Energy Division Compliance Report Filing Cover Sheet

A. Document Name

Today's Date: 07/15/2024

1. Utility Name: PG&E
2. Document Submission Frequency (Annual, Semi-Annual, YTD, Quarterly, Monthly, Weekly, Ad-Hoc, Once, Other Event): Annual
3. Report Name:

Electric Distribution Reliability Report

4. Reporting Interval (for this submission, e.g., 2015 Q1): 2023
5. Document File Name (format as 1 + 2 + 3 + 4):

PG&E Annual Electric Distribution Reliability Report 2023

6. Append the confidential and/or cover sheet notation, as appropriate.

Sample Document Names

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

SCE Annual Procurement Report 2014	*PGE Monthly Gas Report 201602* CONF
SDGE Quarterly DR Forecast 2015Q1	*PGE Daily Gas Report 201602*30 COV
PGE Monthly Gas Report 201602	*PGE Monthly Gas Report 201602* COV CONF

7. Identify whether this filing is: ◉ original or ○ revision to a previous filing.
   a. If revision, identify date of the original filing:

B. Documents Related to a Proceeding

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

1. Proceeding Number (starts with R, I, C, A, or P plus 7 numbers):

R.14-12-014

2. Decision Number (starts with D. plus 7 numbers):

D.16-01-008

3. Ordering Paragraph (OP) Number from the Decision:

OP 1

C. Documents Submitted as Requested by Other Requirements

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

Energy Division Compliance Report Filing Cover Sheet

D. Document Summary

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

D.16-01-008, OP 1, requires PG&E to submit the Report to the Energy Division

E. Sender Contact Information

1. Sender Name:

Kingsley Cheng

2. Sender Organization:

PG&E

3. Sender Phone:

415-973-5265

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F. Confidentiality

Is this document confidential? ◉ No ○ Yes

If **Yes**, provide an explanation of why confidentiality is claimed and identify the expiration of the confidentiality designation (e.g., Confidential until December 31, 2020.)

G. CPUC Routing

Energy Division's Director requests that you not copy him on filings sent to ED Central Files. Identify below any Commission staff that were copied on the submittal of this document. Names of Commission staff that sender copied on the submittal of this Document:

D.16-01-008, OP 1, requires PG&E to submit the Report to the Energy Division.
The Notification was directed to Energy Division Central Files; with cc to
Leuwam Tesfai, Deputy Executive Director for Energy and Climate Policy
Lee Palmer, Director, Safety and Enforcement Division
Julian Enis, Energy Division

PACIFIC GAS AND ELECTRIC COMPANY

2023 ANNUAL ELECTRIC RELIABILITY REPORT
(Per Decision 16-01-008)

July 15, 2024

Table of Contents

Executive Summary

Pacific Gas and Electric Company (PG&E) is committed to provided safe, reliable, affordable, and clean energy to our customers. This report provides detailed information on the reliability of our electric service during the 2023 calendar. Most notably, our measurement of the number of times the average PG&E customer experienced a sustained outage in a given year improved in 2023 over 2022, the first such positive movement since 2017.

PG&E's electric service reliability performance in 2023 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 2023 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 being 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 2023 and 2022 when compared to 2021.

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 purposes of 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's experience.

Table 1 below displays the electric reliability metrics SAIDI, SAIFI, MAIFI and CAIDI from 2014 through 2023.

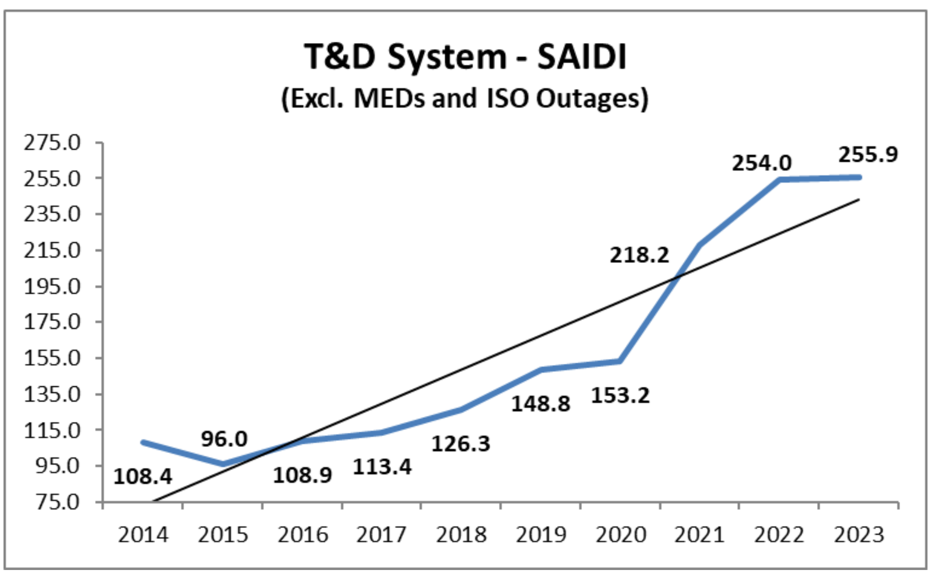
Table 1 – Combined Transmission and Distribution System Indices (2014-2023) (Excludes MED and Independent System Operator (ISO) outages, and includes planned outages)

Year	Major Events Excluded			
	SAIDI	**SAIFI**	**MAIFI**	**CAIDI**
2014	108.4	0.966	1.396	112.2
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	254.0	1.620	1.311	156.9
2023	255.9	1.558	1.220	164.3

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:

2014-2023 Transmission & Distribution System SAIDI Performance Results

Chart A



(Excludes Major Event Days and ISO Outages)[1]

1 See Table 115 as shown in Section 3.

Not surprisingly, similar trends are mirrored at the division level.

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 2023, PG&E's SAIDI was 255.9 minutes per customer.**
- SAIFI is the number of times the average PG&E customer experiences a sustained outage in a given year. **In 2023, PG&E's SAIFI was 1.558.**
- MAIFI[2] 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 2023, PG&E's MAIFI was 1.220.**
- CAIDI is the average duration of sustained outages. It is determined by taking the total outage minutes for all customer outages[3] (SAIDI) and dividing it by the total number of customer outages (SAIFI). **In 2023, PG&E's CAIDI was 164.3 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.

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 2022 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.

Introduction

This is the 2023 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 (2014-2023)
2.	Division Reliability Indices (2014-2023) Including and Excluding Major Event Days (MED)
3.	System and Division Indices Based on IEEE 1366 (2014-2023) 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 2023
7.	Summary List of MED per IEEE 1366
8.	Historical Ten Largest Unplanned Outage Events (2014-2023)
9.	The Number of Customer Inquiries on Reliability Data and the Number of Days per Response
10.	Appendix A – Definitions, Acronyms and Abbreviations

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 process 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.

1. System Indices for the Last Ten Years

a. System Indices (2014-2023)

Table 2 lists the required SAIDI, SAIFI, MAIFI[4], and CAIDI with MED Included and Excluded as directed in Appendix B of D.16-01-008[5]:

Table 2 – Combined Transmission and Distribution System Indices (2014-2023) (Excludes planned and ISO outages)

Year	Major Events Included				Major Events Excluded			
	SAIDI	SAIFI	MAIFI	CAIDI	SAIDI	SAIFI	MAIFI	CAIDI
2014	131.9	1.045	1.561	126.2	91.0	0.879	1.390	103.5
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	282.0	1.607	1.389	175.5	212.1	1.461	1.301	145.2
2023	669.2	2.065	2.003	324.1	213.7	1.402	1.211	152.5

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.

i. Distribution System Indices

Table 3 – Distribution System Indices (2014-2023)
(Excludes planned outages, transmission, substation, and generation related outages)

Year	Major Events Included				Major Events Excluded			
	SAIDI	SAIFI	MAIFI	CAIDI	SAIDI	SAIFI	MAIFI	CAIDI
2014	119.7	0.926	1.275	129.2	85.2	0.780	1.125	109.2
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

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

The MAIFI information is not included in Table 3 and Table 4 since non-SCADA automatic recording devices (Smart Meters) do not distinguish between transmission system outages or distribution system outages.

ii. Transmission System Indices

Table 4– Transmission System Indices (2014-2023)
(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
2014	14.1	0.116	0.289	121.0	7.5	0.097	0.268	77.8
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

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

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

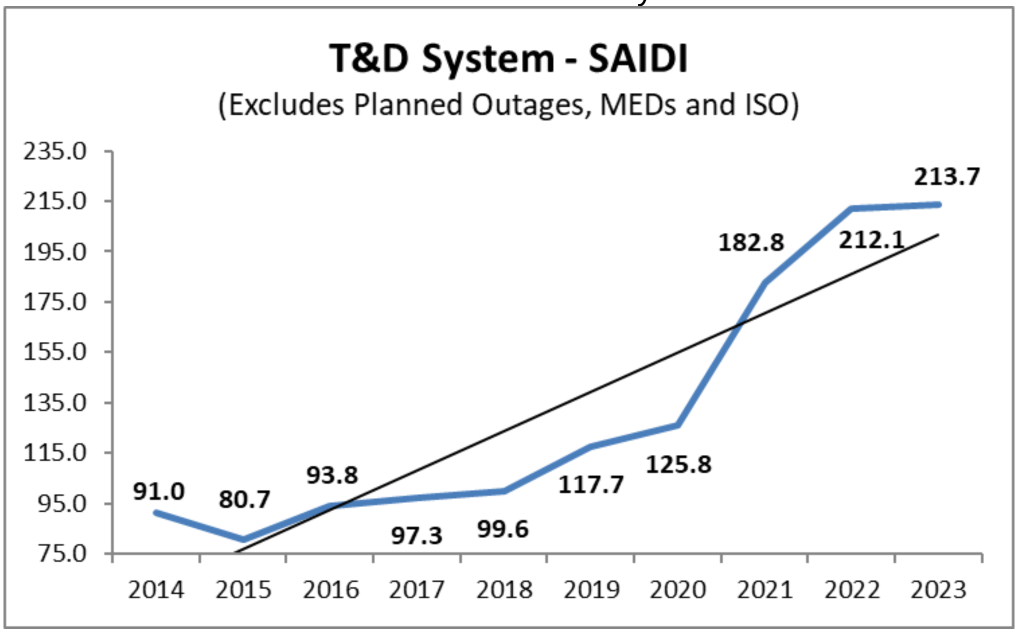


Chart 2: Distribution System SAIDI Indices

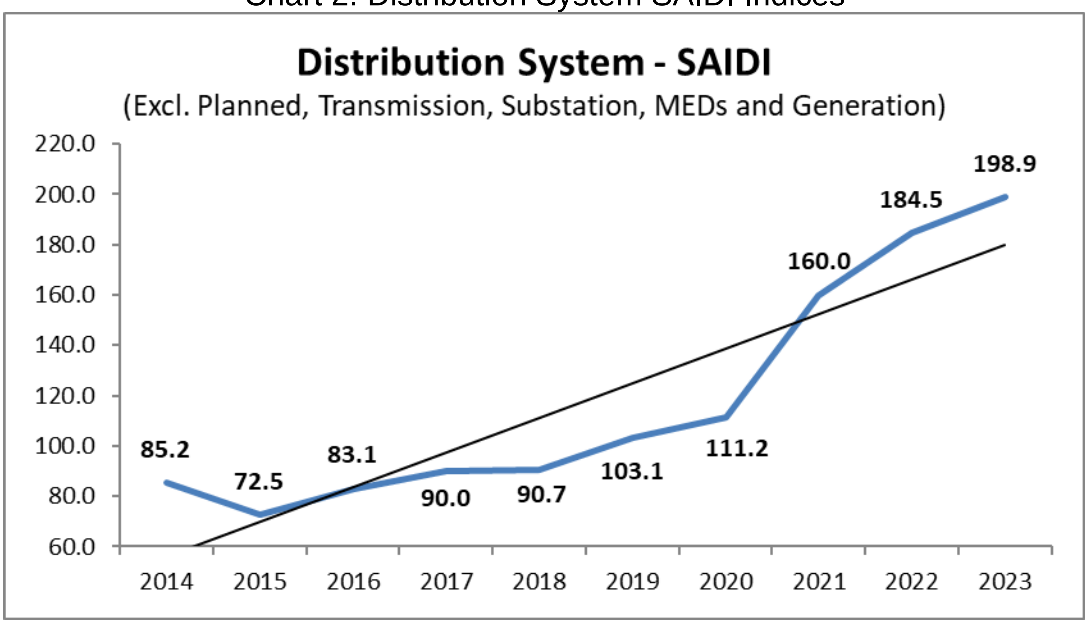
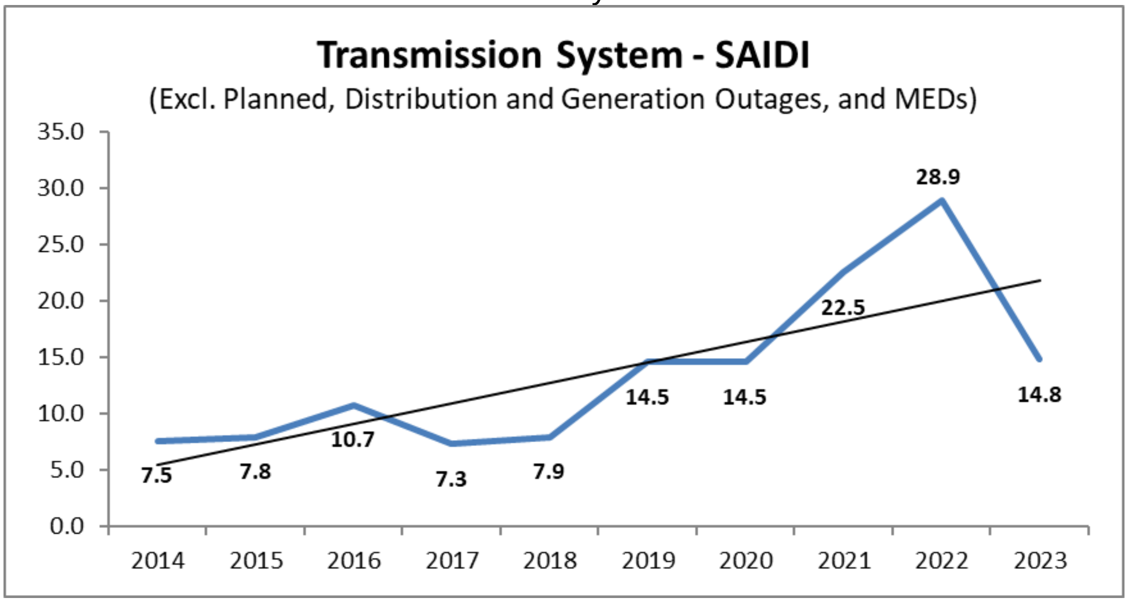


Chart 3: Transmission System SAIDI Indices



(Includes substation outages)

ii. SAIFI Performance Results (MED Excluded)

Chart 4: Transmission & Distribution System SAIFI Indices

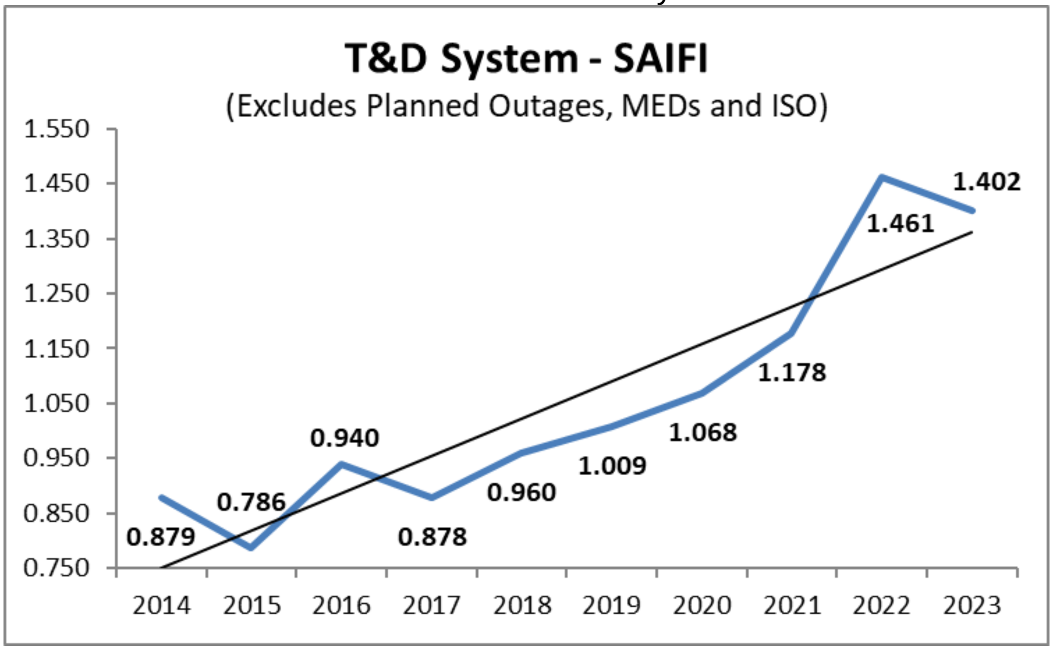


Chart 5: Distribution System SAIFI Indices

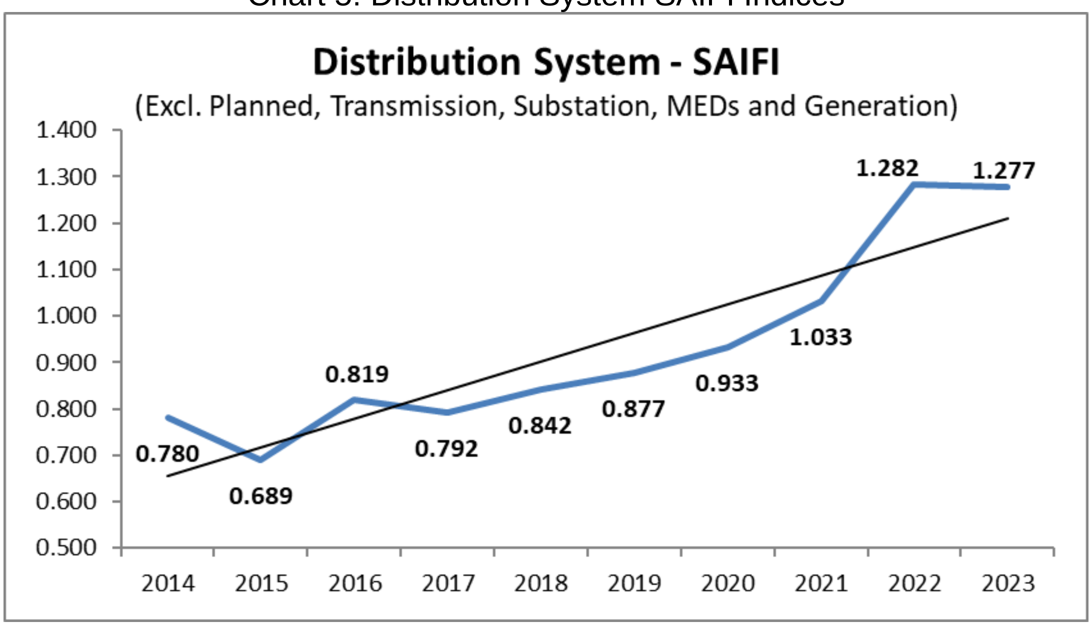
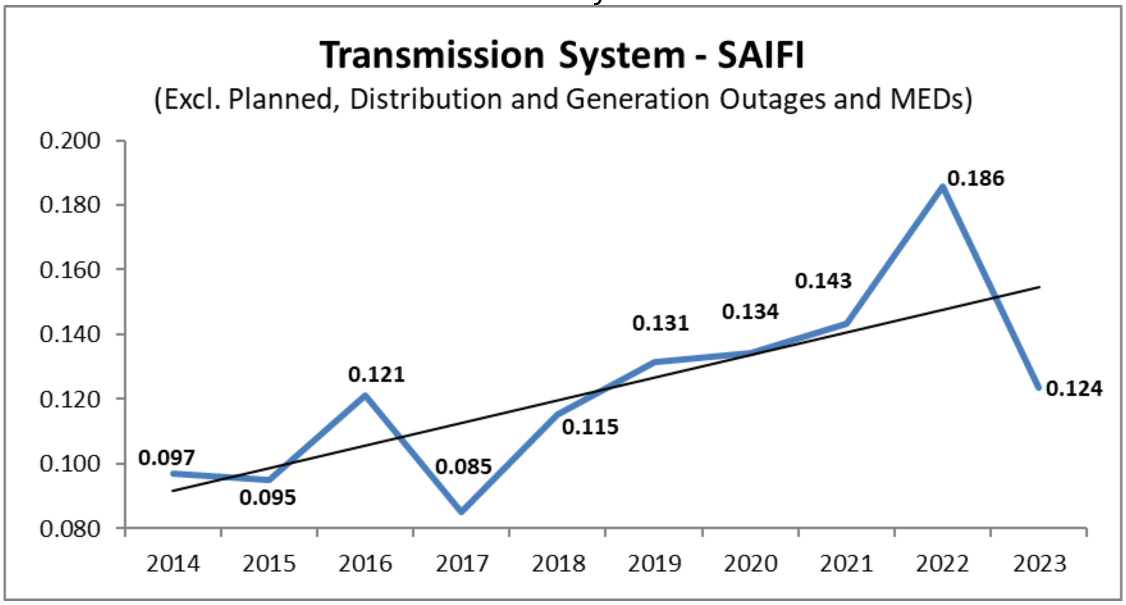


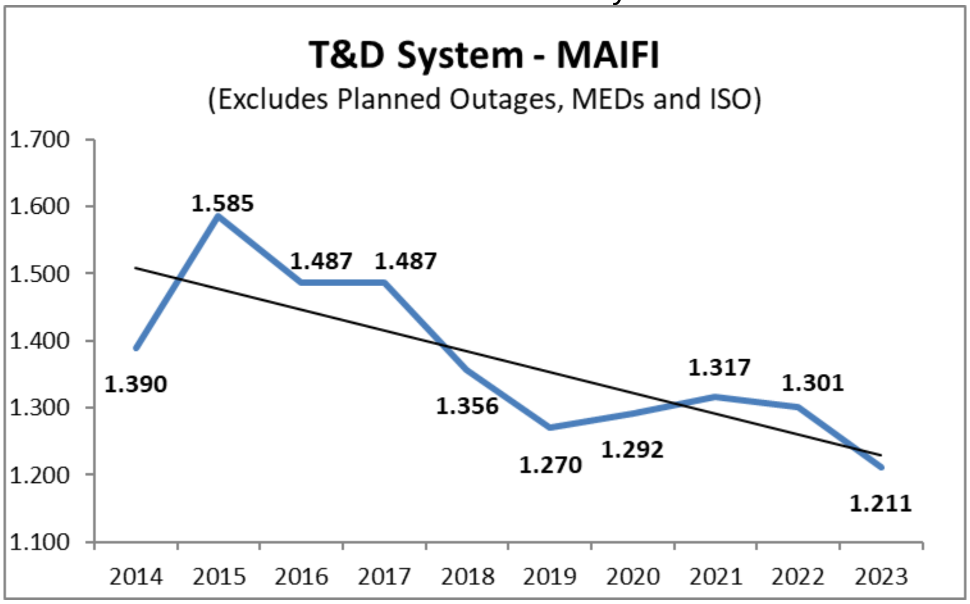
Chart 6: Transmission System SAIFI Indices



(Includes substation outages)

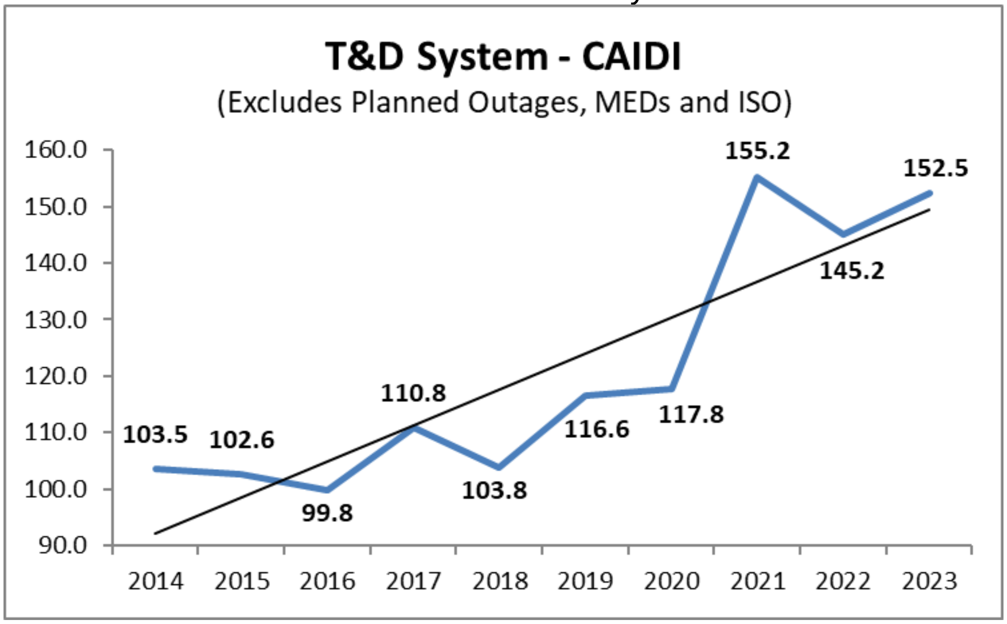
iii. MAIFI[6] Performance Results (MED Excluded)

Chart 7: Transmission & Distribution System MAIFI Indices



iv. AIDI Performance Results (MED Excluded)

Chart 8: Transmission & Distribution System CAIDI Indices



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6 See footnote 4.

Chart 9: Distribution System CAIDI Indices

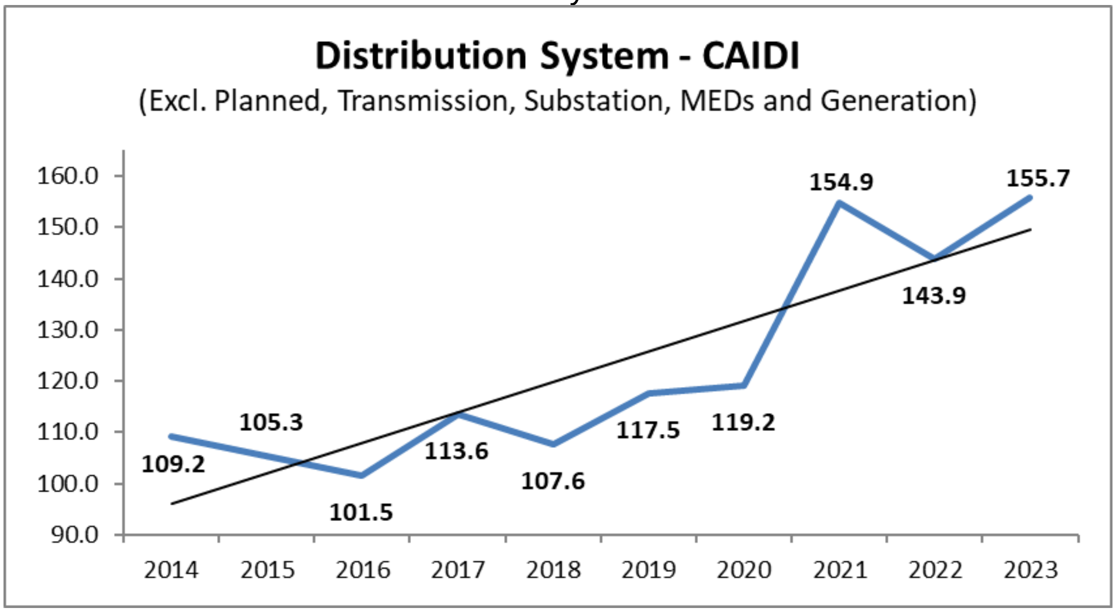
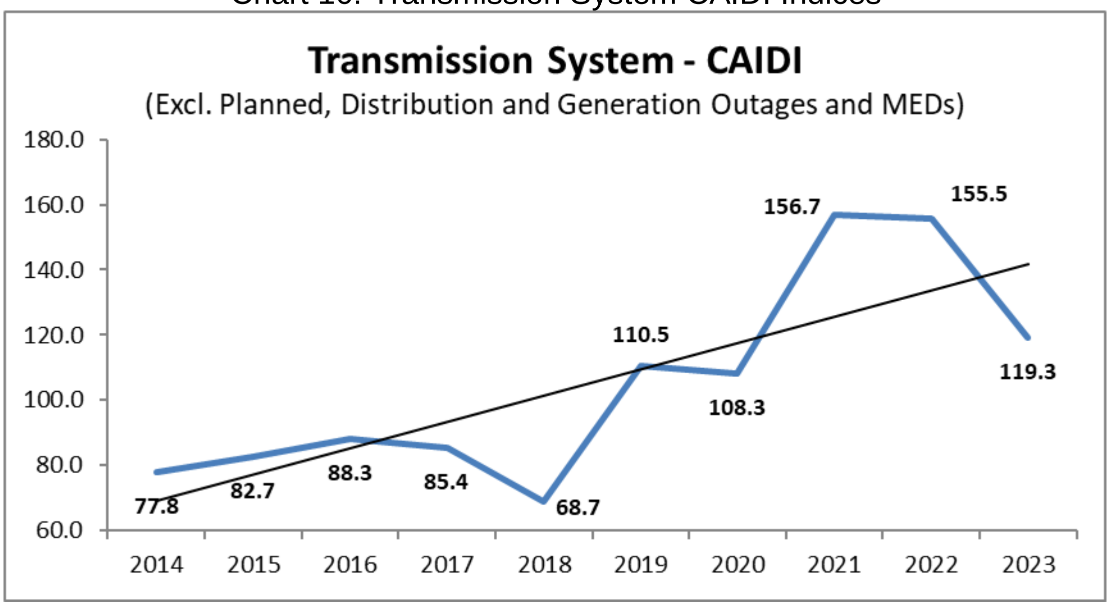


Chart 10: Transmission System CAIDI Indices



(Includes substation outages)

2. Division Reliability Indices for the past 10 years including and excluding MED

a. Division Reliability Indices for the past 10 years excluding ISO and planned outages and including Major Event Days

Table 5: Division Reliability Indices

Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
CENTRAL COAST	2014	199.3	1.351	2.133	147.5
CENTRAL COAST	2015	253.0	1.289	2.173	196.3
CENTRAL COAST	2016	188.6	1.637	2.730	115.2
CENTRAL COAST	2017	807.8	2.462	4.576	328.2
CENTRAL COAST	2018	186.8	1.598	2.502	117.0
CENTRAL COAST	2019	1,294.9	2.584	3.149	501.2
CENTRAL COAST	2020	395.9	2.129	1.888	185.9
CENTRAL COAST	2021	711.0	2.379	2.543	298.9
CENTRAL COAST	2022	481.8	2.966	2.983	162.4
CENTRAL COAST	2023	1,768.0	3.848	3.756	459.5
Division/System	**Year**	**SAIDI**	**SAIFI**	**MAIFI**	**CAIDI**
DE ANZA	2014	112.9	1.017	1.318	111.1
DE ANZA	2015	63.4	0.594	1.281	106.7
DE ANZA	2016	109.6	0.924	1.414	118.6
DE ANZA	2017	315.4	1.503	1.792	209.8
DE ANZA	2018	86.8	0.836	1.426	103.8
DE ANZA	2019	402.2	1.385	2.008	290.4
DE ANZA	2020	226.3	0.958	1.597	236.2
DE ANZA	2021	294.6	1.189	1.784	247.8
DE ANZA	2022	178.8	1.213	1.111	147.4
DE ANZA	2023	1,491.8	2.419	3.006	616.7
Division/System	**Year**	**SAIDI**	**SAIFI**	**MAIFI**	**CAIDI**
DIABLO	2014	82.2	0.979	1.374	84.0
DIABLO	2015	84.0	0.981	1.878	85.6
DIABLO	2016	79.0	1.008	1.729	78.4
DIABLO	2017	140.7	1.218	2.138	115.5
DIABLO	2018	89.5	1.112	1.540	80.4
DIABLO	2019	612.7	1.601	1.855	382.7
DIABLO	2020	249.6	1.433	1.823	174.1
DIABLO	2021	163.6	1.430	1.671	114.4
DIABLO	2022	207.3	1.689	1.375	122.7
DIABLO	2023	459.8	2.161	1.585	212.8

Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
EAST BAY	2014	81.1	0.847	1.515	95.8
EAST BAY	2015	59.6	0.723	1.179	82.5
EAST BAY	2016	128.2	1.205	1.242	106.4
EAST BAY	2017	147.3	1.217	1.983	121.1
EAST BAY	2018	87.6	0.990	1.131	88.4
EAST BAY	2019	459.7	1.346	1.216	341.6
EAST BAY	2020	222.4	1.116	1.647	199.3
EAST BAY	2021	238.5	1.679	1.683	142.0
EAST BAY	2022	158.8	1.237	1.671	128.4
EAST BAY	2023	412.6	1.574	1.566	262.2
Division/System	**Year**	**SAIDI**	**SAIFI**	**MAIFI**	**CAIDI**
FRESNO	2014	81.6	1.002	1.781	81.5
FRESNO	2015	100.3	1.151	2.057	87.2
FRESNO	2016	85.1	1.127	1.975	75.5
FRESNO	2017	102.5	0.986	1.863	104.0
FRESNO	2018	113.9	1.046	1.415	108.9
FRESNO	2019	120.7	0.994	1.695	121.4
FRESNO	2020	116.9	1.136	1.452	102.9
FRESNO	2021	213.2	1.354	1.698	157.4
FRESNO	2022	181.0	1.286	1.780	140.8
FRESNO	2023	281.4	1.509	1.982	186.5
Division/System	**Year**	**SAIDI**	**SAIFI**	**MAIFI**	**CAIDI**
HUMBOLDT	2014	288.4	1.368	1.940	210.9
HUMBOLDT	2015	695.2	2.234	2.736	311.2
HUMBOLDT	2016	219.4	1.637	2.055	134.0
HUMBOLDT	2017	919.8	2.362	3.510	389.5
HUMBOLDT	2018	402.6	2.144	1.570	187.8
HUMBOLDT	2019	6,899.5	4.365	2.423	1,580.7
HUMBOLDT	2020	968.7	2.161	1.304	448.3
HUMBOLDT	2021	1,602.5	2.815	2.079	569.4
HUMBOLDT	2022	1,005.7	3.045	1.404	330.3
HUMBOLDT	2023	2,410.3	4.231	3.576	569.6
Division/System	**Year**	**SAIDI**	**SAIFI**	**MAIFI**	**CAIDI**
KERN	2014	108.8	1.109	1.848	98.2
KERN	2015	92.0	0.947	1.925	97.1
KERN	2016	89.8	0.932	2.072	96.3
KERN	2017	138.9	1.072	1.958	129.6
KERN	2018	72.4	0.789	1.747	91.8
KERN	2019	162.0	1.325	2.079	122.2
KERN	2020	129.7	1.157	1.955	112.1
KERN	2021	179.3	1.397	1.855	128.4
KERN	2022	270.4	1.482	1.277	182.4
KERN	2023	193.3	1.399	2.133	138.1

Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
LOS PADRES	2014	186.6	1.238	1.354	150.7
LOS PADRES	2015	132.2	0.844	1.783	156.6
LOS PADRES	2016	114.1	1.172	1.672	97.4
LOS PADRES	2017	315.7	1.574	2.127	200.6
LOS PADRES	2018	141.8	1.277	1.153	111.1
LOS PADRES	2019	225.9	1.533	1.134	147.4
LOS PADRES	2020	198.1	1.296	0.915	152.9
LOS PADRES	2021	300.8	1.621	1.935	185.5
LOS PADRES	2022	317.9	2.018	0.995	157.5
LOS PADRES	2023	438.4	2.407	1.789	182.1
Division/System	**Year**	**SAIDI**	**SAIFI**	**MAIFI**	**CAIDI**
MISSION	2014	73.7	0.751	0.820	98.1
MISSION	2015	62.6	0.596	1.150	105.1
MISSION	2016	82.7	0.763	0.961	108.4
MISSION	2017	137.9	1.012	1.470	136.4
MISSION	2018	67.1	0.672	0.839	99.9
MISSION	2019	296.5	0.948	0.939	312.6
MISSION	2020	219.2	1.201	1.387	182.5
MISSION	2021	156.3	1.215	1.216	128.6
MISSION	2022	126.4	0.831	0.909	152.1
MISSION	2023	166.1	1.083	1.092	153.3
Division/System	**Year**	**SAIDI**	**SAIFI**	**MAIFI**	**CAIDI**
NORTH BAY	2014	235.1	1.250	2.721	188.1
NORTH BAY	2015	135.4	1.059	2.161	127.9
NORTH BAY	2016	110.3	0.920	1.434	119.8
NORTH BAY	2017	733.3	1.761	2.810	416.5
NORTH BAY	2018	164.6	0.982	1.837	167.6
NORTH BAY	2019	3,518.1	3.182	2.272	1,105.7
NORTH BAY	2020	509.3	1.718	2.521	296.4
NORTH BAY	2021	352.5	1.627	2.289	216.6
NORTH BAY	2022	216.2	1.490	1.148	145.1
NORTH BAY	2023	477.3	1.886	1.915	253.1
Division/System	**Year**	**SAIDI**	**SAIFI**	**MAIFI**	**CAIDI**
NORTH VALLEY	2014	173.2	1.177	1.778	147.2
NORTH VALLEY	2015	479.6	1.787	2.528	268.3
NORTH VALLEY	2016	175.1	1.265	2.173	138.4
NORTH VALLEY	2017	398.6	1.672	3.163	238.5
NORTH VALLEY	2018	4,287.0	1.629	1.393	2,631.8
NORTH VALLEY	2019	4,886.2	3.961	2.501	1,233.6
NORTH VALLEY	2020	1,979.0	2.563	1.654	772.2
NORTH VALLEY	2021	2,098.1	2.899	3.243	723.8
NORTH VALLEY	2022	350.8	2.233	1.300	157.1
NORTH VALLEY	2023	724.9	2.764	2.146	262.2

Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
PENINSULA	2014	98.4	1.061	1.363	92.8
PENINSULA	2015	76.2	0.866	1.798	87.9
PENINSULA	2016	87.1	0.986	1.381	88.3
PENINSULA	2017	167.0	1.328	2.382	125.7
PENINSULA	2018	66.4	0.856	1.255	77.5
PENINSULA	2019	734.2	1.551	1.642	473.2
PENINSULA	2020	169.5	1.199	1.383	141.4
PENINSULA	2021	391.0	1.625	1.927	240.6
PENINSULA	2022	160.6	1.127	1.407	142.5
PENINSULA	2023	1,241.3	2.432	2.978	510.3
Division/System	**Year**	**SAIDI**	**SAIFI**	**MAIFI**	**CAIDI**
SACRAMENTO	2014	107.9	0.913	1.437	118.2
SACRAMENTO	2015	92.4	0.894	1.771	103.3
SACRAMENTO	2016	99.4	1.035	1.803	96.1
SACRAMENTO	2017	283.0	1.870	3.213	151.3
SACRAMENTO	2018	108.5	1.059	1.935	102.4
SACRAMENTO	2019	670.8	1.686	2.349	397.9
SACRAMENTO	2020	281.9	1.602	1.796	176.0
SACRAMENTO	2021	579.7	1.740	2.888	333.2
SACRAMENTO	2022	381.1	1.526	1.697	249.8
SACRAMENTO	2023	444.3	1.788	2.111	248.4
Division/System	**Year**	**SAIDI**	**SAIFI**	**MAIFI**	**CAIDI**
SAN FRANCISCO	2014	131.0	0.780	0.353	167.9
SAN FRANCISCO	2015	36.1	0.521	0.537	69.3
SAN FRANCISCO	2016	40.7	0.537	0.397	75.8
SAN FRANCISCO	2017	116.4	0.860	0.513	135.4
SAN FRANCISCO	2018	38.0	0.417	0.298	91.0
SAN FRANCISCO	2019	71.7	0.718	0.363	99.8
SAN FRANCISCO	2020	48.5	0.642	0.427	75.5
SAN FRANCISCO	2021	68.4	0.674	0.595	101.5
SAN FRANCISCO	2022	53.2	0.526	0.473	101.0
SAN FRANCISCO	2023	138.3	0.864	0.561	160.1
Division/System	**Year**	**SAIDI**	**SAIFI**	**MAIFI**	**CAIDI**
SAN JOSE	2014	98.9	0.975	1.066	101.4
SAN JOSE	2015	75.6	0.763	1.151	99.1
SAN JOSE	2016	68.9	0.678	1.200	101.5
SAN JOSE	2017	179.8	1.241	1.807	144.8
SAN JOSE	2018	86.9	0.872	1.349	99.6
SAN JOSE	2019	275.7	1.083	1.422	254.6
SAN JOSE	2020	177.7	1.074	1.526	165.5
SAN JOSE	2021	171.7	1.004	1.252	170.9
SAN JOSE	2022	210.2	1.381	1.322	152.2
SAN JOSE	2023	309.6	1.376	1.615	225.0

Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
SIERRA	2014	194.8	1.411	2.349	138.1
SIERRA	2015	181.9	1.274	3.150	142.8
SIERRA	2016	174.3	1.252	1.864	139.2
SIERRA	2017	620.1	2.076	3.105	298.7
SIERRA	2018	399.2	1.450	1.431	275.3
SIERRA	2019	5,826.0	4.104	2.545	1,419.6
SIERRA	2020	2,345.1	2.626	1.917	892.9
SIERRA	2021	3,067.0	2.880	2.461	1,064.9
SIERRA	2022	697.9	3.287	1.172	212.4
SIERRA	2023	1,486.1	3.306	2.545	449.5
Division/System	**Year**	**SAIDI**	**SAIFI**	**MAIFI**	**CAIDI**
SONOMA	2014	214.9	1.270	2.049	169.3
SONOMA	2015	119.1	0.868	1.992	137.3
SONOMA	2016	95.4	0.834	1.605	114.3
SONOMA	2017	1,850.1	1.951	2.885	948.3
SONOMA	2018	107.4	0.974	1.240	110.3
SONOMA	2019	3,871.1	2.540	1.661	1,523.9
SONOMA	2020	601.0	1.645	1.597	365.3
SONOMA	2021	396.0	1.738	1.882	227.8
SONOMA	2022	240.6	1.549	1.439	155.3
SONOMA	2023	528.1	1.831	1.208	288.4
Division/System	**Year**	**SAIDI**	**SAIFI**	**MAIFI**	**CAIDI**
STOCKTON	2014	123.9	0.843	1.444	147.0
STOCKTON	2015	124.5	1.035	2.243	120.3
STOCKTON	2016	100.0	0.994	1.777	100.6
STOCKTON	2017	271.1	1.627	1.924	166.6
STOCKTON	2018	224.8	1.152	1.994	195.1
STOCKTON	2019	1,579.9	2.366	1.904	667.7
STOCKTON	2020	661.0	1.595	1.549	414.4
STOCKTON	2021	1,119.6	2.003	2.410	558.9
STOCKTON	2022	480.1	1.871	1.178	256.6
STOCKTON	2023	629.0	2.550	2.136	246.7
Division/System	**Year**	**SAIDI**	**SAIFI**	**MAIFI**	**CAIDI**
YOSEMITE	2014	135.6	1.290	2.669	105.2
YOSEMITE	2015	112.4	1.072	3.095	104.8
YOSEMITE	2016	129.9	1.234	2.156	105.2
YOSEMITE	2017	310.8	1.720	3.048	180.7
YOSEMITE	2018	177.4	1.465	1.834	121.1
YOSEMITE	2019	1,399.3	2.652	2.686	527.5
YOSEMITE	2020	783.7	1.944	1.588	403.2
YOSEMITE	2021	1,319.9	3.168	2.637	416.6
YOSEMITE	2022	352.2	2.219	1.836	158.8
YOSEMITE	2023	1,105.8	3.111	2.603	355.4

b. Division Reliability Indices for the past 10 years excluding planned outages, ISO outages and Major Event Days

Table 6: Division Reliability Indices

Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
CENTRAL COAST	2014	122.1	1.088	1.835	112.3
CENTRAL COAST	2015	102.0	0.847	1.844	120.4
CENTRAL COAST	2016	166.1	1.471	2.476	112.9
CENTRAL COAST	2017	146.3	1.293	2.589	113.1
CENTRAL COAST	2018	162.4	1.447	2.242	112.2
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	375.8	2.644	2.854	142.1
CENTRAL COAST	2023	413.0	2.465	2.174	167.6
Division/System	**Year**	**SAIDI**	**SAIFI**	**MAIFI**	**CAIDI**
DE ANZA	2014	89.3	0.890	1.213	100.3
DE ANZA	2015	51.2	0.476	1.171	107.6
DE ANZA	2016	87.3	0.753	1.336	116.0
DE ANZA	2017	97.9	0.985	1.150	99.4
DE ANZA	2018	84.0	0.789	1.402	106.4
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	120.4	1.001	1.062	120.3
DE ANZA	2023	173.3	1.002	1.473	173.0
Division/System	**Year**	**SAIDI**	**SAIFI**	**MAIFI**	**CAIDI**
DIABLO	2014	66.1	0.892	1.220	74.1
DIABLO	2015	74.0	0.856	1.671	86.5
DIABLO	2016	76.5	0.995	1.694	76.9
DIABLO	2017	78.0	0.876	1.620	89.1
DIABLO	2018	78.3	1.004	1.496	78.0
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	178.4	1.559	1.289	114.4
DIABLO	2023	183.9	1.384	1.083	132.9
Division/System	**Year**	**SAIDI**	**SAIFI**	**MAIFI**	**CAIDI**
EAST BAY	2014	64.8	0.726	1.299	89.2
EAST BAY	2015	45.0	0.586	1.085	76.9
EAST BAY	2016	101.4	1.050	1.079	96.6
EAST BAY	2017	73.8	0.903	1.528	81.7
EAST BAY	2018	78.8	0.901	1.080	87.5
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	146.5	1.151	1.652	127.3
EAST BAY	2023	109.9	0.998	0.782	110.1

Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
FRESNO	2014	79.4	0.983	1.709	80.7
FRESNO	2015	70.0	0.849	1.829	82.4
FRESNO	2016	83.4	1.105	1.951	75.4
FRESNO	2017	72.3	0.799	1.546	90.5
FRESNO	2018	73.5	0.861	1.368	85.4
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	174.1	1.235	1.719	140.9
FRESNO	2023	170.9	1.178	1.493	145.1
Division/System	**Year**	**SAIDI**	**SAIFI**	**MAIFI**	**CAIDI**
HUMBOLDT	2014	212.4	1.217	1.809	174.5
HUMBOLDT	2015	276.3	1.621	2.423	170.5
HUMBOLDT	2016	203.0	1.537	1.995	132.1
HUMBOLDT	2017	275.1	1.306	2.280	210.6
HUMBOLDT	2018	225.9	1.789	1.502	126.3
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	468.1	2.491	1.326	187.9
HUMBOLDT	2023	610.8	2.729	1.636	223.8
Division/System	**Year**	**SAIDI**	**SAIFI**	**MAIFI**	**CAIDI**
KERN	2014	81.0	0.936	1.635	86.5
KERN	2015	80.4	0.862	1.850	93.2
KERN	2016	89.2	0.916	2.066	97.4
KERN	2017	78.1	0.733	1.403	106.5
KERN	2018	71.6	0.783	1.720	91.4
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	267.3	1.449	1.200	184.4
KERN	2023	145.2	1.195	1.815	121.5
Division/System	**Year**	**SAIDI**	**SAIFI**	**MAIFI**	**CAIDI**
LOS PADRES	2014	95.2	1.043	1.135	91.2
LOS PADRES	2015	72.2	0.687	1.408	105.1
LOS PADRES	2016	112.3	1.147	1.671	97.9
LOS PADRES	2017	106.7	0.944	1.442	113.0
LOS PADRES	2018	130.5	1.195	1.010	109.3
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	232.1	1.814	0.866	128.0
LOS PADRES	2023	221.1	1.831	1.180	120.7

Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
MISSION	2014	62.9	0.672	0.770	93.6
MISSION	2015	56.7	0.543	1.054	104.4
MISSION	2016	72.7	0.702	0.916	103.7
MISSION	2017	60.2	0.602	1.002	99.9
MISSION	2018	62.0	0.644	0.815	96.4
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	108.9	0.777	0.872	140.2
MISSION	2023	102.8	0.787	0.796	130.6
Division/System	**Year**	**SAIDI**	**SAIFI**	**MAIFI**	**CAIDI**
NORTH BAY	2014	114.6	0.875	2.505	131.0
NORTH BAY	2015	97.4	0.904	1.977	107.8
NORTH BAY	2016	83.9	0.767	1.209	109.4
NORTH BAY	2017	148.5	0.955	1.832	155.5
NORTH BAY	2018	116.3	0.921	1.771	126.3
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	211.7	1.453	1.095	145.7
NORTH BAY	2023	191.6	1.291	0.976	148.5
Division/System	**Year**	**SAIDI**	**SAIFI**	**MAIFI**	**CAIDI**
NORTH VALLEY	2014	111.1	0.968	1.521	114.8
NORTH VALLEY	2015	132.8	1.062	1.930	125.0
NORTH VALLEY	2016	146.4	1.128	1.937	129.8
NORTH VALLEY	2017	112.3	0.863	2.007	130.2
NORTH VALLEY	2018	187.1	1.364	1.325	137.2
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	334.8	2.159	1.195	155.0
NORTH VALLEY	2023	377.5	2.108	1.333	179.1
Division/System	**Year**	**SAIDI**	**SAIFI**	**MAIFI**	**CAIDI**
PENINSULA	2014	77.1	0.898	1.164	85.9
PENINSULA	2015	60.5	0.752	1.601	80.4
PENINSULA	2016	78.8	0.905	1.195	87.2
PENINSULA	2017	61.5	0.640	1.176	96.0
PENINSULA	2018	60.5	0.806	1.204	75.0
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	129.2	1.000	1.344	129.2
PENINSULA	2023	207.9	1.269	1.367	163.7

Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
SACRAMENTO	2014	94.4	0.807	1.258	117.0
SACRAMENTO	2015	80.1	0.799	1.556	100.3
SACRAMENTO	2016	83.6	0.944	1.539	88.5
SACRAMENTO	2017	121.2	1.070	1.708	113.2
SACRAMENTO	2018	101.0	1.021	1.825	98.9
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	172.9	1.277	1.552	135.3
SACRAMENTO	2023	191.3	1.276	1.436	149.8
Division/System	**Year**	**SAIDI**	**SAIFI**	**MAIFI**	**CAIDI**
SAN FRANCISCO	2014	41.5	0.457	0.235	90.8
SAN FRANCISCO	2015	33.9	0.504	0.501	67.2
SAN FRANCISCO	2016	39.7	0.518	0.355	76.7
SAN FRANCISCO	2017	36.5	0.500	0.372	73.0
SAN FRANCISCO	2018	35.2	0.378	0.270	93.0
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	49.4	0.494	0.457	100.0
SAN FRANCISCO	2023	70.6	0.581	0.366	121.4
Division/System	**Year**	**SAIDI**	**SAIFI**	**MAIFI**	**CAIDI**
SAN JOSE	2014	76.0	0.806	1.026	94.4
SAN JOSE	2015	65.9	0.678	1.008	97.2
SAN JOSE	2016	65.5	0.644	1.152	101.7
SAN JOSE	2017	72.3	0.739	1.171	97.8
SAN JOSE	2018	85.0	0.858	1.322	99.1
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	151.4	1.144	1.174	132.4
SAN JOSE	2023	126.5	0.891	1.051	142.0
Division/System	**Year**	**SAIDI**	**SAIFI**	**MAIFI**	**CAIDI**
SIERRA	2014	142.2	1.210	2.128	117.5
SIERRA	2015	123.2	1.115	2.816	110.5
SIERRA	2016	121.7	1.029	1.705	118.2
SIERRA	2017	155.0	1.191	1.856	130.2
SIERRA	2018	152.9	1.241	1.350	123.2
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	525.2	3.076	1.010	170.8
SIERRA	2023	369.6	2.440	1.155	151.4

Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
SONOMA	2014	113.7	0.899	1.587	126.6
SONOMA	2015	73.0	0.673	1.534	108.5
SONOMA	2016	88.6	0.792	1.508	111.8
SONOMA	2017	120.7	0.886	1.566	136.2
SONOMA	2018	105.5	0.956	1.201	110.3
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	230.6	1.511	1.376	152.6
SONOMA	2023	183.0	1.334	0.662	137.2
Division/System	**Year**	**SAIDI**	**SAIFI**	**MAIFI**	**CAIDI**
STOCKTON	2014	105.9	0.749	1.309	141.4
STOCKTON	2015	96.1	0.874	1.947	109.9
STOCKTON	2016	84.0	0.900	1.663	93.3
STOCKTON	2017	84.6	0.946	1.264	89.5
STOCKTON	2018	107.7	1.036	1.872	103.9
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	244.8	1.648	1.053	148.5
STOCKTON	2023	278.1	1.896	1.330	146.7
Division/System	**Year**	**SAIDI**	**SAIFI**	**MAIFI**	**CAIDI**
YOSEMITE	2014	117.6	1.226	2.446	96.0
YOSEMITE	2015	102.3	0.984	2.638	103.9
YOSEMITE	2016	123.2	1.178	2.025	104.5
YOSEMITE	2017	143.0	1.170	2.150	122.2
YOSEMITE	2018	158.3	1.355	1.773	116.8
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	326.9	2.034	1.621	160.7
YOSEMITE	2023	411.1	2.184	1.699	188.2

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. AIDI Performance Results (MED Included)

