bringing additional impacts across the territory, especially the southern portions of the territory, thereby bringing strong winds, moderate to heavy rainfall across the far south, heavy snow in the mountains, and severe thunderstorms resulting in two EF1 category tornadoes in San Luis Obispo County. This event resulted in the year's largest outage event that impacted a total of 1,630,090 customers in the service territory.



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Table 29 summarizes the system and division CAIDI performances during this event and the average of the prior ten weather related major events.

(February 4, 2024, vs. Prior 10 MED)

System / Division	Average CAIDI of Prior 10 System / Division Specific Excludable ME	February 4th, 2024 / Division Specific CAIDI	Percent Difference From the Prior CAIDI Average	Exceeds the Investigation Threshold?
SYSTEM	808.4	842.2	104.2%	NO
CENTRAL COAST	997.5	1374.4	137.8%	Yes
DE ANZA	951.4	620.2	65.2%	NO
DIABLO	348.5	661.3	189.8%	Yes
EAST BAY	565.5	135.0	23.9%	NO
FRESNO	338.7	98.2	29.0%	NO
HUMBOLDT	821.2	1274.3	155.2%	Yes
KERN	272.5	353.1	129.6%	Yes
LOS PADRES	438.7	363.9	83.0%	NO
MISSION	206.2	189.9	92.1%	NO
NORTH BAY	359.7	981.8	273.0%	Yes
NORTH VALLEY	470.7	890.0	189.1%	Yes
PENINSULA	856.1	1123.5	131.2%	Yes
SACRAMENTO	509.9	531.4	104.2%	NO
SAN FRANCISCO	224.5	548.6	244.4%	Yes
SAN JOSE	437.6	838.9	191.7%	Yes
SIERRA	1,295.4	1173.9	90.6%	NO
SONOMA	284.6	1528.0	536.9%	Yes
STOCKTON	551.9	486.6	88.2%	NO
YOSEMITE	729.5	276.9	38.0%	NO

Table 29 – February 4, 2024, CAIDI Performance



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1.1 Central Coast CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
Central Coast	January 7-10th, 2023	786.7	103
Central Coast	January 14th, 2023	274.7	61
Central Coast	January 16th, 2023	340.8	63
Central Coast	February 19th, 2023	138.6	2
Central Coast	February 21st, 2023	1062.1	145
Central Coast	February 23-28th, 2023	650.3	35
Central Coast	March 9th, 2023	1701.4	84
Central Coast	March 14th, 2023	877.8	157
Central Coast	March 21st, 2023	1737.1	306
Central Coast	September 9th, 2023	349.4	22
	Average of 10 excludable major events	997.5	103
Central Coast	February 4th, 2024	1,374.4	369
	% difference	37.8%	257%

Table 30 – Central Coast Historical Performance

As indicated in Table 30, the Central Coast Division CAIDI value of 1,374.4 minutes for the February 4th, 2024, major event was 37.8% higher than the 997.5 -minute average of the prior 10 weather-related excludable major events.

The top contributing factors to the higher division CAIDI value on February 4th, 2024, was due to the following outages:

- 2 third-party outages, a request to make the area safe to repair a gas leak and another to help restore customer owned line, occurred on Viejo 2203 feeder and Soledad 2105 feeder. Both outages contributed 3,332.3 minutes to the overall CAIDI performance.
- 204 outages related to vegetation contributed 1,789.6 minutes to the overall CAIDI performance.



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1.2 Diablo CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
Diablo	January 7-10th, 2023	282.1	17
Diablo	January 14th, 2023	228.3	5
Diablo	January 16th, 2023	91.4	21
Diablo	February 19th, 2023	100.8	1
Diablo	February 21st, 2023	213.1	15
Diablo	February 23-28th, 2023	189.3	5
Diablo	March 9th, 2023	179.2	10
Diablo	March 14th, 2023	608.4	68
Diablo	March 21st, 2023	224.0	77
Diablo	September 9th, 2023	607.0	2
	Average of 10 excludable major events	348.5	22
Diablo	February 4th, 2024	661.3	96
	% difference	89.8%	340%

Table 31 – Diablo Historical Performance

As indicated in Table 31, the Diablo Division CAIDI value of 661.3 minutes for the February 4th, 2024, major event was 89.8% higher than the 348.5-minute average of the prior 10 weather-related excludable major events.

The top contributing factors to the higher division CAIDI value on February 4th, 2024, was due to the following outages:

- 19 outages due to overhead and underground equipment failure related outages contributed 716.3 minutes to the overall CAIDI performance.
- 38 outages related to vegetation contributed 738.7 minutes to the overall performance.

1.3 Humboldt CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
Humboldt	January 7-10th, 2023	471.6	51
Humboldt	January 14th, 2023	375.9	53
Humboldt	January 16th, 2023	189.9	13
Humboldt	February 19th, 2023	19.8	3
Humboldt	February 21st, 2023	370.6	55
Humboldt	February 23-28th, 2023	1071.3	97
Humboldt	March 9th, 2023	54.1	45
Humboldt	March 14th, 2023	252.2	33
Humboldt	March 21st, 2023	201.9	11
Humboldt	September 9th, 2023	265.0	4
	Average of 10 excludable major events	821.2	37
Humboldt	February 4th, 2024	1274.3	235
	% difference	55.2%	530%

Table 32 – Humboldt Historical Performance

As indicated in Table 32, the Humboldt Division CAIDI value of 1274.3 minutes for the February 4th, 2024, major event was 55.2% higher than the 821.2 -minute average of the prior 10 weather-related excludable major events.

The top contributing factors to the higher division CAIDI value of February 4th, 2024, was due to the following outages:

- 30 outages due to unknown causes where Patrol found nothing contributed 475.9 minutes overall CAIDI performance.
- 163 outages related to vegetation contributed 1,829.4 minutes to the overall CAIDI performance.



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1.4 Kern CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
Kern	January 7-10th, 2023	102.9	9
Kern	January 14th, 2023	214.8	2
Kern	January 16th, 2023	279.6	9
Kern	February 19th, 2023	112.0	1
Kern	February 21st, 2023	265.3	36
Kern	February 23-28th, 2023	447.5	13
Kern	March 9th, 2023	598.9	9
Kern	March 14th, 2023	302.9	9
Kern	March 21st, 2023	190.2	24
Kern	September 9th, 2023	169.7	9
	Average of 10 excludable major events	272.5	12
Kern	February 4th, 2024	353.1	122
	% difference	29.6%	895%

Table 33 – Kern Historical Performance

As indicated in Table 33, the Kern Division CAIDI value of 353.1 minutes for the February 4th, 2024, major event was 29.6% higher than the 272.5 -minute average of the prior 10 weather-related excludable major events.

The top contributing factors to the higher division CAIDI value on February 4th, 2024, was due to the following outages:

- An event related to a planned outage, requested by the customer on Poso Mountain 2104 feeder contributed 1,568.0 minutes to the overall CAIDI performance.
- 5 outages related to environmental causes (flood and erosion) contributed 3,008.4 minutes to the overall CAIDI performance.



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1.5 North Bay CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
North Bay	January 7-10th, 2023	439.3	26
North Bay	January 14th, 2023	107.8	20
North Bay	January 16th, 2023	140.9	7
North Bay	February 19th, 2023	318.6	2
North Bay	February 21st, 2023	271.1	43
North Bay	February 23-28th, 2023	648.9	13
North Bay	March 9th, 2023	249.8	16
North Bay	March 14th, 2023	225.2	64
North Bay	March 21st, 2023	185.1	44
North Bay	September 9th, 2023	506.2	2
	Average of 10 excludable major events	359.7	24
North Bay	February 4th, 2024	981.8	166
	% difference	173.0%	593%

Table 34 – North Bay Historical Performance

As indicated in Table 34, the North Bay Division CAIDI value of 981.8 minutes for the February 4th, 2024, major event was 173.0% higher than the 359.7-minute average of the prior 10 weather-related excludable major events.

The top contributing factors to the higher division CAIDI value on February 4th, 2024, was due to the following outages:

- 49 outages related to equipment failure contributed 650.2 minutes to the overall CAIDI performance.
- 62 outages related to vegetation contributed 553.2 minutes to the overall CAIDI performance.



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1.6 North Valley CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
North Valley	January 7-10th, 2023	241.2	25
North Valley	January 14th, 2023	184.0	37
North Valley	January 16th, 2023	149.1	4
North Valley	February 19th, 2023	237.1	2
North Valley	February 21st, 2023	118.7	34
North Valley	February 23-28th, 2023	668.8	52
North Valley	March 9th, 2023	482.9	35
North Valley	March 14th, 2023	517.8	37
North Valley	March 21st, 2023	60.5	14
North Valley	September 9th, 2023	813.0	3
	Average of 10 excludable major events	470.7	24
North Valley	February 4th, 2024	890.0	129
	% difference	89.1%	444%

Table 35 – North valley Historical Performance

As indicated in Table 35, the North Valley Division CAIDI value of 890.0 minutes for the February 4th, 2024, major event was 89.1% higher than the 470.7 -minute average of the prior 10 weather-related excludable major events.

The top contributing factors to the higher division CAIDI value on February 4th, 2024, was due to the following outages:

- 1 outage related to environment (flood) contributed 1,410.4 minutes to the overall CAIDI performance.
- 67 outages related to vegetation contributed 1,092.0 minutes to the overall CAIDI performance.

1.7 Peninsula CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
Peninsula	January 4-5th, 2023	1102.6	61
Peninsula	January 7-10th, 2023	472.7	32
Peninsula	January 14th, 2023	243.3	21
Peninsula	January 16th, 2023	134.2	15
Peninsula	February 21st, 2023	1448.1	101
Peninsula	February 23-25th, 2023	159.6	25
Peninsula	February 27-28th, 2023	103.8	5
Peninsula	March 9th, 2023	232.6	40
Peninsula	March 14th, 2023	1188.2	136
Peninsula	March 21st, 2023	643.9	104
	Average of 10 excludable major events	856.1	53
Peninsula	February 4th, 2024	1123.5	128.0
	% difference	31.2%	142%

Table 36 – Peninsula Historical Performance

As indicated in Table 36, the Peninsula Division CAIDI value of 1123.5 minutes for the February 4th, 2024, major event was 31.2% higher than the 856.1 -minute average of the prior 10 weather-related excludable major events.

The top contributing factors to the higher division CAIDI value on February 4th, 2024, was due to the following outages:

- An outage on the Menlo 1102 feeder occurred due to an operator error and contributed 1,915.0 minutes to the overall CAIDI performance.
- 64 outages related to vegetation contributed 1,422.2 minutes to the overall CAIDI performance.

1.8 San Francisco CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
San Francisco	January 4-5th, 2023	1102.6	61
San Francisco	January 7-10th, 2023	472.7	32
San Francisco	January 14th, 2023	243.3	21
San Francisco	January 16th, 2023	134.2	15
San Francisco	February 21st, 2023	1448.1	101
San Francisco	February 23-25th, 2023	159.6	25
San Francisco	February 27-28th, 2023	103.8	5
San Francisco	March 9th, 2023	232.6	40
San Francisco	March 14th, 2023	1188.2	136
San Francisco	March 21st, 2023	643.9	104
	Average of 10 excludable major events	224.5	9
San Francisco	February 4th, 2024	548.6	35
	% difference	144.4%	286%

Table 37 – San Francisco Historical Performance

As indicated in Table 37, the San Francisco Division CAIDI value of 548.6 minutes for the February 4th, 2024, major event was 144.4% higher than the 224.5 -minute average of the prior 10 weather-related excludable major events.

The top contributing factors to the higher division CAIDI value on February 4th, 2024, was due to the following outages:

- 9 outages related to vegetation contributed 420.3 minutes to the overall CAIDI performance.
- 14 outages related to equipment failure contributed 1,025.0 minutes to the overall CAIDI performance.

1.9 San Jose CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
San Jose	January 4-5th, 2023	443.0	22
San Jose	January 7-10th, 2023	294.2	8
San Jose	January 14th, 2023	85.2	15
San Jose	January 16th, 2023	86.8	1
San Jose	February 21st, 2023	436.6	73
San Jose	February 23-25th, 2023	118.0	7
San Jose	February 27-28th, 2023	83.9	5
San Jose	March 9th, 2023	783.2	78
San Jose	March 14th, 2023	118.9	34
San Jose	March 21st, 2023	721.3	3
	Average of 10 excludable major events	437.6	25
San Jose	February 4th, 2024	838.9	146
	% difference	91.7%	475%

Table 38 – San Jose Historical Performance

As indicated in Table 38, the San Jose Division CAIDI value of 548.6 minutes for the February 4th, 2024, major event was 144.4% higher than the 224.5 -minute average of the prior 10 weather-related excludable major events.

The top contributing factors to the higher division CAIDI value on February 4th, 2024, was due to the following outages:

- 32 outages related to unknown cause where patrol found nothing contributed 833.0 minutes to the overall CAIDI performance.
- 51 outages related to vegetation contributed 895.7 minutes to the overall CAIDI performance.



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1.10 Sonoma CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
Sonoma	January 7-10th, 2023	321.7	33
Sonoma	January 14th, 2023	176.1	25
Sonoma	January 16th, 2023	341.4	9
Sonoma	February 19th, 2023	92.0	3
Sonoma	February 21st, 2023	355.7	72
Sonoma	February 23-28th, 2023	284.4	12
Sonoma	March 9th, 2023	116.4	11
Sonoma	March 14th, 2023	187.2	49
Sonoma	March 21st, 2023	259.6	16
Sonoma	September 9th, 2023	161.9	4
	Average of 10 excludable major events	284.6	24
Sonoma	February 4th, 2024	1528.0	292
	% difference	436.9%	1107%

Table 39 – Sonoma Historical Performance

As indicated in Table 39, the Sonoma Division CAIDI value of 1,528.0 minutes for the February 4th, 2024, major event was 436.9% higher than the 284.6 -minute average of the prior 10 weather-related excludable major events.

The top contributing factors to the higher division CAIDI value on February 4th, 2024, was due to the following outages:

- 2 events related to planned outages, requested by the customer contributed 3,504.3 minutes to the overall CAIDI performance.
- 13 outages related to Environmental (flood) contributed 6,739.1 minutes to the overall CAIDI performance.



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2. March 01, 2024, Major Event Day

A very cold storm system moved into the territory on March 1st, 2024 bringing impacts for several days. Moderate to heavy rain, gusty winds, and thunderstorms were reported with snow levels dropping below 1000 ft across the far North late on the 1st into the 2nd bringing low and middle elevation snow impacts, especially across the northern Humboldt region. Below average daytime temperatures were reported on the 2nd, in the 40s and 50s across the northern half of the territory. rainfall Totals were highest on the 1st across the Sierra where around 2" to 5" fell through the period, with generally 1.5" to 6" along the coastline. Wind gusts of 40-70 + mph were reported across the northern Humboldt Coast, Northern interior and higher elevations and around 30-55+ mph across the Bay Area.

Table 40 summarizes the system and division CAIDI performances during this event and the average of the prior ten weather related major events.

(March 01, 2024 vs. Prior 10 MED)

System / Division	Average CAIDI of Prior 10 System / Division Specific Excludable ME	March 1st, 2024 / Division Specific CAIDI	Percent Difference From the Prior CAIDI Average	Exceeds the Investigation Threshold?
SYSTEM	808.4	304.7	37.7%	NO
CENTRAL COAST	997.5	72.6	7.3%	NO
DE ANZA	951.4	72.8	7.7%	NO
DIABLO	348.5	143.8	41.3%	NO
EAST BAY	565.5	277.8	49.1%	NO
FRESNO	338.7	76.4	22.6%	NO
HUMBOLDT	821.2	346.6	42.2%	NO
KERN	272.5	212.1	77.8%	NO
LOS PADRES	438.7	148.2	33.8%	NO
MISSION	206.2	28.6	13.9%	NO
NORTH BAY	359.7	436.1	121.3%	NO
NORTH VALLEY	470.7	985.5	209.4%	Yes
PENINSULA	856.1	69.0	8.1%	NO
SACRAMENTO	509.9	190.7	37.4%	NO
SAN FRANCISCO	224.5	960.9	428.1%	Yes
SAN JOSE	437.6	83.8	19.1%	NO
SIERRA	1,295.4	1033.0	79.7%	NO
SONOMA	284.6	127.9	44.9%	NO
STOCKTON	551.9	80.9	14.7%	NO
YOSEMITE	729.5	667.4	91.5%	NO

Table 40 – March 01, 2024 CAIDI Performance



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2.1 North Valley CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
North valley	January 7-10th, 2023	241.2	25
North valley	January 14th, 2023	184	37
North valley	January 16th, 2023	149.1	4
North valley	February 19th, 2023	237.1	2
North valley	February 21st, 2023	118.7	34
North valley	February 23-28th, 2023	668.8	52
North valley	March 9th, 2023	482.9	35
North valley	March 14th, 2023	517.8	37
North valley	March 21st, 2023	60.5	14
North valley	September 9th, 2023	813.0	3
	Average of 10 excludable major events	470.7	24
North valley	March 1st, 2024	985.5	24
	% difference	109.4%	1%

Table 41 – North Valley Historical Performance

As indicated in Table 41, the North Valley Division CAIDI value of 985.5 minutes for the March 1st, 2024, major event was 109.4% higher than the 470.7 -minute average of the prior 10 weather-related excludable major events.

The top contributing factor to the higher division CAIDI value on March 1st, 2024, was due to the following outages:

- 5 outages related to equipment failure contributed 1,771.2 minutes to the overall CAIDI performance.



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2.2 San Francisco CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
San Francisco	January 7-10th, 2023	1102.6	61
San Francisco	January 14th, 2023	472.7	32
San Francisco	January 16th, 2023	243.3	21
San Francisco	February 19th, 2023	134.2	15
San Francisco	February 21st, 2023	1448.1	101
San Francisco	February 23-28th, 2023	159.6	25
San Francisco	March 9th, 2023	103.8	5
San Francisco	March 14th, 2023	232.6	40
San Francisco	March 21st, 2023	1188.2	136
San Francisco	September 9th, 2023	643.9	104
	Average of 10 excludable major events	224.5	9
San Francisco	March 1st, 2024	960.9	1.0
	% difference	328.1%	-89%

Table 42 – San Francisco Historical Performance

As indicated in Table 42, the San Francisco Division CAIDI value of 960.9 minutes for the March 1st, 2024, major event was 328.1% higher than the 224.5 - minute average of the prior 10 weather-related excludable major events.

The top contributing factors to the higher division CAIDI value on March 1st, 2024, was due to the following outage:

- 1 outage related to replacing a broken secondary cross arm on our overhead lines contributed 960.9 minutes to the overall CAIDI performance.



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3. October 17, 2024 Major Event Day

The third major event of the year resulted in an MED on October 17, 2024, due to a weather system that produced showers and isolated thunderstorms across the high Sierras with dry weather elsewhere and breezy to gusty northwesterly winds across mainly across the North Coast and elevated terrain across the North. Wind gusts of 30-50+ mph was reported with wind gusts of 40-65+ mph near the Tehachapi's. A Public Safety Power Shutoff went into effect the afternoon of the 17th through the 19th.

(October 17th, 2024 vs. Prior 10 MED)

System / Division	Average CAIDI of Prior 10 System / Division Specific Excludable ME	October 17th, 2024 / Division Specific CAIDI	Percent Difference From the Prior CAIDI Average	Exceeds the Investigation Threshold?
SYSTEM	808.4	675.6	83.6%	NO
CENTRAL COAST	997.5	79.9	8.0%	NO
DE ANZA	951.4	0.0	0.0%	NO
DIABLO	348.5	627.1	180.0%	Yes
EAST BAY	565.5	303.1	53.6%	NO
FRESNO	338.7	183.6	54.2%	NO
HUMBOLDT	821.2	331.4	40.4%	NO
KERN	272.5	108.3	39.7%	NO
LOS PADRES	438.7	85.0	19.4%	NO
MISSION	206.2	205.2	99.5%	NO
NORTH BAY	359.7	2759.4	767.2%	Yes
NORTH VALLEY	470.7	1278.9	271.7%	Yes
PENINSULA	856.1	145.1	16.9%	NO
SACRAMENTO	509.9	1364.7	267.6%	Yes
SAN FRANCISCO	224.5	58.0	25.8%	NO
SAN JOSE	437.6	289.6	66.2%	NO
SIERRA	1,295.4	478.4	36.9%	NO
SONOMA	284.6	660.5	232.1%	Yes
STOCKTON	551.9	39.3	7.1%	NO
YOSEMITE	729.5	256.1	35.1%	NO

Table 43 – October 17, 2024, CAIDI Performance



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3.1 Diablo CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
Diablo	January 7-10th, 2023	282.1	17
Diablo	January 14th, 2023	228.3	5
Diablo	January 16th, 2023	91.4	21
Diablo	February 19th, 2023	100.8	1
Diablo	February 21st, 2023	213.1	15
Diablo	February 23-28th, 2023	189.3	5
Diablo	March 9th, 2023	179.2	10
Diablo	March 14th, 2023	608.4	68
Diablo	March 21st, 2023	224.0	77
Diablo	September 9th, 2023	607.0	2
	Average of 10 excludable major events	348.5	22
Diablo	October 17th, 2024	627.1	21
	% difference	80.0%	-4%

Table 44 – Diablo Historical Performance

As indicated in Table 44, the Diablo Division CAIDI value of 627.1 minutes for the October 17th, 2024, major event was 80.0% higher than the 348.5-minute average of the prior 10 weather-related excludable major events.

The top contributing factors to the higher division CAIDI value on October 17th, 2024, was due to the following outages:

- 12 outages related to PSPS events contributed 2,491.5 minutes to the overall system CAIDI performance.

3.2 North Bay CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
North Bay	January 7-10th, 2023	439.3	26
North Bay	January 14th, 2023	107.8	20
North Bay	January 16th, 2023	140.9	7
North Bay	February 19th, 2023	318.6	2
North Bay	February 21st, 2023	271.1	43
North Bay	February 23-28th, 2023	648.9	13
North Bay	March 9th, 2023	249.8	16
North Bay	March 14th, 2023	225.2	64
North Bay	March 21st, 2023	185.1	44
North Bay	September 9th, 2023	506.2	2
	Average of 10 excludable major events	359.7	24
North Bay	October 17th, 2024	2759.4	29
	% difference	667.2%	21%

Table 45 – North Bay Historical Performance

As indicated in Table 45, the North Bay Division CAIDI value of 1,467.4 minutes for the March 9, 14 and 21st major event was 78.1% higher than the 320.9 minutes average of the prior 10 weather-related excludable major events.

The top contributing factors to the higher division CAIDI value on October 17th, 2024, was due to the following outages:

- 22 outages related to PSPS events contributed 2,997.7 minutes to the overall system, October 17th, 2024, CAIDI performance.

3.3 North Valley CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
North Valley	January 7-10th, 2023	241.2	25
North Valley	January 14th, 2023	184	37
North Valley	January 16th, 2023	149.1	4
North Valley	February 19th, 2023	237.1	2
North Valley	February 21st, 2023	118.7	34
North Valley	February 23-28th, 2023	668.8	52
North Valley	March 9th, 2023	482.9	35
North Valley	March 14th, 2023	517.8	37
North Valley	March 21st, 2023	60.5	14
North Valley	September 9th, 2023	813.0	3
	Average of 10 excludable major events	470.7	24
North Valley	October 17th, 2024	1,278.9	64
	% difference	171.7%	170%

Table 46 – North Valley Historical Performance

As indicated in Table 46, the North Valley Division CAIDI value of 1,278.9 minutes for the October 17th, 2024, major event was 171.7% higher than the 470.7 minutes average of the prior 10 weather-related excludable major events.

The top contributing factors to the higher division CAIDI value on October 17th, 2024, was due to the following outages:

- 1 outage due to temporary generator failure on Big Meadows 2101 feeder contributed 886.0 minutes to the overall system CAIDI performance.
- 18 outages related to PSPS events contributed 2,147.0 minutes to the overall system CAIDI performance.



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3.4 Sacramento CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
Sacramento	January 7-10th, 2023	798.8	76
Sacramento	January 14th, 2023	104.7	32
Sacramento	January 16th, 2023	215.5	15
Sacramento	February 19th, 2023	294.1	12
Sacramento	February 21st, 2023	201.4	25
Sacramento	February 23-28th, 2023	234.5	15
Sacramento	March 9th, 2023	138.0	15
Sacramento	March 14th, 2023	237.8	57
Sacramento	March 21st, 2023	347.0	27
Sacramento	September 9th, 2023	159.9	6
	Average of 10 excludable major events	509.9	29
Sacramento	October 17th, 2024	1,364.7	44
	% difference	167.6%	50%

Table 47 – Sacramento Historical Performance

As indicated in Table 47, the Sacramento Division CAIDI value of 1364.7 minutes for the October 17th, 2024, major event was 167.6% higher than the 509.9 minutes average of the prior 10 weather-related excludable major events.

The top contributing factors to the higher division CAIDI value on October 17th, 2024, was due to the following outages:

- 1 outage relayed to forest fire that cause a distribution pole to catch fire on Williams – 1102 feeder contributed 1,512.0 minutes to the overall system CAIDI performance.
- 11 outages related to PSPS events contributed 2,666.6 minutes to the overall system CAIDI performance.



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3.5 Sonoma CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
Sonoma	January 7-10th, 2023	321.7	33
Sonoma	January 14th, 2023	176.1	25
Sonoma	January 16th, 2023	341.4	9
Sonoma	February 19th, 2023	92.0	3
Sonoma	February 21st, 2023	355.7	72
Sonoma	February 23-28th, 2023	284.4	12
Sonoma	March 9th, 2023	116.4	11
Sonoma	March 14th, 2023	187.2	49
Sonoma	March 21st, 2023	259.6	16
Sonoma	September 9th, 2023	161.9	4
	Average of 10 excludable major events	284.6	24
Sonoma	October 17th, 2024	660.5	18
	% difference	167.6%	50%

Table 48 – Sonoma Historical Performance

As indicated in Table 48, the Sonoma Division CAIDI value of 660.5 minutes for the October 17th, 2024, major event was 167.6% higher than the 284.6 minutes average of the prior 10 weather-related excludable major events.

The top contributing factors to the higher division CAIDI value on October 17th, 2024, was due to the following outages:

- 2 unknown cause related outages, where we patrolled the line and found no cause, contributed 327.6 minutes to the overall system CAIDI performance.
- 12 outages related to PSPS events contributed 2,476.5 minutes to the overall system CAIDI performance.



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4. November 5th, 2024, Major Event Day

A moderate to strong offshore wind event occurred on the 5th and 6th as a weather system dropped southward through the Great Basin region. The strongest winds were reported across the Sacramento Valley and adjacent terrain, elevated terrain of the North Bay, East Bay hills, Santa Cruz mountains, the Diablo Valley, and portions of Kern County near the Tehachapi's ranging from 40-75+ mph. A Public Safety Power Shutoff event began on the 5th continuing through early morning hours of the 7th.

(November 05, 2024 vs. Prior 10 MED)

System / Division	Average CAIDI of Prior 10 System / Division Specific Excludable ME	November 5th, 2024 / Division Specific CAIDI	Percent Difference From the Prior CAIDI Average	Exceeds the Investigation Threshold?
SYSTEM	808.4	729.5	90.2%	NO
CENTRAL COAST	997.5	261.3	26.2%	NO
DE ANZA	951.4	2048.1	215.3%	Yes
DIABLO	348.5	560.4	160.8%	Yes
EAST BAY	565.5	8.0	1.4%	NO
FRESNO	338.7	65.6	19.4%	NO
HUMBOLDT	821.2	1766.7	215.1%	Yes
KERN	272.5	140.7	51.6%	NO
LOS PADRES	438.7	79.3	18.1%	NO
MISSION	206.2	218.3	105.9%	NO
NORTH BAY	359.7	1460.8	406.2%	Yes
NORTH VALLEY	470.7	748.6	159.0%	Yes
PENINSULA	856.1	107.0	12.5%	NO
SACRAMENTO	509.9	1994.9	391.2%	Yes
SAN FRANCISCO	224.5	197.8	88.1%	NO
SAN JOSE	437.6	876.1	200.2%	Yes
SIERRA	1,295.4	116.9	9.0%	NO
SONOMA	284.6	881.2	309.6%	Yes
STOCKTON	551.9	56.4	10.2%	NO
YOSEMITE	729.5	91.1	12.5%	NO

Table 49 – November 05, 2024, CAIDI Performance

4.1 De Anza CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
De Anza	January 7-10th, 2023	767.8	34
De Anza	January 14th, 2023	368.6	22
De Anza	January 16th, 2023	311.2	20
De Anza	February 19th, 2023	84.7	4
De Anza	February 21st, 2023	442.7	58
De Anza	February 23-28th, 2023	2641.3	19
De Anza	March 9th, 2023	179.5	34
De Anza	March 14th, 2023	1535.7	187
De Anza	March 21st, 2023	282.7	75
De Anza	September 9th, 2023	209.6	8
	Average of 10 excludable major events	951.4	47
De Anza	November 5th, 2024	2,048.1	14
	% difference	115.3%	-70%

Table 50 – De Anza Historical Performance

As indicated in Table 50, the De Anza Division CAIDI value of 2,048.1 minutes for the November 11th, 2024, major event was 115.3% higher than the 951.4-minute average of the prior 10 weather-related excludable major events.

The top contributing factors to the higher division CAIDI value on November 5th, 2024, was due to the following outages:

- 6 outages related to PSPS events contributed 2,074.7 minutes to the overall CAIDI performance.

4.2 Diablo CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
Diablo	January 7-10th, 2023	282.1	17
Diablo	January 14th, 2023	228.3	5
Diablo	January 16th, 2023	91.4	21
Diablo	February 19th, 2023	100.8	1
Diablo	February 21st, 2023	213.1	15
Diablo	February 23-28th, 2023	189.3	5
Diablo	March 9th, 2023	179.2	10
Diablo	March 14th, 2023	608.4	68
Diablo	March 21st, 2023	224.0	77
Diablo	September 9th, 2023	607.0	2
	Average of 10 excludable major events	348.5	22
Diablo	November 5th, 2024	560.4	9
	% difference	60.8%	-59%

Table 51 – Diablo Historical Performance

As indicated in Table 51, the Diablo Division CAIDI value of 560.4 minutes for the November 5th, 2024, major event was 60.8% higher than the 348.5-minute average of the prior 10 weather-related excludable major events.

The top contributing factors to the higher division CAIDI value on November 5th, 2024, was due to the following outages:

- 4 outages related to overhead and underground equipment failure contributed 280.4 minutes to the overall CAIDI performance.
- 4 outages related to PSPS events contributed 1,357.3 minutes to the overall CAIDI performance.



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4.3 Humboldt CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
Humboldt	January 7-10th, 2023	471.6	51
Humboldt	January 14th, 2023	375.9	53
Humboldt	January 16th, 2023	189.9	13
Humboldt	February 19th, 2023	19.8	3
Humboldt	February 21st, 2023	370.6	55
Humboldt	February 23-28th, 2023	1071.3	97
Humboldt	March 9th, 2023	54.1	45
Humboldt	March 14th, 2023	252.2	33
Humboldt	March 21st, 2023	201.9	11
Humboldt	September 9th, 2023	265.0	4
	Average of 10 excludable major events	821.2	37
Humboldt	November 5th, 2024	1766.7	12
	% Difference	115.1%	-68%

Table 52 – Humboldt Historical Performance

As indicated in Table 52, the Humboldt Division CAIDI value of 1,766.7 minutes for the November 5th, 2024, major event was 115.1% higher than the 821.2-minute average of the prior 10 weather-related excludable major events.

The top contributing factors to the higher division CAIDI value on November 5th, 2024, was due to the following outages:

- 13 outages related to planned system hardening work and other planned work contributed 252.1 minutes to the overall CAIDI performance.
- 1 outage on Redbud 1101 feeder that occurred due to a tree growing into our lines contributed 2,170.0 minutes to the overall CAIDI performance.
- 6 outages related to PSPS events contributed 2,110.6 minutes to the overall CAIDI performance.



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4.4 North Bay CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
North Bay	January 7-10th, 2023	439.3	26
North Bay	January 14th, 2023	107.8	20
North Bay	January 16th, 2023	140.9	7
North Bay	February 19th, 2023	318.6	2
North Bay	February 21st, 2023	271.1	43
North Bay	February 23-28th, 2023	648.9	13
North Bay	March 9th, 2023	249.8	16
North Bay	March 14th, 2023	225.2	64
North Bay	March 21st, 2023	185.1	44
North Bay	September 9th, 2023	506.2	2
	Average of 10 excludable major events	359.7	24
North Bay	November 5th, 2024	1460.8	56
	% Difference	306.2%	134%

Table 53 – North Bay Historical Performance

As indicated in Table 53, the North Bay Division CAIDI value of 1,460.8 minutes for the November 5th, 2024, major event was 306.2% higher than the 359.7-minute average of the prior 10 weather-related excludable major events.

The top contributing factors to the higher division CAIDI value on November 5th, 2024, was due to the following outages:

- 3 outages related to planned work contributed 294.6 minutes to the overall CAIDI performance.
- 2 outages due to tree branches falling on our lines contributed to the higher division CAIDI value, one each on Grand Island 2223 Vallejo B 0414 feeders. These outages contributed 1,380.9 minutes to the overall CAIDI performance.
- 21 outages related to PSPS events contributed 2,555.6 minutes to the overall CAIDI performance.



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4.5 North Valley CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
North Valley	January 7-10th, 2023	241.2	25
North Valley	January 14th, 2023	184.0	37
North Valley	January 16th, 2023	149.1	4
North Valley	February 19th, 2023	237.1	2
North Valley	February 21st, 2023	118.7	34
North Valley	February 23-28th, 2023	668.8	52
North Valley	March 9th, 2023	482.9	35
North Valley	March 14th, 2023	517.8	37
North Valley	March 21st, 2023	60.5	14
North Valley	September 9th, 2023	813	3
	Average of 10 excludable major events	470.7	24
North Valley	November 5th, 2024	748.6	17
	% Difference	59.0%	-28%

Table 54 – North Valley Historical Performance

As indicated in Table 54, the North Valley Division CAIDI value of 748.6 minutes for the November 5th, 2024, major event was 59.0% higher than the 470.7-minute average of the prior 10 weather-related excludable major events.

The top contributing factor to the higher division CAIDI value on November 5th, 2024, was due to the following outages:

- 14 outages related to planned system hardening work and other planned work contributed 279.3 minutes to the overall CAIDI performance.
- 3 outages related to PSPS events contributed 2,205.2 minutes to the overall CAIDI performance.



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4.6 Sacramento CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
Sacramento	January 7-10th, 2023	798.8	76
Sacramento	January 14th, 2023	104.7	32
Sacramento	January 16th, 2023	215.5	15
Sacramento	February 19th, 2023	294.1	12
Sacramento	February 21st, 2023	201.4	25
Sacramento	February 23-28th, 2023	234.5	15
Sacramento	March 9th, 2023	138.0	15
Sacramento	March 14th, 2023	237.8	57
Sacramento	March 21st, 2023	347.0	27
Sacramento	September 9th, 2023	159.9	6
	Average of 10 excludable major events	509.9	29
Sacramento	November 5th, 2024	1,994.9	34
	% difference	291.2%	16%

Table 55 – Sacramento Historical Performance

As indicated in Table 55, the Sacramento Division CAIDI value of 1994.9 minutes for the November 5th 2024 major event was 291.2% higher than the 509.9-minute average of the prior 10 weather-related excludable major events.

The top contributing factors to the higher division CAIDI value on November 5th, 2024, was due to the following outages:

- 5 outages related to planned system hardening work and planned maintenance work contributed 173.5 minutes to the overall CAIDI performance.
- 11 outages related to PSPS events contributed 2,313.0 minutes to the overall CAIDI performance.

4.7 San Jose CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
San Jose	January 7-10th, 2023	443.0	22
San Jose	January 14th, 2023	294.2	8
San Jose	January 16th, 2023	85.2	15
San Jose	February 19th, 2023	86.8	1
San Jose	February 21st, 2023	436.6	73
San Jose	February 23-28th, 2023	118.0	7
San Jose	March 9th, 2023	83.9	5
San Jose	March 14th, 2023	783.2	78
San Jose	March 21st, 2023	118.9	34
San Jose	September 9th, 2023	721.3	3
	Average of 10 excludable major events	437.6	25
San Jose	November 5th, 2024	876.1	10
	% difference	100.2%	-60.6%

Table 56 – San Jose Historical Performance

As indicated in Table 56, the San Jose Division CAIDI value of 876.1 minutes for the November 5th, 2024, major event was 100.2% higher than the 437.6-minute average of the prior 10 weather-related excludable major events.

The top contributing factors to the higher division CAIDI value on November 5th, 2024, was due to the following outages:

- 6 outages related to planned system hardening work and planned maintenance work contributed 258.7 minutes to the overall CAIDI performance.
- 2 outages related to PSPS events contributed 1,044.8 minutes to the overall CAIDI performance.

4.8 Sonoma CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
Sonoma	January 7-10th, 2023	321.7	33
Sonoma	January 14th, 2023	176.1	25
Sonoma	January 16th, 2023	341.4	9
Sonoma	February 19th, 2023	92.0	3
Sonoma	February 21st, 2023	355.7	72
Sonoma	February 23-28th, 2023	284.4	12
Sonoma	March 9th, 2023	116.4	11
Sonoma	March 14th, 2023	187.2	49
Sonoma	March 21st, 2023	259.6	16
Sonoma	September 9th, 2023	161.9	4
	Average of 10 excludable major events	284.6	24
Sonoma	November 5th, 2024	881.2	27
	% difference	209.6%	12%

Table 57 – Sonoma Historical Performance

As indicated in Table 57, the Sonoma Division CAIDI value of 881.2 minutes for the November 5th, 2024, major event was 209.6% higher than the 284.6-minute average of the prior 10 weather-related excludable major events.

The top contributing factors to the higher division CAIDI value on November 5th, 2024, was due to the following outages:

- 8 outages related to planned system hardening work contributed 147.1 minutes to the overall CAIDI performance.
- 14 outages related to PSPS events contributed 2,214.4 minutes to the overall CAIDI performance.



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5. December 14th, 2024, Major Event Day

A very strong winter storm moved through the territory on the 13th and 14th producing strong winds, moderate to heavy rain, thunderstorms, and heavy mountain snow. Rainfall totals 2" to 5" were reported across the North Coast and northern interior, leading to numerous reports of flooding. Widespread wind gusts in the range of 50-70+ mph was reported. An EF1 tornado was also reported in Scotts Valley, north of Santa Cruz. Residual outages carried over into the 15th.

(December 14, 2024 vs. Prior 10 MED)

System / Division	Average CAIDI of Prior 10 System / Division Specific Excludable ME	December 14th, 2024 / Division Specific CAIDI	Percent Difference From the Prior CAIDI Average	Exceeds the Investigation Threshold?
SYSTEM	808.4	451.4	55.8%	NO
CENTRAL COAST	997.5	968.5	97.1%	NO
DE ANZA	951.4	334.0	35.1%	NO
DIABLO	348.5	84.1	24.1%	NO
EAST BAY	565.5	212.4	37.6%	NO
FRESNO	338.7	221.2	65.3%	NO
HUMBOLDT	821.2	116.1	14.1%	NO
KERN	272.5	201.4	73.9%	NO
LOS PADRES	438.7	366.5	83.6%	NO
MISSION	206.2	111.2	53.9%	NO
NORTH BAY	359.7	438.0	121.8%	NO
NORTH VALLEY	470.7	307.4	65.3%	NO
PENINSULA	856.1	589.7	68.9%	NO
SACRAMENTO	509.9	153.4	30.1%	NO
SAN FRANCISCO	224.5	0.0	0.0%	NO
SAN JOSE	437.6	204.0	46.6%	NO
SIERRA	1,295.4	273.9	21.1%	NO
SONOMA	284.6	324.4	114.0%	NO
STOCKTON	551.9	457.2	82.8%	NO
YOSEMITE	729.5	361.4	49.5%	NO

Table 58 – December 14, 2024, CAIDI Performance\



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3. System and Division Indices Based on IEEE 1366 for the Past 10 Years Including Planned Outages and Including and Excluding MED

Table 69 below provides the T&D system reliability indices from 2015 to 2024 (excluding ISO outages) for unplanned and planned outages combined (both including and excluding Major Event Days).