Chart 11: Division Reliability - AIDI Indices

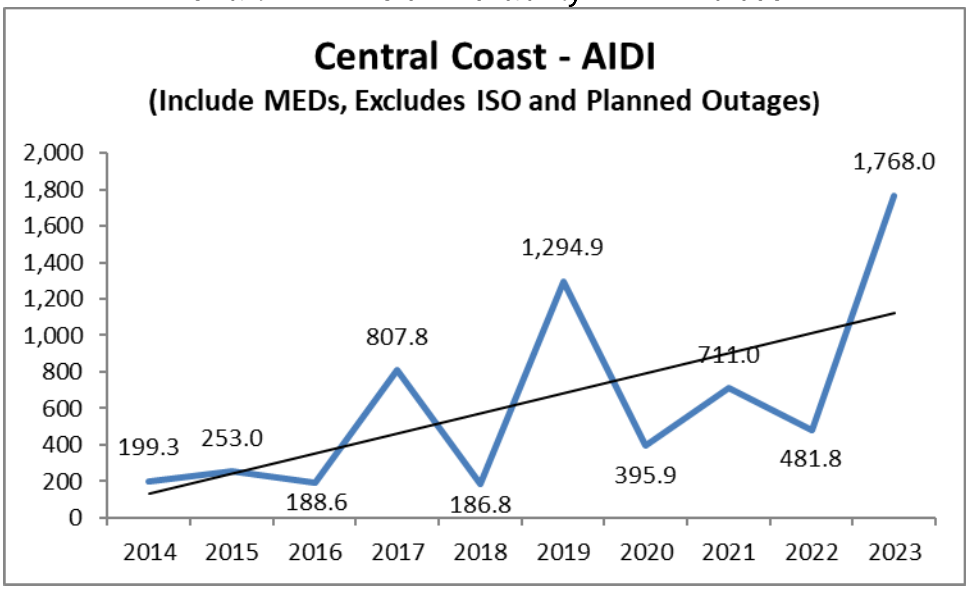


Chart 12: Division Reliability - AIDI Indices

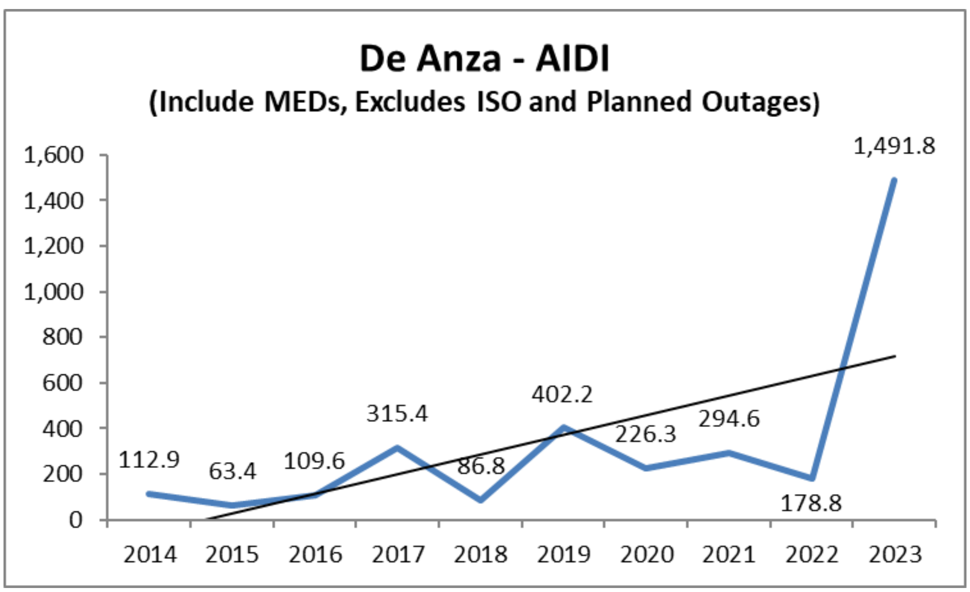


Chart 13: Division Reliability - AIDI Indices

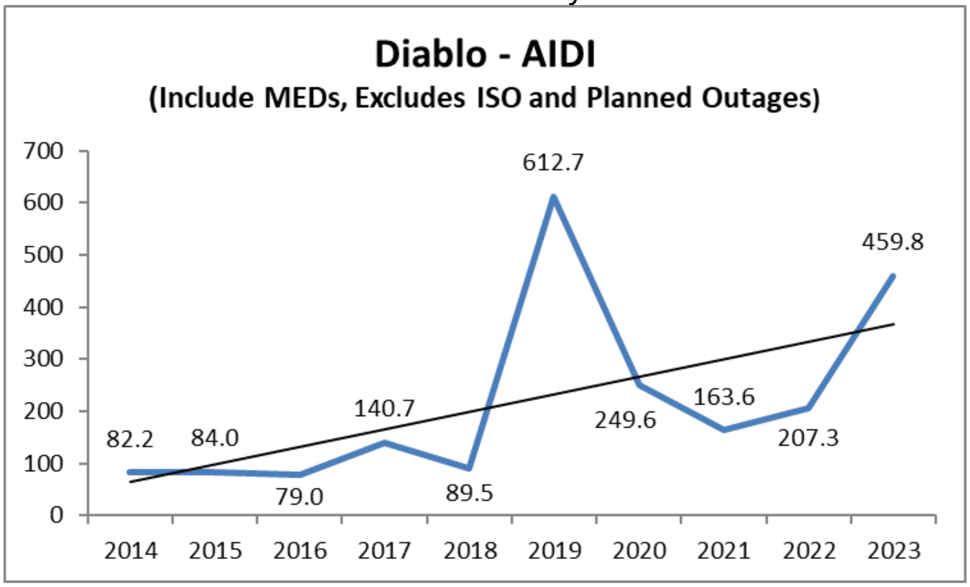


Chart 14: Division Reliability - AIDI Indices

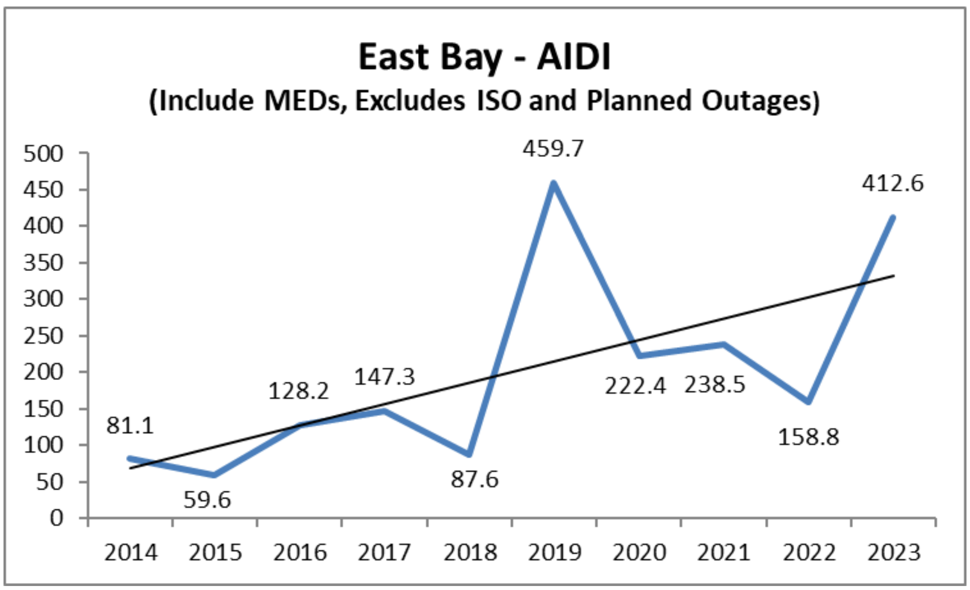


Chart 15: Division Reliability - AIDI Indices

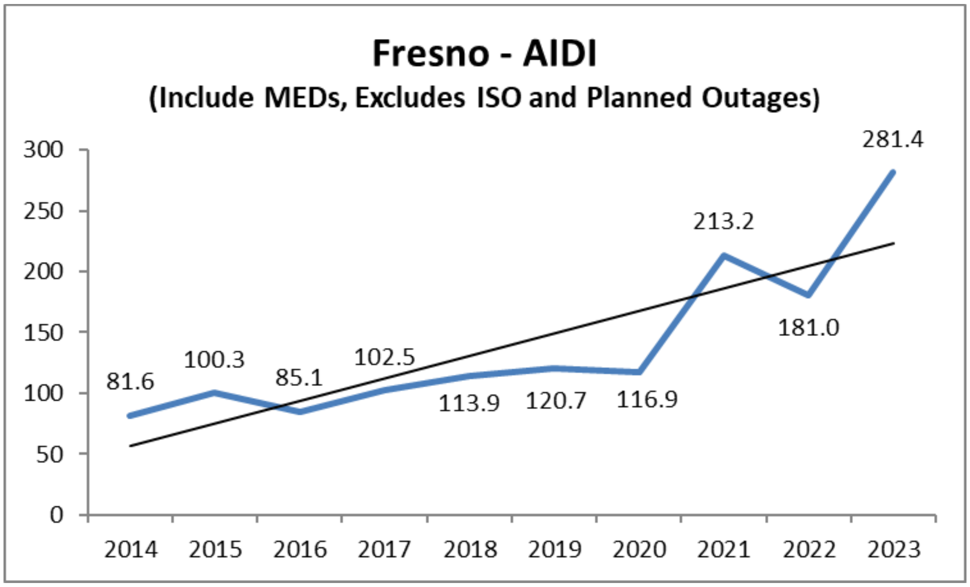


Chart 16: Division Reliability - AIDI Indices

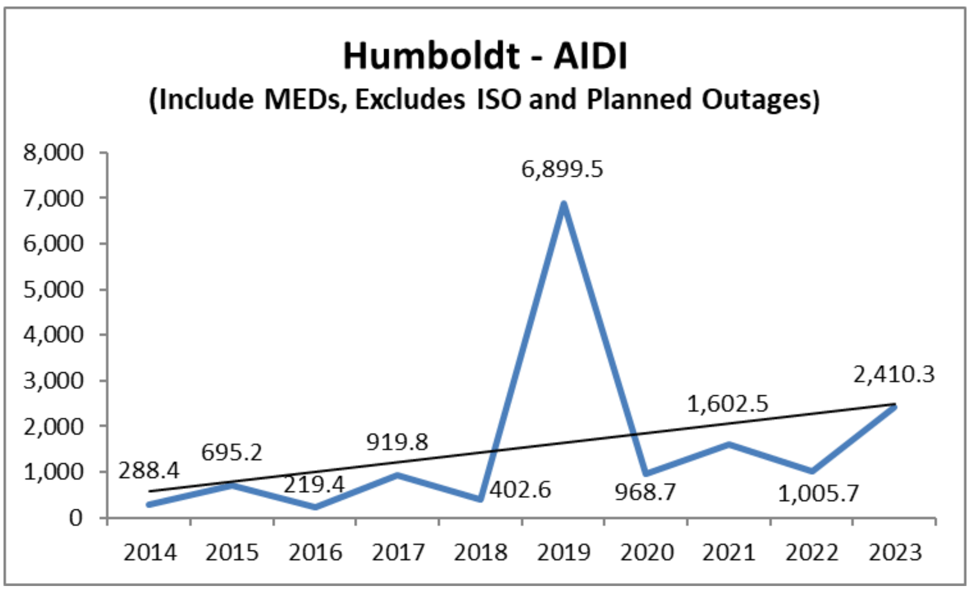


Chart 17: Division Reliability - AIDI Indices

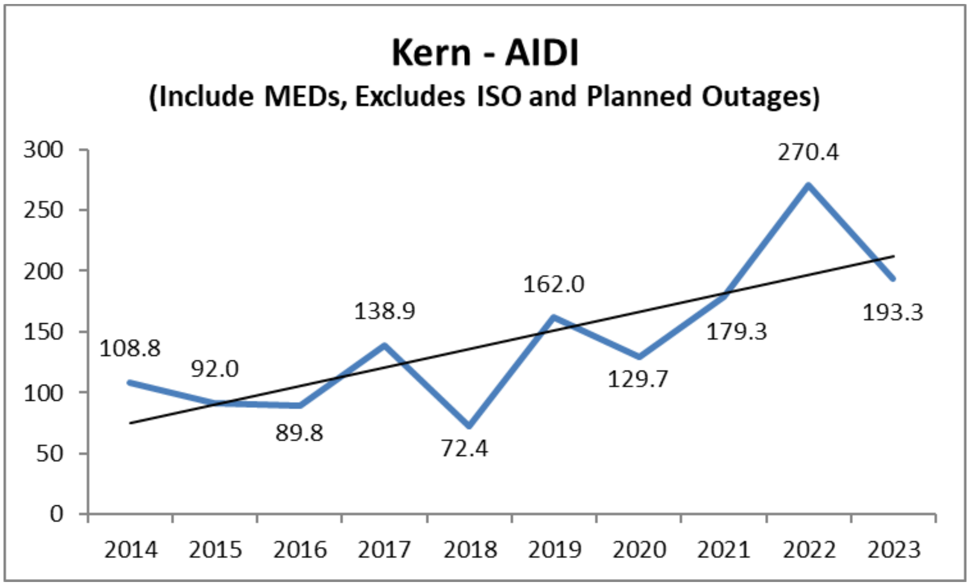


Chart 18: Division Reliability - AIDI Indices

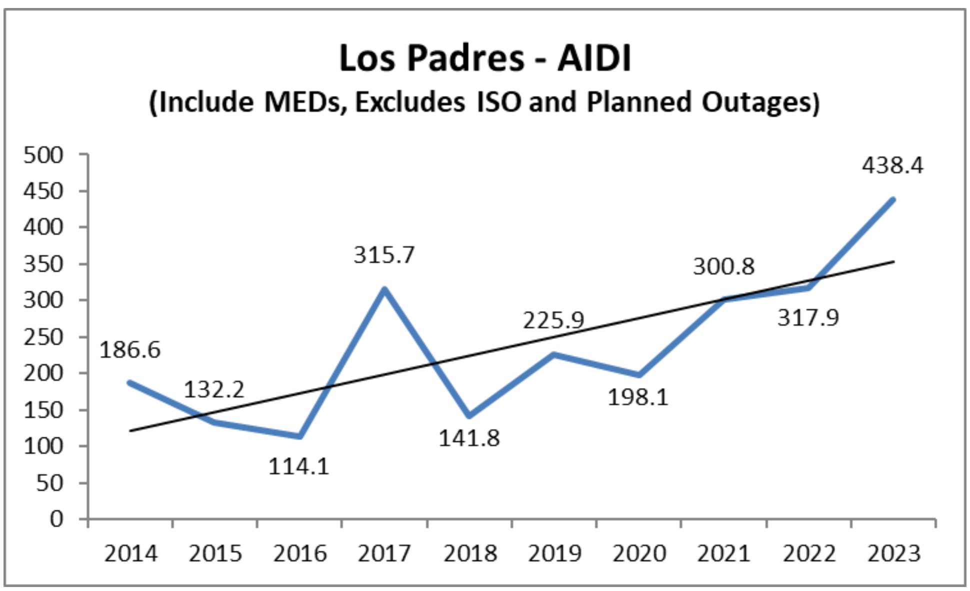


Chart 19: Division Reliability - AIDI Indices

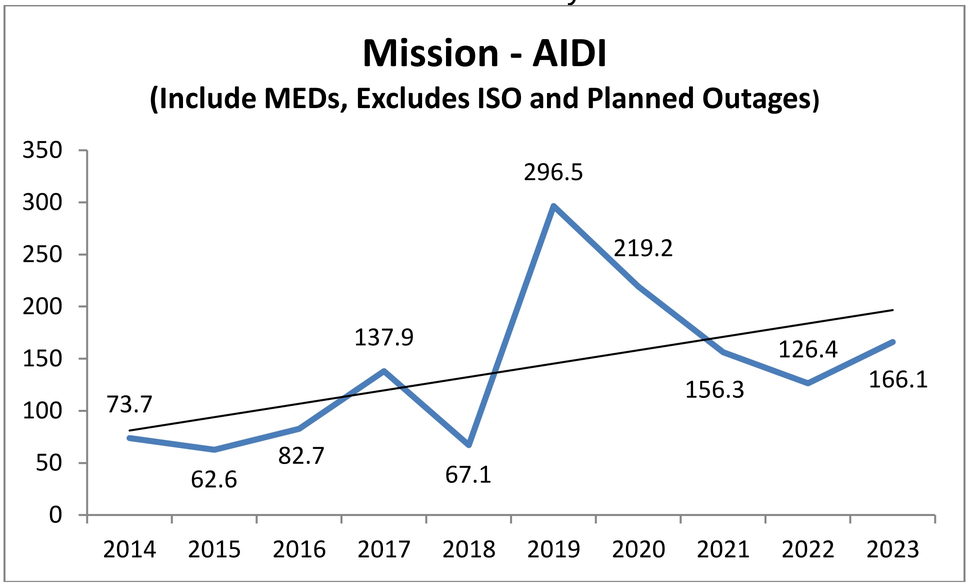


Chart 20: Division Reliability – AIDI Indices

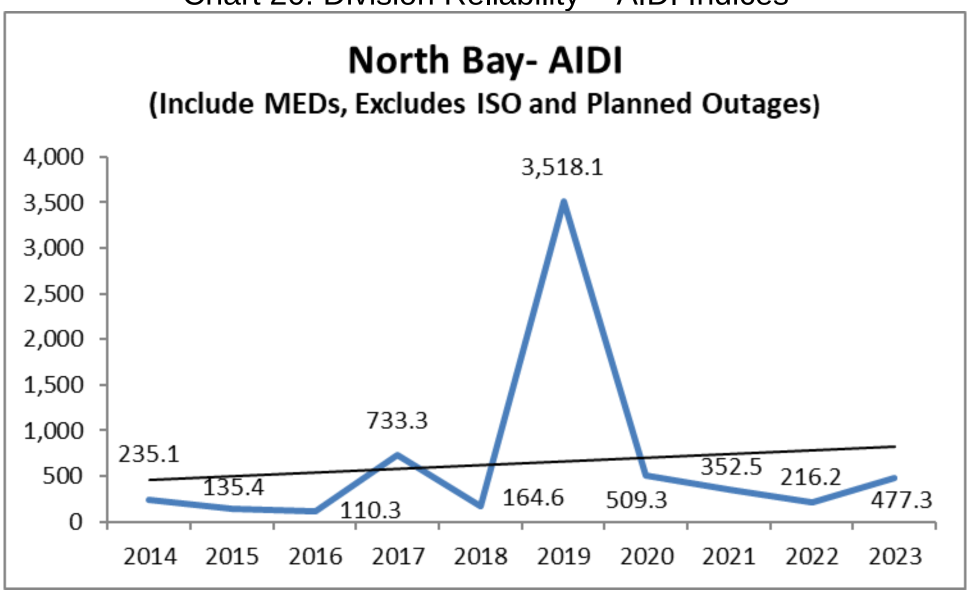


Chart 21: Division Reliability - AIDI Indices

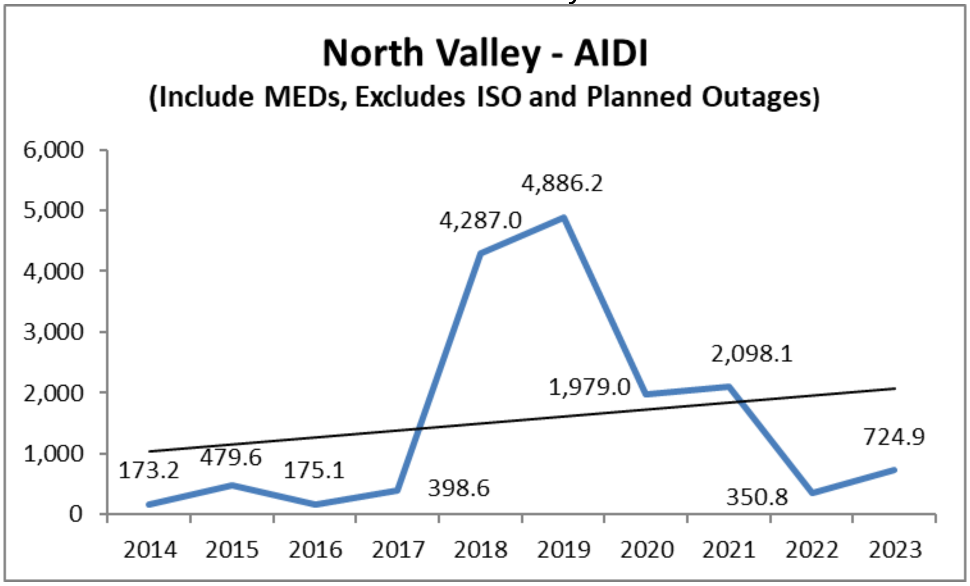


Chart 22: Division Reliability - AIDI Indices

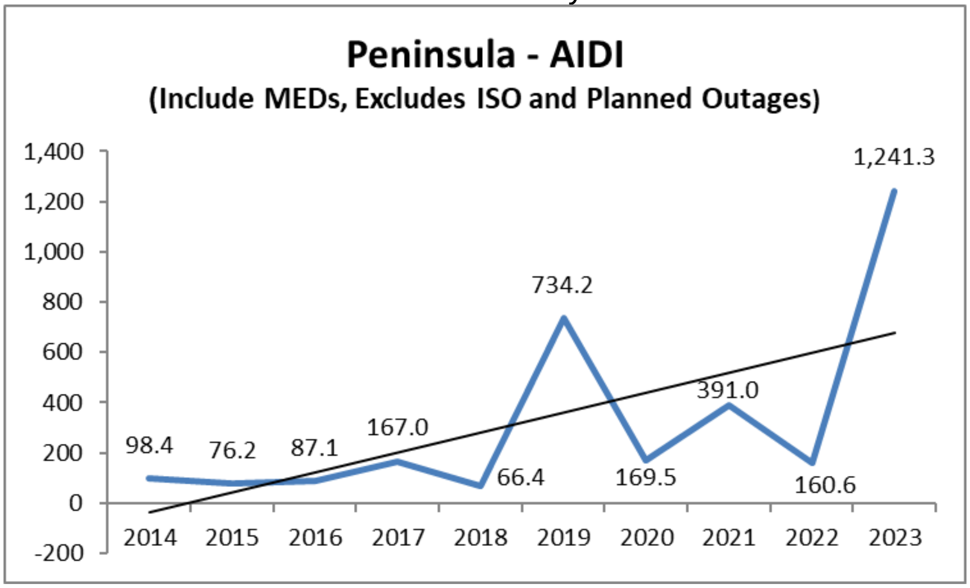


Chart 23: Division Reliability - AIDI Indices

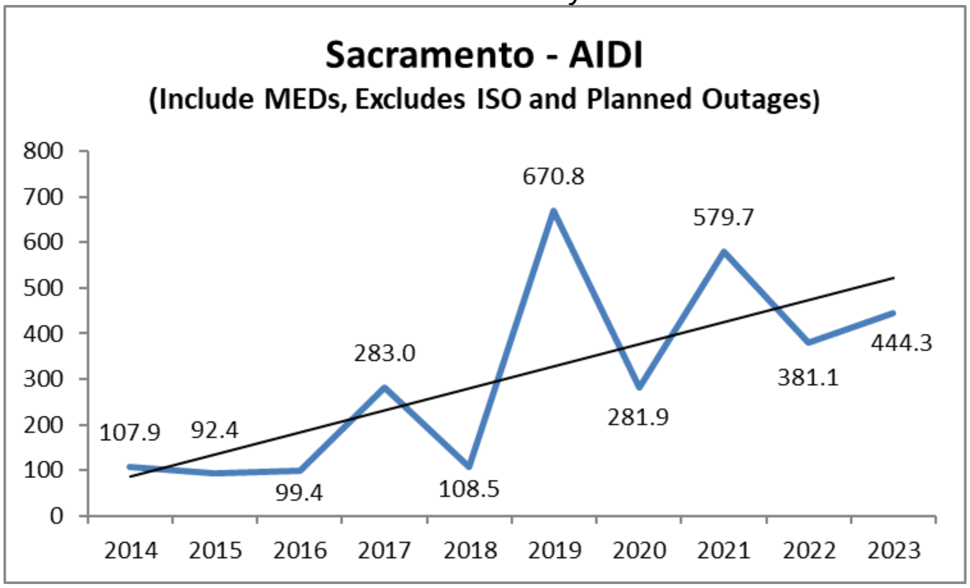


Chart 24: Division Reliability - AIDI Indices

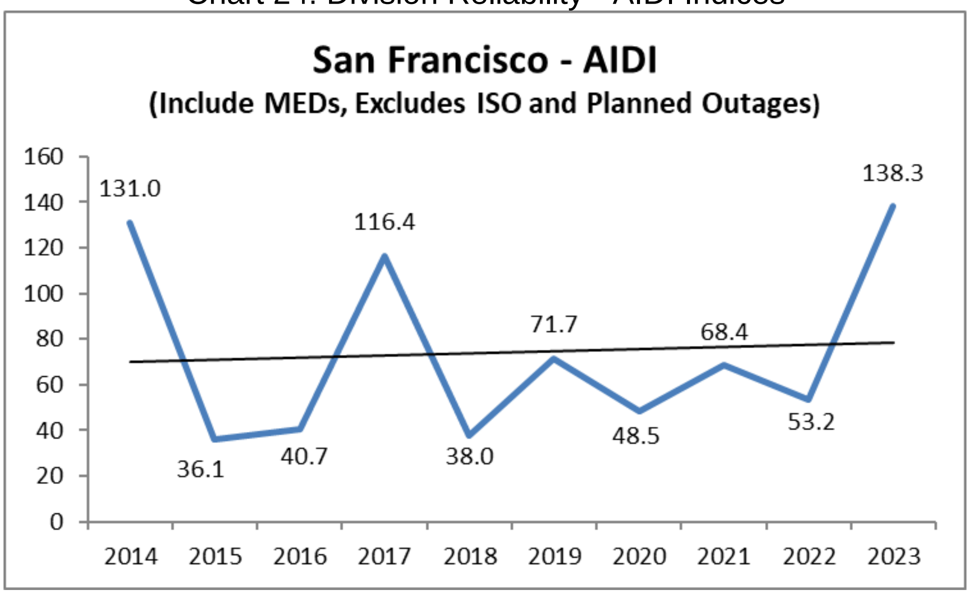


Chart 25: Division Reliability - AIDI Indices

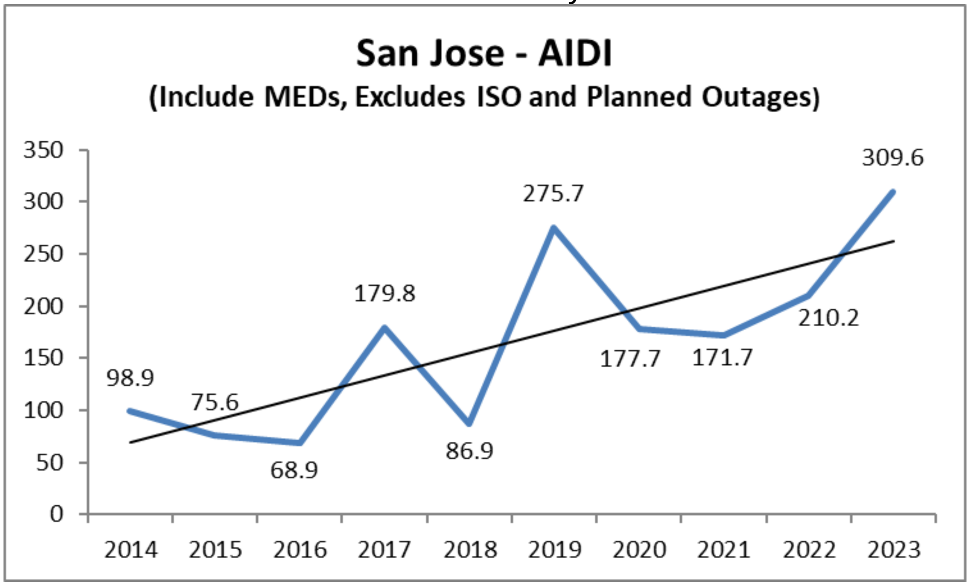


Chart 26: Division Reliability – AIDI Indices

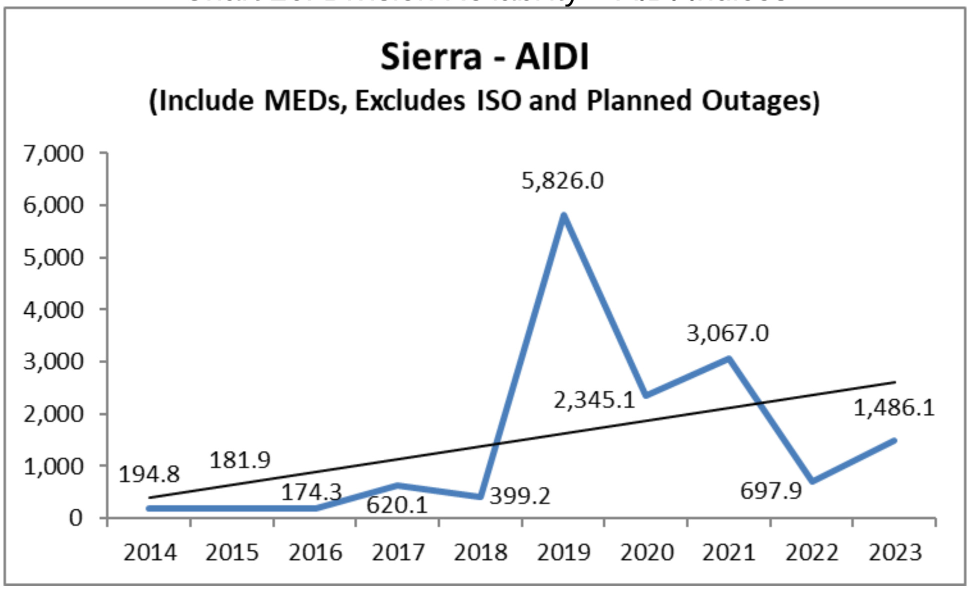


Chart 27: Division Reliability – AIDI Indices

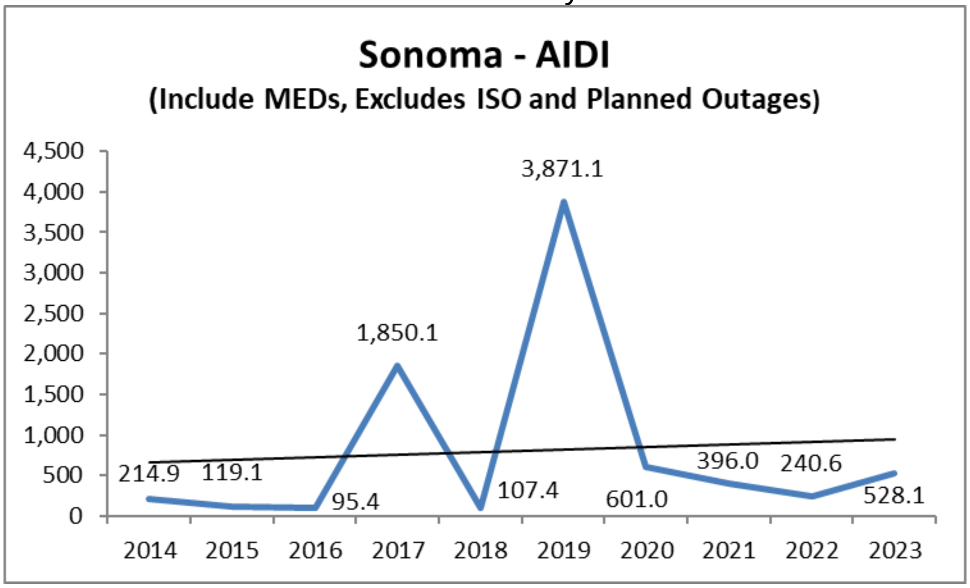


Chart 28: Division Reliability - AIDI Indices

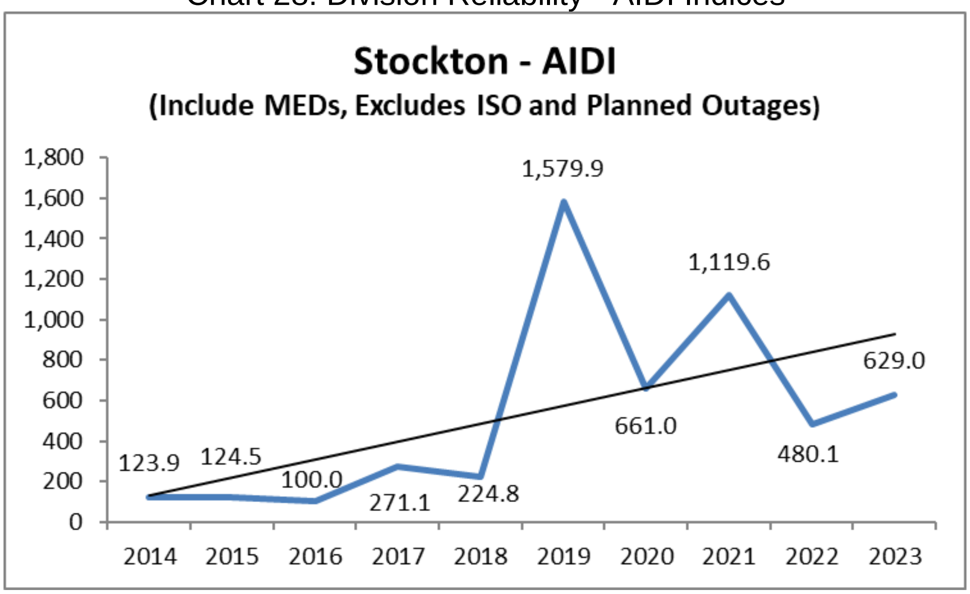
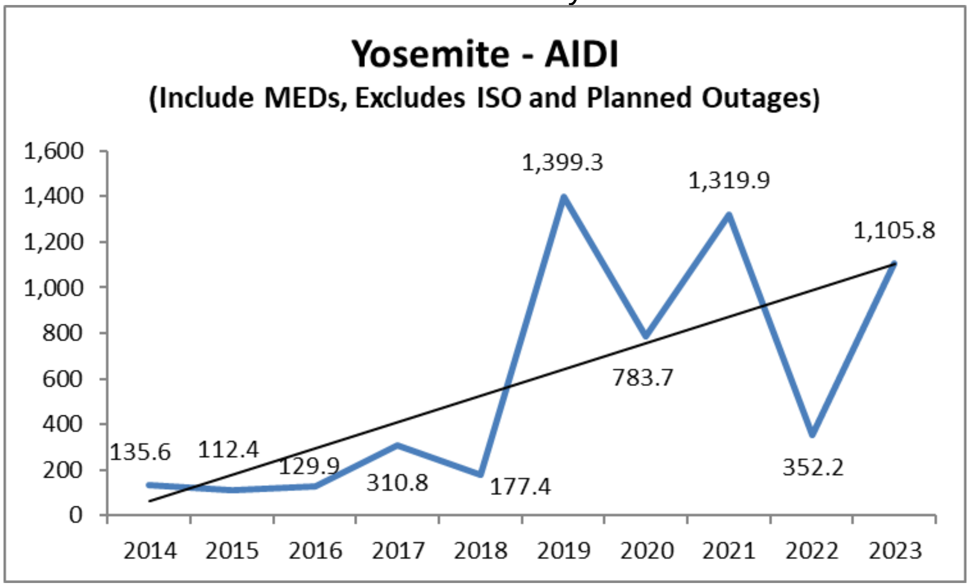


Chart 29: Division Reliability - AIDI Indices



2. AIFI Performance Results (MED Included)

Chart 30: Division Reliability - AIFI Indices

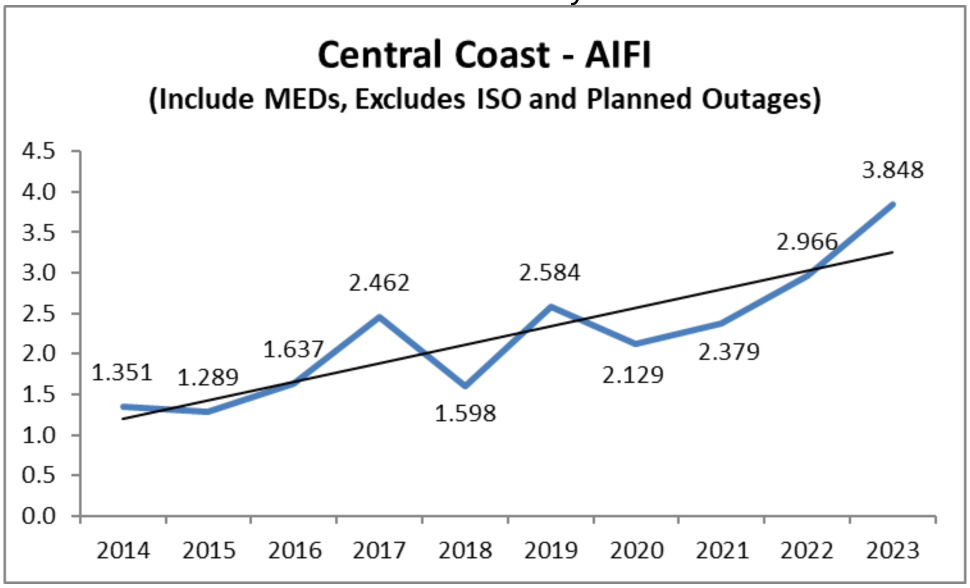


Chart 31: Division Reliability - AIFI Indices

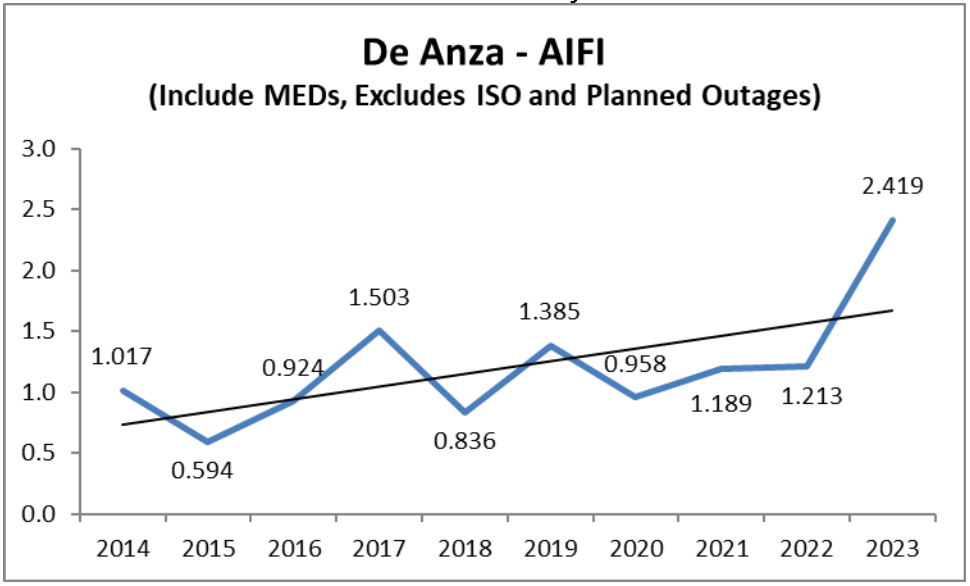


Chart 32: Division Reliability - AIFI Indices

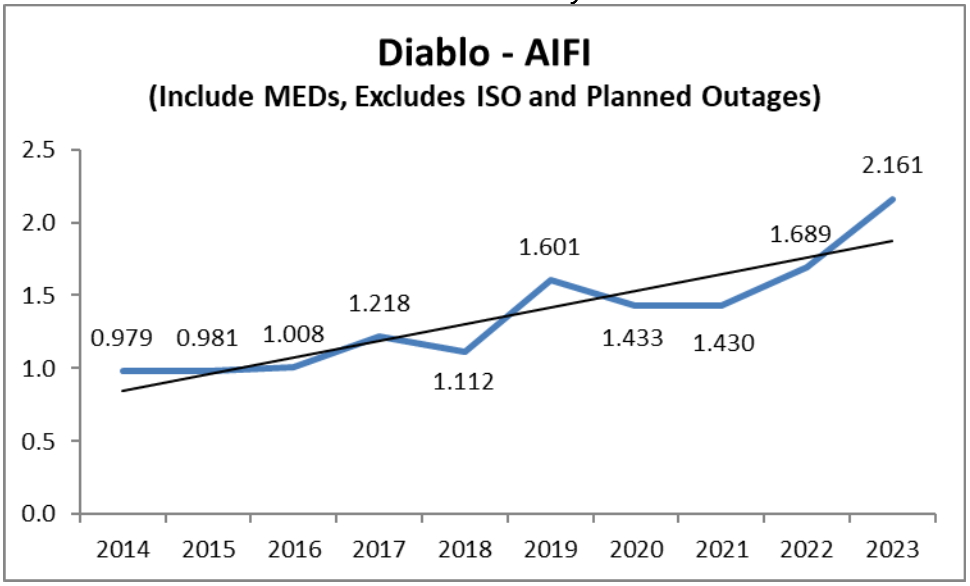


Chart 33: Division Reliability - AIFI Indices

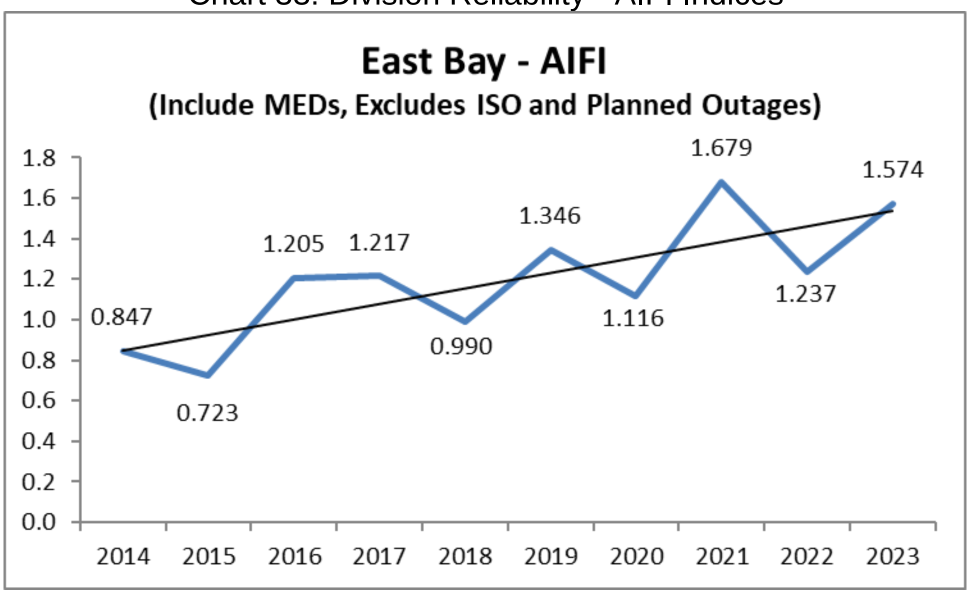


Chart 34: Division Reliability - AIFI Indices

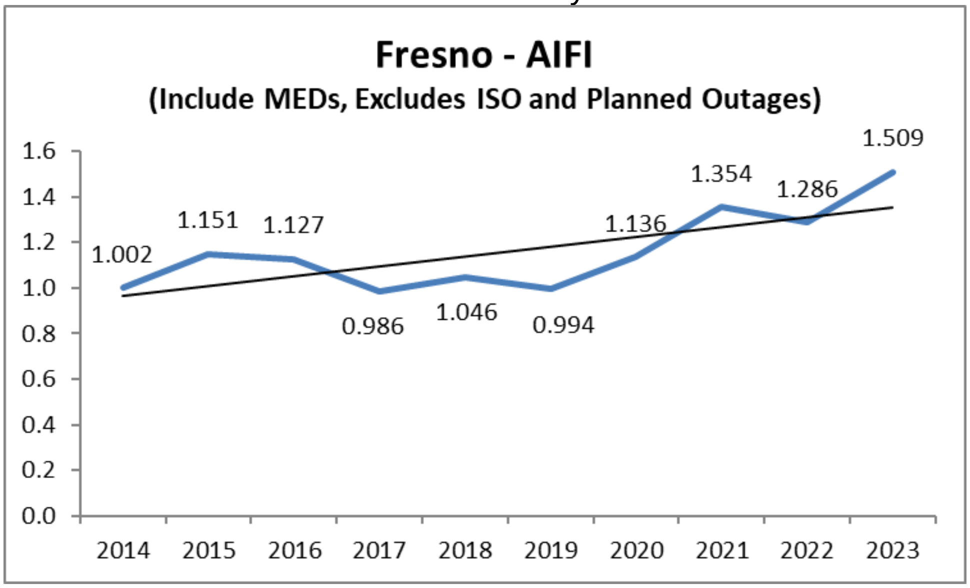


Chart 35: Division Reliability - AIFI Indices

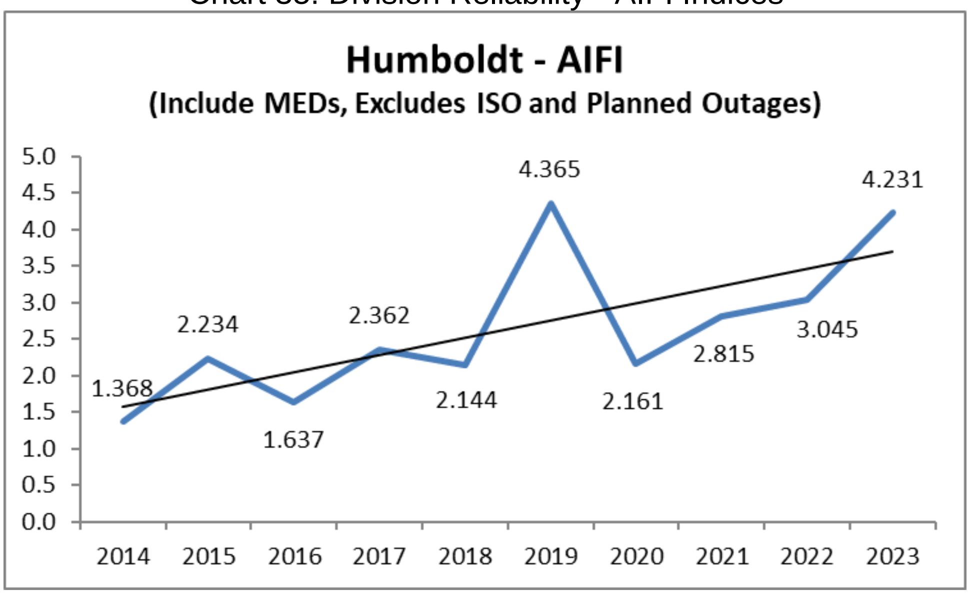


Chart 36: Division Reliability - AIFI Indices

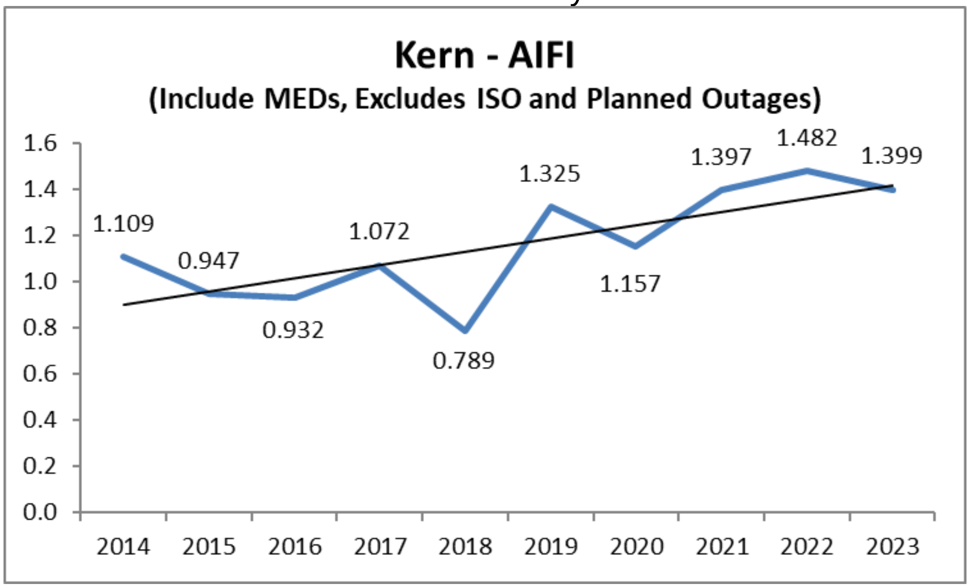


Chart 37: Division Reliability - AIFI Indices

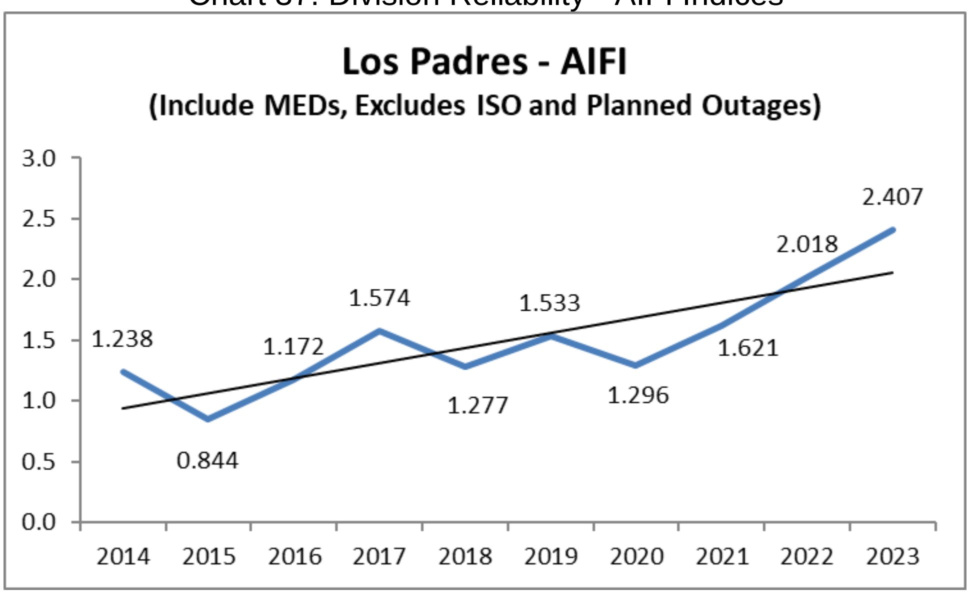


Chart 38: Division Reliability - AIFI Indices

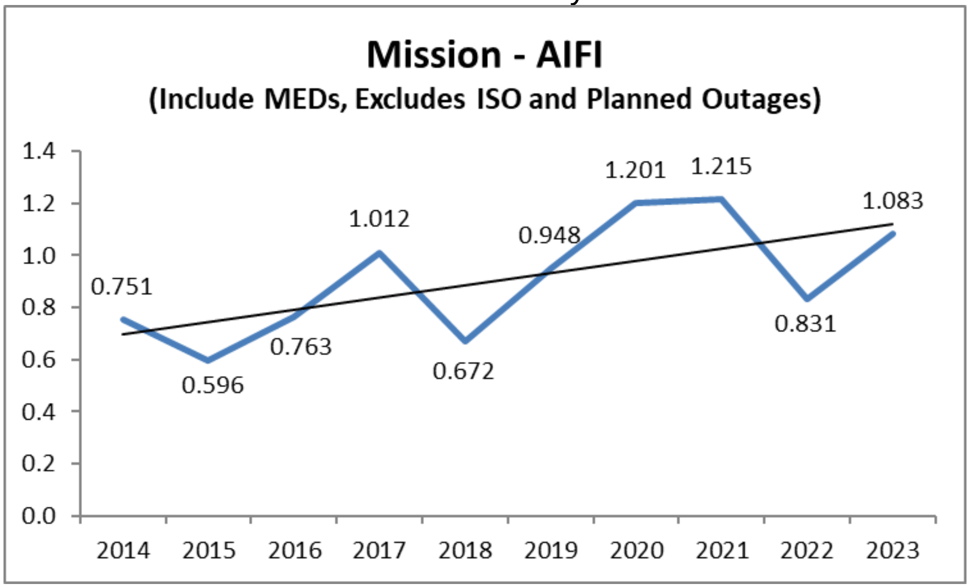


Chart 39: Division Reliability - AIFI Indices

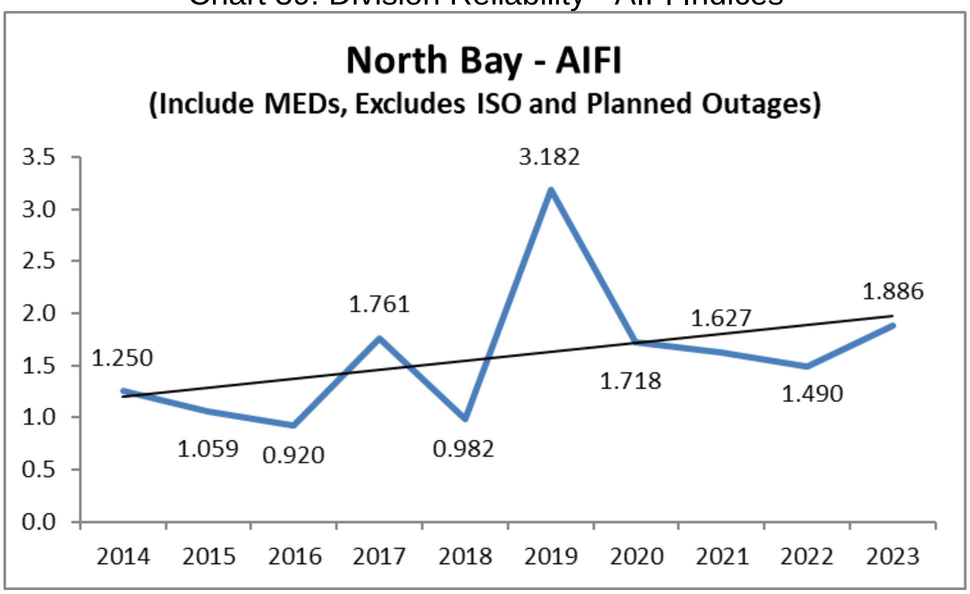


Chart 40: Division Reliability - AIFI Indices

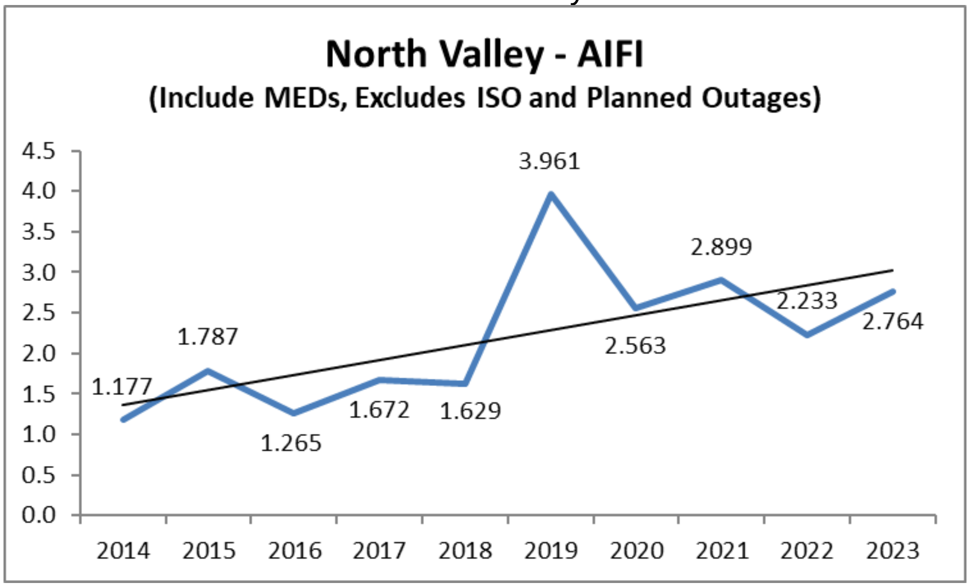


Chart 41: Division Reliability - AIFI Indices

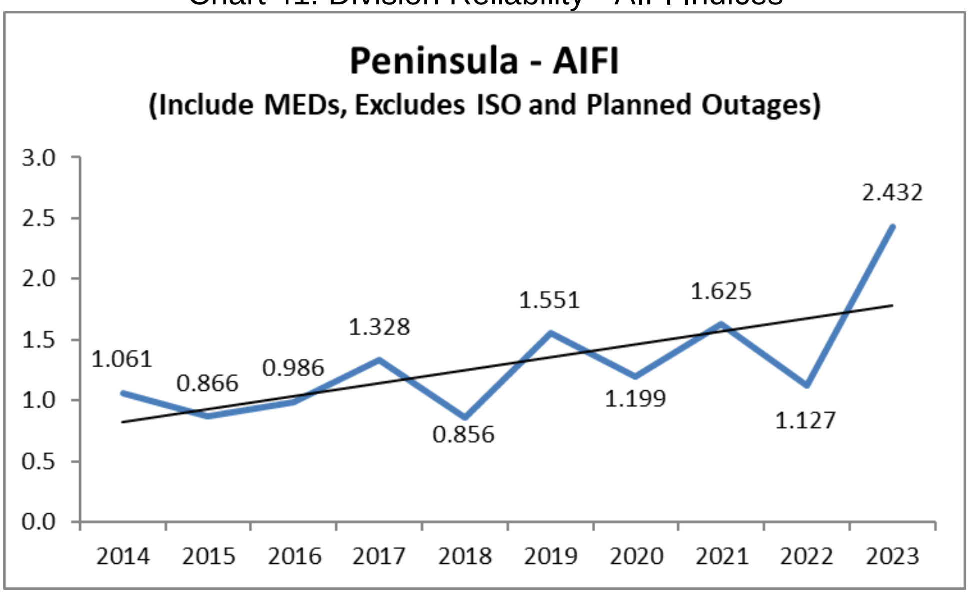


Chart 42: Division Reliability - AIFI Indices

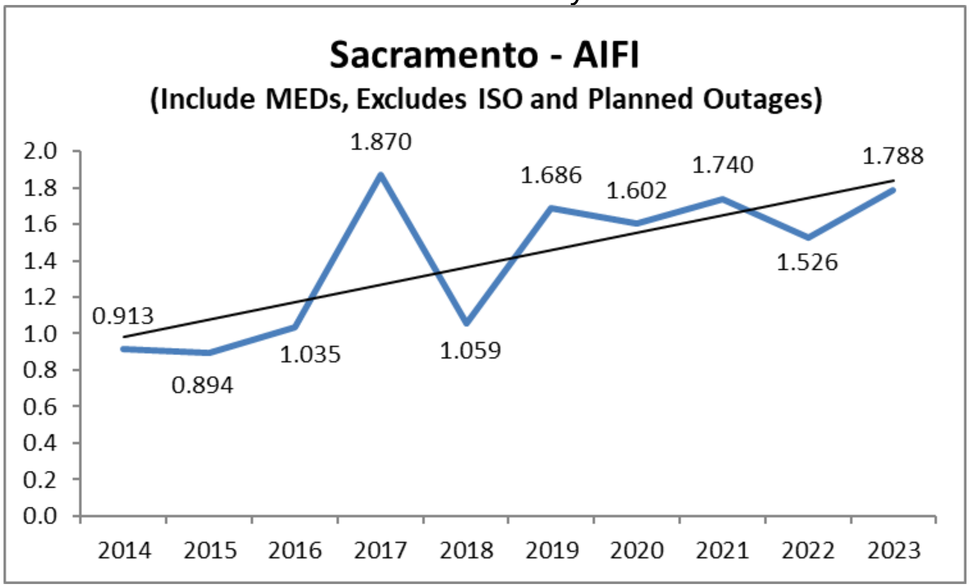


Chart 43: Division Reliability - AIFI Indices

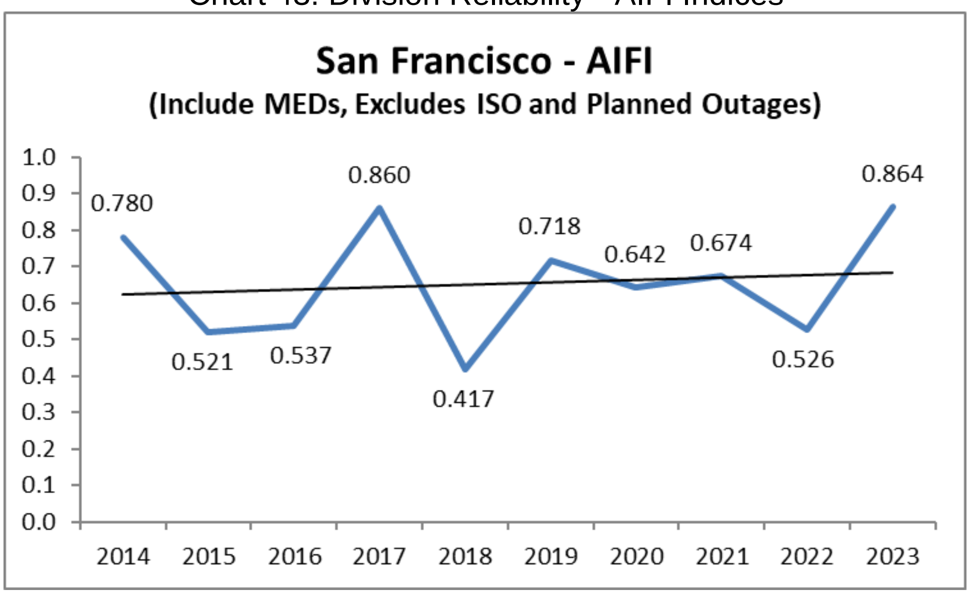


Chart 44: Division Reliability - AIFI Indices

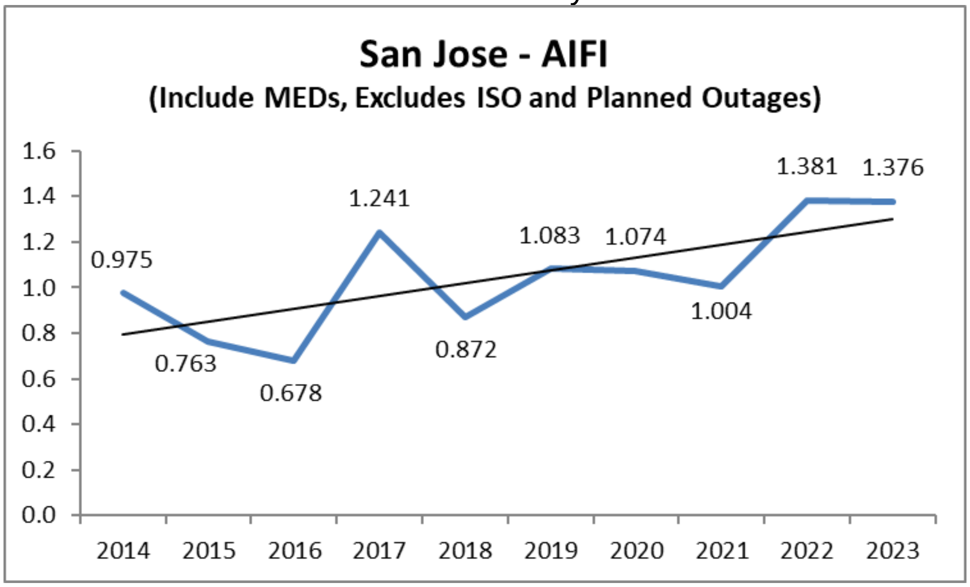


Chart 45: Division Reliability - AIFI Indices

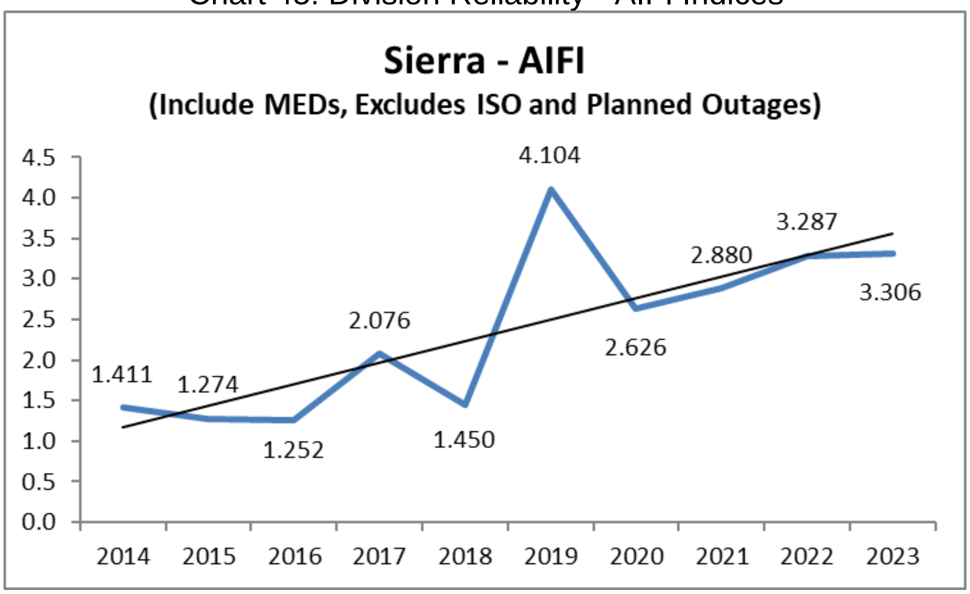


Chart 46: Division Reliability - AIFI Indices

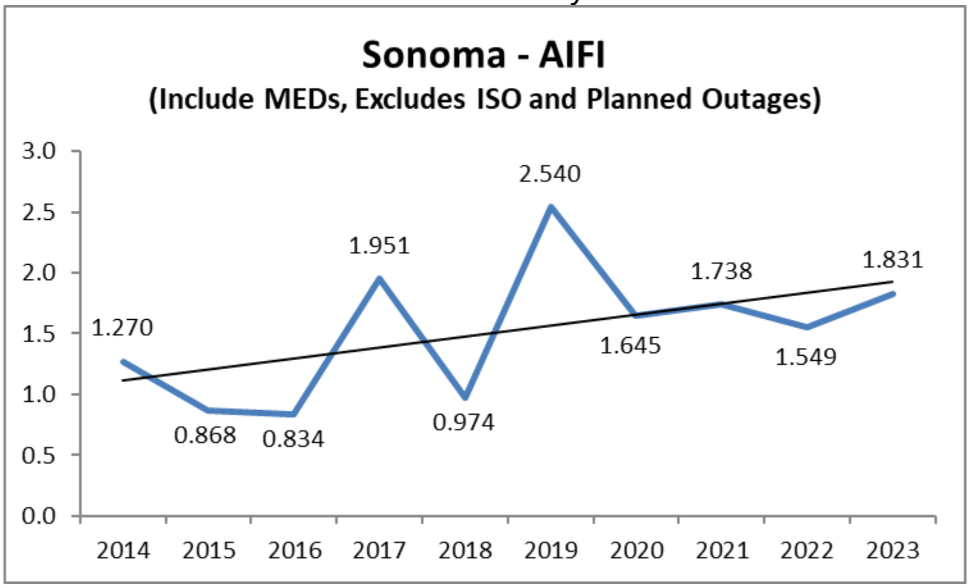


Chart 47: Division Reliability - AIFI Indices

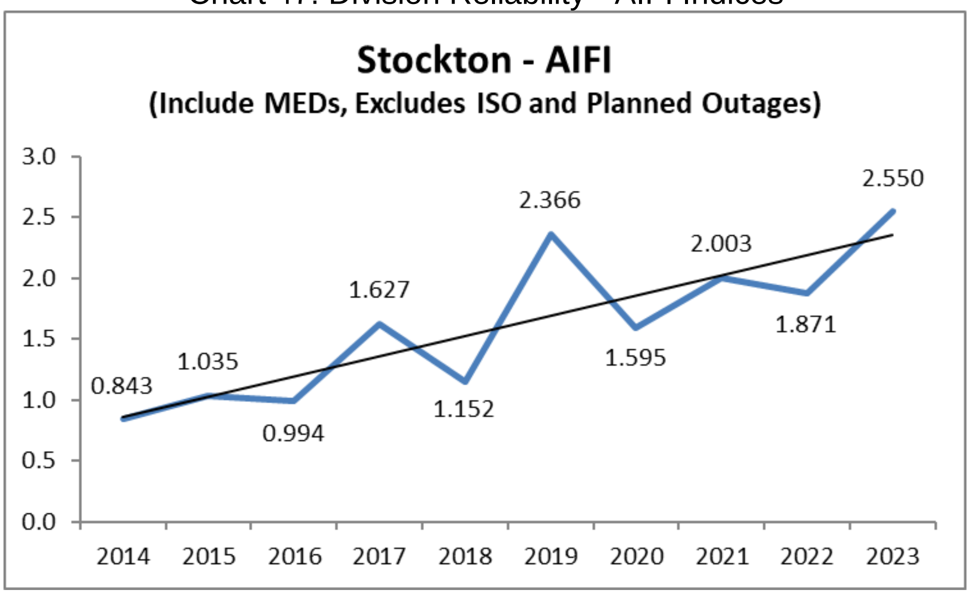
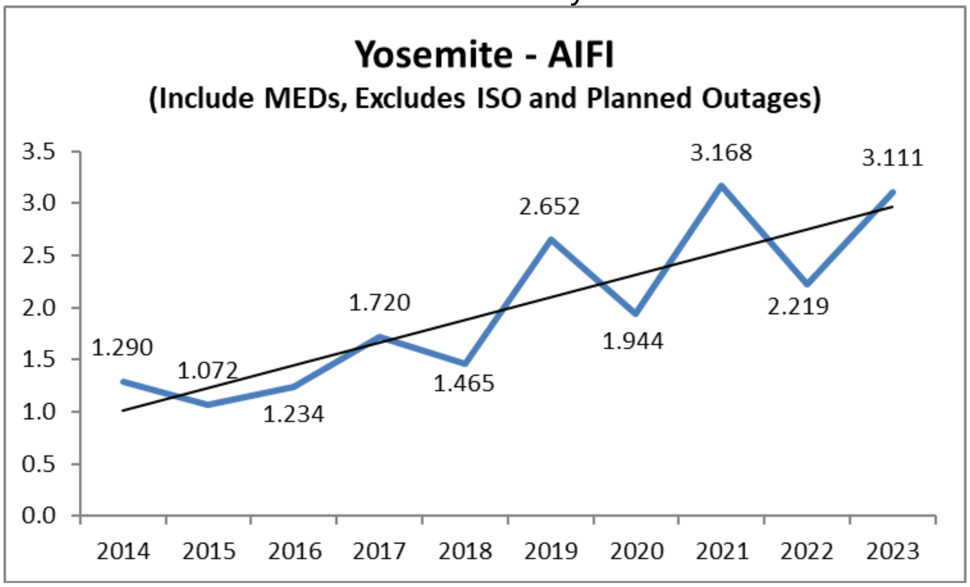