Table 59: Combined Transmission and Distribution System Indices with Planned Outages

Year	Major Events Included				Major Events Excluded			
	SAIDI	SAIFI	MAIFI	CAIDI	SAIDI	SAIFI	MAIFI	CAIDI
2015	147.2	1.052	1.821	139.9	96.0	0.871	1.594	110.2
2016	121.9	1.103	1.603	110.6	108.9	1.021	1.494	106.7
2017	374.2	1.549	2.297	241.6	113.4	0.958	1.489	118.3
2018	309.4	1.175	1.428	263.3	126.3	1.080	1.361	117.0
2019	1,395.4	1.996	1.793	699.3	148.8	1.128	1.282	131.9
2020	478.4	1.556	1.571	307.5	153.2	1.179	1.316	130.0
2021	626.3	1.837	1.907	341.0	218.2	1.318	1.327	165.5
2022	326.3	1.778	1.409	183.5	255.7	1.630	1.320	156.9
2023	711.9	2.222	2.006	320.4	256.1	1.558	1.215	164.4
2024	510.1	2.161	1.527	236.0	276.4	1.832	1.205	150.9



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- a. **System and Division Indices Based on IEEE 1366 for the Past Ten Years Including Planned Outages, and Excluding ISO Outages**
- (i) Including MED
- (ii) Excluding MED

Table 60: System and Division Reliability Indices

		Major Events Included				Major Events Excluded			
Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI	SAIDI	SAIFI	MAIFI	CAIDI
CENTRAL COAST	2015	269.6	1.376	2.176	195.9	118.6	0.934	1.847	126.9
CENTRAL COAST	2016	202.8	1.714	2.739	118.3	180.2	1.548	2.485	116.4
CENTRAL COAST	2017	819.7	2.522	4.577	325.0	157.8	1.352	2.590	116.7
CENTRAL COAST	2018	217.7	1.733	2.507	125.6	193.0	1.582	2.247	122.0
CENTRAL COAST	2019	1,328.1	2.706	3.153	490.8	235.7	1.587	2.235	148.5
CENTRAL COAST	2020	417.0	2.215	1.968	188.3	180.0	1.808	1.680	99.6
CENTRAL COAST	2021	740.2	2.515	2.544	294.3	317.1	1.774	1.906	178.7
CENTRAL COAST	2022	523.3	3.132	3.002	167.1	416.7	2.808	2.872	148.4
CENTRAL COAST	2023	1,814.2	4.012	3.743	452.3	458.7	2.626	2.160	174.7
CENTRAL COAST	2024	1,245.0	3.384	2.254	367.9	433.6	2.664	1.651	162.8
Division/System	Year	AIDI	AIFI	MAIFI	CAIDI	SAIDI	SAIFI	MAIFI	CAIDI
DE ANZA	2015	80.7	0.680	1.291	118.8	68.2	0.561	1.182	121.7
DE ANZA	2016	119.4	0.977	1.415	122.1	96.8	0.806	1.337	120.2
DE ANZA	2017	332.0	1.583	1.793	209.7	114.3	1.063	1.150	107.5
DE ANZA	2018	121.3	0.967	1.429	125.4	117.8	0.918	1.406	128.3
DE ANZA	2019	435.7	1.496	2.011	291.3	124.0	0.982	1.660	126.4
DE ANZA	2020	252.7	1.043	1.642	242.2	108.7	0.793	1.257	137.0
DE ANZA	2021	327.8	1.301	1.798	251.9	153.5	0.896	1.001	171.2
DE ANZA	2022	227.9	1.387	1.116	164.3	169.2	1.174	1.067	144.1
DE ANZA	2023	1,545.0	2.607	3.004	592.6	226.1	1.189	1.471	190.2
DE ANZA	2024	549.1	2.286	1.819	240.2	288.7	1.844	1.306	156.5
Division/System	Year	AIDI	AIFI	MAIFI	CAIDI	SAIDI	SAIFI	MAIFI	CAIDI
DIABLO	2015	97.9	1.062	1.883	92.2	87.8	0.935	1.676	93.9
DIABLO	2016	97.8	1.121	1.736	87.3	95.2	1.107	1.701	86.0
DIABLO	2017	161.0	1.327	2.143	121.3	97.9	0.982	1.625	99.8
DIABLO	2018	122.1	1.278	1.544	95.6	110.7	1.168	1.501	94.7
DIABLO	2019	640.8	1.728	1.857	370.9	105.8	1.057	1.215	100.1
DIABLO	2020	269.0	1.523	1.825	176.6	130.1	1.295	1.623	100.5
DIABLO	2021	201.1	1.588	1.673	126.6	148.4	1.328	1.354	111.7
DIABLO	2022	244.5	1.844	1.385	132.6	215.3	1.713	1.298	125.7
DIABLO	2023	489.5	2.270	1.582	215.7	213.5	1.492	1.080	143.1
DIABLO	2024	350.5	2.288	1.652	153.2	227.2	2.036	1.346	111.6



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		Major Events Included				Major Events Excluded			
Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI	SAIDI	SAIFI	MAIFI	CAIDI
EAST BAY	2015	65.9	0.749	1.179	87.9	51.1	0.611	1.085	83.6
EAST BAY	2016	137.1	1.246	1.243	110.0	110.2	1.091	1.080	101.0
EAST BAY	2017	162.1	1.271	1.983	127.6	88.3	0.956	1.528	92.4
EAST BAY	2018	121.0	1.089	1.132	111.1	111.9	0.999	1.081	112.0
EAST BAY	2019	485.2	1.419	1.217	342.0	109.1	0.924	0.957	118.1
EAST BAY	2020	238.2	1.174	1.647	202.9	111.1	0.896	1.453	124.0
EAST BAY	2021	265.6	1.772	1.685	149.9	181.0	1.341	1.369	135.0
EAST BAY	2022	195.3	1.351	1.682	144.6	183.0	1.265	1.662	144.7
EAST BAY	2023	442.7	1.671	1.566	265.0	139.6	1.095	0.782	127.5
EAST BAY	2024	220.6	1.467	0.916	150.4	188.4	1.273	0.716	148.0
Division/System	Year	AIDI	AIFI	MAIFI	CAIDI	SAIDI	SAIFI	MAIFI	CAIDI
FRESNO	2015	115.2	1.238	2.060	93.1	84.8	0.935	1.832	90.7
FRESNO	2016	99.4	1.206	1.978	82.4	97.5	1.184	1.955	82.4
FRESNO	2017	116.6	1.064	1.866	109.6	85.9	0.874	1.549	98.2
FRESNO	2018	128.0	1.142	1.416	112.1	87.3	0.955	1.369	91.4
FRESNO	2019	139.2	1.090	1.697	127.8	96.6	0.920	1.478	105.0
FRESNO	2020	130.3	1.205	1.464	108.1	99.4	0.931	1.364	106.7
FRESNO	2021	227.8	1.424	1.699	159.9	156.1	1.149	1.469	135.9
FRESNO	2022	201.3	1.378	1.798	146.0	194.2	1.327	1.736	146.3
FRESNO	2023	305.9	1.594	1.980	191.9	195.2	1.262	1.491	154.7
FRESNO	2024	218.6	1.630	1.568	134.1	213.9	1.594	1.518	134.2
Division/System	Year	AIDI	AIFI	MAIFI	CAIDI	SAIDI	SAIFI	MAIFI	CAIDI
HUMBOLDT	2015	738.9	2.388	2.739	309.4	319.8	1.774	2.426	180.2
HUMBOLDT	2016	251.0	1.757	2.100	142.9	234.5	1.657	2.040	141.6
HUMBOLDT	2017	955.5	2.526	3.511	378.2	310.5	1.469	2.281	211.4
HUMBOLDT	2018	448.5	2.333	1.571	192.3	271.4	1.976	1.503	137.4
HUMBOLDT	2019	7,018.7	4.731	2.490	1,483.6	391.2	1.964	1.900	199.2
HUMBOLDT	2020	1,058.7	2.460	1.499	430.4	280.3	1.631	1.346	171.8
HUMBOLDT	2021	1,717.4	3.196	2.145	537.4	569.3	2.368	1.481	240.4
HUMBOLDT	2022	1,158.0	3.595	1.451	322.1	618.2	3.036	1.373	203.7
HUMBOLDT	2023	2,524.4	4.612	3.643	547.3	724.6	3.109	1.703	233.1
HUMBOLDT	2024	1,387.0	4.408	2.324	314.7	850.7	3.845	1.819	221.3
Division/System	Year	AIDI	AIFI	MAIFI	CAIDI	AIDI	AIFI	MAIFI	CAIDI
KERN	2015	104.5	1.022	1.929	102.2	92.8	0.938	1.855	99.0
KERN	2016	101.9	0.998	2.078	102.1	101.3	0.982	2.071	103.1
KERN	2017	149.9	1.132	1.959	132.4	88.5	0.790	1.403	112.0
KERN	2018	83.3	0.859	1.748	97.0	82.4	0.852	1.721	96.7
KERN	2019	172.4	1.391	2.080	123.9	116.1	1.162	1.744	99.9
KERN	2020	137.6	1.196	1.968	115.1	122.5	1.099	1.843	111.4
KERN	2021	193.7	1.454	1.869	133.2	151.7	1.155	1.516	131.3
KERN	2022	288.2	1.565	1.288	184.2	284.9	1.531	1.210	186.2
KERN	2023	212.4	1.479	2.125	143.6	164.1	1.274	1.807	128.9
KERN	2024	248.5	1.527	2.162	162.7	209.1	1.408	1.722	148.6



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		Major Events Included				Major Events Excluded			
Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI	SAIDI	SAIFI	MAIFI	CAIDI
LOS PADRES	2015	148.2	0.931	1.814	159.1	88.1	0.773	1.438	113.9
LOS PADRES	2016	130.2	1.255	1.674	103.7	128.4	1.230	1.672	104.4
LOS PADRES	2017	335.7	1.688	2.127	198.9	126.3	1.054	1.443	119.8
LOS PADRES	2018	165.9	1.408	1.155	117.8	154.5	1.325	1.011	116.6
LOS PADRES	2019	261.0	1.670	1.134	156.3	184.0	1.319	0.798	139.5
LOS PADRES	2020	221.5	1.408	0.916	157.3	162.4	1.252	0.837	129.8
LOS PADRES	2021	341.5	1.825	1.951	187.1	233.6	1.320	1.330	177.0
LOS PADRES	2022	362.3	2.207	1.001	164.2	275.6	1.999	0.871	137.9
LOS PADRES	2023	484.2	2.593	1.808	186.7	266.7	2.016	1.199	132.3
LOS PADRES	2024	417.2	2.768	1.223	150.7	306.5	2.458	1.008	124.7
Division/System	Year	AIDI	AIFI	MAIFI	CAIDI	AIDI	AIFI	MAIFI	CAIDI
MISSION	2015	71.7	0.654	1.152	109.6	65.6	0.601	1.055	109.3
MISSION	2016	95.2	0.828	0.972	114.9	85.1	0.766	0.927	111.1
MISSION	2017	149.1	1.074	1.471	138.8	71.1	0.664	1.004	107.1
MISSION	2018	79.5	0.738	0.853	107.6	74.3	0.710	0.829	104.7
MISSION	2019	308.2	1.014	0.943	303.9	77.0	0.732	0.697	105.1
MISSION	2020	231.5	1.258	1.389	184.0	103.2	0.821	1.061	125.6
MISSION	2021	172.2	1.287	1.225	133.8	129.2	1.027	0.922	125.7
MISSION	2022	142.6	0.915	0.921	155.9	124.5	0.858	0.883	145.0
MISSION	2023	183.1	1.149	1.095	159.3	119.7	0.853	0.799	140.3
MISSION	2024	196.6	1.471	1.123	133.6	166.2	1.281	1.016	129.8
Division/System	Year	AIDI	AIFI	MAIFI	CAIDI	AIDI	AIFI	MAIFI	CAIDI
NORTH BAY	2015	156.3	1.171	2.162	133.5	117.9	1.014	1.978	116.2
NORTH BAY	2016	133.5	1.040	1.436	128.3	107.2	0.887	1.210	120.8
NORTH BAY	2017	752.8	1.840	2.812	409.0	167.7	1.033	1.835	162.3
NORTH BAY	2018	204.7	1.145	1.856	178.9	156.0	1.082	1.790	144.2
NORTH BAY	2019	3,551.3	3.321	2.276	1,069.4	180.8	1.449	1.652	124.8
NORTH BAY	2020	555.2	1.897	2.536	292.6	188.8	1.413	2.107	133.6
NORTH BAY	2021	405.0	1.839	2.293	220.2	210.7	1.267	1.555	166.3
NORTH BAY	2022	295.7	1.785	1.206	165.7	291.0	1.746	1.152	166.7
NORTH BAY	2023	556.8	2.154	1.895	258.5	270.4	1.557	0.957	173.7
NORTH BAY	2024	826.7	2.885	1.746	286.6	319.6	2.267	1.058	141.0
Division/System	Year	AIDI	AIFI	MAIFI	CAIDI	AIDI	AIFI	MAIFI	CAIDI
NORTH VALLEY	2015	505.6	1.920	2.536	263.4	158.7	1.195	1.938	132.9
NORTH VALLEY	2016	194.4	1.357	2.195	143.3	165.7	1.220	1.959	135.9
NORTH VALLEY	2017	417.4	1.760	3.164	237.1	130.9	0.949	2.008	138.0
NORTH VALLEY	2018	4,318.7	1.774	1.401	2,434.4	218.5	1.508	1.333	144.9
NORTH VALLEY	2019	4,960.1	4.212	2.515	1,177.5	277.4	1.751	1.473	158.4
NORTH VALLEY	2020	2,102.1	2.964	1.685	709.3	390.3	1.940	1.400	201.1
NORTH VALLEY	2021	2,223.8	3.224	3.269	689.7	517.0	1.999	2.219	258.6
NORTH VALLEY	2022	460.1	2.593	1.339	177.4	443.6	2.517	1.234	176.2
NORTH VALLEY	2023	824.7	3.064	2.152	269.2	476.0	2.402	1.339	198.1
NORTH VALLEY	2024	813.2	2.704	1.420	300.7	449.5	2.288	1.153	196.5



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Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI	SAIDI	SAIFI	MAIFI	CAIDI
PENINSULA	2015	90.5	0.940	1.798	96.3	74.8	0.826	1.602	90.6
PENINSULA	2016	102.6	1.065	1.383	96.3	94.4	0.984	1.197	96.0
PENINSULA	2017	181.4	1.394	2.383	130.1	75.6	0.704	1.176	107.3
PENINSULA	2018	106.1	0.991	1.256	107.0	99.7	0.940	1.204	106.0
PENINSULA	2019	771.5	1.661	1.642	464.5	124.1	0.920	0.983	134.9
PENINSULA	2020	196.8	1.288	1.383	152.8	112.5	0.943	1.043	119.3
PENINSULA	2021	436.2	1.762	1.927	247.6	204.3	1.199	0.945	170.4
PENINSULA	2022	206.2	1.282	1.415	160.8	174.7	1.155	1.352	151.3
PENINSULA	2023	1,281.8	2.581	2.977	496.7	248.2	1.418	1.366	175.1
PENINSULA	2024	656.7	2.181	1.142	301.1	266.0	1.740	0.706	152.9
Division/System	Year	AIDI	AIFI	MAIFI	CAIDI	AIDI	AIFI	MAIFI	CAIDI
SACRAMENTO	2015	113.0	1.009	1.776	112.0	100.7	0.913	1.561	110.3
SACRAMENTO	2016	118.5	1.133	1.810	104.6	102.6	1.042	1.545	98.5
SACRAMENTO	2017	300.0	1.970	3.218	152.3	137.9	1.168	1.713	118.1
SACRAMENTO	2018	134.3	1.190	1.937	112.8	126.6	1.152	1.827	110.0
SACRAMENTO	2019	686.8	1.761	2.349	390.1	114.3	0.939	1.575	121.7
SACRAMENTO	2020	302.1	1.690	1.797	178.7	193.7	1.438	1.500	134.7
SACRAMENTO	2021	608.9	1.849	2.892	329.4	183.6	1.228	1.878	149.6
SACRAMENTO	2022	417.7	1.660	1.720	251.6	206.4	1.407	1.573	146.7
SACRAMENTO	2023	475.3	1.892	2.112	251.2	222.2	1.380	1.437	161.0
SACRAMENTO	2024	531.6	1.949	1.921	272.8	250.0	1.456	1.408	171.7
Division/System	Year	AIDI	AIFI	MAIFI	CAIDI	AIDI	AIFI	MAIFI	CAIDI
SAN FRANCISCO	2015	44.2	0.569	0.553	77.7	41.8	0.551	0.516	75.8
SAN FRANCISCO	2016	49.7	0.597	0.398	83.3	48.7	0.577	0.356	84.4
SAN FRANCISCO	2017	127.0	0.906	0.514	140.3	46.5	0.543	0.372	85.6
SAN FRANCISCO	2018	62.2	0.506	0.300	123.0	58.9	0.466	0.273	126.5
SAN FRANCISCO	2019	104.9	0.817	0.363	128.4	88.4	0.707	0.259	125.0
SAN FRANCISCO	2020	66.8	0.713	0.429	93.7	61.7	0.651	0.389	94.8
SAN FRANCISCO	2021	94.4	0.770	0.595	122.6	73.8	0.622	0.500	118.7
SAN FRANCISCO	2022	76.1	0.611	0.476	124.6	72.3	0.578	0.460	125.0
SAN FRANCISCO	2023	171.9	0.974	0.561	176.4	104.1	0.691	0.366	150.5
SAN FRANCISCO	2024	138.0	0.813	0.259	169.7	109.1	0.736	0.209	148.2
Division/System	Year	AIDI	AIFI	MAIFI	CAIDI	AIDI	AIFI	MAIFI	CAIDI
SAN JOSE	2015	90.1	0.872	1.165	103.4	80.4	0.785	1.022	102.3
SAN JOSE	2016	80.8	0.753	1.203	107.2	77.4	0.719	1.155	107.6
SAN JOSE	2017	201.1	1.342	1.808	149.8	92.9	0.837	1.172	111.0
SAN JOSE	2018	112.1	0.986	1.351	113.7	110.1	0.972	1.324	113.3
SAN JOSE	2019	290.8	1.154	1.425	252.0	96.1	0.815	1.256	117.8
SAN JOSE	2020	193.6	1.145	1.528	169.1	136.4	0.974	1.276	140.0
SAN JOSE	2021	189.4	1.079	1.252	175.5	112.5	0.835	0.910	134.7
SAN JOSE	2022	234.5	1.488	1.332	157.6	175.4	1.249	1.183	140.4
SAN JOSE	2023	341.8	1.489	1.614	229.5	158.5	1.003	1.050	158.0
SAN JOSE	2024	446.4	1.788	1.618	249.7	212.8	1.455	1.274	146.2



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		Major Events Included				Major Events Excluded			
Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI	SAIDI	SAIFI	MAIFI	CAIDI
SIERRA	2015	197.3	1.378	3.224	143.2	138.4	1.218	2.887	113.6
SIERRA	2016	188.4	1.341	1.887	140.4	135.8	1.118	1.728	121.4
SIERRA	2017	641.5	2.193	3.112	292.4	176.3	1.308	1.864	134.8
SIERRA	2018	445.6	1.693	1.446	263.3	198.9	1.482	1.366	134.3
SIERRA	2019	5,898.4	4.364	2.630	1,351.5	239.3	1.408	1.555	170.0
SIERRA	2020	2,402.7	2.901	2.076	828.3	265.4	1.695	1.328	156.5
SIERRA	2021	3,142.9	3.236	2.544	971.3	415.4	2.016	1.105	206.0
SIERRA	2022	795.8	3.669	1.212	216.9	621.0	3.455	1.048	179.8
SIERRA	2023	1,573.1	3.665	2.588	429.2	456.2	2.798	1.197	163.1
SIERRA	2024	1,039.4	3.768	1.962	275.9	437.6	3.158	1.552	138.6
Division/System	Year	AIDI	AIFI	MAIFI	CAIDI	AIDI	AIFI	MAIFI	CAIDI
SONOMA	2015	140.7	0.985	1.993	142.8	94.3	0.790	1.535	119.5
SONOMA	2016	114.5	0.931	1.605	123.0	107.7	0.887	1.508	121.3
SONOMA	2017	1,868.6	2.064	2.887	905.3	139.0	0.998	1.567	139.3
SONOMA	2018	150.4	1.152	1.242	130.5	147.9	1.133	1.203	130.5
SONOMA	2019	3,929.2	2.801	1.786	1,402.9	202.1	1.325	1.358	152.5
SONOMA	2020	643.8	1.819	1.621	353.9	166.7	1.232	1.351	135.2
SONOMA	2021	454.1	1.989	1.891	228.3	221.2	1.492	1.429	148.2
SONOMA	2022	299.9	1.795	1.490	167.1	289.6	1.755	1.427	165.0
SONOMA	2023	572.0	2.015	1.210	283.9	226.6	1.516	0.665	149.5
SONOMA	2024	853.6	2.574	1.920	331.6	315.5	2.014	1.341	156.6
Division/System	Year	AIDI	AIFI	MAIFI	CAIDI	AIDI	AIFI	MAIFI	CAIDI
STOCKTON	2015	135.0	1.105	2.249	122.1	106.5	0.944	1.952	112.8
STOCKTON	2016	118.1	1.087	1.778	108.7	102.1	0.994	1.664	102.7
STOCKTON	2017	289.5	1.718	1.930	168.5	102.3	1.033	1.270	99.1
STOCKTON	2018	239.2	1.232	2.000	194.1	121.8	1.115	1.878	109.3
STOCKTON	2019	1,602.3	2.465	1.920	650.0	196.8	1.372	1.146	143.4
STOCKTON	2020	678.8	1.680	1.596	403.9	149.3	1.271	1.315	117.5
STOCKTON	2021	1,152.2	2.178	2.421	529.0	208.5	1.323	1.481	157.6
STOCKTON	2022	516.0	2.037	1.198	253.3	277.9	1.811	1.071	153.5
STOCKTON	2023	668.6	2.723	2.148	245.5	317.1	2.067	1.342	153.4
STOCKTON	2024	416.0	2.131	1.634	195.2	281.0	1.817	1.375	154.7
Division/System	Year	AIDI	AIFI	MAIFI	CAIDI	AIDI	AIFI	MAIFI	CAIDI
YOSEMITE	2015	130.6	1.162	3.098	112.4	120.4	1.073	2.641	112.2
YOSEMITE	2016	147.9	1.333	2.164	111.0	141.3	1.277	2.032	110.6
YOSEMITE	2017	323.8	1.796	3.053	180.2	155.5	1.242	2.155	125.2
YOSEMITE	2018	190.6	1.544	1.841	123.5	171.4	1.433	1.780	119.6
YOSEMITE	2019	1,425.6	2.767	2.689	515.2	186.0	1.581	1.607	117.6
YOSEMITE	2020	809.2	2.077	1.592	389.6	222.6	1.542	1.304	144.3
YOSEMITE	2021	1,366.4	3.353	2.644	407.6	479.6	2.359	1.818	203.3
YOSEMITE	2022	407.2	2.428	1.874	167.7	381.4	2.241	1.658	170.2
YOSEMITE	2023	1,154.1	3.363	2.614	343.2	459.3	2.435	1.710	188.6
YOSEMITE	2024	385.7	2.492	1.748	154.8	322.5	2.302	1.552	140.1



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		Major Events Included				Major Events Excluded			
Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI	SAIDI	SAIFI	MAIFI	CAIDI
SYSTEM	2015	147.2	1.052	1.821	139.9	96.0	0.871	1.594	110.2
SYSTEM	2016	121.9	1.103	1.603	110.6	108.9	1.021	1.494	106.7
SYSTEM	2017	374.2	1.549	2.297	241.6	113.4	0.958	1.489	118.3
SYSTEM	2018	309.4	1.175	1.428	263.3	126.3	1.080	1.361	117.0
SYSTEM	2019	1,395.4	1.996	1.793	699.3	148.8	1.128	1.282	131.9
SYSTEM	2020	478.4	1.556	1.571	307.5	153.2	1.179	1.316	130.0
SYSTEM	2021	626.3	1.837	1.907	341.0	218.2	1.318	1.327	165.5
SYSTEM	2022	326.3	1.778	1.409	183.5	255.7	1.630	1.320	156.9
SYSTEM	2023	711.9	2.222	2.006	320.4	256.1	1.558	1.215	164.4
SYSTEM	2024	510.1	2.161	1.527	236.0	276.4	1.832	1.205	150.9

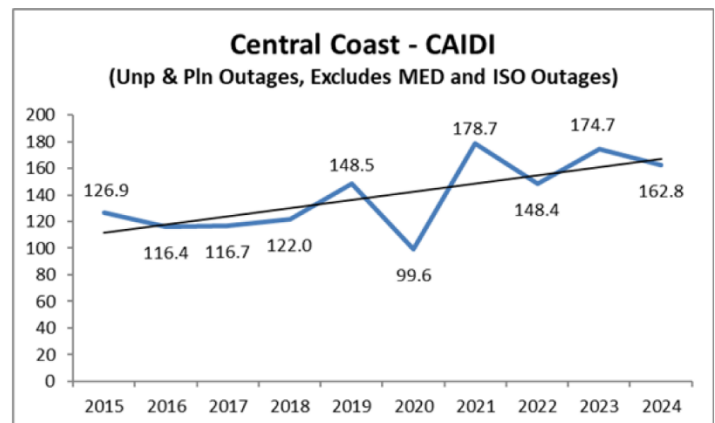
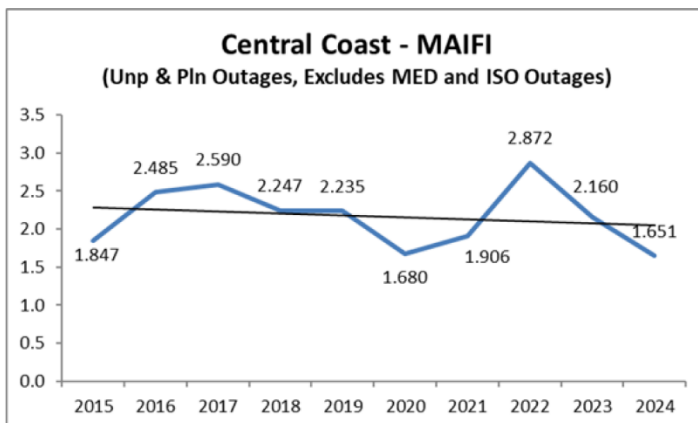
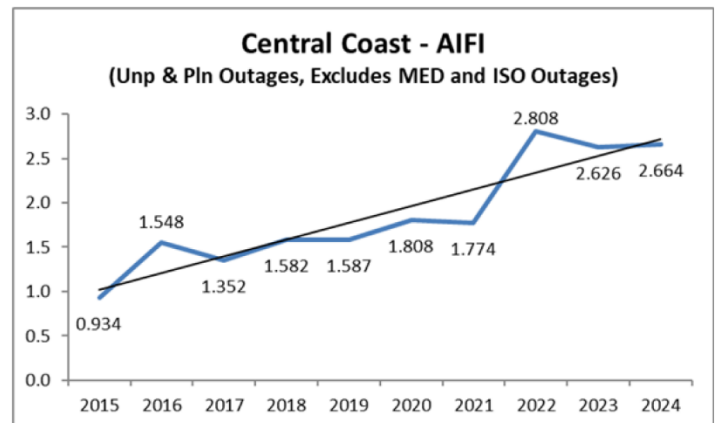
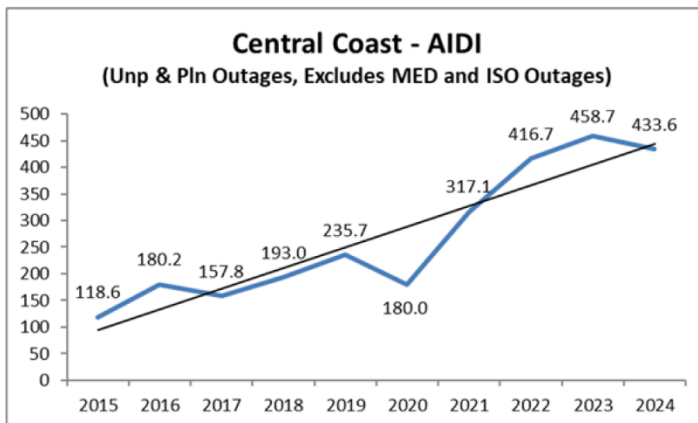


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b. Charts for System and Division Indices Based on IEEE 1366 for the Past 10 Years Including Planned Outages and Including and Excluding MED

i. Charts for System and Division Reliability Indices based on IEEE 1366 for the Past 10 Years with Linear Trend Line, and Including Planned Outages and Excluding ISO, and ME

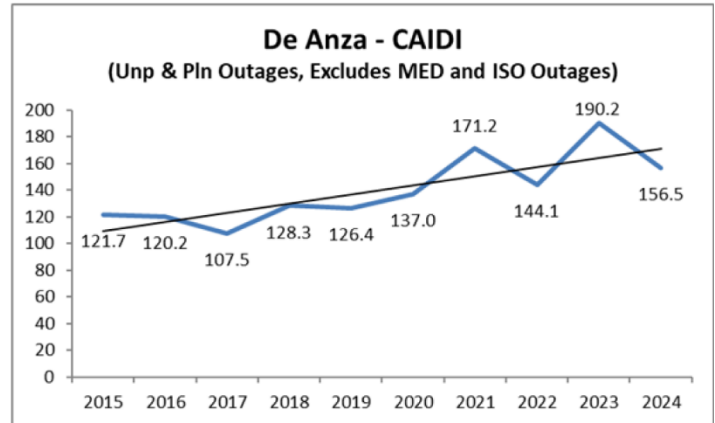
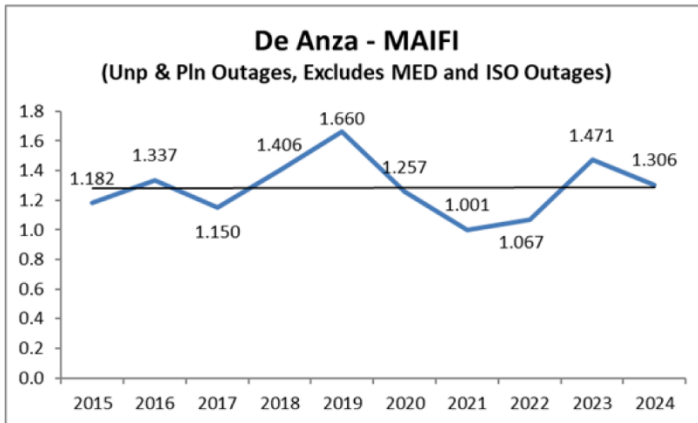
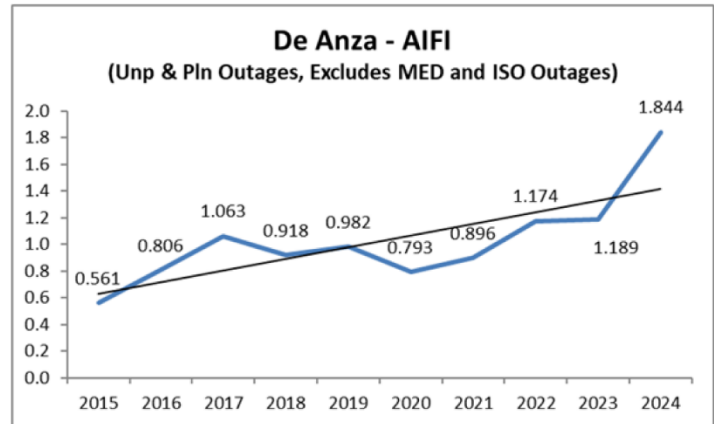
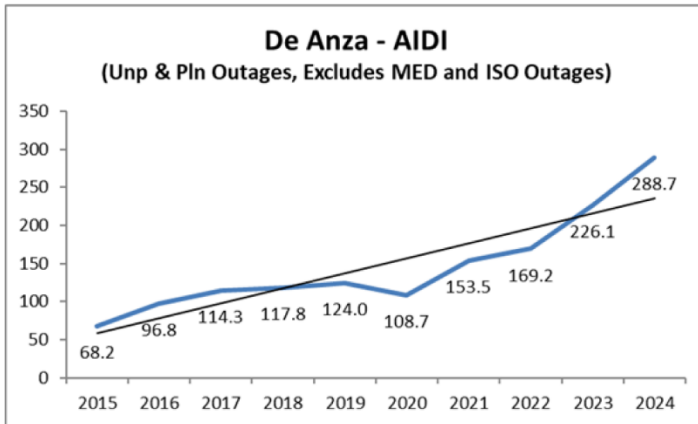
1. Central Coast Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Excluded)





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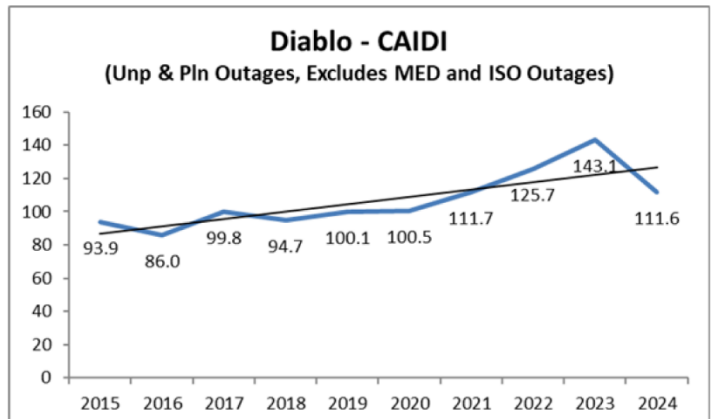
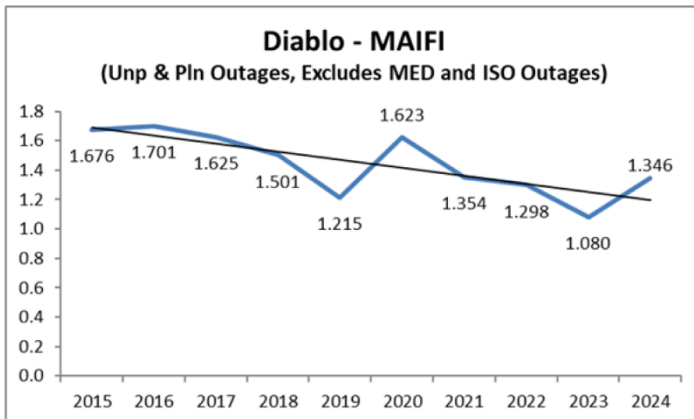
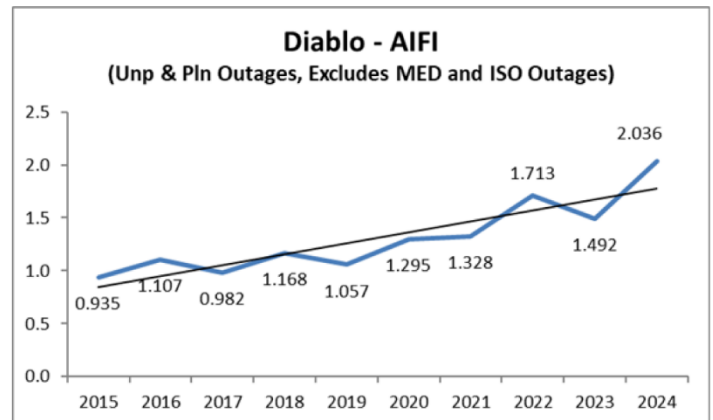
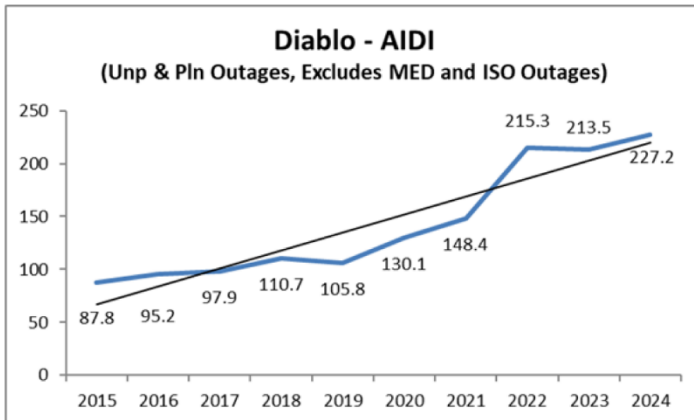
2. De Anza Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Excluded)





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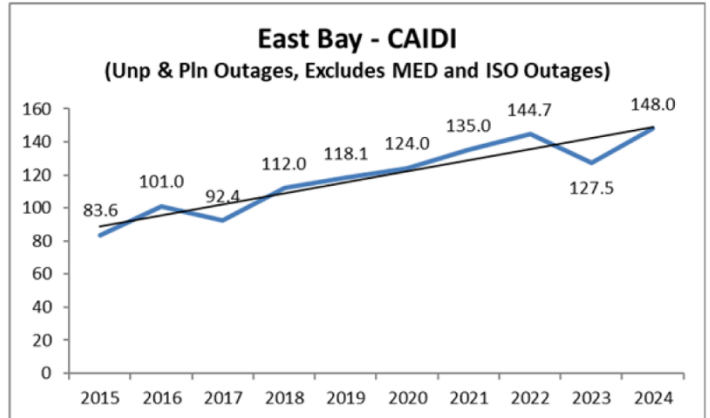
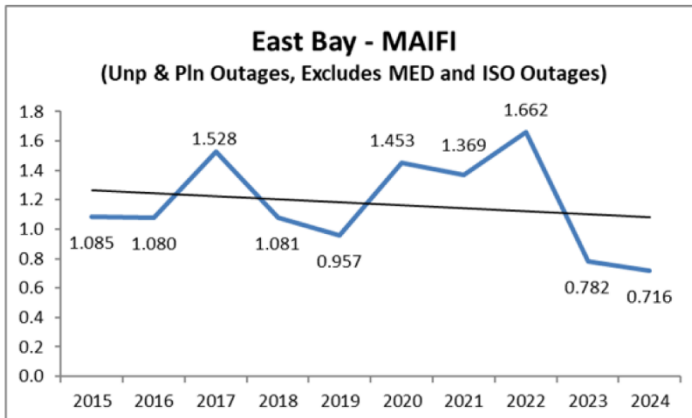
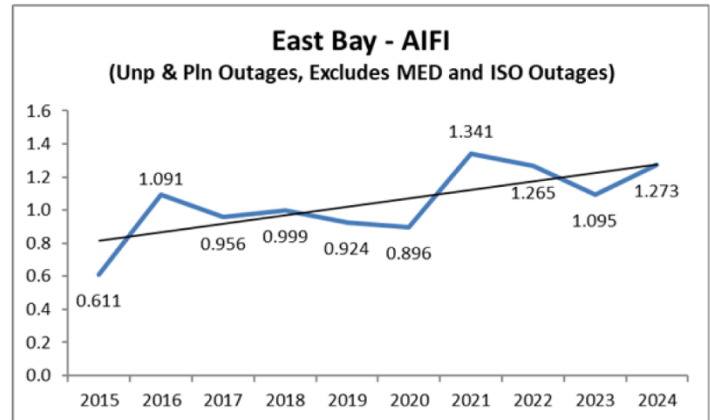
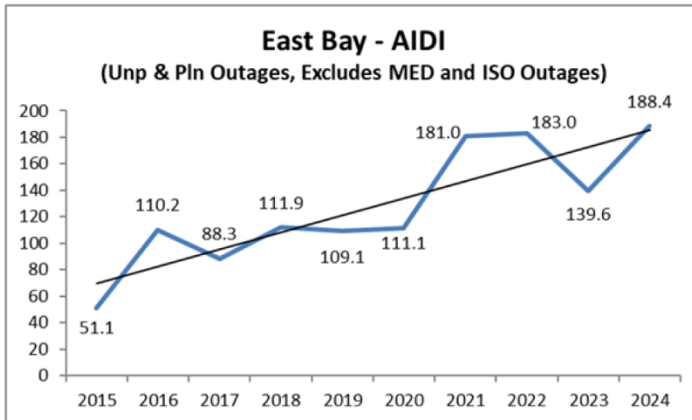
3. Diablo Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Excluded)





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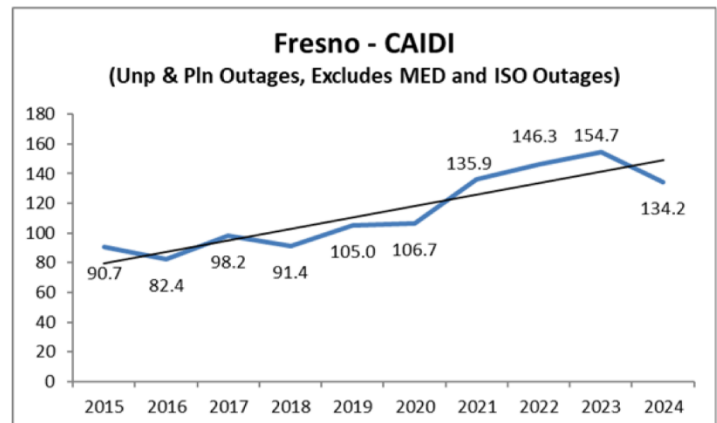
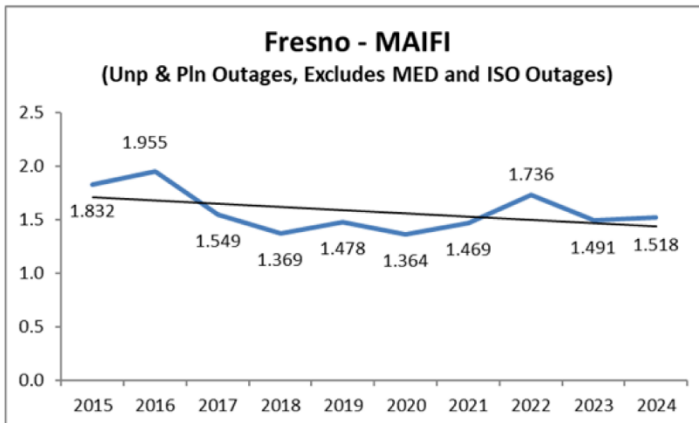
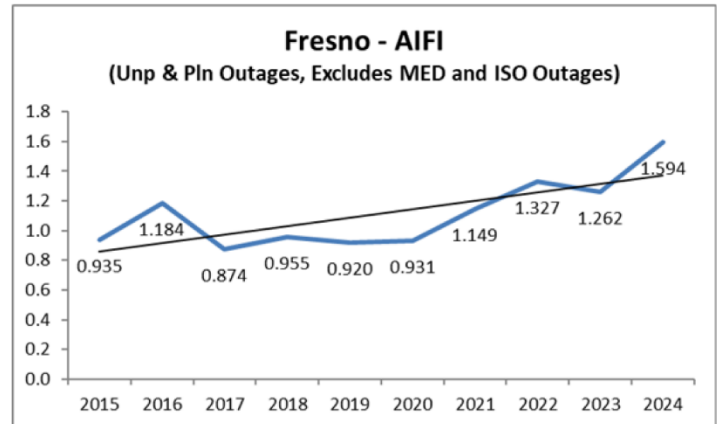
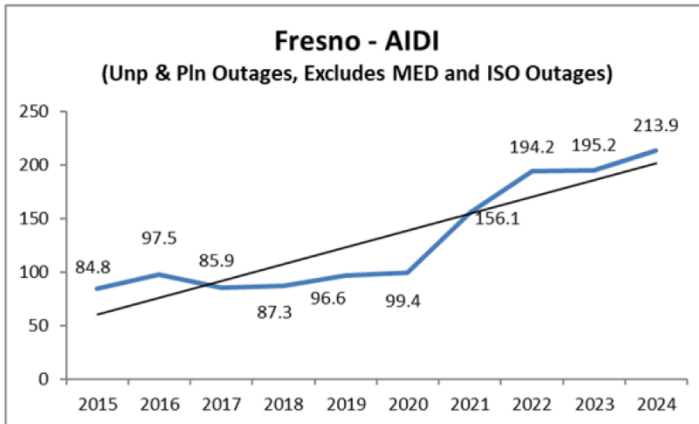
4. East Bay Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Excluded)