Chart 48: Division Reliability - AIFI Indices



3. MAIFI Performance Results (MED Included)

Chart 49: Division Reliability - MAIFI Indices

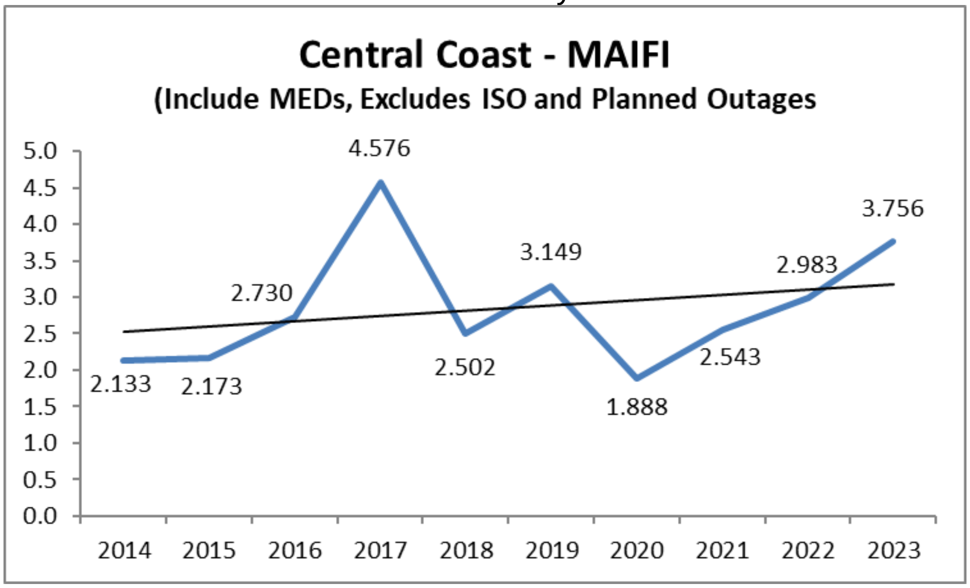


Chart 50: Division Reliability - MAIFI Indices

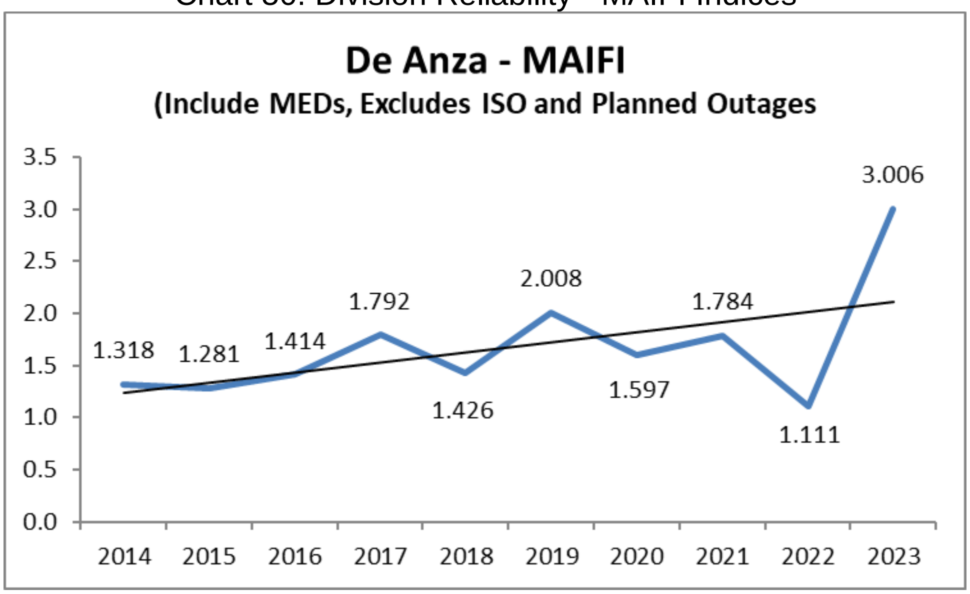


Chart 51: Division Reliability - MAIFI Indices

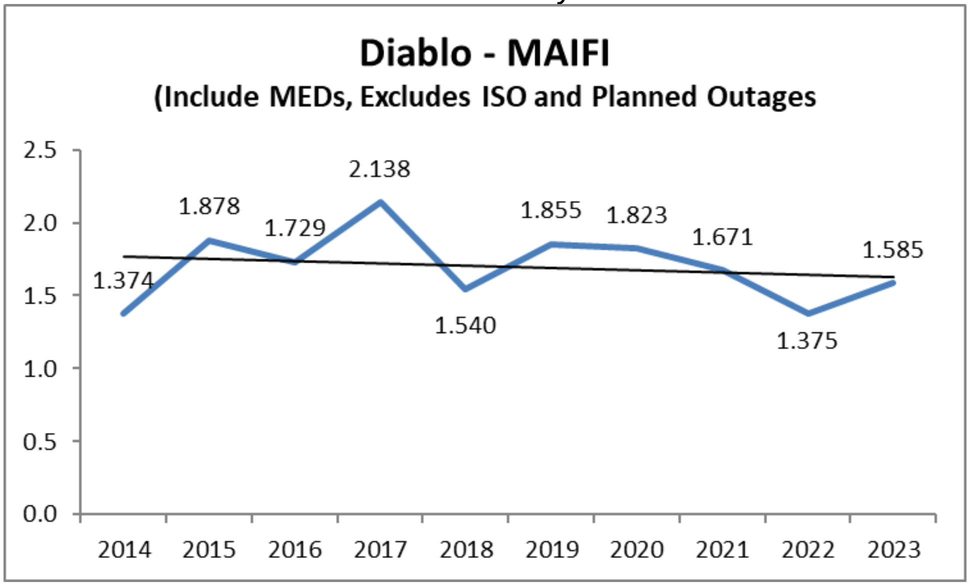


Chart 52: Division Reliability - MAIFI Indices

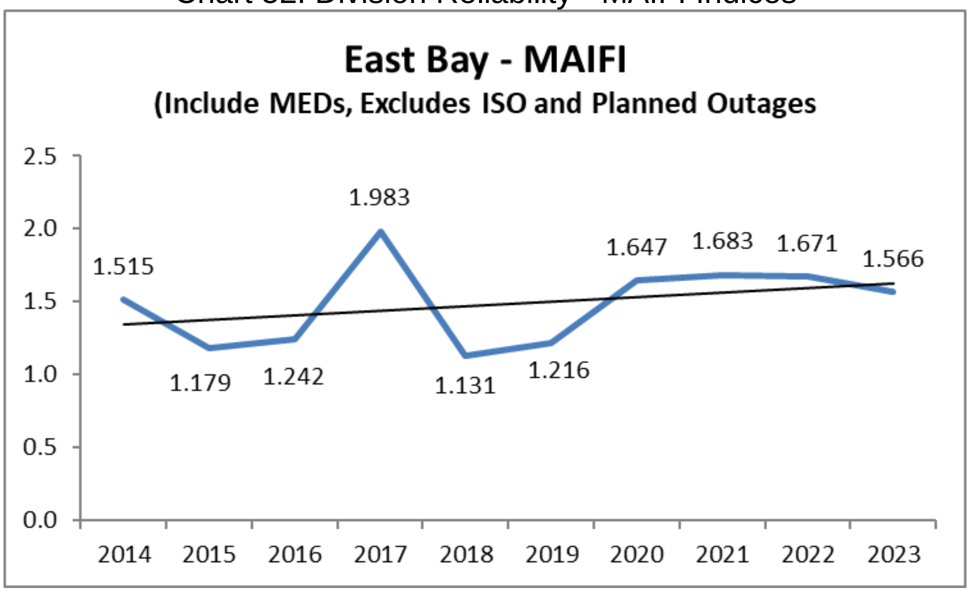


Chart 53: Division Reliability - MAIFI Indices

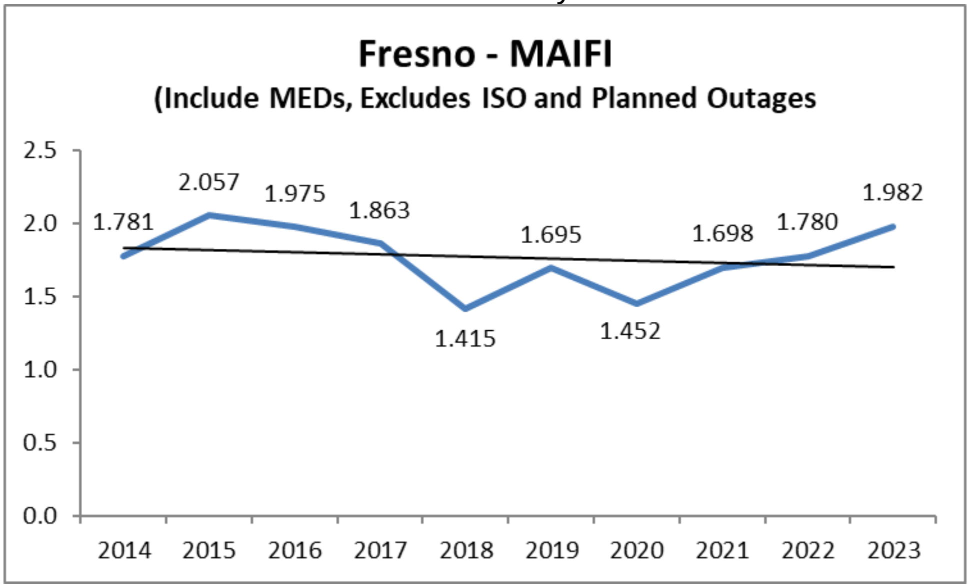


Chart 54: Division Reliability - MAIFI Indices

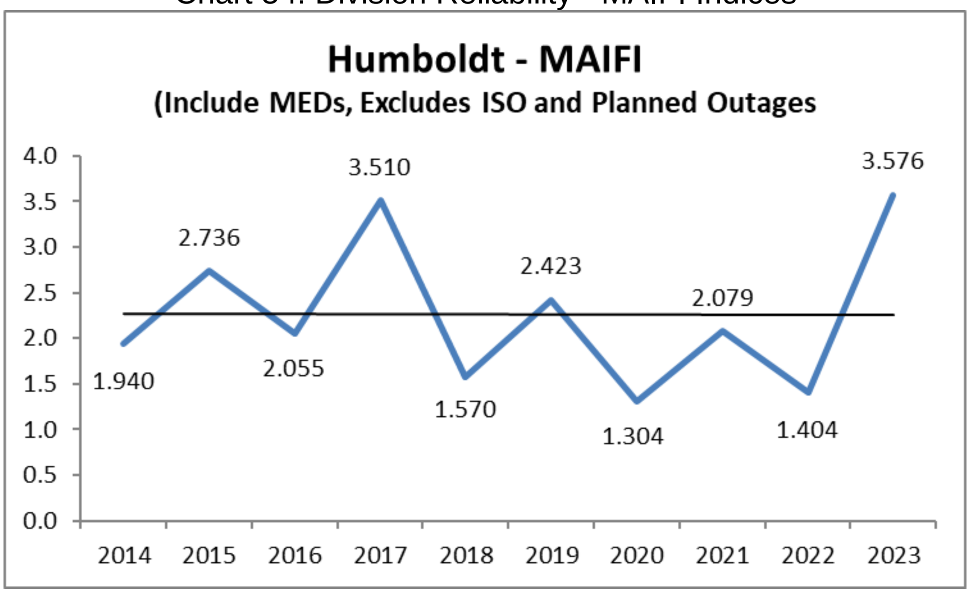


Chart 55: Division Reliability - MAIFI Indices

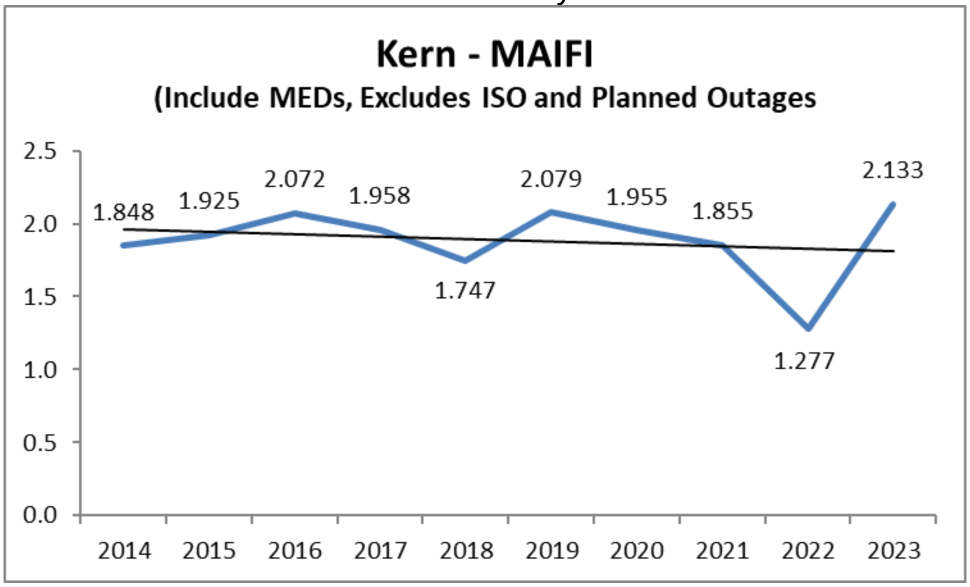


Chart 56: Division Reliability - MAIFI Indices

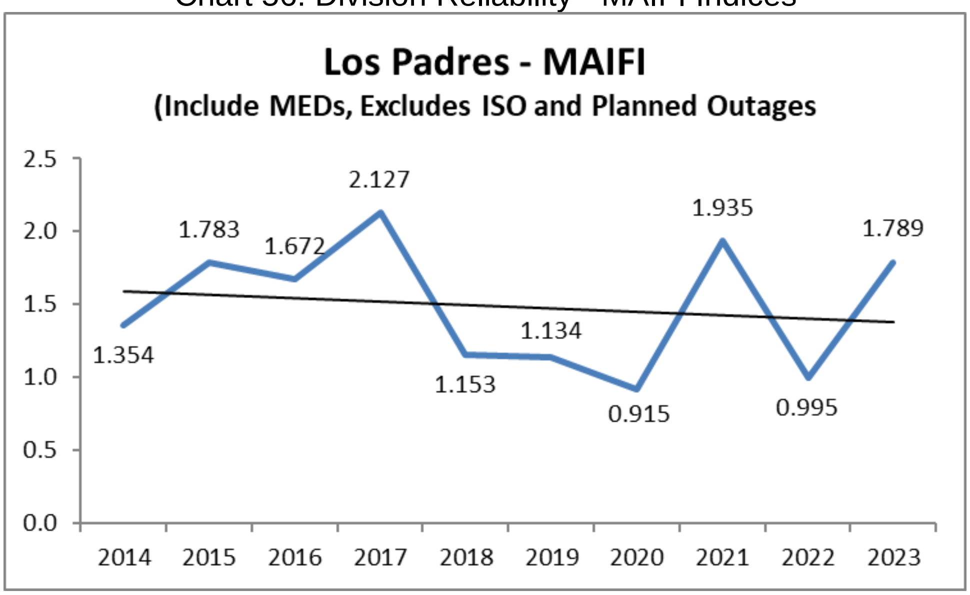


Chart 57: Division Reliability - MAIFI Indices

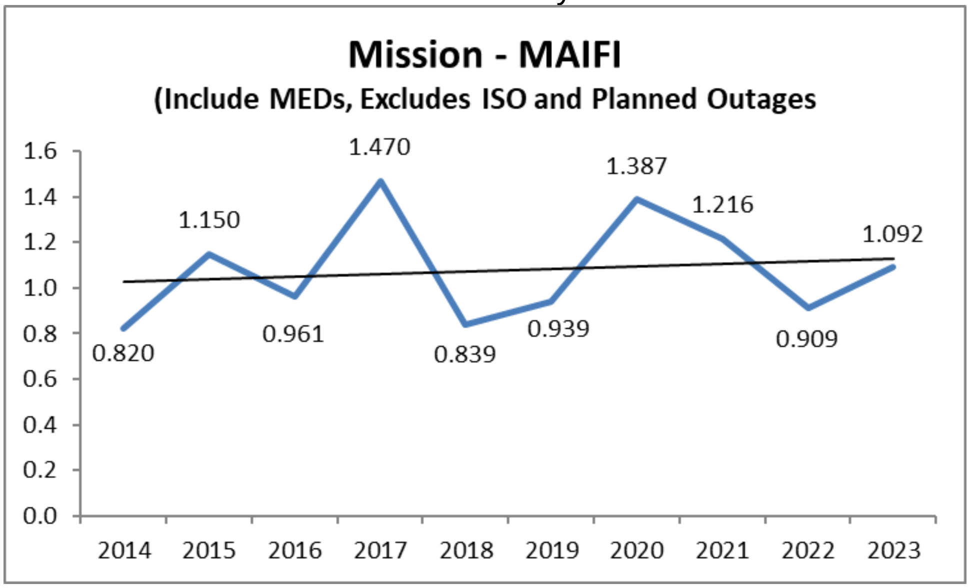


Chart 58: Division Reliability - MAIFI Indices

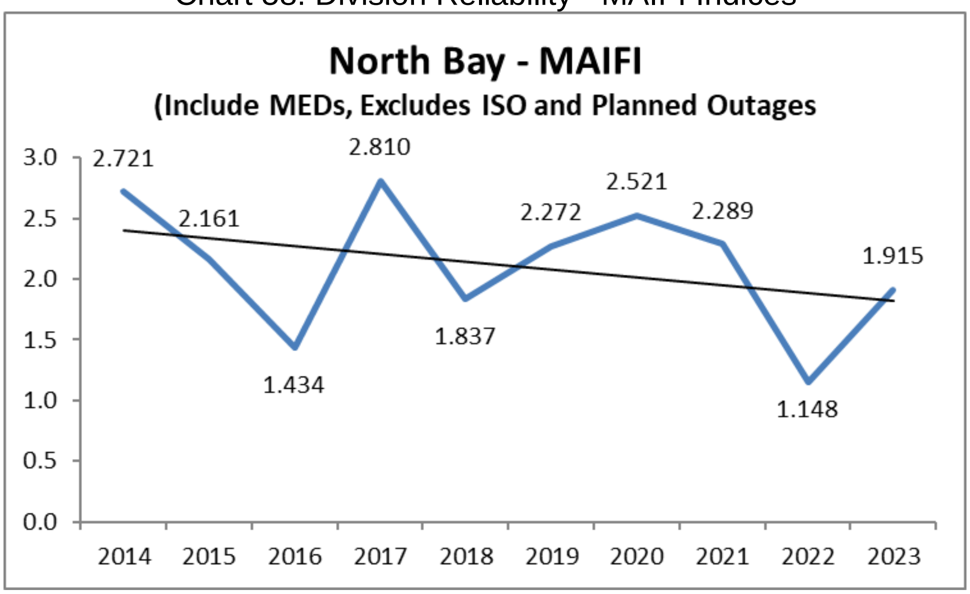


Chart 59: Division Reliability - MAIFI Indices

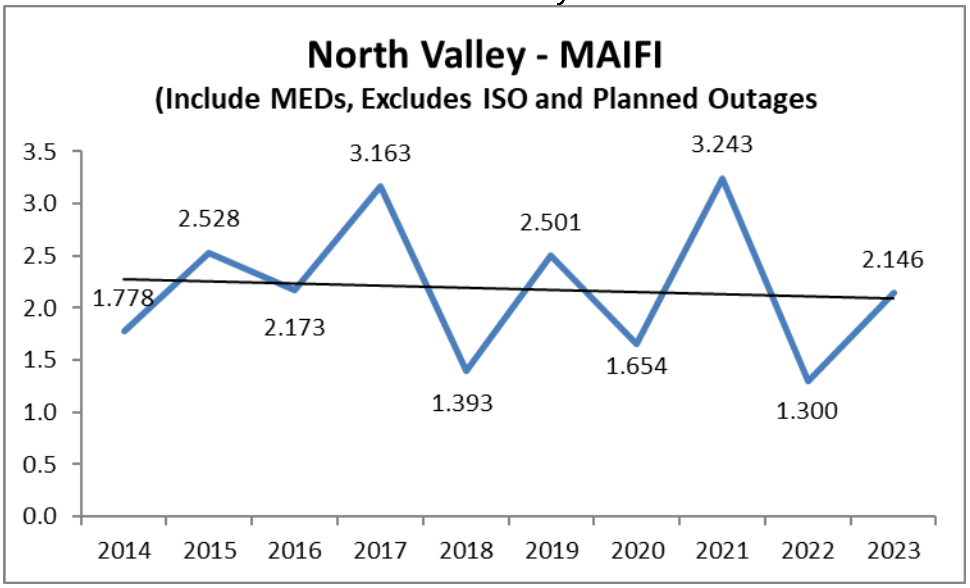


Chart 60: Division Reliability - MAIFI Indices

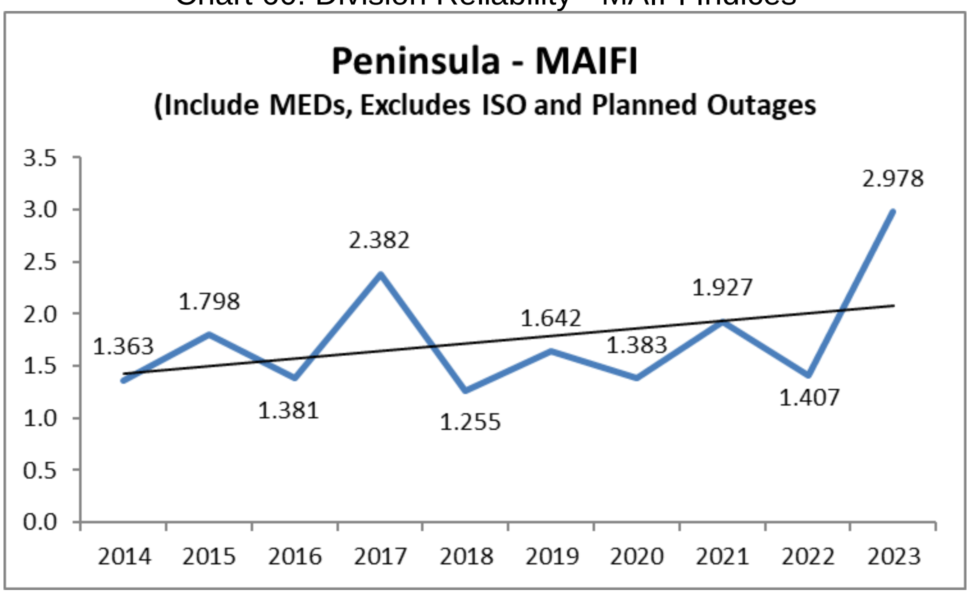


Chart 61: Division Reliability - MAIFI Indices

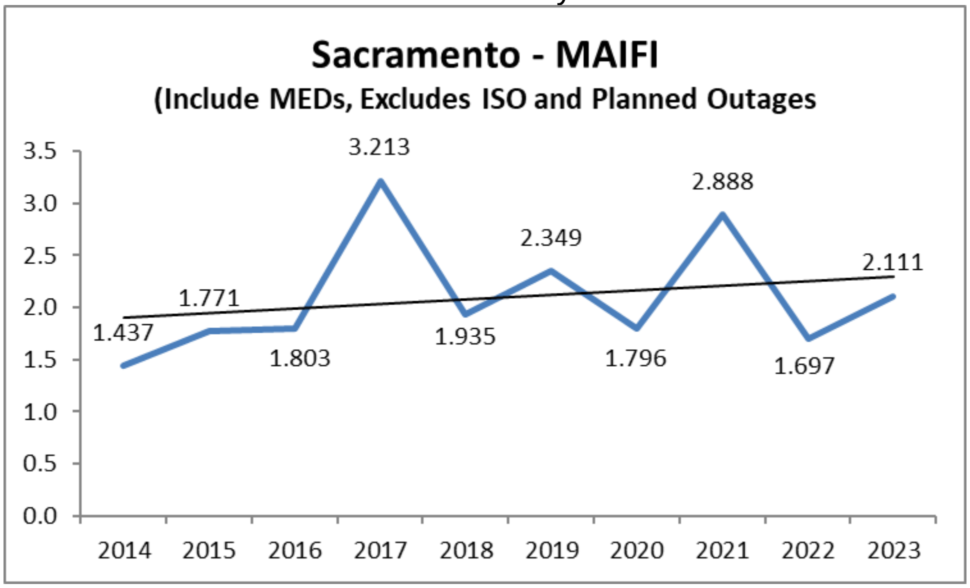


Chart 62: Division Reliability - MAIFI Indices

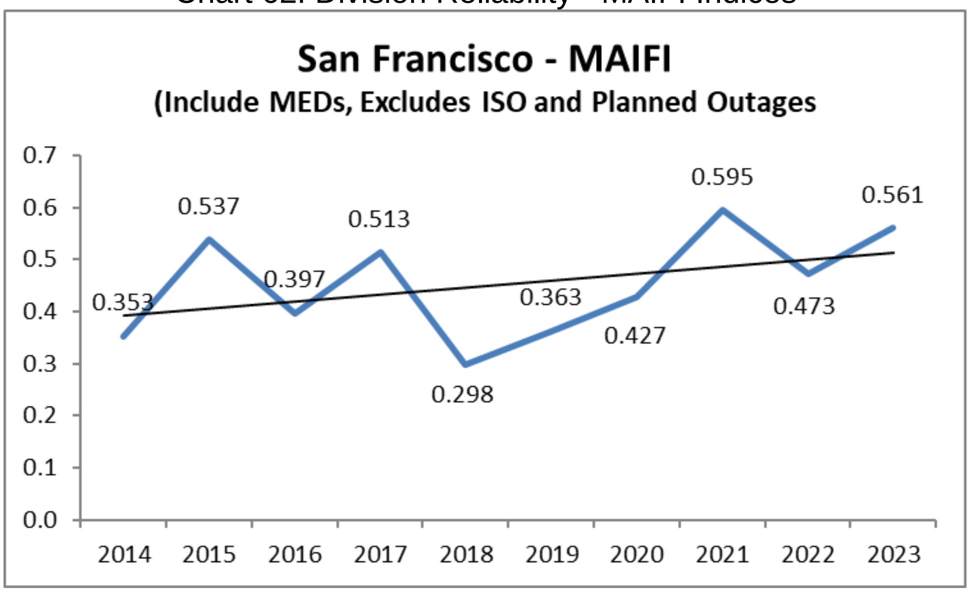


Chart 63: Division Reliability - MAIFI Indices

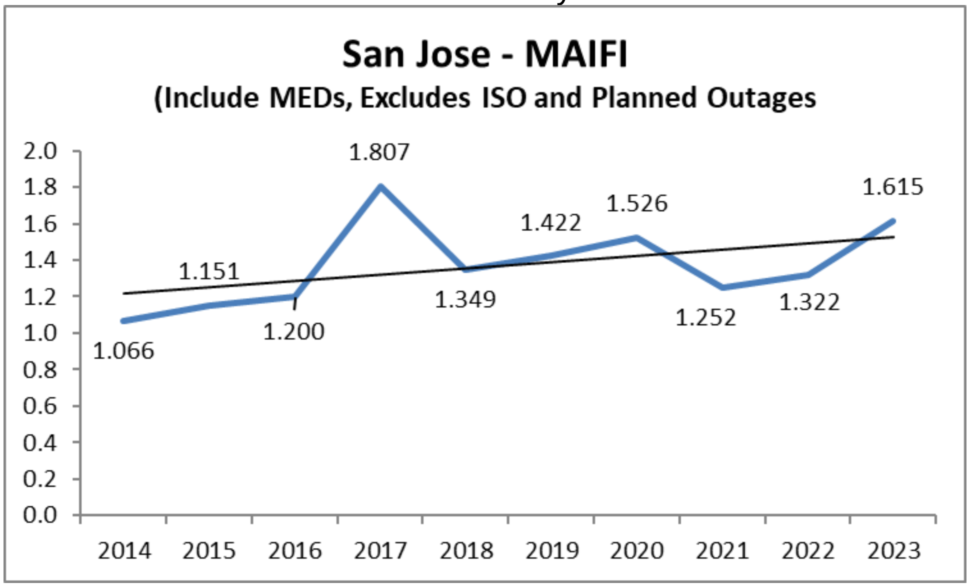


Chart 64: Division Reliability - MAIFI Indices

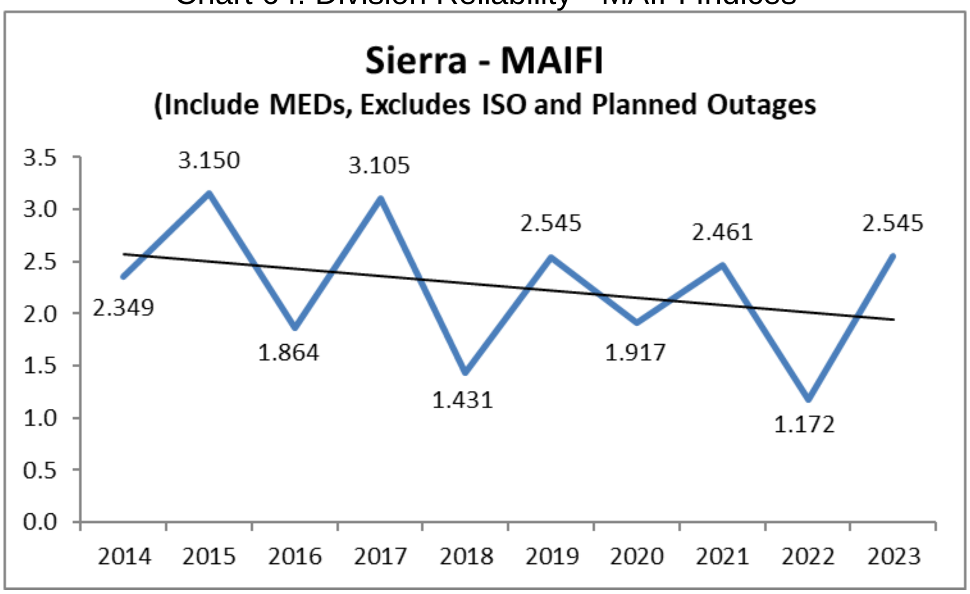


Chart 65: Division Reliability - MAIFI Indices

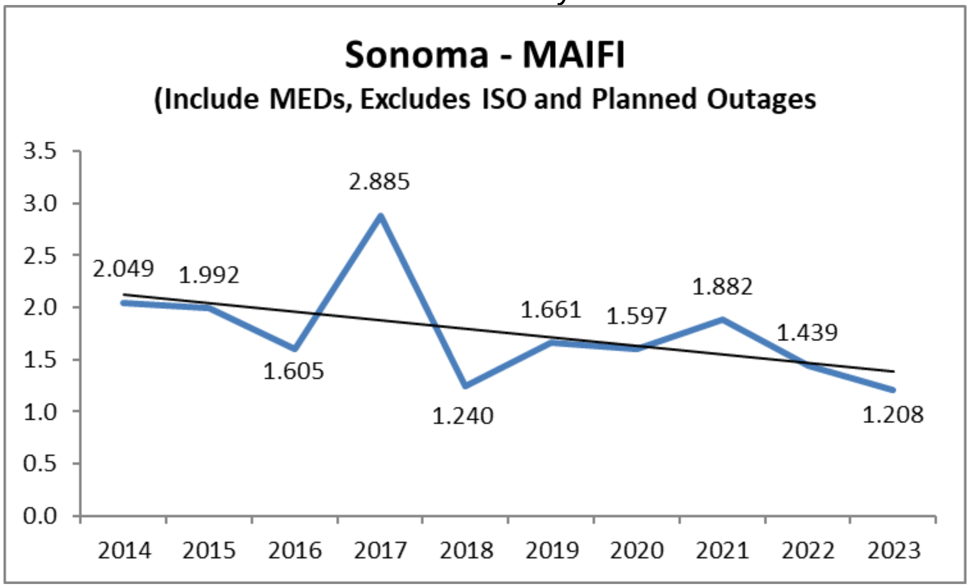


Chart 66: Division Reliability - MAIFI Indices

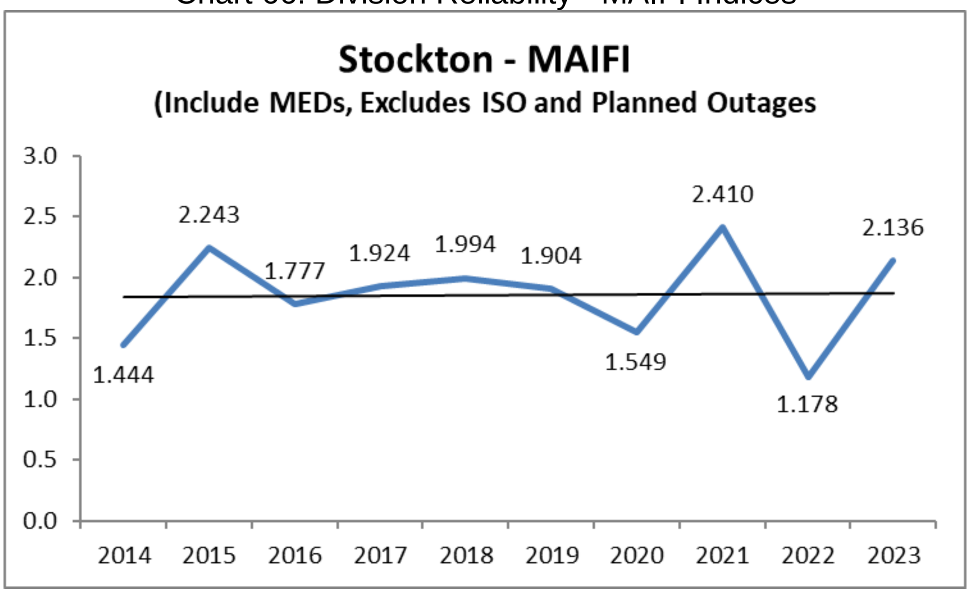
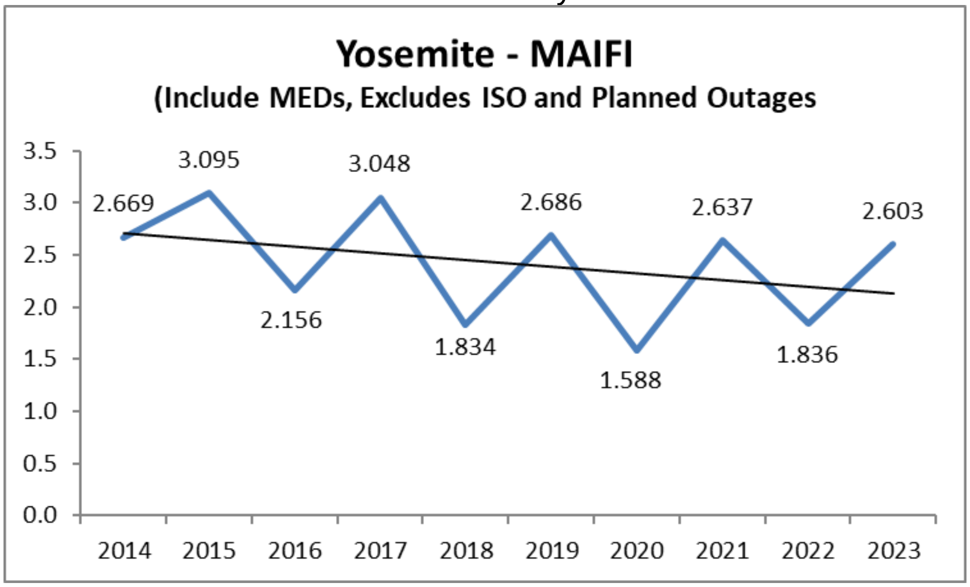


Chart 67: Division Reliability - MAIFI Indices



4. CAIDI Performance Results (MED Included)

Chart 68: Division Reliability - CAIDI Indices

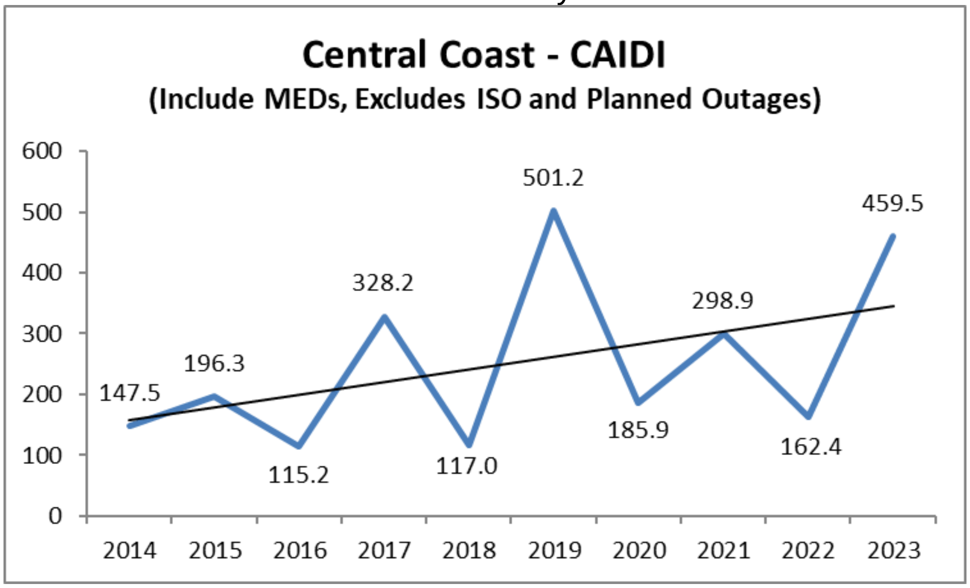


Chart 69: Division Reliability - CAIDI Indices

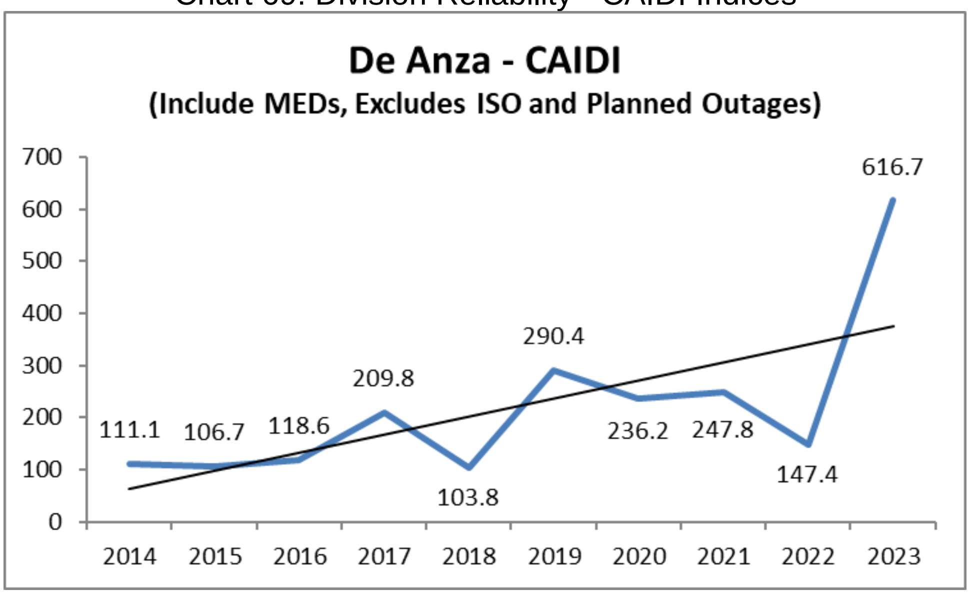


Chart 70: Division Reliability - CAIDI Indices

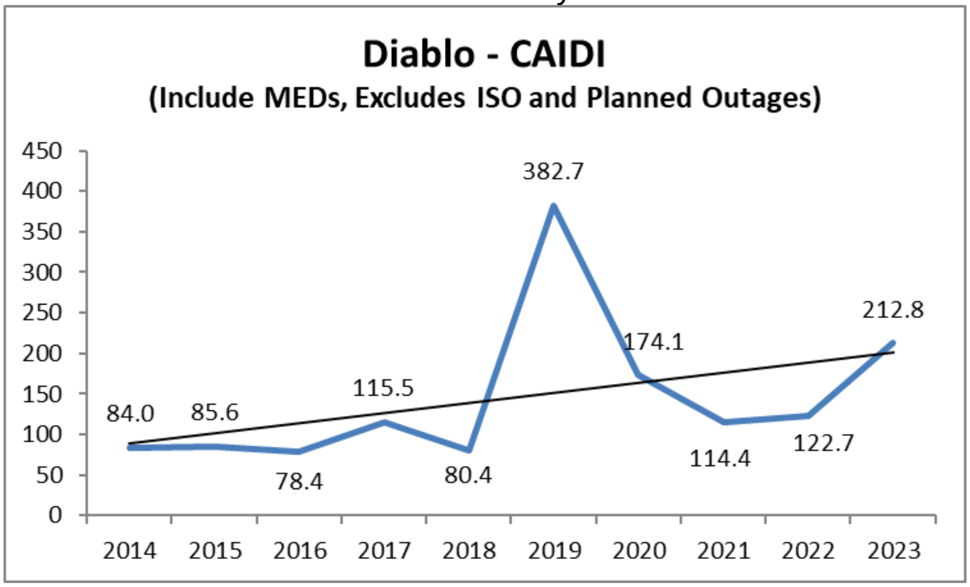


Chart 71: Division Reliability - CAIDI Indices

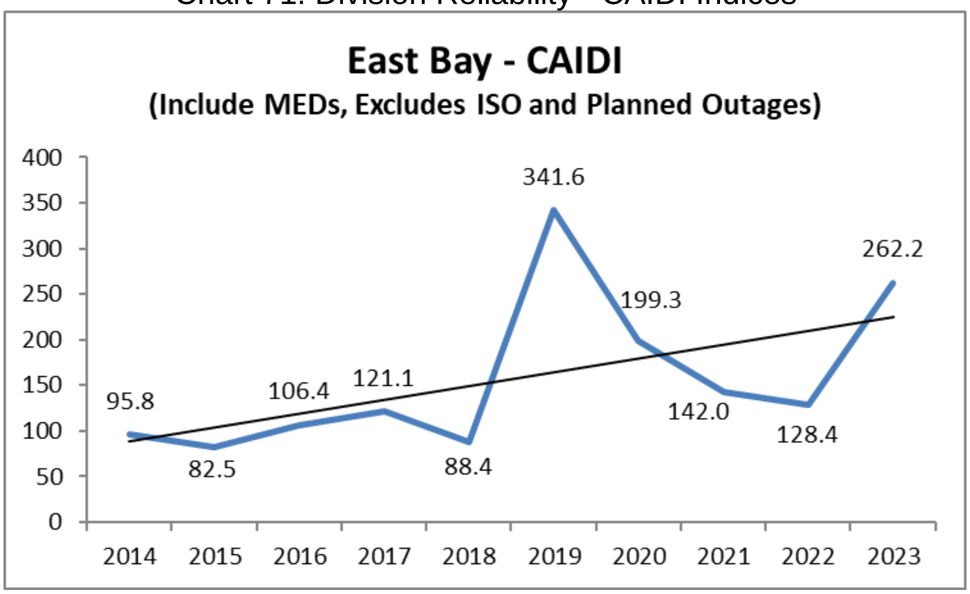


Chart 72: Division Reliability - CAIDI Indices

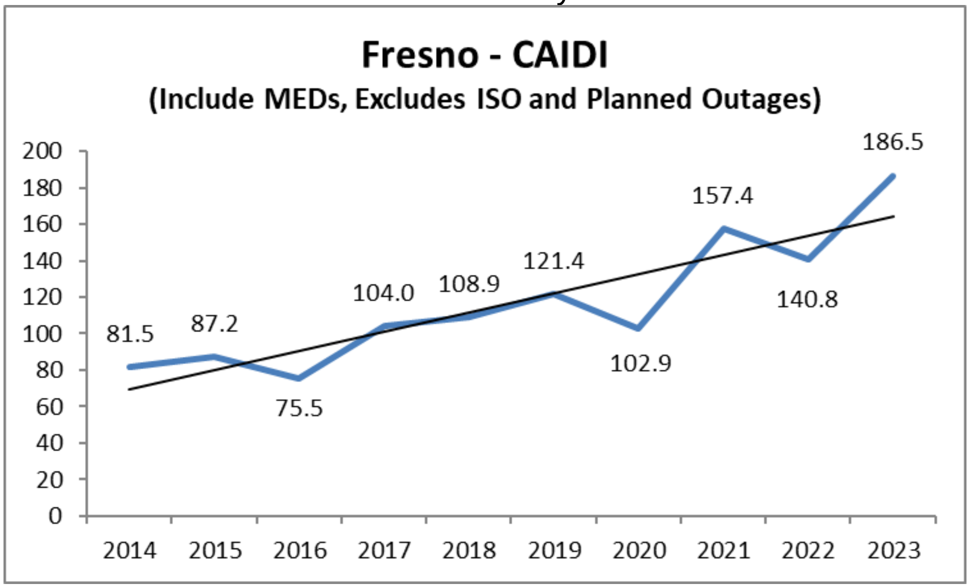


Chart 73: Division Reliability - CAIDI Indices

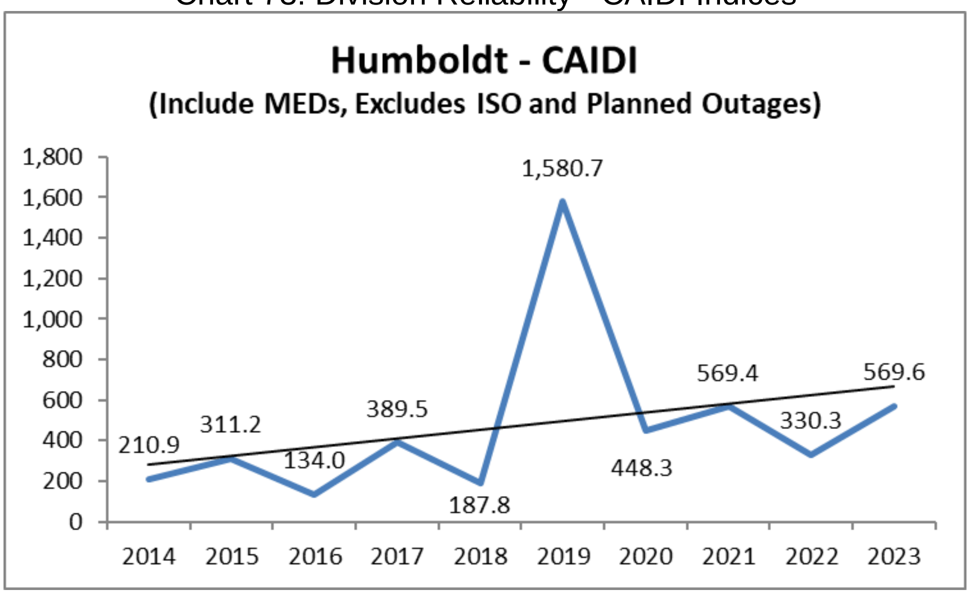


Chart 74: Division Reliability - CAIDI Indices

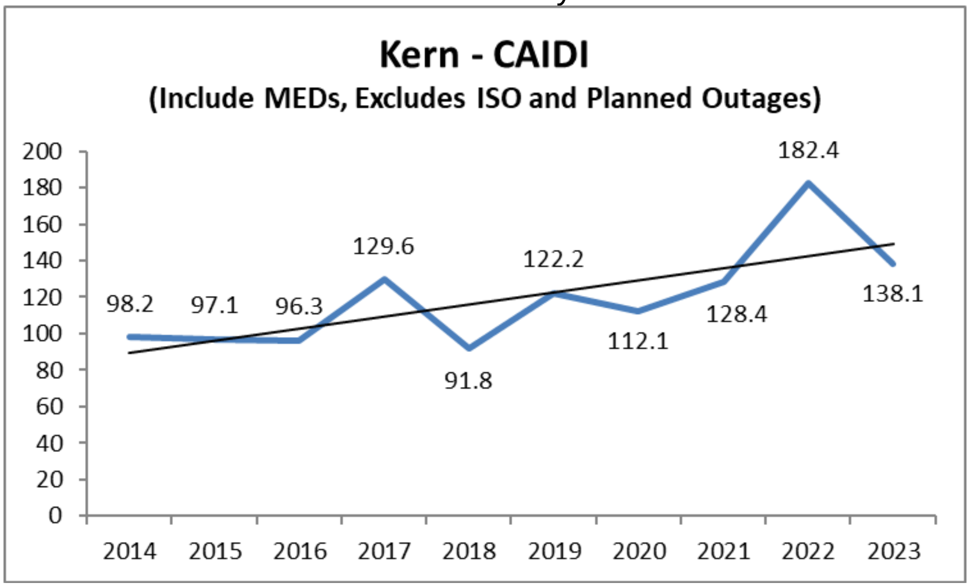


Chart 75: Division Reliability - CAIDI Indices

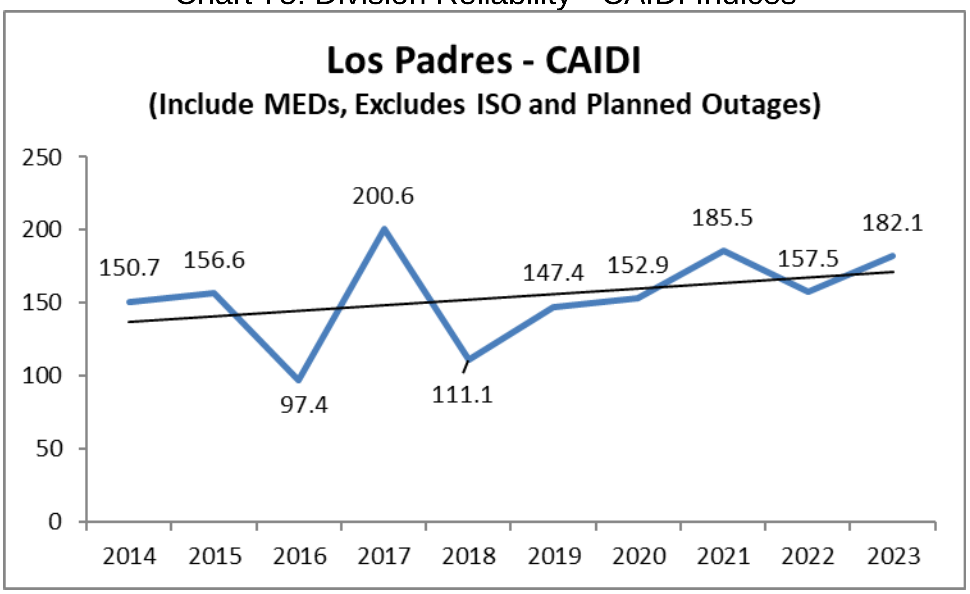


Chart 76: Division Reliability - CAIDI Indices

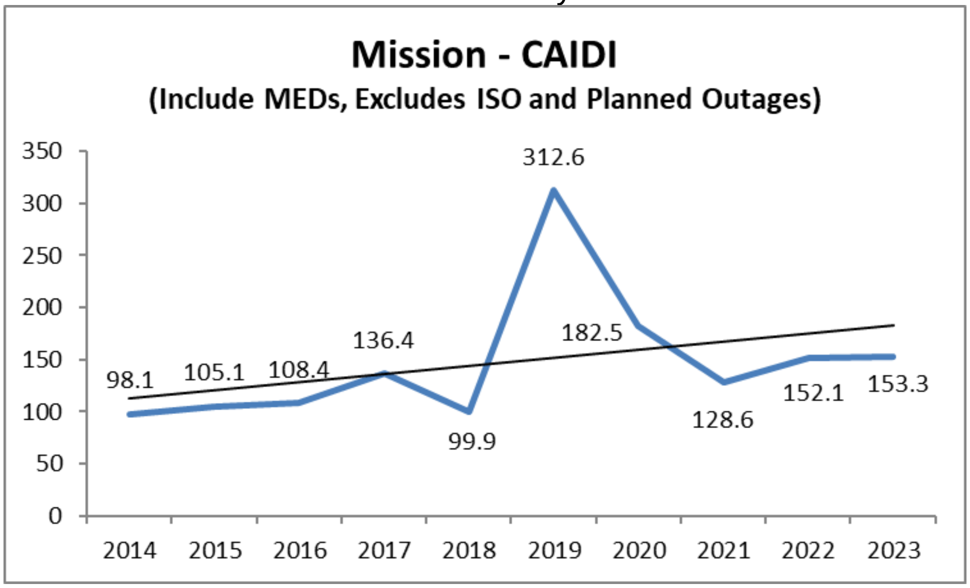


Chart 77: Division Reliability - CAIDI Indices

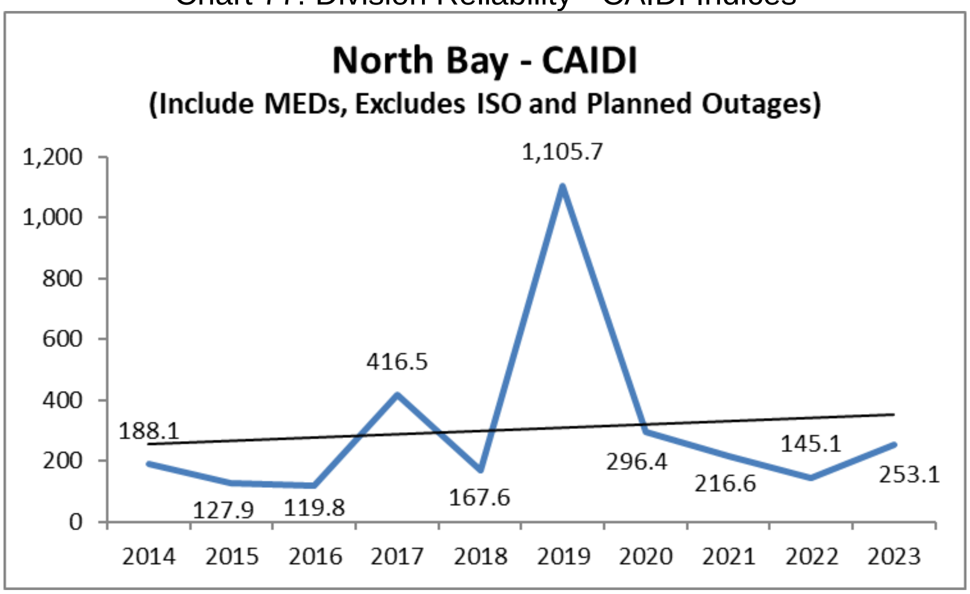


Chart 78: Division Reliability - CAIDI Indices

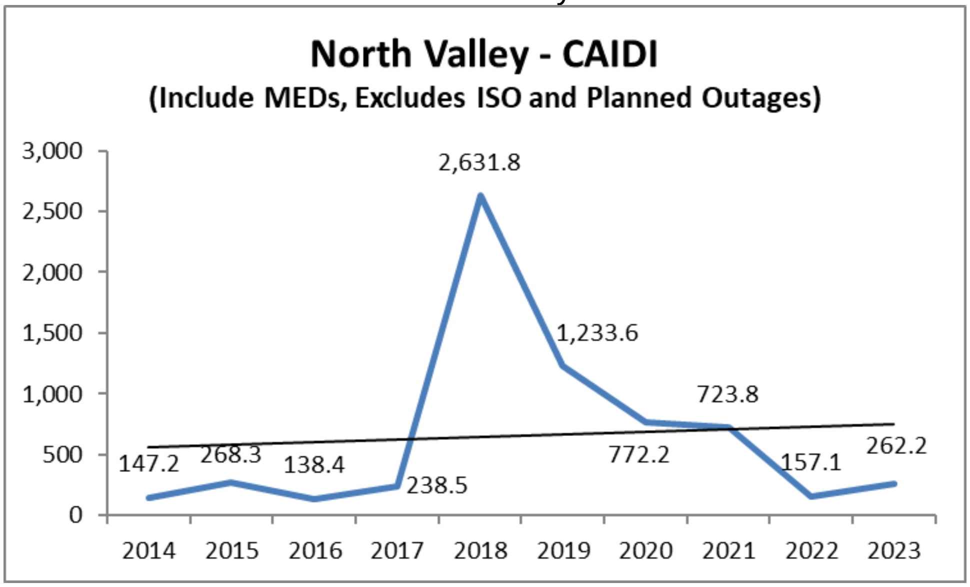


Chart 79: Division Reliability - CAIDI Indices

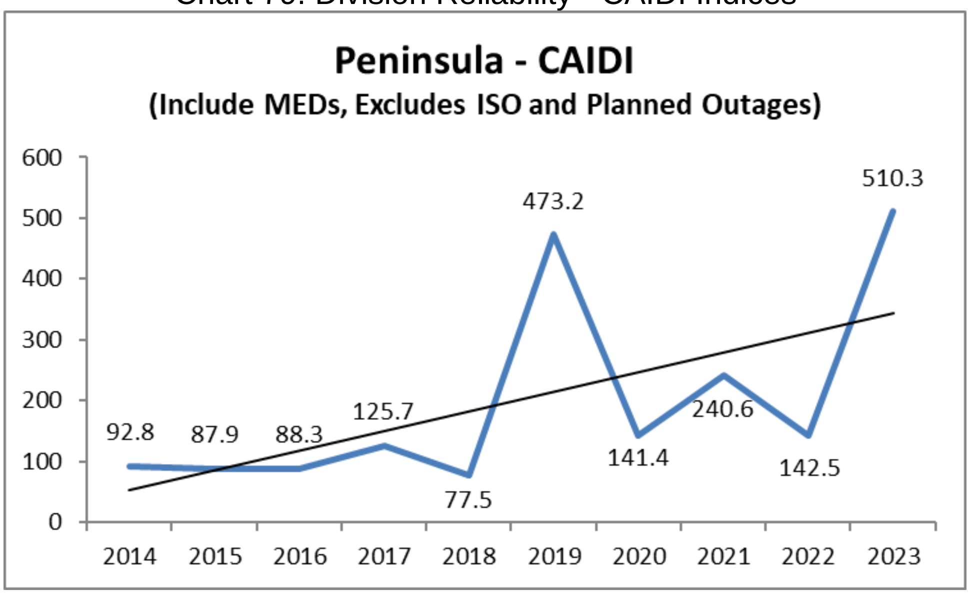


Chart 80: Division Reliability - CAIDI Indices

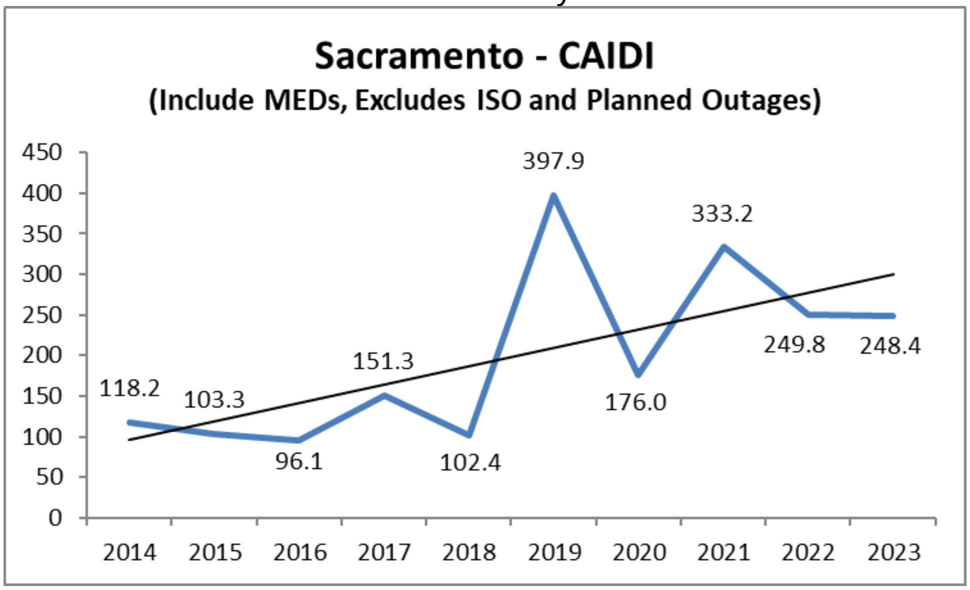


Chart 81: Division Reliability - CAIDI Indices

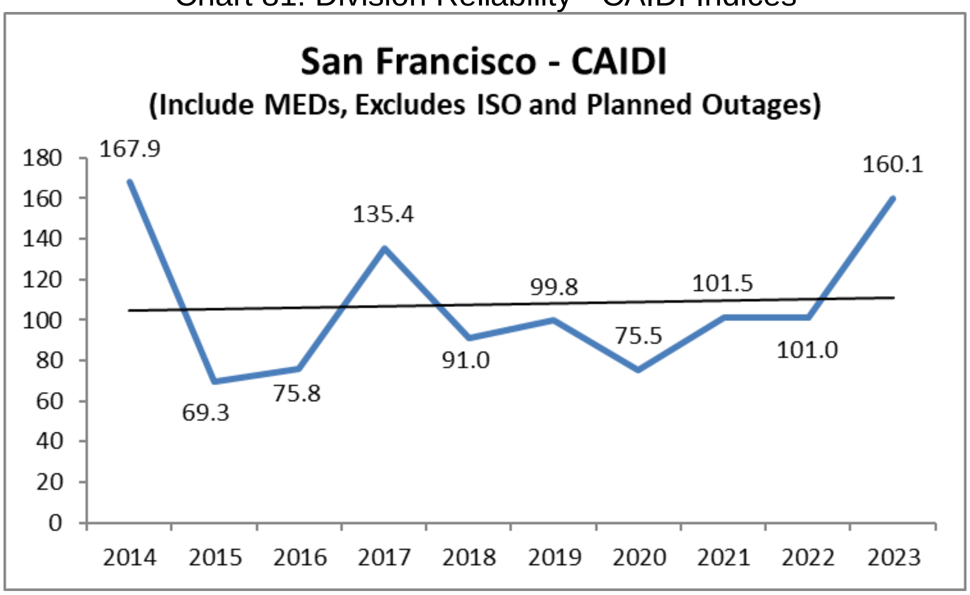


Chart 82: Division Reliability - CAIDI Indices

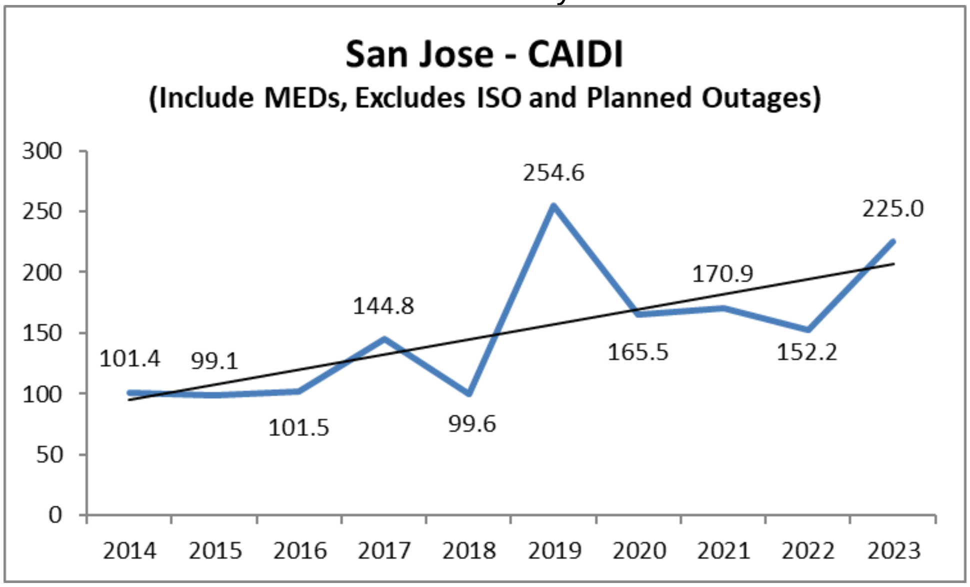


Chart 83: Division Reliability - CAIDI Indices

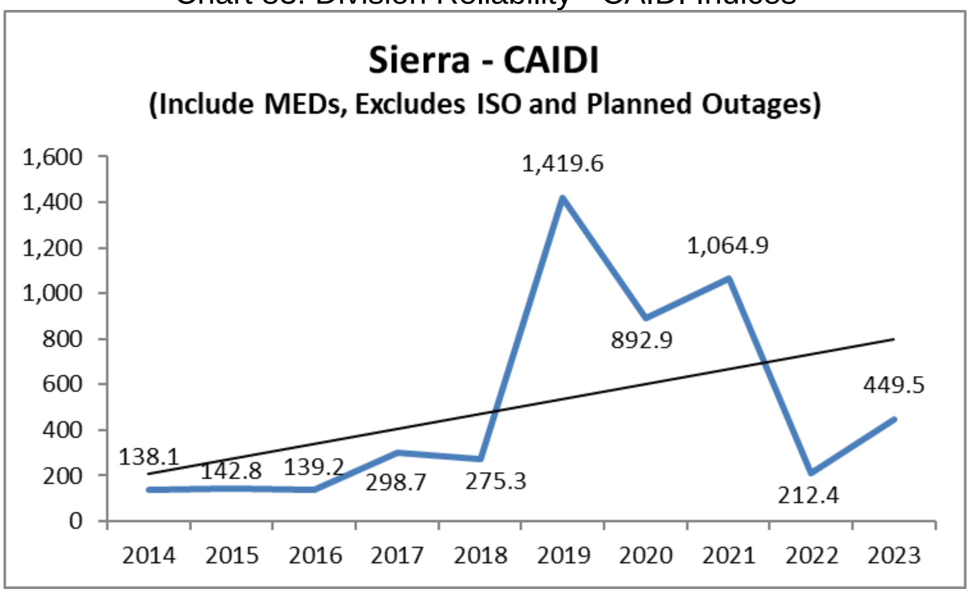


Chart 84: Division Reliability - CAIDI Indices

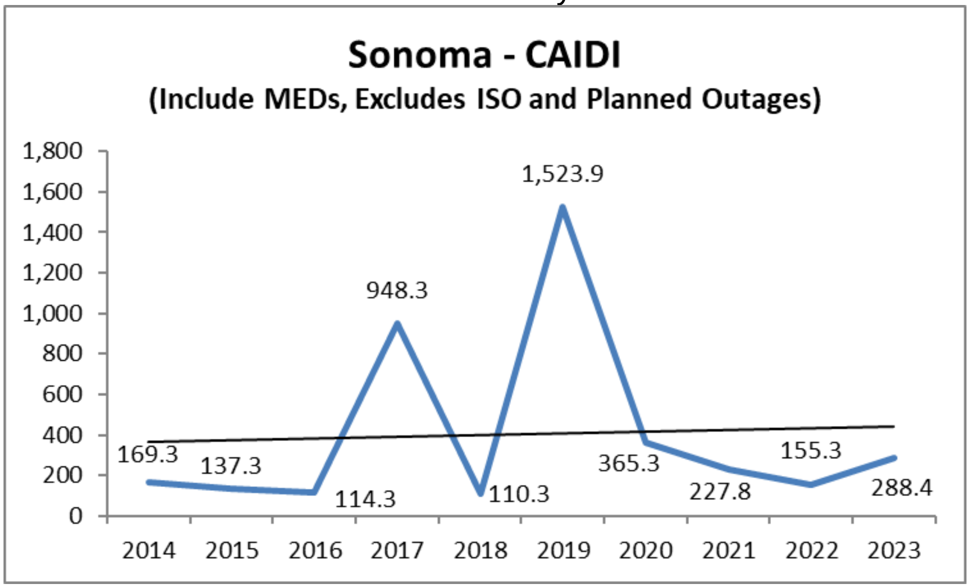


Chart 85: Division Reliability - CAIDI Indices

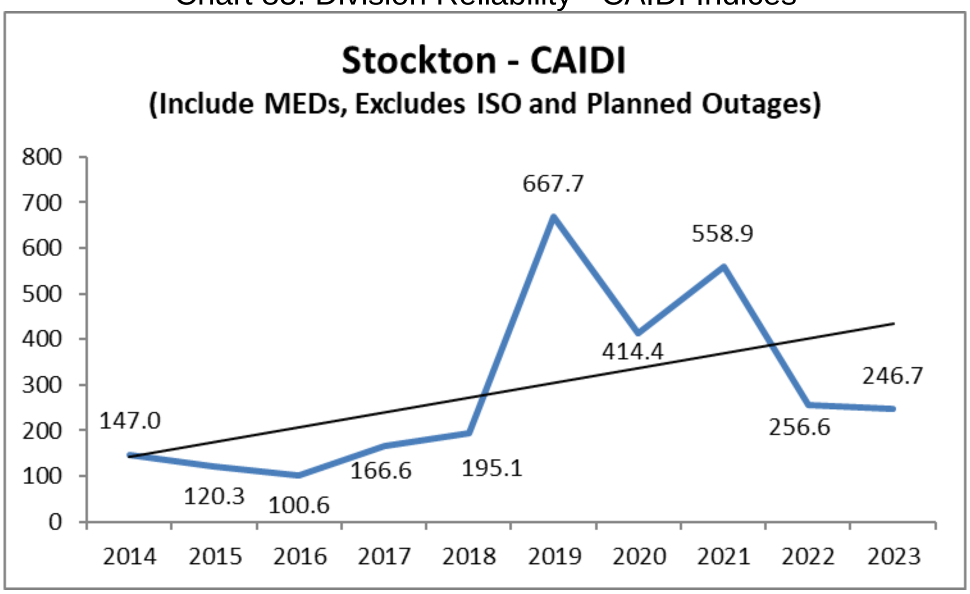
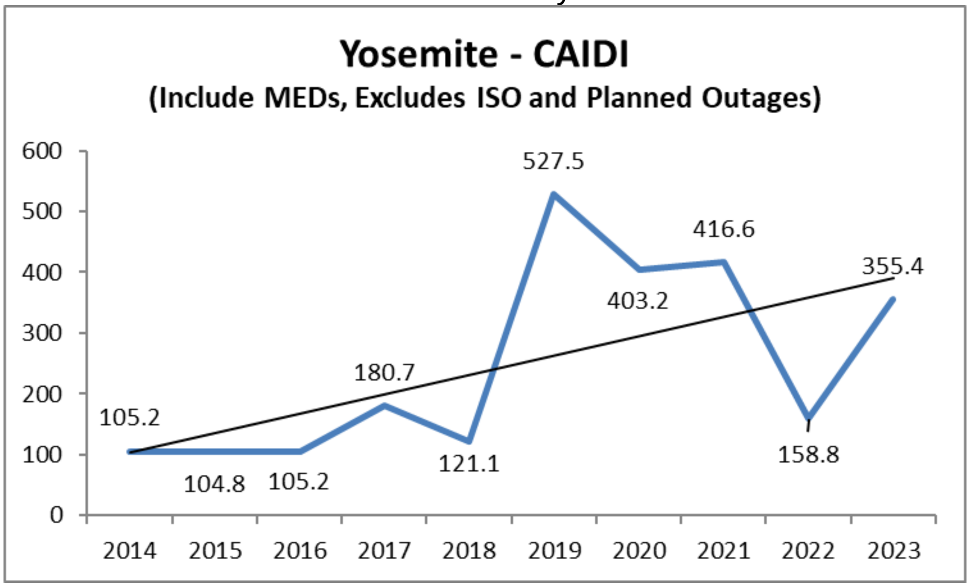


Chart 86: Division Reliability - CAIDI Indices



ii. Charts for Division Reliability Indices for the past 10 years with linear trend line excluding ISO, planned outages and MED

1. AIDI Performance Results (MED Excluded)

Chart 87: Division Reliability - AIDI Indices

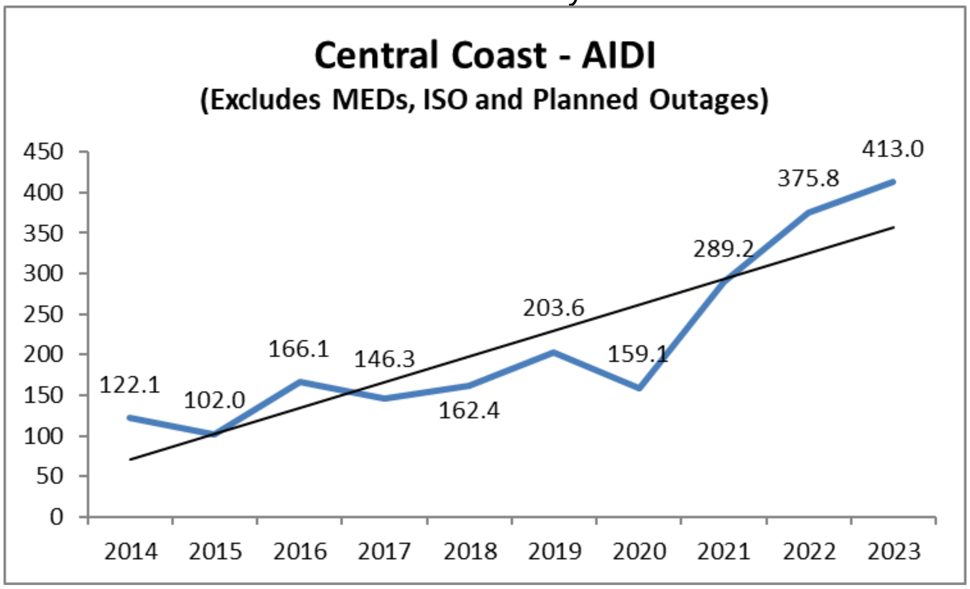


Chart 88: Division Reliability - AIDI Indices

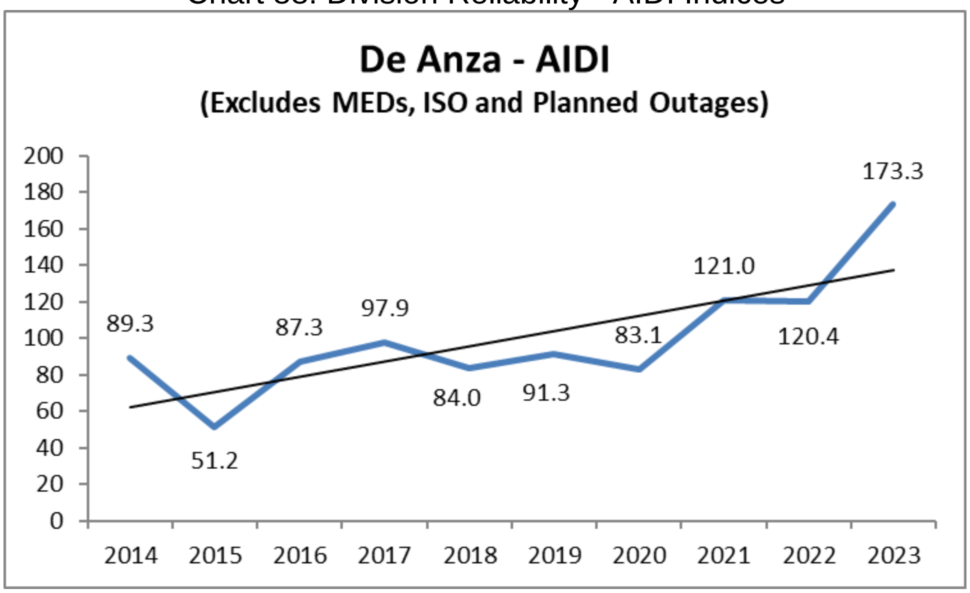


Chart 89: Division Reliability - AIDI Indices

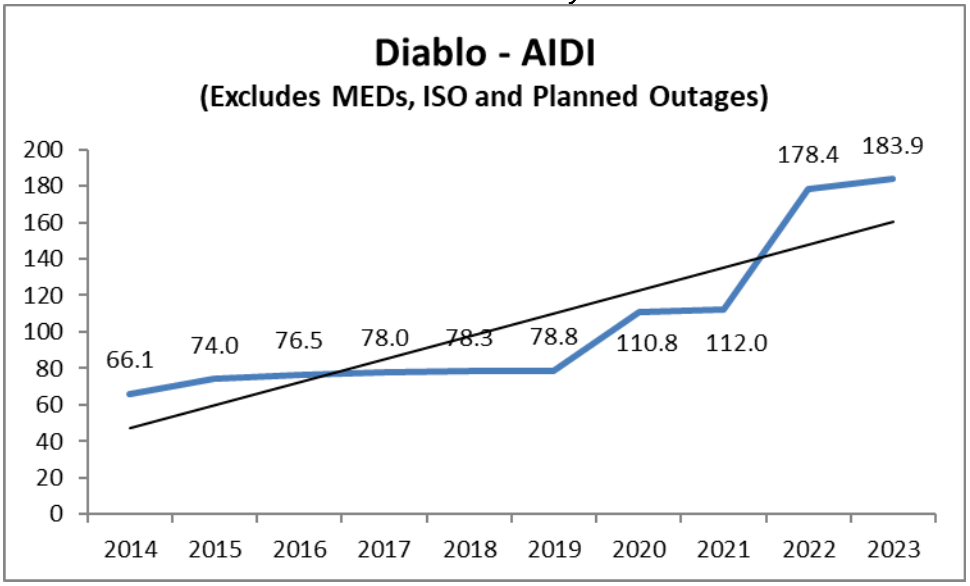


Chart 90: Division Reliability - AIDI Indices

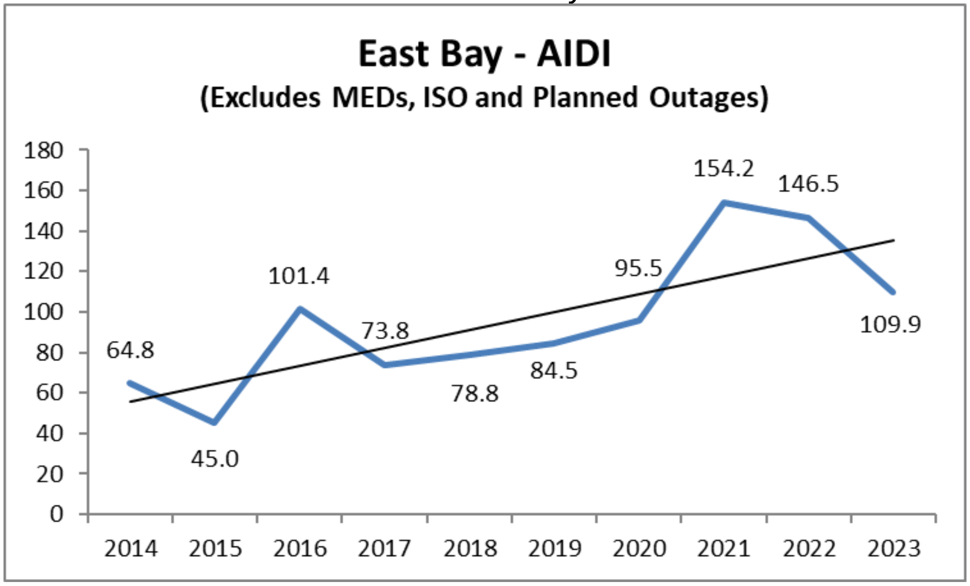


Chart 91: Division Reliability - AIDI Indices

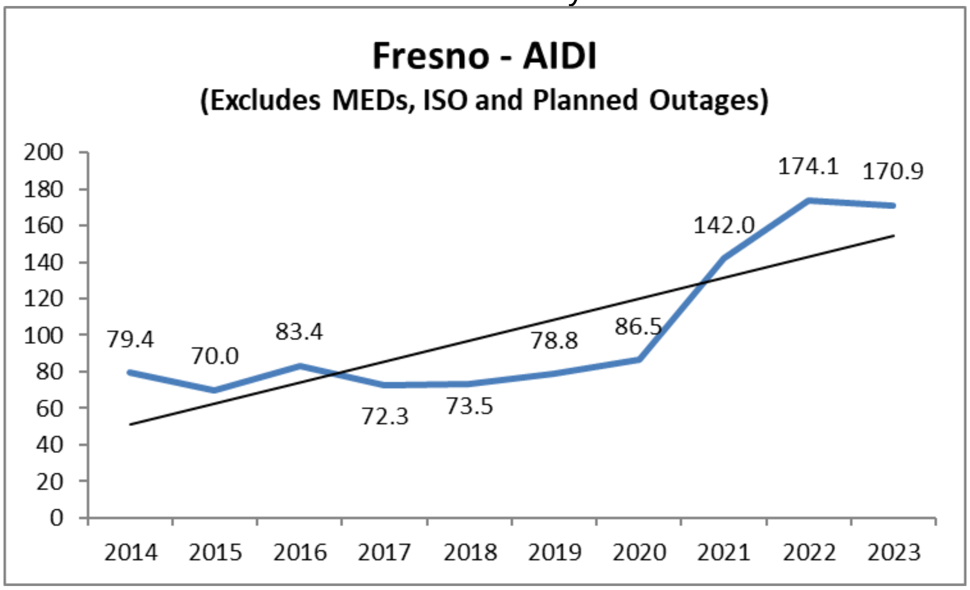


Chart 92: Division Reliability - AIDI Indices

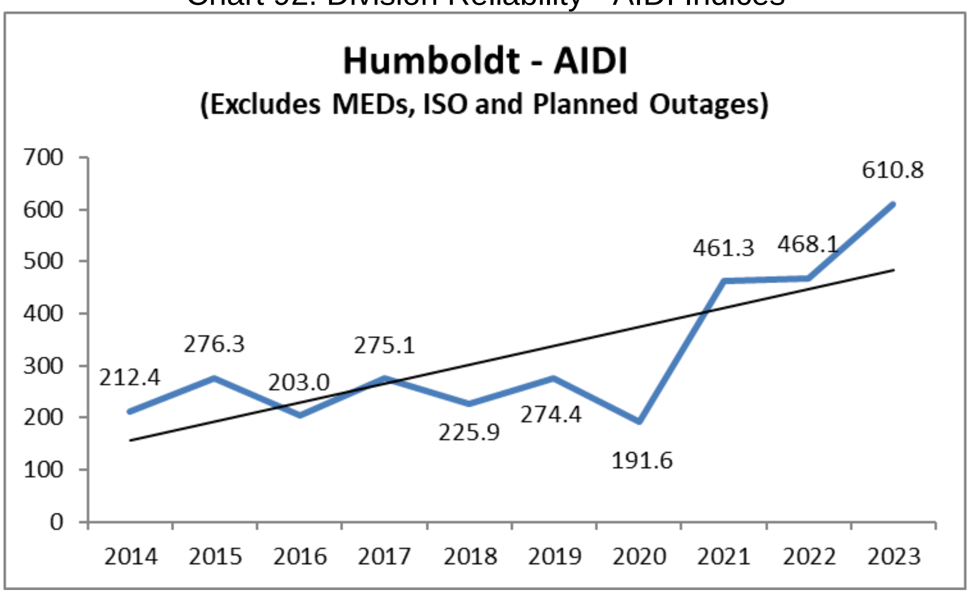


Chart 93: Division Reliability - AIDI Indices

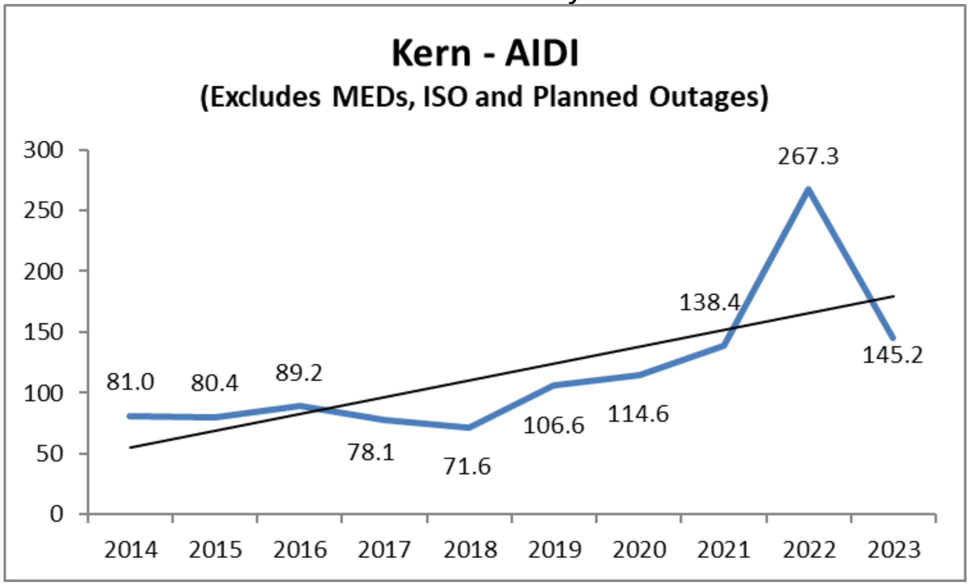


Chart 94: Division Reliability - AIDI Indices

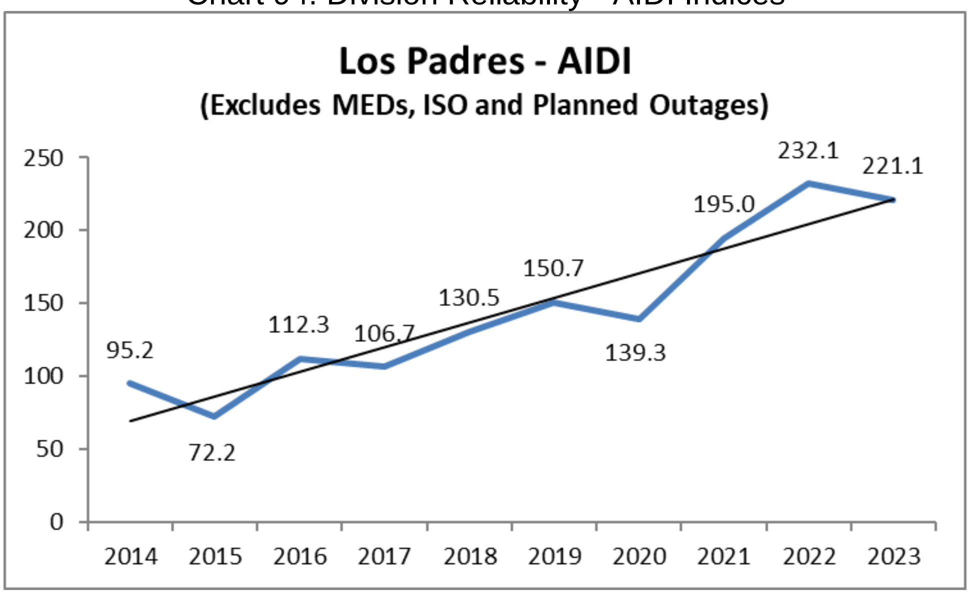


Chart 95: Division Reliability - AIDI Indices

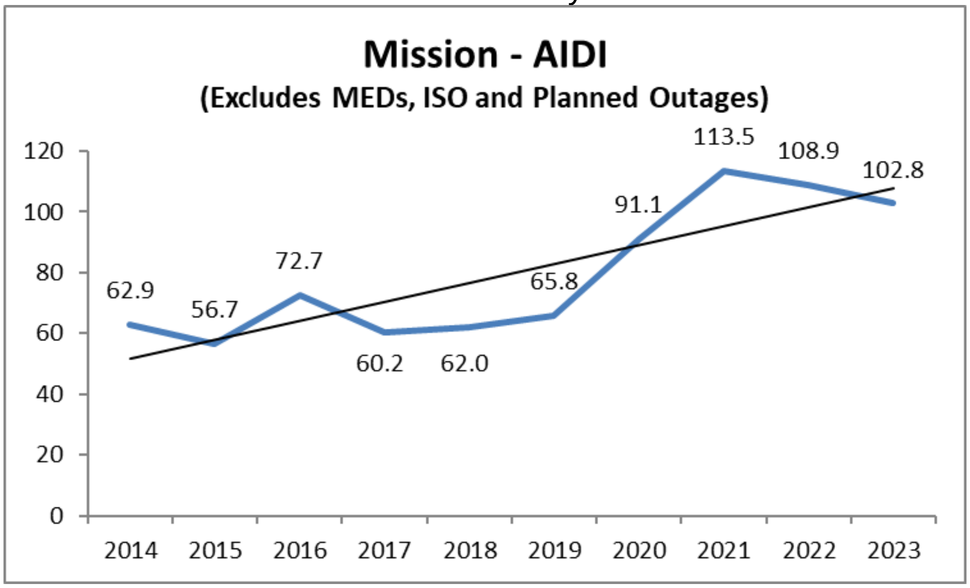


Chart 96: Division Reliability - AIDI Indices

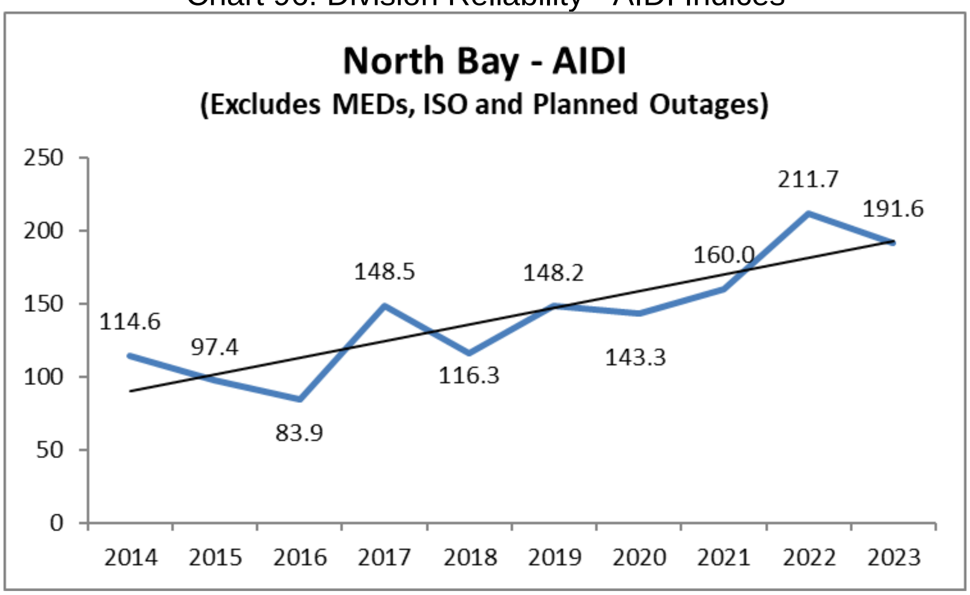


Chart 97: Division Reliability - AIDI Indices

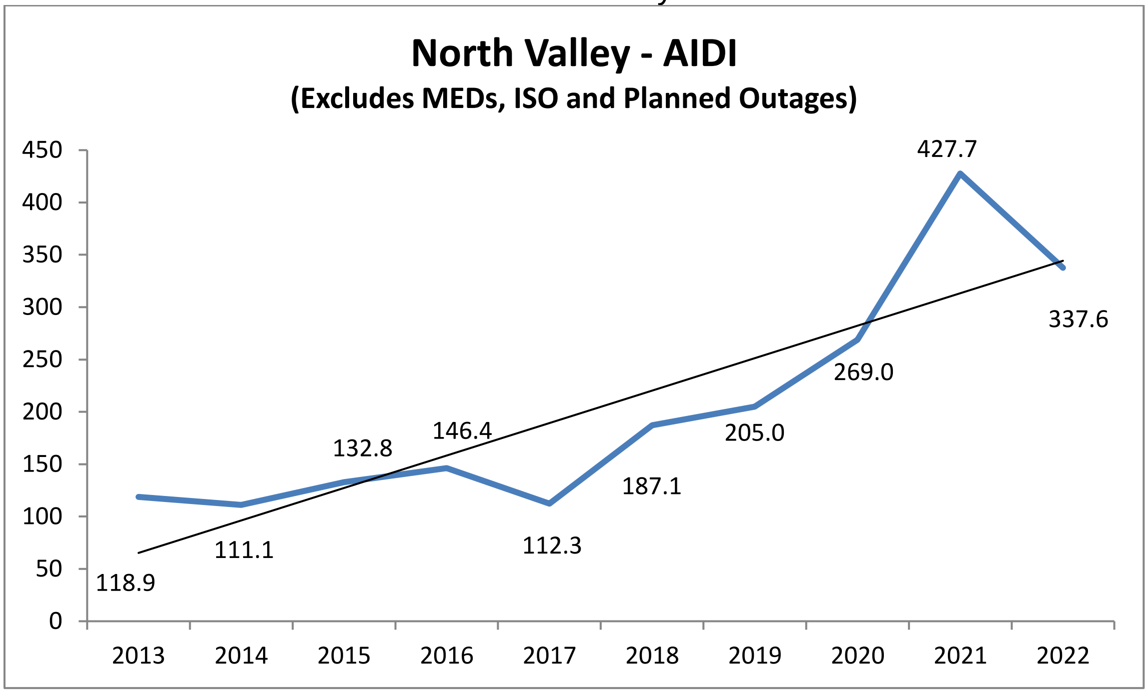


Chart 98: Division Reliability - AIDI Indices

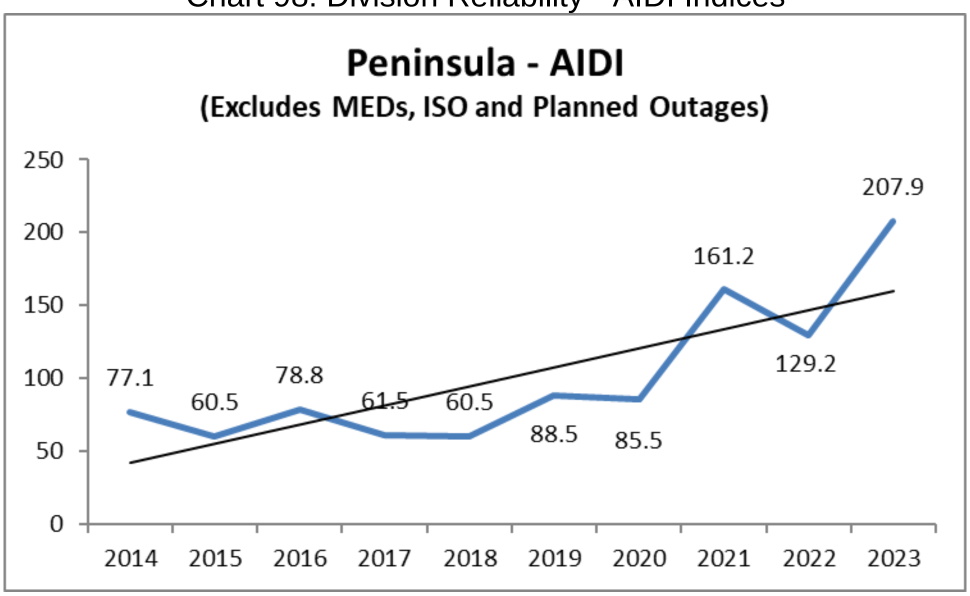


Chart 99: Division Reliability - AIDI Indices

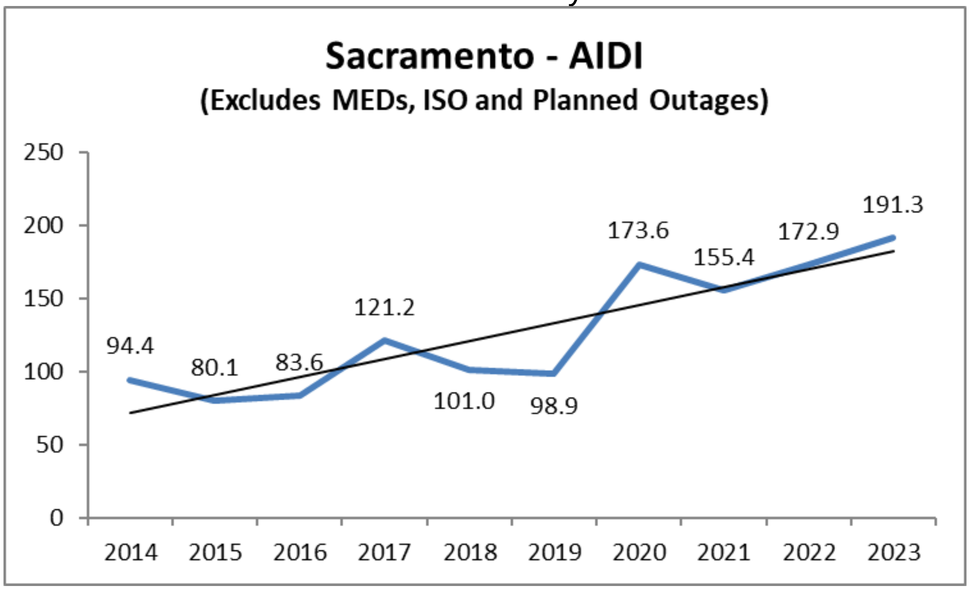


Chart 100: Division Reliability - AIDI Indices

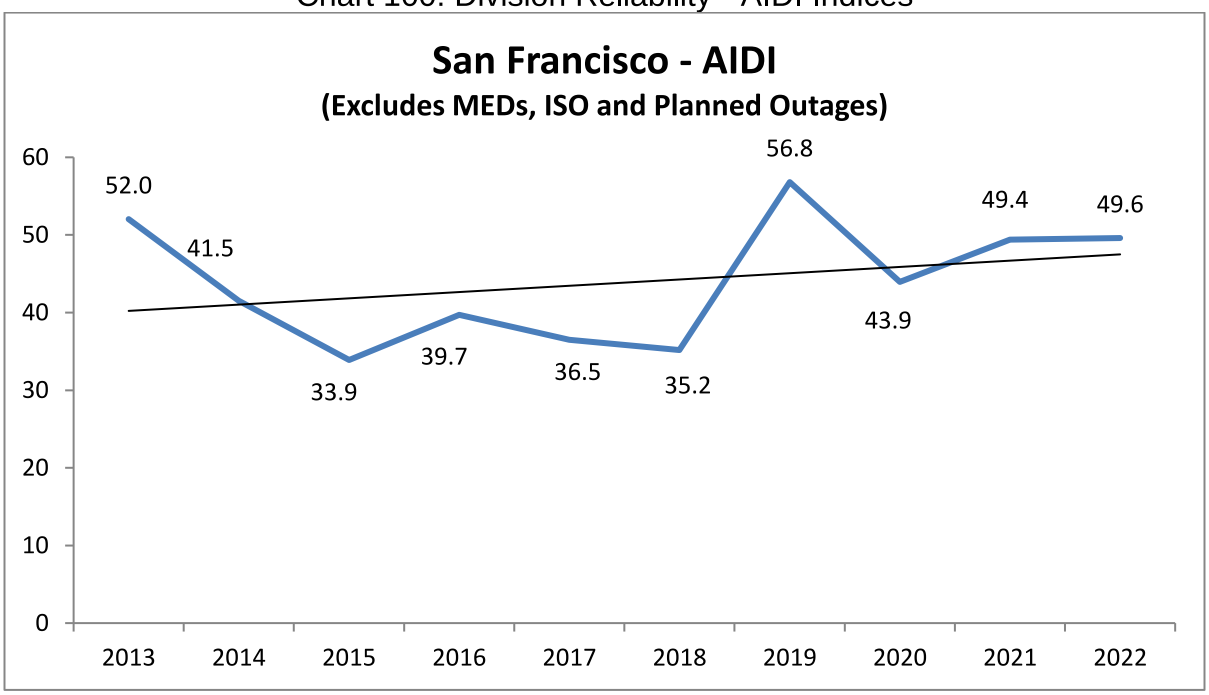


Chart 101: Division Reliability - AIDI Indices

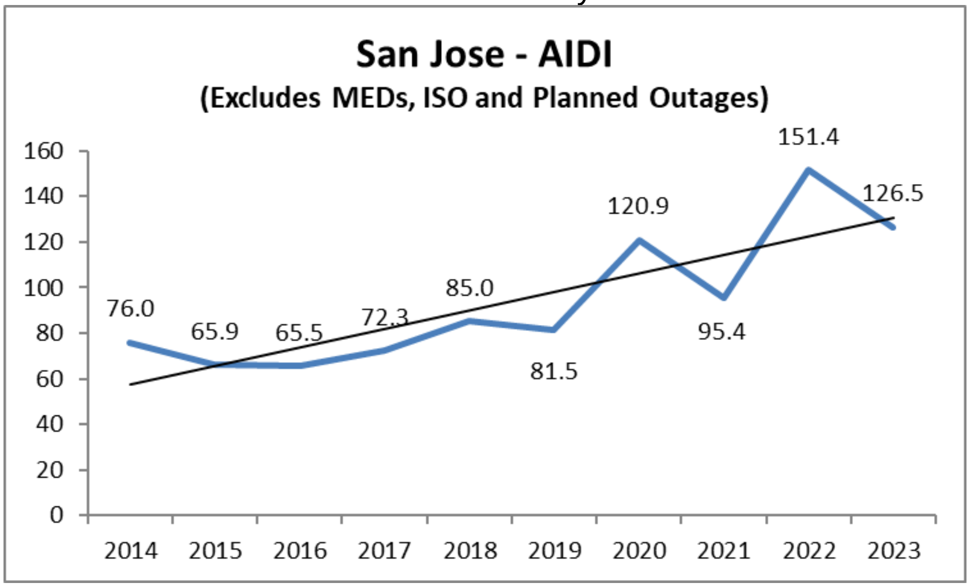


Chart 102: Division Reliability - AIDI Indices

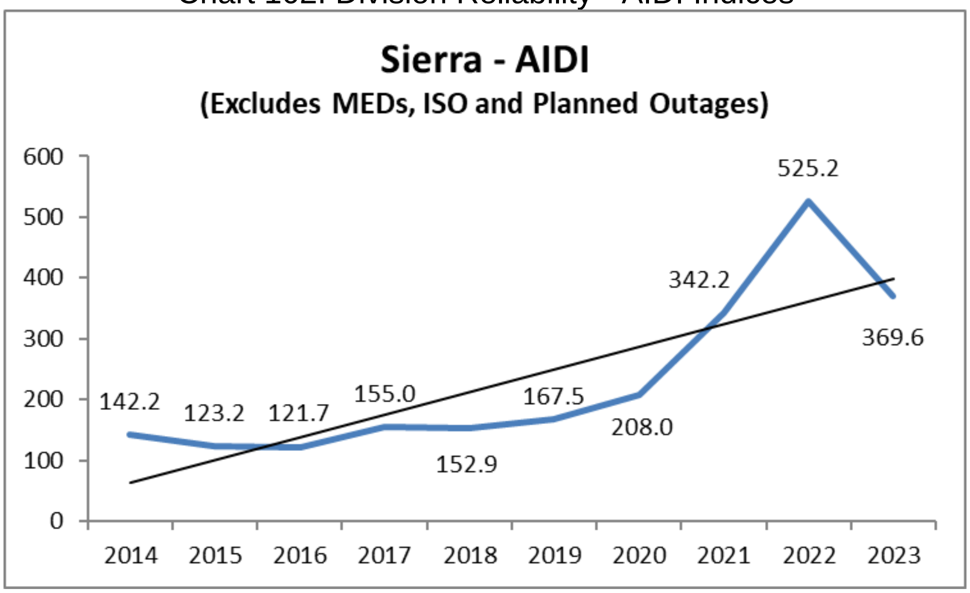


Chart 103: Division Reliability - AIDI Indices

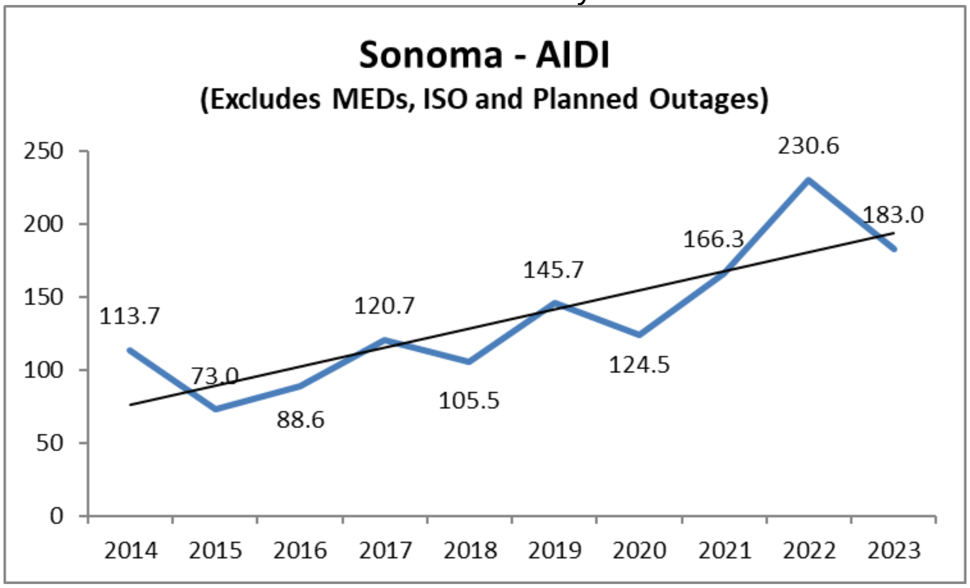


Chart 104: Division Reliability - AIDI Indices

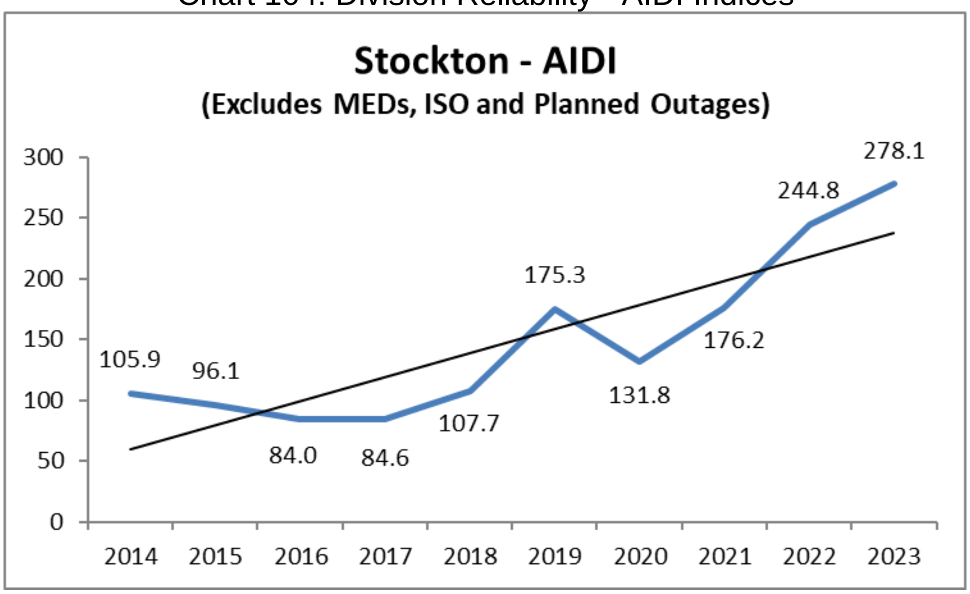
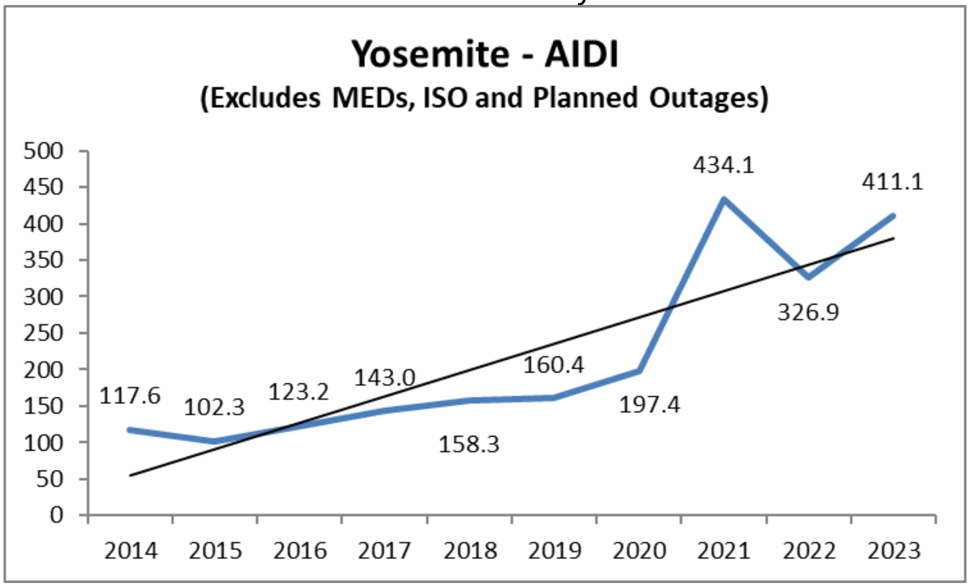