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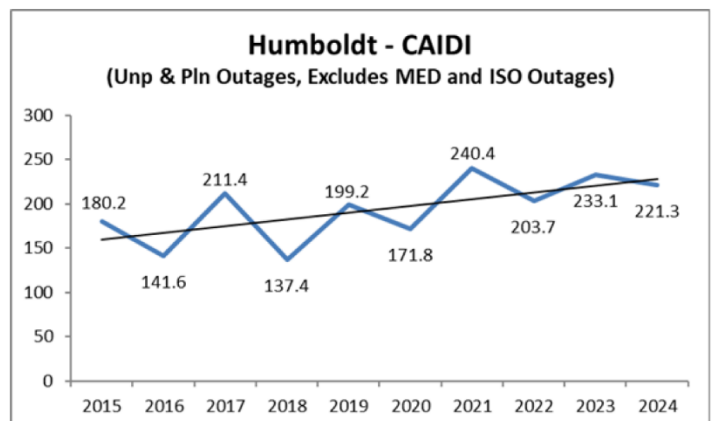
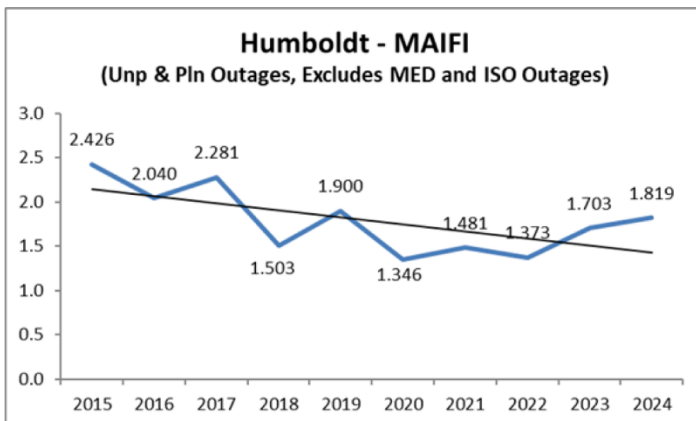
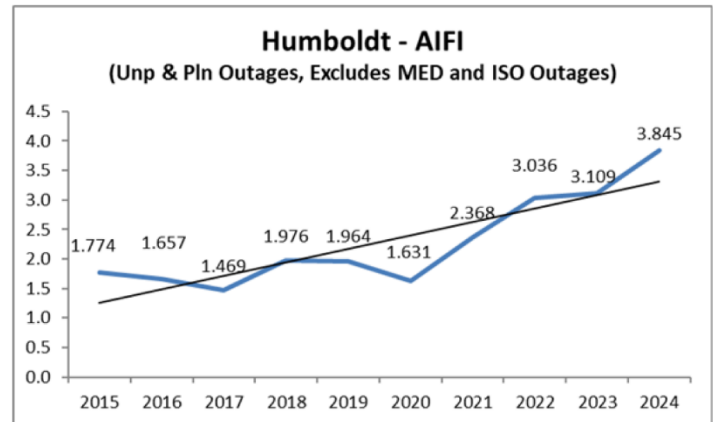
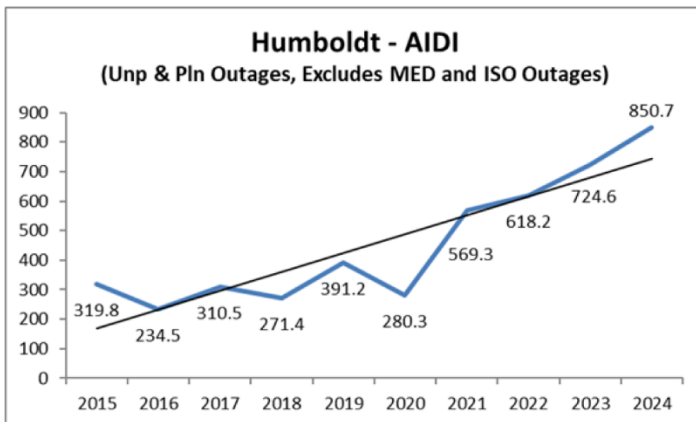
5. Fresno Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Excluded)





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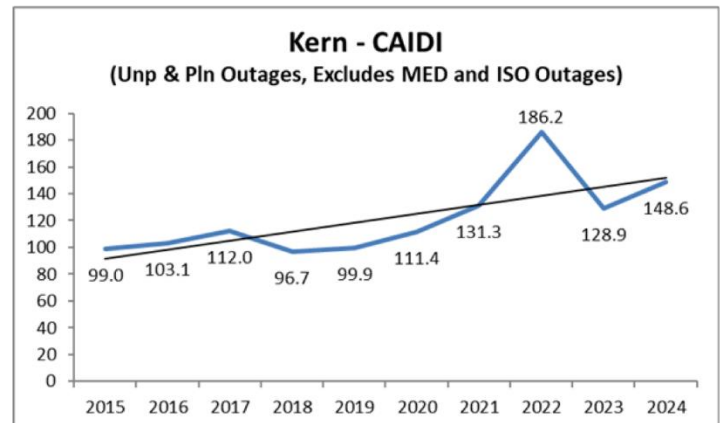
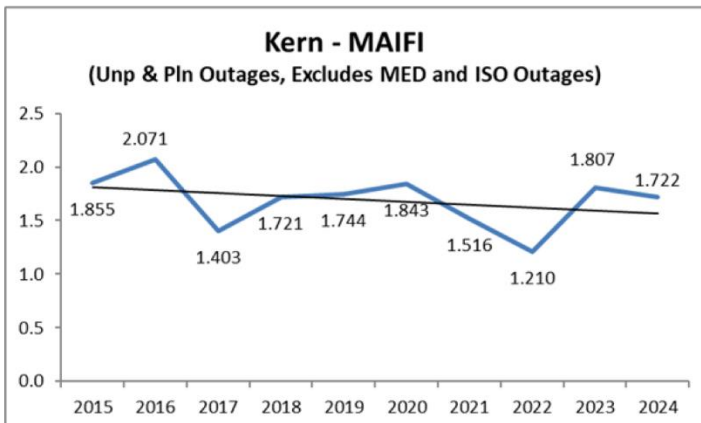
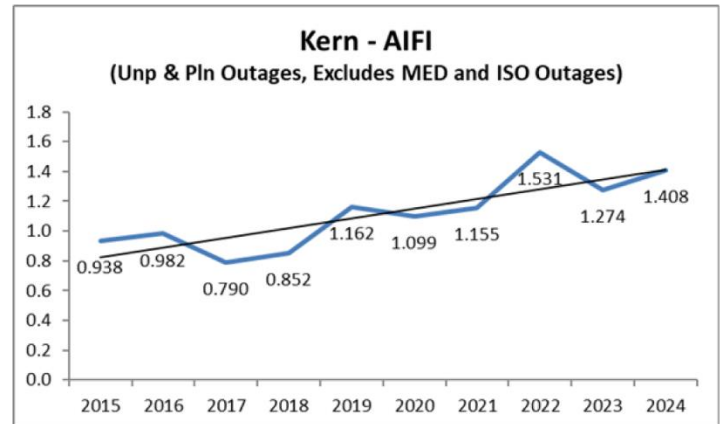
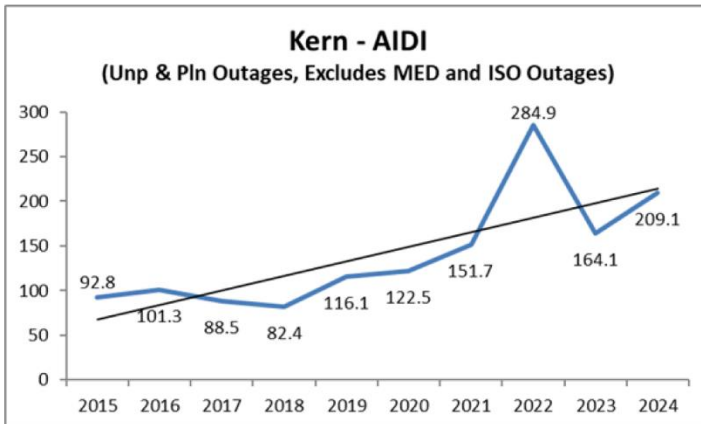
6. Humboldt Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Excluded)





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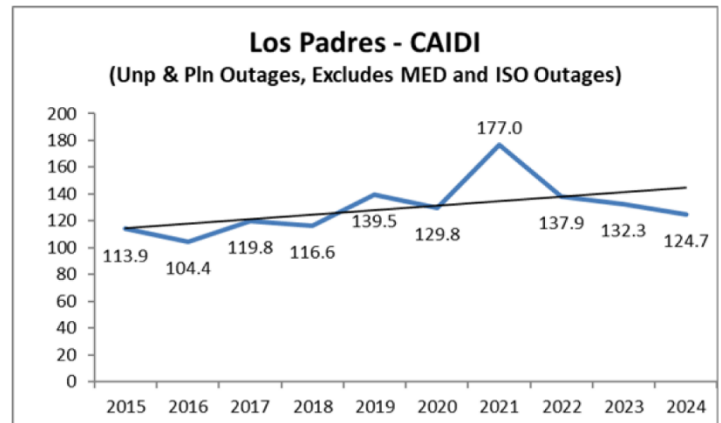
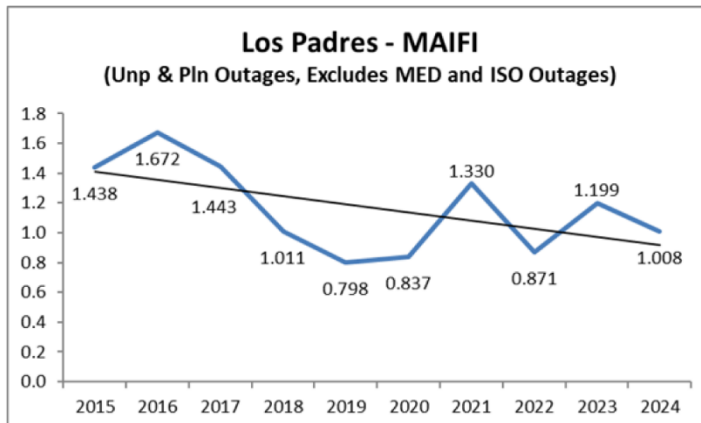
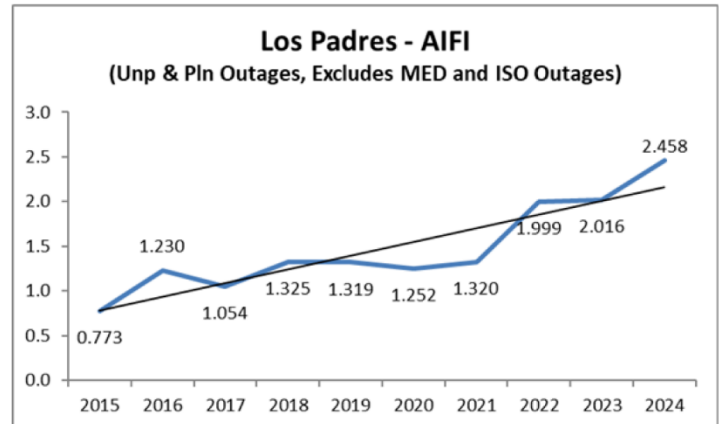
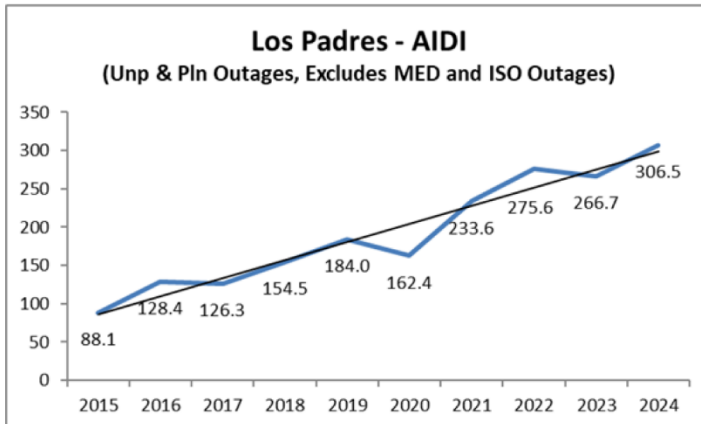
7. Kern Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Excluded)





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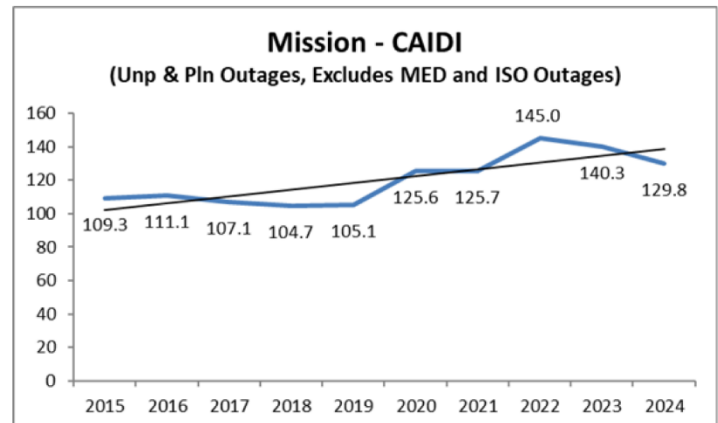
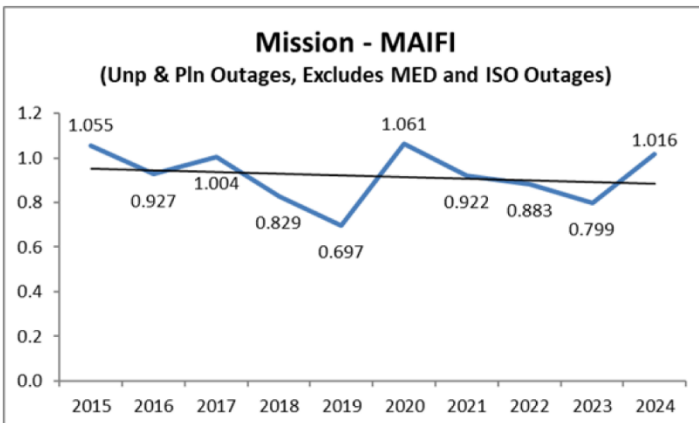
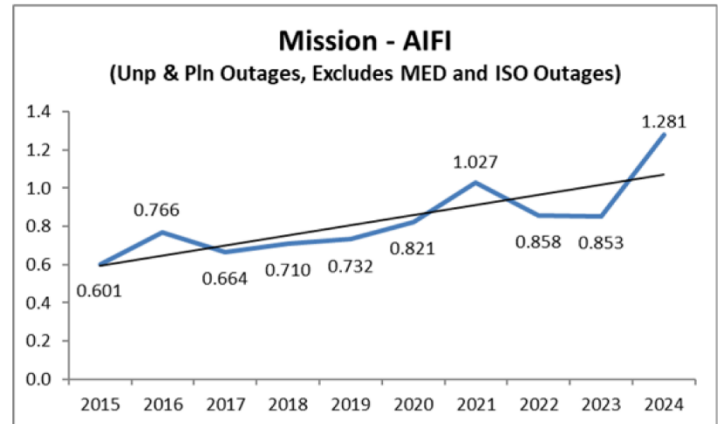
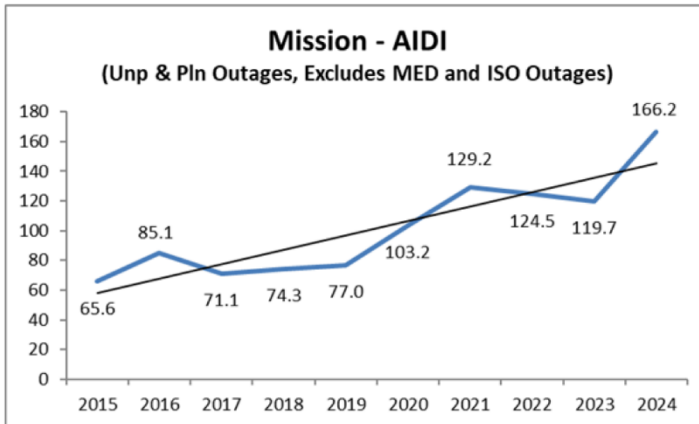
8. Los Padres Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Excluded)





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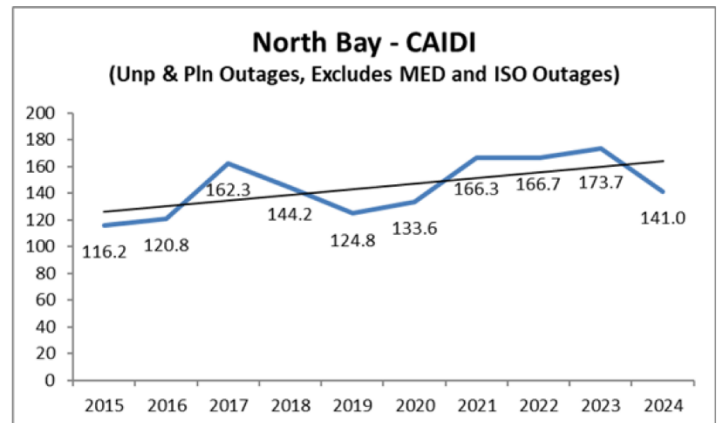
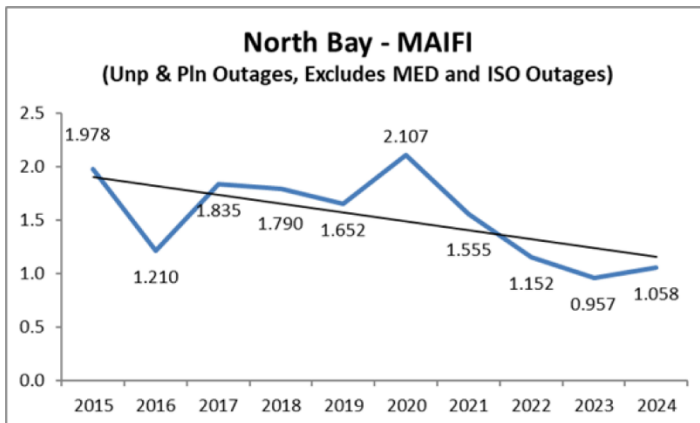
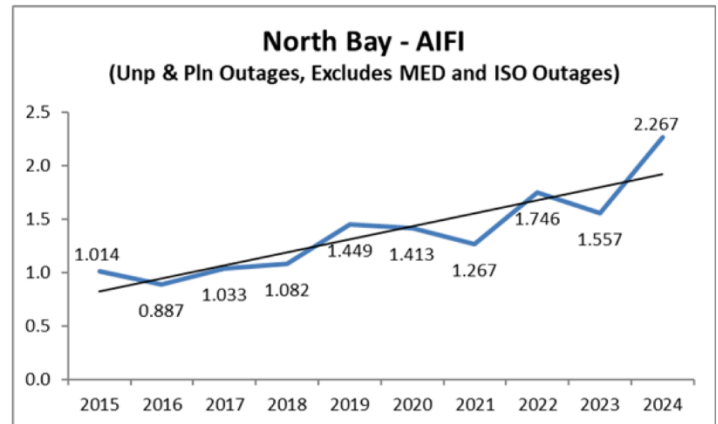
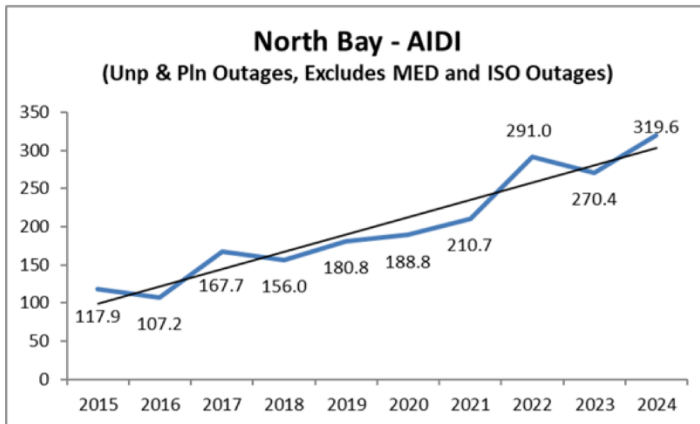
9. Mission Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Excluded)





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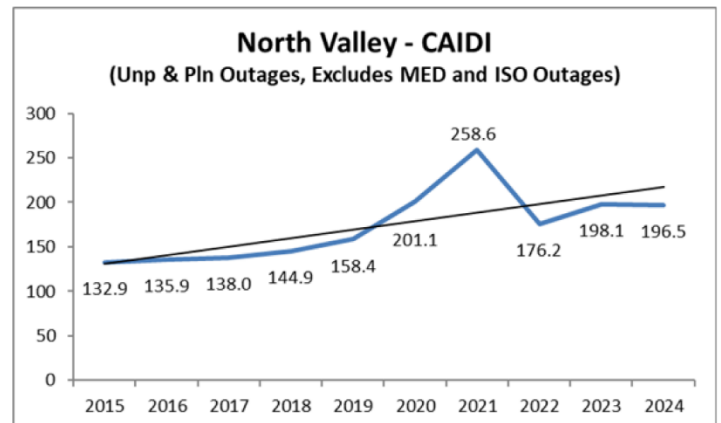
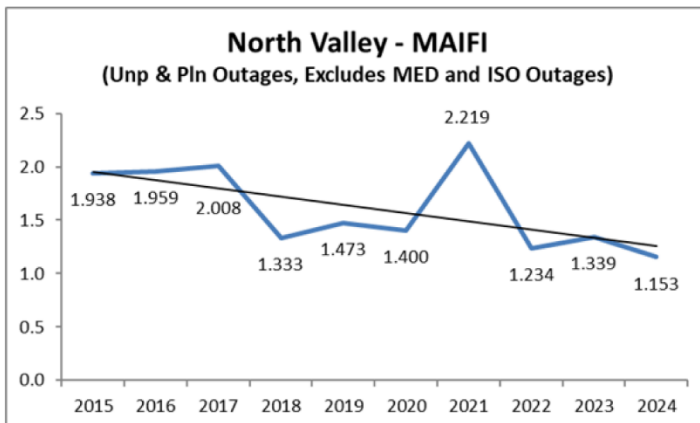
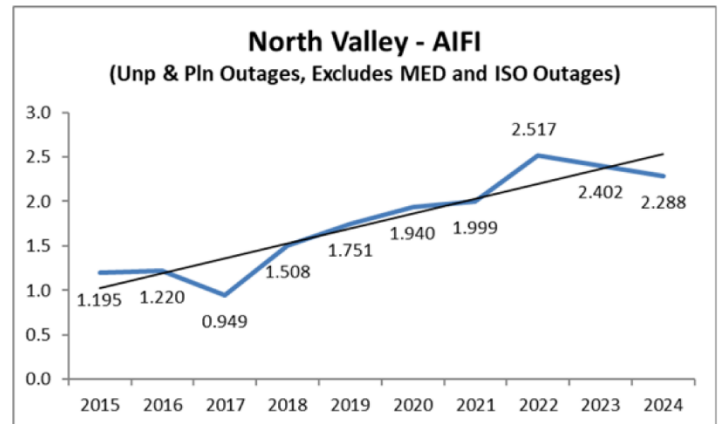
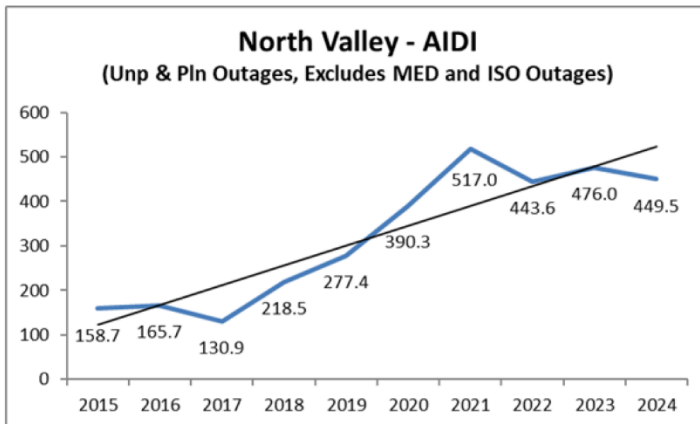
10. North Bay Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Excluded)





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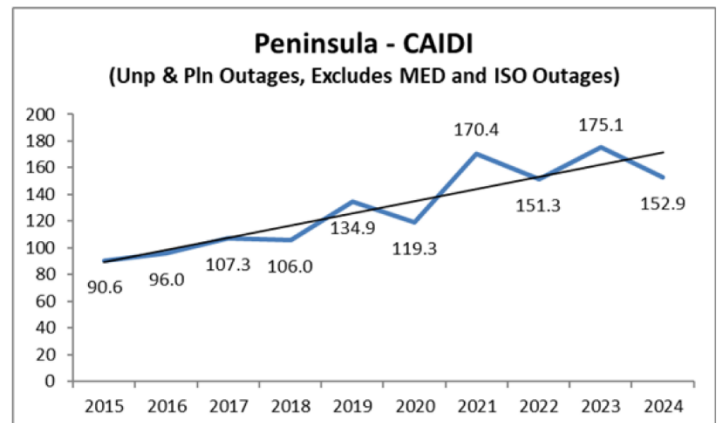
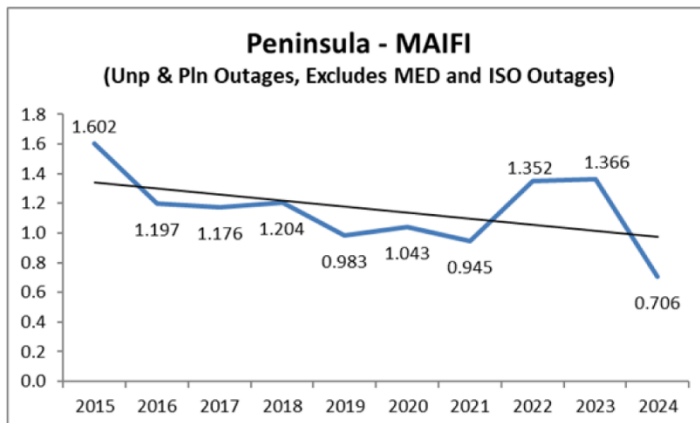
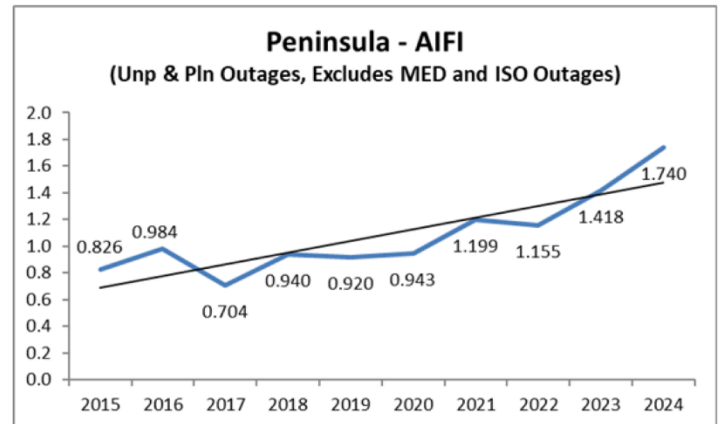
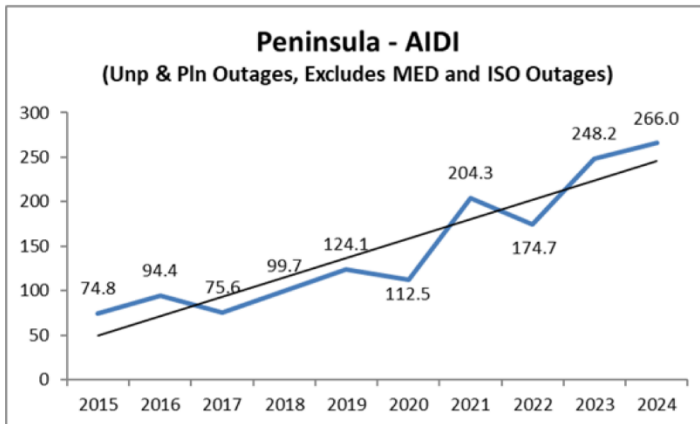
11. North Valley Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Excluded)





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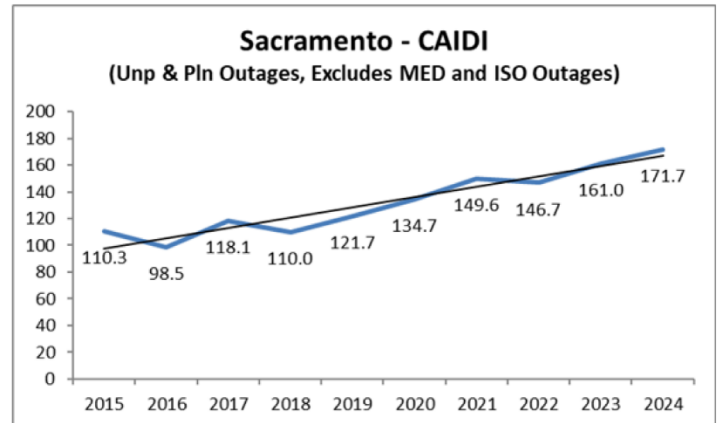
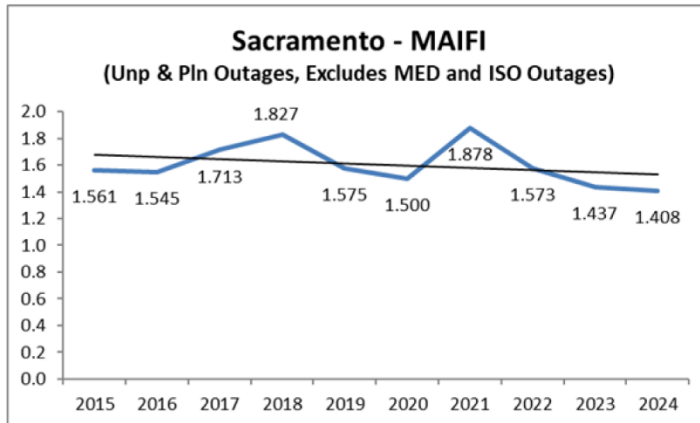
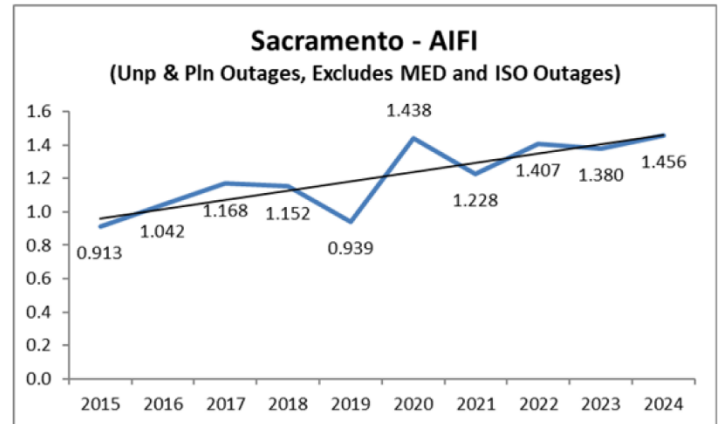
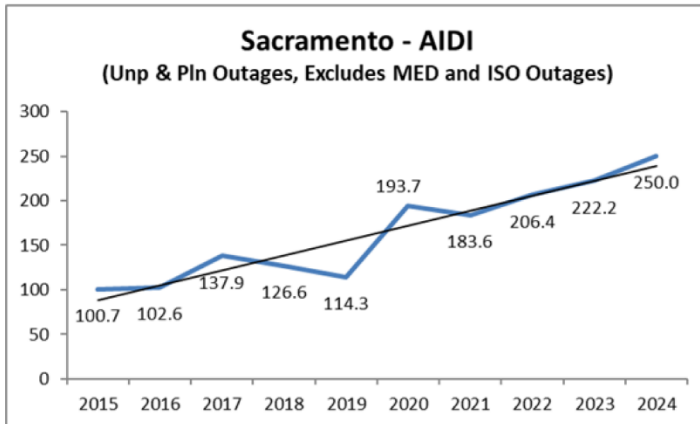
12. Peninsula Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Excluded)





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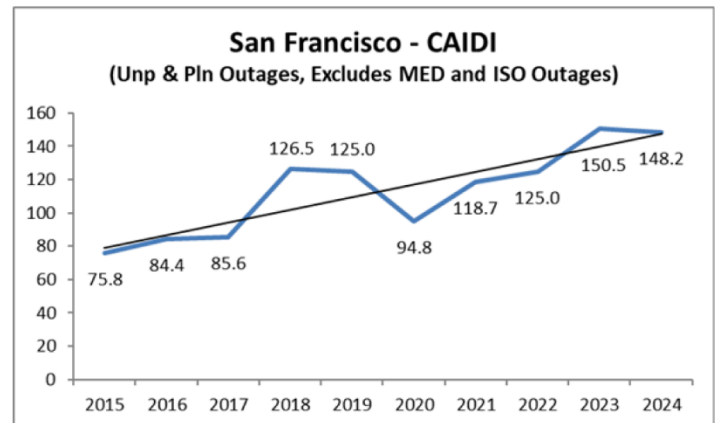
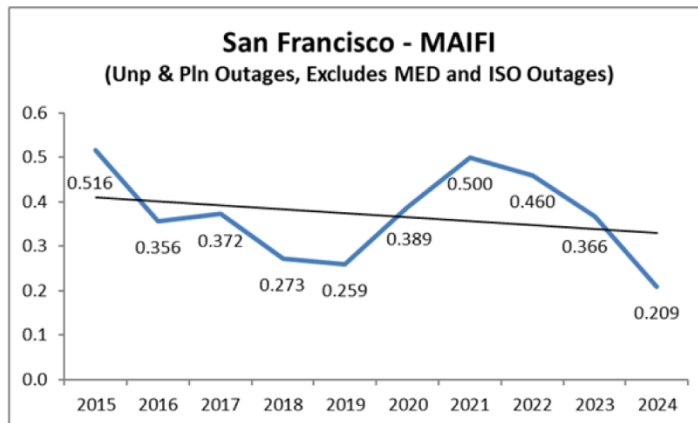
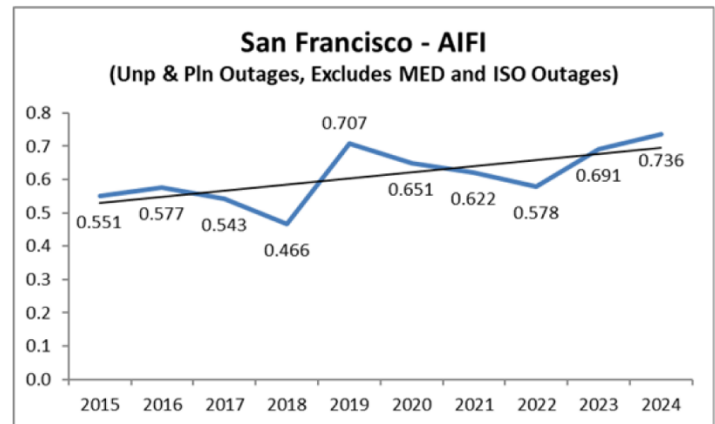
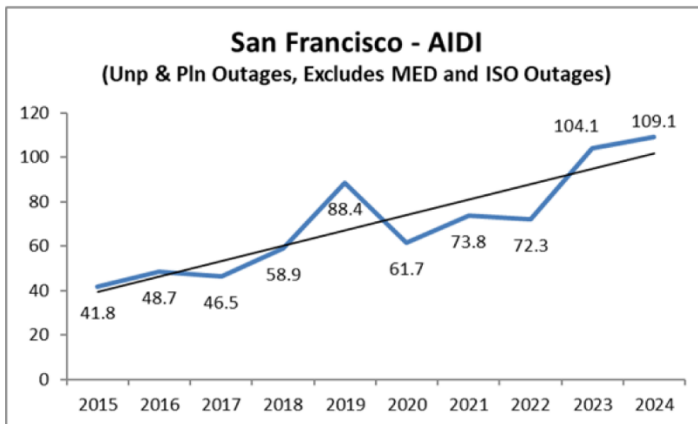
13. Sacramento Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Excluded)





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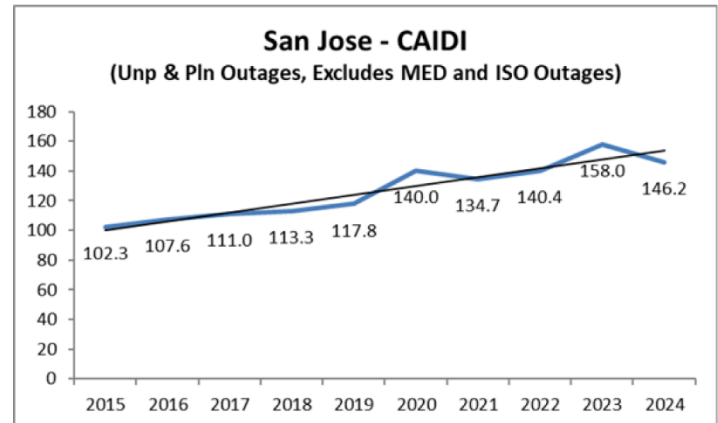
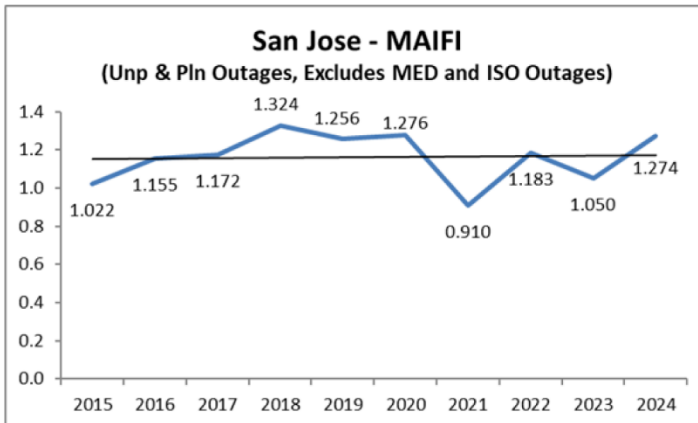
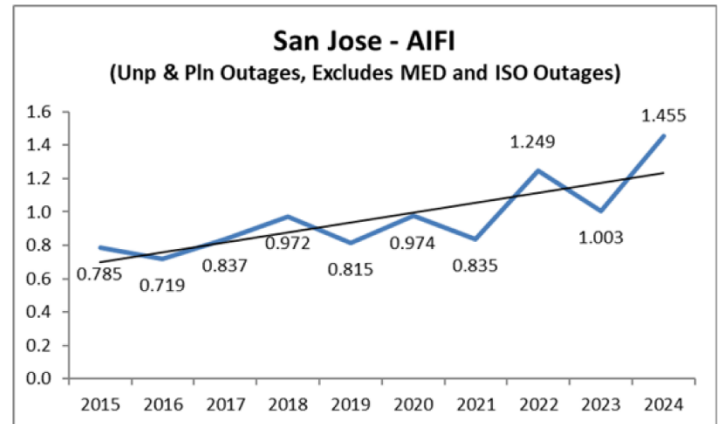
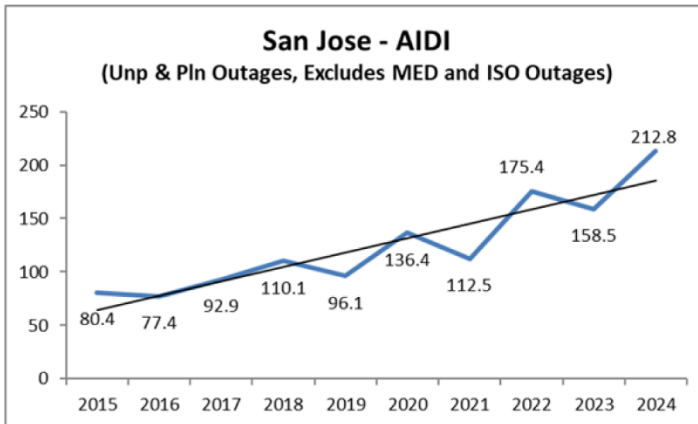
14. San Francisco Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Excluded)





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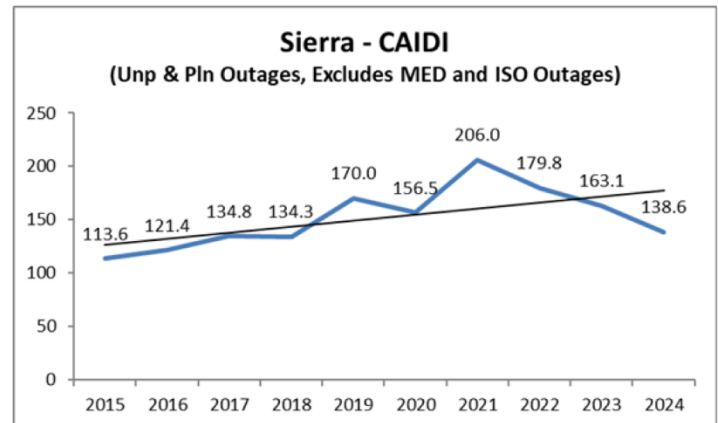
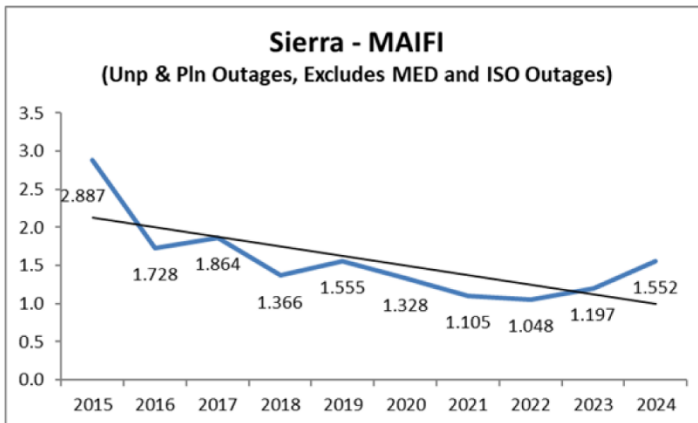
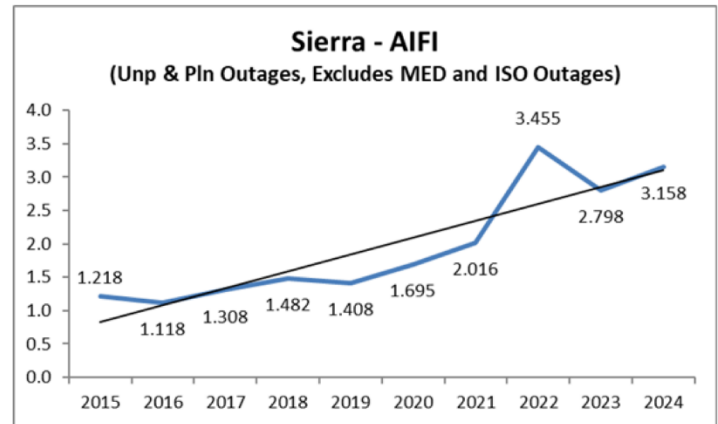
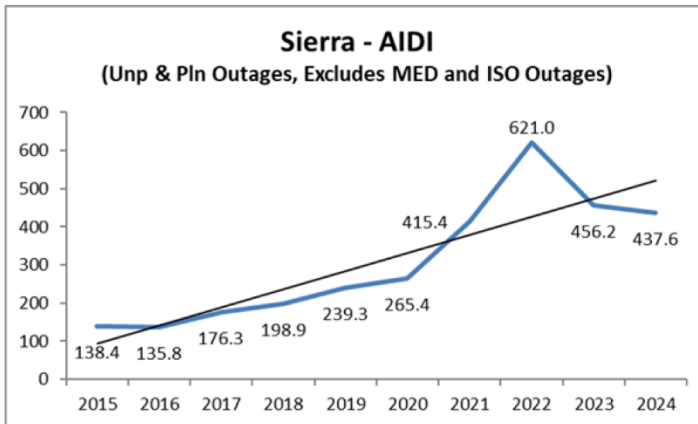
15. San Jose Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Excluded)