Chart 105: Division Reliability - AIDI Indices



2. AIFI Performance Results (MED Excluded)

Chart 106: Division Reliability - AIFI Indices

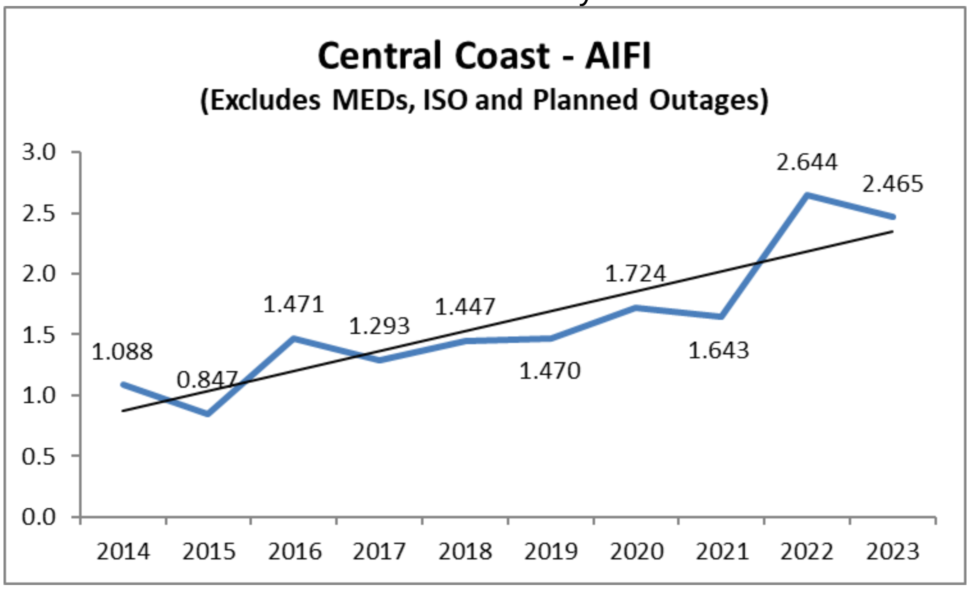


Chart 107: Division Reliability - AIFI Indices

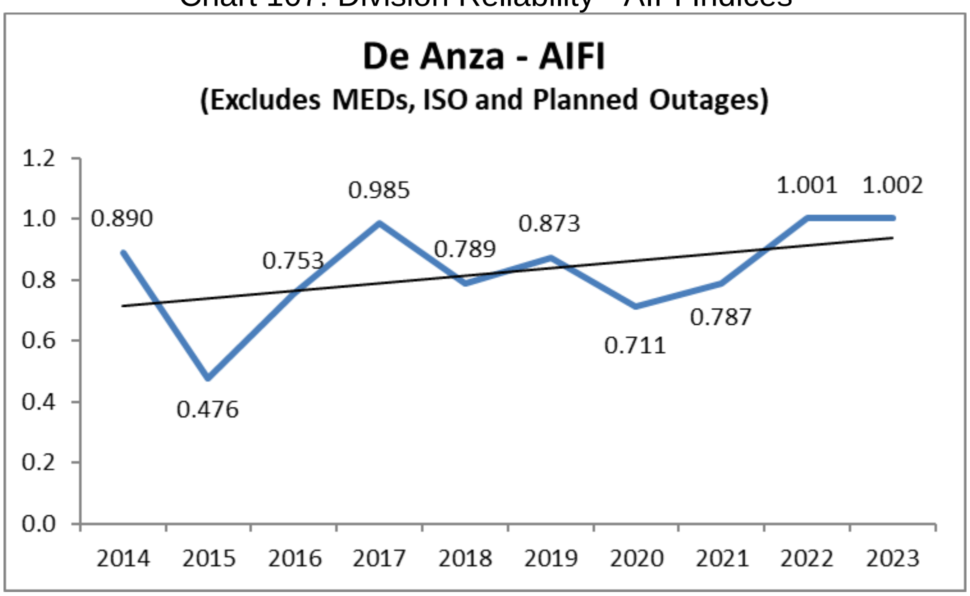


Chart 108: Division Reliability - AIFI Indices

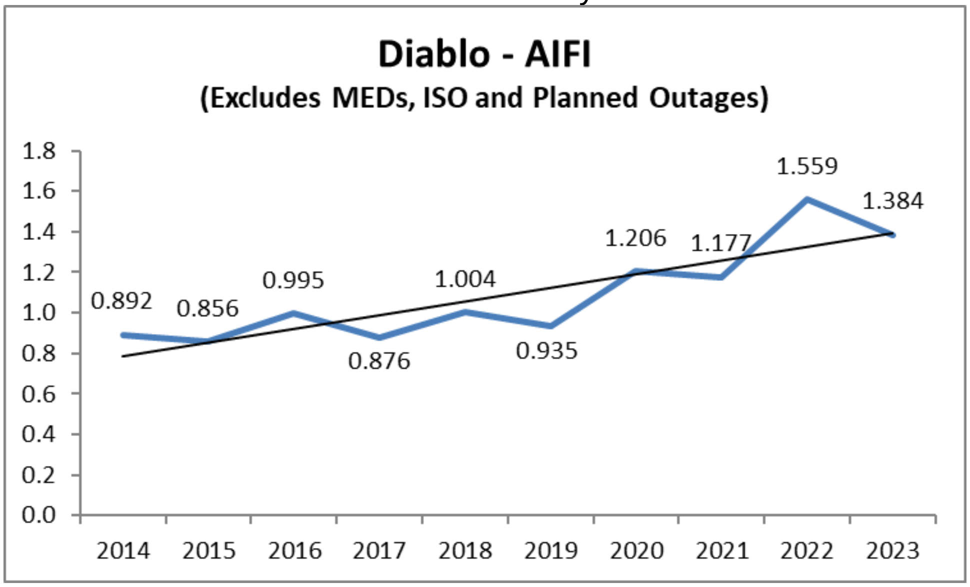


Chart 109: Division Reliability - AIFI Indices

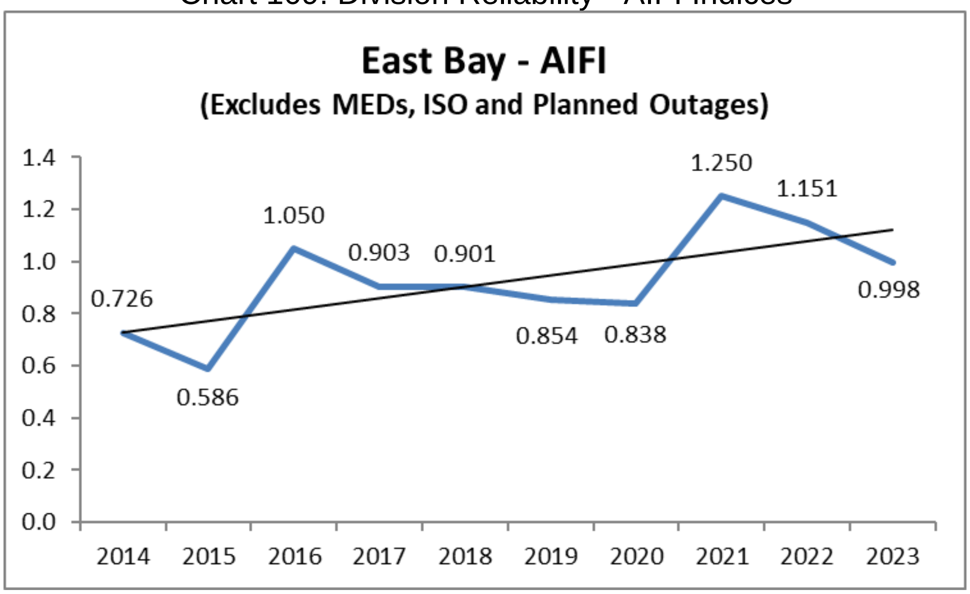


Chart 110: Division Reliability - AIFI Indices

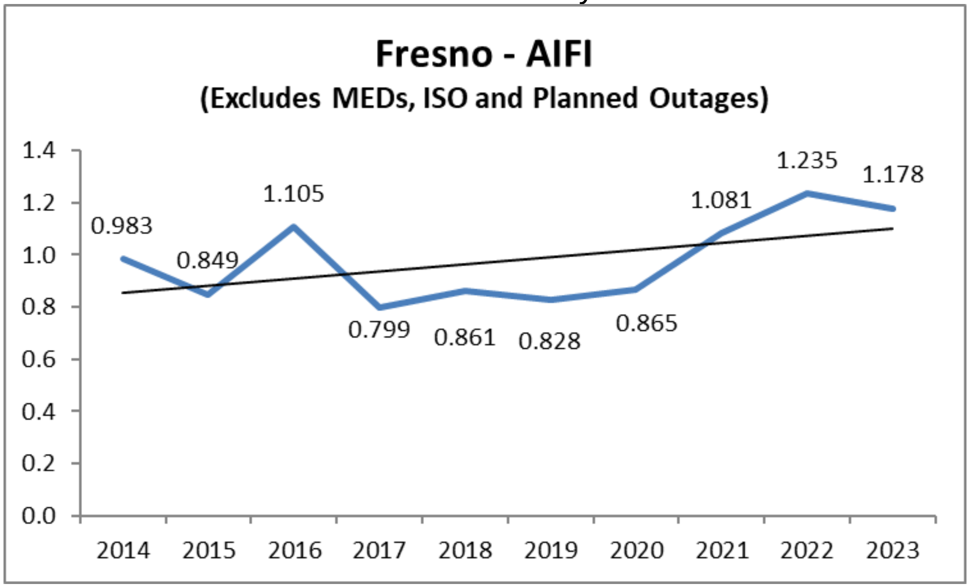


Chart 111: Division Reliability - AIFI Indices

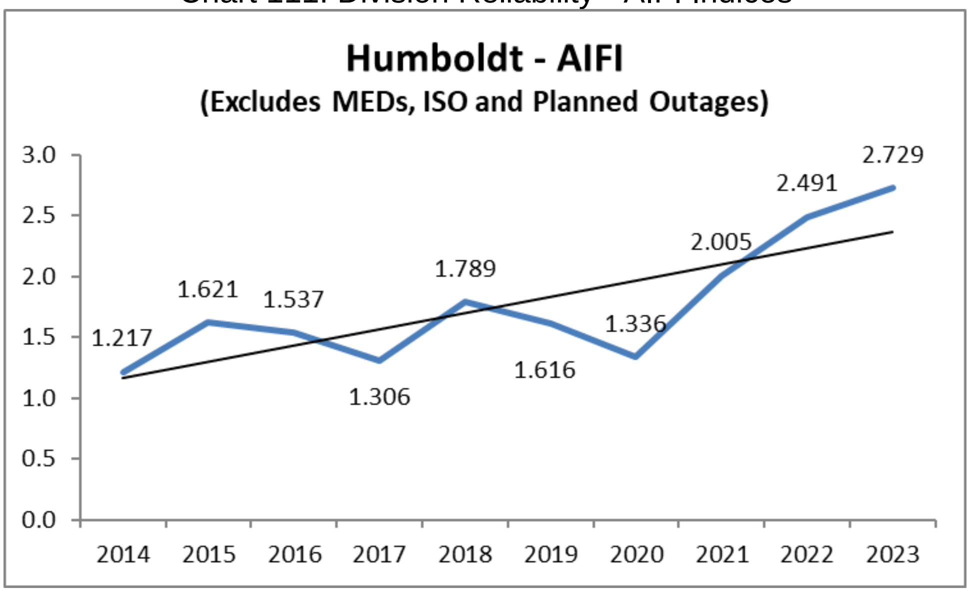


Chart 112: Division Reliability - AIFI Indices

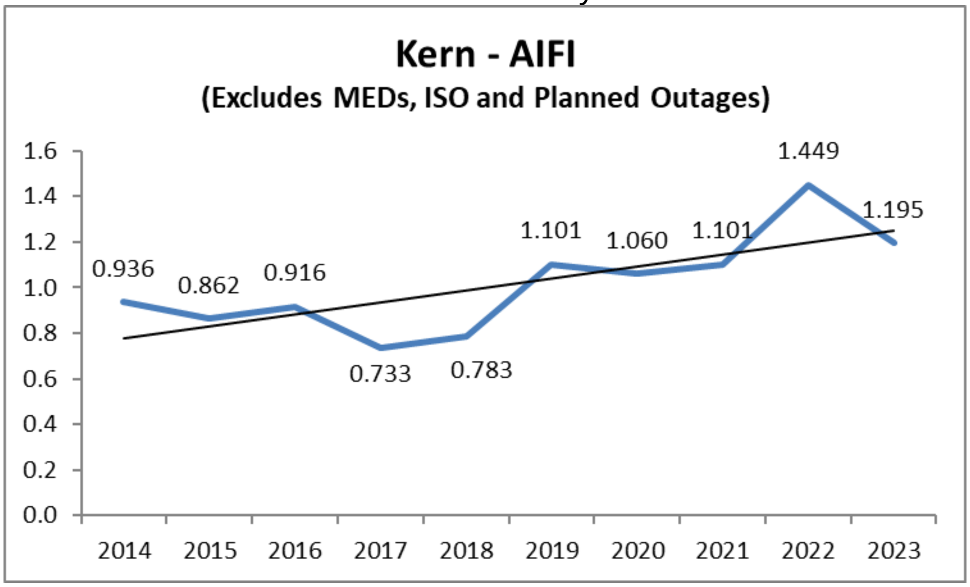


Chart 113: Division Reliability - AIFI Indices

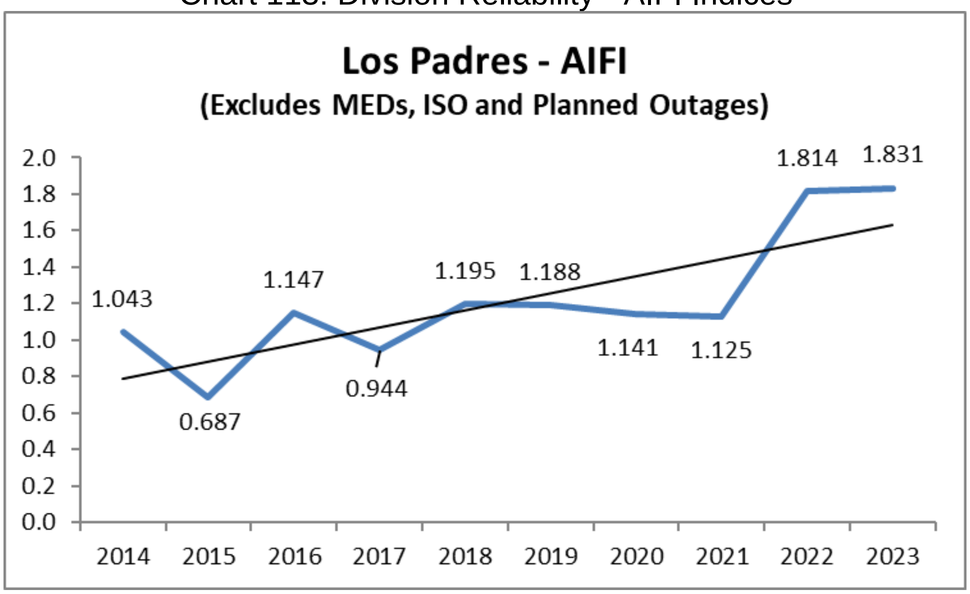


Chart 114: Division Reliability - AIFI Indices

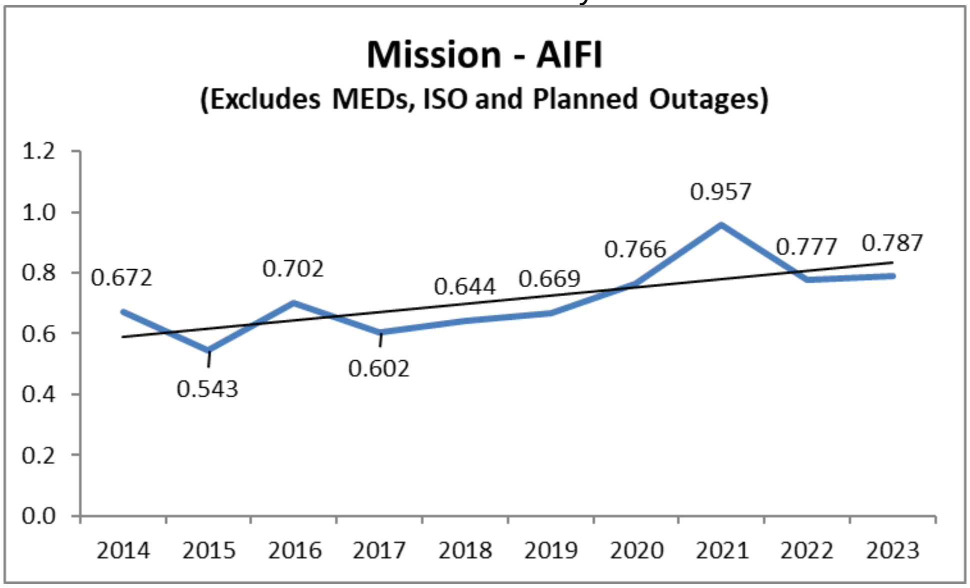


Chart 115: Division Reliability - AIFI Indices

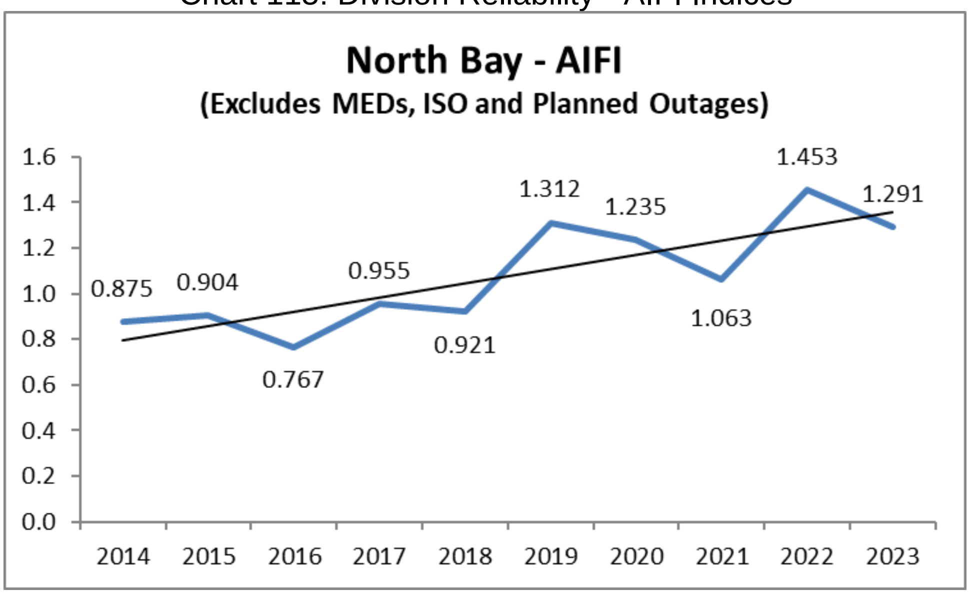


Chart 116: Division Reliability - AIFI Indices

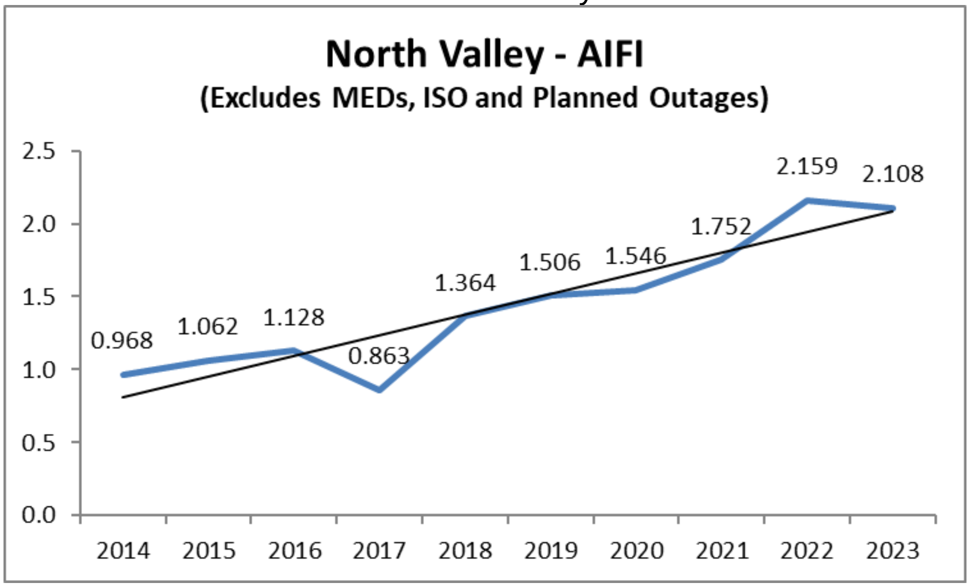


Chart 117: Division Reliability - AIFI Indices

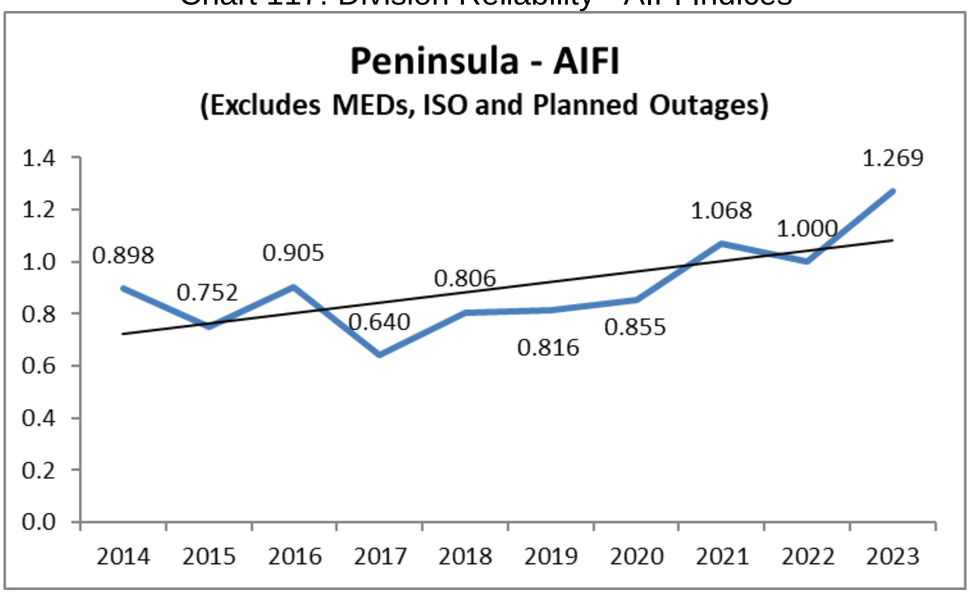


Chart 118: Division Reliability - AIFI Indices

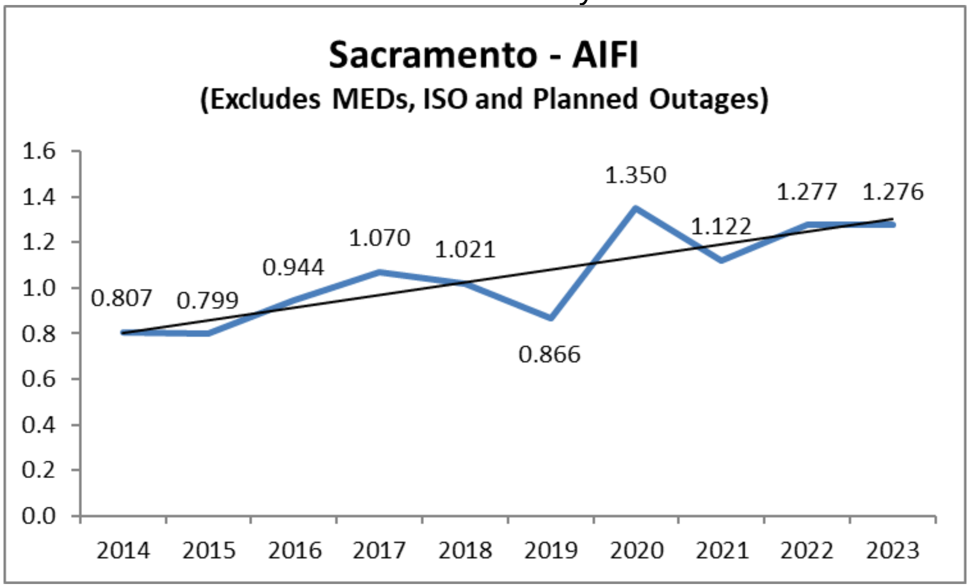


Chart 119: Division Reliability - AIFI Indices

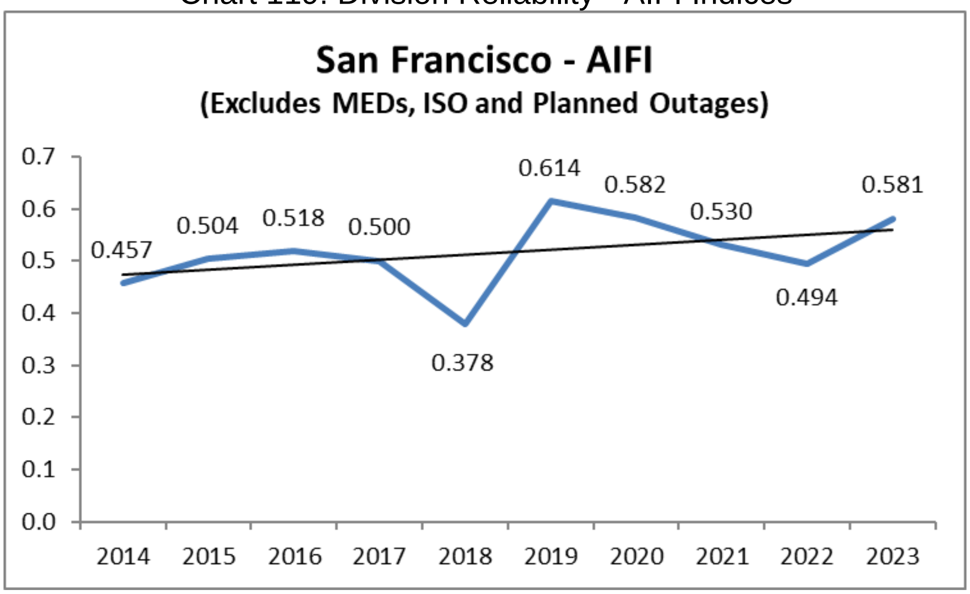


Chart 120: Division Reliability - AIFI Indices

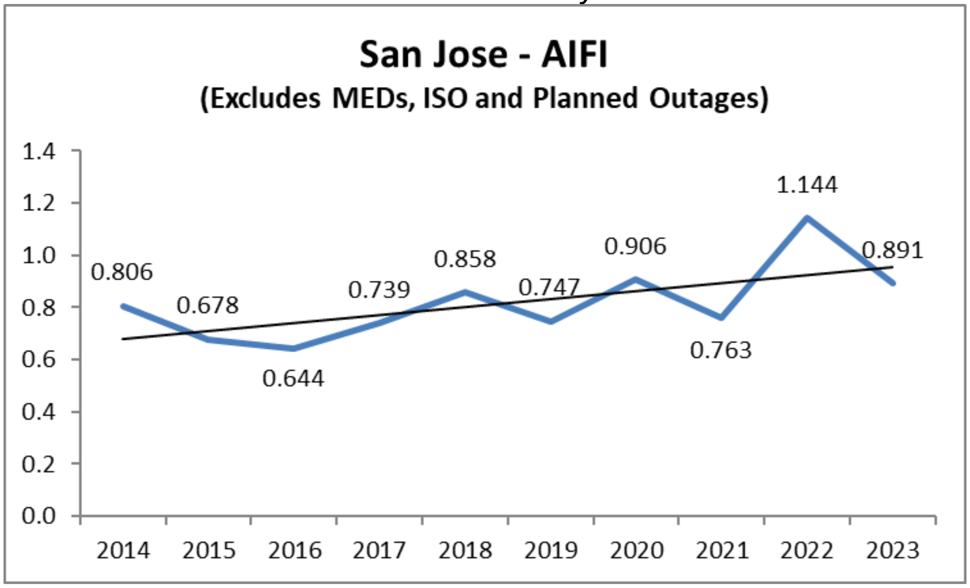


Chart 121: Division Reliability - AIFI Indices

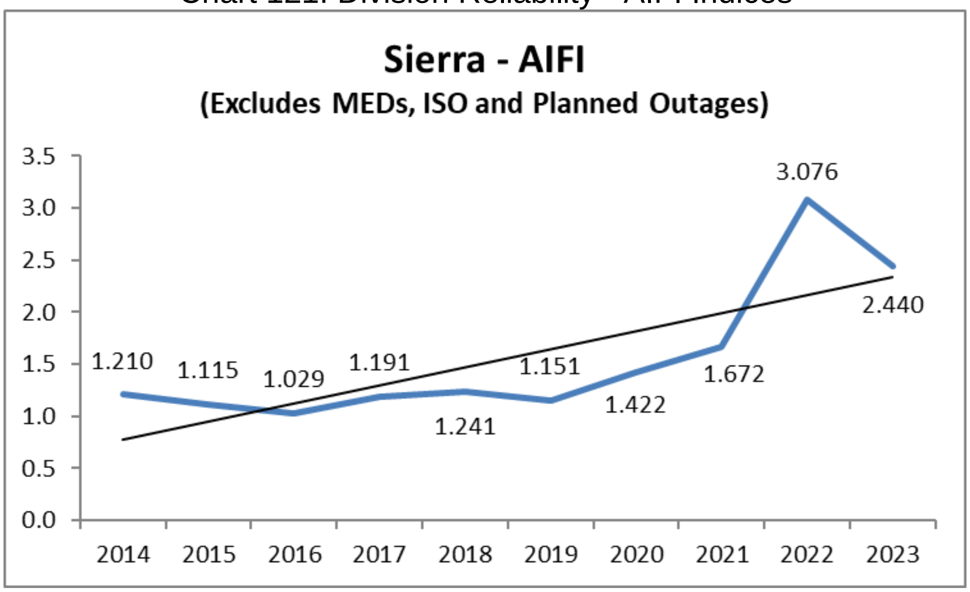


Chart 122: Division Reliability - AIFI Indices

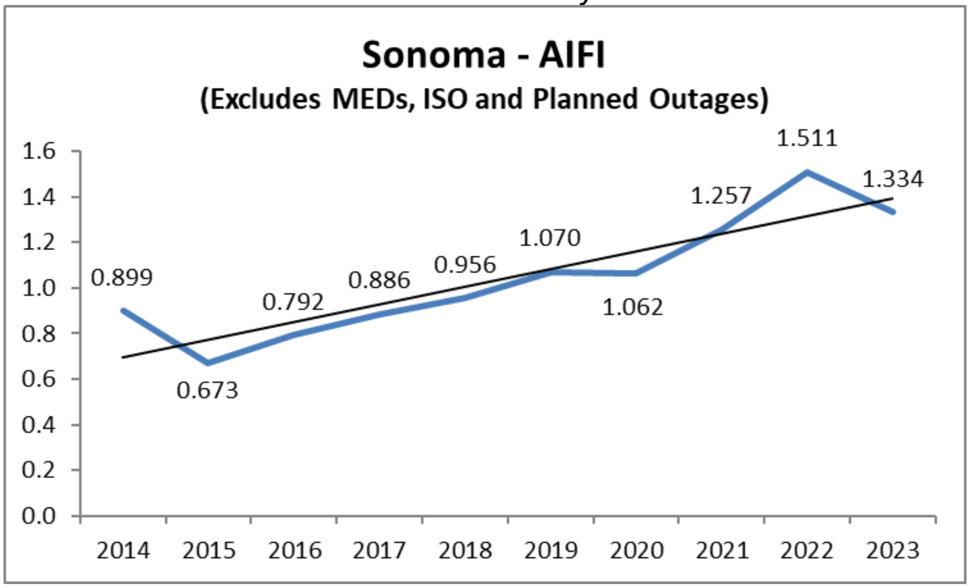


Chart 123: Division Reliability - AIFI Indices

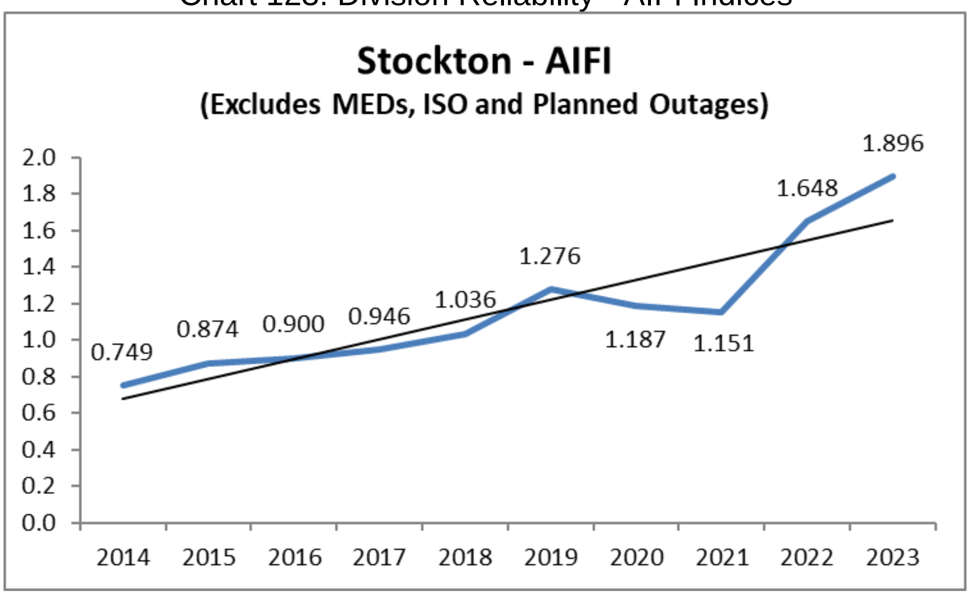
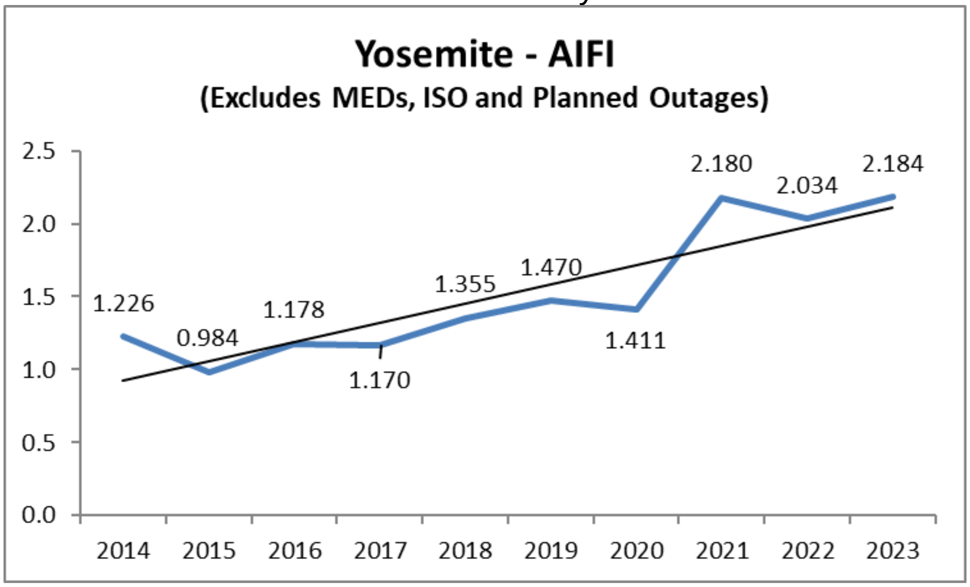


Chart 124: Division Reliability - AIFI Indices



3. MAIFI Performance Results (MED Excluded)

Chart 125: Division Reliability - MAIFI Indices

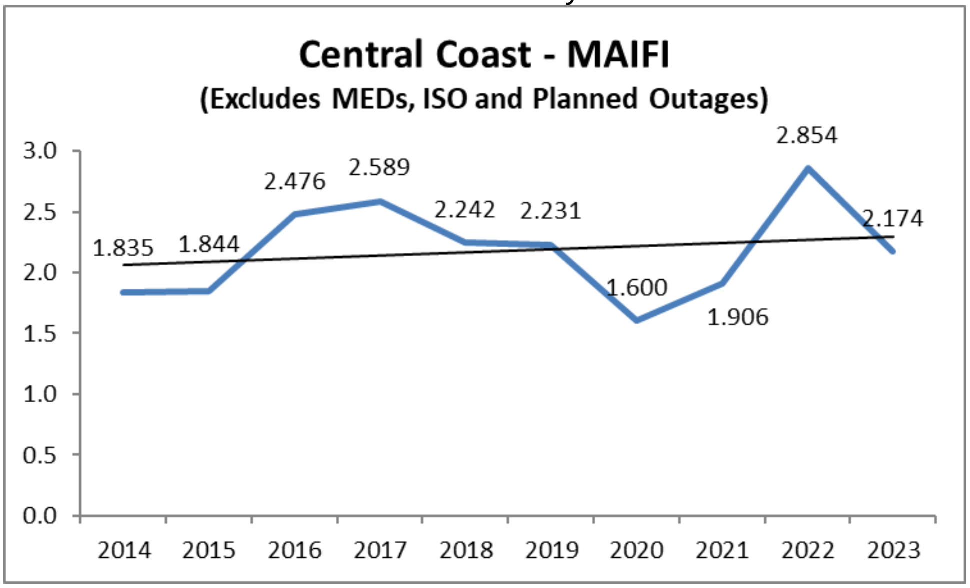


Chart 126: Division Reliability - MAIFI Indices

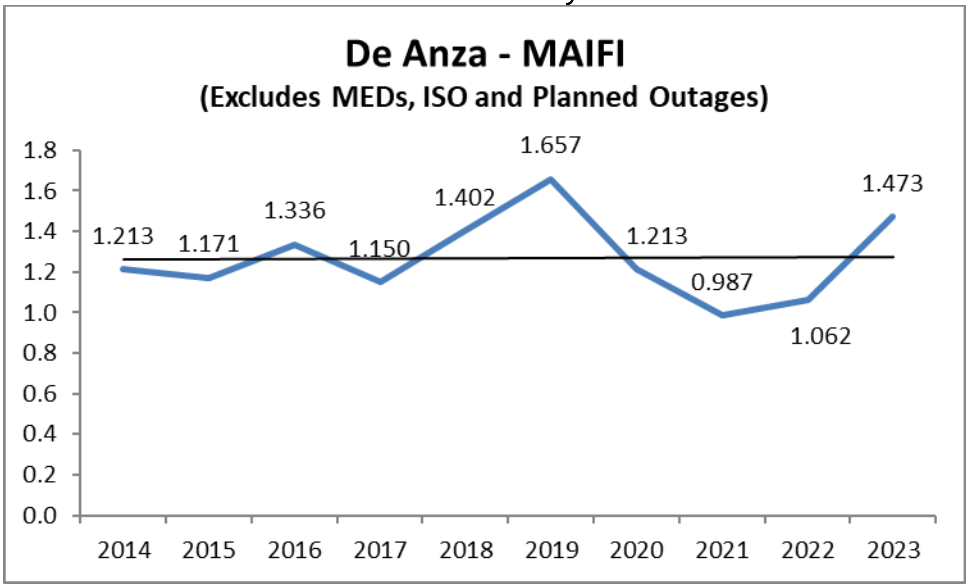


Chart 127: Division Reliability - MAIFI Indices

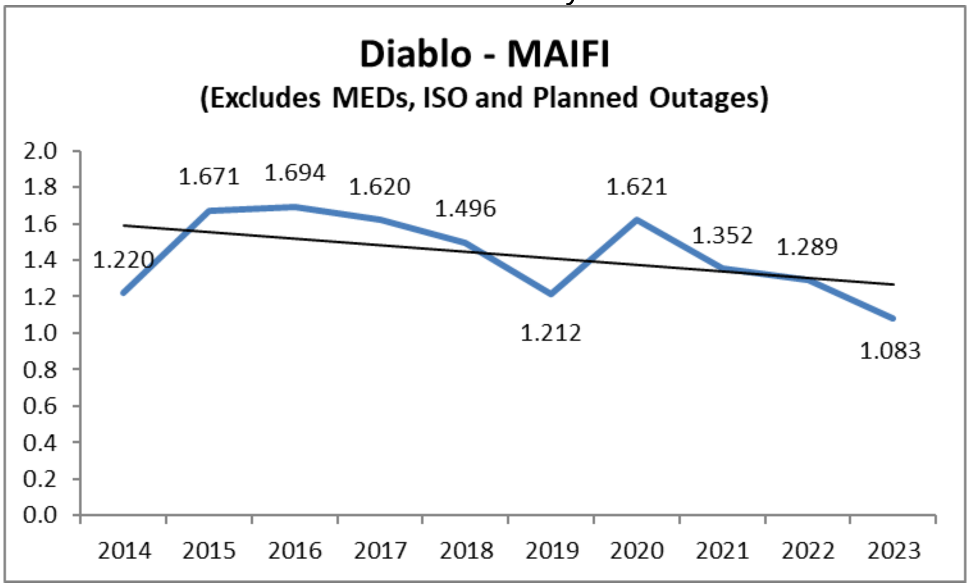


Chart 128: Division Reliability - MAIFI Indices

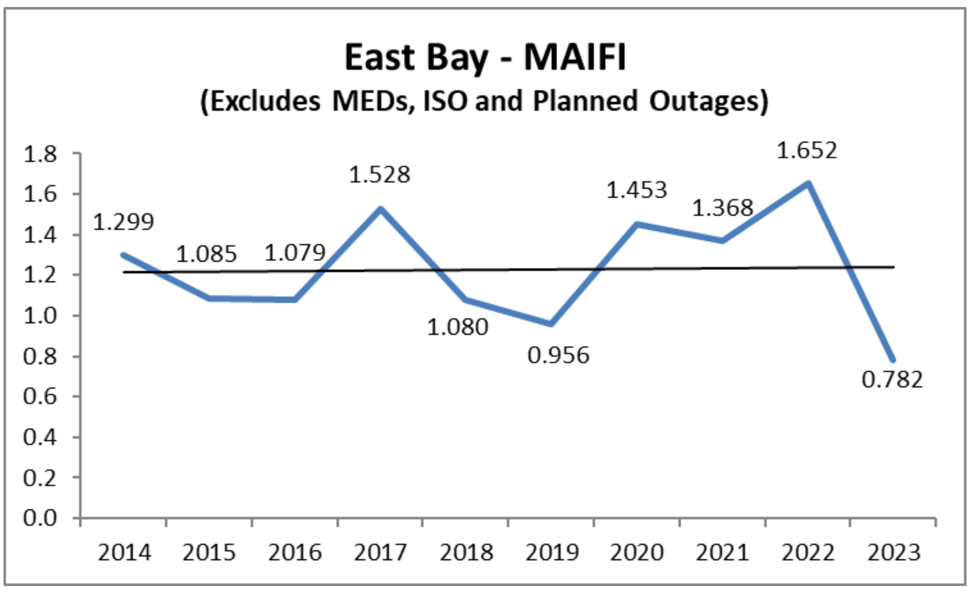


Chart 129: Division Reliability - MAIFI Indices

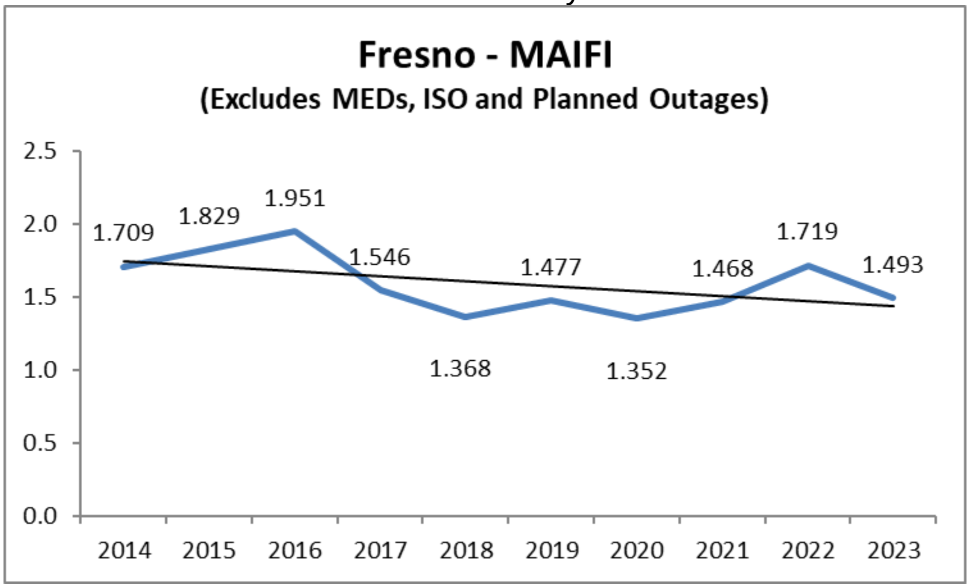


Chart 130: Division Reliability - MAIFI Indices

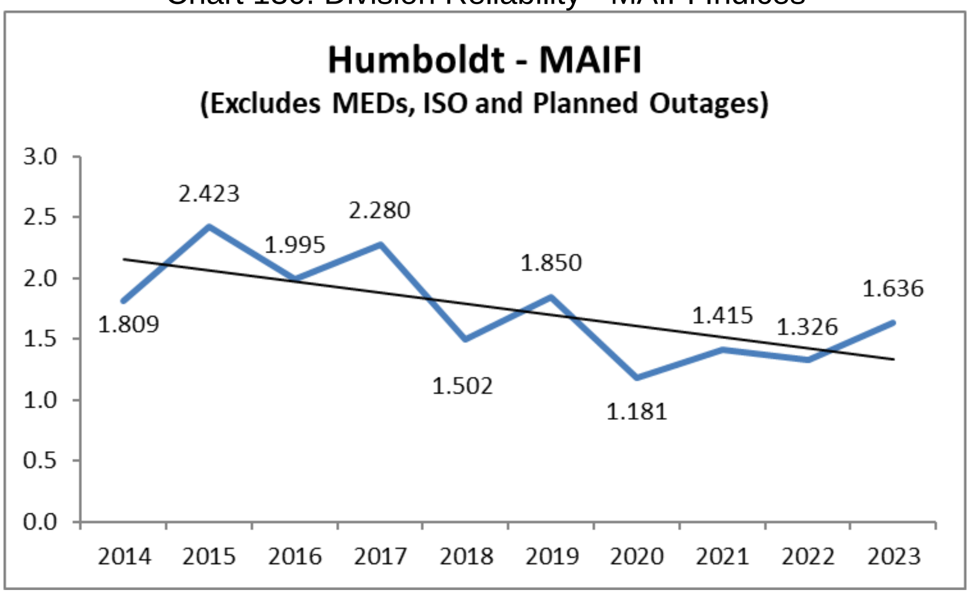


Chart 131: Division Reliability - MAIFI Indices

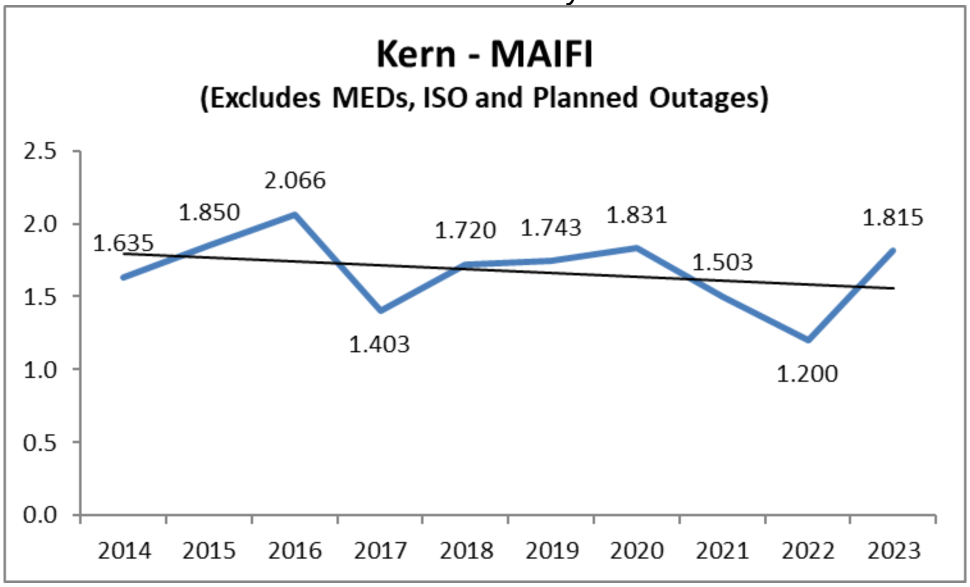


Chart 132: Division Reliability - MAIFI Indices

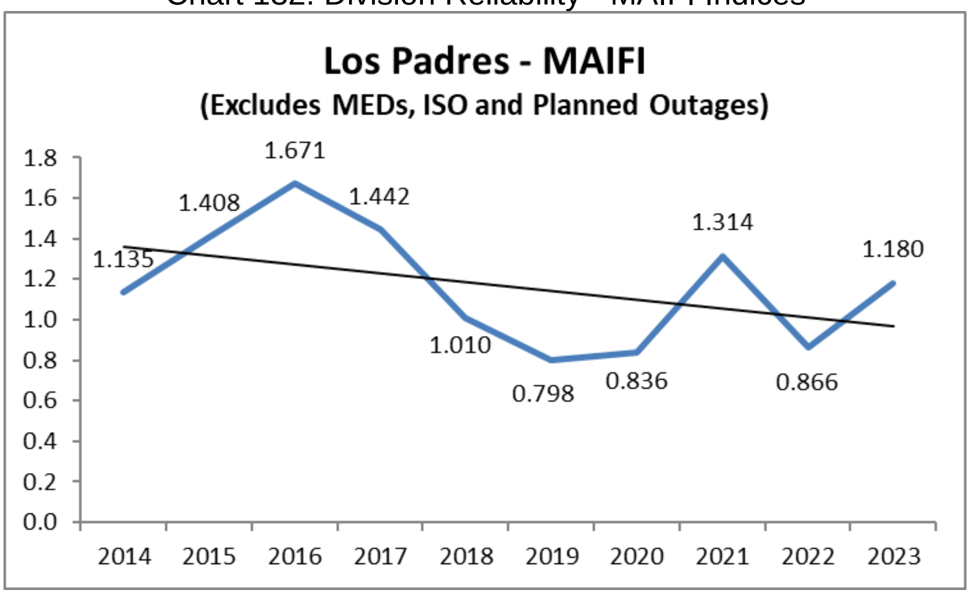


Chart 133: Division Reliability - MAIFI Indices

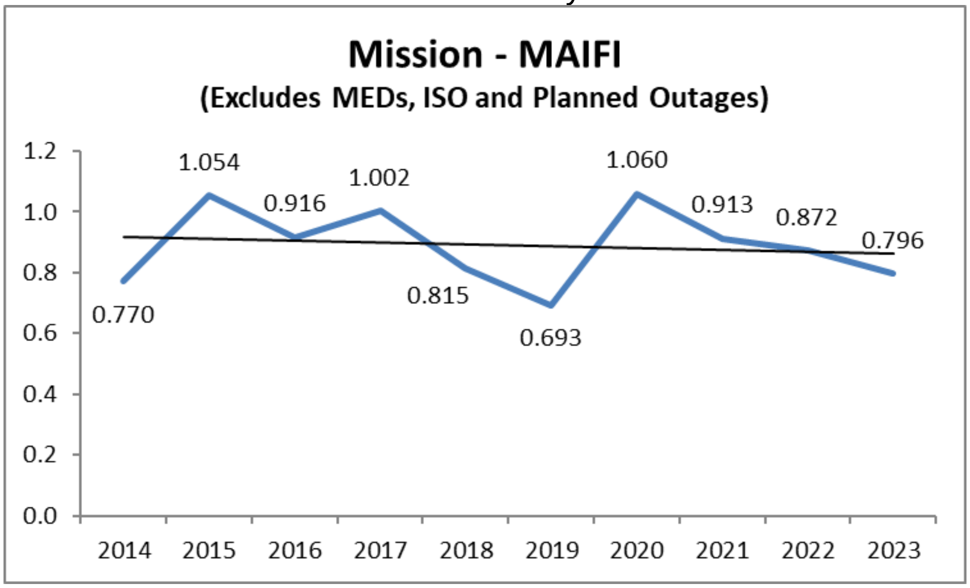


Chart 134: Division Reliability - MAIFI Indices

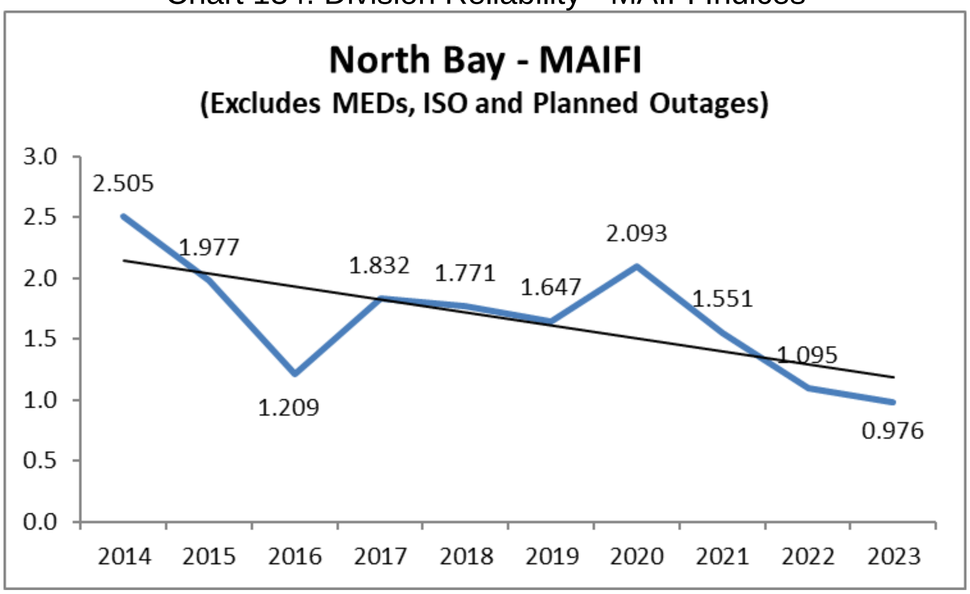


Chart 135: Division Reliability - MAIFI Indices

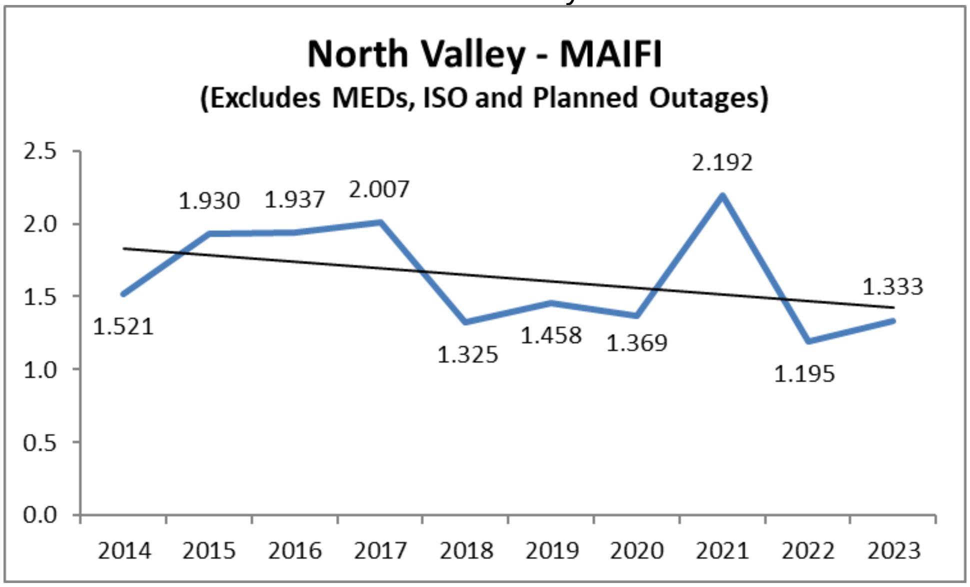


Chart 136: Division Reliability - MAIFI Indices

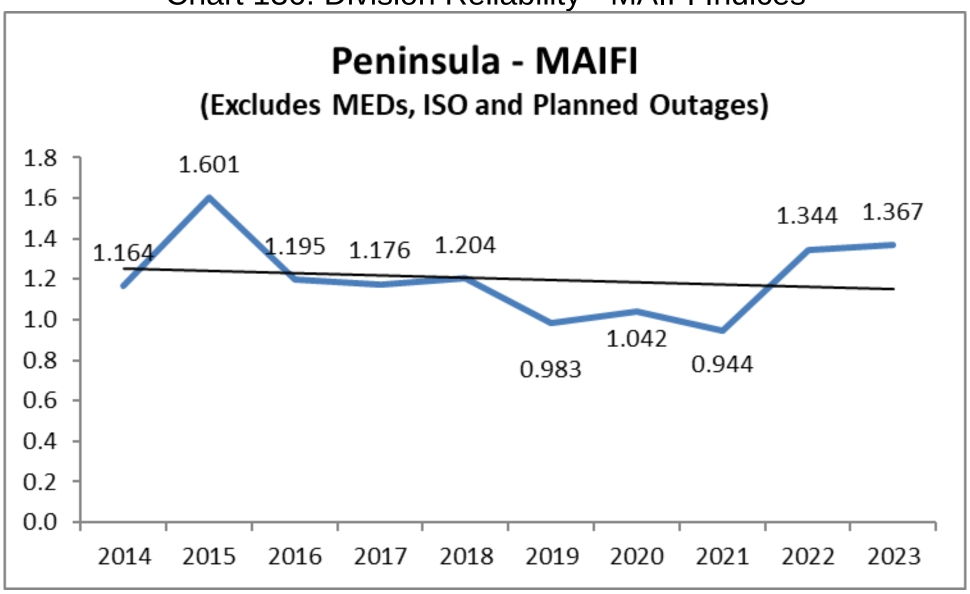


Chart 137: Division Reliability - MAIFI Indices

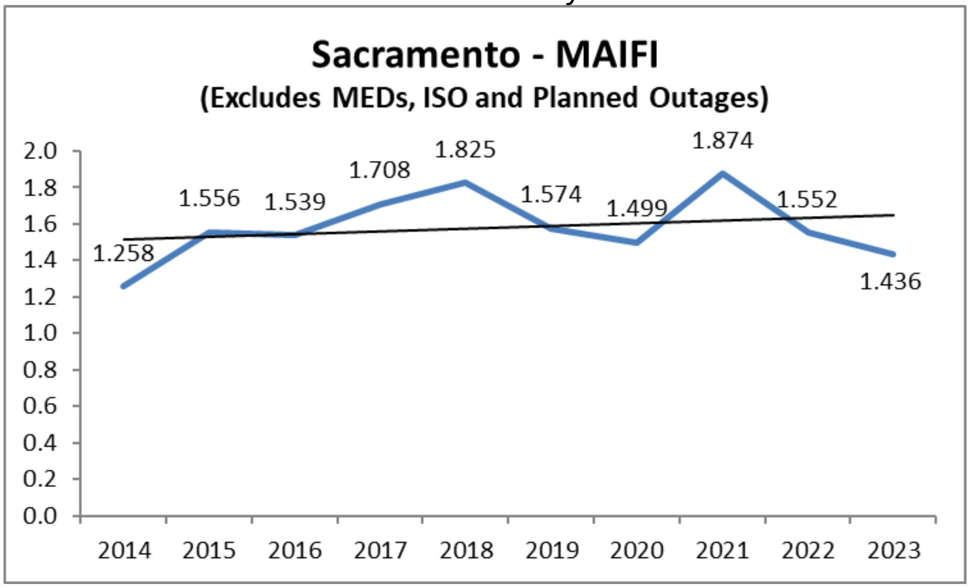


Chart 138: Division Reliability - MAIFI Indices

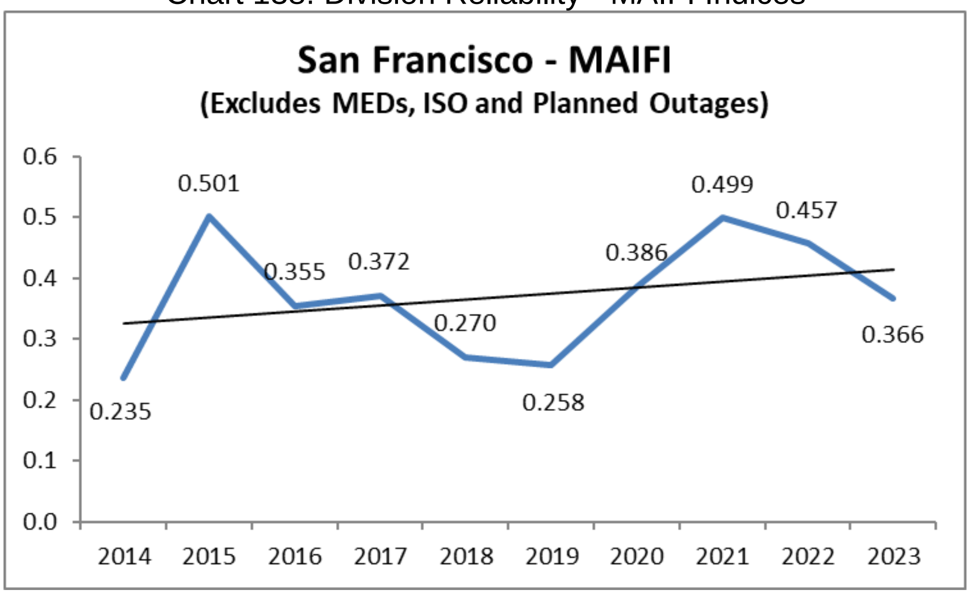


Chart 139: Division Reliability - MAIFI Indices

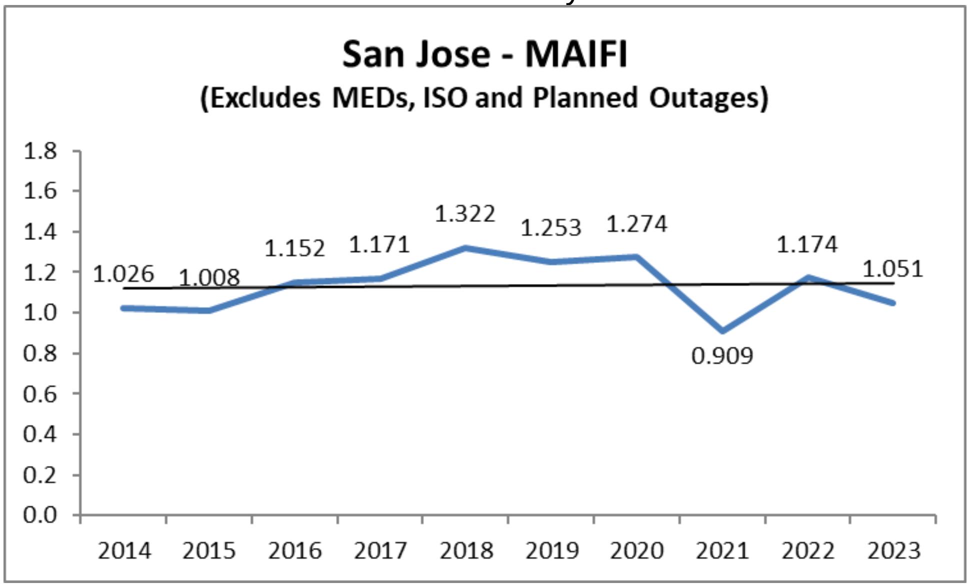


Chart 140: Division Reliability - MAIFI Indices

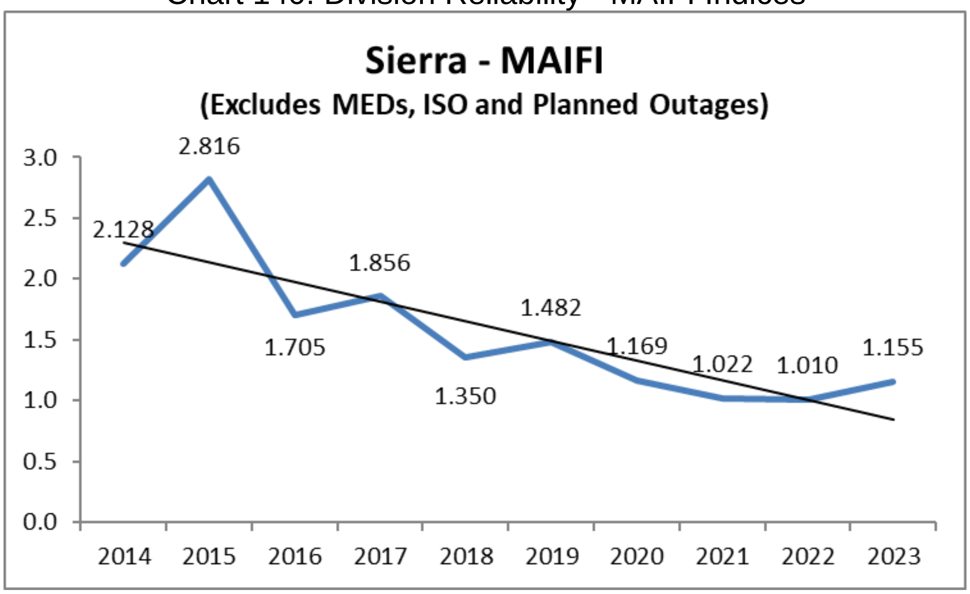


Chart 141: Division Reliability - MAIFI Indices

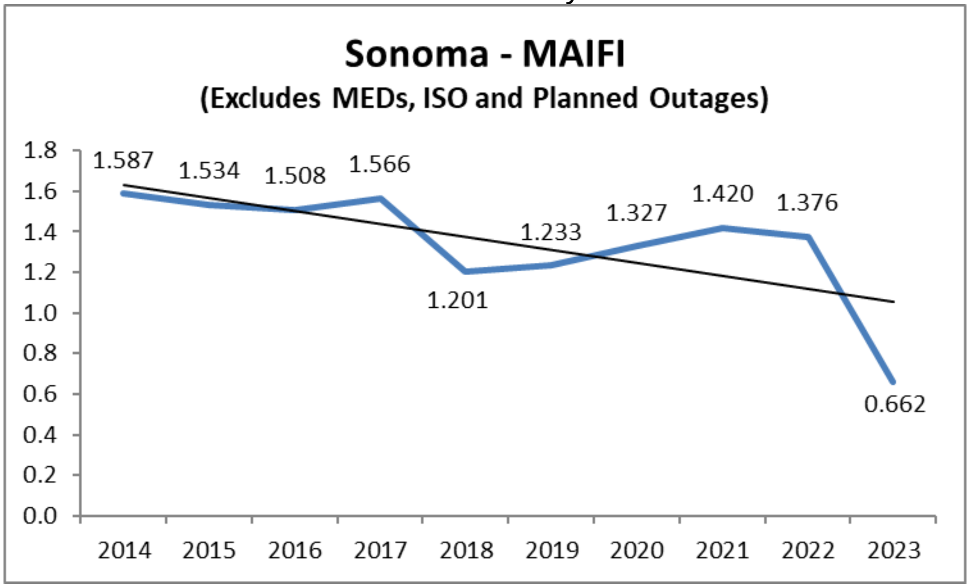


Chart 142: Division Reliability - MAIFI Indices

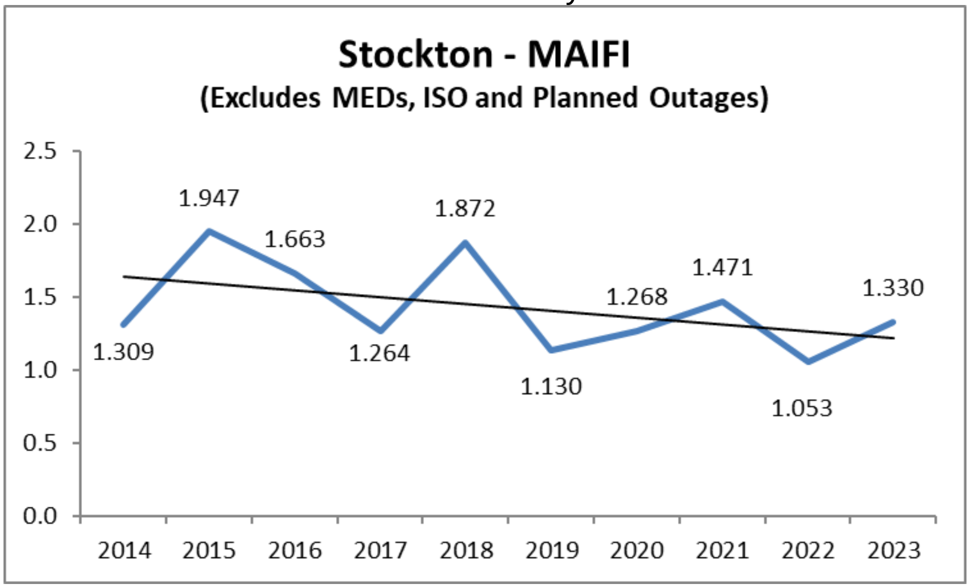
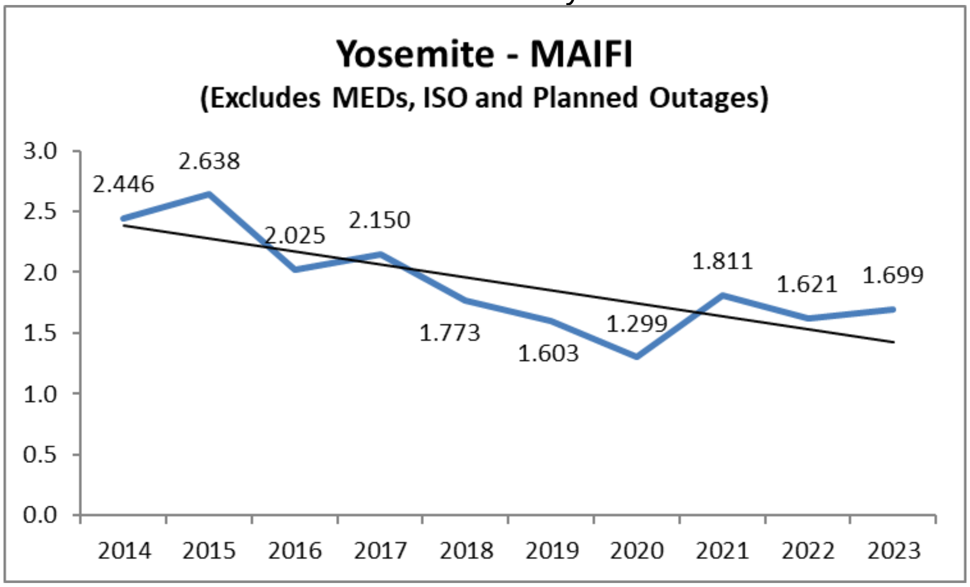


Chart 143: Division Reliability - MAIFI Indices



4. CAIDI Performance Results (MED Excluded)

Chart 144: Division Reliability - CAIDI Indices

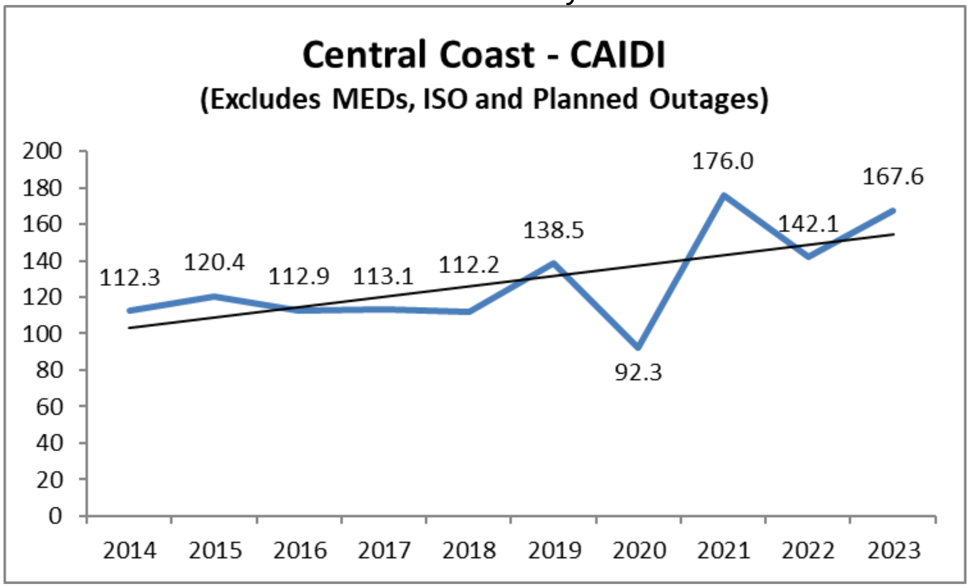


Chart 145: Division Reliability - CAIDI Indices

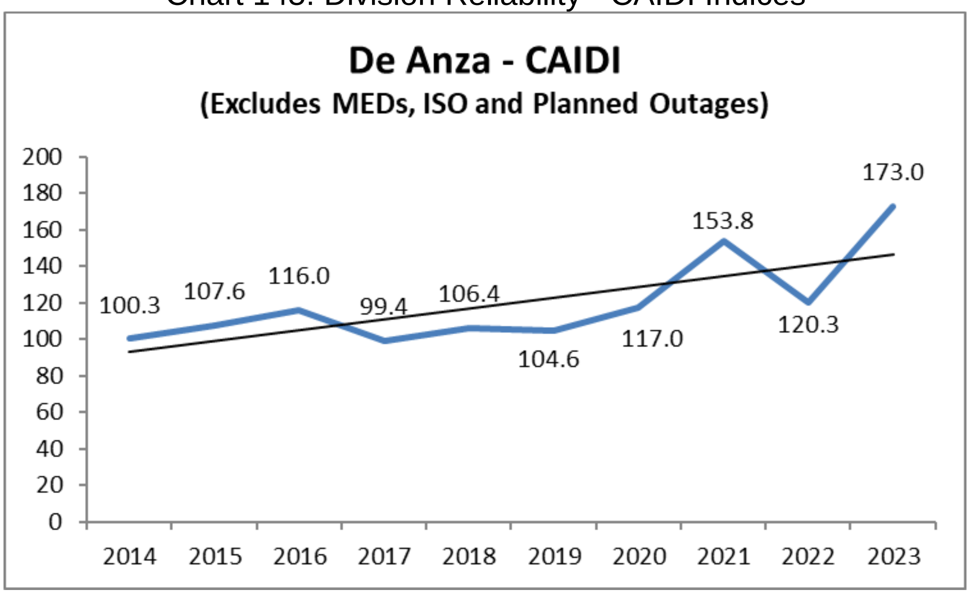


Chart 146: Division Reliability - CAIDI Indices

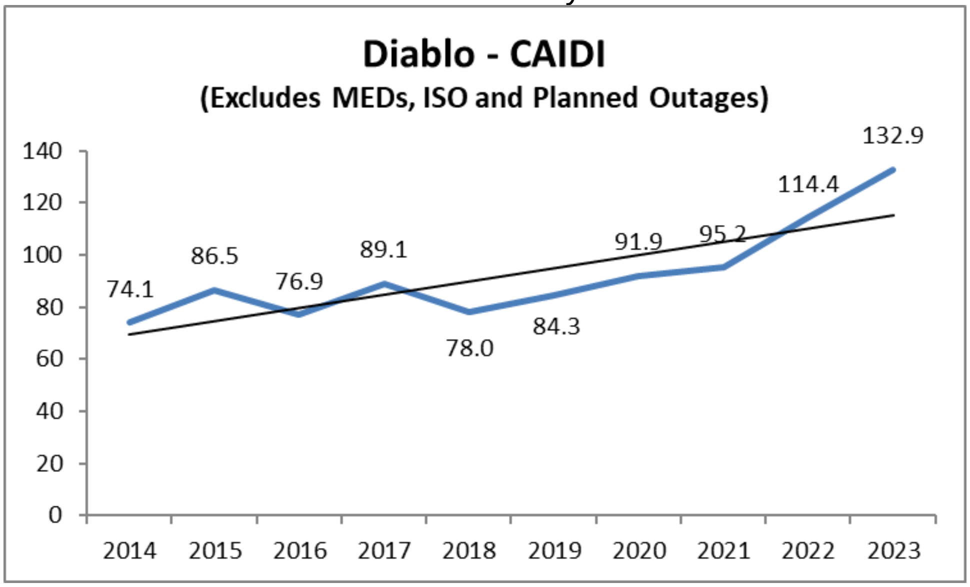


Chart 147: Division Reliability - CAIDI Indices

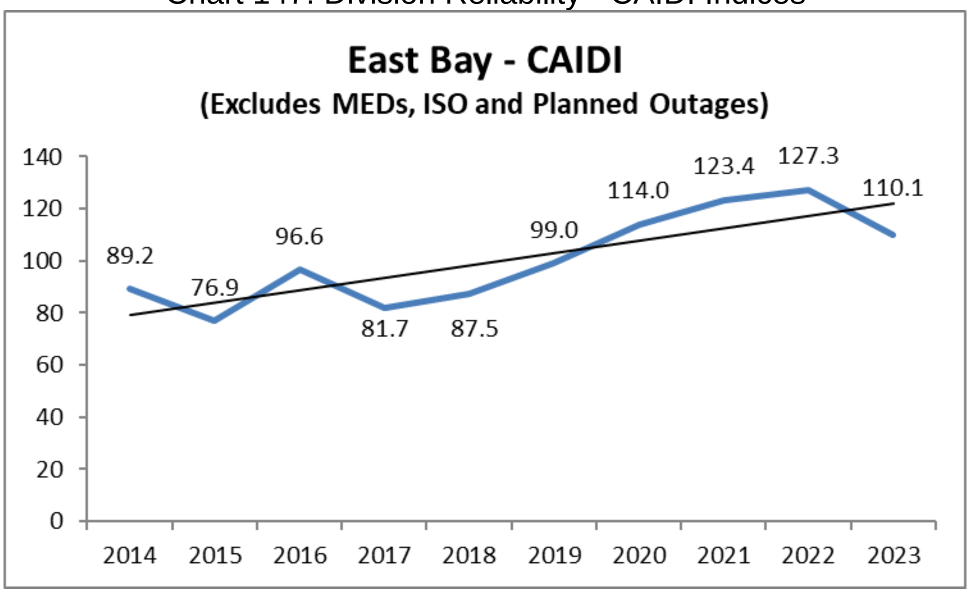


Chart 148: Division Reliability - CAIDI Indices

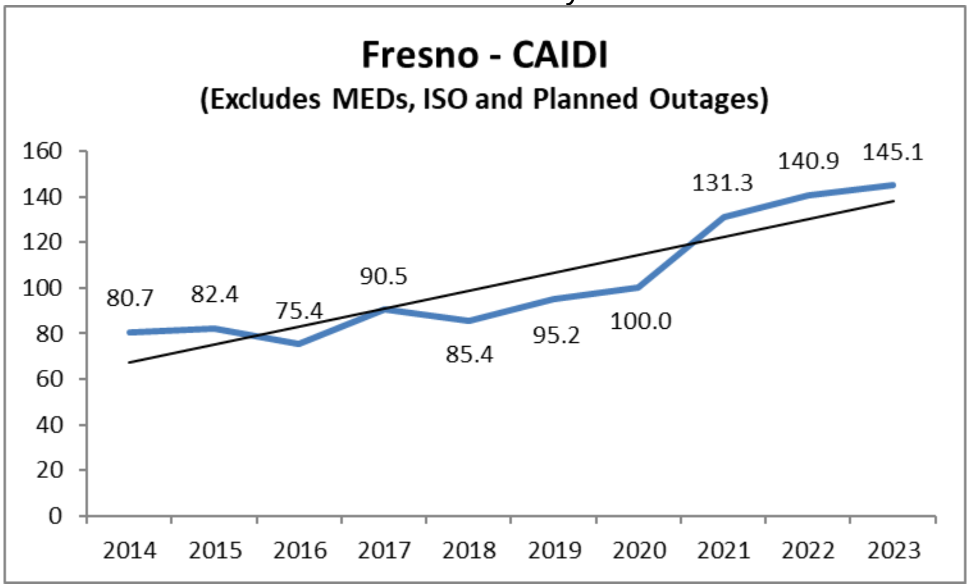


Chart 149: Division Reliability - CAIDI Indices

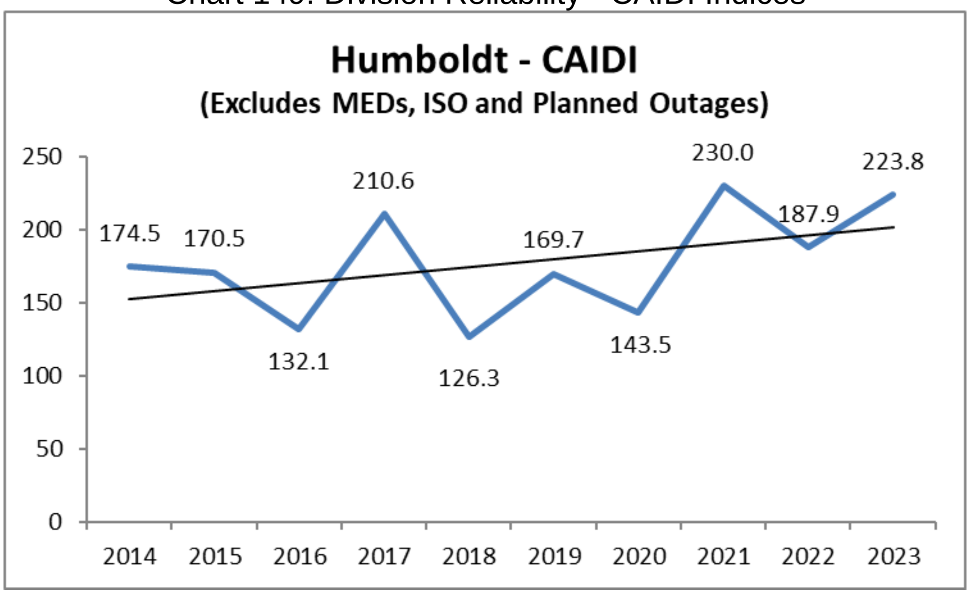


Chart 150: Division Reliability - CAIDI Indices

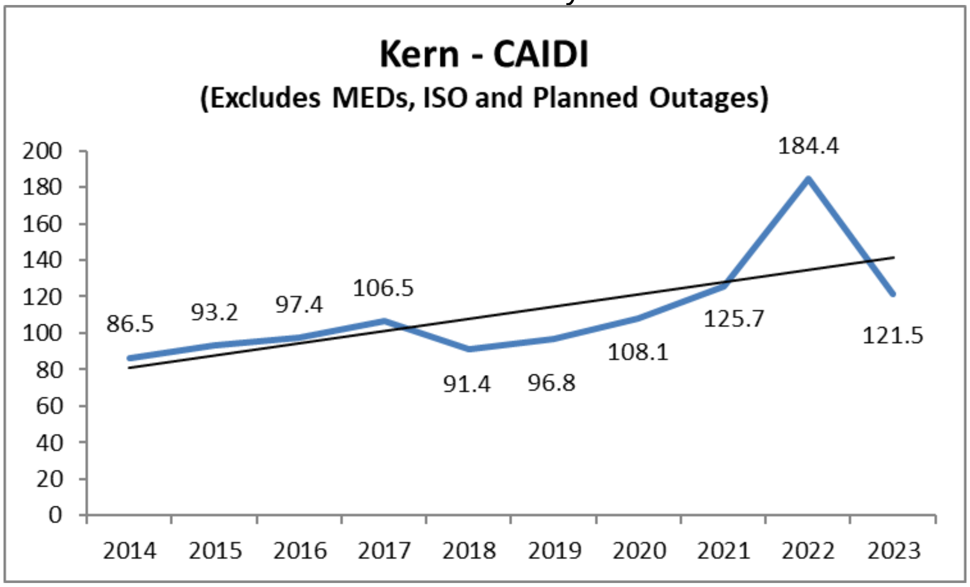


Chart 151: Division Reliability - CAIDI Indices

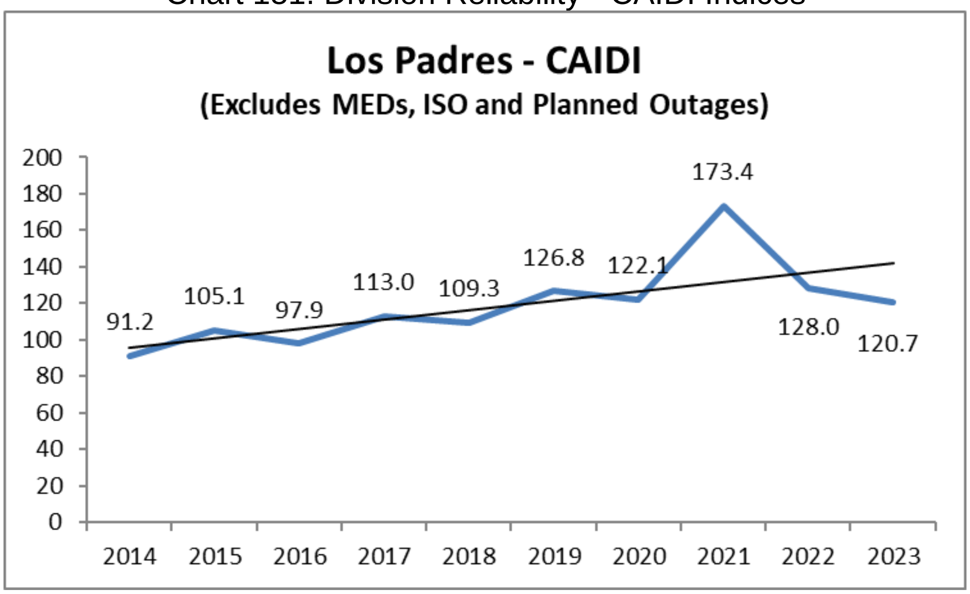


Chart 152: Division Reliability - CAIDI Indices

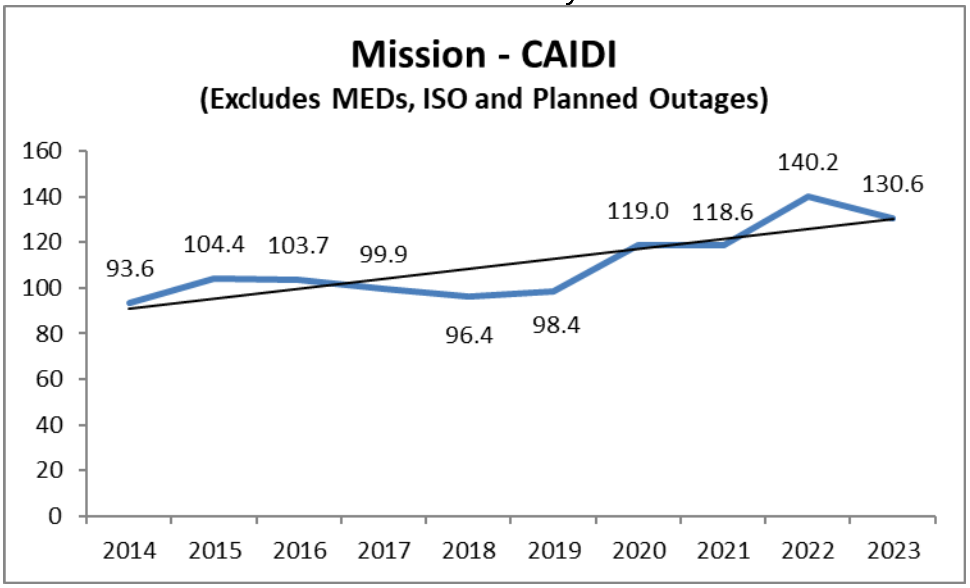


Chart 153: Division Reliability - CAIDI Indices

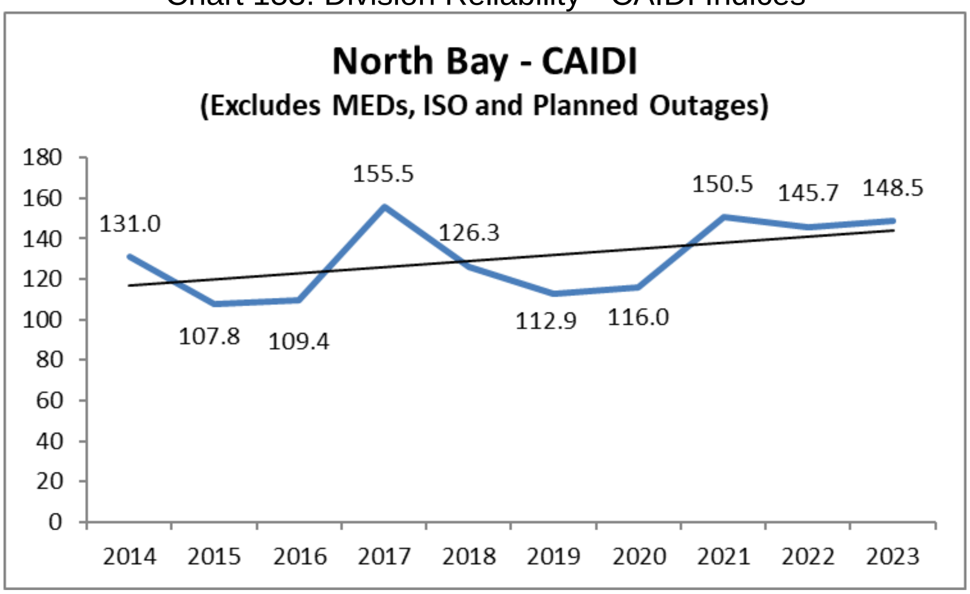


Chart 154: Division Reliability - CAIDI Indices

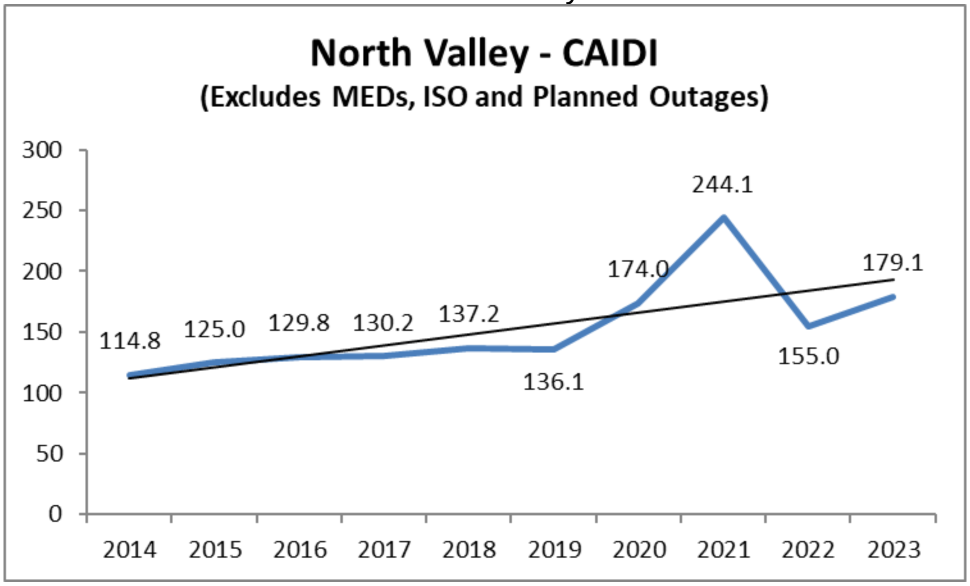


Chart 155: Division Reliability - CAIDI Indices

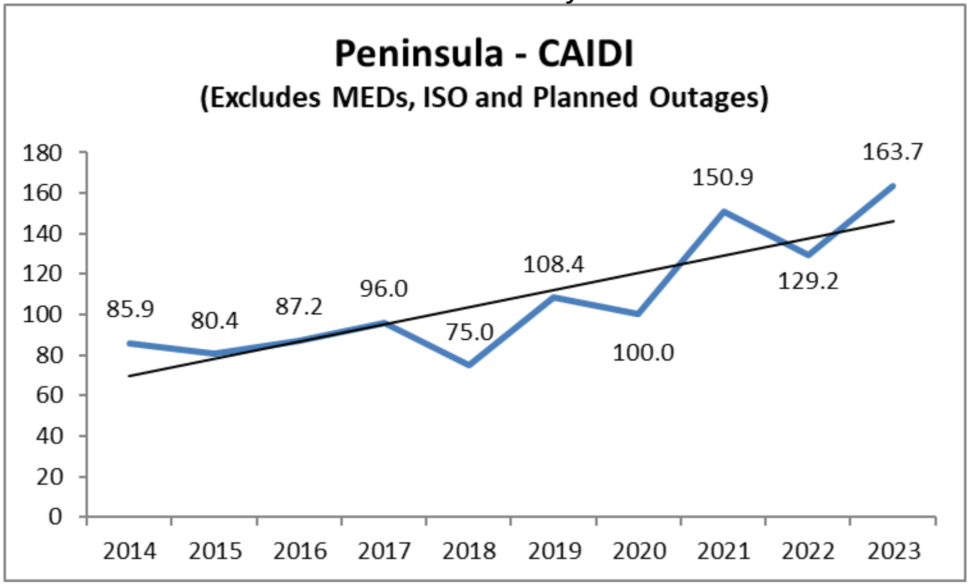


Chart 156: Division Reliability - CAIDI Indices

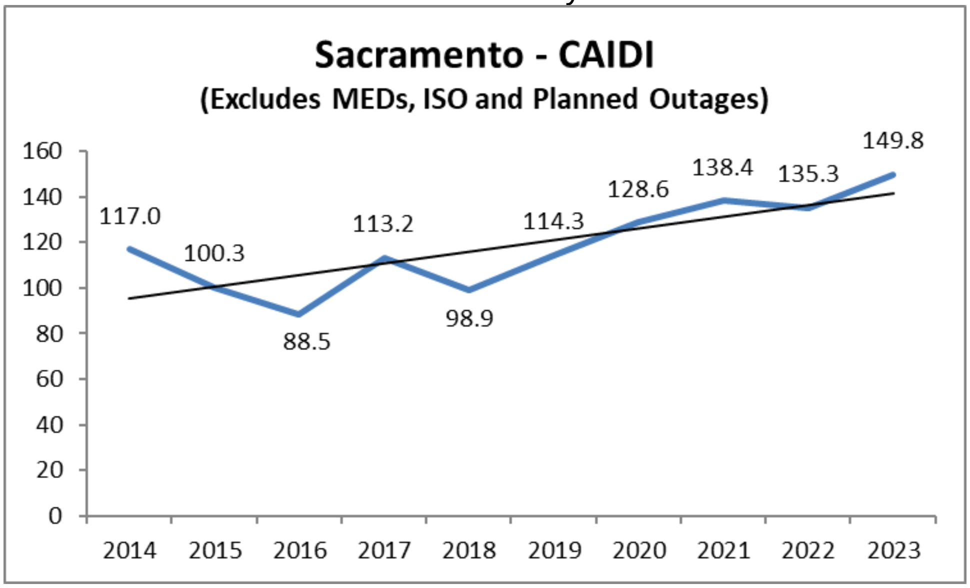


Chart 157: Division Reliability - CAIDI Indices

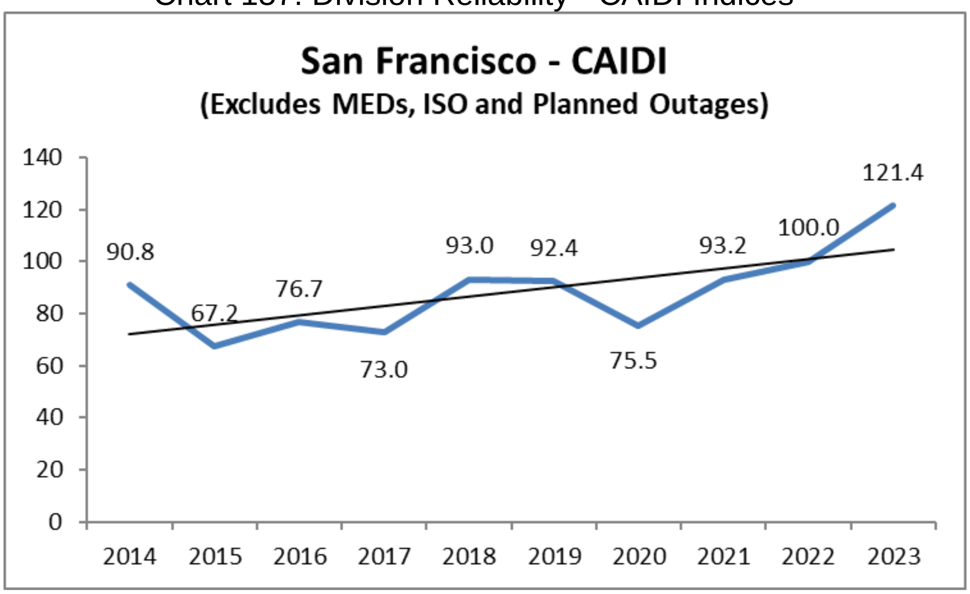


Chart 158: Division Reliability - CAIDI Indices

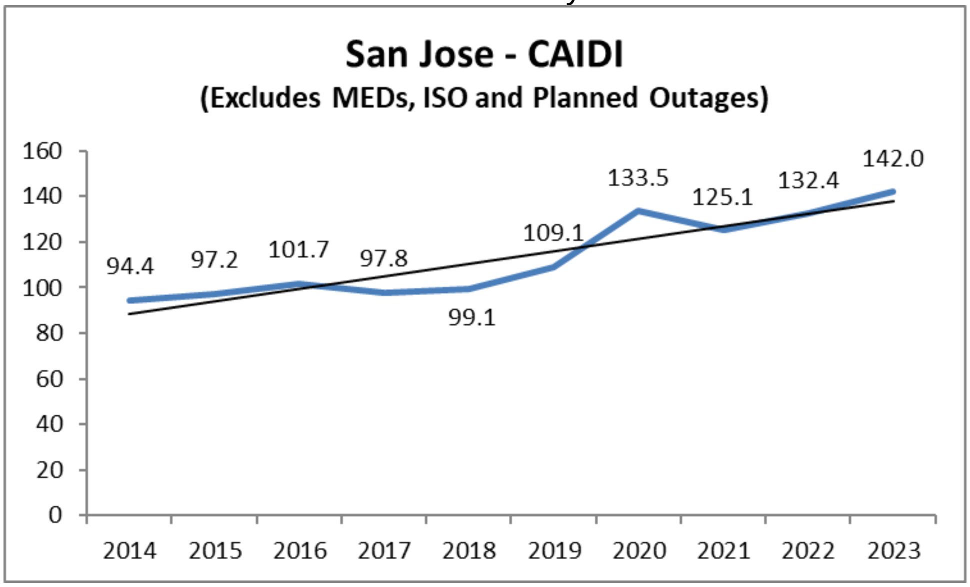


Chart 159: Division Reliability - CAIDI Indices

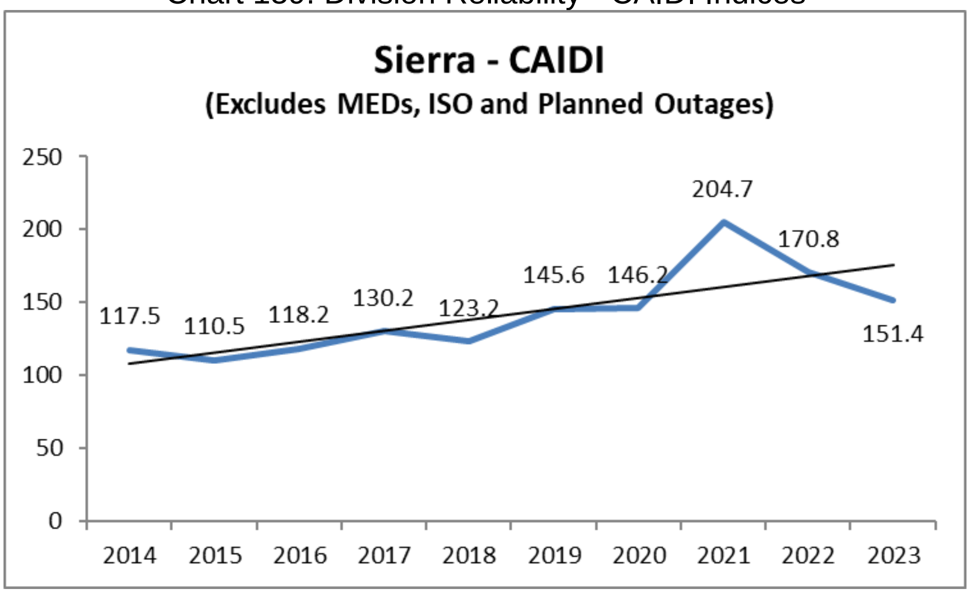


Chart 160: Division Reliability - CAIDI Indices\

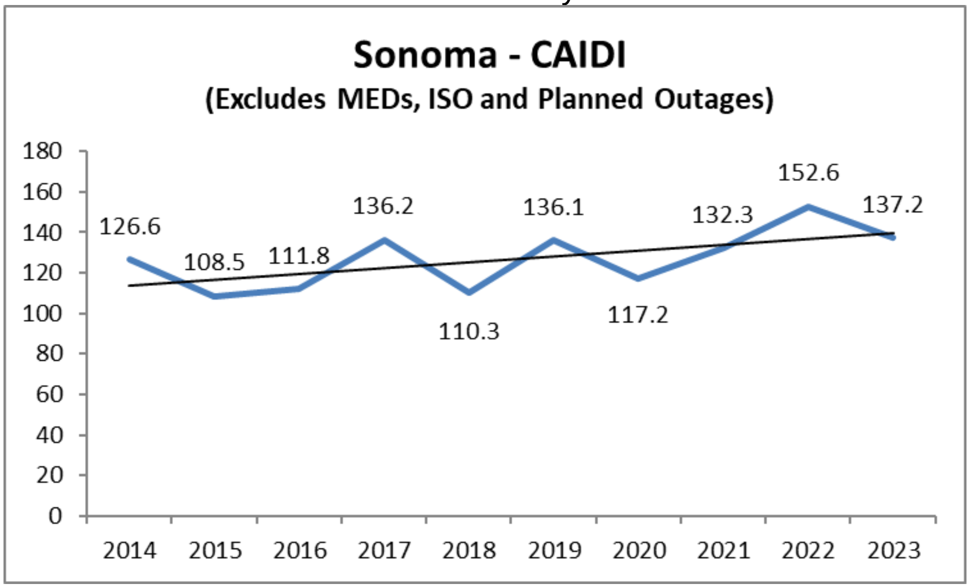


Chart 161: Division Reliability - CAIDI Indices

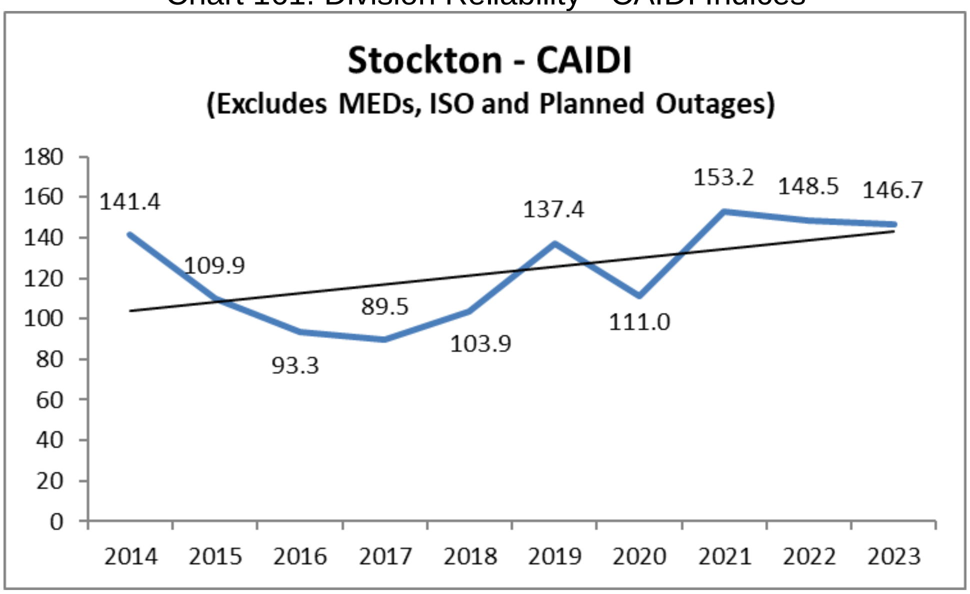
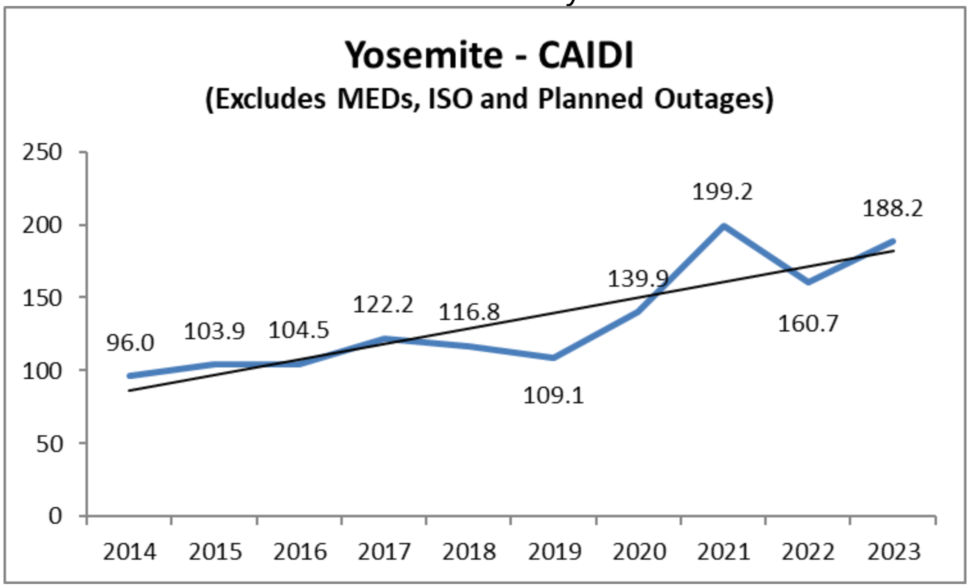


Chart 162: Division Reliability - CAIDI Indices



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 2022 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 2022 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 2022 reliability was better than the prior five-year average.

Table 7 – 2023 Indices excluding Major Events
(Meeting the Reporting Requirement Thresholds)

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

Table 8: Division and System Reliability Indices 2018-2023 - Performance Variances (Excluding MED)

Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
SYSTEM	2018	99.6	0.960	1.356	103.8
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	212.1	1.461	1.301	145.2
5-Year Average	17-21 Avg	147.6	1.135	1.307	130.0
SYSTEM	2023	213.7	1.402	1.211	152.5
	%Difference	44.8%	23.5%	-7.3%	17.3%
Division/System	**Year**	**SAIDI**	**SAIFI**	**MAIFI**	**CAIDI**
CENTRAL COAST	2018	162.4	1.447	2.242	112.2
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	375.8	2.644	2.854	142.1
5-Year Average	17-21 Avg	238.0	1.786	2.167	133.3
CENTRAL COAST	2023	413.0	2.465	2.174	167.6
	%Difference	73.5%	38.0%	0.3%	25.7%
Division/System	**Year**	**SAIDI**	**SAIFI**	**MAIFI**	**CAIDI**
DE ANZA	2018	84.0	0.789	1.402	106.4
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	120.4	1.001	1.062	120.3
5-Year Average	17-21 Avg	100.0	0.832	1.264	120.1
DE ANZA	2023	173.3	1.002	1.473	173.0
	%Difference	73.4%	20.4%	16.5%	44.0%
Division/System	**Year**	**SAIDI**	**SAIFI**	**MAIFI**	**CAIDI**
DIABLO	2018	78.3	1.004	1.496	78.0
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	178.4	1.559	1.289	114.4
5-Year Average	17-21 Avg	111.6	1.176	1.394	94.9
DIABLO	2023	183.9	1.384	1.083	132.9
	%Difference	64.7%	17.7%	-22.3%	40.0%
Division/System	**Year**	**SAIDI**	**SAIFI**	**MAIFI**	**CAIDI**
EAST BAY	2018	78.8	0.901	1.080	87.5
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	146.5	1.151	1.652	127.3
5-Year Average	17-21 Avg	111.9	0.999	1.302	112.1
EAST BAY	2023	109.9	0.998	0.782	110.1
	%Difference	-1.8%	0.0%	-39.9%	-1.8%

Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
FRESNO	2018	73.5	0.861	1.368	85.4
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	174.1	1.235	1.719	140.9
5-Year Average	17-21 Avg	111.0	0.974	1.477	113.9
FRESNO	2023	170.9	1.178	1.493	145.1
	%Difference	54.0%	20.9%	1.1%	27.4%
Division/System	**Year**	**SAIDI**	**SAIFI**	**MAIFI**	**CAIDI**
HUMBOLDT	2018	225.9	1.789	1.502	126.3
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	468.1	2.491	1.326	187.9
5-Year Average	17-21 Avg	324.2	1.847	1.455	175.5
HUMBOLDT	2023	610.8	2.729	1.636	223.8
	%Difference	88.4%	47.7%	12.5%	27.5%
Division/System	**Year**	**SAIDI**	**SAIFI**	**MAIFI**	**CAIDI**
KERN	2018	71.6	0.783	1.720	91.4
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	267.3	1.449	1.200	184.4
5-Year Average	17-21 Avg	139.7	1.099	1.599	127.1
KERN	2023	145.2	1.195	1.815	121.5
	%Difference	3.9%	8.7%	13.5%	-4.4%
Division/System	**Year**	**SAIDI**	**SAIFI**	**MAIFI**	**CAIDI**
LOS PADRES	2018	130.5	1.195	1.010	109.3
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	232.1	1.814	0.866	128.0
5-Year Average	17-21 Avg	169.5	1.293	0.965	131.2
LOS PADRES	2023	221.1	1.831	1.180	120.7
	%Difference	30.4%	41.7%	22.3%	-8.0%
Division/System	**Year**	**SAIDI**	**SAIFI**	**MAIFI**	**CAIDI**
MISSION	2018	62.0	0.644	0.815	96.4
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	108.9	0.777	0.872	140.2
5-Year Average	17-21 Avg	88.3	0.763	0.870	115.8
MISSION	2023	102.8	0.787	0.796	130.6
	%Difference	16.5%	3.3%	-8.5%	12.8%

Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
NORTH BAY	2018	116.3	0.921	1.771	126.3
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	211.7	1.453	1.095	145.7
5-Year Average	17-21 Avg	155.9	1.197	1.631	130.3
NORTH BAY	2023	191.6	1.291	0.976	148.5
	%Difference	22.9%	7.8%	-40.2%	14.0%
Division/System	**Year**	**SAIDI**	**SAIFI**	**MAIFI**	**CAIDI**
NORTH VALLEY	2018	187.1	1.364	1.325	137.2
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	334.8	2.159	1.195	155.0
5-Year Average	17-21 Avg	284.7	1.665	1.508	171.0
NORTH VALLEY	2023	377.5	2.108	1.333	179.1
	%Difference	32.6%	26.6%	-11.6%	4.8%
Division/System	**Year**	**SAIDI**	**SAIFI**	**MAIFI**	**CAIDI**
PENINSULA	2018	60.5	0.806	1.204	75.0
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	129.2	1.000	1.344	129.2
5-Year Average	17-21 Avg	105.0	0.909	1.103	115.5
PENINSULA	2023	207.9	1.269	1.367	163.7
	%Difference	98.0%	39.6%	23.9%	41.8%
Division/System	**Year**	**SAIDI**	**SAIFI**	**MAIFI**	**CAIDI**
SACRAMENTO	2018	101.0	1.021	1.825	98.9
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	172.9	1.277	1.552	135.3
5-Year Average	17-21 Avg	140.4	1.127	1.665	124.5
SACRAMENTO	2023	191.3	1.276	1.436	149.8
	%Difference	36.3%	13.2%	-13.8%	20.3%
Division/System	**Year**	**SAIDI**	**SAIFI**	**MAIFI**	**CAIDI**
SAN FRANCISCO	2018	35.2	0.378	0.270	93.0
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	49.4	0.494	0.457	100.0
5-Year Average	17-21 Avg	47.0	0.520	0.374	90.3
SAN FRANCISCO	2023	70.6	0.581	0.366	121.4
	%Difference	50.3%	11.8%	-2.2%	34.4%

Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
SAN JOSE	2018	85.0	0.858	1.322	99.1
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	151.4	1.144	1.174	132.4
5-Year Average	17-21 Avg	106.9	0.884	1.186	120.9
SAN JOSE	2023	126.5	0.891	1.051	142.0
	%Difference	18.4%	0.8%	-11.4%	17.4%
Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
SIERRA	2018	152.9	1.241	1.350	123.2
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	525.2	3.076	1.010	170.8
5-Year Average	17-21 Avg	279.1	1.712	1.206	163.0
SIERRA	2023	369.6	2.440	1.155	151.4
	%Difference	32.4%	42.5%	-4.3%	-7.1%
Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
SONOMA	2018	105.5	0.956	1.201	110.3
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	230.6	1.511	1.376	152.6
5-Year Average	17-21 Avg	154.5	1.171	1.311	131.9
SONOMA	2023	183.0	1.334	0.662	137.2
	%Difference	18.4%	13.9%	-49.5%	4.0%
Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
STOCKTON	2018	107.7	1.036	1.872	103.9
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	244.8	1.648	1.053	148.5
5-Year Average	17-21 Avg	167.2	1.260	1.359	132.7
STOCKTON	2023	278.1	1.896	1.330	146.7
	%Difference	66.4%	50.5%	-2.1%	10.5%
Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
YOSEMITE	2018	158.3	1.355	1.773	116.8
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	326.9	2.034	1.621	160.7
5-Year Average	17-21 Avg	255.4	1.690	1.621	151.2
YOSEMITE	2023	411.1	2.184	1.699	188.2
	%Difference	61.0%	29.3%	4.8%	24.5%

i. System and Division Performance Assessment

1. System Performance Assessment

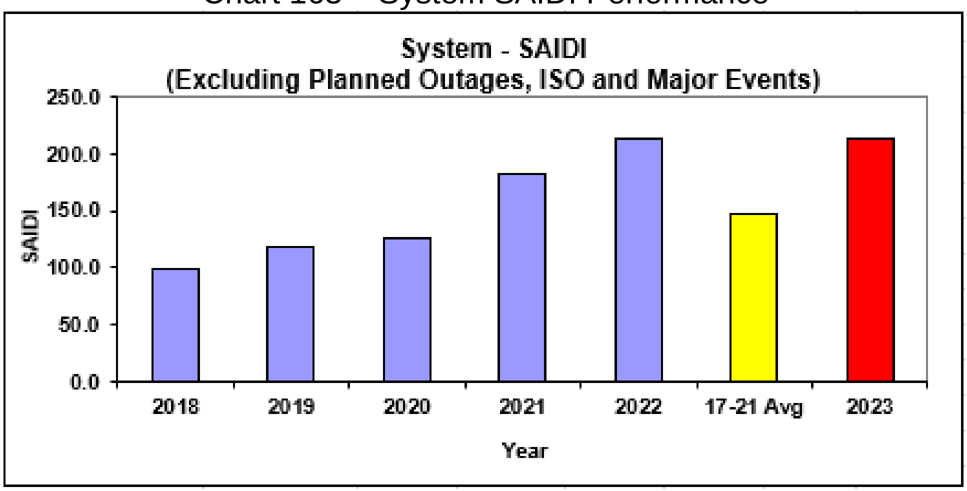
Table 9: System Performance

Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
SYSTEM	2018	99.6	0.960	1.356	103.8
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	212.1	1.461	1.301	145.2
5-Year Average	17-21 Avg	147.6	1.135	1.307	130.0
SYSTEM	2023	213.7	1.402	1.211	152.5
	%Difference	44.8%	23.5%	-7.3%	17.3%

System SAIDI Performance

The system's 2023 SAIDI performance of 213.7 was 66.1 customer-minutes (or 44.8%) higher than the previous 5-year average of 147.6 as shown in the table above and illustrated in the figure below.

Chart 163 – System SAIDI Performance



The higher-than-average 2023 system SAIDI was attributed to the following top contributing factors:

1. On January 6th, a tree fell into our primary distribution line on the Woodside 1101 feeder causing a sustained outage to 1,468 customers and contributed 1.7 customer-minutes to the system's SAIDI performance.
2. On February 2nd, a tree fell into our primary distribution line on the Garberville

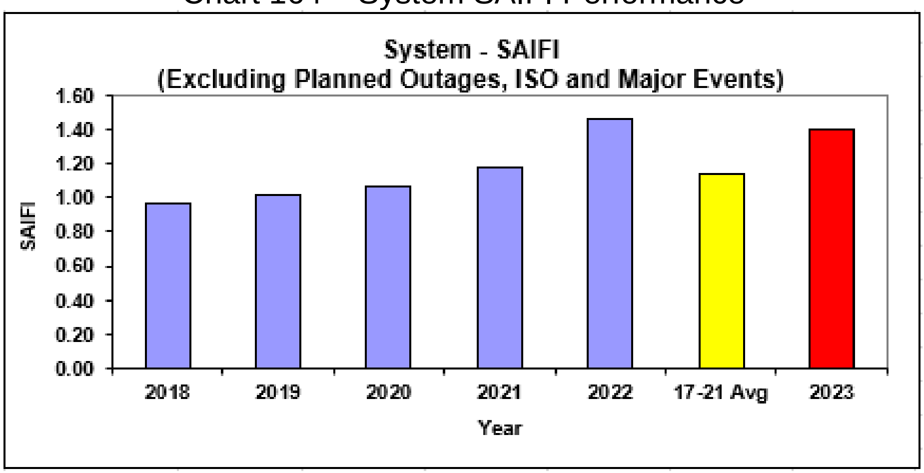
1102 feeder causing a sustained outage to 1,734 customers and contributed 1.1 customer-minutes to the system's SAIDI performance.

3. On March 22nd, an overhead equipment failure on the Sneath Lane 1107 feeder (that was temporarily feeding most of Pacifica 1102 feeder) caused a sustained outage to 9,201 customers and contributed 0.6 customer-minutes to the system's SAIDI performance.
4. The EPSS and DCD settings installed on the distribution line equipment contributed 61.7 customer-minutes to the System's SAIDI performance.

System SAIFI Performance

The system's 2023 SAIFI performance of 1.402 was 0.266 customer-interruptions (or 23.5%) higher than the previous 5-year average of 1.135 as shown in the table above and illustrated in the figure below.

Chart 164 – System SAIFI Performance



The higher-than-average 2023 system SAIFI was attributed to the following top contributing factors:

1. On July 15th, a broken crossarm on the Bellevue-2105 feeder caused a sustained outage to 9,281 customers and contributed 0.002 customer-interruptions to the system SAIFI performance.
2. On March 22nd, an overhead equipment failure on the Sneath Lane 1107 feeder (that was temporarily feeding most of Pacifica 1102 feeder) caused a sustained outage to 9,201 customers and contributed 0.002 customer-interruptions to the system SAIFI performance.
3. On March 28th, an underground equipment failure on the Del Monte 2105 feeder caused a sustained outage to 9,146 customers and contributed 0.002

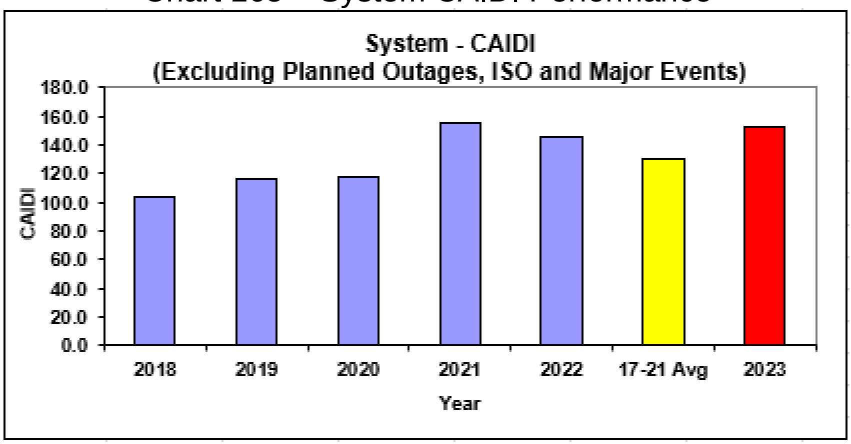
customer-interruptions to the system SAIFI Performance.

4. On October 2nd an underground equipment failure on the Oakland J 1111 feeder caused a sustained outage to 8,731 customers and contributed 0.002 customer-interruptions to the system SAIFI Performance.
5. The EPSS and DCD settings installed on the distribution line equipment contributed 0.338 customer-interruptions to the system SAIFI performance.

System CAIDI Performance

The system's 2023 CAIDI performance of 152.5 was 22.5 customer-minutes (or 17.3%) higher than the previous 5-year average of 130.0 as shown in the table above and illustrated in the figure below.

Chart 165 – System CAIDI Performance



The higher-than-average 2023 system CAIDI was attributed to the following:

1. On August 30th as well as on September 20th and 21st, a PSPS event was executed that caused an outage to 5,547 customers and contributed 1,046.8 minutes to the system CAIDI performance.
2. On January 6th, a tree fell into our primary distribution line on the Woodside 1101 feeder causing a sustained outage to 1,468 customers and contributed 6,062.4 minutes to the system's CAIDI performance.
3. On February 2nd, a tree fell into our primary distribution line on the Garberville 1102 feeder causing a sustained outage to 1,734 customers and contributed 3,701.4 minutes to the system's CAIDI performance.
4. The EPSS and DCD settings installed on the distribution line equipment contributed 182.7 customer-minutes to the division's CAIDI performance.

2. Central Coast Division Performance Assessment

Central Coast Division Performance

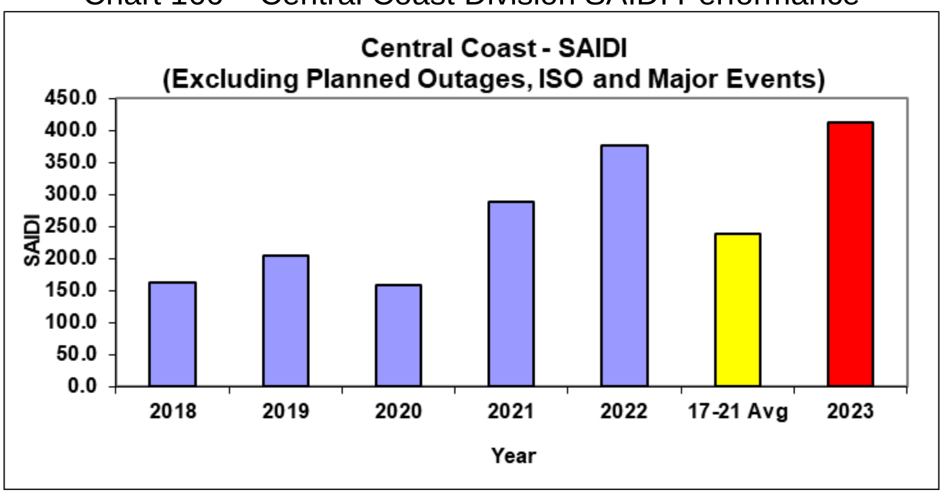
Table 10: Central Coast Performance

Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
CENTRAL COAST	2018	162.4	1.447	2.242	112.2
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	375.8	2.644	2.854	142.1
5-Year Average	17-21 Avg	238.0	1.786	2.167	133.3
CENTRAL COAST	2023	413.0	2.465	2.174	167.6
	%Difference	73.5%	38.0%	0.3%	25.7%

Central Coast Division SAIDI Performance

Central Coast Division's 2023 SAIDI performance of 413.0 was 175.0 customer-minutes (or 73.5%) higher than the previous 5-year average of 238.0 as shown in the table above and illustrated in the figure below.

Chart 166 – Central Coast Division SAIDI Performance



The higher-than-average 2023 division SAIDI was attributed to the following:

1. On March 11th, an overhead primary distribution cutout burned on the Del Monte 2105 feeder (that was temporarily feeding most of Viejo 2204 feeder) causing a sustained outage to 11,227 customers and contributed 13.9 SAIDI minutes to the system's SAIDI performance.
2. On March 28th, a primary distribution underground equipment failure on the De Monte 2105 feeder (that was temporarily feeding most of Viejo 2204 feeder) caused a sustained outage to 12,718 customers and contributed 11.0 SAIDI

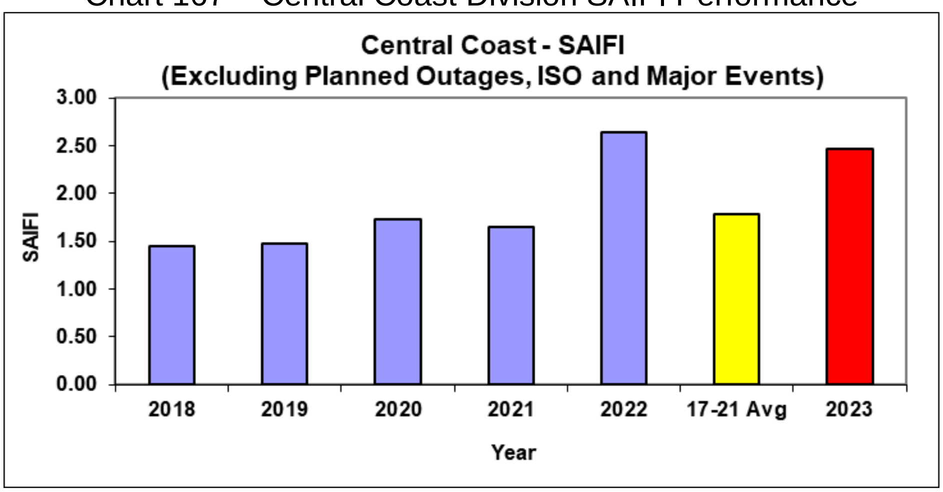
minutes to the system's SAIDI performance.

3. On November 13th, a primary overhead distribution conductor broke on the Los Coches 1102 feeder and caused a sustained outage to 3,575 customers and contributed 7.1 SAIDI minutes to the system's SAIDI performance.
4. On December 28th, a primary overhead distribution conductor broke on the Fort Ord 1101 feeder and caused a sustained outage to 4,454 customers and contributed 6.0 SAIDI minutes to the system's SAIDI performance.
5. The EPSS and DCD settings installed on the distribution line equipment contributed 95.1 customer-minutes to the division's SAIDI performance.

Central Coast Division SAIFI Performance

Central Coast Division's 2023 SAIFI performance of 2.465 was 0.679 customer-interruptions (or 38.0%) higher than the previous 5-year average of 1.786 as shown in the table above and illustrated in the figure below.

Chart 167 – Central Coast Division SAIFI Performance



The higher-than-average 2023 system SAIFI was attributed to the following top contributing factors:

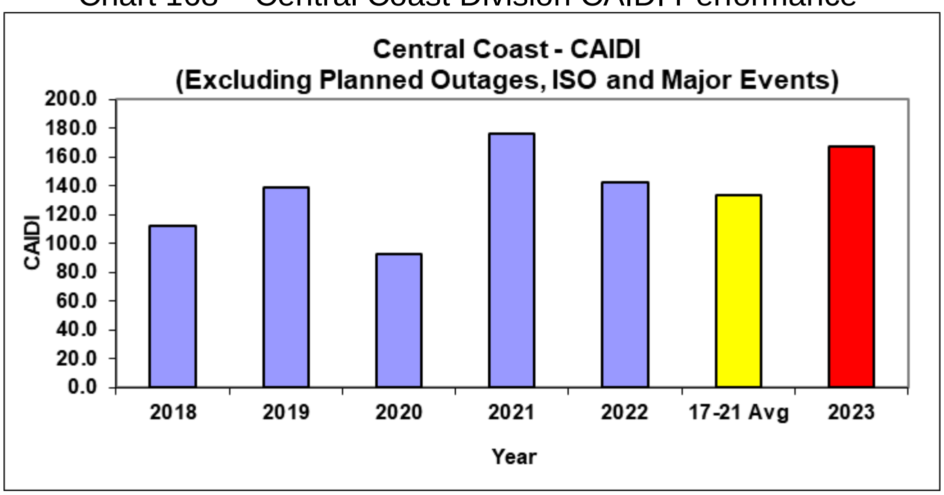
1. On March 28th, an underground equipment failure on the De Monte 2105 feeder (that was temporarily feeding most of Viejo 2204 feeder) caused a sustained outage to 12,718 customers and contributed 0.042 customer-interruptions to the system SAIFI.
2. On August 30th, a 3rd party vehicle hit a pole carrying the Green Valley 2104 overhead primary distribution line and broke a guy wire causing a sustained outage to 8,029 customers and contributed 0.027 customer-interruptions to the system SAIFI.

3. On March 11th, an overhead primary distribution cutout burned on the Del Monte 2105 feeder causing a sustained outage to 11,227 customers and contributed 0.037 customer-interruptions to the system SAIFI.
4. On August 19th, an underground equipment failure on the Paul Sweet 2101 feeder caused a sustained outage to 7,011 customers and contributed 0.023 customer-interruptions to the system SAIFI.
5. The EPSS and DCD settings installed on the distribution line equipment contributed 0.617 customer-interruptions to the system SAIFI performance.

Central Coast Division CAIDI Performance

Central Coast Division's 2023 CAIDI performance of 167.6 was 34.3 (or 25.7%) minutes higher than the previous 5-year average of 133.3 as shown in the table above and illustrated in the figure below.

Chart 168 – Central Coast Division CAIDI Performance



The higher-than-average 2023 system CAIDI was attributed to the following:

1. On November 13th, a primary overhead distribution conductor broke on the Los Coches 1102 feeder and caused a sustained outage to 3,575 customers and contributed 599.8 minutes to the system CAIDI.
2. On December 28th, a primary overhead distribution conductor broke on the Fort Ord 1101 feeder and caused a sustained outage to 4,454 customers and contributed 408.3 minutes to the system's CAIDI performance.
3. On March 11th, an overhead primary distribution cutout burned on the Del Monte 2105 feeder (that was temporarily feeding most of Viejo 2204 feeder) causing a sustained outage to 11,227 customers and contributed 383.7

minutes to the system's CAIDI performance.

4. On August 19th, an underground equipment failure on the Paul sweet 2101 feeder caused a sustained outage to 7,011 customers and contributed 257.8 minutes to the system's CAIDI performance.
5. On December 18th, a broken pole on the Paul Sweet 2103 feeder caused a sustained outage to 3,656 customers and contributed 212.4 minutes to the system's CAIDI performance.
6. The EPSS and DCD settings installed on the distribution line equipment contributed 154.2 customer-minutes to the division's CAIDI performance.