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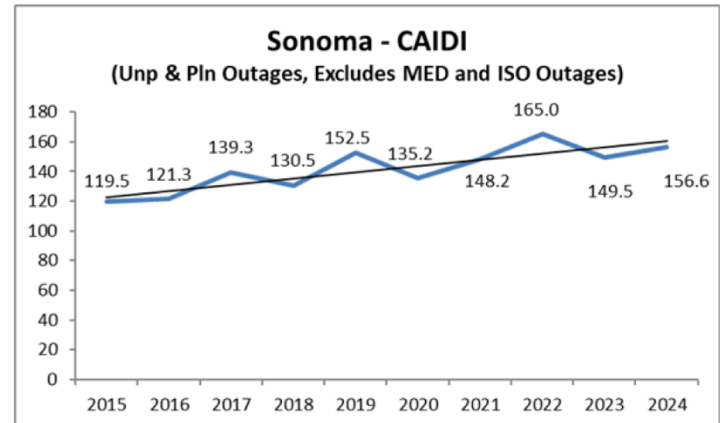
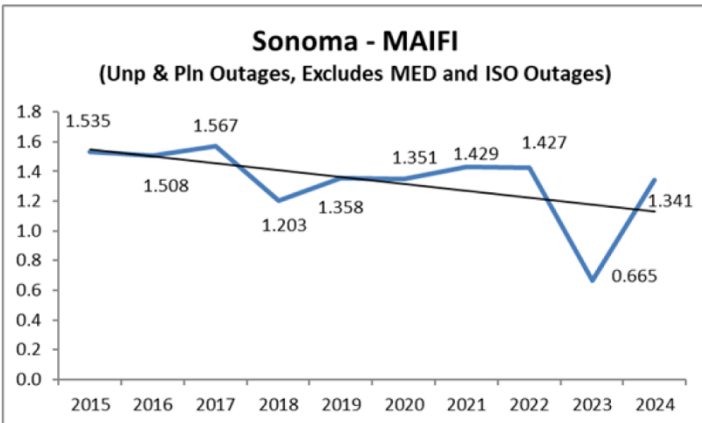
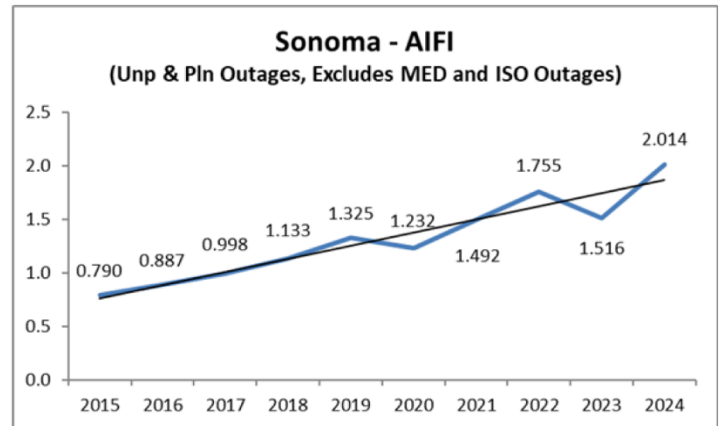
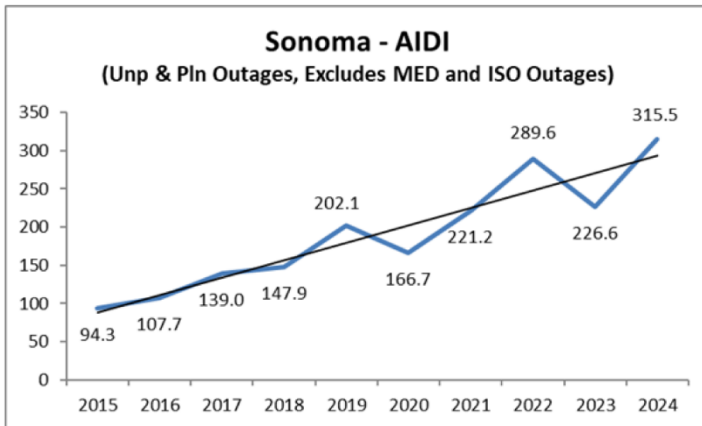
16. Sierra Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Excluded)





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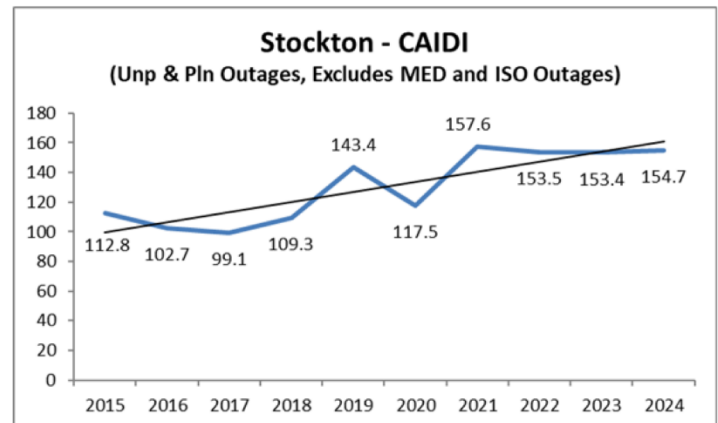
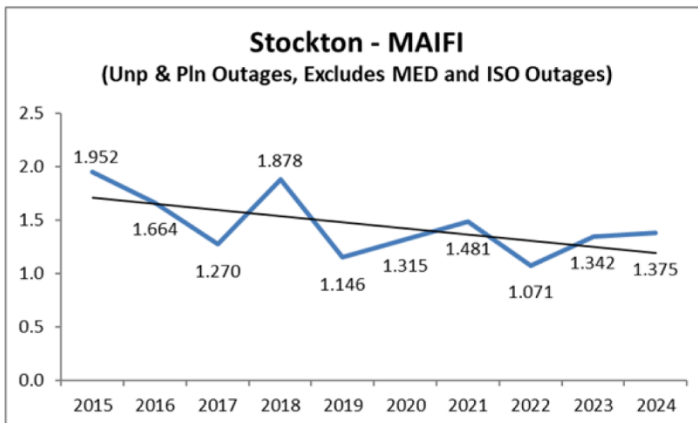
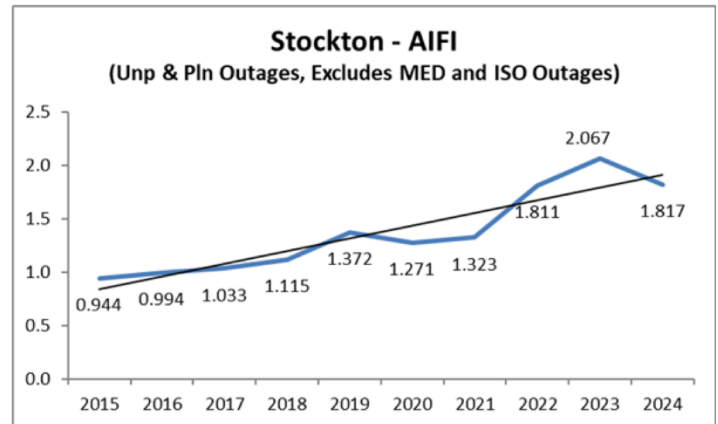
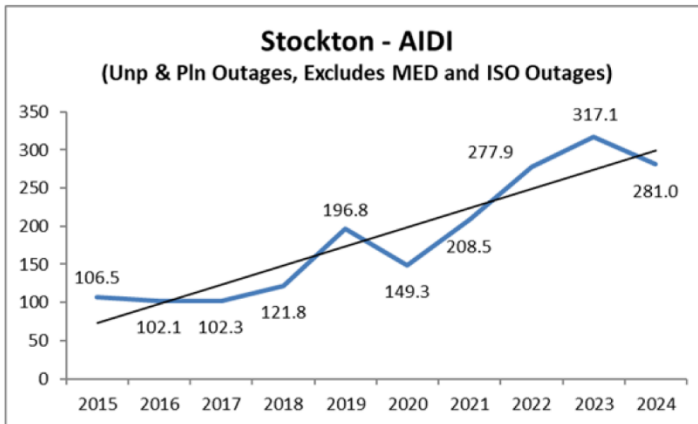
17. Sonoma Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Excluded)



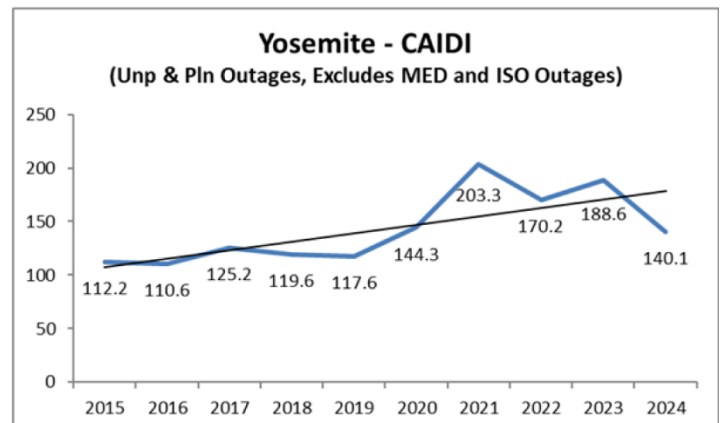
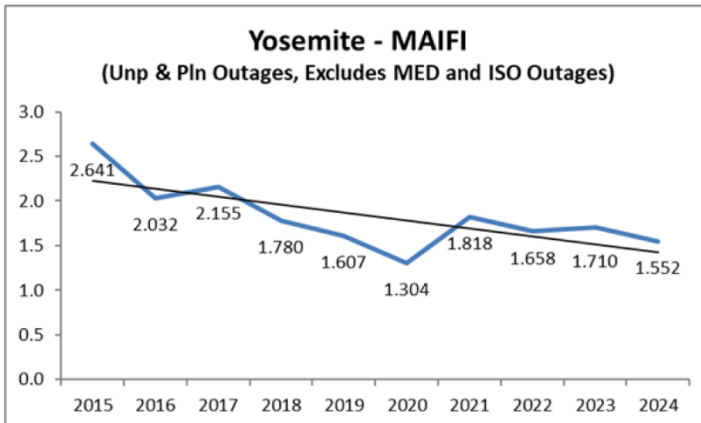
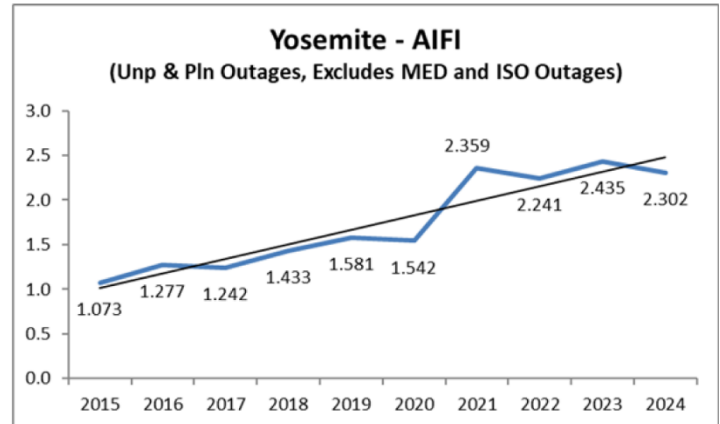
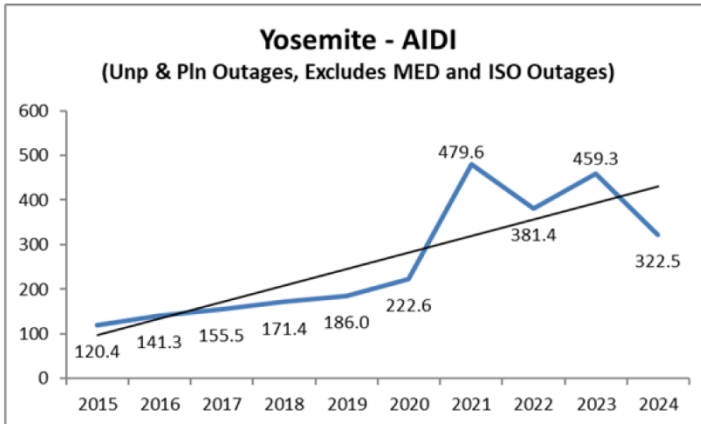


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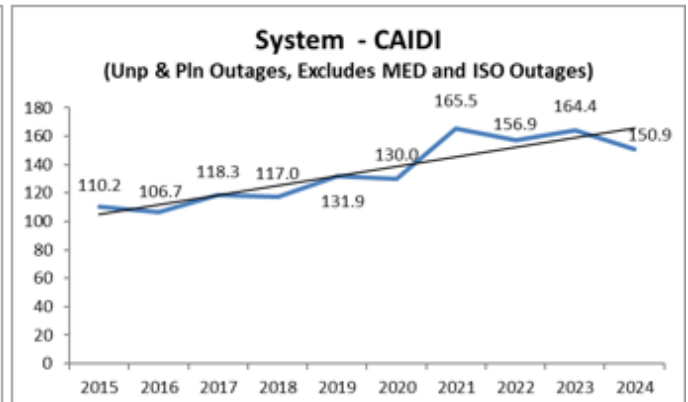
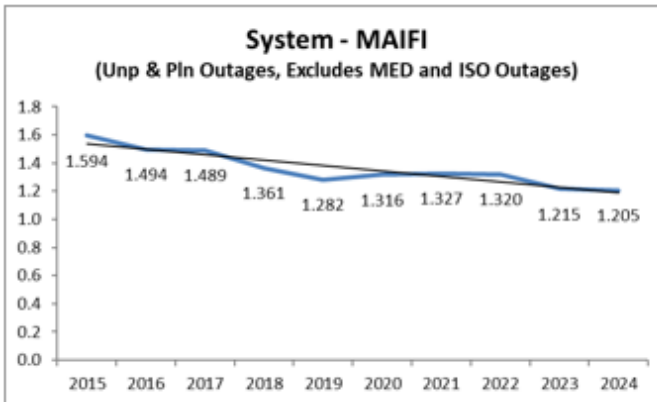
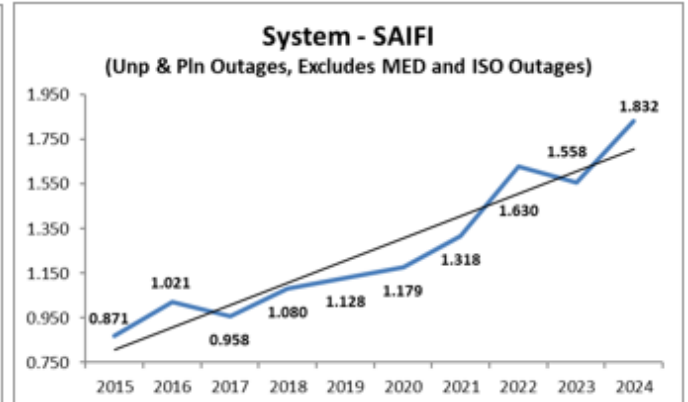
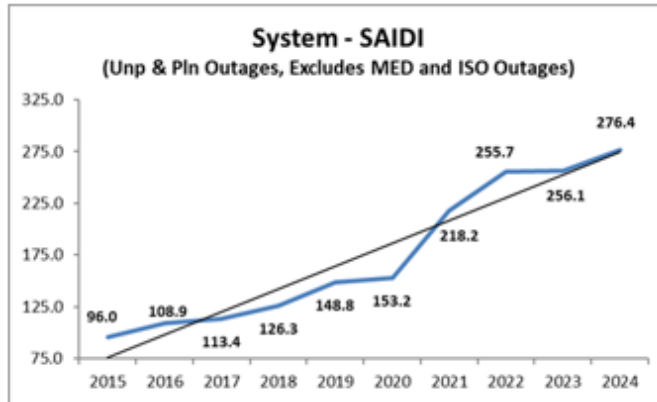
18. Stockton Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Excluded)



19. Yosemite Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Excluded)



20. System Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Excluded)

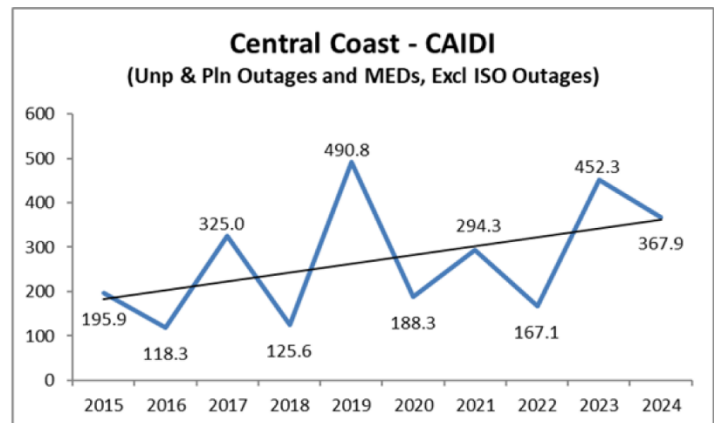
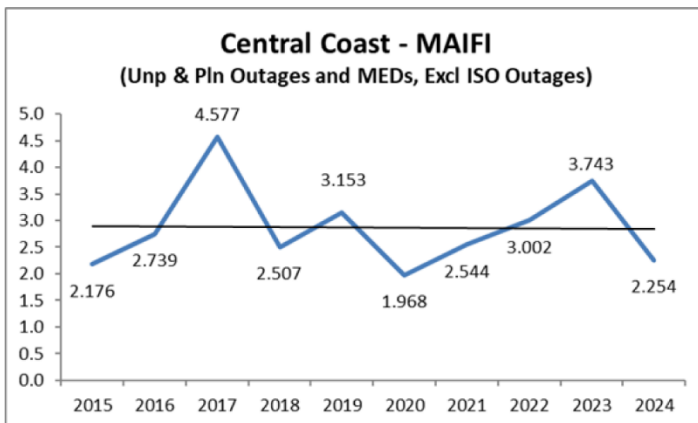
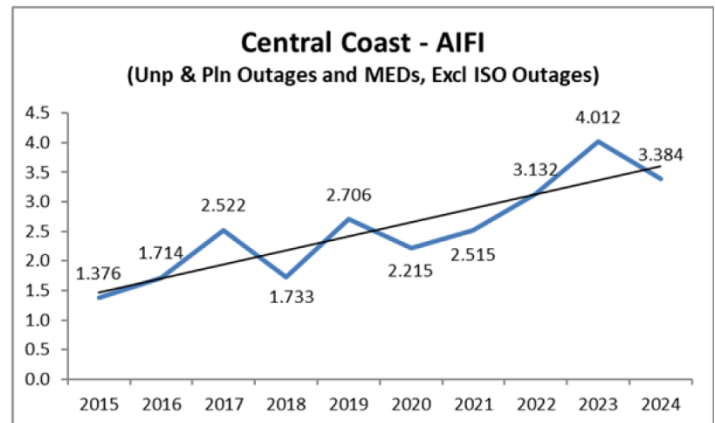
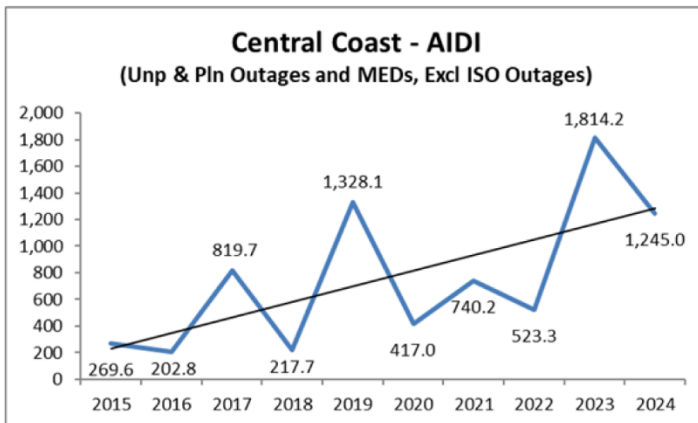




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ii. Charts for System and Division Reliability Indices Based on IEEE 1366 for the Past 10 Years Including Planned Outages and Including MED

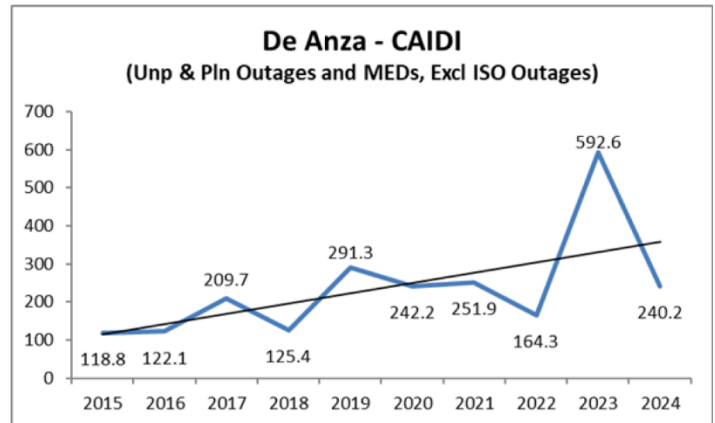
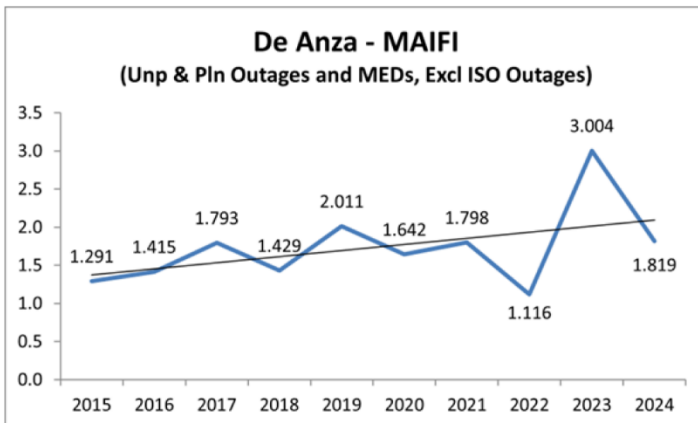
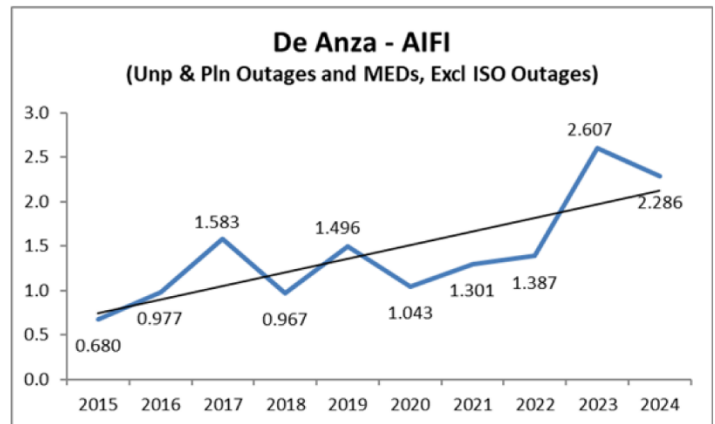
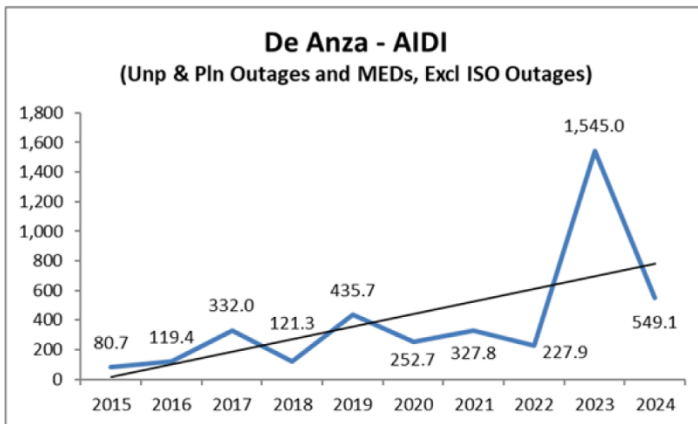
1. Central Coast Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Included)





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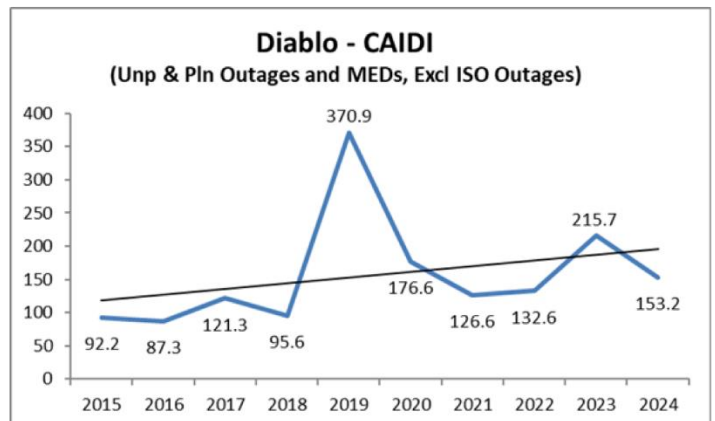
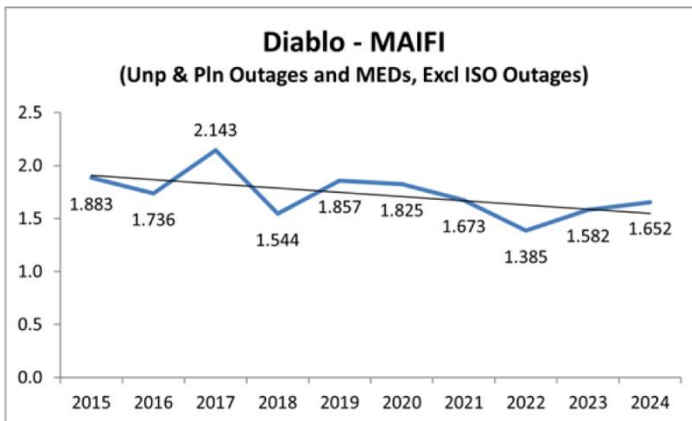
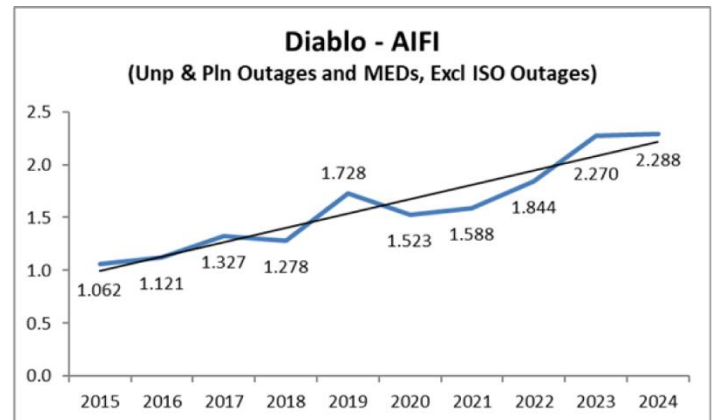
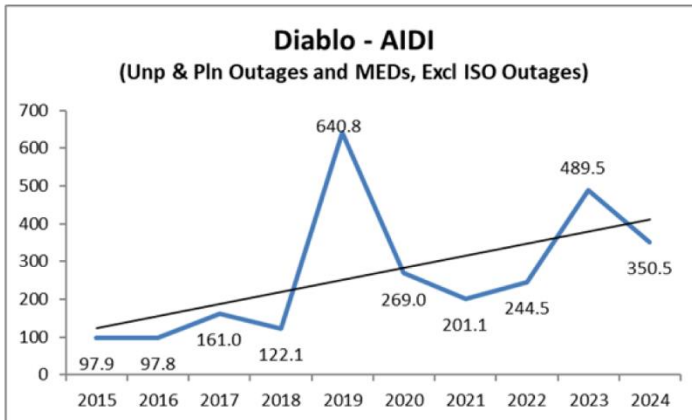
2. De Anza Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Included)





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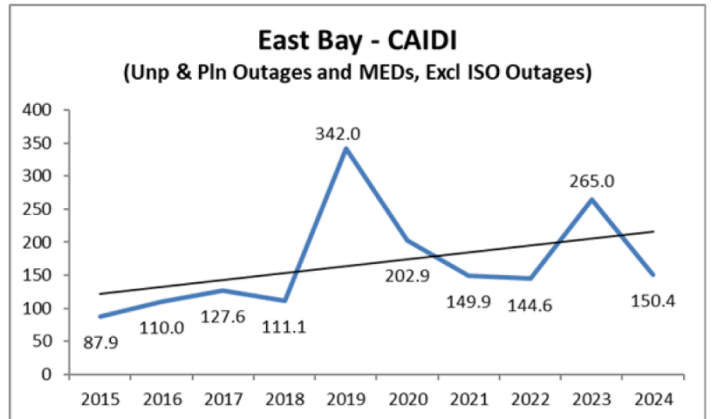
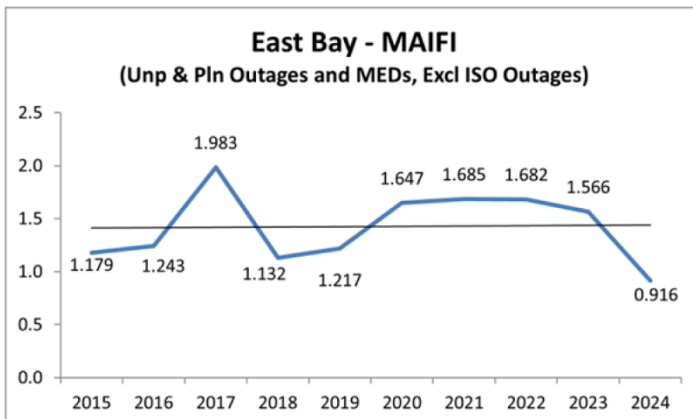
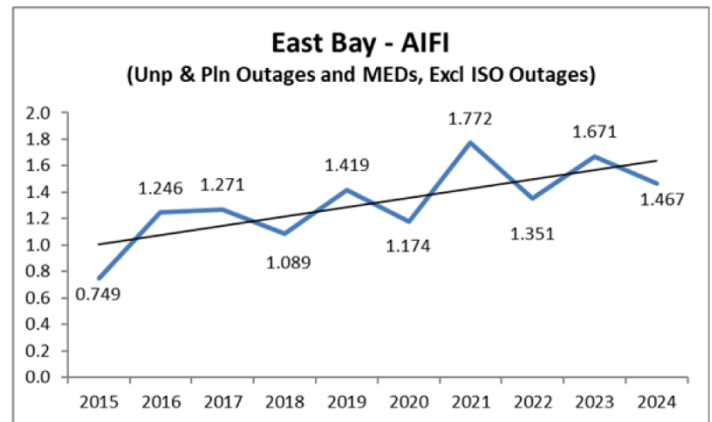
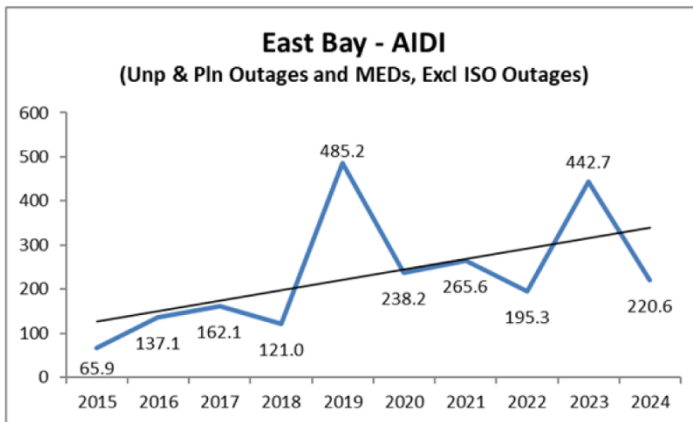
3. Diablo Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Included)





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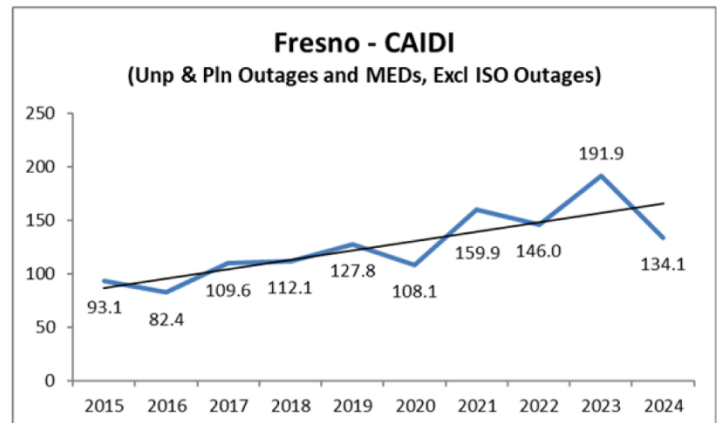
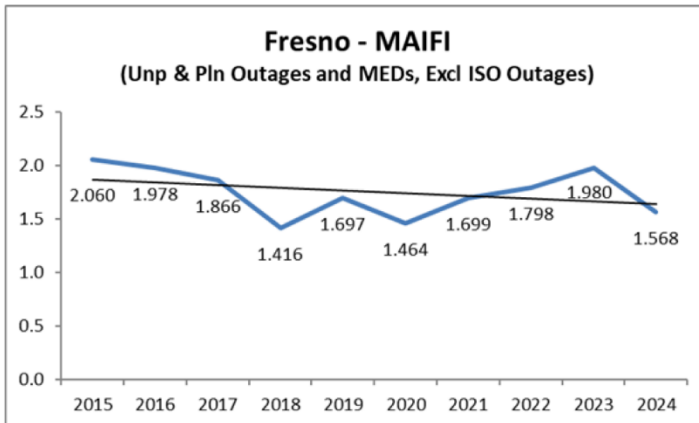
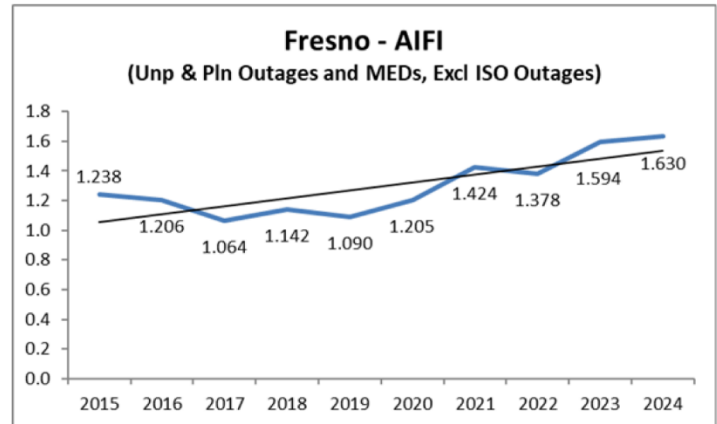
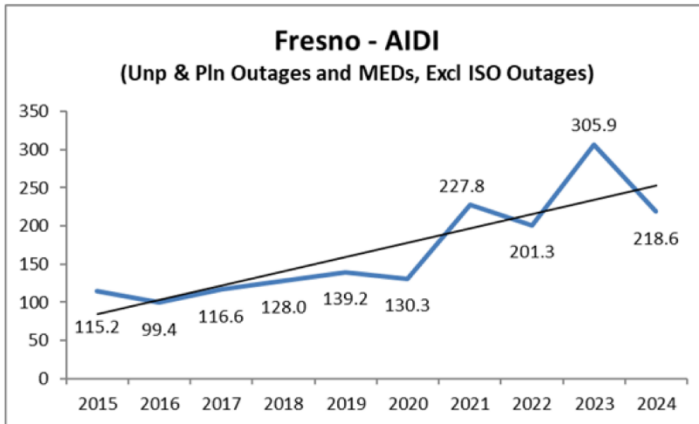
4. East Bay Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Included)





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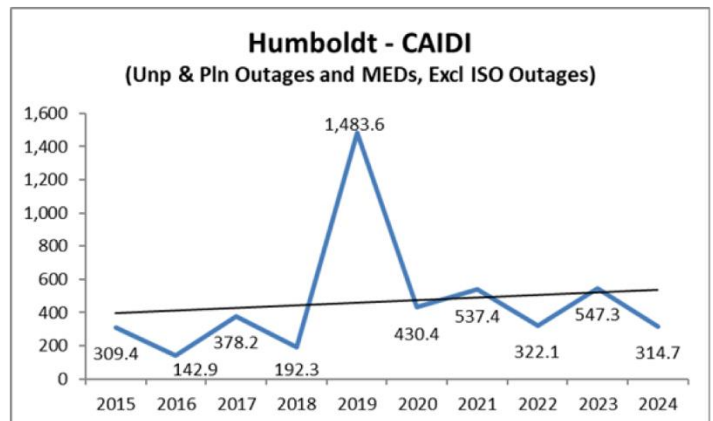
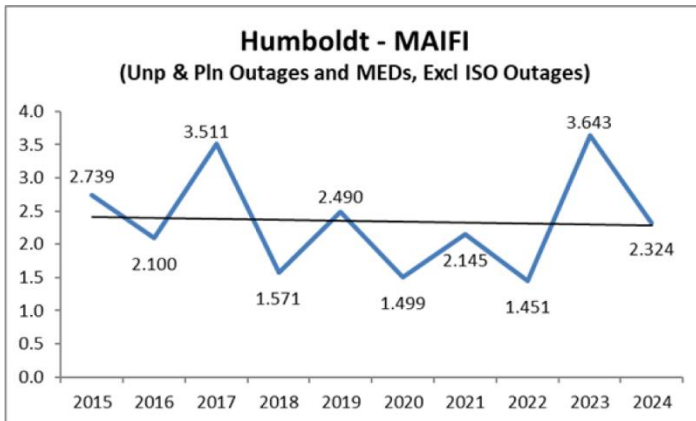
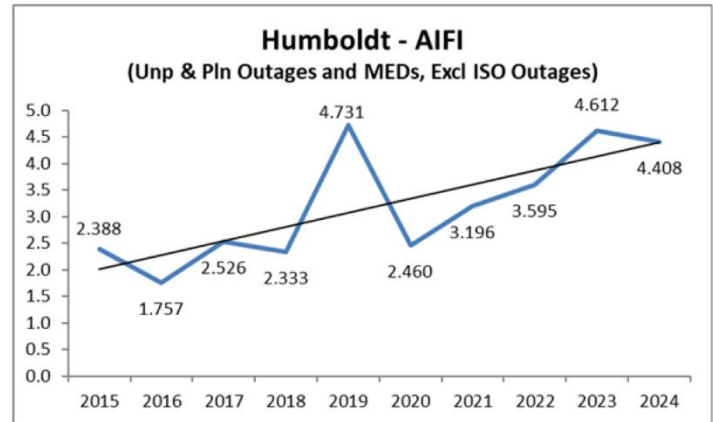
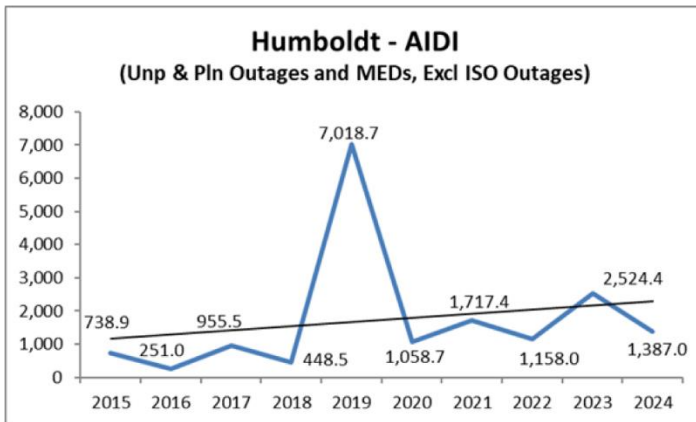
5. Fresno Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Included)





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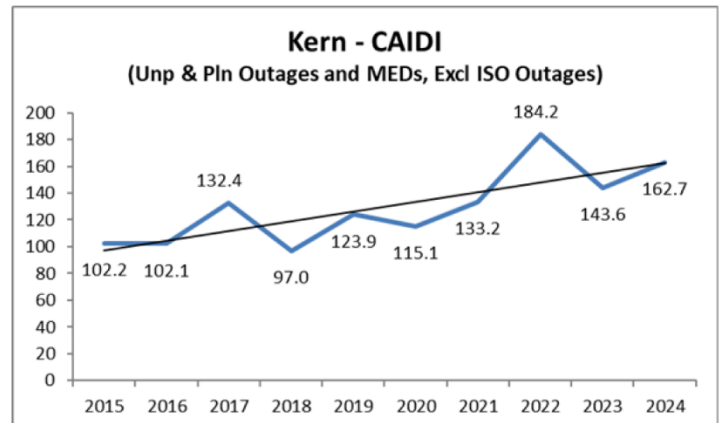
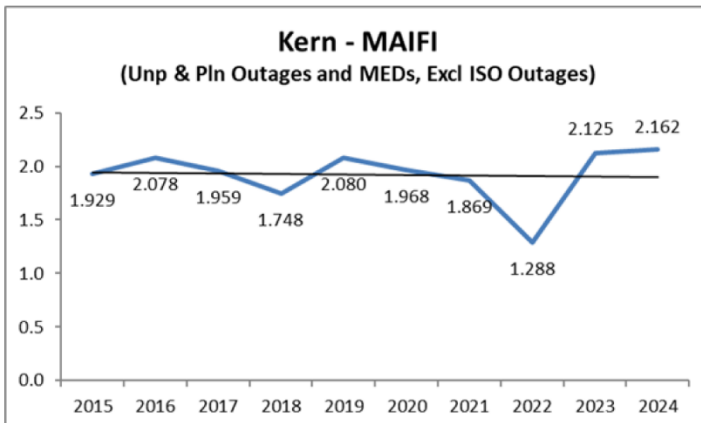
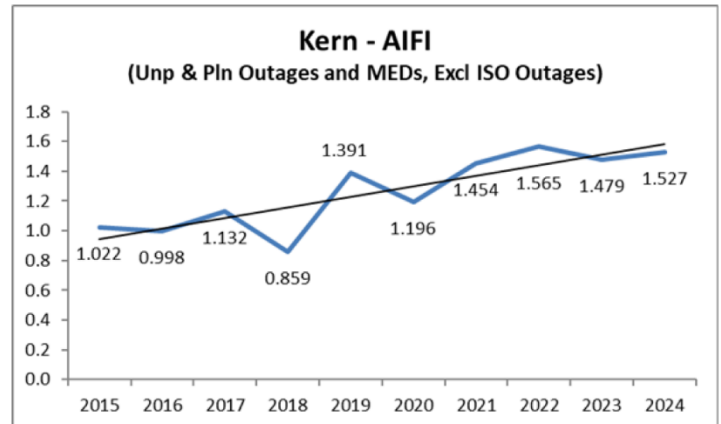
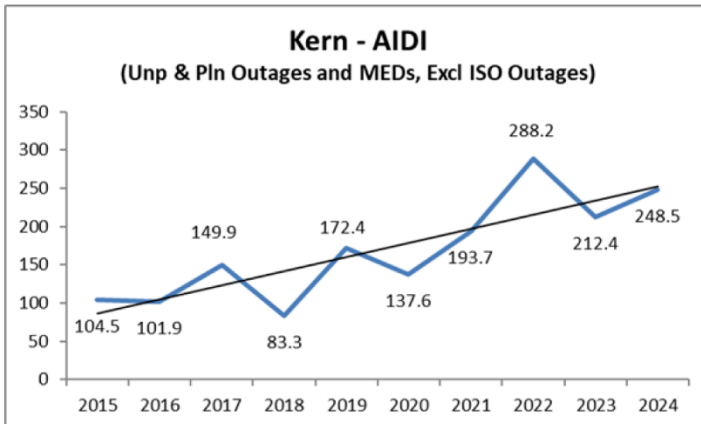
6. Humboldt Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Included)