3. De Anza Division Performance Assessment

De Anza Division Performance

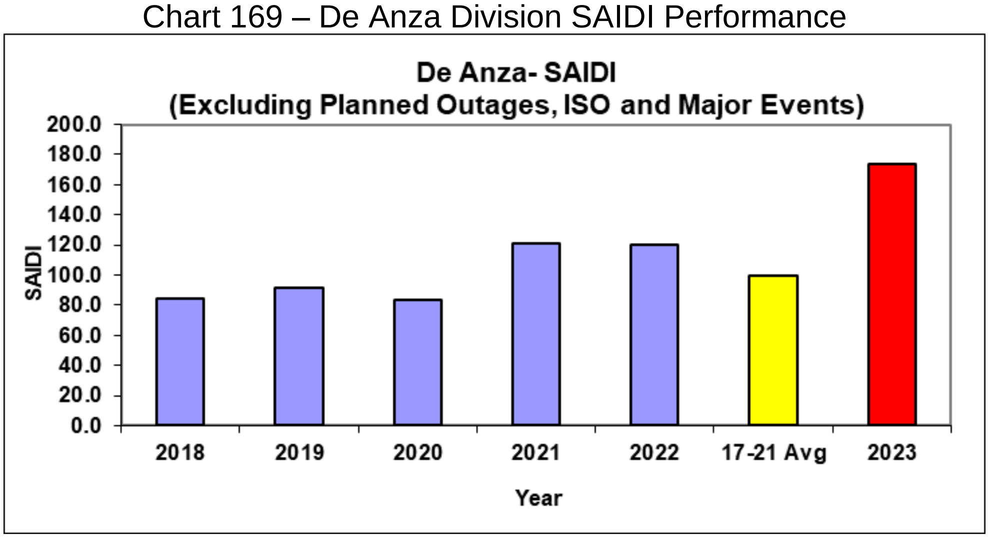
Table 11: De Anza Division Performance

Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
DE ANZA	2018	84.0	0.789	1.402	106.4
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	120.4	1.001	1.062	120.3
5-Year Average	17-21 Avg	100.0	0.832	1.264	120.1
DE ANZA	2023	173.3	1.002	1.473	173.0
	%Difference	73.4%	20.4%	16.5%	44.0%

De Anza Division SAIDI Performance

De Anza Division's 2023 SAIDI performance of 173.3 was 73.4 customer-minutes (or 73.4%) higher than the previous 5-year average of 100.0 as shown in the table above and illustrated in the figure below.

Chart 169 – De Anza Division SAIDI Performance



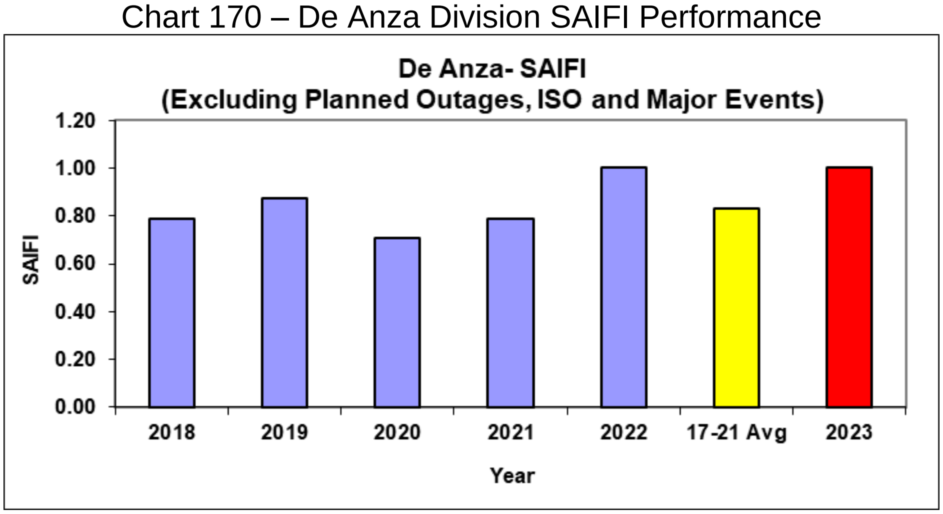
The higher-than-average 2023 De Anza Division SAIDI was attributed to the following:

1. On January 23rd, a tree fell into our line and broke the overhead conductor on the LOS GATOS-1107 feeder causing a recloser level outage that contributed 7.6 customer-minutes to the division's SAIDI performance.
2. On October 24th, an overhead equipment failure caused a large EPSS outage on the Las Gatos 1106 feeder and resulted in a recloser level outage. This outage contributed 6.4 customer-minutes to the division's SAIDI performance.
3. On September 24th, a tree wire came off the insulator and was found lying on the crossarm causing an EPSS outage on the Las Gatos 1106 feeder that resulted in a recloser level outage. This outage contributed 4.7 customer-minutes to the division's SAIDI performance.
4. On September 26th, a car pole incident broke our overhead wire on the El Patio 1104 feeder caused a breaker level outage. This outage contributed 4.0 customer-minutes to the division's SAIDI performance.
5. The EPSS and DCD settings installed on the distribution line equipment contributed 25.4 customer-minutes to the division's SAIDI performance.

De Anza Division SAIFI Performance

De Anza Division's 2023 SAIFI performance of 1.002 was 0.170 customer-interruptions (or 20.4%) higher than the previous 5-year average of 0.832 as shown in the table above and illustrated in the figure below.

Chart 170 – De Anza Division SAIFI Performance



The higher-than-average 2023 De Anza division SAIFI was attributed to the

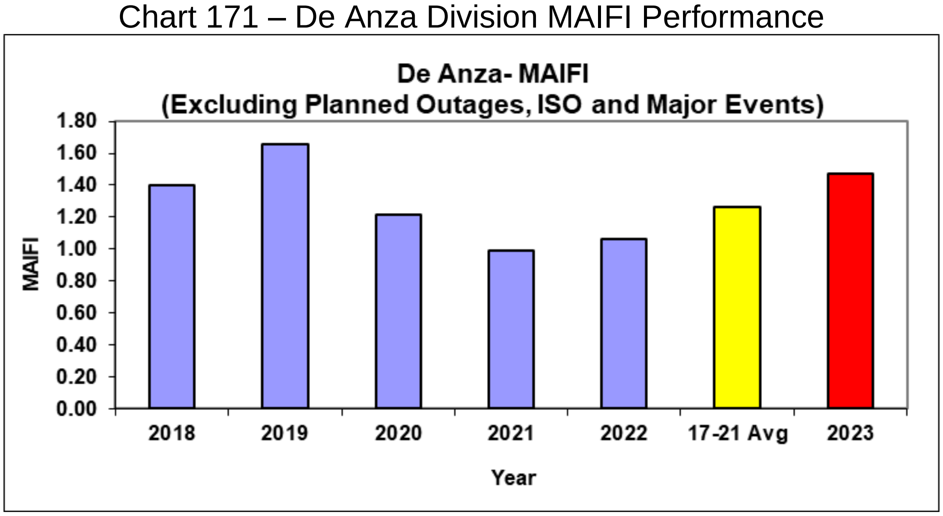
following:

1. On September 21st, a failed transformer bank at the Saratoga substation required all three 12 kV feeders served from that failed bank to be transferred to a working bank. This outage contributed 0.068 customer-interruptions to the division's SAIFI.
2. On November 30th, the Los Altos 1104 feeder breaker operated due to heavy load and caused a breaker level outage. This outage contributed 0.024 customer-interruptions to the division's SAIFI.
3. On July 25th, a company initiated outage on Stelling 1107 feeder caused an outage that contributed 0.023 customer-interruptions to the division's SAIFI.
4. On January 11th, a tree branches fell into our line at multiple locations on the El patio 1112 feeder causing a recloser level outage. This outage contributed 0.022 customer-interruptions to the division's SAIFI.
5. The EPSS and DCD settings installed on the distribution line equipment contributed 0.110 customer-interruptions to the system SAIFI performance.

<u>De Anza Division MAIFI Performance</u>

East Bay Division's 2023 MAIFI performance of 1.473 was 0.209 customer-interruptions (or 16.5%) higher than the previous 5-year average of 1.264 as shown in the table above and illustrated in the figure below.

Chart 171 – De Anza Division MAIFI Performance



The higher-than-average 2023 De Anza Division MAIFI was attributed to momentary outages on:

1. Wolfe 1113 feeder breaker on March 1st due to an unknown cause. This outage

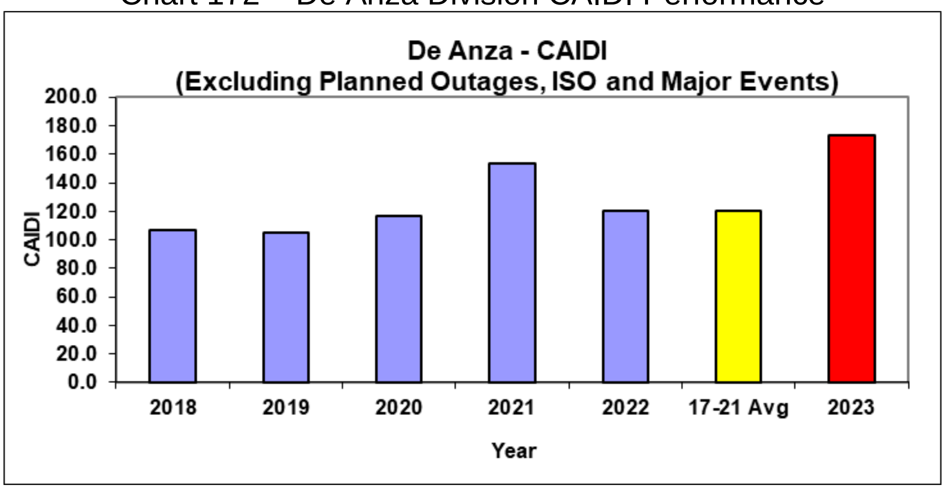
contributed 0.034 customer-interruptions to the division's MAIFI performance.

2. Los Altos - 1104 recloser on November 30th, due to electrical overload. This outage contributed 0.024 customer-interruptions to the division's MAIFI performance.
3. Vasona 1108 feeder breaker on June 5th, due overhead equipment failure. This outage contributed 0.022 customer-interruptions to the division's MAIFI performance.
4. The EPSS and DCD settings installed on the distribution line equipment contributed 0.001 customer-interruptions to the system MAIFI performance.

De Anza Division CAIDI Performance

De Anza Division's 2023 CAIDI performance of 173.0 was 52.9 minutes (or 44.0%) higher than the previous 5-year average of 120.1 as shown in the table above and illustrated in the figure below.

Chart 172 – De Anza Division CAIDI Performance



The higher-than-average 2023 De Anza Division CAIDI was attributed to the following:

1. On January 23rd, a tree fell into our line and broke the overhead conductor on the LOS GATOS-1107 feeder causing a recloser level outage that contributed 1,578.4 customer-minutes to the division's CAIDI performance.
2. On October 24th, an overhead equipment failure caused a large EPSS outage on the Las Gatos 1106 feeder and resulted in a recloser level outage. This outage contributed 675.0 customer-minutes to the division's CAIDI performance.

3. On September 24th, a tree wire came off the insulator and was found lying on the crossarm causing an EPSS outage on the Las Gatos 1106 feeder that resulted in a recloser level outage. This outage contributed 496.5 customer-minutes to the division's CAIDI performance.
4. On September 26th, a car pole incident broke our overhead wire on the El Patio 1104 feeder caused a breaker level outage. This outage contributed 305.3 customer-minutes to the division's CAIDI performance.
5. The EPSS and DCD settings installed on the distribution line equipment contributed 231.5 customer-minutes to the division's CAIDI performance.

4. Diablo Division Performance Assessment

Diablo Division Performance

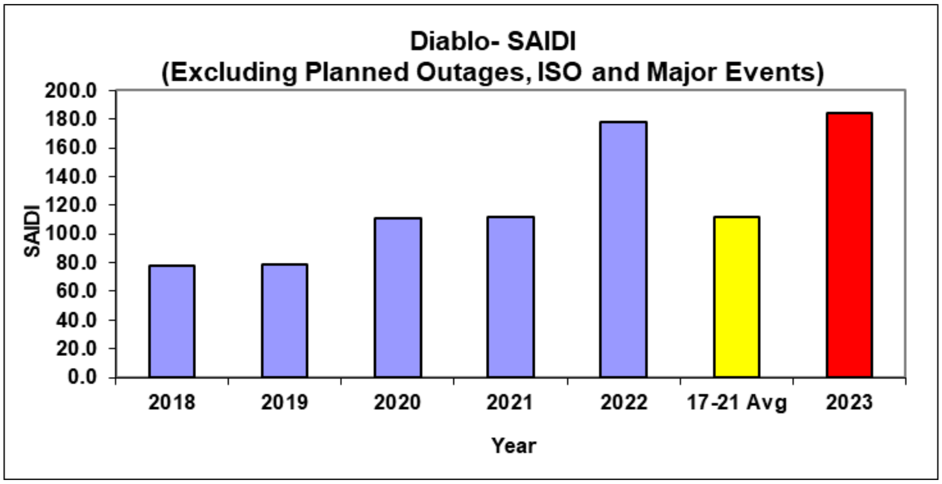
Table 12: Diablo Division Performance

Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
DIABLO	2018	78.3	1.004	1.496	78.0
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	178.4	1.559	1.289	114.4
5-Year Average	17-21 Avg	111.6	1.176	1.394	94.9
DIABLO	2023	183.9	1.384	1.083	132.9
	%Difference	64.7%	17.7%	-22.3%	40.0%

Diablo Division SAIDI Performance

Diablo Division's 2023 SAIDI performance of 183.9 was 72.2 customer-minutes (or 64.7%) higher than the previous 5-year average of 111.6 as shown in the table above and illustrated in the figure below.

Chart 173 – Diablo Division SAIDI Performance



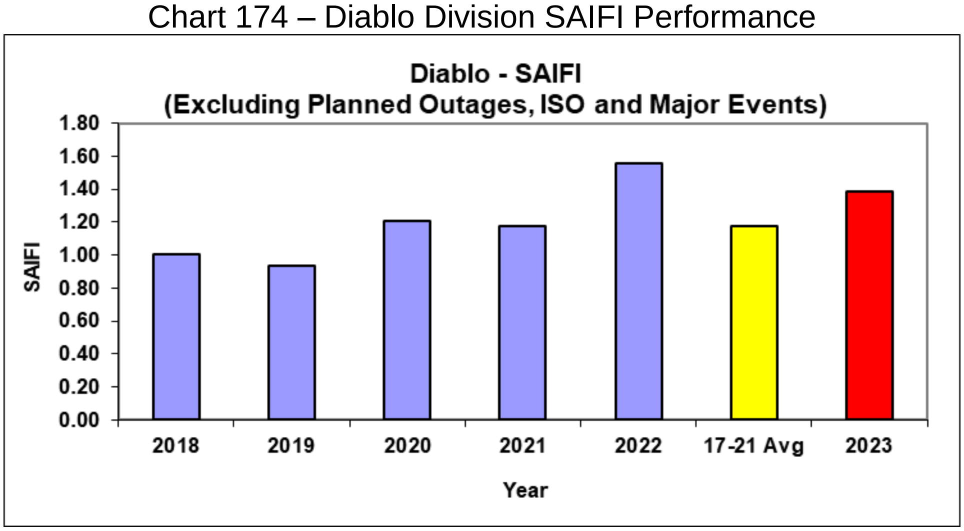
The higher-than-average 2023 Diablo Division SAIDI was attributed to the following:

1. The EPSS settings installed on the distribution line equipment contributed 80.9 customer-minutes to the division's SAIDI performance.
2. On August 14th, the largest EPSS related outage due to an underground cable failure that resulted in a breaker level outage on the Tassajara 2108 feeder caused a large outage and contributed 10.0 customer-minutes to the division's SAIDI performance.
3. On July 1st, an underground equipment failure on research 2102 feeder caused a breaker level outage. This outage contributed 6.6 customer-minutes to the division's SAIDI performance.
4. On August 7th, a bird related incident triggered the EPSS settings and cause a recloser level outage on the Clayton 2215 feeder. This outage contributed 4.3 customer-minutes to the division's SAIDI performance.
5. On October 28th, a failed capacitor bank on the Clayton 2217 feeder caused a breaker level outage triggered by the EPSS settings. This outage contributed 4.2 customer-minutes to the division's SAIDI performance.

Diablo Division SAIFI Performance

Diablo Division's 2023 SAIFI performance of 1.384 was 0.208 customer-interruptions (or 17.7%) higher than the previous 5-year average of 1.176 as shown in the table above and illustrated in the figure below.

Chart 174 – Diablo Division SAIFI Performance



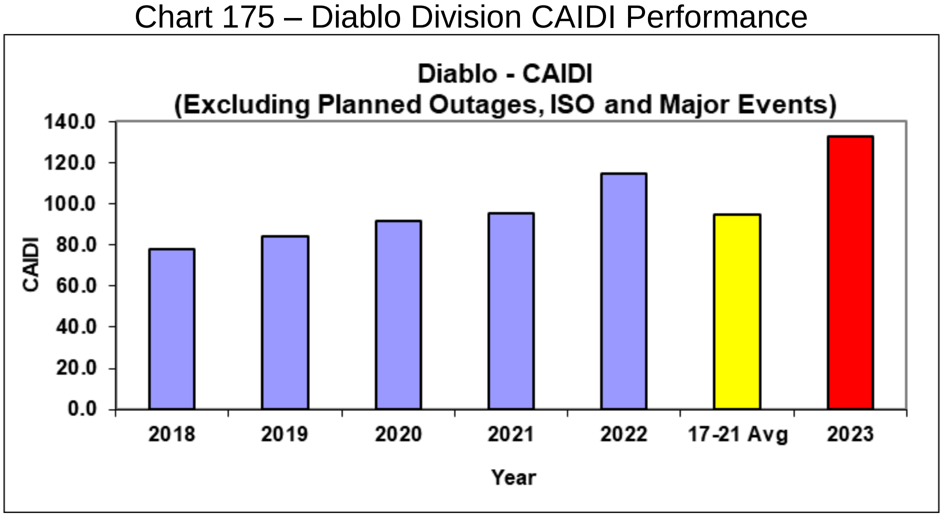
The higher-than-average 2023 Diablo Division SAIFI was attributed to the following:

1. The EPSS installed on the distribution line equipment contributed 0.463 customer-interruptions to the division's SAIFI Performance.
2. On July 8th, EPSS settings at the breaker was triggered due to an unknown cause resulting in a large outage on the Tassajara 2108 feeder and contributed 0.025 customer-interruptions to the division's SAIFI performance.
3. On August 14th, a breaker level outage occurred on the Tassajara 2108 feeder due to an underground cable failure that triggered the EPSS settings. This outage contributed 0.024 customer-interruptions to the division's SAIFI performance.
4. On July 29th, a breaker level outage occurred on the Willow Pass 2108 feeder due to an unknown cause that triggered the EPSS settings. This outage contributed 0.017 customer-interruptions to the division's SAIFI performance.
5. On July 26th, a underground transformer failure on the Kirker 2103 feeder caused a breaker level outage. This outage contributed 0.017 customer-interruptions to the division's SAIFI performance.

<u>Diablo Division CAIDI Performance</u>

Diablo Division's 2023 CAIDI performance of 132.9 was 38.0 (or 40.0%) minutes higher than the previous 5-year average of 94.9 as shown in the table above and illustrated in the figure below.

Chart 175 – Diablo Division CAIDI Performance



The higher-than-average 2023 Diablo Division CAIDI was attributed to the

following:

1. The EPSS installed on the distribution line equipment contributed 174.6 minutes to the division's CAIDI performance.
2. On August 14th, the largest EPSS related outage due to an underground cable failure that resulted in a breaker level outage on the Tassajara 2108 feeder caused a large outage and contributed 423.4 minutes to the division's CAIDI performance.
3. On July 1st, an underground equipment failure on research 2102 feeder caused a breaker level outage. This outage contributed 762.7 minutes to the division's CAIDI performance.
4. On August 7th, a bird related incident triggered the EPSS settings and caused a recloser level outage on the Clayton 2215 feeder. This outage contributed 387.1 minutes to the division's CAIDI performance.
5. On October 28th, a failed capacitor bank on the Clayton 2217 feeder caused a breaker level outage triggered by the EPSS settings . This outage contributed 263.1 minutes to the division's CAIDI performance.

5. Fresno Division Performance Assessment

Fresno Division Performance

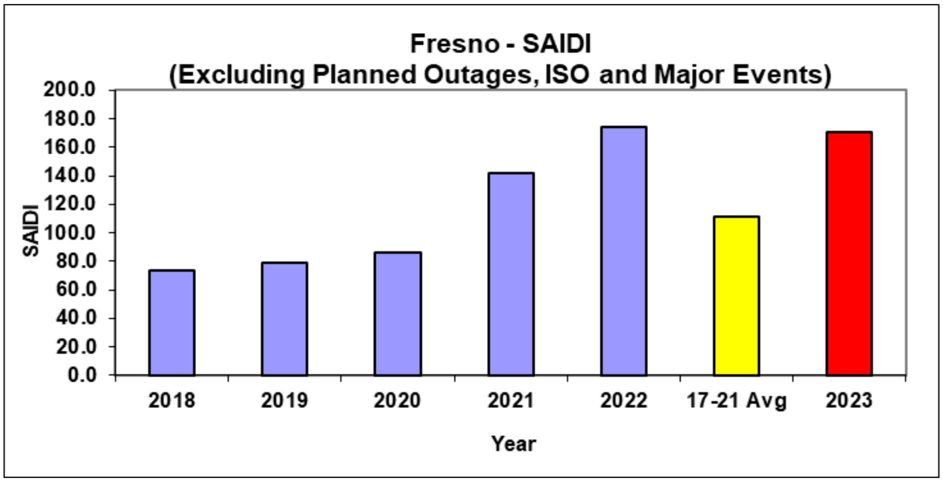
Table 13: Fresno Division Performance

Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
FRESNO	2018	73.5	0.861	1.368	85.4
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	174.1	1.235	1.719	140.9
5-Year Average	17-21 Avg	111.0	0.974	1.477	113.9
FRESNO	2023	170.9	1.178	1.493	145.1
	%Difference	54.0%	20.9%	1.1%	27.4%

Fresno Division SAIDI Performance

Fresno Division's 2023 SAIDI performance of 170.9 was 60.0 customer-minutes (or 54.0%) higher than the previous 5-year average of 111.0 as shown in the table above and illustrated in the figure below.

Chart 176 – Fresno Division SAIDI Performance



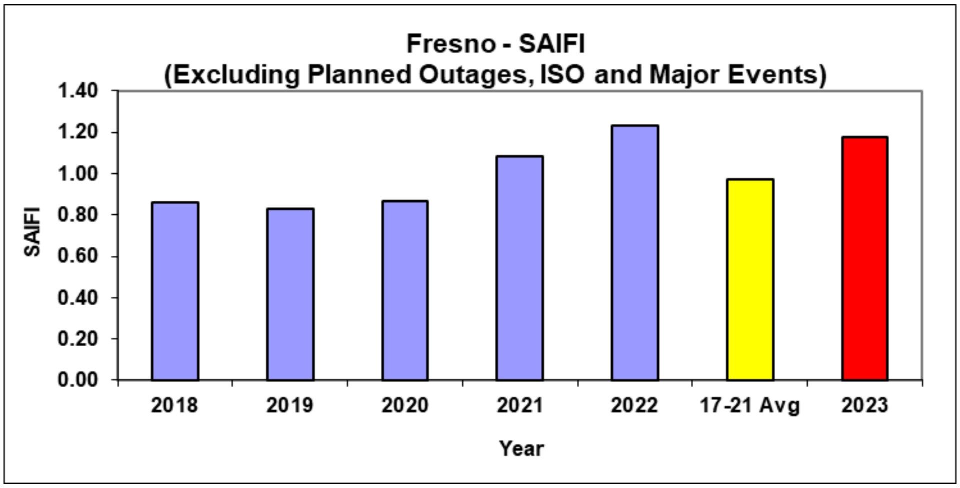
The higher-than-average 2023 Fresno Division SAIDI was attributed to the following:

1. EPSS and DCD installed on the distribution line equipment contributed 19.9 customer minutes to the division's SAIDI performance.
2. On August 7th, a flashed pole and caused a transmission level outage on the Gates -Tulare Lake 70 kV transmission line. This incident caused a loss of power to two substations Kettleman Hills and Avenal. This outage contributed 4.3 customer-minutes to the division's SAIDI.
3. On August 18th, a broken crossarm caused an outage the Sanger 1118 feeder and contributed 3.5 customer-minutes to the division's SAIDI.
4. On August 19th, a bird related incident caused a recloser level outage on the Avenal 2102 feeder. This outage contributed 3.4 customer-minutes to the division's SAIDI.
5. On April 21st, a recloser level outage occurred on the Corcoran 1112 feeder due to flooding by Tulare lake and contributed 2.0 customer-minutes to the division's SAIDI.

Fresno Division SAIFI Performance

Fresno Division's 2023 SAIFI performance of 1.178 was 0.204 customer-interruptions (or 20.9%) higher than the previous 5-year average of 0.974 as shown in the table above and illustrated in the figure below.

Chart 177 – Fresno Division SAIFI Performance



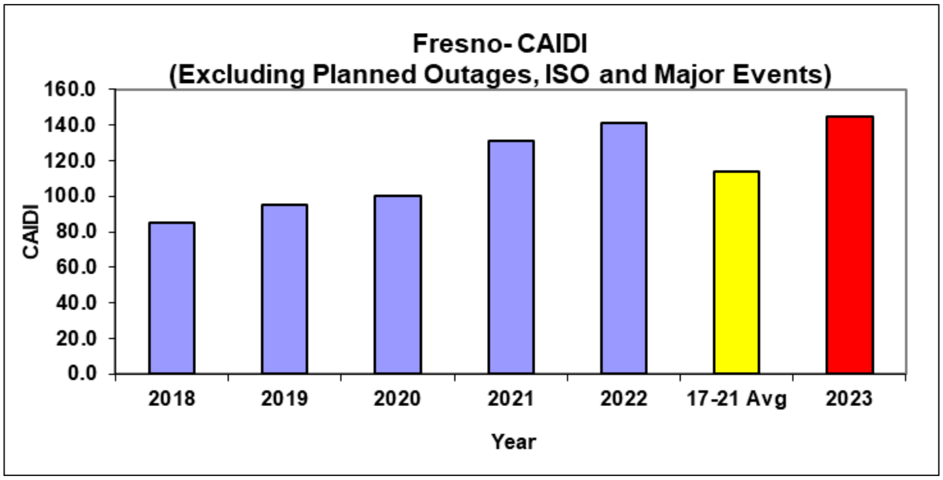
The higher-than-average 2023 Fresno Division SAIFI was attributed to the following:

1. EPSS and DCD settings installed on the distribution line equipment contributed 0.066 customer-interruptions to the division's SAIFI performance.
2. On February 2nd, a broken overhead piece of equipment had to be repaired. An unplanned fuse level outage on the Clovis 2109 feeder contributed 0.014 customer-interruptions to the division's SAIFI performance.
3. On December 14th, a breaker level outage occurred on the Figarden 2102 feeder due to a failed overhead switch that contributed 0.010 customer-interruptions to the division's SAIFI performance.
4. On December 15th, a company initiated outage caused breaker level outages on Bullard 2114 and Bullard 2111 feeders. This outage contributed 0.009 customer-interruptions to the division's SAIFI performance.
5. On March 3rd, a 3rd party vehicle related incident caused a breaker level outage occurred on the Woodward 2102 feeder that contributed 0.008 customer-interruptions to the division's SAIFI performance.

Fresno Division CAIDI Performance

Fresno Division's 2022 CAIDI performance of 145.1 was 31.2 minutes (or 27.4%) higher than the previous 5-year average of 113.9 as shown in the table above and illustrated in the figure below.

Chart 178 – Fresno Division CAIDI Performance



The higher-than-average 2023 CAIDI performance was mainly due to the following:

1. EPSS on the distribution line equipment installed contributed 300.8 minutes to the division's CAIDI performance.
2. On April 21st, a recloser level outage occurred on the Corcoran 1112 feeder due to flooding by Tulare lake and contributed 37,458.0 customer-minutes to the division's CAIDI performance.
3. On April 18th, a fuse level outage occurred on the Henrietta 1104 feeder due to flood erosion and contributed 96,009.0 customer-minutes to the division's CAIDI performance.

6. Humboldt Division Performance Assessment

Humboldt Division Performance

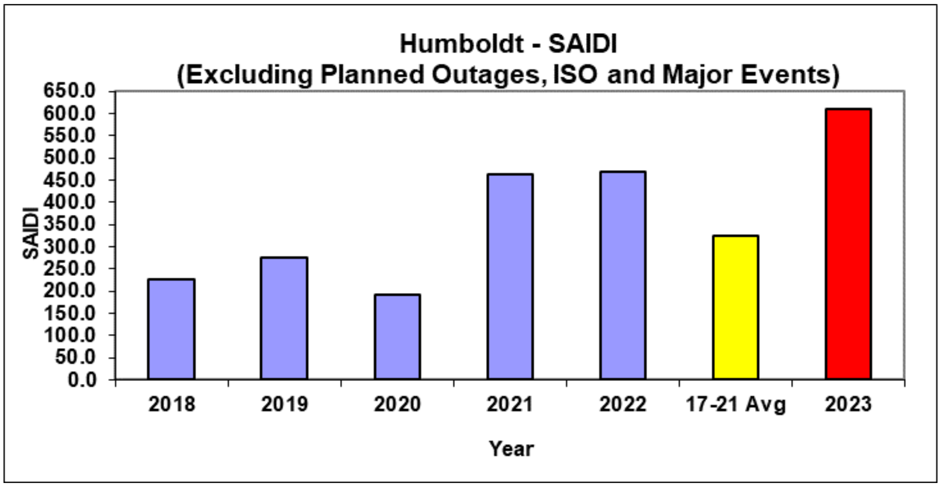
Table 14: Humboldt Division Performance

Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
HUMBOLDT	2018	225.9	1.789	1.502	126.3
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	468.1	2.491	1.326	187.9
5-Year Average	17-21 Avg	324.2	1.847	1.455	175.5
HUMBOLDT	2023	610.8	2.729	1.636	223.8
	%Difference	88.4%	47.7%	12.5%	27.5%

Humboldt Division SAIDI Performance

Humboldt Division's 2023 SAIDI performance of 610.8 was 286.6 customer-minutes (or 88.4%) higher than the previous 5-year average of 324.2 as shown in the table above and illustrated in the figure below.

Chart 179 – Humboldt Division SAIDI Performance



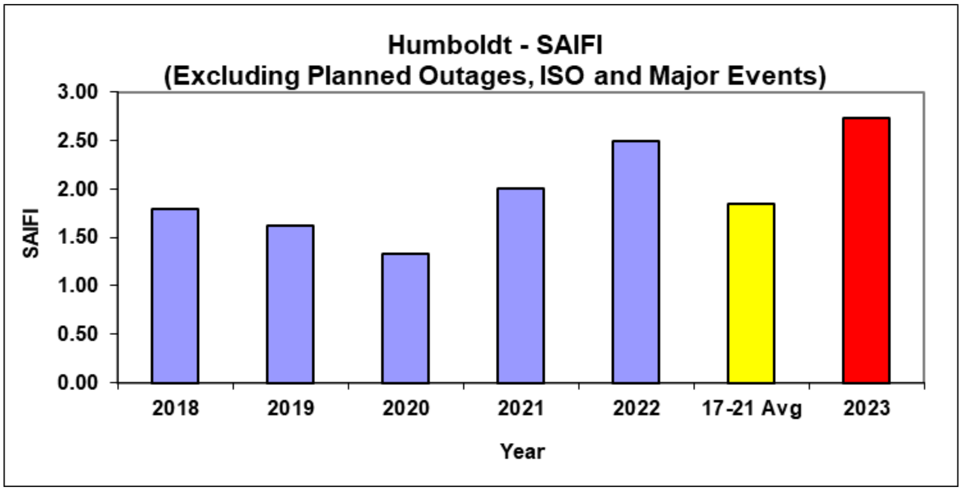
The higher-than-average 2023 Humboldt Division SAIDI was attributed to the following:

1. EPSS installed on the distribution line equipment contributed 187.5 customer minutes to the division's SAIDI performance.
2. On February 22nd, a tree fell into our lines and caused an outage on the Garberville 1102 feeder. This outage contributed 41.5 customer-minutes to the division's SAIDI.
3. On June 24th, an DCD settings related recloser level outage occurred due to an unknown cause on the Willow Creek 1103 feeder. This outage contributed 11.8 customer-minutes to the division's SAIDI.
4. On March 5th a tree fell into our lines and broke the overhead conductor causing an outage on the Bridgeville 1101 feeder. This outage contributed 10.9 customer-minutes to the division's SAIDI.
5. On February 4th, a tree branch fell into our lines and brought the conductor down causing an outage on the Arcata 1122 feeder. This outage contributed 9.1 customer-minutes to the division's SAIDI.

Humboldt Division SAIFI Performance

Humboldt Division's 2022 SAIFI performance of 2.729 was 0.882 customer-interruptions (or 47.7%) higher than the previous 5-year average of 1.847 as shown in the table above and illustrated in the figure below.

Chart 180 – Humboldt Division SAIFI Performance



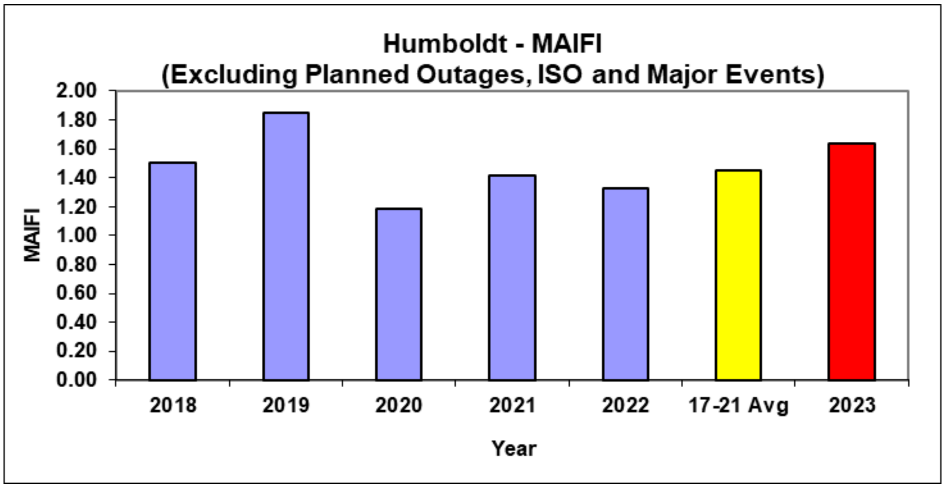
The higher-than-average 2023 Humboldt Division SAIFI was attributed to the following:

1. EPSS installed on the distribution line equipment contributed 0.905 customer-interruptions to the division's SAIFI performance.
2. On October 26th, a breaker level outage occurred on the Gualala 1112 feeder due to 3rd party incident. This outage contributed 0.025 customer-interruptions to the division's SAIFI performance.
3. On September 18th, a breaker level outage due to the EPSS settings occurred on Gualala 1112 feeder due to a tree branch hitting our lines. This outage contributed 0.025 customer-interruptions to the division's SAIFI performance.
4. On August 21st, a breaker level outage due to the EPSS settings occurred on the Gualala 1112 feeder due to an unknown cause. This outage contributed 0.025 customer-interruptions to the division's SAIFI performance.

Humboldt Division MAIFI Performance

Humboldt Division's 2023 MAIFI performance of 1.636 was 0.182 customer-interruptions (or 12.5%) higher than the previous 5-year average of 1.455 as shown in the table above and illustrated in the figure below.

Chart 181 – Humboldt Division MAIFI Performance



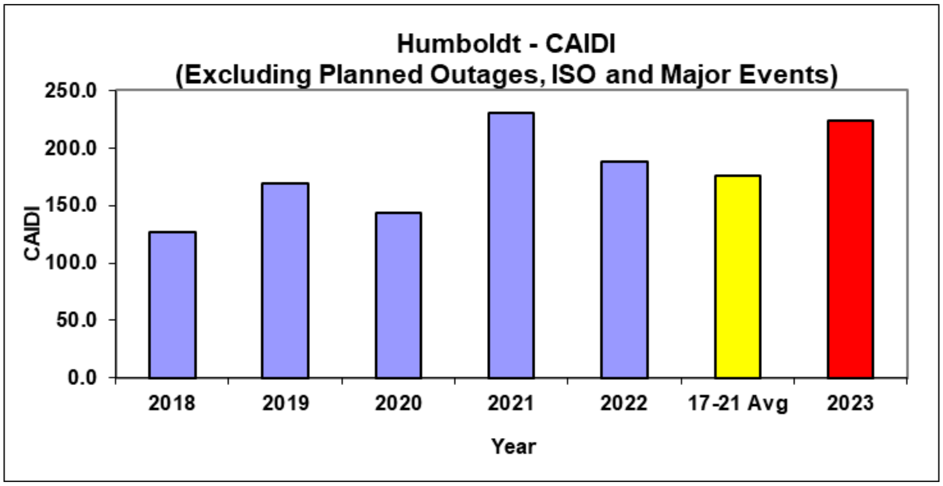
The higher-than-average 2023 Humboldt Division MAIFI was attributed to momentary outages as follows:

1. Newburg 1132 feeder breaker on January 27th due to an operator error. This outage contributed 0.043 customer-interruptions to the division's MAIFI performance.
2. Eureka E-1104 feeder breaker on April 10th due to an Unknown cause. This outage contributed 0.024 customer-interruptions to the division's MAIFI performance.
3. Middletown - 1102 feeder breaker on January 23rd due to an Unknown cause. This outage contributed 0.021 customer-interruptions to the division's MAIFI performance.
4. The EPSS and DCD settings installed on the distribution line equipment contributed 0.022 customer-interruptions to the division's MAIFI Performance.

Humboldt Division CAIDI Performance

Humboldt Division's 2023 CAIDI performance of 223.8 was 48.3 minutes (or 27.5%) higher than the previous 5-year average of 175.5 as shown in the table above and illustrated in the figure below.

Chart 182 – Humboldt Division CAIDI Performance



The higher-than-average 2023 Humboldt Division CAIDI was attributed to the following:

1. On August 21st, a breaker level outage due to the EPSS settings occurred on the Gualala 1112 feeder due to an unknown cause. This outage contributed 125.5 customer-minutes to the division's CAIDI performance.
2. On February 22nd, a tree fell into our line and broke our overhead wire causing a fuse level outage on Garberville 1101 feeder that contributed 18,008.0 customer-minutes to the division's CAIDI performance.
3. On March 3rd, an unknown cause resulted in a fuse level outage on Laytonville 1102 feeder and contributed 17,660.0 customer-minutes to the division's CAIDI performance.
4. The EPSS and DCD settings installed on the distribution line equipment contributed 207.2 customer-minutes to the division's CAIDI performance.

7. Kern Division Performance Assessment

Kern Division Performance

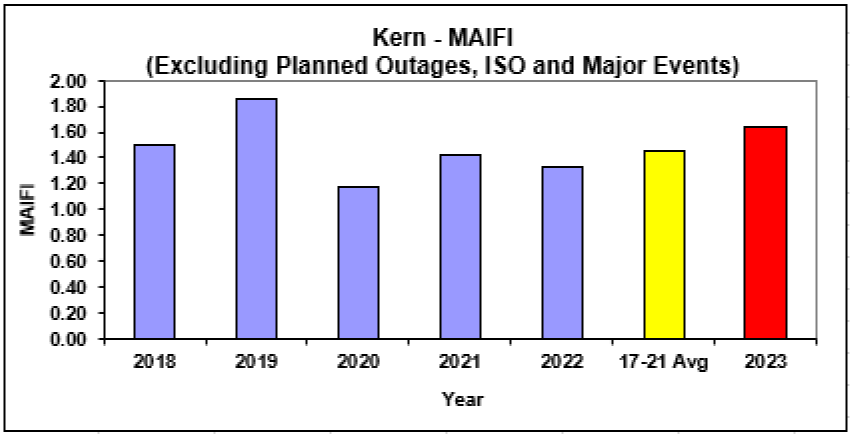
Table 15: Kern Division Performance

Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
KERN	2018	71.6	0.783	1.720	91.4
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	267.3	1.449	1.200	184.4
5-Year Average	17-21 Avg	139.7	1.099	1.599	127.1
KERN	2023	145.2	1.195	1.815	121.5
	%Difference	3.9%	8.7%	13.5%	-4.4%

Kern Division MAIFI Performance

Kern Division's 2023 MAIFI performance of 1.815 is 0.216 customer-interruptions (or 13.5%) higher than the previous 5-year average of 1.599 as shown in the table above and illustrated below.

Chart 183 – Kern Division MAIFI Performance



The higher-than-average 2023 Kern Division MAIFI performance is due the following outage events:

1. On October 16th, the Stockdale 2112 feeder circuit breaker operated due to an unknown cause.
2. On June7th, the Stockdale 2112 feeder circuit breaker operated due to an unknown cause.
3. On February 12th, the Panama 2102 feeder circuit breaker operated due to an unknown cause.
4. On April 23rd, the Stockdale 2112 circuit breaker operated due to an unknown cause.

   These outages contributed 0.090 customer-interruptions to the division's MAIFI performance.

8. Los Padres Division Performance Assessment

Los Padres Division Performance

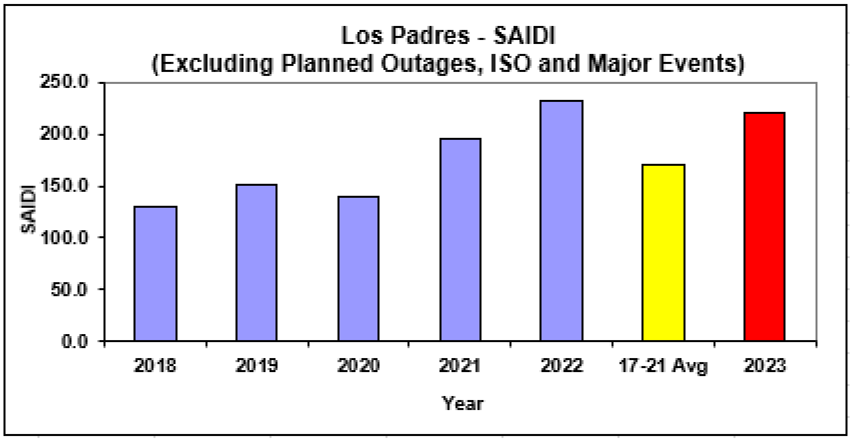
Table 16: Los Padres Division Performance

Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
LOS PADRES	2018	130.5	1.195	1.010	109.3
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	232.1	1.814	0.866	128.0
5-Year Average	17-21 Avg	169.5	1.293	0.965	131.2
LOS PADRES	2023	221.1	1.831	1.180	120.7
	%Difference	30.4%	41.7%	22.3%	-8.0%

Los Padres Division SAIDI Performance

Los Padres Division's 2023 SAIDI performance of 221.1 was 51.5 customer-minutes (or 30.4%) higher than the previous 5-year average of 169.5 as shown in the table above and illustrated in the figure below.

Chart 184 – Los Padres Division SAIDI Performance



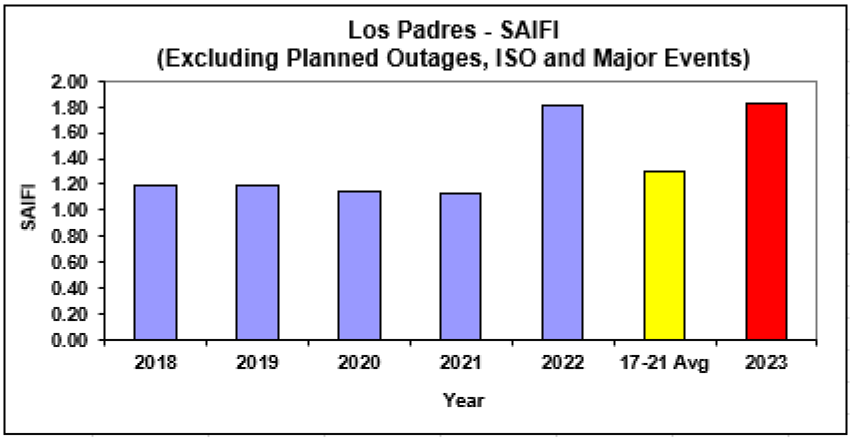
The higher-than-average 2023 Los Padres Division SAIDI was attributed to the following:

1. EPSS and DCD settings installed on the distribution line equipment contributed 115.1 minutes to the division's SAIDI performance.
2. On June 17th, an EPSS settings related, recloser level outage occurred due to unknown cause on Oilfields 1103 feeder. This outage contributed 10.6 customer-minutes to the division's SAIDI.
3. On June 28th, an EPSS settings related, breaker level outage occurred due an equipment failure on the Templeton 2113 feeder. This outage contributed 5.7 customer-minutes to the division's SAIDI.
4. On July 21st, an EPSS settings related, recloser level outage occurred due to an underground equipment failure. This outage contributed 3.9 customer-minutes to the division's SAIDI.

Los Padres Division SAIFI Performance

Los Padres Division's 2022 SAIFI performance of 1.831 was 0.539 customer-interruptions (or 41.7%) higher than the previous 5-year average of 1.293 as shown in the table above and illustrated in the figure below.

Chart 185 – Los Padres Division SAIFI Performance



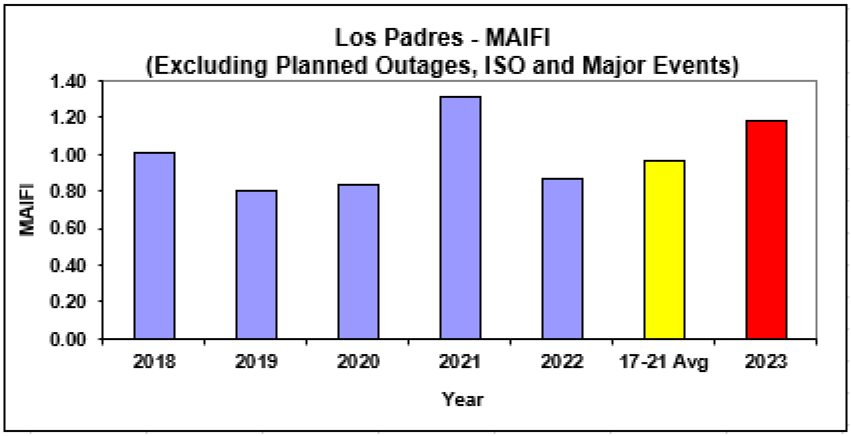
The higher-than-average 2023 SAIFI performance is due the following outage events:

1. EPSS and DCD settings installed on the distribution line equipment contributed 0.883 customer-interruptions to the division's SAIFI.
2. On June 28th, an EPSS settings related, breaker level outage occurred due an equipment failure on the Templeton 2113 feeder. This outage contributed 0.033 customer-interruptions to the division's SAIFI.
3. On August 10th, an underground equipment failure caused a breaker level outage on the Divide 1102 feeder. This outage contributed 0.028 customer-interruptions to the division's SAIFI.
4. On December 1st, a burnt jumper caused breaker level outage on the Morro Bay 1102 feeder. This outage contributed 0.031 customer-interruptions to the division's SAIFI.

Los Padres Division MAIFI Performance

Peninsula Division's 2023 MAIFI performance of 1.180 was 0.216 customer-interruptions (or 22.3%) higher than the previous 5-year average of 0.965 as shown in the table above and illustrated in the figure below.

Chart 186 – Los Padres Division MAIFI Performance



The higher-than-average 2023 Los Padres Division MAIFI was attributed to the following momentary outages:

1. On December 1st, a burnt jumper event resulted in a momentary outage on the Morro Bay 1102 feeder.
2. On August 10th, the Divide 1102 feeder circuit breaker operated due to an unknown cause.
3. On August 10th, the Divide 1102 feeder circuit breaker operated a second time due to an unknown cause.
4. On June 17th, the San Luis Obispo – Oceano 115kV transmission line relayed and Oceano substation lost power due to unknown reasons. These outages contributed 0.117 customer-interruptions to the division's MAIFI performance.
5. EPSS and DCD settings installed on the distribution line equipment contributed 0.021 customer-interruptions to the division's MAIFI performance.

9. Mission Division Performance Assessment

Mission Division Performance

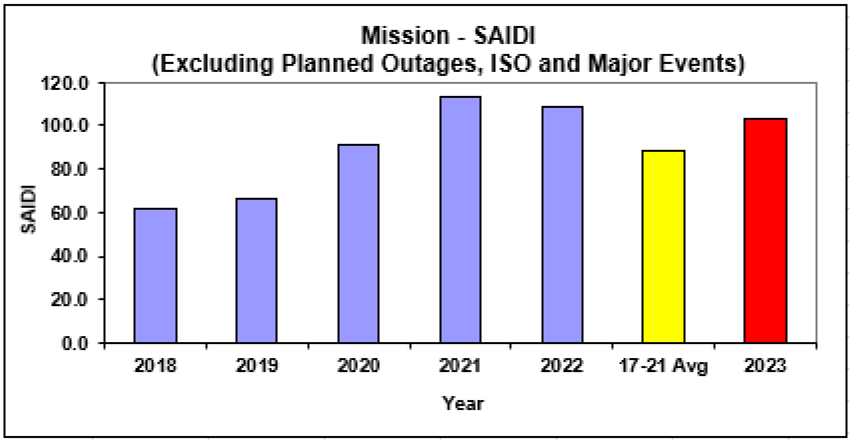
Table 17: Mission Division Performance

Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
MISSION	2018	62.0	0.644	0.815	96.4
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	108.9	0.777	0.872	140.2
5-Year Average	17-21 Avg	88.3	0.763	0.870	115.8
MISSION	2023	102.8	0.787	0.796	130.6
	%Difference	16.5%	3.3%	-8.5%	12.8%

Mission Division SAIDI Performance

Mission Division's 2023 SAIDI performance of 102.8 was 14.5 customer-minutes (or 16.5%) higher than the previous 5-year average of 88.3 as shown in the table above and illustrated in the figure below.

Chart 187 – Mission Division SAIDI Performance



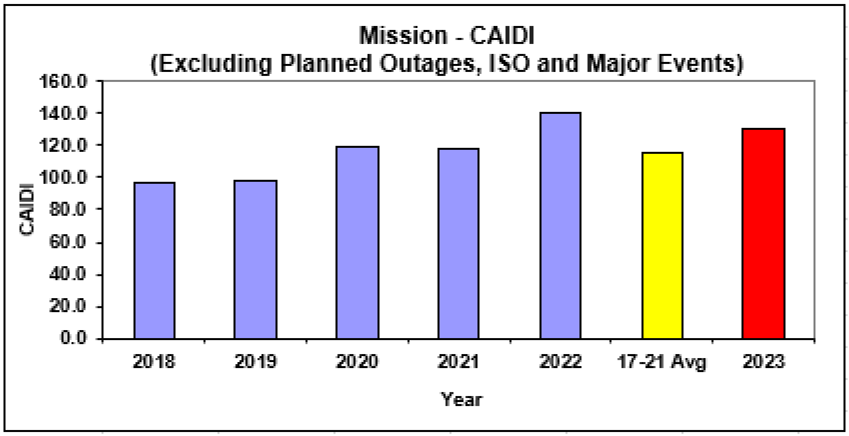
The higher-than-average 2023 Mission Division SAIDI was attributed to the following:

1. EPSS and DCD settings installed on the distribution line equipment contributed 31.8 minutes to the division's SAIDI performance.
2. On July 22nd, a breaker level outage occurred due to an unknown cause on the Vineyard 2110 feeder. This outage contributed 6.0 customer-minutes to the division's SAIDI performance.
3. On July 22nd, a tree fell on our line and broke the overhead conductor causing a breaker level outage on the Vineyard 2107 feeder. This outage contributed 3.2 customer-minutes to the division's SAIDI performance.
4. On April 17th, a transformer failure caused a recloser level outage on Jarvis 1112 feeder. This outage contributed 3.0 customer-minutes to the division's SAIDI.
5. On September 11th, an underground equipment failure caused a breaker level outage on the Fremont 1108 feeder. This outage contributed 3.0 customer-minutes to the division's SAIDI.

Mission Division CAIDI Performance

Mission Division's 2023 CAIDI performance of 130.6 was 14.8 minutes (or 12.8%) higher than the previous 5-year average of 115.8 as shown in the table above and illustrated in the figure below.

Chart 188 – Mission Division CAIDI Performance



The higher-than-average 2023 Mission Division CAIDI was attributed to the following:

1. EPSS and DCD settings installed on the distribution line equipment contributed 202.4 customer-minutes to the division's CAIDI performance.
2. On January 1st, an underground equipment failure caused a fuse level outage on the Grant 1104 feeder and contributed 528.3 customer-minutes to the division's CAIDI performance.
3. On December 16th, a transformer failure caused a fuse level outage on the Newark 21 kV - 2102 feeder and contributed 768.0 customer-minutes to the division's CAIDI performance.
4. On July 29th, an overhead equipment failure caused an outage on the Radum 1105 feeder and contributed 822.6 customer-minutes to the division's CAIDI performance.
5. On July 13th, an underground equipment failure caused a fuse level outage on the San Ramon 2104 feeder and contributed 779.9 customer-minutes to the division's CAIDI performance.

10. North Bay Division Performance Assessment

North Bay Division Performance

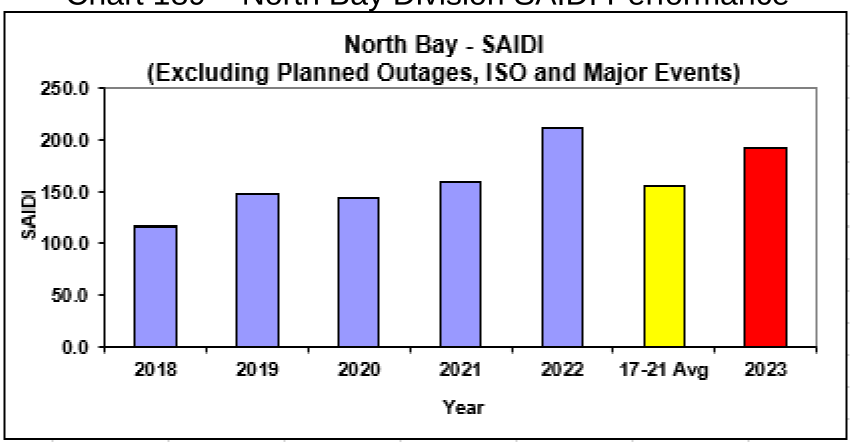
Table 18: North Bay Division Performance

Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
NORTH BAY	2018	116.3	0.921	1.771	126.3
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	211.7	1.453	1.095	145.7
5-Year Average	17-21 Avg	155.9	1.197	1.631	130.3
NORTH BAY	2023	191.6	1.291	0.976	148.5
	%Difference	22.9%	7.8%	-40.2%	14.0%

North Bay Division SAIDI Performance

North Bay Division's 2023 SAIDI performance of 191.6 was 35.7 customer-minutes (or 22.9%) higher than the previous 5-year average of 155.9 as shown in the table above and illustrated in the figure below.

Chart 189 – North Bay Division SAIDI Performance



The higher-than-average 2023 North Bay Division SAIDI was attributed to the following outage events:

1. EPSS and DCD settings installed on the distribution line equipment contributed 71.7 minutes to the division's SAIDI performance. performance.
2. On August 5th, a 3rd party vehicle broke a pole and caused a recloser level EPSS settings related outage on the Silverado 1104 feeder. This outage contributed 6.3 customer-minutes to the division's SAIDI performance.
3. On June 29th, a recloser level EPSS settings related outage occurred due to an unknown cause on Silverado 2104 feeder. This outage contributed 4.8

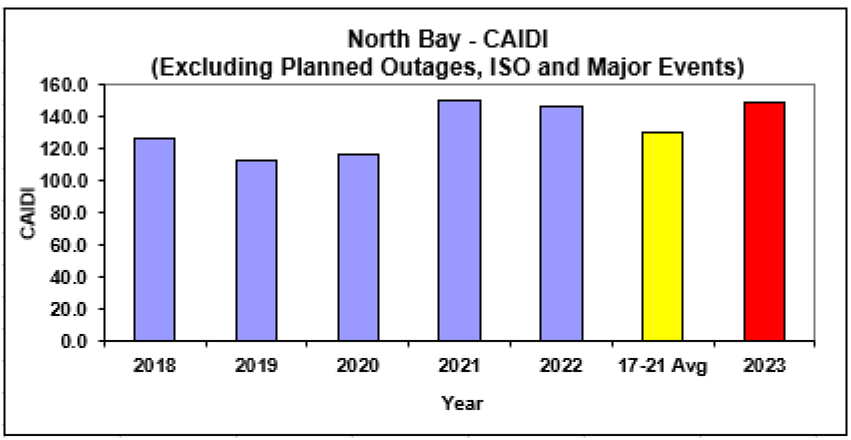
customer-minutes to the division's SAIDI performance.

4. On July 21st, a tree fell on a section of the overhead conductor and caused a recloser level outage on the Silverado 1104 feeder due to an unknown cause. This outage contributed 4.6 customer-minutes to the division's SAIDI.
5. On October 27th, a recloser level EPSS settings related outage occurred on Silverado 1104 feeder due to an unknown cause. This outage contributed 4.2 customer-minutes to the division's SAIDI.

North Bay Division CAIDI Performance

North Bay Division's 2023 CAIDI performance of 148.5 was 18.2 minutes (or 14.0%) higher than the previous 5-year average of 130.3 as shown in the table above and illustrated in the figure below.

Chart 190 – North Bay Division CAIDI Performance



The higher-than-average 2023 North Bay Division CAIDI was attributed to the following:

1. EPSS and DCD settings installed on the distribution line equipment contributed 252.3 customer-minutes to the division's CAIDI performance.
2. On August 5th, a third party vehicle broke our wood pole and caused a EPSS settings related recloser level outage on the Silverado 2104 feeder and contributed 714.6 customer-minutes to the division's CAIDI performance.
3. On June 29th, a recloser level EPSS settings related outage occurred on the Silverado 2104 feeder due to an unknown cause and contributed 548.9 customer-minutes to the division's CAIDI performance.
4. On July 21st, a recloser level EPSS settings related outage occurred on the Silverado 2104 feeder due to a tree falling on our overhead line and contributed 836.9 customer-minutes to the division's CAIDI performance.

5. On October 27th, a recloser level EPSS settings related outage occurred on Silverado 1104 feeder due to an unknown cause and contributed 746.0 customer-minutes to the division's CAIDI performance.

11. North Valley Division Performance Assessment

North Valley Division Performance

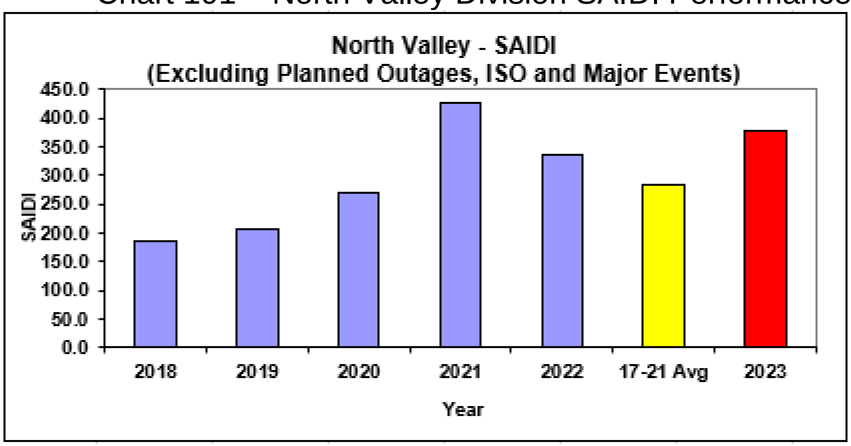
Table 19: North Valley Division Performance

Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
NORTH VALLEY	2018	187.1	1.364	1.325	137.2
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	334.8	2.159	1.195	155.0
5-Year Average	17-21 Avg	284.7	1.665	1.508	171.0
NORTH VALLEY	2023	377.5	2.108	1.333	179.1
	%Difference	32.6%	26.6%	-11.6%	4.8%

North Valley Division SAIDI Performance

North Valley Division's 2023 SAIDI performance of 377.5 was 92.8 customer-minutes (or 32.6%) higher than the previous 5-year average of 284.7 as shown in the table above and illustrated in the figure below.

Chart 191 – North Valley Division SAIDI Performance



The higher-than-average 2023 North Valley Division SAIDI was attributed to the following outage events:

1. EPSS and DCD settings installed on the distribution line equipment contributed 118.4 minutes to the division's SAIDI performance. performance.
2. On June 5th, a lightning strike caused the Volta Power House to relay thereby

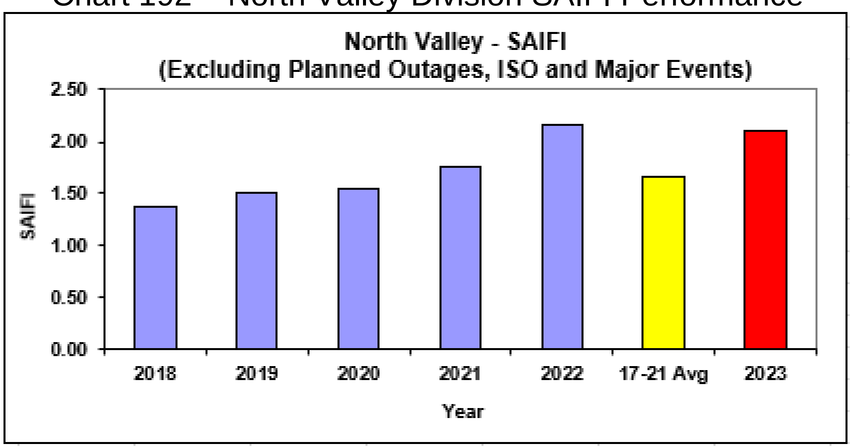
de-energizing the transmission source to Volta distribution substation. This outage contributed 14.2 customer-minutes to the division's SAIDI performance.