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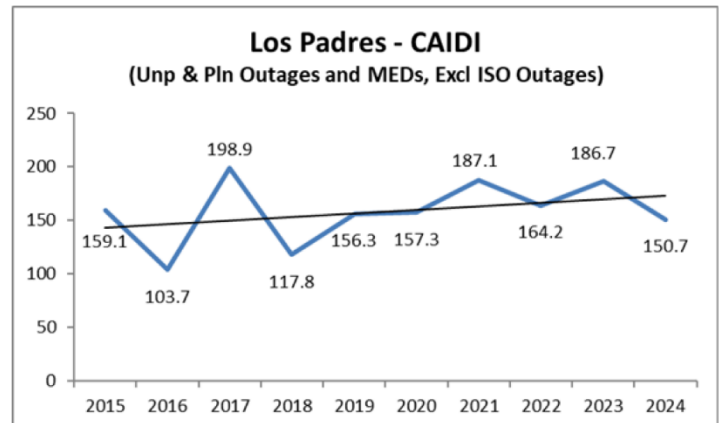
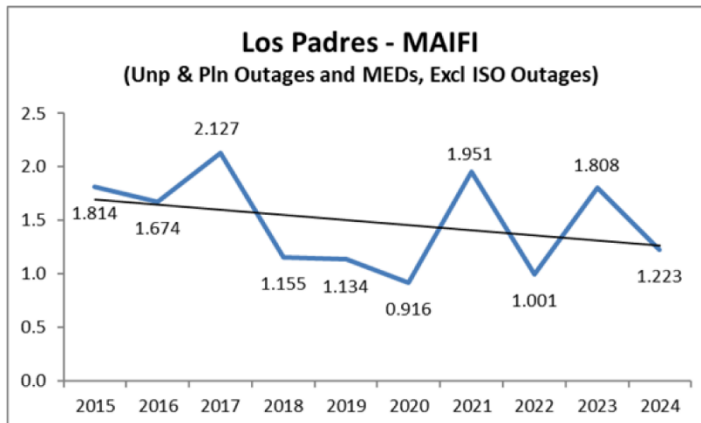
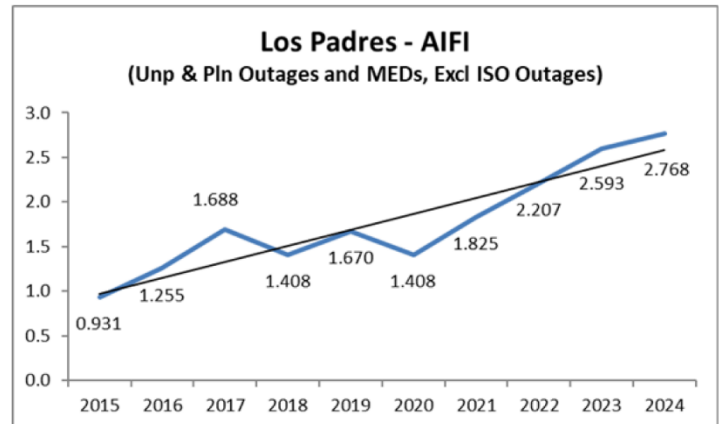
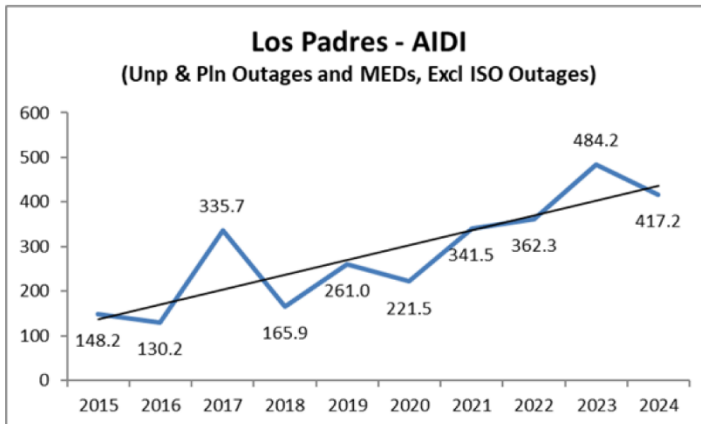
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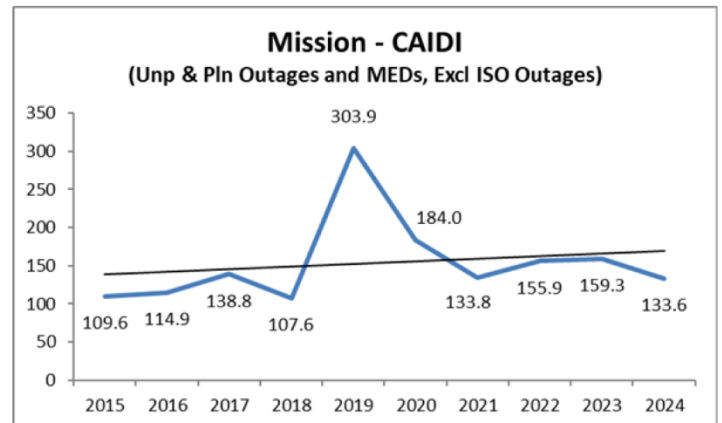
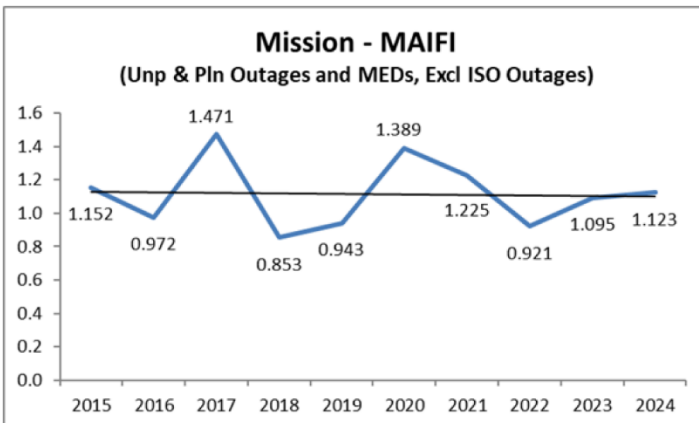
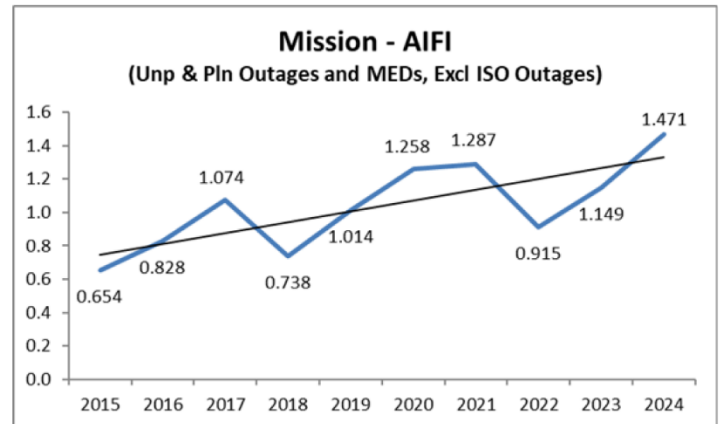
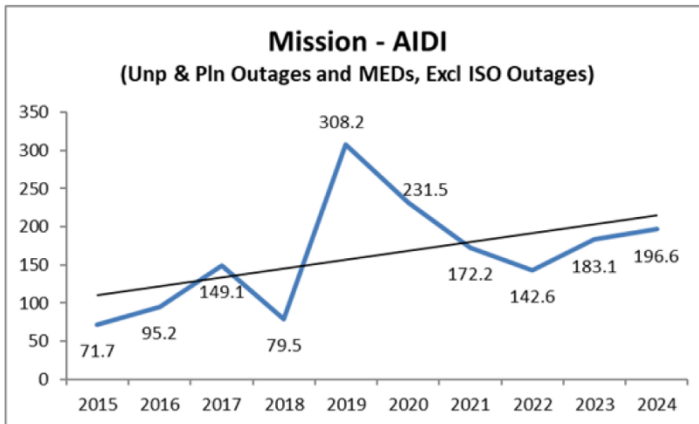
8. Los Padres Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Included)





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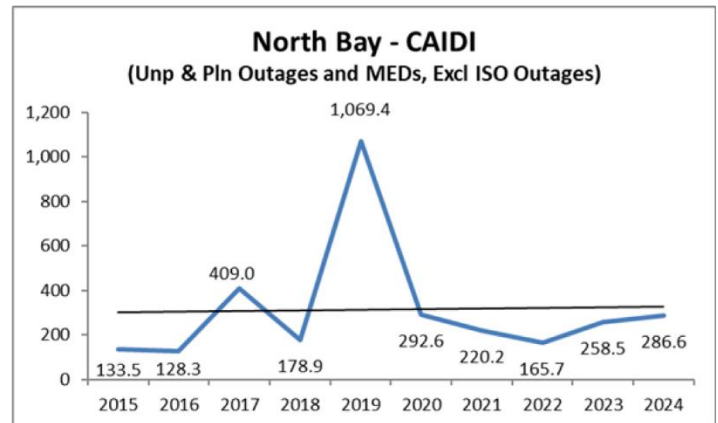
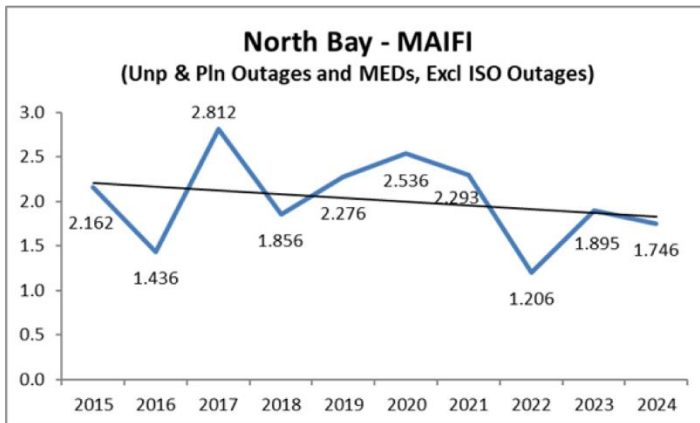
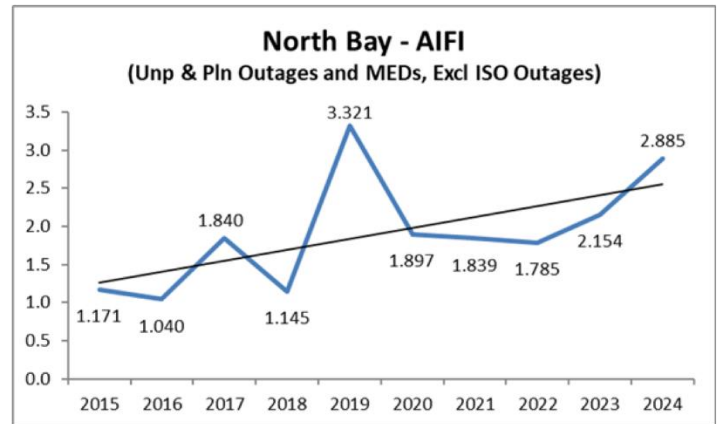
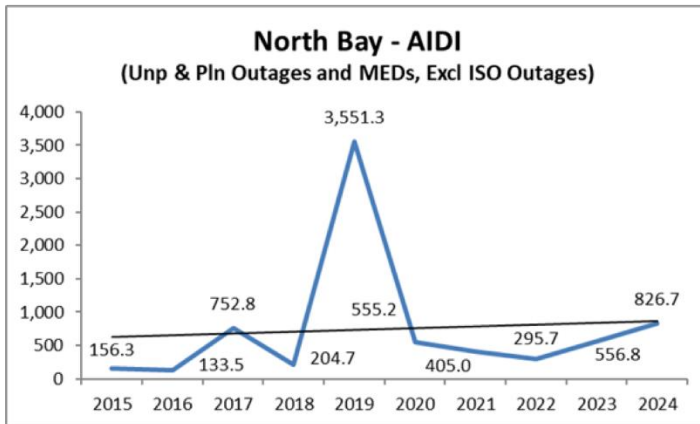
9. Mission Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Included)





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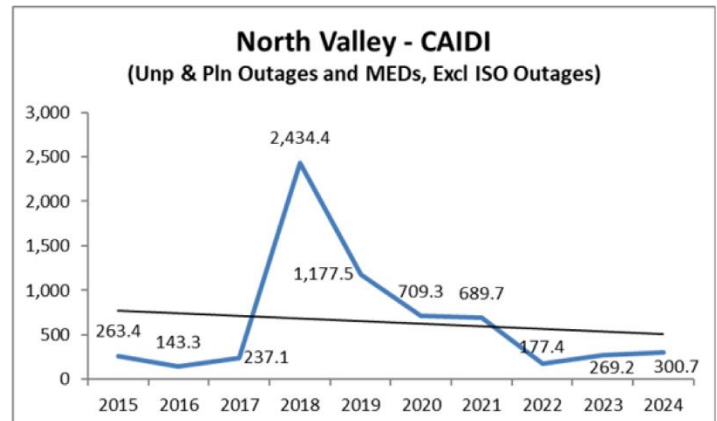
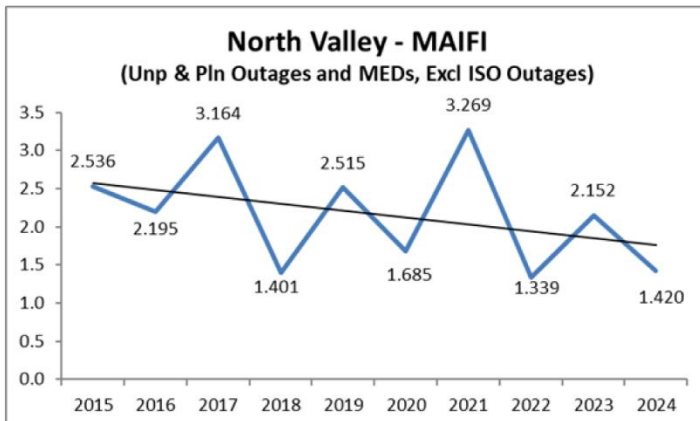
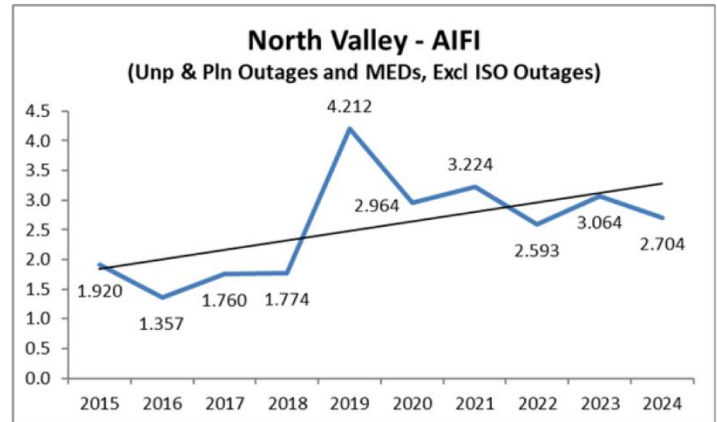
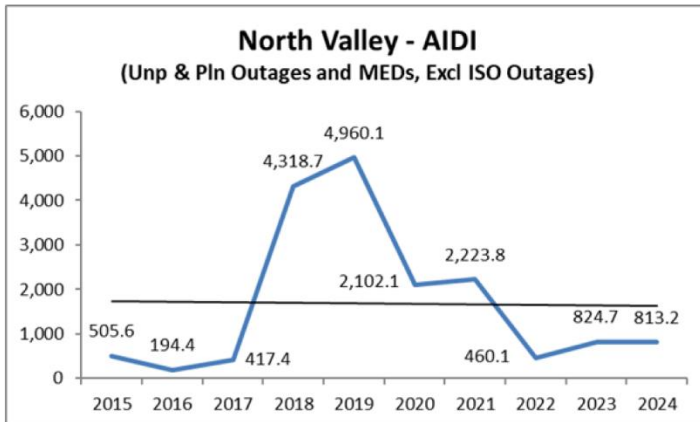
10. North Bay Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Included)





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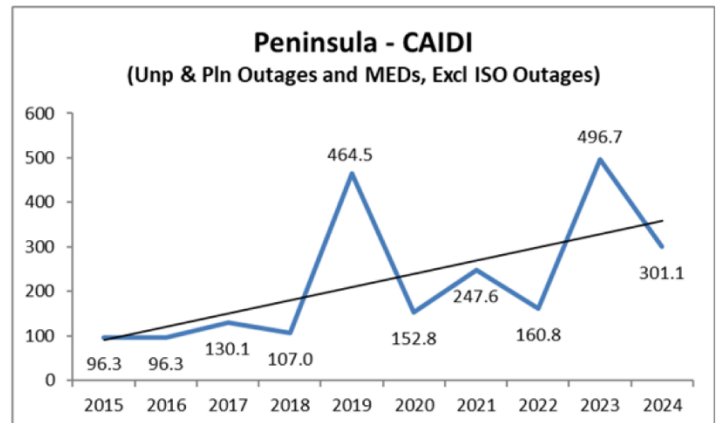
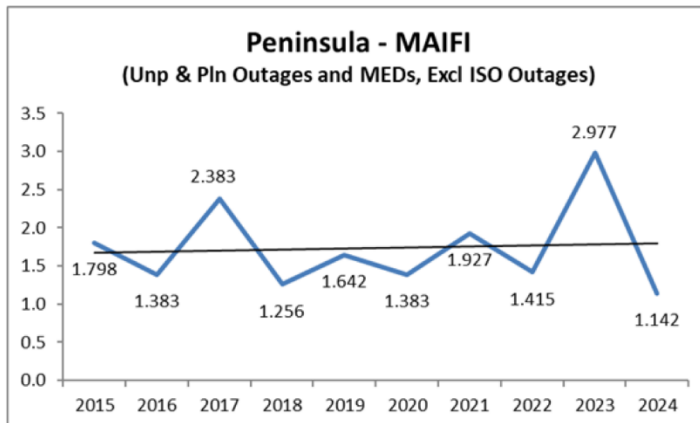
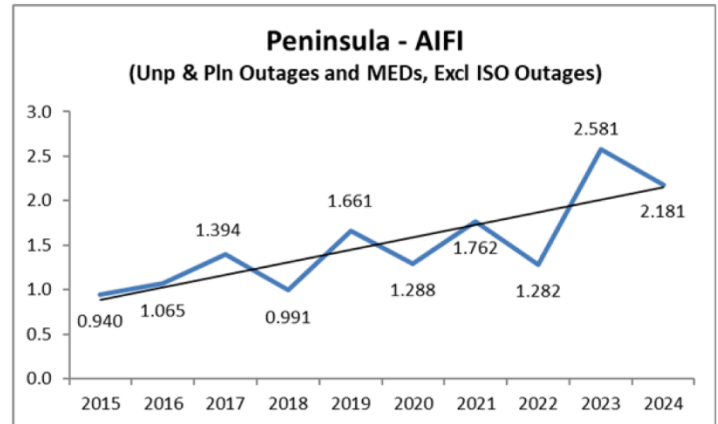
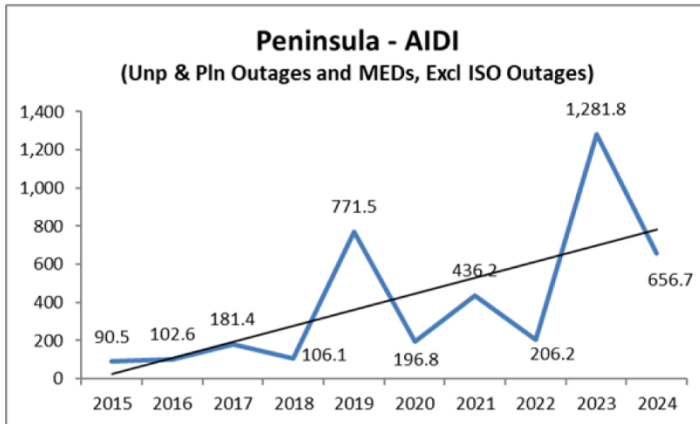
11. North Valley Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Included)





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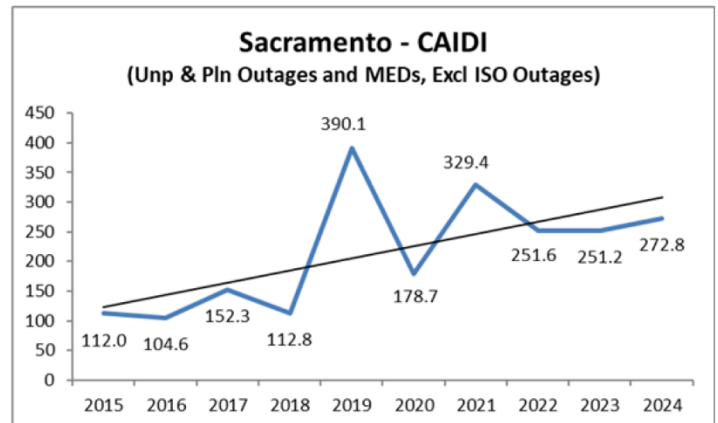
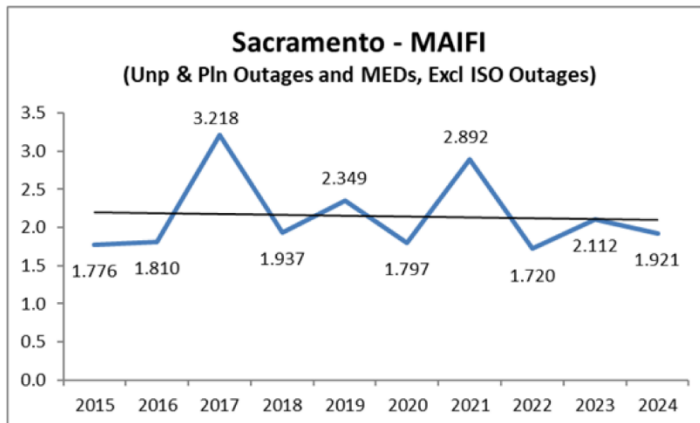
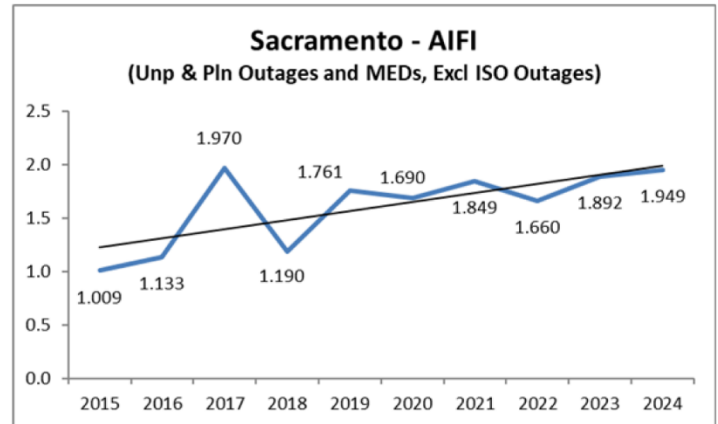
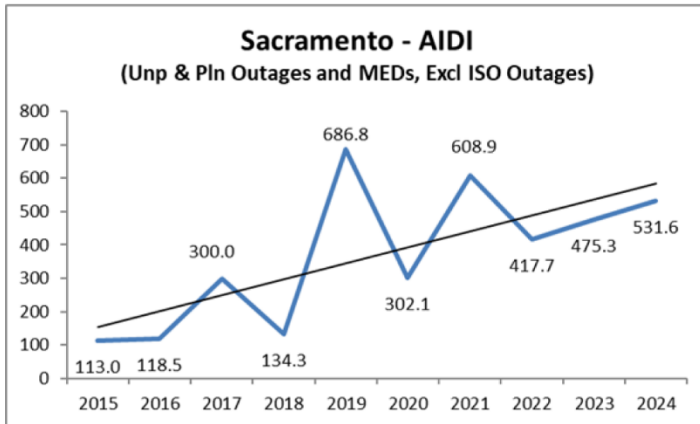
12. Peninsula Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Included)





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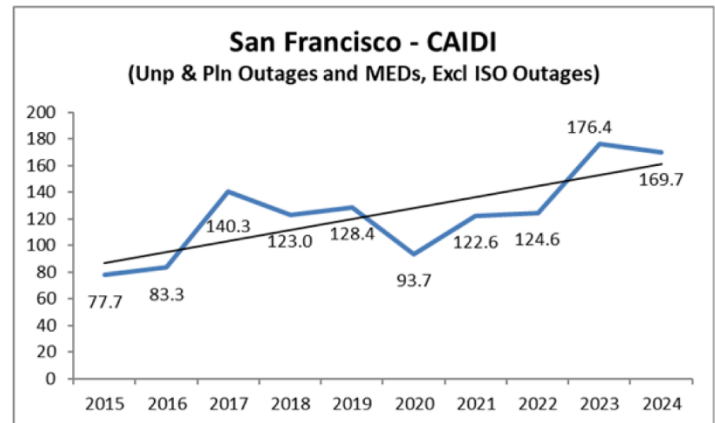
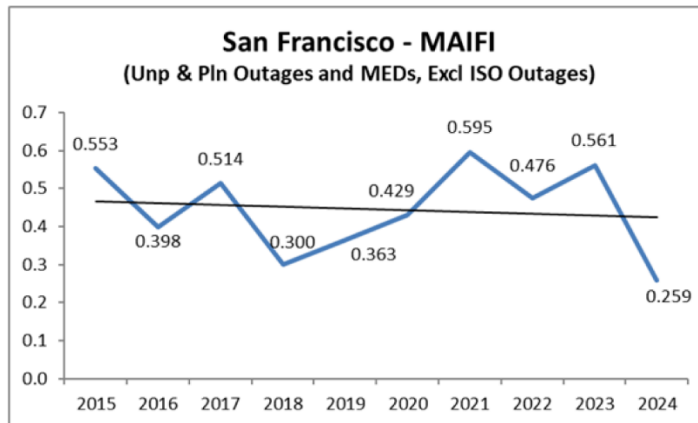
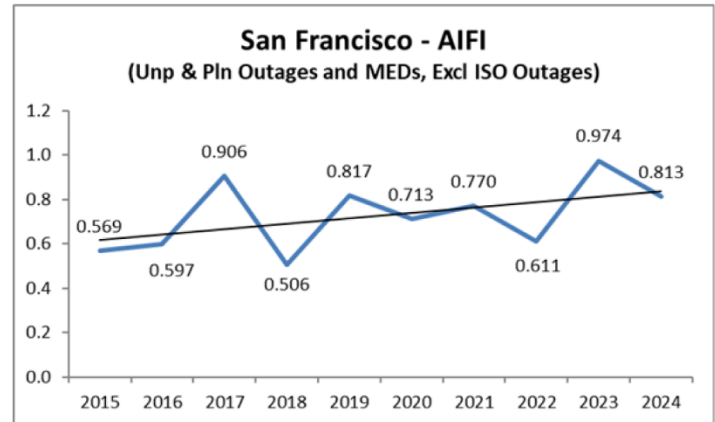
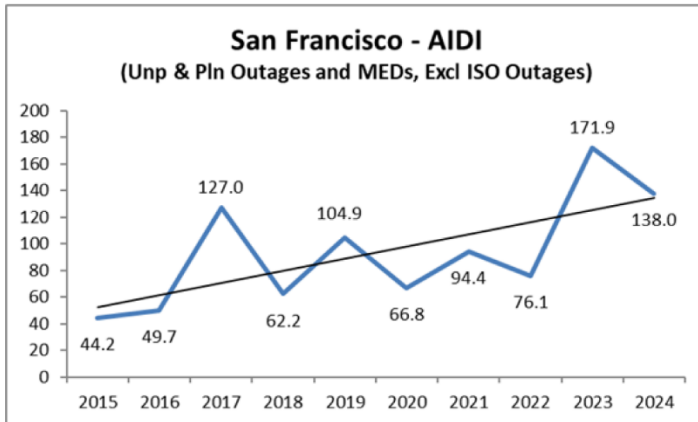
13. Sacramento Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Included)



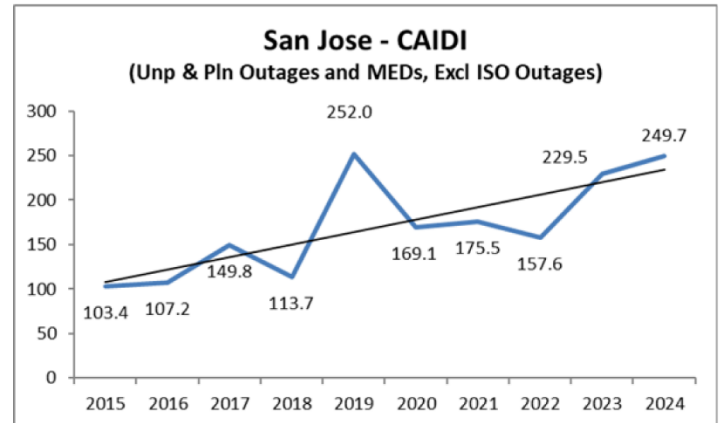
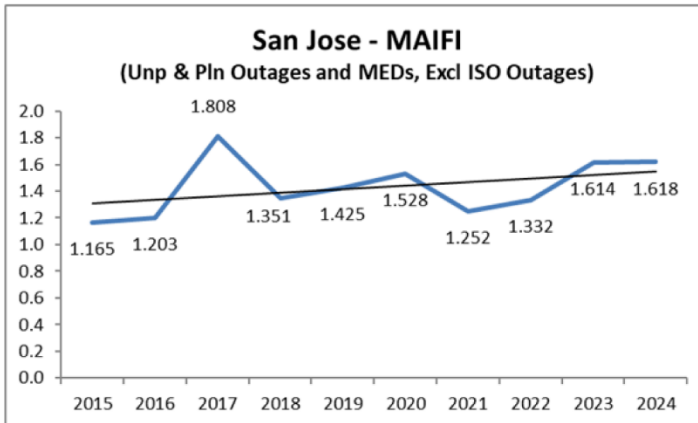
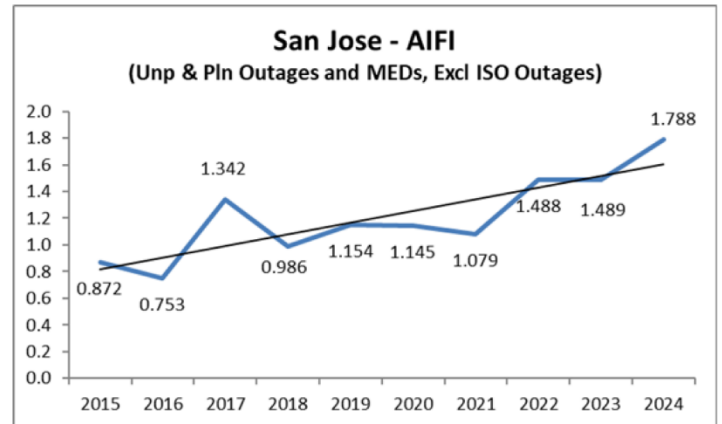
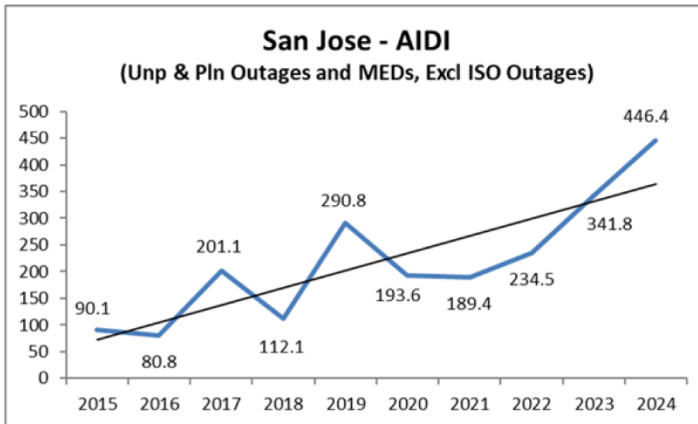


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14. San Francisco Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Included)



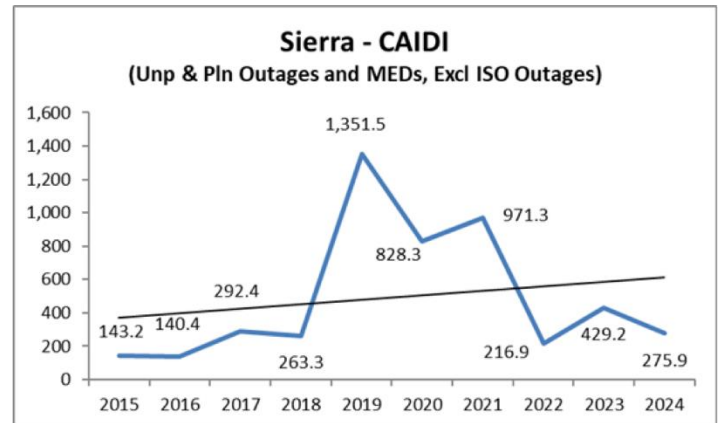
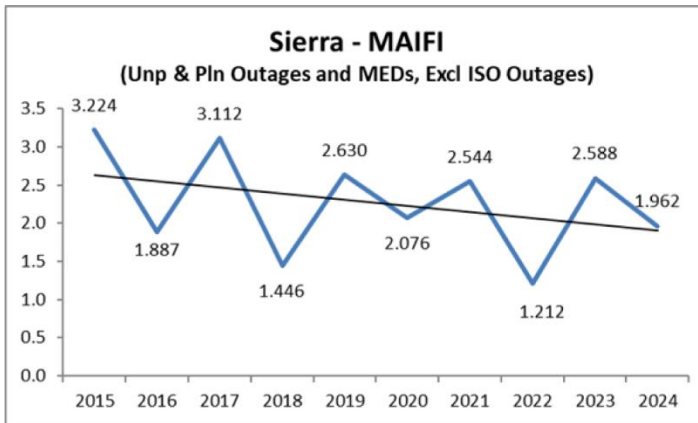
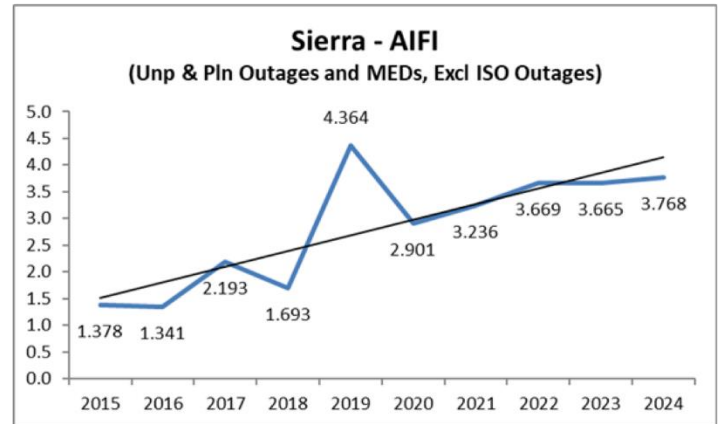
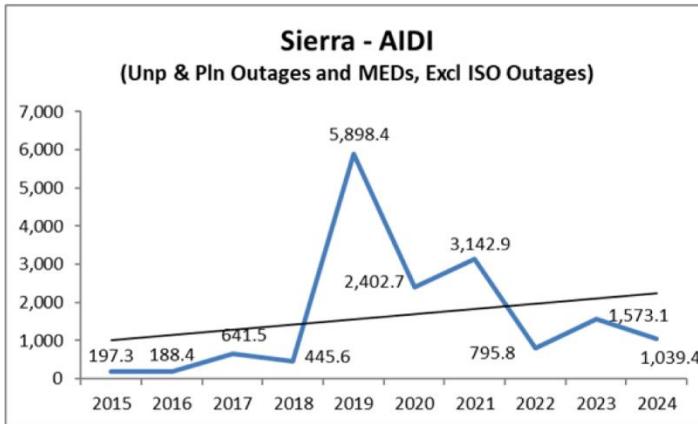
15. San Jose Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Included)



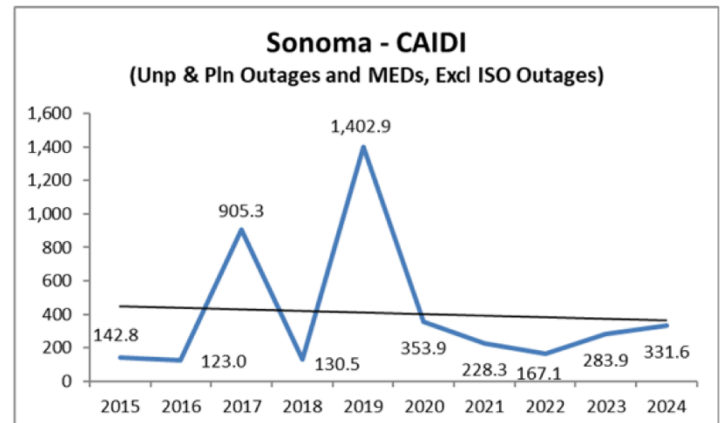
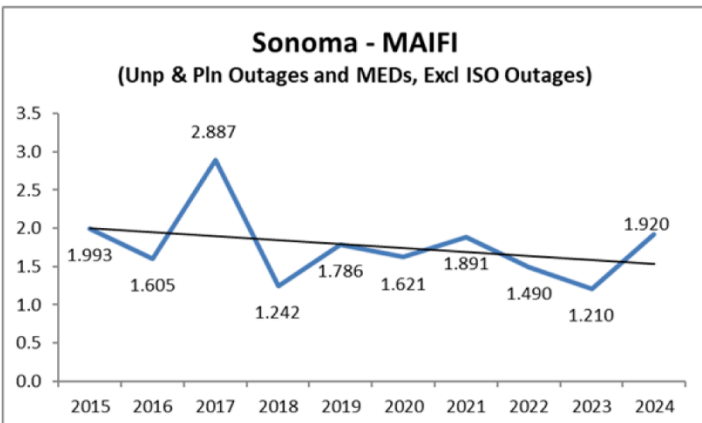
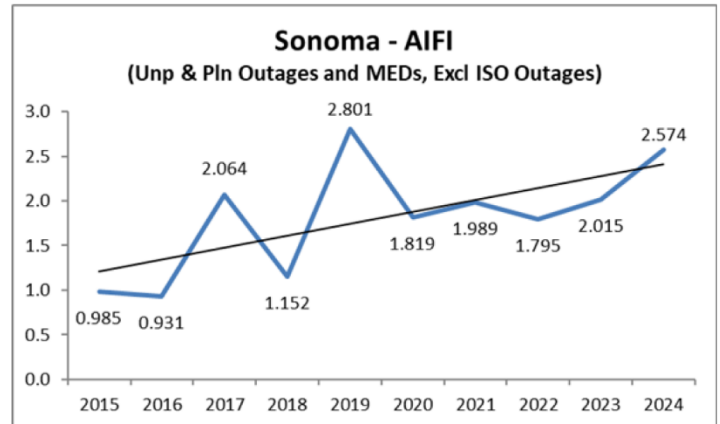
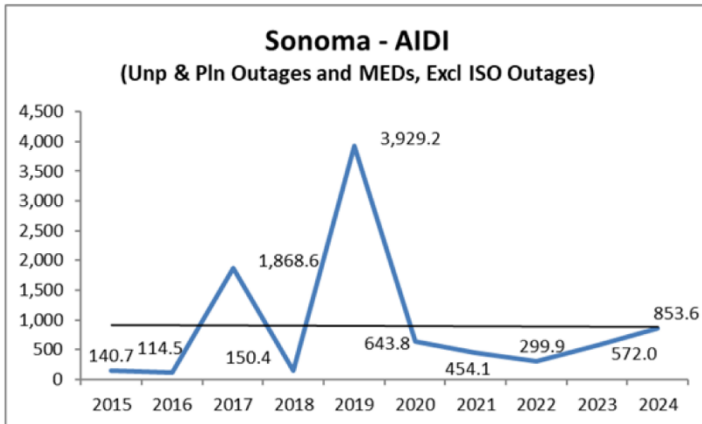


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16. Sierra Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Included)



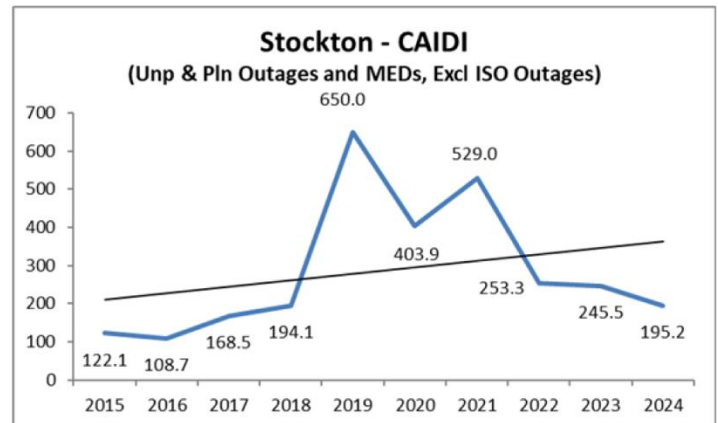
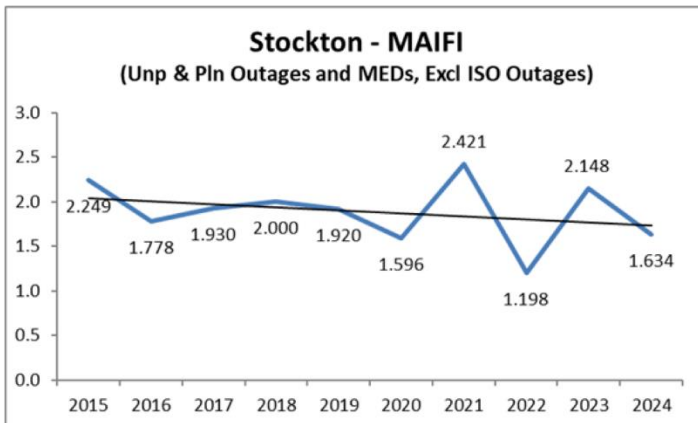
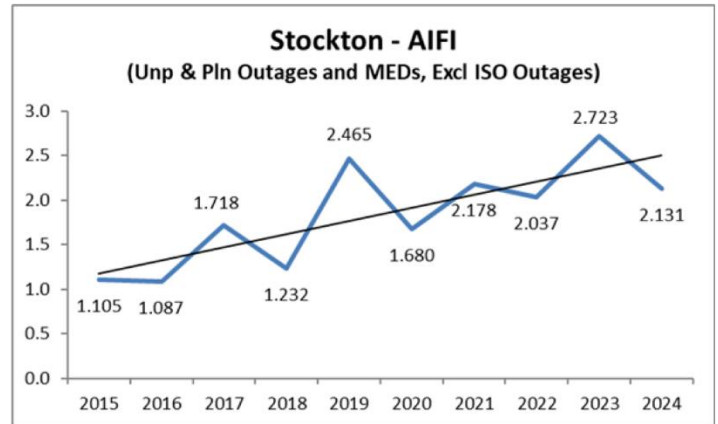
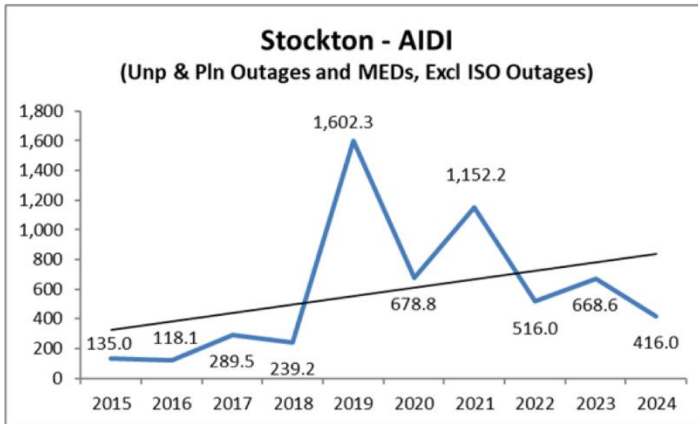
17. Sonoma Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Included)





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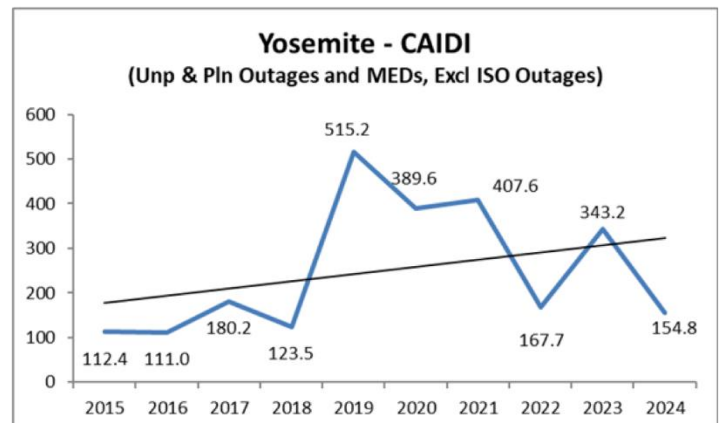
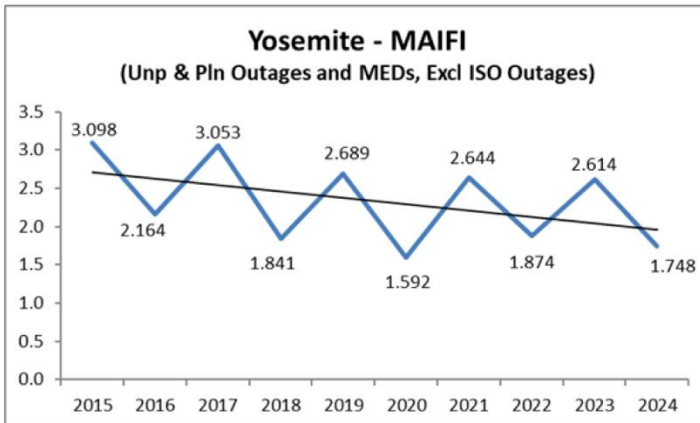
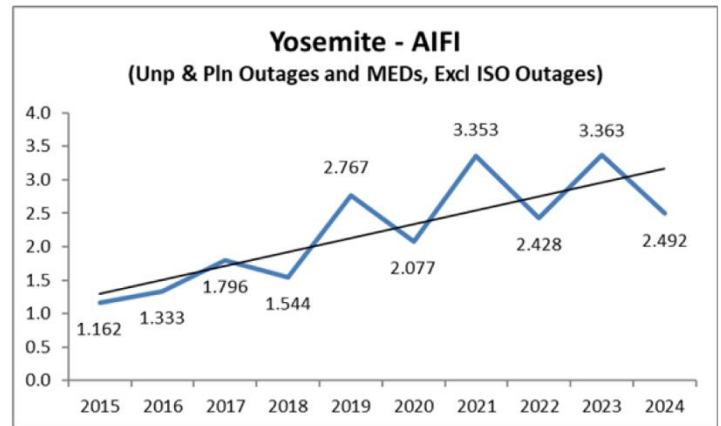
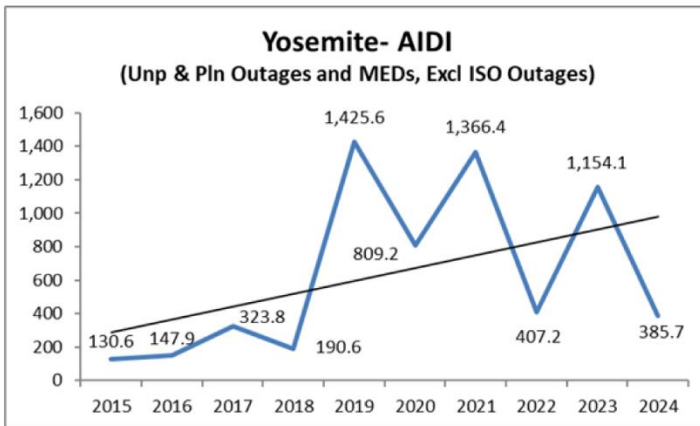
18. Stockton Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Included)



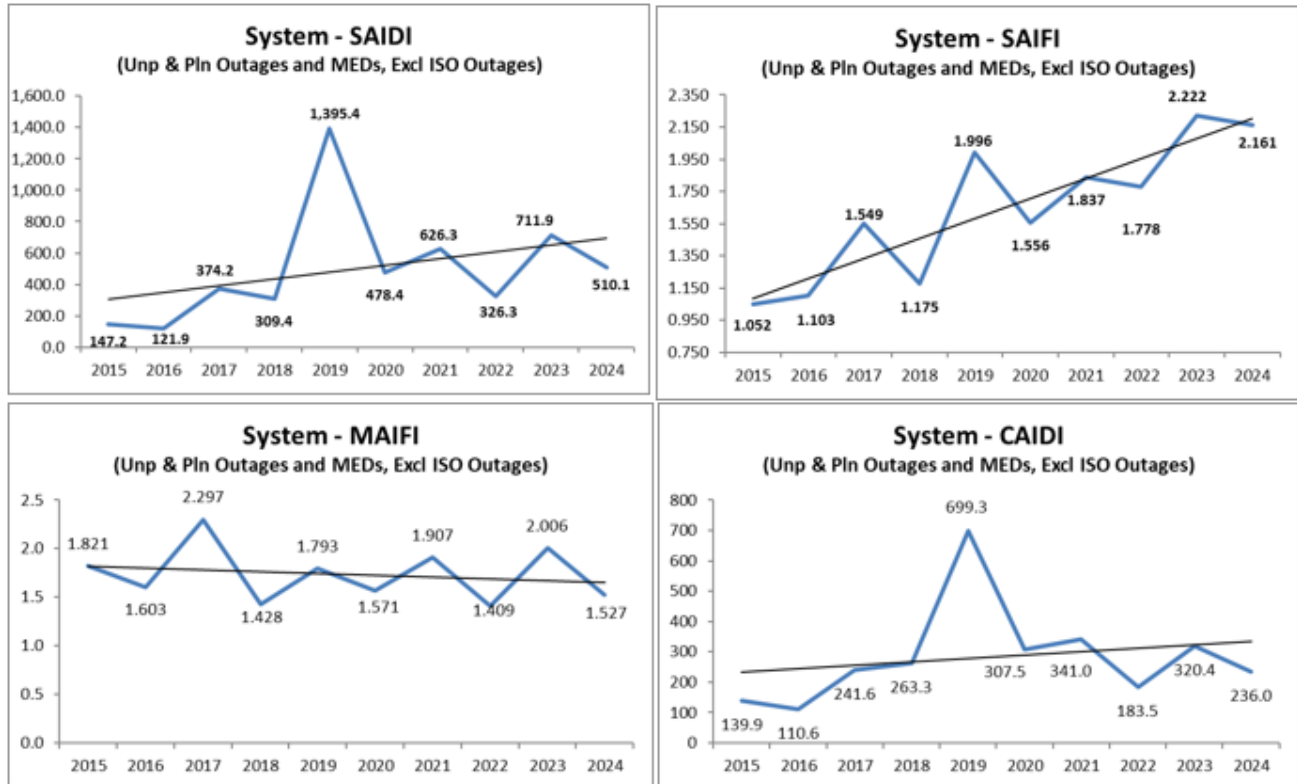


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19. Yosemite Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Included)



20. System Performance Results AIDI, AIFI, MAIFI, CAIDI (MED Included)





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c. The Number of Planned Outages, Date, and Location of Planned Outages in Each Division on an Annual Basis.

PG&E is submitting detailed planned outage information on a confidential basis under seal as required by Appendix B of Decision 16-01-008, footnote 7. Listed below is a summary of planned outages by year from 2015 through 2024:

Table 63: Ten Years Planned Outage Summary (2015-2024)

Year	Total Planned Outages
2015	18,891
2016	20,253
2017	18,913
2018	36,576
2019	31,409
2020	36,118
2021	45,087
2022	43,915
2023	38,879
2024	44,067

4. Service Territory Map



5. Top 1% of Worst-Performing Circuits (WPC) Excluding Major Event Day (MED)

PG&E's selection of its worst-performing circuits is comprised of two lists. List #1 (see Table 61 below) is ranked by the highest number of sustained outages the average customer on the circuit experiences on an annual basis (AIFI). List #2 (see Table 62 below) is ranked by the highest total number of sustained outage minutes that the average customer on the circuit experiences on an annual basis (AIDI). PG&E recognizes that a given circuit could appear on both the AIDI and AIFI lists of Worst-Performing circuits. In consideration of this overlap, PG&E identified 20 circuits on each list with eight circuits appearing on both lists. The net total of 32 individual circuits represents one percent of the total number of circuits in PG&E's distribution system.

For the purposes of this reliability report, PG&E's focus in developing the Worst-Performing circuit lists has been on the impact on the *average customer on the circuit*. This is different than a focus on a circuit's impact or contribution to overall system reliability performance. For example, a circuit with 50 customers that experienced 5 sustained outages affecting the entire circuit (a total of 250 sustained customer outages) would have a higher Worst-Performing circuit ranking than a circuit with 1,000 customers where each customer experienced 3 sustained outages (a total of 3,000 sustained customer outages). For purposes of the Worst-Performing circuit list, the fact that the average customer on the smaller circuit experienced five sustained outages caused that circuit to rank as performing worse than a circuit where the average customer only experienced three sustained outages.

Consistent with Decision 16-01-008, PG&E has used three years (2022 - 2024) of outage data in developing the Worst-Performing circuit lists. PG&E has excluded outage data involving planned outages, CAISO (California Independent System Operator) outages and major event days. PG&E has also limited its review to mainline circuit outages only (in other words, only outages involving a circuit breaker, a recloser, or an interrupter). Finally, PG&E has excluded outage occurrences in which the circuit was in an abnormal configuration. An abnormal circuit configuration occurs when additional customers are temporarily added to a circuit to support construction or maintenance work performed on an adjacent circuit. Analysis has shown that outages associated with abnormal circuit configurations would skew the results of the Worst-Performing circuit lists. PG&E believes that this approach best defines a Worst-Performing circuit.

Table 61 lists the Worst-Performing circuits by outage frequency and indicates the worst AIFI circuit was the Ben Lomond 1101 circuit. The average customer on the Ben Lomond 1101 circuit experienced 11.45 sustained mainline outages per year from 2022-2024 (resulting from the operation of a circuit breaker or an automatic recloser).



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Table 62 focuses on the duration of the sustained outages. Here, the Garberville 1102 circuit was identified as the worst AIDI performing circuit. For this circuit, the average customer on the circuit experienced 4,373 sustained mainline outage minutes per year from 2022-2024 (resulting from the operation of a circuit breaker or an automatic recloser).

Eight circuits (Ben Lomond 0401, Burns 2101, Devils Den 1101, Elk Creek 1101, Garberville 1101, Garberville 1102, Hoopa 1101, and Poso Mountain 2101) appear on both lists. These eight circuits are highlighted in red within Tables 64 and 65.

Additionally, fourteen circuits are marked with an asterisk (*) indicating that they are “deficient”. A “deficient” circuit is defined as a circuit that has appeared consecutively on the WPC lists for the previous two years (see the “*Deficient*” Worst-Performing Section below for further details).

#	DIVISION	SUBSTATION	CIRCUIT NAME	TOTAL CUSTOMERS	CIRCUIT MILES	% OH	% UG	HFTD	3 YR AVG MAINLINE OUTAGES	3 YR AVG AIFI
1	CENTRAL COAST	BEN LOMOND	BEN LOMOND 1101	747	15	100	0	3	13	11.45
2	SACRAMENTO	GRAND ISLAND	GRAND ISLAND 2224	561	63	98	2	1	17	11.13
3	HUMBOLDT	GARBERVILLE	GARBERVILLE 1102*	1853	142	94	6	1 & 2	34	11.05
4	CENTRAL COAST	BEN LOMOND	BEN LOMOND 0401*	886	24	96	4	3	16	10.61
5	CENTRAL COAST	BURNS	BURNS 2101	701	30	97	3	3	14	9.95
6	HUMBOLDT	GUALALA	GUALALA 1112	1303	53	89	11	1 & 2	11	8.82
7	DE ANZA	LOS GATOS	LOS GATOS 1106*	2249	102	94	6	2 & 3	21	8.40
8	KERN	POSO MOUNTAIN	POSO MOUNTAIN 2101	149	59	100	0	1 & 2	21	8.40
9	LOS PADRES	OILFIELDS	OILFIELDS 1103	2549	169	83	17	1 & 2	18	8.14
10	NORTH VALLEY	ELK CREEK	ELK CREEK 1101	900	175	90	10	1 & 2	19	7.88
11	STOCKTON	ALPINE	ALPINE 1101*	282	8	12	88	1	8	7.43
12	HUMBOLDT	HOOPA	HOOPA 1101*	2102	142	92	8	1, 2, & 3	24	7.18
13	HUMBOLDT	GARBERVILLE	GARBERVILLE 1101*	1015	148	98	2	1 & 2	20	6.92
14	FRESNO	DEVILS DEN	DEVILS DEN 1101	70	34	100	0	1	8	6.61
15	YOSEMITE	MERCED FALLS	MERCED FALLS 1102	1855	152	99	1	1 & 2	11	6.53
16	SACRAMENTO	MADISON	MADISON 2101	2195	177	94	6	1 & 2	25	6.25
17	CENTRAL COAST	SAN BENITO	SAN BENITO 2104	1297	58	90	10	1 & 2	6	6.17
18	DE ANZA	LOS GATOS	LOS GATOS 1107	2307	104	90	10	1, 2, & 3	18	6.14
19	NORTH BAY	SILVERADO	SILVERADO 2102	1320	125	83	17	1, 2, & 3	19	6.04
20	SIERRA	APPLE HILL	APPLE HILL 2102	4949	384	93	7	1, 2, & 3	19	5.98

Table 61



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#	DIVISION	SUBSTATION	CIRCUIT NAME	TOTAL CUSTOMERS	CIRCUIT MILES	% OH	% UG	HFTD	3 YR AVG MAINLINE OUTAGES	3 YR AVG AIDI
1	HUMBOLDT	GARBERVILLE	GARBERVILLE 1102*	1853	142	94	6	1 & 2	34	4373
2	NORTH VALLEY	PIT NO 5	PIT NO 5 1101*	122	27	89	11	2	8	3605
3	HUMBOLDT	HOOPA	HOOPA 1101*	2102	142	92	8	1, 2, & 3	24	3168
4	KERN	POSO MOUNTAIN	POSO MOUNTAIN 2101*	149	59	100	0	1 & 2	21	3036
5	FRESNO	BALCH NO 1	BALCH NO 1 1101*	28	15	100	0	2	1	2978
6	NORTH VALLEY	BUCKS CREEK	BUCKS CREEK 1103	381	45	29	71	2 & 3	5	2624
7	NORTH VALLEY	ELK CREEK	ELK CREEK 1101*	900	175	90	10	1 & 2	19	2518
8	PENINSULA	WOODSIDE	WOODSIDE 1101	1824	74	82	18	1, 2, & 3	13	2449
9	FRESNO	DEVILS DEN	DEVILS DEN 1101	70	34	100	0	1	8	2388
10	CENTRAL COAST	BURNS	BURNS 2101	701	30	97	3	3	14	2358
11	NORTH VALLEY	BIG BEND	BIG BEND 1101	329	58	98	2	2 & 3	9	2345
12	NORTH VALLEY	CHALLENGE	CHALLENGE 1101*	708	50	98	2	2 & 3	9	2236
13	KERN	POSO MOUNTAIN	POSO MOUNTAIN 2103	21	16	100	0	1 & 2	5	2217
14	FRESNO	DUNLAP	DUNLAP 1103	934	76	93	7	2	12	2194
15	HUMBOLDT	GARBERVILLE	GARBERVILLE 1101	1015	148	98	2	1 & 2	20	2064
16	HUMBOLDT	WILLOW CREEK	WILLOW CREEK 1103*	1550	89	87	13	2 & 3	10	1842
17	SIERRA	ALLEGHANY	ALLEGHANY 1101*	1080	78	97	3	1, 2, & 3	12	1787
18	SIERRA	ALLEGHANY	ALLEGHANY 1102*	165	18	94	6	3	5	1727
19	YOSEMITE	CURTIS	CURTIS 1703	3893	206	96	4	1, 2, & 3	13	1688
20	CENTRAL COAST	BEN LOMOND	BEN LOMOND 0401*	886	24	96	4	3	16	1682

Table 62

Cost-Effective Reliability Remediation:

In compliance with California SB (Senate Bill) 901, AB (Assembly Bill) 1054 and guidelines from the Office of Energy Infrastructure Safety (Energy Safety), PG&E submitted a 2023-2025 Wildfire Mitigation Plan (WMP) to support PG&E's stance that catastrophic wildfires shall stop. And several components in the 2023-2025 WMP have had both positive and negative impacts on reliability performance. Under the System Hardening Program, PG&E's distribution engineers evaluate a rebuild of overhead distribution circuits in the High Fire-Threat District (HFTD) and High Fire Risk Areas (HFRA) areas. The typical system hardening work included, as appropriate for the circuit, replacing bare wire with insulated or covered conductor, increasing strength requirements for poles, installing new system automation and protection equipment, line removal, and targeted conversion of overhead equipment to underground equipment. The anticipated goal of each system hardened circuit is to minimize the risk of an asset failure that could result in a fire ignition. The anticipated reliability improvement of each system hardened circuit is to minimize vegetation, equipment failure, third-party, animal, and other (unknown) caused outages that could result in a fire ignition.



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Another key component of the 2023-2025 Wildfire Mitigation Plan is the continued effort of the Vegetation Management (VM) program. In 2023, the Enhanced Vegetation Management (EVM) Program transitioned to three new risk-informed VM programs: Focus Tree Inspections, VM for Operational Mitigations, and Tree Removal Inventory. PG&E continues to execute targeted vegetation management work, Vegetation Management for Operational Mitigation (VMOM), intended to reduce the impacts of vegetation-caused outages due to increased sensitivity resulting from EPSS-enabled devices. Additionally, PG&E continues to execute the Vegetation Extent of Condition patrols and vegetation management work for EPSS-enabled vegetation-caused outages to: (1) determine if there are additional vegetation risks upstream and downstream of the fault location; and (2) attempt to remove any identified vegetation.

PG&E is conducting additional efforts to minimize EPSS reliability impacts, such as executing animal mitigation work for EPSS-enabled animal-caused outages. Animal mitigation may include installation of bird retrofitting, critter guard, and additional measures depending on asset configuration.

In 2021, PG&E piloted the Enhanced Powerline Safety Settings (EPSS) Program. Under the EPSS effort, PG&E's distribution engineers re-adjusted the sensitivity settings on distribution line protection equipment to quickly react to problems detected on the system and automatically turn off power. Power was restored once a line patrol was conducted to ensure no wildfire ignition risk persisted. In 2022, the EPSS effort expanded to include all distribution lines in the HFTD areas and High Fire Risk Areas (HFRA), as well as select non-HFTD areas (buffer zone) that are adjacent to HFTD areas and HFRA. However, it was also observed that the EPSS effort negatively impacted reliability performance in terms of both outage impacts to customers and outage duration times. This was primarily due to the sensitivity setting adjustments causing a decrease in coordination with downstream protection equipment. Efforts to minimize the negative reliability impacts of EPSS include the continued adjustment of the safety settings, installing Fault Indicators (FI) and Line Sensors to help pinpoint the problem locations, installing Fuse Savers (FS) to help re-establish proper protection coordination, and taking a more surgical approach in applying EPSS settings for areas most at risk.

In 2023, PG&E deployed a new Down Conductor Detection (DCD) program to further reduce wildfire risk. Specifically, this program focuses on enhancing ground fault protection by sensing low current and high impedance faults. As a result, it is anticipated that the implementation of DCD technology would have a negative impact on reliability performance. In 2024, as part of the efforts to minimize the negative reliability impacts of DCD enablement is deployment of DCD algorithm firmware upgrade to reduce DCD nuisance outage frequency, adding DCD capability to EPSS devices for improve targeting/sectionalizing, and PG&E's distribution engineers performing DCD sensitivity setting readjustments as part of their EPSS outage review efforts.



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In 2025, PG&E is re-establishing the Targeted Circuit Program (as a pilot program) as part of the overall reliability improvement plan to Cost-Effectively remediate PG&E's system's Worst-Performing circuits. The Reliability Targeted Circuit Program involves reinforcing the circuit mainline within the circuit breaker and line recloser zones to minimize the number and duration of outages impacting the circuit. The overall 2025 Targeted Circuit effort includes performing detailed patrol of targeted circuit protection zones and identifying work that would improve the circuit's reliability performance. Detailed patrol scope of work may include, as appropriate for the circuit, reframing poles to increase phase separation, installing animal/bird guards, repairing deteriorated equipment, and completing pending reliability-related maintenance work.

In addition to the Wildfire Mitigation Plan, internal reviews of unplanned outages are performed on a regular basis through the PG&E Outage Review Team (ORT) Process. The ORT process's objective is to identify and minimize chronic localized reliability issues affecting a smaller number of customers. Cost-effective remediation work that addresses those circuits identified from the ORT process are incorporated into PG&E's base reliability work.

As identified in Tables 61 and 62, 17 and 19 of PG&E's Worst-Performing AIFI and AIDI circuits respectively are High Fire-Threat District (HFTD) circuits. For the Worst-Performing circuits located in non-EPSS circuits, PG&E will evaluate what remedial action, if any, is appropriate through the ORT process. This includes determining whether any cost-effective remedial action will be performed through PG&E's base reliability improvement work.

"Deficient" Worst-Performing Circuits:

The circuits listed below are "deficient" (WPC) circuits in response to section 5b of CPUC D 16-008-001, Appendix B:

1. ALLEGHANY 1101

- i. An explanation of why it was ranked as a "deficient" circuit:
 - Three-year (2020-2022) average AIDI score of 1,627.
 - Three-year (2021-2023) average AIDI score of 1,909.
 - Three-year (2022-2024) average AIDI score of 1,787.
- ii. A historical record of the metric:
 - AIDI 2020 = 330
 - AIDI 2021 = 1,468
 - AIDI 2022 = 3,077
 - AIDI 2023 = 1,178
 - AIDI 2024 = 1,104



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- iii. An explanation of why it was on the deficiency list again:

The Alleghany 1101 circuit provides electric service to approximately 1,080 customers in Sierra and Plumas Counties through 78 circuit-miles of primarily overhead conductors. This circuit also serves customers located in the CPUC High Fire-Threat District - Tier 2 (Elevated Risk) and High Fire-Threat District - Tier 3 (Extreme Risk) and is classified as an EPSS circuit. The Alleghany 1101 circuit is comprised of about 45 miles of mainline with various branches that travel through a mix of rural highway and cross-country access. Its northernmost branch travels through mountainous terrain encompassing the Plumas National Forest. The major factors driving the Alleghany 1101 reliability performance are the remote service territory, overhead conductor exposure, and minimal ties to adjacent circuits for outage restoration support. Specifically, the elevated outage activity observed in year 2022 was primarily driven by vegetation-caused outages and accounted for over half of the overall AIDI performance. The outage activity observed in year 2023 was primarily driven by equipment failures (overhead conductor) while the year 2024 outage activity was driven primarily by both equipment failures (various) and vegetation-caused outages.
- iv. An explanation of what is being done to improve the circuit's future performance:

The Alleghany 1101 circuit is included as part of the multi-year System Hardening/Undergrounding Work Plan. As of June 2025, the current plan is targeting approximately 18.2 miles of overhead conductor to be hardened/undergrounded by year 2027. In addition, as part of the 2023 and 2024 work plan a total of 9 sets of fault indicators were installed to help pinpoint problem locations and to support the outage restoration efforts during the EPSS enablement season.
- v. A quantitative description of the utility's expectation for that circuit's future performance:

Significant reliability improvement is anticipated after the successful completion of the System Hardening/Undergrounding Plan to further minimize wildfire ignition risks on the EPPS circuit. This includes observing improved reliability performance on the Alleghany 1101 circuit in the years 2023 and 2024 and will be continuously monitored. Initiating base reliability improvement work to minimize any identified re-occurring outage activities will continue to be performed as part of the Outage Review Process. This includes continuously performing EPSS post-outage improvement efforts such as the Vegetation Management for Operational Mitigation (VMOM) process to minimize vegetation-caused outages and animal



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mitigation work to minimize animal (bird, squirrel) caused outages.

2. ALLEGHANY 1102

- i. An explanation of why it was ranked as a "deficient" circuit:
 - Three-year (2020-2022) average AIDI score of 1,519.
 - Three-year (2021-2023) average AIDI score of 1,999.
 - Three-year (2022-2024) average AIDI score of 1,727.
- ii. A historical record of the metric:
 - AIDI 2020 = 1,456
 - AIDI 2021 = 919
 - AIDI 2022 = 2,180
 - AIDI 2023 = 2,899
 - AIDI 2024 = 102
- iii. An explanation of why it was on the deficiency list again:

The Alleghany 1102 circuit provides electric service to approximately 165 customers in Sierra and Nevada Counties through 18 circuit-miles of primarily overhead conductor. This circuit is located entirely within the CPUC High Fire-Threat District - Tier 3 (Extreme Risk) and is classified as an EPSS circuit. The Alleghany 1102 circuit is comprised of one main branch that travels south from Alleghany through remote, mountainous terrain encompassing Tahoe National Forest to the community of Washington. The major factors driving the Alleghany 1102 reliability performance are the remote service territory, overhead conductor exposure, and minimal ties to adjacent circuits for outage restoration support. Specifically, the elevated outage activity observed in years 2022 and 2023 was primarily driven by vegetation-caused outages and accounted for 2/3 of the overall AIDI performance.
- iv. An explanation of what is being done to improve the circuit's future performance:

The Alleghany 1102 circuit is included in the multi-year System Hardening/Undergrounding Work Plan. As of June 2025, the current plan is targeting approximately 13.1 miles of overhead conductor to be hardened/undergrounded by year 2026. In addition, a total of 4 sets of fault indicators were successfully installed in years 2023 and 2024 to support outage investigation and restoration efforts during the EPSS enablement season through improved pinpointing of problem areas.
- v. A quantitative description of the utility's expectation for that circuit's future performance:



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Significant reliability improvement is anticipated after the successful completion of the System Hardening/Undergrounding Plan that further minimizes wildfire ignition risks on the EPPS circuit. This includes observing improved reliability performance on the Alleghany 1102 circuit in year 2024 and will be continuously monitored. Initiating base reliability improvement work to minimize any identified re-occurring outage activities will continue to be performed as part of the Outage Review Process. This includes continuously performing EPSS post-outage improvement efforts such as the Vegetation Management for Operational Mitigation (VMOM) process to minimize vegetation-caused outages and animal mitigation work to minimize animal (bird, squirrel) caused outages.

3. ALPINE 1101

- i. An explanation of why it was ranked as a "deficient" circuit:
 - Three-year (2020-2022) average AIFI score of 4.94.
 - Three-year (2021-2023) average AIFI score of 6.51.
 - Three-year (2022-2024) average AIFI score of 7.43.
- ii. A historical record of the metric:
 - AIFI 2020 = 1.80
 - AIFI 2021 = 4.00
 - AIFI 2022 = 9.00
 - AIFI 2023 = 6.52
 - AIFI 2024 = 6.78
- iii. An explanation of why it was on the deficiency list again:

The Alpine 1101 circuit provides electric service to approximately 282 customers in Alpine County through 8 circuit-miles of primarily underground conductor. Specifically, the Alpine 1101 circuit supports the Bear Valley community. The Salt Springs 2101 circuit provides the primary service to the Alpine 1101 circuit through 21/12 kV voltage step down transformers. Its main line travels through mountainous terrain including the Stanislaus National Forest. The major factor driving the Alpine 1101 reliability performance is the reliability performance of the Salt Springs 2101 circuit. This includes its remote service territory, overhead conductor exposure, minimal ties to adjacent circuits for outage restoration support, and elevated terrain which makes it susceptible to snow loading conditions. The Salt Springs 2101 circuit also serves customers located in the CPUC High Fire-Threat District - Tier 2 (Elevated Risk) and is an EPSS circuit.
- iv. An explanation of what is being done to improve the circuit's future performance:



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It is anticipated that any improvement work on Salt Springs 2101 will also improve Alpine 1101 reliability performance. A 2023 base reliability project was successfully completed by installing 1 OH fuse to improve sectionalizing. In addition, 6 sets of fault indicators were installed in years 2023 to 2024 to help pinpoint problem locations and to support the outage restoration efforts during the EPSS enablement season. As part of the 2024 work plan, there was an upgrade completed to 1 Reclosers control for enabling DCD (Down Conductor Detection) and improve sectionalizing/target detection during EPSS enablement; and 1 additional Recloser control upgrade planned for year 2025. Additionally, 2025 base reliability project completed updating trip saver to fuse saver device to minimize the impacts of EPSS by re-establishing proper protection coordination and additional project planned for installing a new UG switch to aid with operational and restoration efforts. The Salt Spring 2101 circuit is included as part of the multi-year System Hardening/Undergrounding/OH Removal Work Plan targeting approximately 0.09 miles for year 2025. This circuit is currently being re-evaluated for future projects.

- v. A quantitative description of the utility's expectation for that circuit's future performance:

Incremental reliability improvement is anticipated after completion of the base reliability work. Alpine 1101 circuit performance will be monitored continuously. This includes initiating base reliability improvement work to minimize any identified re-occurring outage activities as part of the Outage Review Process. In addition, EPSS post-outage improvement efforts will be performed on a continuous basis such as the Vegetation Management for Operational Mitigation (VMOM) process to minimize vegetation-caused outages and the animal mitigation work to minimize animal (bird, squirrel) caused outages.

4. BALCH NO 1 1101

- i. An explanation of why it was ranked as a "deficient" circuit:
- Three-year (2020-2022) average AIDI score of 3,129.
 - Three-year (2021-2023) average AIDI score of 3,252.
 - Three-year (2022-2024) average AIDI score of 2,978.
- ii. A historical record of the metric:
- AIDI 2020 = 24
 - AIDI 2021 = 627
 - AIDI 2022 = 8,224
 - AIDI 2023 = 625



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- AIDI 2024 = 0.
- iii. An explanation of why it was on the deficiency list again:
- The Balch No 1 1101 circuit provides electric service to approximately 28 customers in Fresno County through 15 circuit-miles of primarily overhead conductor. The Balch No 1 1101 circuit also serves customers located in the CPUC High Fire-Threat District - Tier 2 (Elevated Risk) and is an EPSS circuit. The Balch No 1 1101 circuit is comprised of two main line branches that travel north along S Vomac Rd on the Sierra National Forest, northeast of Fresno. The major factors driving the Balch No 1 1101 reliability performance are the remote service territory, overhead conductor exposure, and minimal ties to adjacent circuits for outage restoration support. Two outages were the primary drivers for 2022 reliability performance. The first outage due was an OCB forced out with prolonged repair time due to additional trouble found on UG facilities and time required for installation of temp generator. The second outage prolonged duration due to equipment failure at a remote location with access issues.
- iv. An explanation of what is being done to improve the circuit's future performance:
- The Balch No 1 1101 circuit is included as part of the multi-year System Hardening/Undergrounding Work Plan. As of June 2025, the current plan is targeting approximately 14.5 miles to be hardened/undergrounded by year 2027. In addition, as part of the 2024 work plan, 2 sets of fault indicators were installed to help pinpoint problem locations and to support the outage restoration efforts during the EPSS enablement season.
- v. A quantitative description of the utility's expectation for that circuit's future performance:
- Significant reliability improvement is anticipated after completion of the base reliability work and the comprehensive Wildfire Mitigation Plan to minimize wildfire ignition risks in the Tier 2 High Fire-Threat Districts. The Balch No 1 1101 circuit observed improved reliability in 2024 with no main line outages and will be monitored continuously. This includes initiating base reliability improvement work to minimize any identified re-occurring outage activities as part of the Outage Review Process. In addition, EPSS post-outage improvement efforts will be performed on a continuous basis such as the Vegetation Management for Operational Mitigation (VMOM) process to minimize vegetation-caused outages and the animal mitigation work to minimize animal (bird, squirrel) caused outages



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5. BEN LOMOND 0401

- i. An explanation of why it was ranked as a "deficient" circuit:
 - Three-year (2020-2022) average AIFI score of 7.78 and AIDI score of 1,523.
 - Three-year (2021-2023) average AIFI score of 10.36 and AIDI score of 2,014.
 - Three-year (2022-2024) average AIFI score of 10.61 and AIDI score of 1,682.
- ii. A historical record of the metric:
 - AIFI 2020 = 2.00
 - AIFI 2021 = 8.32
 - AIFI 2022 = 12.27
 - AIFI 2023 = 10.20
 - AIFI 2024 = 9.36
 - AIDI 2020 = 92
 - AIDI 2021 = 2,186
 - AIDI 2022 = 2,181
 - AIDI 2023 = 1,699
 - AIDI 2024 = 1,168
- iii. An explanation of why it was on the deficiency list again:

The Ben Lomond 0401 circuit provides electric service to 886 primarily residential customers, along rural Highway 9 in Santa Cruz County. This circuit comprises about 24 circuit-miles of primarily OH conductor and additional 3 circuit-miles on its current source Burns 2101 - 21kv distribution circuit. Prior to mid-August 2022, Ben Lomond 0401 used to be fed from Camp Evers 2105 – 21kv distribution circuit. The Ben Lomond 0401 is located entirely in the CPUC High Fire-Threat District - Tier 3 (Extreme Risk) and is an EPSS circuit. The major factors driving Ben Lomond 0401 reliability performance are the remote mountainous service territory with increased vegetation-caused outage risks, overhead conductor exposure, and minimal ties to adjacent circuits for outage restoration support. The primary driver for 2021 to 2024 reliability performance was implementation of the Enhance Powerline Safety Settings (EPSS) scheme.
- iv. An explanation of what is being done to improve the circuit's future performance:

Base reliability projects have been initiated on Camp Evers 2105, Burns 2101, and Ben Lemond 0401 circuits to minimize the impacts



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of EPSS. Specifically, a total of 18 sets of fault indicators were installed from 2022 to 2024 to help pin-point problem locations and to support the outage restoration efforts during the EPSS enablement season. As part of the 2024 work plan, upgrade completed for 1 Recloser control on the Burns 2101 circuit for enabling DCD (Down Conductor Detection) and improve sectionalizing/target detection during EPSS enablement; and 1 additional control upgrade planned for year 2025. The Camp Evers 2105, Burns 2101, and Ben Lemond 0401 circuits are included as part of the multi-year System Hardening/Undergrounding/OH removal Work Plan with a total of 1.5 miles completed from 2019 to 2022. The Burns 2101 and Ben Lemond 0401 circuits are currently being re-evaluated for future projects.

- v. A quantitative description of the utility's expectation for that circuit's future performance:

Incremental reliability improvement is anticipated after completion of the base reliability work and comprehensive Wildfire Mitigation Plan to minimize wildfire ignition risks in the Tier 3 High Fire-Threat District. Ben Lomond 0401 and Burns 2101 circuit performance will be monitored continuously. This includes initiating base reliability improvement work to minimize any identified re-occurring outage activities as part of the Outage Review Process. In addition, EPSS post-outage improvement efforts will be performed on a continuous basis such as the Vegetation Management for Operational Mitigation (VMOM) process to minimize vegetation-caused outages and the animal mitigation work to minimize animal (bird, squirrel) caused outages.

6. CHALLENGE 1101

- i. An explanation of why it was ranked as a "deficient" circuit:

- Three-year (2020-2022) average AIDI score of 2,188.
- Three-year (2021-2023) average AIDI score of 2,022.
- Three-year (2022-2024) average AIDI score of 2,236.

- ii. A historical record of the metric:

- AIDI 2020 = 2,072
- AIDI 2021 = 361
- AIDI 2022 = 4,120
- AIDI 2023 = 1,577
- AIDI 2024 = 1,015

- iii. An explanation of why it was on the deficiency list again:

The Challenge 1101 circuit provides electric service to approximately 708 customers in Yuba, Butte, and Plumas Counties through 50



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circuit-miles of primarily overhead conductor. This circuit also serves customers located in the CPUC High Fire-Threat District - Tier 2 (Elevated Risk) and Tier 3 (Extreme Risk) and is an EPSS circuit. The Challenge 1101 circuit comprises one main branch that travels northeast through remote, mountainous terrain including the Plumas National Forest. The major factors driving the Challenge 1101 reliability performance are the remote mountainous service territory with increased vegetation-caused outage risks, overhead conductor exposure, and minimal ties to adjacent circuits for outage restoration support. About half of the contribution of the 2020 AIDI performance was driven by a single vegetation-caused outage resulting in wire down. And about a third of the contribution of the 2022 AIDI performance was driven by a single equipment failure outage during a winter storm event.

- iv. An explanation of what is being done to improve the circuit's future performance:

Base reliability projects have been initiated on Challenge 1101 circuit to minimize the impacts of EPSS. Specifically, a total of 9 sets of fault indicators were installed in years 2023 to 2024 to help pin-point problem locations and to support the outage restoration efforts during the EPSS enablement season. In addition, as part of the 2025 work plan, 1 fuse upgrade to a fuse saver device is planned to minimize the impacts of EPSS by re-establishing proper protection coordination. The Challenge 1101 circuit is included as part of the multi-year System Hardening/Undergrounding/OH removal Work Plan with 0.04 miles completed from 2019 to 2020 and targeting approximately 0.06 miles for year 2025. This circuit is currently being re-evaluated for future projects.

- v. A quantitative description of the utility's expectation for that circuit's future performance:

Incremental reliability improvement is anticipated after completion of the base reliability work and the comprehensive Wildfire Mitigation Plan to minimize wildfire ignition risks in the Tier 2 and 3 High Fire-Threat Districts. The Challenge 1101 circuit observed improved reliability in 2024 and will be monitored continuously. This includes initiating base reliability improvement work to minimize any identified re-occurring outage activities as part of the Outage Review Process. In addition, EPSS post-outage improvement efforts will be performed on a continuous basis such as the Vegetation Management for Operational Mitigation (VMOM) process to minimize vegetation-caused outages and the animal mitigation work to minimize animal (bird, squirrel) caused outages.



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7. ELK CREEK 1101

- i. An explanation of why it was ranked as a "deficient" circuit:
 - Three-year (2020-2022) average AIDI score of 1,328.
 - Three-year (2021-2023) average AIDI score of 2,129.
 - Three-year (2022-2024) average AIDI score of 2,518.
- ii. A historical record of the metric:
 - AIDI 2020 = 614
 - AIDI 2021 = 1,001
 - AIDI 2022 = 2,384
 - AIDI 2023 = 3,021
 - AIDI 2024 = 2,150
- iii. An explanation of why it was on the deficiency list again:

The Elk Creek 1101 circuit provides electric service to approximately 900 customers in Southern Glenn and Northern Colusa Counties through 175 circuit-miles of primarily overhead conductor. This circuit also serves customers located in the CPUC High Fire-Threat District - Tier 2 (Elevated Risk) and is an EPSS circuit. The Elk Creek 1101 circuit is comprised of several branches that travel north along Hwy 162, west into Mendocino National Forest, and south along Hwy 306 past Stony Gorge Reservoir. The major factors driving the Elk Creek 1101 reliability performance are the remote service territory, overhead conductor exposure, and minimal ties to adjacent circuits for outage restoration support. The primary driver for 2022 reliability performance was the Enhance Powerline Safety Settings (EPSS) scheme, with an observed uptick in the number of mainline level outages. The primary drivers for 2023 reliability performance were the following: wildfire mitigation (Public Safety Power Shutoff outages); a single equipment failure caused outage event during EPSS enablement conditions in which the outage restoration duration time was prolonged due to access issues and securing helicopter patrol support; and the continued uptick in the number of mainline level outages during EPSS enablement conditions. The primary driver for 2024 reliability performance was the continued uptick in the number of mainline level outages during EPSS enablement conditions.
- iv. An explanation of what is being done to improve the circuit's future performance:

Base reliability projects have been initiated on Elk Creek 1101 circuit to minimize the impacts of EPSS. Specifically, as part of the 2023 and 2024 work plan, 16 sets of fault indicators were installed to help pinpoint problem locations and to support the outage restoration efforts during the EPSS enablement season. In addition, a total of 2



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animal work locations were completed between 2024 and 2025. And as part of the 2025 work plan, 5 fuse upgrades to fuse saver devices are planned to minimize the impacts of EPSS by re-establishing proper protection coordination. Several system hardening projects have been completed on the Elk Creek 1101 circuit as part of the Wildfire Mitigation Plan with 16.9 miles successfully completed in 2023. As of June 2025, the plan is to harden/underground and OH line remove approximately 22.5 miles by year 2026.

- v. A quantitative description of the utility's expectation for that circuit's future performance:

Incremental reliability improvement is anticipated after completion of the base reliability work and the comprehensive Wildfire Mitigation Plan to minimize wildfire ignition risks in the Tier 2 High Fire-Threat District. Elk Creek 1101 circuit performance will be monitored continuously. This includes initiating base reliability improvement work to minimize any identified re-occurring outage activities as part of the Outage Review Process. In addition, EPSS post-outage improvement efforts will be performed on a continuous basis such as the Vegetation Management for Operational Mitigation (VMOM) process to minimize vegetation-caused outages and the animal mitigation work to minimize animal (bird, squirrel) caused outages.

8. GARBERVILLE 1101

- i. An explanation of why it was ranked as a "deficient" circuit:
- Three-year (2020-2022) average AIFI score of 5.22.
 - Three-year (2021-2023) average AIFI score of 5.64.
 - Three-year (2022-2024) average AIFI score of 6.92.

- ii. A historical record of the metric:

- AIFI 2020 = 4.40
- AIFI 2021 = 4.24
- AIFI 2022 = 7.03
- AIFI 2023 = 5.65
- AIFI 2024 = 8.06

- iii. An explanation of why it was on the deficiency list again:

The Garberville 1101 circuit provides electric service to approximately 1,015 customers in Southern Humboldt and Northern Mendocino Counties through 148 circuit-miles of primarily overhead conductor. This circuit also serves customers located in the CPUC High Fire-Threat District - Tier 2 (Elevated Risk) and is an EPSS circuit. The Garberville 1101 circuit is comprised of three main branches. The eastern branch serves approximately 288 customers through a 22 circuit-mile line section that travels through remote,



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mountainous terrain including zones with intermediate and heavy snow loading. The western branch serves about 178 customers through a 12-mile line section that traverses through coastal mountains to the Whitethorn community. The southern branch serves about 512 customers through a 28-circuit-mile line section that follows the Hwy 101 corridor between Garberville and Leggett. The southern branch also runs along the South Fork of the Eel River and crosses several State Parks including Richardson's Grove, Smith Redwoods, and Standish Hickey Recreation Area. The major factors driving the Garberville 1101 reliability performance are the remote mountainous service territory with increased vegetation-caused outage risks, overhead conductor exposure, and minimal ties to adjacent circuits for outage restoration support. Particularly, 2022 and 2023 reliability performance driven by vegetation-caused outages contributing about half of the AIFI metric. The primary driver for 2024 reliability performance is vegetation and unknown caused outages.

- iv. An explanation of what is being done to improve the circuit's future performance:

Base reliability projects have been initiated on Garberville 1101 circuit to minimize the impacts of EPSS. Specifically, as part of the 2022 and 2023 work plans, a total of 17 sets of fault indicators were installed to help pinpoint problem locations and to support the outage restoration efforts during the EPSS enablement season. In addition, as part of the 2025 work plan, 10 fuse upgrades to fuse saver devices are planned to minimize the impacts of EPSS by re-establishing proper protection coordination. The Garberville 1101 circuit is included as part of the multi-year System Hardening/Undergrounding/OH removal Work Plan with 0.35 miles completed from 2021 to 2022 and targeting approximately 0.25 miles for year 2025. This circuit is currently being re-evaluated for future projects.

- v. A quantitative description of the utility's expectation for that circuit's future performance:

Incremental reliability improvement is anticipated after completion of the base reliability work and comprehensive Wildfire Mitigation Plan. Garberville 1101 circuit performance will be monitored continuously. This includes initiating base reliability improvement work to minimize any identified re-occurring outage activities as part of the Outage Review Process. In addition, EPSS post-outage improvement efforts will be performed on a continuous basis such as the Vegetation Management for Operational Mitigation (VMOM) process to minimize vegetation-caused outages and the animal mitigation work to minimize animal (bird, squirrel) caused outages.



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9. GARBERVILLE 1102

- i. An explanation of why it was ranked as a "deficient" circuit:
 - Three-year (2020-2022) average AIFI score of 5.32 and AIDI score of 1,891.
 - Three-year (2021-2023) average AIFI score of 7.55 and AIDI score of 3,629.
 - Three-year (2022-2024) average AIFI score of 11.05 and AIDI score of 4,373.
- ii. A historical record of the metric:
 - AIFI 2020 = 2.31
 - AIFI 2021 = 5.41
 - AIFI 2022 = 8.20
 - AIFI 2023 = 9.04
 - AIFI 2024 = 15.84
 - AIDI 2020 = 378
 - AIDI 2021 = 1,499
 - AIDI 2022 = 3,785
 - AIDI 2023 = 5,597
 - AIDI 2024 = 3,749
- iii. An explanation of why it was on the deficiency list again:

The Garberville 1102 circuit provides electric service to approximately 1,853 customers in Humboldt County through 142 circuit-miles of primarily overhead conductor. This circuit also serves customers located in the CPUC High Fire-Threat District - Tier 2 (Elevated Risk) and is an EPSS circuit. The primary mainline section of Garberville 1102 circuit travels through a 50 mile stretch of mountainous terrain along the northern coast. The primary mainline section also crosses an area known in the outdoor/hiking community as "The Lost Coast" and portions of the Humboldt Redwoods State Park. The primary mainline section splits near the town of Briceland, approximately 10 circuit miles northwest of Garberville. The north branch extends 37 miles to Petrolia while the south branch extends 14 miles to the community of Whitethorn. The major factors driving the Garberville 1102 reliability performance are the remote mountainous service territory with increased vegetation-caused outage risks, overhead conductor exposure, and minimal ties to



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- adjacent circuits for outage restoration support. Particularly, 2020 to 2024 reliability performance driven by vegetation-caused outages.
- iv. An explanation of what is being done to improve the circuit's future performance:
- Base reliability projects have been initiated on Garberville 1102 circuit to minimize the impacts of EPSS. Specifically, as part of the 2022 to 2024 work plans, a total of 21 sets of fault indicators were installed to help pin-point problem locations and to support the outage restoration efforts during the EPSS enablement season. In addition, as part of the 2024 work plan, an upgrade was completed to 1 Reclosers control for enabling DCD (Down Conductor Detection) and improve sectionalizing/target detection during EPSS enablement. The capacity driven project successfully completed 1.2 miles of system hardening in the year 2022. And as part of the 2025 work plan, 2 fuse upgrades to fuse saver devices are planned to minimize the impacts of EPSS by re-establishing proper protection coordination. The Garberville 1102 circuit is included as part of the multi-year System Hardening/Undergrounding/OH removal Work Plan with 1.4 miles completed from 2019 to 2022 and is currently being re-evaluated for future projects. The Garberville 1102 is included as part of the 2025 pilot Target Circuit Program. Although the scope of work has not yet been developed, detail patrol and performing miscellaneous reliability improvement work is anticipated.
- v. A quantitative description of the utility's expectation for that circuit's future performance:
- Incremental reliability improvement is anticipated after completion of the base reliability work and comprehensive Wildfire Mitigation Plan. Garberville 1102 circuit performance will be monitored continuously. This includes initiating base reliability improvement work to minimize any identified re-occurring outage activities as part of the Outage Review Process. In addition, EPSS post-outage improvement efforts will be performed on a continuous basis such as the Vegetation Management for Operational Mitigation (VMOM) process to minimize vegetation-caused outages and the animal mitigation work to minimize animal (bird, squirrel) caused outages.

10. HOOPA 1101

- i. An explanation of why it was ranked as a "deficient" circuit:
- Three-year (2020-2022) average AIFI score of 4.17 and AIDI score of 1,645.
 - Three-year (2021-2023) average AIFI score of 5.60 and AIDI score of 2,447.



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- Three-year (2022-2024) average AIFI score of 7.18 and AIDI score of 3,168.
- ii. A historical record of the metric:
 - AIFI 2020 = 2.26
 - AIFI 2021 = 3.38
 - AIFI 2022 = 6.89
 - AIFI 2023 = 6.53
 - AIFI 2024 = 8.14
 - AIDI 2020 = 213
 - AIDI 2021 = 1,885
 - AIDI 2022 = 2,847
 - AIDI 2023 = 2,607
 - AIDI 2024 = 4,409
- iii. An explanation of why it was on the deficiency list again:

The Hoopa 1101 circuit provides electric service to 2,102 customers in Humboldt County through 142 circuit-miles of primarily overhead conductor. This circuit also serves customers located in the CPUC High Fire-Threat District - Tier 2 (Elevated Risk) and Tier 3 (Extreme Risk) and is an EPSS circuit. The Hoopa 1101 circuit is comprised of three main sections. Section near Substation feeding the community of Hoopa up to Hwy 169 and Hwy 96 intersection. The main line splits into 2 main line branches. The eastern branch serves about 527 customers through a 24-circuit-mile line section that traverses through remote mountainous terrain including the Six Rivers and Klamath National Forests, including the community of Orleans. The western branch is a 20 circuit-mile line section that runs along the Klamath River and follows the Hwy 169 corridor between the communities of Weitchpec and Johnsons. The major factors driving the Hoopa 1101 reliability performance are the remote mountainous service territory with increased vegetation-caused outage risks, overhead conductor exposure, and minimal ties to adjacent circuits for outage restoration support. Particularly, reliability performance from years 2021 to 2023 was driven by vegetation-caused outages contributing to about half of AIDI metric. The primary driver for 2024 reliability performance was the continued uptick in the number of mainline level outages, particularly vegetation-caused outages.
- iv. An explanation of what is being done to improve the circuit's future performance:

Base reliability projects have been initiated on Hoopa 1101 circuit to minimize the impacts of EPSS. Specifically, as part of the 2022 and

2023 work plans, 10 and 11 fault indicators were installed, respectively, to help pinpoint problem locations and to support the outage restoration efforts during the EPSS enablement season. In addition, as part of the 2025 work plan, 1 fuse upgrade to fuse saver device and 1 Recloser installation are planned to minimize the impacts of EPSS by re-establishing proper protection coordination. And 2026 work plan calls for 2 additional fuse upgrades to fuse savers. The Hoopa 1101 circuit is included as part of the multi-year System Hardening/Undergrounding/OH Removal Work Plan with 0.2 miles completed from 2019 to 2020 and targeting approximately 0.06 miles for year 2025. This circuit is currently being re-evaluated for future projects. The Hoopa 1101 is included as part of the 2025 pilot Target Circuit Program. Although the scope of work has not yet been developed, detail patrol and performing miscellaneous reliability improvement work is anticipated.

- v. A quantitative description of the utility's expectation for that circuit's future performance:

Incremental reliability improvement is anticipated after completion of the base reliability work and comprehensive Wildfire Mitigation Plan. Hoopa 1101 circuit performance will be monitored continuously. This includes initiating base reliability improvement work to minimize any identified re-occurring outage activities as part of the Outage Review Process. In addition, EPSS post-outage improvement efforts will be performed on a continuous basis such as the Vegetation Management for Operational Mitigation (VMOM) process to minimize vegetation-caused outages and the animal mitigation work to minimize animal (bird, squirrel) caused outages.

11. LOS GATOS 1106

- i. An explanation of why it was ranked as a "deficient" circuit:
 - Three-year (2020-2022) average AIFI score of 6.75.
 - Three-year (2021-2023) average AIFI score of 7.46.
 - Three-year (2022-2024) average AIFI score of 8.40.
- ii. A historical record of the metric:
 - AIFI 2020 = 4.88
 - AIFI 2021 = 9.12
 - AIFI 2022 = 6.25
 - AIFI 2023 = 7.01
 - AIFI 2024 = 10.96
- iii. An explanation of why it was on the deficiency list again:



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Los Gatos 1106 is located approximately seven miles southwest of San Jose in De Anza Division. The Los Gatos 1106 circuit provides electric service to approximately 2,249 customers in Santa Clara County through 102 miles of primary overhead conductor. This circuit also serves customers located in the CPUC High Fire-Threat District - Tier 2 (Elevated Risk) and Tier 3 (Extreme Risk) and is an EPSS circuit. The Los Gatos 1106 circuit is comprised of one main branch that travels south along Highway 17 through a 3-mile stretch of mountainous terrain including Lexington Reservoir Park. The primary mainline section splits into various branches near the Lexington Reservoir and extends into the Santa Cruz mountains. The major factors driving the Los Gatos 1106 reliability performance are the mountainous service territory with increased vegetation-caused outage risks, overhead conductor exposure, and minimal ties to adjacent circuits for outage restoration support. The primary driver from 2021 to 2023 reliability performance was implementation of the Enhance Powerline Safety Settings (EPSS) scheme. The primary driver for 2024 reliability performance was the continued uptick in the number of mainline level outages, particularly vegetation-caused outages.

- iv. An explanation of what is being done to improve the circuit's future performance:

Several system hardening projects have been completed as part of the Wildfire Safety Plan with 6.2 miles successfully completed in 2019-2023; and planned OH removal work of 0.07 miles for year 2025. In addition, the Los Gatos 1106 circuit is currently being re-evaluated for future System Hardening/Undergrounding/OH Removal projects. Base reliability projects have been initiated to minimize the impacts of EPSS. As part of the 2022 to 2024 work plans, a total of 16 sets of fault indicators were installed to help pin-point problem locations and to support the outage restoration efforts during the EPSS enablement season. And as part of the 2024 work plan, 2 projects to update fuses to Fuse Saver device to help reestablish proper protection coordination and 1 recloser installation to improve sectionalization were successfully completed. In addition, the 2025 work plan calls for 5 fuse upgrades to fuse saver devices and 1 animal guard location.

- v. A quantitative description of the utility's expectation for that circuit's future performance:

Incremental reliability improvement is anticipated after completion of the base reliability and system hardening projects. This includes the associated reliability benefits after completion of the comprehensive Wildfire Mitigation Plan. Los Gatos 1106 circuit performance will be monitored continuously. This includes initiating base reliability



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improvement work to minimize any identified re-occurring outage activities as part of the Outage Review Process. In addition, EPSS post-outage improvement efforts will be performed on a continuous basis such as the Vegetation Management for Operational Mitigation (VMOM) process to minimize vegetation-caused outages and the animal mitigation work to minimize animal (bird, squirrel) caused outages.

12. PIT NO 5 1101

- i. An explanation of why it was ranked as a "deficient" circuit:
 - Three-year (2020-2022) average AIDI score of 2,035.
 - Three-year (2021-2023) average AIDI score of 3,459.
 - Three-year (2022-2024) average AIDI score of 3,605.
- ii. A historical record of the metric:
 - AIDI 2020 = 3,493
 - AIDI 2021 = 2,353
 - AIDI 2022 = 243
 - AIDI 2023 = 7,790
 - AIDI 2024 = 2,780
- iii. An explanation of why it was on the deficiency list again:

The Pit No 5 1101 circuit provides electric service to about 122 customers in Big Bend and Shasta County through 27 circuit-miles of primarily overhead conductor. This circuit is in the CPUC High Fire-Threat District - Tier 2 (Elevated Risk) and is an EPSS circuit. The main drivers for the Pit No 5 1101 AIDI reliability performance is Public Safety Power Shutoff (PSPS) outages during non-major event days in 2020, a single vegetation-caused outage in 2021, and two vegetation-caused outages during winter months in 2023. The primary driver for 2024 reliability performance was a single outage with multiple problem locations during rainstorm event.
- iv. An explanation of what is being done to improve the circuit's future performance:

Base reliability projects have been initiated on Pit No 5 1101 circuit to minimize the impacts of EPSS. Specifically, as part of the 2022 work plan a project was completed for installing a new Recloser to improve operational flexibility. In addition, as part of the 2023 work plan 1 fault indicator set was installed to help pin-point problem locations and to support the outage restoration efforts during the EPSS enablement season. In addition, the Pit No 5 1101 circuit is currently being re-evaluated as part of the multi-year System Hardening/Undergrounding Work Plan. As of June 2025, the current



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plan is targeting approximately 2.8 miles to be hardened/undergrounded by year 2027.

- v. A quantitative description of the utility's expectation for that circuit's future performance:

Incremental reliability improvement is anticipated after completion of the base reliability projects and comprehensive Wildfire Mitigation Plan to minimize wildfire ignition risks in the Tier 2 High Fire-Threat District. Pit No 5 1101 circuit performance will be monitored continuously. This includes initiating base reliability improvement work to minimize any identified re-occurring outage activities as part of the Outage Review Process. In addition, EPSS post-outage improvement efforts will be performed on a continuous basis such as the Vegetation Management for Operational Mitigation (VMOM) process to minimize vegetation-caused outages and the animal mitigation work to minimize animal (bird, squirrel) caused outages.

13. POSO MOUNTAIN 2101

- i. An explanation of why it was ranked as a "deficient" circuit:

- Three-year (2020-2022) average AIDI score of 1,293.
- Three-year (2021-2023) average AIDI score of 2,859.
- Three-year (2022-2024) average AIDI score of 3,036.

- ii. A historical record of the metric:

- AIDI 2020 = 13
- AIDI 2021 = 893
- AIDI 2022 = 2,980
- AIDI 2023 = 4,691
- AIDI 2024 = 1,449

- iii. An explanation of why it was on the deficiency list again:

The Poso Mountain 2101 circuit provides electric service to approximately 149 customers in Kern County through 59 circuit-miles of entirely overhead conductor. This circuit also serves customers located in the CPUC High Fire-Threat District - Tier 2 (Elevated Risk) and is an EPSS circuit. The Poso Mountain 2101 circuit is comprised of several branches that support a predominately unincorporated community north of Bakersfield. The major factors driving the Poso Mountain 2101 reliability performance are overhead conductor exposure, animal (bird) caused outages, and minimal ties to adjacent circuits for outage restoration support. The primary driver from 2022 to 2024 reliability performance was implementation of the Enhanced Powerline Safety Settings (EPSS) scheme and primarily driven by unknown and animal caused outages.



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- iv. An explanation of what is being done to improve the circuit's future performance:

Base reliability projects have been initiated on Poso Mountain 2101 circuit to minimize the impacts of EPSS, improve sectionalization, and minimize animal cause outages. Specifically, as part of the 2022 and 2023 work plans several projects were completed, installing 3 Recloser, 4 overhead fuses, and 1 animal guard location. In addition, 8 fault indicator sets were installed from 2023 to 2024 to help pinpoint problem locations and to support the outage restoration efforts during the EPSS enablement season. As part of the 2024 work plan, 3 animal guard locations were successfully completed for minimizing bird/animal caused outages; and an upgrade completed to 2 Reclosers controls for enabling DCD (Down Conductor Detection) and improving sectionalizing/target detection during EPSS enablement. In addition, as part of the 2025 work plan, Recloser installation is planned to minimize the impacts of EPSS by improving sectionalization. As part of the Avian Protection Plan, a total of 115 animal guard locations were completed from 2023 to 2024 to minimize animal cause outages. The Poso Mountain 2101 circuit is included as part of the multi-year System Hardening/Undergrounding/OH Removal Work Plan with 0.4 miles completed in year 2024 and is currently being re-evaluated for future projects.

- v. A quantitative description of the utility's expectation for that circuit's future performance:

Incremental reliability improvement is anticipated after completion of the base reliability projects. This includes the associated reliability benefits after completion of the comprehensive Wildfire Mitigation Plan to minimize wildfire ignition risks in the Tiers 2 High Fire-Threat Districts. Poso Mountain 2101 circuit performance will be monitored continuously. This includes initiating base reliability improvement work to minimize any identified re-occurring outage activities as part of the Outage Review Process. In addition, EPSS post-outage improvement efforts will be performed on a continuous basis such as animal mitigation work to minimize animal (bird, bird nest) caused outages.

14. WILLOW CREEK 1103

- i. An explanation of why it was ranked as a "deficient" circuit:
- Three-year (2020-2022) average AIDI score of 1,422.
 - Three-year (2021-2023) average AIDI score of 2,225.
 - Three-year (2022-2024) average AIDI score of 1,842.
- ii. A historical record of the metric:



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- AIDI 2020 = 601
 - AIDI 2021 = 2,593
 - AIDI 2022 = 1,067
 - AIDI 2023 = 2,992
 - AIDI 2024 = 1,451
- iii. An explanation of why it was on the deficiency list again:
- Willow Creek 1103 circuit provides electric service to approximately 1,550 customers in Humboldt and Trinity Counties through 89 circuit-miles of primarily overhead conductor. This circuit also serves customers located in the CPUC High Fire-Threat District - Tier 2 (Elevated Risk) and Tier 3 (Extreme Risk) and is an EPSS circuit. The Willow Creek 1103 circuit comprises two main branches that travel south and southeast through remote, mountainous terrain including the Six Rivers and Trinity National Forests. The major factors driving the Willow Creek 1103 reliability performance are the remote mountainous service territory with increased vegetation-caused outage risks, overhead conductor exposure, and minimal ties to adjacent circuits for outage restoration support. The primary driver for the 2021 to 2023 reliability performance was implementation of the Enhanced Powerline Safety Settings (EPSS) scheme and primarily driven by unknown and vegetation-caused outages. The primary driver for 2024 reliability performance was overhead equipment failures.
- iv. An explanation of what is being done to improve the circuit's future performance:
- Base reliability projects have been initiated on Willow Creek 1103 circuit to minimize the impacts of EPSS. Specifically, as part of the 2022 to 2024 work plans, a total of 29 sets of fault indicators were installed to help pin-point problem locations and to support the outage restoration efforts during the EPSS enablement season. In addition, as part of the 2025 work plan, 2 fuse upgrades to fuse savers devices are planned to minimize the impacts of EPSS by re-establishing proper protection coordination. The Willow Creek 1103 circuit is included as part of the multi-year System Hardening/Undergrounding/OH Removal Work Plan with 9.9 miles completed from 2019 to 2023; and this circuit is currently being re-evaluated for future projects.
- v. A quantitative description of the utility's expectation for that circuit's future performance:
- Incremental reliability improvement is anticipated after completion of the base reliability and system hardening projects. This includes the associated reliability benefits after completion of the comprehensive



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Wildfire Mitigation Plan to minimize wildfire ignition risks in the Tiers 2 and 3 High Fire-Threat Districts. Willow Creek 1103 circuit performance will be actively monitored. This includes initiating base reliability improvement work to minimize any identified re-occurring outage activities as part of the Outage Review Process. In addition, EPSS post-outage improvement efforts will be performed on a continuous basis such as the Vegetation Management for Operational Mitigation (VMOM) process to minimize vegetation-caused outages and the animal mitigation work to minimize animal (bird, squirrel) caused outages.

6. Top 10 Major Unplanned Power Outage Events of 2024

Significant Outage Events Of 2024

The table below lists the ten largest outage events experienced during 2024. PG&E interprets this reporting requirement as the ten events (individual days or in some cases a group of consecutive days) with a significant number of customer interruptions in the system or a portion of the system. These events are listed in descending order of customer interruptions.

Table 63 - Ten Largest 2024 Outage Events

Rank	Description	Date	Number of Customers Affected *	Longest Customer Interruption (Hours)	# of People Used To Restore Service	CPUC Major Event?
1	A major storm and associated strong "atmospheric river" moved through the territory on the 4 th and 5 th bringing strong winds, heavy rain, thunderstorms, and heavy mountain snow. Some of the strongest winds were reported along the coast and through the Sacramento Valley and northern San Joaquin Valley where gusts 40-80+ mph were observed on the 4 th . The highest rainfall totals were reported on the 4 th along the North Coast and Central Coast ranging from 2" to 9.50" leading to numerous reports of flooding. Another weather system moved along the coast on the 6 th and 7 th bringing additional impacts across the territory, especially the southern portions of the territory, bringing locally strong winds, moderate to heavy rain across the far South, heavy mountain snow, and severe thunderstorms resulting in 2 EF1 tornadoes in San Luis Obispo County.	2/4/2024 – 2/8/2024	1,475,817	866	5379	02/04/2024
2	A Public Safety Power Shutoff was in effect on the 2 nd and 3 rd due to strong northerly winds 30-50+ mph across the northern Sacramento Valley. Several wildfires occurred during this period. A prolonged heat wave quickly followed, impacting the territory as high pressure sat over the state for over a week and daytime temperatures rose to 10-20+ degrees above normal. Numerous record high maximum temperatures and several record high minimum temperatures were set across the territory with the most notable across the northern Sacramento Valley, specifically at Redding, where the all-time highest temperature record was broken on the 5 th by reaching 118° and then was broken again on the 6 th when Redding reached a high temperature of 119°, setting the new daily maximum temperature reported at the site. Ukiah tied the all-time record on the 6 th by reaching 117°.	6/30/2024 – 7/9/2024	596,232	235	6734	No
3	A very strong winter storm moved through the territory on the 13 th and 14 th producing strong winds, moderate to heavy rain, thunderstorms, and heavy mountain snow. Rainfall totals 2" to 5" were reported across the North Coast and northern interior, leading to numerous reports of flooding. Widespread wind gusts in the 50-70+ mph were reported. An EF1 tornado was also reported in Scotts Valley, north of Santa Cruz. Residual outages carried over into the 15 th .	12/13/2024 – 12/15/2024	500,904	506	6221	12/14/2024
4	A powerful storm containing a moderate to strong atmospheric river impacted the northern half of the territory from the 19 th through the 21 st . Northern and central portions of the territory were impacted by strong winds, heavy rain, and isolated thunderstorms as an atmospheric river stalled along the North Coast. Rainfall totals through the period ranged from 5" to 17" across the northern half of the territory, breaking numerous daily highest precipitation records and leading to numerous reports of flooding. The all-time daily rainfall record was broken at Santa Rosa on the 20 th when 6.92" of rain was recorded, with daily records broken at Ukiah (3.27" on the 20 th and 3.66" on the 21 st), Redding (3.21" on 20 th), Red Bluff (2.54" on the 20 th), Santa Rosa (4.93" on the 21 st), Sacramento Airport (1.96" on the 22 nd), and San Francisco City (2.00" on the 22 nd). Through the period, widespread strong wind gusts were reported across northern and central portions of the territory, ranging from 40-55+ mph in the lower elevations and 60-80 mph+ across the higher terrain. The weather system finally pushed a front southward across the rest of the territory late on the 21 st and 22 nd shifting impacts across the South including risk for flashover and strong winds.	11/19/2024 – 11/23/2024	323,965	119	5035	No
5	A very cold storm system moved into the territory bringing impacts for several days. Moderate to heavy rain, gusty winds, and thunderstorms were reported with snow levels dropping below 1000 feet across the far North late on the 1 st into the 2 nd bringing low and middle elevation snow impacts, especially across the northern Humboldt region. Below average daytime temperatures were reported on the 2 nd , in the 40s and 50s across the northern half of the territory. Rainfall totals were highest on the 1 st across the Sierra where around 2" to 5" fell through the period, with generally 1.5" to 6" along the coastline. Wind gusts 40-70+ mph were reported across the northern Humboldt Coast, northern interior and higher elevations and around 30-55+ mph across the Bay Area.	2/29/2024 – 3/2/2024	232,719	145	6937	03/01/2024
6	A moderate to strong offshore wind event occurred on the 5 th and 6 th as a weather system dropped southward through the Great Basin region. The strongest winds were reported across the Sacramento Valley and adjacent terrain, elevated terrain of the North Bay, East Bay hills, Santa Cruz mountains, the Diablo Valley, and portions of Kern County near the Tehachapi's ranging from 40-75+ mph. A Public Safety Power Shutoff event began on the 5 th continuing through early morning hours of the 7 th .	11/4/2024 – 11/6/2024	215,126	72	2119	11/05/2024
7	A weather system moved through the territory bringing rain, isolated thunderstorms, gusty winds ranging from 30-55+ mph, and mountain snow. Across the South, light rain likely contributed to flashover and gusty winds 30-65+ mph resulted power outages due to a dust storm across the San Joaquin Valley where multiple dust storm warnings were issued by the National Weather Service.	11/11/2024	112,427	47	160	No
8	A low-pressure system stalled off the North Coast bringing periods of moderate to heavy rain, strong southerly winds across the coast and higher terrain, thunderstorms across the interior, and heavy snowfall across the Sierra and northern mountains. Gusts were generally between 30-60+ mph.	02/19/2024	77,134	56	0	No
9	A weather system produced showers and isolated thunderstorms across the high Sierra with dry weather elsewhere and breezy to gusty northwesterly winds across mainly across the North Coast and elevated terrain across the North. Wind gusts 30-50+ mph were reported with wind gusts 40-65+ mph near the Tehachapi's. A Public Safety Power Shutoff went into effect the afternoon of the 17 th through the 19 th .	10/17/2024	73,447	68	2255	10/17/2024
10	Dry conditions were reported across the territory with afternoon thunderstorms across the Sierra. Temperatures were in the 60s along the coast, 70s and 80s across the Bay Area and coastal valleys, 80s to low 90s across the inland valleys, and upper 90s to low 100s across the interior.	07/16/2024	64,086	26	1436	No

*Note: Values exclude planned outages. PG&E resources are through December 31, 2024. PSPS event data reflects PG&E crew repairs only (excludes patrols, inspections and vegetation management). PG&E employees counted based on time records on activities logged past 12/31/2024 to restore outages that occurred in the year 2024 are reflected in this table.



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7. Summary List of Major Event Day (MED) per IEEE 1366

Major Event Day

IEEE Standard 1366 defines MED as follows:

IEEE Standard 1366-2012 uses a statistically based method of identifying excludable events. Specifically, the IEEE standard provides for the exclusion of all outages occurring on any day where its SAIDI is greater than “TMED” where:

$$T_{MED} = e^{\text{average over 5 yrs. of Ln (daily SAIDI)} + 2.5 * \text{STD DEV of 5 yrs. of Ln (daily SAIDI)}}$$

The IEEE 1366 Standard includes an outage resulting from the failure of a single line transformer.

Table 64 – 2024 Major Event Day

Date	Description	Reason
February 4 th , 2024	A major storm and associated strong “atmospheric river” moved through the territory on the 4th and 5th bringing strong winds, heavy rain, thunderstorms, and heavy mountain snow. Some of the strongest winds were reported along the coast and through the Sacramento Valley and northern San Joaquin Valley where gusts 40-80+ mph were observed on the 4th. The highest rainfall totals were reported on the 4th along the North Coast and Central Coast ranging from 2” to 9.50” leading to numerous reports of flooding. Another weather system moved along the coast on the 6th and 7th bringing additional impacts across the territory, especially the southern portions of the territory, bringing locally strong winds, moderate to heavy rain across the far South, heavy mountain snow, and severe thunderstorms resulting in 2 EF1 tornadoes in San Luis Obispo County.	IEEE MED
March 1 st , 2024	A very cold storm system moved into the territory bringing impacts for several days. Moderate to heavy rain, gusty winds, and thunderstorms were reported with snow levels dropping below 1000 feet across the far North late on the 1st into the 2nd bringing low and middle elevation snow impacts, especially across the northern Humboldt region. Below average daytime temperatures were reported on the 2nd, in the 40s and 50s across the northern half of the territory. Rainfall totals were highest on the 1st across the Sierra where around 2” to 5” fell through the period, with generally 1.5” to 6” along the coastline. Wind gusts 40-70+ mph were reported across the northern Humboldt Coast, northern interior and higher elevations and around 30-55+ mph across the Bay Area.	IEEE MED
October 17 th , 2024	A weather system produced showers and isolated thunderstorms across the high Sierra with dry weather elsewhere and breezy to gusty northwesterly winds across mainly across the North Coast and elevated terrain across the North. Wind gusts 30-50+ mph were reported with wind gusts 40-65+ mph near the Tehachapi’s. A Public Safety Power Shutoff went into effect the afternoon of the 17th through the 19th.	IEEE MED
November 5 th , 2024	A moderate to strong offshore wind event occurred on the 5th and 6th as a weather system dropped southward through the Great Basin region. The strongest winds were reported across the Sacramento Valley and adjacent terrain, elevated terrain of the North Bay, East Bay hills, Santa Cruz mountains, the Diablo Valley, and portions of Kern County near the Tehachapi’s ranging from 40-75+ mph. A Public Safety Power Shutoff event began on the 5th continuing through early morning hours of the 7th.	IEEE MED
December 14 th , 2024	A very strong winter storm moved through the territory on the 13th and 14th producing strong winds, moderate to heavy rain, thunderstorms, and heavy mountain snow. Rainfall totals 2” to 5” were reported across the North Coast and northern interior, leading to numerous reports of flooding. Widespread wind gusts in the 50-70+ mph were reported. An EF1 tornado was also reported in Scotts Valley, north of Santa Cruz. Residual outages carried over into the 15th.	IEEE MED



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*MED is defined as Major Events Day

7.1 Major Event Day (MED) Discussions:

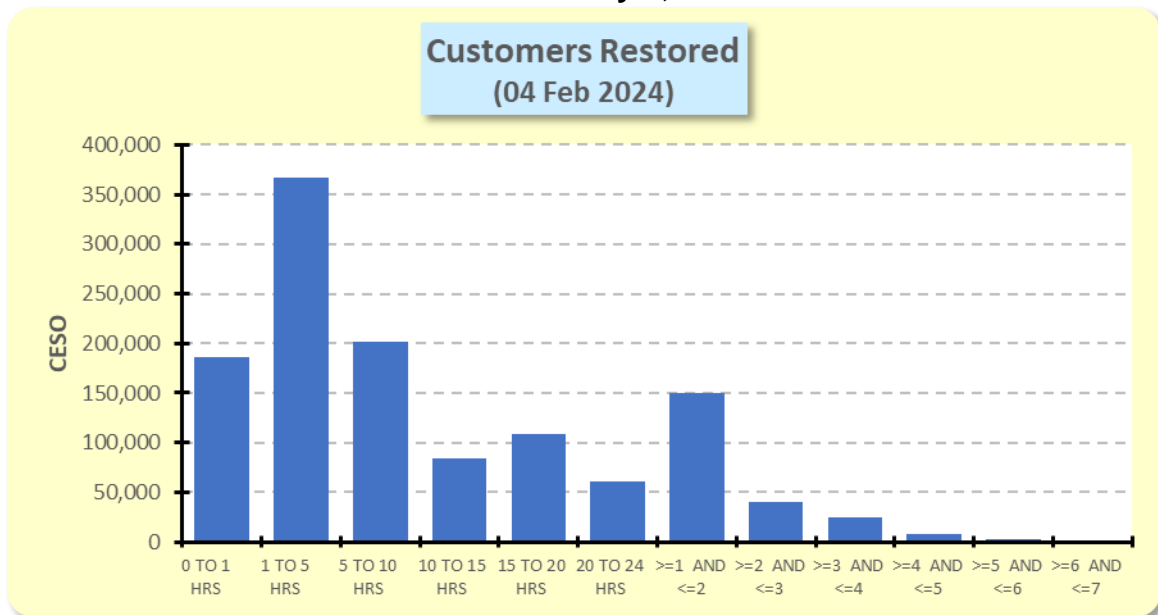
February 4, 2024, Major Event Days

Table 65 below indicates the number of customers without service at periodic intervals for this event (02/04/2024). The numbers of customers noted in the table are for only those divisions impacted by this event.

Table 65 – February 4th, 2024

Range	CESO	Cumulative %
0 TO 1 HRS	185,813	15.03%
1 TO 5 HRS	367,511	29.73%
5 TO 10 HRS	201,755	16.32%
10 TO 15 HRS	83,964	6.79%
15 TO 20 HRS	108,550	8.78%
20 TO 24 HRS	60,605	4.90%
>=1 AND <=2	150,080	12.14%
>=2 AND <=3	40,453	3.27%
>=3 AND <=4	24,677	2.00%
>=4 AND <=5	8,241	0.67%
>=5 AND <=6	2,966	0.24%
>=6 AND <=7	1,230	0.10%
> 7	290	0.02%
Total	1,236,135	

Chart 53: February 4, 2024 MED



Note: The number of customer outages segmented by hourly restoration periods requires a level of detail not normally maintained by PG&E in its central computerized records. The information shown here is what PG&E has been able to reconstruct from several databases and may have a margin of error of up to 5%.

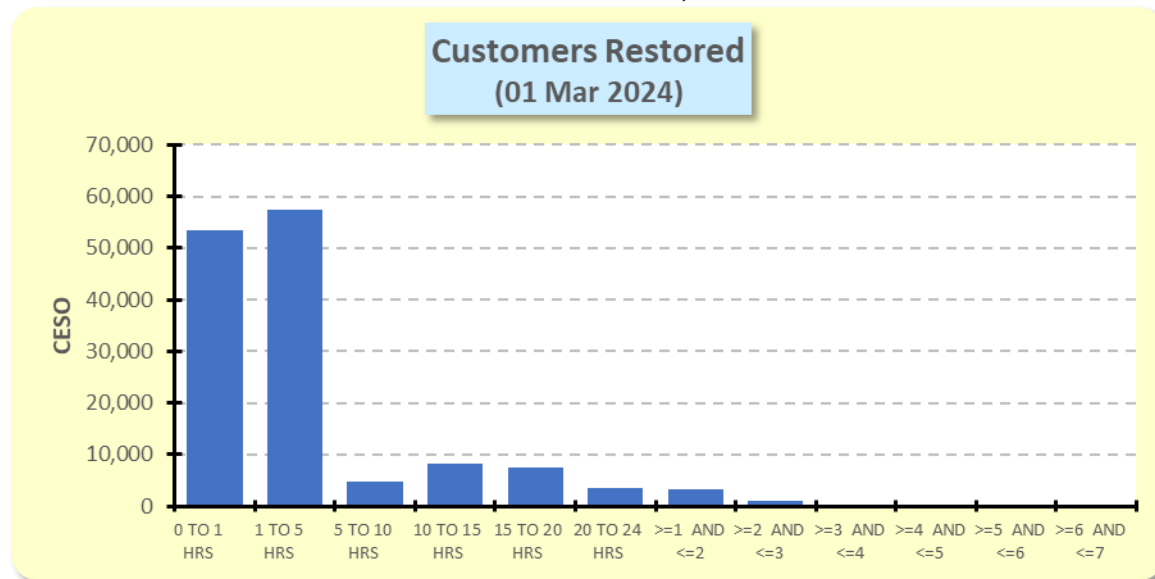
March 1, 2024, Major Event Days

Table 66 below indicates the number of customers without service at periodic intervals for this event (03/01/2024). The number of customers noted in the table is for only those divisions impacted by this event.

Table 66 – March 1st, 2024

Range	CESO	Cumulative %
0 TO 1 HRS	53,425	38.38%
1 TO 5 HRS	57,495	41.31%
5 TO 10 HRS	4,602	3.31%
10 TO 15 HRS	8,096	5.82%
15 TO 20 HRS	7,425	5.33%
20 TO 24 HRS	3,546	2.55%
>=1 AND <=2	3,180	2.28%
>=2 AND <=3	923	0.66%
>=3 AND <=4	268	0.19%
>=4 AND <=5	69	0.05%
>=5 AND <=6	138	0.10%
>=6 AND <=7	21	0.02%
Total	139,188	

Chart 56: March 1, 2024 MED





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Note: The number of customer outages segmented by hourly restoration periods requires a level of detail not normally maintained by PG&E in its central computerized records. The information shown here is what PG&E has been able to reconstruct from several databases and may have a margin of error of up to 5%.

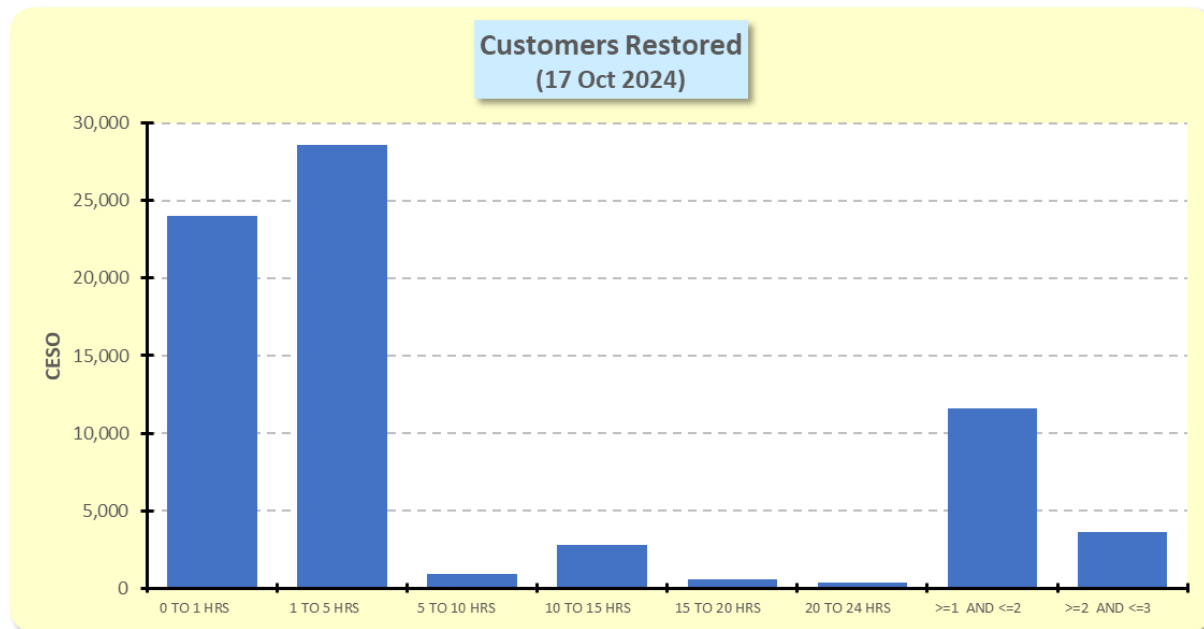
October 17, 2024 Major Event Day

Table 67 below indicates the number of customers without service at periodic intervals for this event (10/17/2024). The numbers of customers noted in the table are for only those divisions impacted by this event.

Table 67 – October 17th, 2024

Range	CESO	Cumulative %
0 TO 1 HRS	23,982	33.13%
1 TO 5 HRS	28,565	39.46%
5 TO 10 HRS	910	1.26%
10 TO 15 HRS	2,793	3.86%
15 TO 20 HRS	573	0.79%
20 TO 24 HRS	329	0.45%
>=1 AND <=2	11,616	16.05%
>=2 AND <=3	3,620	5.00%
Total	72,388	

Chart 57: October 17, 2024 MED



Note: The number of customer outages segmented by hourly restoration periods requires a level of detail not normally maintained by PG&E in its central computerized records. The information shown here is what PG&E has been able to reconstruct from several databases and may have a margin of error of up to 5%.

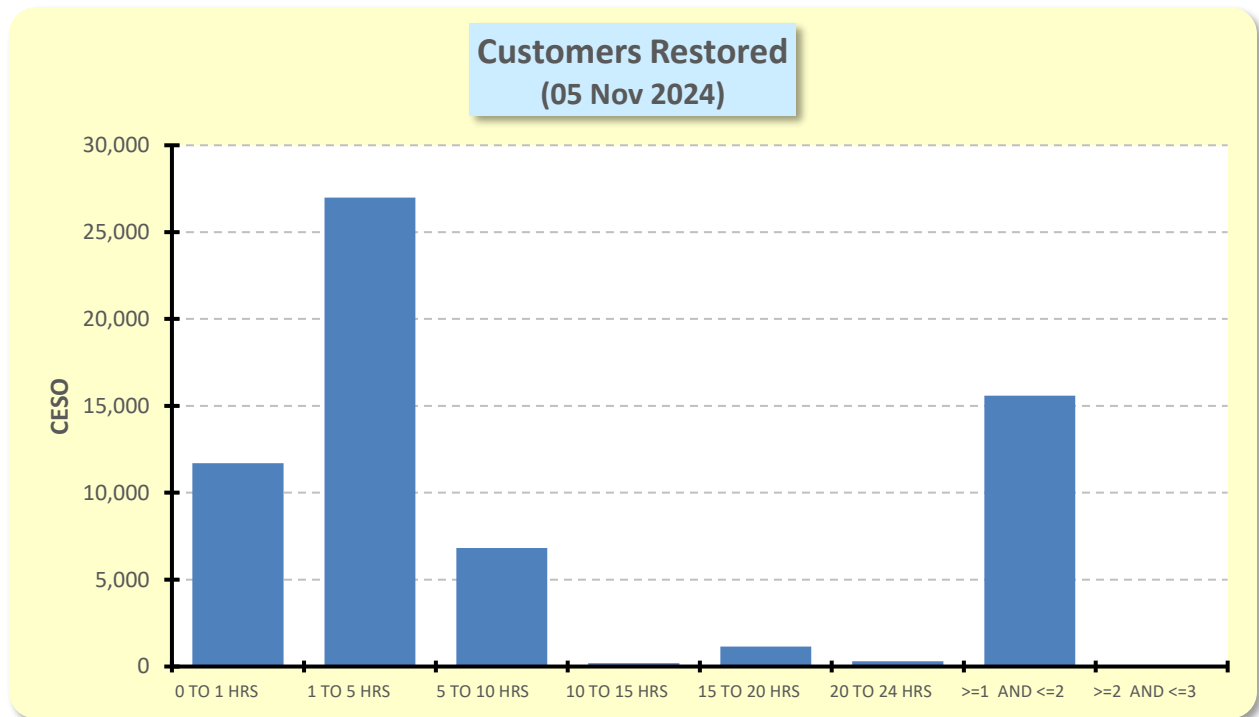
November 05, 2024 Major Event Day

Table 68 below indicates the number of customers without service at periodic intervals for this event (11/05/2024). The numbers of customers noted in the table are for only those divisions impacted by this event.

Table 68 – November 5th, 2024

Range	CESO	Cumulative %
0 TO 1 HRS	11,704	18.62%
1 TO 5 HRS	26,991	42.95%
5 TO 10 HRS	6,825	10.86%
10 TO 15 HRS	189	0.30%
15 TO 20 HRS	1,146	1.82%
20 TO 24 HRS	311	0.49%
>=1 AND <=2	15,597	24.82%
>=2 AND <=3	82	0.13%
Total	62,845	

Chart 58: November 5, 2024 MED



Note: The number of customer outages segmented by hourly restoration periods requires a level of detail not normally maintained by PG&E in its central computerized records. The information shown here is what PG&E has been able to reconstruct from several databases and may have a margin of error of up to 5%.

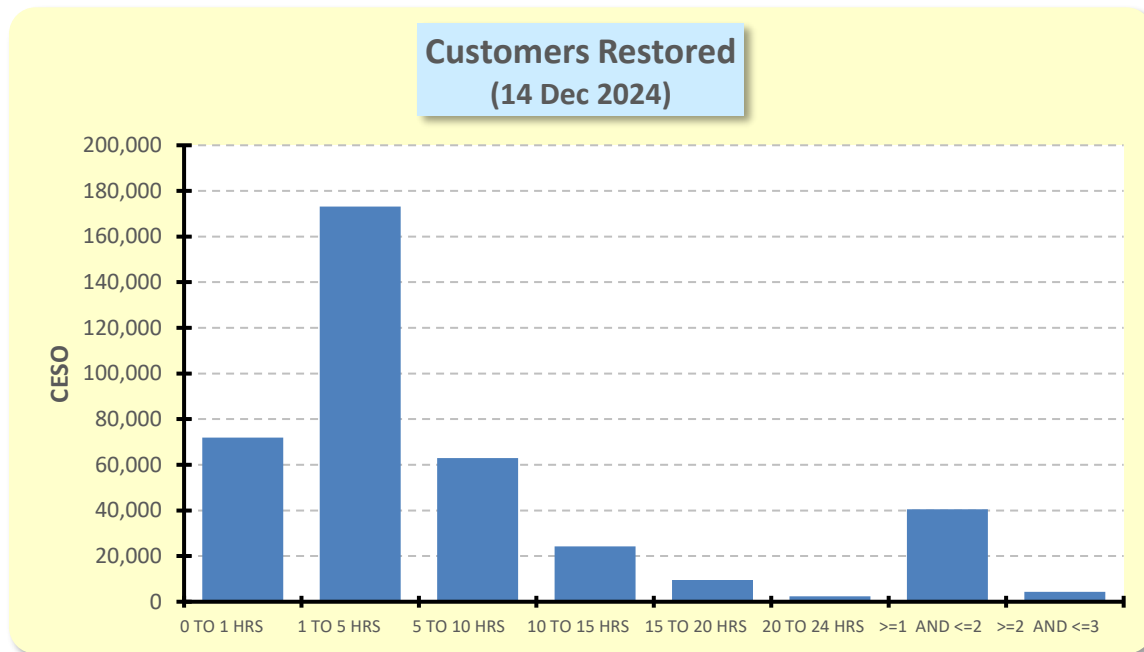
December 14, 2024 Major Event Day

Table 69 below indicates the number of customers without service at periodic intervals for this event (12/15/2024). The numbers of customers noted in the table are for only those divisions impacted by this event.

Table 69 – December 14th, 2024

Range	CESO	Cumulative %
0 TO 1 HRS	71,933	18.49%
1 TO 5 HRS	173,130	44.49%
5 TO 10 HRS	62,979	16.18%
10 TO 15 HRS	24,294	6.24%
15 TO 20 HRS	9,589	2.46%
20 TO 24 HRS	2,336	0.60%
>=1 AND <=2	40,452	10.40%
>=2 AND <=3	4,307	1.11%
>=3 AND <=4	98	0.03%
>=4 AND <=5	2	0.00%
>=5 AND <=6	8	0.00%
> 7	2	0.00%
Total	389,130	

Chart 59: December 14, 2024 MED



Note: The number of customer outages segmented by hourly restoration periods requires a level of detail not normally maintained by PG&E in its central computerized records. The



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information shown here is what PG&E has been able to reconstruct from several databases and may have a margin of error of up to 5%.



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8. Historical Ten Largest Unplanned Outage Events for 2014-2023

Table 70 - Ten Largest 2023 Outage Events

Rank	Description	Date	Number of Customers Affected	Longest Customer Interruption (Hours)	# of People Used To Restore Service	CPUC Major Event?
1	On the heels of the previous "atmospheric river event" at the beginning of January, a series of weather systems continued to impact the territory. The first was a major winter storm and "atmospheric river" event that produced strong southerly winds, periods of heavy rain, heavy mountain snow, and strong thunderstorms. A stalled front across the North allowed for continued gusty winds and rainfall over several days leading to significant rainfall accumulations and additional outages.	1/7/2023 – 1/11/2023	920,870	3,063	7,087	01/07/2023 to 01/10/2023
2	An "atmospheric river" event produced heavy rainfall and significant rainfall totals, gusty southerly winds, and thunderstorms across the territory, especially along the coastline. This event was preceded by another "atmospheric river" event, with already saturated and unstable soils, leading to continued outages.	1/3/2023 – 1/5/2023	584,964	319	3,045	01/04/2023 and 01/05/2023
3	Another "atmospheric river" event produced heavy rainfall and significant rainfall accumulations, isolated thunderstorms, and gusty southerly winds to the territory. Significant outages occurred in the Bay Area and central interior with reports of wind gusts in the 70-100 mph range.	3/14/2023 – 3/15/2023	557,020	1,489	6,518	03/14/2023
4	A strong weather system brought strong southerly winds across the Bay Area and Central Coast, combined with periods of heavy rain leading to flooding in the Bay Area, thunderstorms, and mountain snow across the territory. This weather system tracked directly over the Bay Area, leading to very strong winds. Gusts in the mid 70s were reported at Oakland Airport, with dangerous winds across other portions the Bay Area. Near 250 weather stations recorded peak wind gusts of 50 mph or higher.	03/21/2023 – 03/22/2023	526,673	376	4,321	03/21/2023
5	A major winter storm impacted the territory bringing a combination of low and mid elevation snowfall, strong winds, and isolated thunderstorms. This weather system tracked directly over the Bay Area bringing significant low snow impacts. Snow levels were below 1000' across the North Coast, North Valley, and Bay Area, with levels between 500'-1500' in the Sierra, leading to significant snow accumulations. There were significant snow accumulations in the northern Sacramento Valley and lower Sierra foothills leading to low snow outages.	02/23/2023 – 02/25/2023	399,557	336	6,290	03/23/2023 to 03/25/2023
6	A weather system moved through the territory bringing rain and thunderstorms to the territory and cooler air and strong northwest winds in its wake, leading to significant outages.	02/21/2023	341,071	1,291	2,802	02/21/2023
7	A major winter storm brought low elevation snowfall across Humboldt, Sierra, Yosemite and Stockton divisions with significant accumulations, strong winds, and isolated thunderstorms to the territory.	2/27/2023 – 3/1/2023	222,540	1,059	6,073	02/27/2023 and 02/28/2023
8	A major winter storm and "atmospheric river" event impacted the territory with significant outage activity due to strong winds and heavy rain, especially across the Central Coast divisions. A deep plume of subtropical moisture interacted with a weather system bringing strong winds along the coast, Bay Area, and Central Valley, and heavy rainfall with embedded thunderstorms. Snowmelt also occurred across the state in the lower and middle elevations leading to flooding and saturated soils.	3/9/2023 – 3/11/2023	209,001	1,709	8,359	03/09/2024
9	A weather system moved through the territory resulting in outages due to gusty winds, heavy rain, strong thunderstorms, and mid elevation mountain snow.	3/28/2023 – 3/29/2023	140,942	1,080	3,945	NO
10	A weather system moved through the territory, bringing thunderstorms and periods of moderate rain across the territory, with periods of heavy rain across the southern portions.	01/14/2023	117,196	170	5,281	01/14/2023



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Table 71 - Ten Largest 2022 Outage Events

Rank	Description	Date	Number of Customers Affected	Longest Customer Interruption (Hours)	# of People Used To Restore Service	CPUC Major Event?
1	A major heat event with several locations experiencing multiple days of record hot temperatures occurred. This event technically started with increasing temperatures across interior regions during the end of August. Temperatures then continued to increase while spreading toward the coast during the holiday weekend. By Sunday 9/4 the high temperature at San Jose had reached the 97 degrees, with most other Bay locations seeing temperature in the 90s, and with 100-110F across the interior. Temperatures then reached their maximums on 9/6 and 9/7 with all regions except for some immediate coast locations seeing highs at least in the 90s. The low/high and San Jose both days was 68/104 and then 74/109. For perspective those temperatures are 15-30 degrees above normal for that time of year. The temperatures across the interior ranged from the upper 60s/low 70s for lows to 100-115 for highs. Onshore flow then slowly returned and started to cool the region from the coast inward from 9/7 to 9/10.	9/4/2022 - 9/8/2022	512,900	653	2,148	Yes 9/6/2022 and 9/7/2022
2	A strong winter storm began entering the region via the North Coast on 12/9 and then impacted the entire territory on 12/10. This system had sustained winds ranging 15-30 mph with gusts mainly ranging 35-50. Parts of the North Coast, Sierra foothills, and Sierra crest saw gusts 50-65 mph. Anywhere from a tenth of an inch to two inches of rain fell across valley floors, with several inches falling across coastal regions, elevated terrain, and the Sierra. Snow levels with this system mainly stay above 4,000 feet with several feet of snow above that elevation. There were also a few embedded/isolated lightning strikes with storms that moved through the region. Mainly across the North Coast, northern Sac Valley, and across a few Sierra foothill regions	12/10/2022 - 12/12/2022	344,525	635	2,079	Yes
3	A slow moving weather system moved through central and southern portions of the territory, dropping an inch to several inches of rain across the SF Bay and Sac River/Sac Delta regions. Oakland and Hayward airports both set their 1 day precipitation records which both exceeded 4" in the day (4.87" at KOAK and 4.32 at KHWD) There were also breezy to gusty winds with this system, generally 25-45 mph. But as this system wrapped through the region during the evening there were also strong northerly winds that developed along the Sac/Central Valley that reached 35-60 mph.	12/30/2022 - 12/31/2022	323,195	1,033	2,927	Yes 12/31/2022
4	Heat began to build across the region on Monday 5/23 with increased outages also starting to appear. Maximum temperatures hit the low to mid 90s across the interior, with Concord and Santa Rosa also seeing max temps reach the low to mid 90s on 5/23. San Jose only reached a max temperature of 83 degrees by Monday. Temperatures then increased across the region Tuesday and Wednesday. Max temperatures hit triple digits across the interior and the upper 90s to around 100 across coastal valleys both days. Notable lows/highs across the region for both 5/24 and 5/25: San Jose: 56/93 then 61/93; Concord: 57/98 then 62/99; Santa Rosa: 51/100 then 50/95 Sacramento: 58/100 then 62/102; Fresno: 67/97 then 68/103 Paso Robles: 48/100 then 56/98. Temperatures then cooled across the region on 5/26 but some residual outages continued	05/24/2022 - 05/26/2022	176,742	75	168	No
5	A winter storm moved through the region 9/18 and 9/19 and had moderate to heavy rainfall, breezy to gusty winds, and isolated thunderstorms. Wind gusts generally ranged 25-40 mph on 9/18, with a few elevated areas seeing gusts 45-50 mph. Precipitation amounts ranged anywhere from 1-3" across Northern California with most along the coast, and 1-2" along the South Coast, with trace to up to 0.25" across the San Joaquin Valley. There were 66 total lightning strikes reported on 9/18 with 24 strikes across Humboldt below 3k ft, with 11 strikes in Sonoma, 30 in North Valley, and 1 in Sacramento	09/18/2022 - 09/19/2022	162,726	82	711	No
6	Heat was the primary cause of impact on 6/21, with heat continuing to cause issues on 6/22. However, monsoonal moisture also moved into the region on 6/22 and sparked scattered thunderstorms across the southern San Joaquin Valley. Airports with notable temperatures from 6/21 and 6/22: Redding: 75/102 then 69/105; Stockton: 59/106 then 64/94; Fresno: 65/103 then 71/100; Concord 61/102 then 65/97; Paso Robles: 53/100 then 51/99; Bakersfield 68/101 then 73/97. Otherwise on 6/22 1252 lightning strikes occurred below 3000ft with an additional 170 above 3k ft. Most strikes occurred across Central Coast (159), Yosemite (150), Fresno (309), and Kern (633) divisions.	6/21/2022 - 6/22/2022	143,986	421	692	No
7	Not weather related. There was a substation outage in Sierra division as well as several other long customer min outages. Cause is under investigation.	8/24/2022 - 8/25/2022	131,359	51	0	No
8	On 1/21 and 1/22 there was a strong offshore (northeast) wind event across Northern California. Winds hit their peak late on 1/21 and continued into 1/22 and wind gusts ranged between 30-55 mph; including Oakland Airport which hit a peak of 54 mph. Other elevated terrain saw peak gusts reach into the 50-60s, with a few exposed peaks like Mt Diablo hitting 71 mph. Winds were strongest along the western Sac Valley, North Bay hills to Lake County, through the Bay/Delta south to about San Jose	1/21/2022 - 1/22/2022	123,844	134	1,114	No
9	Flashover may have contributed to outages this day along the south coast as there was a thick marine layer with drizzle being reported. There were also 4 separate substation outages in the Central Coast near Monterey that affected ~65k customers	06/04/2022	111,901	32	173	No
10	Heat played a role in some of the outages on 8/3 and 8/4, but there was also a substation outage in Kern on 8/4 that affected ~14k customers. Airports with notable temperatures from 8/3 and 8/4: Redding: 76/108 then 79/107; Stockton: 67/102 then 72/100; Fresno: 76/104 then 80/107; Concord 63/96 then 63/92; Paso Robles: 62/104 then 65/96; Bakersfield 74/102 then 82/104	8/3/2022 - 8/4/2022	108,809	76	0	No



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Table 72 - Ten Largest 2021 Outage Events

Rank	Description	Date	Number of Customers Affected *	Longest Customer Interruption (Hours)	# of People Used To Restore Service	CPUC Major Event?
1	A major winter storm and an "atmospheric river" event produced significant mountain snowfall, gusty southerly winds and moderate to heavy rainfall. Low to mid elevation snowfall impacts occurred across Humboldt, North Valley, Sierra, and Stockton divisions.	1/25/2021 – 1/28/2021	734,309	454	2,884	Yes
2	A major winter storm and an "atmospheric river" event produced very strong southerly winds and several inches of heavy rainfall across the territory.	10/24/2021 – 10/25/2021	622,050	120	3,494	Yes
3	There was a succession of 3 weather systems that that resulted in wind and flashover outages during this period. The first system moved through the state October 17 and October 18, largely impacting SF Bay Area divisions with wind and flashover outages. The second system moved onshore across the North Coast on October 19 causing wind and flashover related outages, with flashover outages continuing October 20 across Northern California divisions. A third system swept across the entire state October 21 and October 22 producing additional flashover outages.	10/17/2021 – 10/22/2021	423,063	457	1,034	Yes (10/17/2021)
4	A strong weather system moved through the state and produced moderate rainfall and breezy to gusty winds. Snow levels dropped to around 2000-3500' and low to mid elevation snowfall also produced impact across North Valley and Sierra divisions.	12/13/2021 – 12/15/2021	339,075	194	1,743	Yes
5	A strong and prolonged offshore wind event occurred across the entire state with the execution of a PSPS across the southern Sierra, southern Coastal Ranges, and Kern County.	1/18/2021 – 1/19/2021	294,129	378	2,435	Yes
6	A three-day triple digit heat event brought temperatures that ranged from 105-112F across the Central Valley with mid-90s to around 105F for intermediate and inland Bay Area valleys. This resulted in high electric loads and heat-related outage activity.	6/17/2021 – 6/19/2021	219,892	35	735	No
7	A weather system brought major low elevation snow that impacted Humboldt, Sierra, and Stockton Divisions. The "Atmospheric River" system brought strong rain activity to the North Valley and Yosemite divisions, including of low snow impacts.	12/25/2021 – 12/27/2021	230,018	431	3,095	Yes
8	Late season heat with temperatures reaching 100-107F across the Interior and around 90F in the Bay lead to high electric load and heat related outages on September 8. Heat impact continued September 9 across the San Joaquin Valley; meanwhile, during that evening a weather system moved onshore across Northern California and produced lightning and flashover impacts that continued into September 10.	9/8/2021 – 9/10/2021	180,415	73	285	Yes (09/10/2021)
9	Strong north to northwest winds brought system wide impact October 11 and created critical fire weather resulting in PSPS shutoffs across the Northern Sierra and Coastal Ranges.	10/11/2021	171,765	81	925	Yes
10	A weather system moved through Northern California on September 18 and 19 resulting in outages due to lightning and flashover. This system was then followed immediately by strong north to northeast winds, and critical fire weather conditions lead to the execution of PSPS along the western Sacramento Valley/Northern Coastal Range as well as across the elevated terrain of Kern and Santa Barbara Counties.	9/18/2021 – 9/20/2021	143,924	41	300	No

* Note: Values exclude single distribution line transformers and planned outages.



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Table 73 - Ten Largest 2020 Outage Events

Rank	Description	Date	Number of Customers Affected *	Longest Customer Interruption (Hours)	# of People Used To Restore Service	CPUC Major Event?
1	A prolonged heat wave featuring widespread triple-digit temperatures resulted in significant heat-related outages across the territory over the course of several days and energy capacity issues across CA. Additionally, abundant subtropical moisture from Tropical Storm Fausto produced widespread thunderstorm activity 8/15 – 8/18 resulting in over 7700 lightning strikes and the ignition of several hundred wildfires, which formed into several large complex events.	8/13/2020 – 8/20/2020	834,760	1,180	2,157	Yes (8/15 – 8/17)
2	High gusts of wind that started in the Central CA area. A strong offshore wind event developed across a wide swath of the territory resulting in critical fire weather conditions and the implementation of PSPS.	10/25/2020	399,863	79	1,503	Yes
3	A significant heat wave event resulted in widespread triple-digit temperatures away from the coast and heat-related outage activity. Additionally, gusty offshore flow led to critical fire weather conditions and the execution of PSPS across the North, along the Sierra and in southern Kern division.	9/06/2020 – 9/08/2020	354,169	1,599	395	Yes (9/7 – 9/8)
4	A significant offshore wind event impacted the northern and central territory resulting in very strong winds and considerable outage activity along the Sierra and across the Bay Area and Central Coast.	02/09/2020	323,381	170	1,357	Yes
5	A major winter storm delivered rain, heavy mountain snow and thunderstorms to the territory resulting in significant low-snow related outage activity across Humboldt and along the Sierra.	3/15/2020 – 3/16/2020	203,685	227	1,272	Yes
6	An early-season heat wave brought 90-100F+ temperatures to the Bay Area and central territory resulting in high electric loads and heat-related outage activity.	6/01/2020 – 6/04/2020	168,672	41	105	No
7	A potent cold front delivered strong winds, rain and snow to the territory with low elevation snow leading to outage activity across Humboldt and along the Sierra.	1/16/2020 – 1/17/2020	147,270	178	853	Yes
8	A storm system brought gusty winds and widespread rain to the north and central territory, including the first precipitation event in many months for Bay Area locations, resulting in flashover-related outage activity.	11/13/2020 – 11/14/2020	133,040	74	193	No
9	Gusty offshore winds led to critical fire weather conditions and the execution of PSPS across the North and in southern Kern.	09/27/2020	132,498	1,575	969	Yes
10	A weather system delivered breezy winds, isolated thunderstorms and the first precipitation event of the season for most of the territory, which resulted in flashover-related outage activity.	11/05/2020 – 11/06/2020	126,983	37	162	No

*Note: Values exclude planned outages. PG&E resources are through December 31, 2020. PSPS event data reflects PG&E crew repairs only (excludes patrols, inspections and vegetation management). Contractor information not readily available.



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Table 74 - Ten Largest 2019 Outage Events

Rank	Description	Date	Number of Customers Affected ^	Longest Customer Interruption (Hours)	# of People Used To Restore Service	CPUC Major Event?
1	Strong, damaging winds and associated critical fire danger resulted in Extreme-Plus fire potential and the most widespread implementation of PSPS	10/26/2019 – 10/27/2019	1,258,339	312	1,576	Yes
2	A strong offshore wind event developed across Northern CA resulting in critical fire potential and the implementation of PSPS	10/09/2019 – 10/10/2019	799,312	89	378	Yes
3	A pair of potent storms impacted the territory beginning with an "atmospheric river" event, which produced gusty winds, heavy rain and significant low snow in Redding, followed by a colder, dynamic storm that resulted in additional periods of rain and gusty south winds along with low snow and isolated thunderstorms.	2/12/2019 – 2/17/2019	587,843	625	1,677	Yes
4	A series of winter storms resulted in periods of strong gusty south winds, heavy rain, thunderstorms and low elevation snowfall	2/02/2019 – 2/05/2019	378,432	177	1,683	Yes (Feb 2,4,5)
5	A potent winter storm impacted the territory with strong south-southeast winds, isolated thunderstorms and heavy rain and mountain snow	11/25/2019 – 11/27/2019	346,907	120	1,804	Yes (Nov 26, 27)
6	A powerful Pacific storm delivered gusty south winds, heavy rain and mountain snow to the territory	1/16/2019 – 1/17/2019	338,564	87	1,796	Yes
7	Critical fire weather conditions associated with dry, gusty winds led to Extreme-Plus fire potential and the implementation of PSPS	10/23/2019	209,215	384	558	Yes
8	A pair of robust winter storms produced adverse weather in the form of strong gusty winds, heavy rain and mountain snow	1/05/2019 – 1/06/2019	197,290	50	1,977	Yes (Jan 6)
9	Strong high pressure produced triple-digit temperatures away from the coast resulting in widespread heat-related outage activity	8/14/2019 – 8/16/2019	179,699	40	201	Yes (Aug 15)
10	Breezy to gusty north-northeast winds produced critical fire weather conditions across the North leading to the implementation of PSPS	10/29/2019 – 10/30/2019	171,644	72	951	Yes (Oct 29)

* Note: Values exclude planned outages. PG&E resources are through December 31, 2019. PSPS event data reflects PG&E crew repairs only (excludes patrols, inspections and vegetation management). Contractor information not currently available.



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Table 75 - Ten Largest 2018 Outage Events

Rank	Description	Date	Number of Customer s Affected *	Longest Customer Interruption (Hours)	# of People Used To Restore Service	CPUC Major Event ?
1	A trio of early winter-season storms generated a significant amount of outage activity due to gusty south winds and heavy rain with considerable flashover activity across the interior south.	11/21/2018 – 11/23/2018	224,103	97	460	Yes (11/21 only)
2	Carr Fire	7/28/2018 – 7/30/2018	121,187	248	132	Yes (7/28 only)
3	Early season low pressure system brought the first rain in months to the territory resulting in significant flashover-related outages with widespread thunderstorm activity across the interior and south on 10/3 producing over 2,000 lightning strikes.	10/2/2018 – 10/3/2018	115,705	30		
4	A dynamic Pacific weather system delivered gusty south winds, heavy rain, scattered thunderstorms and heavy mountain snow to the territory; causing significant outage activity, especially in Central Coast division.	11/28/2018 – 11/29/2018	109,891	99	741	Yes (11/29 only)
5	A strong winter storm impacted the territory with heavy rain, heavy mountain snow and gusty south winds followed by a secondary wave generating low snow and thunderstorms the next day	3/1/2018 – 3/2/2018	108,654	100		
6	Not weather related	5/17/2018	75,292	19	120	Yes
7	An offshore wind event developed across the northern two thirds of the territory and produced Extreme-Plus fire danger resulting in execution of PSPS.	10/14/2018	70,326	89	441	Yes
8	Camp Fire	11/8/2018	68,468	936	214	Yes
9	Breezy to gusty northeast winds developed across the territory producing considerable outage activity in San Jose and Central Coast divisions	12/31/2018	57,736	31		
10	A moist, atmospheric-river storm system delivered copious amounts of rainfall to parts of the territory with thunderstorm activity across the interior producing over 900 lightning strikes and widespread outage activity.	3/22/2018	55,598	39		

* Note: Values exclude planned outages



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Table 76 - Ten Largest 2017 Outage Events

Rank	Description	Date	Number of Customers Affected *	Longest Customer Interruption (Hours)	# of People Used To Restore Service	CPUC Major Event?
1	A series of atmospheric river storm events impacted the territory with heavy rain and strong south winds. Extensive damage occurred on the Central Coast where Salinas Airport recorded a gust to 69 mph. This was caused by a rapidly intensifying area of low pressure, also known as 'bombogenesis'.	02/17/2017 – 02/22/2017	732,590	235	3,496 Total 3,186 PG&E 310 Mutual Assistance	Y (except Feb 19)
2	Another winter storm series comprised of three storms impacted the territory from 1/18 – 1/23 with heavy rain, mountain snow, and strong south winds.	1/18/2017 – 1/23/2017	653,502	170	3,274 Total 3,151 PG&E 123 Mutual Assistance	Y
3	A vigorous storm produced significant damage across the territory on 1/8/17 due to a combination of very heavy rain and strong south winds. The heavy rain resulted in flooding along rivers, creeks, and streams. A second strong winter storm impacted the territory 1/10/2017 to 1/11/2017.	1/8/2017 – 1/11/2017	560,246	450	3,357 Total 3,180 PG&E 177 Mutual Assistance	Y
4	A strong and dynamic winter storm impacted the territory 4/6 to 4/7 and produced significant outage activity. The storm was the most impactful April storm in the 22+ year PG&E outage record (back to 1995). This storm put the capstone on the wettest water year in PG&E's history.	4/6/2017 – 4/7/2017	249,024	328	1,945	Y
5	October wildfires	10/8/2017 – 10/9/2017	211,812	587	2,336 Total 2,125 PG&E 211 Mutual Assistance	Y
6	A winter storm brought heavy rain and gusty southerly winds through the northern two thirds of the service area, causing significant outage activity	2/7/2017	146,210	127	2,103	Y
7	An offshore wind event developed across the northern two thirds of the territory and produced wind gusts up to 45 mph across lower elevations. Multiple Red Flag Warnings were posted.	12/16/2017	112,218	59	1,385	Y
8	A winter storm moved in the territory and produced considerable outage activity due to rain, gusty south winds, and mountain snow	1/3/2017 – 1/4/2017	102,123	172	1,227	Y (except Jan 4)
9	This event was not weather related. Bad breaker at Larkin Sub in San Francisco.	4/21/2017	93,863	13	220	Y
10	A weather system moved into the territory from the Pacific and generated wind and rain-related outage activity	10/20/2017	70,839	101	499	Y

* Note: Values exclude planned outages



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Table 77 - Ten Largest 2016 Outage Events

Rank	Description	Date	Number of Customer s Affected *	Longest Customer Interruption (Hours)	# of People Used To Restore Service	CPUC Major Event ?
1	A strong winter storm passed through northern and central CA, producing strong south winds of 30 - 50 mph across the lower elevations and 60+ across the exposed higher terrain, as well as moderate to heavy rain. A strong squall line nearly 200 miles long developed in the Sacramento Valley.	3/5/2016 – 3/7/2016	266,173	87	2,405	Yes (Mar 5 th)
2	A series of three storms impacted northern and central CA with periods of moderate to heavy rain and gusty south winds. Some locations saw rain totals near 10 inches and gusts of 50+ mph were also observed.	10/14/2016 – 10/16/2016	255,680	59	1,553	Yes (Oct 14 th)
3	A dynamic weather system moved through the PG&E territory late Wednesday into Thursday with strong south winds. Wind gusts were generally 25 - 40 mph across the Sacramento and northern San Joaquin valley, but very strong gusts to 50 - 60 were observed over the Sierra foothills.	2/17/2016 – 2/18/2016	166,492	46	1,292	Yes (Feb 17 th)
4	A weather system produced breezy northwest winds of 25 – 35 mph with gusts of 50 mph in some locations. Thunderstorms were also reported in the Sacramento, San Joaquin Valleys and the Sierra foothills.	4/24/2016 – 4/25/2016	96,897	24		No
5	Tropical moisture interacted with a Pacific weather system and associated cold front to wring out significant rain across the PG&E territory. 4 – 7 inches of rain were observed along with wind gusts from 20 – 40+ mph.	12/15/2016 – 12/16/2016	91,581	38		No
6	Generally fair and seasonably cool weather was observed across the PG&E territory.	6/16/2016	82,691	15		No
7	A winter storm brought moderate to heavy rain showers, prompting flash flood watches for recent burn scars (e.g., Rim, King, Butte).	1/5/2016 – 1/6/2016	79,600	44		No
8	A very wet weather system produced considerable rain across central CA. 24 hours rain totals topped 6 inches in the wettest locations in the Sierra Nevada.	12/10/2016	77,546	56		No
9	A winter storm and associated cold front pushed west to east across the territory today bringing moderate to heavy rain and gusty southeast winds 25 to 35 with higher gusts over elevated and exposed terrain	3/11/2016	52,342	47		No
10	A strong storm system across southern CA produced low elevation snow in the southern Sierra down to nearly 2500 ft. and gusty northwest winds from 30 – 40 mph.	1/31/2016	48,120	52		No

* Note: Values exclude planned outages



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Table 78 - Ten Largest 2015 Outage Events

Rank	Description	Date	Number of Customers Affected *	Longest Customer Interruption (Hours)	# of People Used To Restore Service	IEEE Major Event?
1	A series of strong Pacific storms moved into CA producing very heavy rain and gusty south winds. South wind gusts near 50 mph were observed along the coast with gusts near 60 mph observed in the northern Sacramento Valley. Generally, 4 - 8 inches of rain were observed across the elevated terrain in the northern part of the territory. Some locations topped 8 inches with Bucks Lake for example, recording 9 inches of rain during the series.	2/6/2015 - 2/8/2015	389,567	114	2836	Yes
2	Tropical moisture associated with former Hurricane Dolores drifted over the territory. Atmospheric instability combined with the abundant tropical moisture initiated a widespread thunderstorm outbreak across the San Joaquin Valley and Central Coast. More than 6000 cloud to ground strikes were recorded.	7/18/2015 - 7/19/2015	154,459	54	925	Yes
3	A strong cold front (squall line) moved into the northern part of the territory and produced strong wind gusts, a period of very heavy rainfall, and significant outage activity. The front swiftly progressed south through the remainder of the territory. Widespread wind gusts from 40 - 55 mph were observed across the Sacramento Valley and Redding recorded a gust near 60 mph.	12/13/2015	142,059	42	364	Yes
4	A late winter-storm moved through the territory producing moderate rain showers, gusty south winds from 30 - 40 mph, and thunderstorms. Nearly 1000 cloud to ground lightning strikes were recorded across the Sacramento and San Joaquin Valleys.	4/6/2015 - 4/7/2015	134,789	17	442	Yes
5	A strong high-pressure ridge developed over the territory and produced the first significant heat of the season. Some selected high temperature readings: Redding 107, Fresno 106, Livermore 106, Sacramento 104, Santa Rosa 99, and San Jose 91.	6/8/2015	99,439	41	1104	Yes
6	The first widespread rain and snow producing system of the fall/winter season passed through the territory. Thunderstorms also developed and near 500 cloud to ground lightning strikes were recorded. Wind gusts from 25 - 35 mph were observed.	11/2/2015	92,777	22	33	No
7	A large transmission outage in the central coast at Moss Landing occurred. No significant adverse weather was recorded.	10/18/2015	69,906	21	1080	No
8	A potent Pacific weather system produced wind gusts to 40 - 50 mph across the lower elevations with gusts near 60 - 70 mph across the exposed, higher terrain. Most of the adverse weather and resultant outage impacts were observed across the northern part of the PG&E service territory.	12/10/2015	64,533	42	602	No
9	A cold frontal system with moderate rain showers moved through the territory and was followed by gusty northwest winds primarily along the coast. Peak winds gusts from 40 - 50 mph were observed.	11/15/2015	59,547	46	554	No
10	An upper level weather system moved over the territory and produced rain showers, breezy winds, and thunderstorms. The PG&E lightning detection network recorded 456 lightning strikes in the territory.	5/7/2015	57,241	28	1740	No

* Note: Values exclude planned outages



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Table 79 - Ten Largest 2014 Outage Events

Rank	Description	Date	Number of Customers Affected *	Longest Customer Interruption (Hours)	# of People Used To Restore Service (Major Events) **	IEEE Major Event?
1	The strongest storm event in more than 3 years slammed the territory with strong winds and heavy rain showers starting on 12/11. Rain and unsettled weather began Wednesday along the north coast and then a very strong cold front developed and intensified Wednesday evening and overnight into Thursday and very slowly progressed through the territory bringing very heavy rain and strong southerly winds. The gusty southerly winds reached up to 50 mph across the Santa Cruz mountains, near 70 mph across elevated Bay Area terrain, and near 120 mph across the Sierra Crest. Over 3 inches of rain fell across many Bay Area locations and over 2 inches for northern Central Valley by Thursday afternoon.	12/11/2014 - 12/12/2014	467,394	77		Yes
2	A strong but dry storm system originating from Western Canada dropped south through the Service Area and produced very strong north to northeast winds from Tuesday morning through early Wednesday. Gusts in excess of 60 mph were reported across the Bay Area elevated terrain and foothills across the Sierra Nevada. A strong mountain wave moved into San Jose division from the east, resulting in reported gusts above 50 mph in downtown San Jose.	12/30/2014 - 12/31/2014	296,402	67		Yes (Dec 30 th)
3	A strong storm moved in from the southwest, bringing heavy rain and gusty southeast winds to many areas, especially the Central Coast and San Joaquin Valley. A secondary line of heavy showers with imbedded thundershowers developed over the San Joaquin Valley during the early afternoon hours, which caused significant outage activity. Wind gusts up to 47 mph were also observed across the lower elevations.	2/28/2014 - 3/1/2014	167,137	55		N
4	Two strong Pacific weather systems produced an impressive round of precipitation across the territory Tuesday and Wednesday. Accompanying the rain showers were breezy to gusty southerly winds that developed through the San Joaquin Valley and adjacent elevated terrain. Rainfall totals were 7 inches across the Santa Cruz Mountains and the Central Sierra and generally 2 - 4 inches across the lower elevations in the Bay Area.	12/02/2014 - 12/04/2014	138,447	34		Yes (Dec 3 rd)
5	An "Atmospheric River" weather event delivered significant rain and high-elevation mountain snow to the territory. The abundant rain and gusty south winds to 40 mph at times produced a prolonged stretch of light to moderate elevated outage activity. Rain totals from the event were highest across the central Sierra and the north coast where 7 - 15 inches of rain fell during the event.	2/7/2014 - 2/8/2014	102,832	35		N
6	At 3:20 AM on Sun 8/24/2014 a magnitude 6.0 earthquake was observed in the North Bay Area near American Canyon, Ca. An earthquake summary poster from USGS can be found here: http://earthquake.usgs.gov/earthquakes/eqarchives/poster/2014/20140824.pdf	8/24/2014	99,705	30		Yes
7	A strong ridge of high pressure and lack of the marine layer and sea-breeze combined to produce hot temperatures for Bay Area interior valleys and across the interior. Maximum temperatures reached over 100 in Santa Rosa and Livermore on Sunday and up to 105 across the interior Central Valley.	6/8/2014 - 6/9/2014	83,962	39		N
8	A wet weather system delivered heavy rain across Northern California and the Sierra, along with moderate rain throughout the Bay Area. After the front moved through, thunderstorms developed and produced 331 lightning strikes within the PG&E territory.	9/25/2014	61,597	23		N
9	A weather system delivered the first widespread rain of the season south of a Salinas to Sonora line and also produced a northwest gust front down the San Joaquin Valley where gusts up to 40 mph were observed in Fresno and Bakersfield.	10/31/2014	55,145	22		N
10	The weather system with a very moist air mass slid through the Bay Area early Thursday morning and produced light showers and drizzly conditions that resulted in isolated significant outage activity in the east Bay Area.	9/18/2014	39,860	17		N

* Note:

Values exclude planned outages.

** Note: This data is requested only for Major Event days.

This data is requested only for Major Event days.



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9. Number of Customer Inquiries About Electric Reliability and the Number of Days per Response

The following table provides the total number of customer inquiries, and PG&E response times for the year 2024.

Table 80 – Electric Reliability Customer Inquiries

YTD 2024 ESR Closed Cases							
Division Name	Total Cases	Closed 0-7 Days	Closed 8-14 Days	Closed >14 Days	% Closed 0-7 Days	% Closed 8-14 Days	% Closed >14 Days
Central Coast	57	44	10	3	77%	18%	5%
DeAnza	92	63	12	17	68%	13%	18%
Diablo	104	83	8	13	80%	8%	13%
East Bay	64	53	9	2	83%	14%	3%
Fresno	36	36	0	0	100%	0%	0%
Humboldt	19	18	1	0	95%	5%	0%
Kern	36	36	0	0	100%	0%	0%
Los Padres	35	34	1	0	97%	3%	0%
Mission	87	84	3	0	97%	3%	0%
North Valley	33	31	1	1	94%	3%	3%
North Bay	93	70	13	10	75%	14%	11%
Peninsula	130	77	16	37	59%	12%	28%
Sacramento	18	14	1	3	78%	6%	17%
San Francisco	73	48	10	15	66%	14%	21%
San Jose	120	85	17	18	71%	14%	15%
Sierra	66	59	4	3	89%	6%	5%
Sonoma	103	89	10	4	86%	10%	4%
Stockton	41	40	1	0	98%	2%	0%
Yosemite	40	32	7	1	80%	18%	3%
Grand Total	1247	996	124	127	80%	10%	10%

Note: ESR = Electric Service Reliability (Recurring Outages). This Includes ESR cases created on or after January 1, 2024, and closed as of December 31, 2024. It excludes canceled and re-directed ESR tickets. Re-directed help tickets are initially categorized as an ESR ticket but subsequently determined to be non-reliability related and then forwarded to the appropriate department. An example of a re-direct: a customer calls regarding a PG&E planned outage. This request is forwarded to the maintenance and construction department, and a new help ticket is created.



10. Appendix A – Definitions, Acronyms & Abbreviations

AIDI – Average Interruption Duration Indices

AIFI – Average Interruption Frequency Indices for sustained outages only

Customer – A metered electrical service point for which an active bill account is established at a specific location.

CAIDI – Customer Average Interruption Duration Index - The Customer Average Interruption Duration Index (CAIDI) represents the average time required to restore service.

CESO: A term that counts the number of Customers Experiencing Sustained Outages.

DART – Distribution Asset Reconciliation Tools – a distribution asset database used by PG&E.

DCD – Downed Conductor Detection scheme

Distribution system: That portion of an electric system that delivers electric energy from transformation points on the transmission system to the customer. PG&E defines its distribution system as line voltage less than 60 kilovolts (kV). The distribution system is generally considered to be anything from the distribution substation fence to the transformer prior to stepping down the voltage to the customer premise.

EPSS – Enhanced Powerline Safety Scheme

ILIS – Integrated Logging and Information System – The tool PG&E's distribution operators use to log electric outages.

ISO – The California Independent System Operator. The ISO operates the transmission system throughout most of the State of California, including throughout PG&E's service territory.

Major Event – Designates an event that exceeds reasonable design and or operational limits of the electric power system. A Major Event includes at least one Major Event Day. *See also: Major Event Day.*

Major Event Day (MED) – A day in which the daily system, System Average Interruption Duration Index (SAIDI) exceeds a Major Event Day threshold value. For the purposes of calculating daily system SAIDI, any interruption that spans multiple calendar days is accrued to the day on which the interruption began.

MAIFI – Momentary Average Interruption Frequency Index

The Momentary Average Interruption Frequency Index (MAIFI) indicates the average frequency of momentary interruptions. PG&E's momentary outage reporting tools were originally designed to track momentary outages based on D96-09-045. As provided in D.16-01-008, the provided MAIFI metric is the same as what PG&E has used in its prior



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annual reliability reports and corresponds to the MAIFI_E definition contained in the IEEE Guide for Electric Power Distribution Reliability Indices (IEEE 1366 standard), which counts multiple outage interruptions that occur close to each other in time as a single momentary outage event. This metric is equal to the total number of customer momentary interruption events divided by the total number of customers served and does not include the events immediately preceding a sustained interruption.

Momentary interruption – The brief (five minutes or less) loss of power delivery to one or more customers caused by the opening and closing operation of an interrupting device.

Non-Restorable Outage Process – PG&E utilizes a non-restorable outage designation and process for unique outage events involving requests by customers or agencies requiring that facilities be de-energized, access not permitted, and/or restoration be delayed due to circumstances not initiated or controlled by PG&E. This process includes adjusting the outage minutes to accurately reflect these situations and to measure PG&E's actual true performance.

ODB – Operations Database - ODB is the outage database for PG&E

Planned outage: The intentional disabling of a component's capability to deliver power, done at a preselected time, usually for the purposes of construction, preventative maintenance, or repair.

SAIDI – System Average Interruption Duration Index

The System Average Interruption Duration Index (SAIDI) indicates the total duration of interruption for the average customer during a predefined time period. It is commonly measured in minutes or hours of interruption.

SAIFI – System Average Interruption Frequency Index

The System Average Interruption Frequency Index (SAIFI) indicates how often the average customer experiences a sustained interruption over a predefined time period.

SCADA – Supervisory Control and Data Acquisition – an online database for distribution operators to remotely gather information and control the distribution system.

Sustained interruption – Any interruption not classified as a part of a momentary event. That is, any interruption that lasts more than five minutes.

Unplanned interruption – The loss of electric power to one or more customers that does not result from a planned outage.