3. On March 28th, a tree fell into our line and broke the overhead conductor causing a breaker level outage on the Pit #3 2101 feeder. This outage contributed 7.6 customer-minutes to the division's SAIDI performance.
4. On March 30th, the Caribou-Plumas 60 kV transmission line relayed due to an unknown cause and therefore the source to the Gansner distribution substation was lost. This outage contributed 6.5 customer-minutes to the division's SAIDI.
5. On September 30th, a lightning strike caused a EPSS settings related recloser level outage on the Clark Road 1101 feeder. This outage contributed 6.1 customer-minutes to the division's SAIDI.

<u>North Valley Division SAIFI Performance</u>

North Valley Division's 2023 SAIFI performance of 2.108 was 0.443 customer-interruptions (or 26.6%) higher than the previous 5-year average of 1.665 as shown in the table above and illustrated in the figure below.

Chart 192 – North Valley Division SAIFI Performance



The higher-than-average 2023 North Valley Division SAIFI was attributed to the following:

1. EPSS and DCD settings installed on the distribution line equipment contributed 0.663 customer-interruptions to the division's SAIFI.
2. On March 30th, the Caribou-Plumas 60 kV transmission line relayed due to an unknown cause and therefore the source to the Gansner distribution substation was lost. This outage contributed 0.016 customer-interruptions to the division's SAIFI.

3. On July 25th, a tree grew into our overhead line and caused a breaker level outage due to EPSS settings on the Wyandotte 1107 feeder. This outage contributed 0.014 customer-interruptions to the division's SAIFI.
4. On March 19th, a tree fell into our line and caused a breaker level outage on the Wyandotte 1110 feeder due to unknown cause. This outage contributed 0.014 customer-interruptions to the division's SAIFI.
5. On November 29th, the feeder breaker tripped due to an unknown cause on the Panorama 1102 feeder. This outage contributed 0.019 customer-interruptions to the division's SAIFI.

12. Peninsula Division Performance Assessment

Peninsula Division Performance

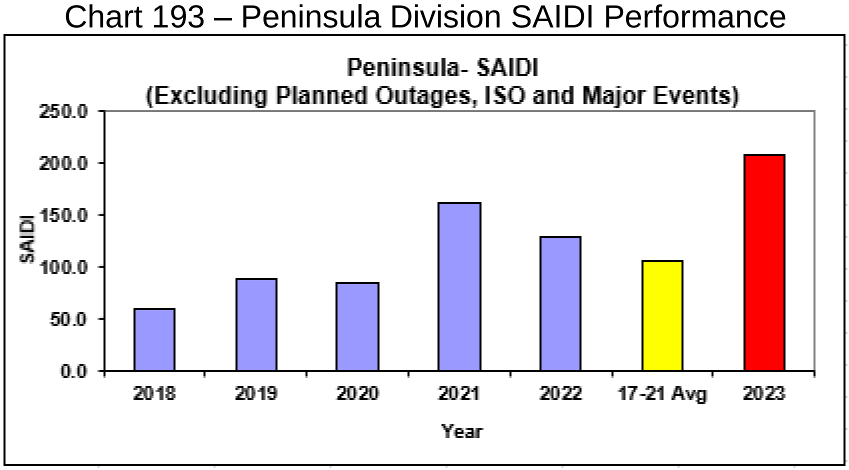
Table 20: Peninsula Division Performance

Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
PENINSULA	2018	60.5	0.806	1.204	75.0
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	129.2	1.000	1.344	129.2
5-Year Average	17-21 Avg	105.0	0.909	1.103	115.5
PENINSULA	2023	207.9	1.269	1.367	163.7
	%Difference	98.0%	39.6%	23.9%	41.8%

Peninsula Division SAIDI Performance

Peninsula Division's 2023 SAIDI performance of 207.9 was 102.9 customer-minutes (or 98.0%) higher than the previous 5-year average of 105.0 as shown in the table above and illustrated in the figure below.

Chart 193 – Peninsula Division SAIDI Performance



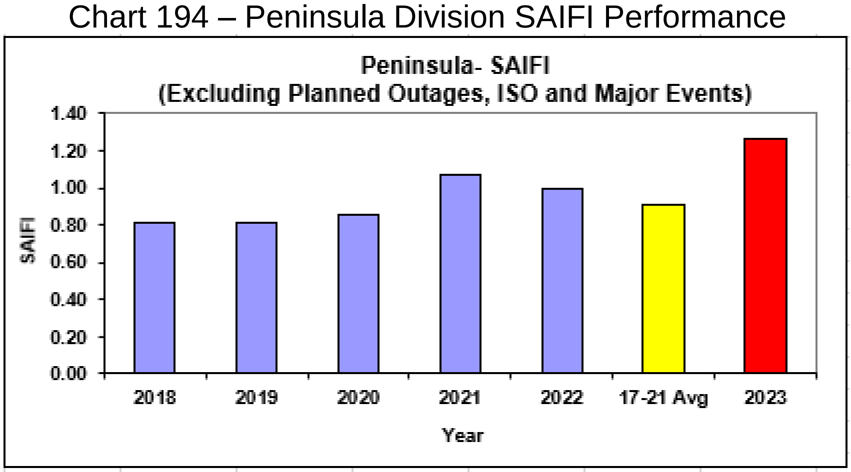
The higher-than-average 2023 Peninsula Division SAIDI was attributed to the following:

1. EPSS and DCD settings installed on the distribution line equipment contributed 6.9 minutes to the division's SAIDI performance.
2. On January 6th, a tree fell on our lines and broke our conductor causing a breaker level outage on the Woodside 1101 feeder. This event contributed 29.1 customer-minutes to the division's SAIDI performance.
3. On March 22nd, a section of deteriorated conductor broke and fell on the ground causing a recloser level outage on the Sneath lane 1107 feeder. This event contributed 11.1 customer-minutes to the division's SAIDI performance.
4. On October 3rd, a broken bushing on an underground section of line caused an interrupter level outage on the Bay Meadows 1108 feeder. This event contributed 3.8 customer-minutes to the division's SAIDI performance.
5. On December 31st, a section of an underground cable failed due to deterioration and caused a recloser level outage on the Sneath Lane 1102 feeder. This event contributed 3.1 customer-minutes to the division's SAIDI performance.

<u>Peninsula Division SAIFI Performance</u>

Peninsula Division's 2022 SAIFI performance of 1.269 was 0.360 customer-interruptions (or 39.6%) higher than the previous 5-year average of 0.909 as shown in the table above and illustrated in the figure below.

Chart 194 – Peninsula Division SAIFI Performance



The higher-than-average 2023 Peninsula Division SAIFI was attributed to the

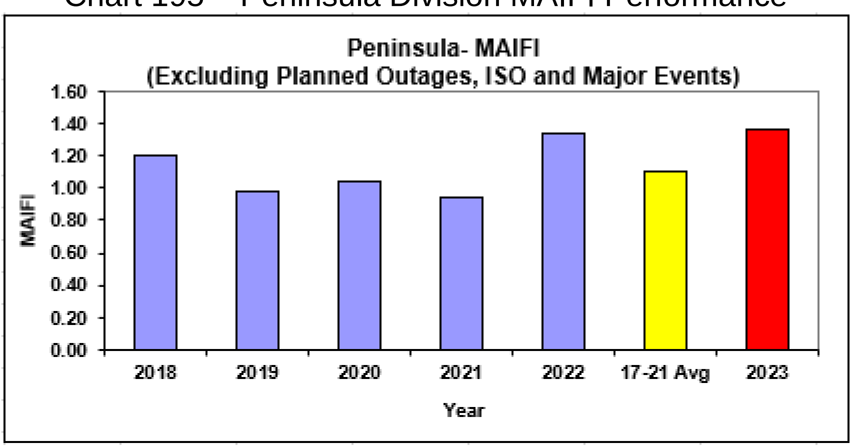
following:

1. EPSS installed on the distribution line equipment contributed 0.045 customer-interruptions to the division's SAIFI performance.
2. On March 22nd, a section of deteriorated overhead conductor broke and caused a recloser level outage on Sneath Lane 1107 feeder. This event contributed 0.029 customer-minutes to the division's SAIDI performance.
3. On March 12th, a tree branch fell into our overhead line and broke a guy wire on the Sneath Lane 1102 feeder causing a recloser level outage an outage. This event contributed 0.023 customer-interruptions to the division's SAIFI performance.
4. On November 10th, a third party vehicle hit our pole and broke it causing a recloser level outage on the Bellehaven 1106 feeder. This event contributed 0.012 customer-interruptions to the division's SAIFI performance.
5. On July 10th, a tree fell into our line causing our overhead conductors to wrap around which resulted in a breaker level outage on the Sneath Lane 1107 feeder. This event contributed 0.019 customer-interruptions to the division's SAIFI performance.

<u>Peninsula Division MAIFI Performance</u>

Peninsula Division's 2022 MAIFI performance of 1.367 was 0.264 customer-interruptions (or 23.9%) higher than the previous 5-year average of 1.103 as shown in the table above and illustrated in the figure below.

Chart 195 – Peninsula Division MAIFI Performance



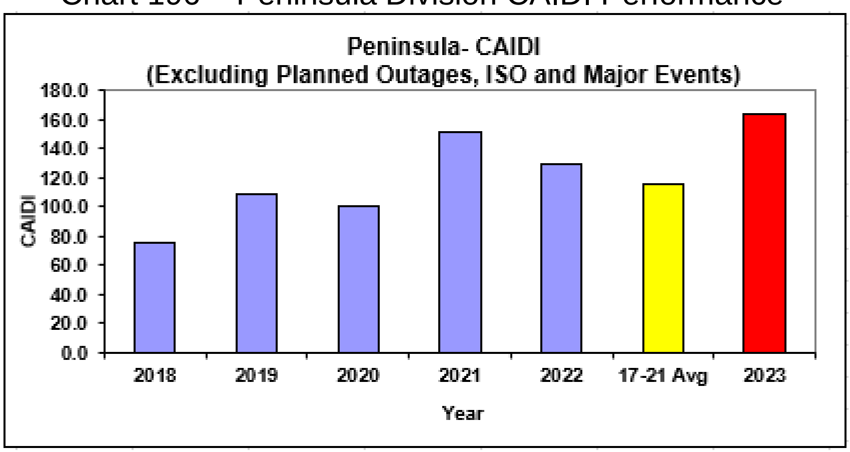
The higher-than-average 2023 Peninsula Division MAIFI was attributed to the following momentary outages:

1. EPSS installed on the distribution line equipment contributed 0.003 customer-interruptions to the division's MAIFI performance.
2. On April 2nd, Seremonte 1104 feeder breaker operated due to an unknown Cause.
3. On March 2nd, Seremonte 1104 feeder circuit breaker operated due to an unknown cause.
4. On March 10th, the San Mateo 2102 feeder circuit breaker operated due to an unknown cause.
5. On September 18th, the Bay Meadows 2101 line recloser operated due to an unknown cause.
6. On May 11th, the Bay Meadows 2101 line recloser operated due to an unknown cause.
7. These outages contributed 0.096 customer-interruptions to the division's MAIFI performance.

Peninsula Division CAIDI Performance

Peninsula Division's 2023 CAIDI performance of 163.7 was 48.2 minutes (or 41.8%) higher than the previous 5-year average of 115.5 as shown in the table above and illustrated in the figure below.

Chart 196 – Peninsula Division CAIDI Performance



The higher-than-average 2023 Peninsula Division CAIDI was attributed to the following:

1. EPSS and DCD settings installed on the distribution line equipment contributed 154.6 customer-interruptions to the division's CAIDI performance.
2. On January 6th, a tree fell on our lines and broke our conductor causing a

breaker level outage on the woodside 1101 feeder and contributed 6,062.4 minutes to the division's CAIDI performance.

3. On January 6th, a tree fell on our lines and broke our conductor causing a Trip saver level outage on the Woodside 1101 feeder and contributed 7,053.3 minutes to the division's CAIDI performance.
4. On January 6th, a tree fell on our lines and broke our conductor causing a fuse level outage on the Menlo 1103 feeder and contributed 8,133.5 minutes to the division's CAIDI performance.
5. On January 6th, a broken pole caused a transformer level outage on the Half Moon Bay 1102 feeder. This incident added 6,740.0 minutes to the division's CAIDI performance.

13. Sacramento Division Performance Assessment

Sacramento Division Performance

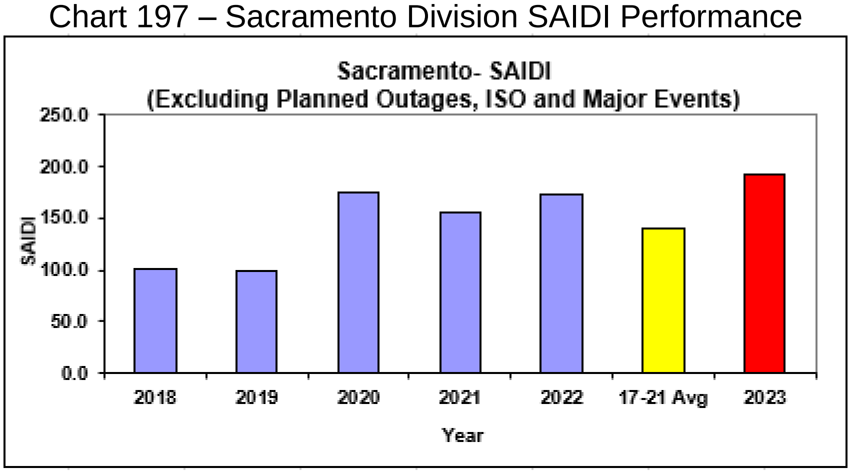
Table 21: Sacramento Division Performance

Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
SACRAMENTO	2018	101.0	1.021	1.825	98.9
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	172.9	1.277	1.552	135.3
5-Year Average	17-21 Avg	140.4	1.127	1.665	124.5
SACRAMENTO	2023	191.3	1.276	1.436	149.8
	%Difference	36.3%	13.2%	-13.8%	20.3%

Sacramento Division SAIDI Performance

Sacramento Division's 2023 SAIDI performance of 191.3 was 50.9 customer-minutes (or 36.3%) higher than the previous 5-year average of 140.4 as shown in the table above and illustrated in the figure below.

Chart 197 – Sacramento Division SAIDI Performance



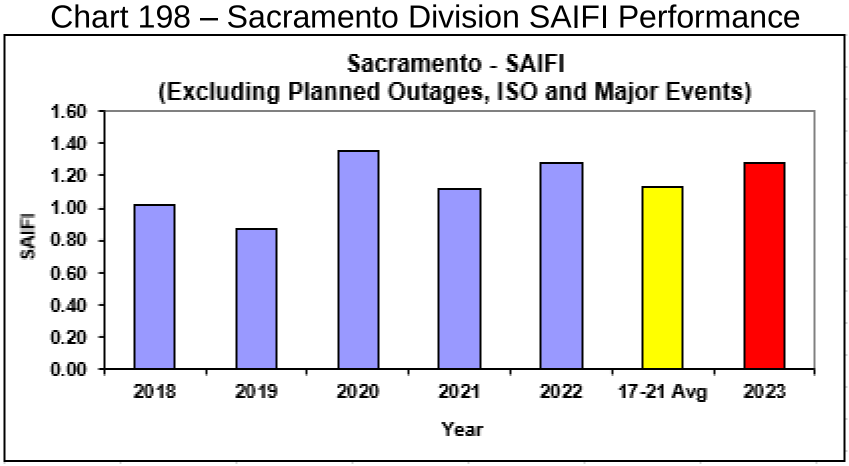
The higher-than-average 2023 Sacramento Division SAIDI was attributed to the following outage events:

1. EPSS installed on the distribution line equipment contributed 30.3 minutes to the division's SAIDI performance.
2. On August 17th, an underground equipment caused a breaker level outage on the Grands Island 2226 feeder. This event contributed 5.3 customer-minutes to the division's SAIDI performance.
3. On July 25th, an underground equipment caused a breaker level outage on the Peabody 2112 feeder. This event contributed 5.2 customer-minutes to the division's SAIDI performance.
4. On August 27th, a 3rd party vehicle broke our pole and caused a breaker level outage on the West Sacramento 1108 feeder. This event contributed 3.5 customer-minutes to the division's SAIDI performance.
5. On June 18th, a 3rd party metallic balloon caused a breaker level outage on the Peabody 2113 feeder related to EPSS settings. This event contributed 3.4 customer-minutes to the division's SAIDI performance.

Sacramento Division SAIFI Performance

Sacramento Division's 2023 SAIFI performance of 1.276 was 0.149 customer-interruptions (or 13.2%) higher than the previous 5-year average of 1.127 as shown in the table above and illustrated in the figure below.

Chart 198 – Sacramento Division SAIFI Performance



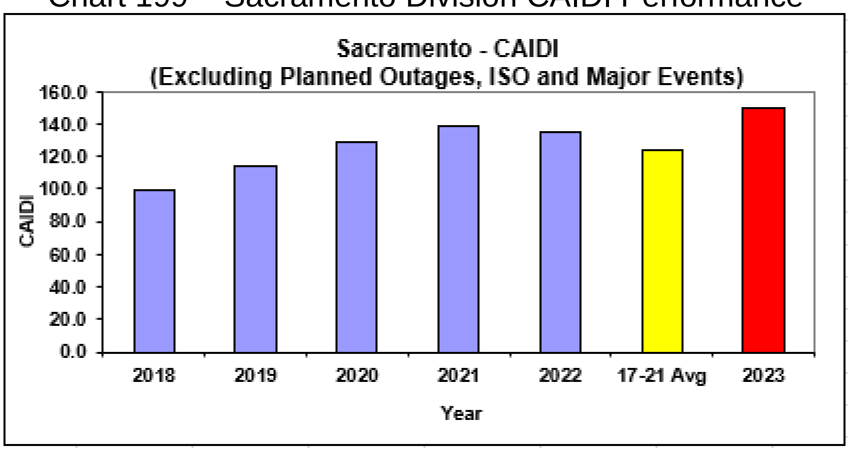
The higher-than-average 2023 Sacramento Division SAIFI was attributed to the following:

1. EPSS installed on the distribution line equipment contributed 0.154 customer-interruptions to the division's SAIFI performance.
2. On August 17th, an underground equipment caused a breaker level outage on the Grands Island 2226 feeder. This event contributed 0.014 customer-interruptions to the division's SAIFI performance.
3. On July 25th, an underground equipment caused a breaker level outage on the Peabody 2112 feeder. This event contributed 0.018 customer-minutes to the division's SAIDI performance.
4. On August 27th, a 3rd party vehicle broke our pole and caused a breaker level outage on the West Sacramento 1108 feeder. This event contributed 0.010 customer-interruptions to the division's SAIFI performance.
5. On June 18th, a 3rd party metallic balloon caused a breaker level outage on the Peabody 2113 feeder related to EPSS settings. This event contributed 0.017 customer-interruptions to the division's SAIFI performance.

Sacramento Division CAIDI Performance

Sacramento Division's 2023 CAIDI performance of 149.8 was 25.3 minutes (or 20.3%) higher than the previous 5-year average of 124.5 as shown in the table above and illustrated in the figure below.

Chart 199 – Sacramento Division CAIDI Performance



The higher-than-average 2023 Sacramento Division CAIDI was attributed to the following:

1. EPSS and DCD settings installed on the distribution line equipment contributed 196.8 customer-interruptions to the division's CAIDI performance.
2. On August 17th, an underground equipment caused a breaker level outage on

the Grands Island 2226 feeder and contributed 378.8 minutes to the division's CAIDI performance.

3. On August 27th, a 3rd party vehicle broke our pole and caused a breaker level outage on the West Sacramento 1108 feeder and contributed 368.2 minutes to the division's CAIDI performance.
4. On May 12th, an overhead equipment failure caused a breaker level outage on the Deepwater 1109 feeder. This outage contributed 331.9 minutes to the division's CAIDI performance.
5. On July 2nd, a recloser level EPSS outage occurred on the East Marysville 1108 feeder due to an Unknown cause. This outage contributed 790.6 minutes to the division's CAIDI performance.

14. San Francisco Division Performance Assessment

San Francisco Division Performance

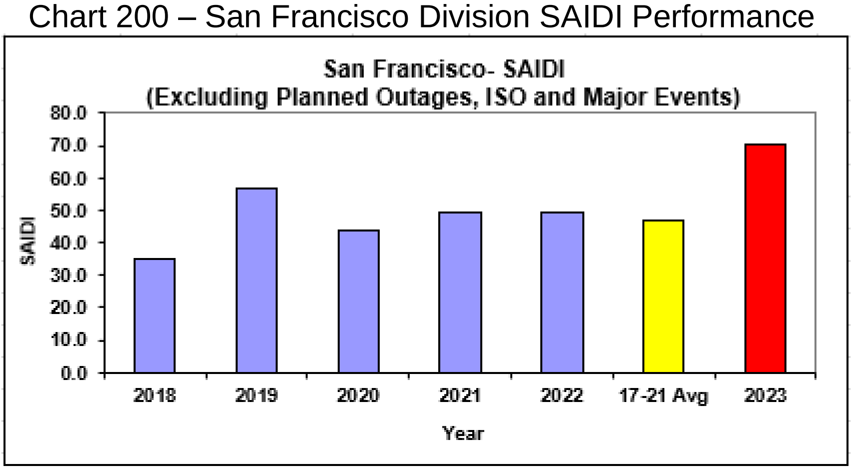
Table 22: San Francisco Division Performance

Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
SAN FRANCISCO	2018	35.2	0.378	0.270	93.0
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	49.4	0.494	0.457	100.0
5-Year Average	17-21 Avg	47.0	0.520	0.374	90.3
SAN FRANCISCO	2023	70.6	0.581	0.366	121.4
	%Difference	50.3%	11.8%	-2.2%	34.4%

San Francisco Division SAIDI Performance

San Francisco Division's 2023 SAIDI performance of 70.6 was 23.6 customer-minutes (or 50.3%) higher than the previous 5-year average of 47.0 as shown in the table above and illustrated in the figure below.

Chart 200 – San Francisco Division SAIDI Performance



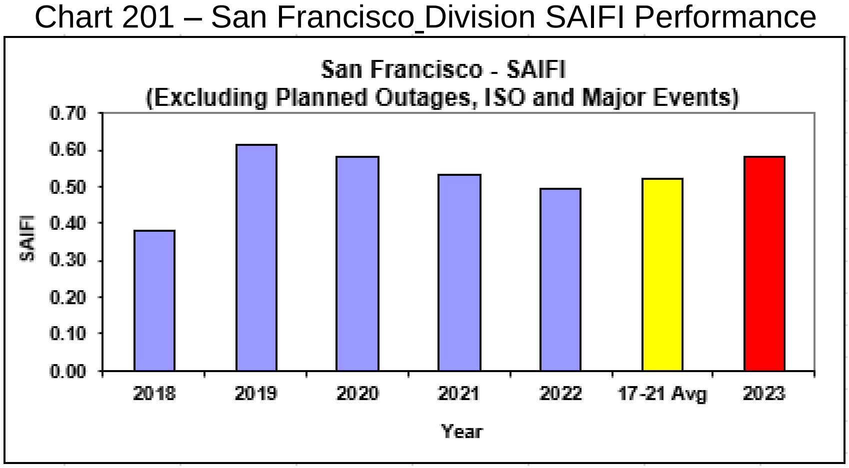
The higher-than-average 2023 San Francisco Division SAIDI was attributed to the following outage events:

1. On April 26th, an underground cable failure caused a large outage on SF Z substation. This event contributed 18.5 customer-minutes to the division's SAIDI performance.
2. On March 29th, a burnt overhead equipment caused an outage on the SF K-1101. This event contributed 2.9 customer-minutes to the division's SAIDI performance.
3. On October 6th, an underground equipment failure caused a breaker level outage on the SF X-1118 feeder. This event contributed 4.1 customer-minutes to the division's SAIDI performance.
4. On December 27th, an overhead broken wire caused a breaker level outage on SF E-1103 feeder. The restoration process resulted in an operating error that led to a few more switching steps. This event contributed 1.8 customer-minutes to the division's SAIDI performance.
5. On March 31st, an underground equipment failure caused a station level outage on the SF J substation. This event contributed 1.7 customer-minutes to the division's SAIDI performance.

<u>San Francisco Division SAIFI Performance</u>

San Francisco Division's 2023 SAIFI performance of 0.581 was 0.061 customer-interruptions (or 11.8%) higher than the previous 5-year average of 0.520 as shown in the table above and illustrated in the figure below.

Chart 201 – San Francisco Division SAIFI Performance



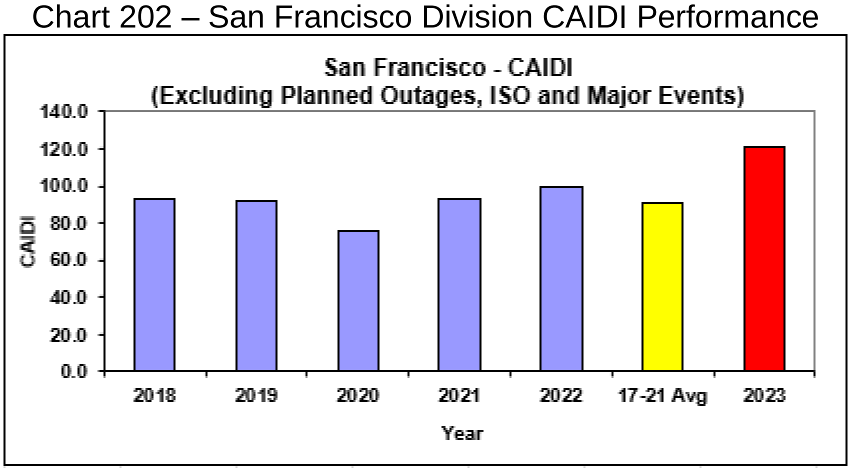
The higher-than-average 2023 San Francisco Division MAIFI was attributed to the following:

1. On March 29th, a burnt overhead equipment caused an outage on the SF K-1101. This event contributed 0.020 customer-interruptions to the division's SAIFI performance.
2. On December 27th, an overhead broken wire caused a breaker level outage on SF E-1103 feeder. This event contributed 0.017 customer-minutes to the division's SAIDI performance.
3. On January 2nd, a recloser level outage occurred on the SF A - 1109 feeder due to a burnt riser termination. This event contributed 0.013 customer-interruptions to the division's SAIFI performance.
4. On January 3rd, a recloser level outage occurred on the SF E- 1107 feeder due to an underground equipment failure. This event contributed 0.014 customer-interruptions to the division's SAIFI performance.

San Francisco Division CAIDI Performance

San Francisco Division's 2023 CAIDI performance of 121.4 was 31.1 minutes (or 34.4%) higher than the previous 5-year average of 90.3 as shown in the table above and illustrated in the figure below.

Chart 202 – San Francisco Division CAIDI Performance



The higher-than-average 2023 San Francisco Division CAIDI was attributed to the following:

1. On April 26th, an underground cable failure caused a large outage on SF Z substation. This outage contributed 815.2 minutes to the division's CAIDI

performance.

2. On March 31st, an underground equipment failure caused a station level outage on the SF J substation. This outage contributed 313.1 minutes to the division's CAIDI performance.
3. On January 1st, a burnt underground cable caused a breaker level outage on SF G-0411 feeder. This outage contributed 526.0 minutes to the division's CAIDI performance.

15. San Jose Division Performance Assessment

San Jose Division Performance

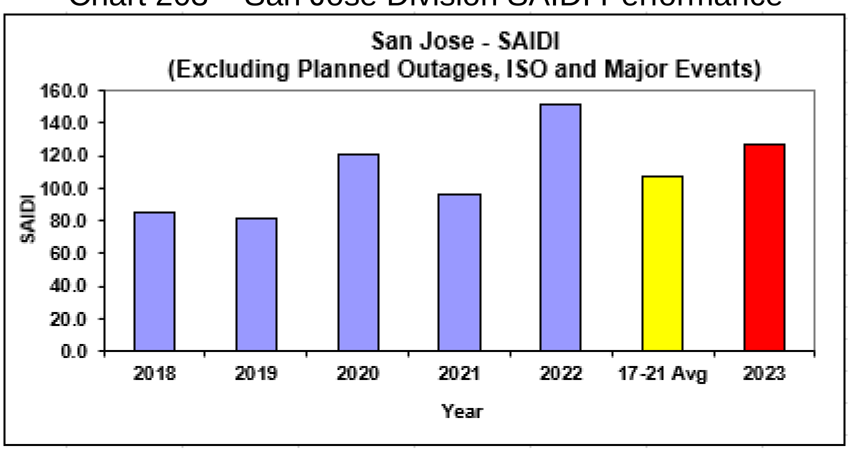
Table 23: San Jose Division Performance

Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
SAN JOSE	2018	85.0	0.858	1.322	99.1
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	151.4	1.144	1.174	132.4
5-Year Average	17-21 Avg	106.9	0.884	1.186	120.9
SAN JOSE	2023	126.5	0.891	1.051	142.0
	%Difference	18.4%	0.8%	-11.4%	17.4%

San Jose Division SAIDI Performance

San Jose Division's 2023 SAIDI performance of 126.5 was 19.7 customer-minutes (or 18.4%) higher than the previous 5-year average of 106.9 as shown in the table above and illustrated in the figure below.

Chart 203 – San Jose Division SAIDI Performance



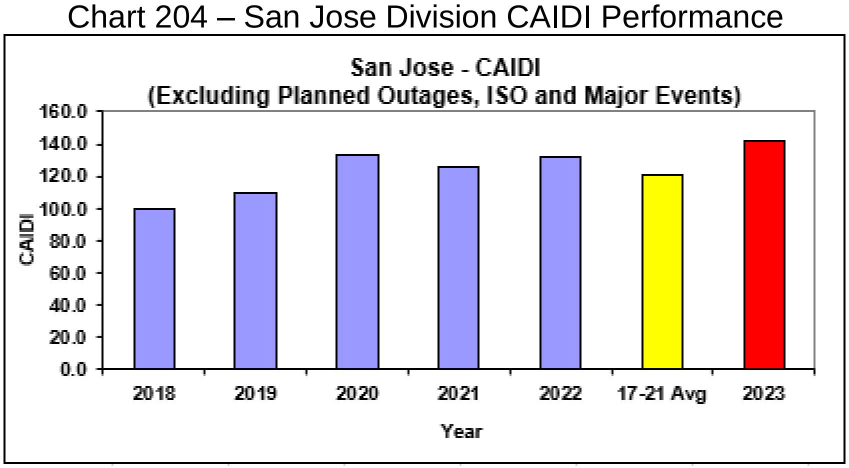
The higher-than-average 2023 San Jose Division SAIDI was attributed to the following:

1. EPSS installed on the distribution line equipment that contributed 18.5 customer minutes to the division's SAIDI performance.
2. On August 18th, a section of deteriorated overhead conductor broke and caused an EPSS breaker level outage on the Hicks 2101 feeder. This outage contributed 3.5 customer minutes to the division's SAIDI performance.
3. On August 15th, an underground equipment failure caused a breaker level outage on Edenvale 2113 feeder. This outage contributed 3.2 customer minutes to the division's SAIDI performance.
4. On November 5th, a wooden pole flashed and caused a recloser level outage on the Mc Kee 1105 feeder. This outage contributed 2.7 customer minutes to the division's SAIDI performance.
5. On August 22nd, a section of deteriorated underground cable caused a breaker level outage on the Swift 2109 feeder. This outage contributed 2.5 customer minutes to the division's SAIDI performance.
6. On August 18th, an underground splice failure caused an outage a recloser level outage at the Hicks 2105 feeder. This outage contributed 2.4 customer minutes to the division's SAIDI performance.

<u>San Jose Division CAIDI Performance</u>

San Jose Division's 2023 CAIDI performance of 142.0 was 21.1 minutes (or 17.4%) higher than the previous 5-year average of 120.9 as shown in the table above and illustrated in the figure below.

Chart 204 – San Jose Division CAIDI Performance



The higher-than-average 2023 San Jose Division CAIDI was attributed to the

following:

1. EPSS installed on the distribution line equipment that contributed 156.1 customer minutes to the division's CAIDI performance.
2. On August 18th, a section of deteriorated overhead conductor broke and caused an EPSS breaker level outage on the Hicks 2101 feeder. This outage contributed 476.6 minutes to the division's CAIDI performance.
3. On August 18th, an underground splice failure caused an outage a recloser level outage at the Hicks 2105 feeder. This outage contributed 333.7 minutes to the division's CAIDI performance.
4. On July 11th, a recloser level outage occurred due to a 3rd party incident that broke a wood pole on the Morgan Hill 2110 feeder. This outage contributed 157.8 minutes to the division's CAIDI performance.
5. On September 5th, an interrupter level occurred due to a burned switch that failed on the Swift 2102 feeder. This outage contributed 752.5 minutes to the division's CAIDI performance.
6. On September 20th, a Company initiated planned outage resulted in an interrupter level outage on the Stone 1101 feeder. This outage contributed 764.5 minutes to the division's CAIDI performance.

16. Sierra Division Performance Assessment

Sierra Division Performance

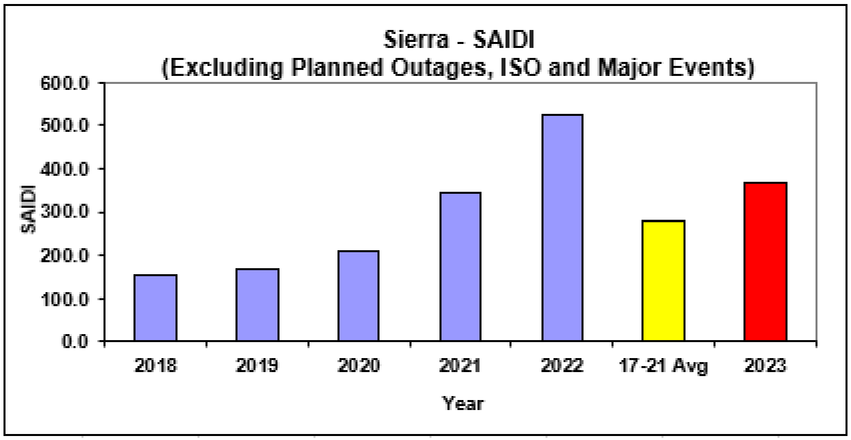
Table 24: Sierra Division Performance

Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
SIERRA	2018	152.9	1.241	1.350	123.2
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	525.2	3.076	1.010	170.8
5-Year Average	17-21 Avg	279.1	1.712	1.206	163.0
SIERRA	2023	369.6	2.440	1.155	151.4
	%Difference	32.4%	42.5%	-4.3%	-7.1%

Sierra Division SAIDI Performance

Sierra Division's 2023 SAIDI performance of 369.6 was 90.4 customer-minutes (or 32.4%) higher than the previous 5-year average of 279.1 as shown in the table above and illustrated in the figure below.

Chart 205 – Sierra Division SAIDI Performance



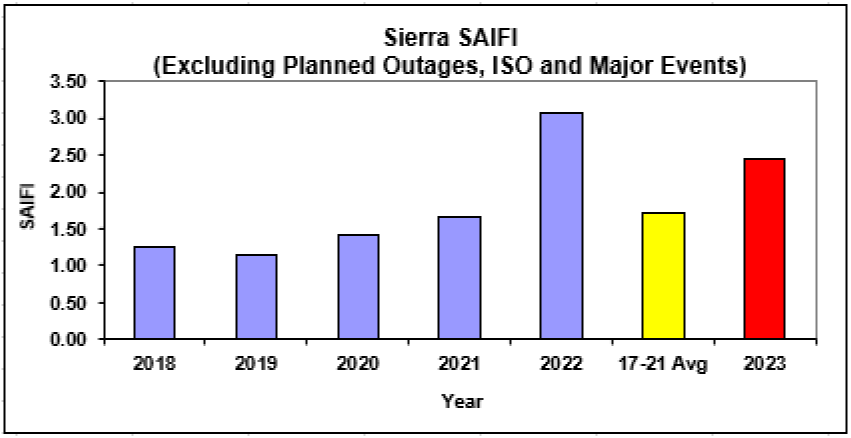
The higher-than-average 2023 Sierra Division SAIDI was attributed to the following:

1. EPSS and DCD settings installed on the distribution line equipment contributed 223.6 customer-minutes to the division's SAIDI performance.
2. On May 18th, a device co-ordination failure resulted in an recloser level EPSS outage on the Apple Hill 2102 feeder. This outage contributed 10.1 customer-minutes to the division's SAIDI performance.
3. On July 22nd, a tree fell into our line and caused an overhead conductor failure that resulted in a recloser level EPSS outage on a section of the Narrows 2105 feeder. This outage contributed 8.6 customer-minutes to the division's SAIDI performance.
4. On August 31st, a tree fell into our line and broke our overhead conductor that resulted in a breaker level EPSS outage on a section of on the Placerville 2106 feeder. This outage contributed 7.3 customer-minutes to the division's SAIDI performance.
5. On December 8th, a company initiated Planned work caused a breaker level EPSS outage on the Narrows 2102 feeder. This outage contributed 6.3 customer-minutes to the division's SAIDI performance.
6. On April 29th, a recloser level EPSS outage due to an unknown cause occurred on the Placerville 2106 feeder. This outage contributed 5.6 customer-minutes to the division's SAIDI performance.
7. On August 14th, a recloser level EPSS outage due to an unknown cause occurred on the on the El Dorado PH-2101 feeder. This outage contributed 5.2 customer-minutes to the division's SAIDI performance.

Sierra Division SAIFI Performance

Sierra Division's 2023 SAIFI performance of 2.440 was 0.728 customer-interruptions (or 42.5%) higher than the previous 5-year average of 1.712 as shown in the table above and illustrated in the figure below.

Chart 206 – Sierra Division SAIFI Performance



The higher-than-average 2023 Sierra Division SAIFI was attributed to the following:

1. EPSS and DCD settings installed on the distribution line equipment contributed 1.411 customer-interruptions to the division's SAIFI performance.
2. On May 18th, a device co-ordination failure resulted in a recloser level EPSS outage on the Apple Hill 2102 feeder. This event contributed 0.021 customer-interruptions to the division's SAIFI performance.
3. On July 22nd, a tree fell into our line and caused an overhead conductor failure that resulted in a recloser level EPSS outage on a section of the Narrows 2105 feeder. This event contributed 0.013 customer-minutes to the division's SAIDI performance.
4. On August 31st, a tree fell into our line and broke our overhead conductor that resulted in a breaker level EPSS outage on a section of on the Placerville 2106 feeder. This event contributed 0.023 customer-interruptions to the division's SAIFI 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 SAIFI performance.
6. On April 29th, a recloser level EPSS outage due to an unknown cause occurred on the Placerville 2106 feeder. This event contributed 0.013 customer-

interruptions to the division's SAIFI performance.

17. Sonoma Division Performance Assessment

Sonoma Division Performance

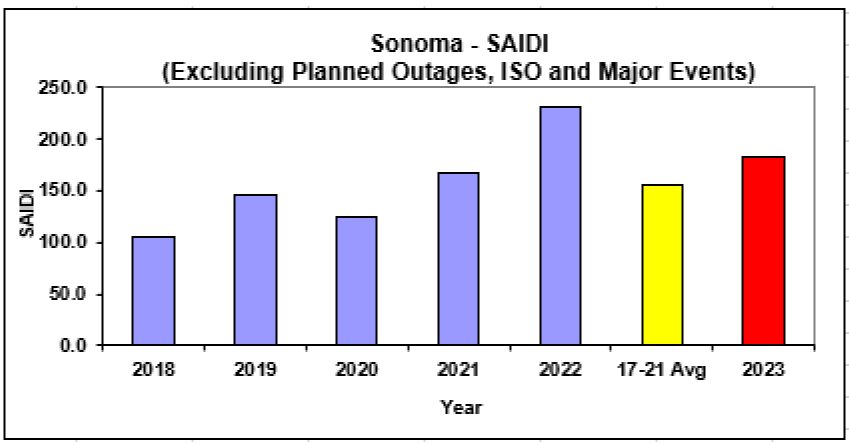
Table 25: Sonoma Division Performance

Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
SONOMA	2018	105.5	0.956	1.201	110.3
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	230.6	1.511	1.376	152.6
5-Year Average	17-21 Avg	154.5	1.171	1.311	131.9
SONOMA	2023	183.0	1.334	0.662	137.2
	%Difference	18.4%	13.9%	-49.5%	4.0%

Sonoma Division SAIDI Performance

Sonoma Division's 2023 SAIDI performance of 183.0 was 28.5 customer-minutes (or 18.4%) higher than the previous 5-year average of 154.5 as shown in the table above and illustrated in the figure below.

Chart 207 – Sonoma Division SAIDI Performance



The higher-than-average 2023 Sonoma Division SAIDI was attributed to the following:

1. EPSS installed on the distribution line equipment that contributed 80.6 customer minutes to the division's SAIDI performance.
2. On July 25th, a recloser level EPSS outage due to an unknown cause occurred on the Molino 1102 feeder. This outage contributed 7.5 customer minutes to the division's SAIDI performance.
3. On July 10th, a car pole incident broke a tie wire on the on an overhead

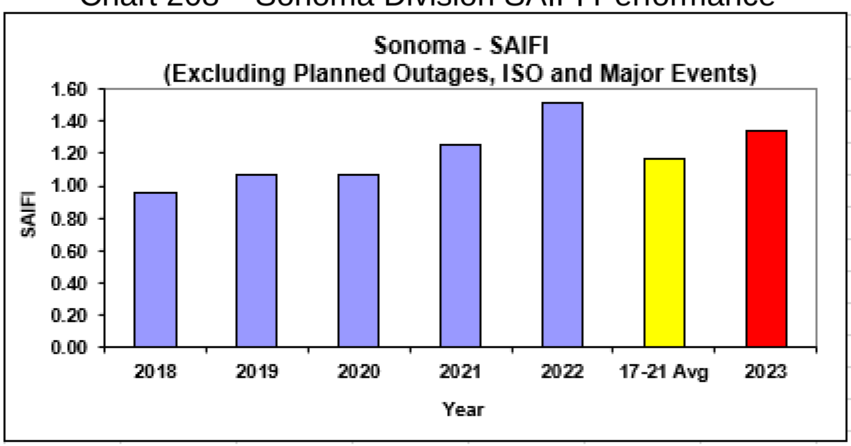
section of the Dunbar 1103 feeder and caused a breaker level EPSS outage. This outage contributed 4.6 customer minutes to the division's SAIDI performance.

4. On July 9th, a tree fell into our line and caused a recloser level EPSS outage on the Monte Rio 1113 feeder. This outage contributed 4.1 customer minutes to the division's SAIDI performance.
5. On August 1st, a recloser level EPSS outage due to an unknown cause occurred on the Molino 1102 feeder. This outage contributed 3.9 customer minutes to the division's SAIDI performance.
6. On September 9th, a recloser level EPSS outage due to an unknown cause occurred on the Geyserville 1101 feeder. This outage contributed 3.9 customer minutes to the division's SAIDI performance.

Sonoma Division SAIFI Performance

Sonoma Division's 2023 SAIFI performance of 1.334 was 0.162 customer-interruptions (or 13.9%) higher than the previous 5-year average of 1.171 as shown in the table above and illustrated in the figure below.

Chart 208 – Sonoma Division SAIFI Performance



The higher-than-average 2023 Sonoma Division SAIFI was attributed to the following:

1. EPSS and DCD settings installed on the distribution line equipment contributed 0.442 customer-interruptions to the division's SAIFI performance.
2. On July 10th, a car pole incident broke a tie wire on the on an overhead

section of the Dunbar 1103 feeder and caused a breaker level EPSS outage. This outage contributed 0.014 customer- interruptions to the division's SAIFI performance.

3. On July 15th, a broken crossarm caused a breaker level outage on the Bellevue 2105 feeder. This outage contributed 0.049 customer-interruptions to the division's SAIFI performance.
4. On September 15th, a 3rd party dig in incident damaged our underground cable and caused a breaker level outage on the Molino 1103 feeder. This outage contributed 0.015 customer-interruptions to the division's SAIFI performance.
5. On June 18th, a tree branch fell on our lines causing the conductors to wrap around together which resulted in a breaker level outage on the Molino 1102 feeder. This outage contributed 0.018 customer-interruptions to the division's SAIFI performance.
6. On November 26th, an overhead splice failure caused a breaker level outage on the Molino 1101 feeder. This outage contributed 0.022 customer-interruptions to the division's SAIFI performance.

18. Stockton Division Performance Assessment

Stockton Division Performance

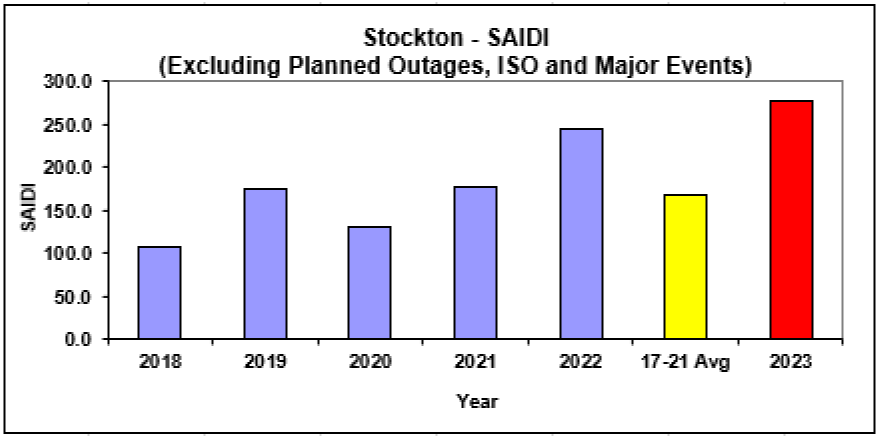
Table 26: Stockton Division Performance

Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
STOCKTON	2018	107.7	1.036	1.872	103.9
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	244.8	1.648	1.053	148.5
5-Year Average	17-21 Avg	167.2	1.260	1.359	132.7
STOCKTON	2023	278.1	1.896	1.330	146.7
	%Difference	66.4%	50.5%	-2.1%	10.5%

Stockton Division SAIDI Performance

Stockton Division's 2023 SAIDI performance of 278.1 was 111.0 customer-minutes (or 66.4%) higher than the previous 5-year average of 167.2 as shown in the table above and illustrated in the figure below.

Chart 209 – Stockton Division SAIDI Performance



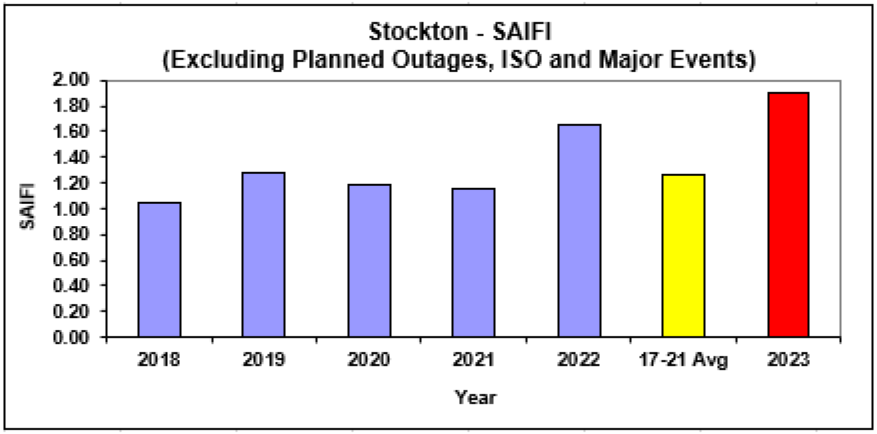
The higher-than-average 2023 Stockton Division SAIDI was attributed to the following:

1. EPSS installed on the distribution line equipment that contributed 114.2 customer minutes to the division's SAIDI performance.
2. On October 8th, a recloser level EPSS outage occurred due to inadequate settings for the load on the Frogtown 1701 feeder. This outage contributed 7.1 customer minutes to the division's SAIDI performance.
3. On August 19th, an overhead transformer was hit by lightning, and this caused a recloser level EPSS outage on the Salt Springs 2102 feeder. This outage contributed 6.8 customer-minutes to the division's SAIDI performance.
4. On August 19th, an overhead transformer was damaged by tree that was hit by lightning and this caused a recloser level EPSS outage on the Frogtown 1701 feeder. This outage contributed 5.7 customer minutes to the division's SAIDI performance.
5. The February 17th, windy weather caused overhead conductor failure and resulted in a recloser level outage on the Salt Springs 2102 feeder. This outage contributed 5.4 customer-minutes to the division's SAIDI performance.
6. On January 2nd, a tree fell into our line and broke a pole. A breaker level outage on the Lodi 1102 feeder was then initiated to replace the pole. This outage contributed 4.8 customer-minutes to the division's SAIDI performance.

Stockton Division SAIFI Performance

Stockton Division's 2023 SAIFI performance of 1.896 was 0.636 customer-interruptions (or 50.5%) higher than the previous 5-year average of 1.260 as shown in the table above and illustrated in the figure below.

Chart 210 – Stockton Division SAIFI Performance



The higher-than-average 2023 Stockton Division SAIFI was attributed to the following:

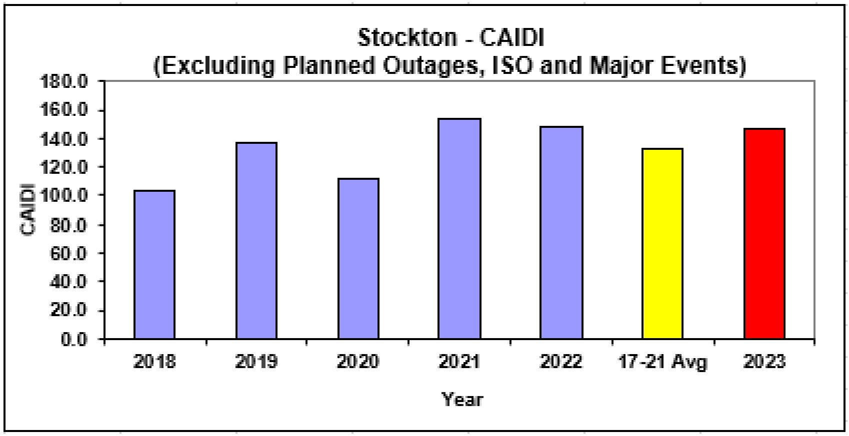
1. EPSS and DCD settings installed on the distribution line equipment that contributed 0.601 customer minutes to the division's SAIDI performance.
2. On October 8th, a recloser level EPSS outage occurred due to inadequate settings for the load on the Frogtown 1701 feeder. This outage contributed 0.012 customer-interruptions to the division's SAIFI performance.
3. On April 29th, an EPSS settings related recloser level outage occurred on the Pine Grove 1102 feeder. This outage contributed 0.009 customer-interruptions to the division's SAIFI performance.
4. On July 3rd, an underground equipment failure caused a breaker level outage on the Stagg 2103 feeder. This outage contributed 0.027 customer-interruptions to the division's SAIFI performance.
5. The July 1st, a EPSS settings related recloser level outage occurred on the Peoria Flat 1704 feeder due to an unknown cause. This outage contributed 0.010 customer- interruptions to the division's SAIFI performance.
6. The February 17th, windy weather caused overhead conductor failure and resulted in a recloser level outage on the Salt Springs 2102 feeder. This

outage contributed 0.011 customer- interruptions to the division's SAIFI performance.

Stockton Division CAIDI Performance

Stockton Division's 2023 CAIDI performance of 146.7 was 14.0 minutes (or 10.5%) higher than the previous 5-year average of 132.7 as shown in the table above and illustrated in the figure below.

Chart 211 – Stockton Division CAIDI Performance



The higher-than-average 2023 Stockton Division CAIDI was attributed to the following:

1. EPSS and DCD settings installed on the distribution line equipment that contributed 190.0 minutes to the division's CAIDI performance.
2. On October 8th, a recloser level EPSS outage occurred due to inadequate settings for the load on the Frogtown 1701 feeder. This outage contributed 600.1 minutes to the Division's CAIDI performance.
3. On August 19th, an overhead transformer was hit by lightning and this caused a recloser level EPSS outage on the Salt Springs 2102 feeder. This outage contributed 1,047.1 minutes to the Division's CAIDI performance.
4. On August 19th, an overhead transformer was damaged by tree that was hit by lightning and this caused a recloser level EPSS outage on the Frogtown 1701 feeder. This outage contributed 960.2 minutes to the Division's CAIDI performance.
5. On January 2nd, a tree fell into our line and broke a pole. A breaker level outage on the Lodi 1101 feeder was then initiated to replace the pole. This outage contributed 1020.1 minutes to the Division's CAIDI performance.
6. The February 17th, windy weather caused overhead conductor failure and

resulted in a recloser level outage on the Salt Springs 2102 feeder. This outage contributed 478.6 minutes to the Division's CAIDI performance.

19. Yosemite Division Performance Assessment

Yosemite Division Performance

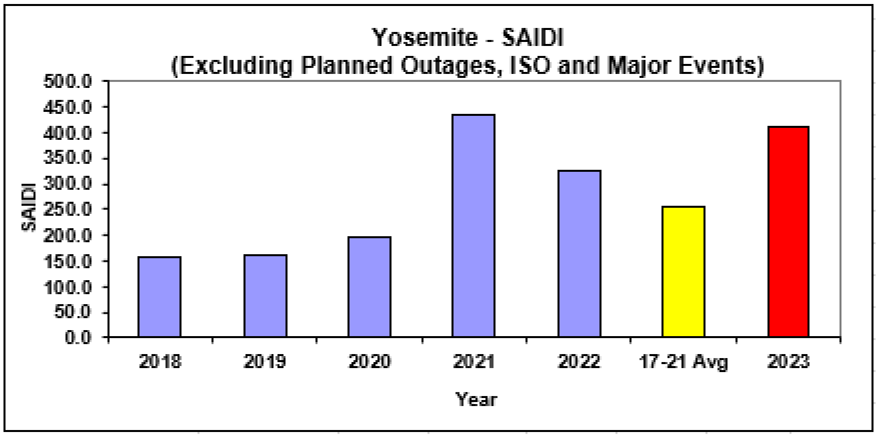
Table 27: Yosemite Division Performance

Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
YOSEMITE	2017	143.0	1.170	2.150	122.2
YOSEMITE	2018	158.3	1.355	1.773	116.8
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
5-Year Average	17-21 Avg	218.6	1.517	1.727	144.1
YOSEMITE	2022	328.9	2.047	1.631	160.7
	%Difference	50.4%	34.9%	-5.6%	11.5%

Yosemite Division SAIDI Performance

Yosemite Division's 2023 SAIDI performance of 411.1 was 155.7 customer-minutes (or 61.0%) higher than the previous 5-year average of 255.4 as shown in the table above and illustrated in the figure below.

Chart 212 – Yosemite Division SAIDI Performance



The higher-than-average 2023 Yosemite Division SAIDI was attributed to the following:

1. EPSS installed on the distribution line equipment that contributed 187.5 customer minutes to the division's SAIDI performance.
2. On July 1st, a recloser level EPSS outage occurred on the Curtis 1703

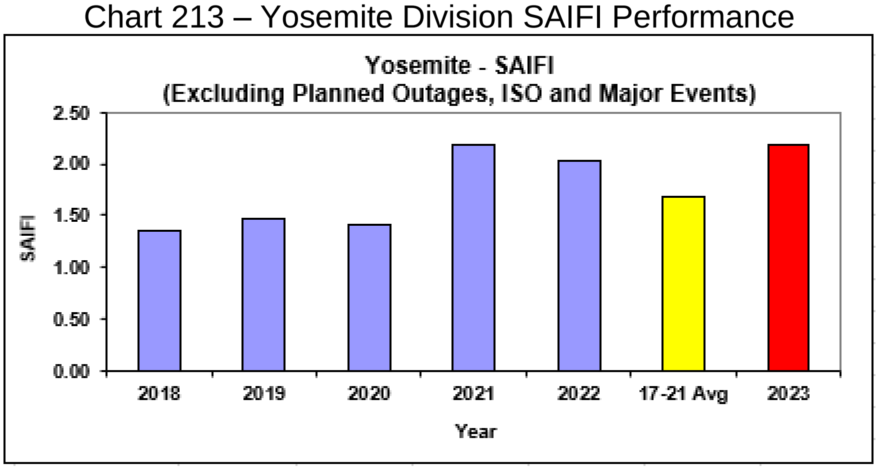
feeder due to electrical overload. This outage contributed 12.9 customer minutes to the division's SAIDI performance.

3. On September 2nd the Chowchilla-Kerkoff #2 115 kV transmission line relayed due to an unknown cause. Two substations (Oakhurst and Coarsegold) fed from this transmission line lost power due to this incident. This outage contributed 11.2 customer-minutes to the division's SAIDI performance.
4. On August 19th, an overhead equipment failure caused a recloser level EPSS outage on the Curtis 1703 feeder. This outage contributed 11.9 customer-minutes to the division's SAIDI performance.
5. On July 2nd, an overhead equipment failure caused a recloser level EPSS outage on Curtis 1703 feeder. This outage contributed 7.3 customer minutes to the division's SAIDI performance.
6. On October 14th, a recloser level EPSS outage occurred due to an unknown cause on the Miwuk 1702 feeder. This outage contributed 6.9 customer minutes to the division's SAIDI performance.
7. On July 1st, a recloser level EPSS outage occurred due to an unknown cause on the Curtis 1703 feeder. This outage contributed 6.2 customer-minutes to the division's SAIDI performance.

Yosemite Division SAIFI Performance

Yosemite Division's 2023 SAIFI performance of 2.184 was 0.495 customer-interruptions (or 29.3%) higher than the previous 5-year average of 1.690 as shown in the table above and illustrated in the figure below.

Chart 213 – Yosemite Division SAIFI Performance



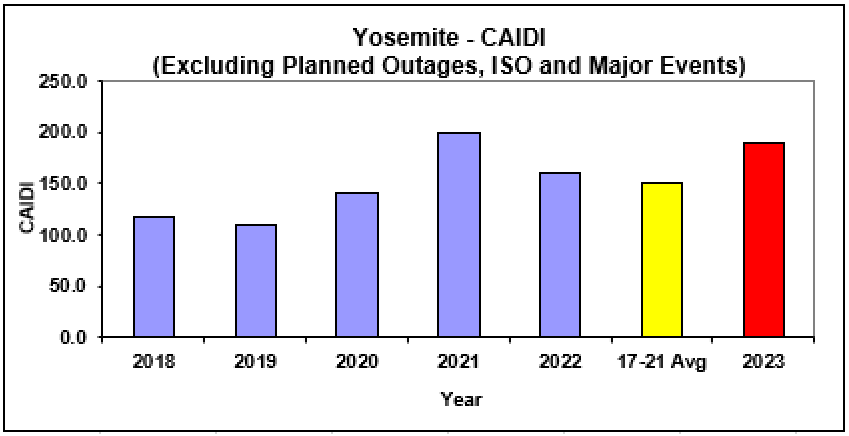
The higher-than-average 2023 Yosemite Division SAIFI was attributed to the following:

1. EPSS installed on the distribution line equipment contributed 0.801 customer-interruptions to the division's SAIFI performance.
2. On July 1st, a recloser level EPSS outage occurred on the Curtis 1703 feeder due to electrical overload. This event contributed 0.012 customer-interruptions to the division's SAIFI performance.
3. On September 2nd the Chowchilla-Kerkoff #2 115 kV transmission line relayed due to an unknown cause. Two substations (Oakhurst and Coarsegold) fed from this transmission line lost power due to this incident. This event contributed 0.059 customer-minutes to the division's SAIDI performance.
4. On August 19th, an overhead equipment failure caused a recloser level EPSS outage on the Curtis 1703 feeder. This event contributed 0.012 customer-minutes to the division's SAIDI performance.
5. On July 1st, a recloser level EPSS outage occurred due to an unknown cause on the Curtis 1703 feeder. This event contributed 0.012 customer-minutes to the division's SAIDI performance.
6. On August 15th, a recloser level EPSS outage occurred on the Curtis 1703 feeder due to a company planned outage. The recloser tripped on sensitive EPSS settings when the crew opened the jumpers to establish open points for planned work. This event contributed 0.012 customer-interruptions to the division's SAIFI performance.

Yosemite Division CAIDI Performance

Yosemite Division's 2022 CAIDI performance of 188.2 was 37.0 minutes (or 24.5%) higher than the previous 5-year average of 151.2 as shown in the table above and illustrated in the figure below.

Chart 214 – Yosemite Division CAIDI Performance



The higher-than-average 2023 Yosemite Division CAIDI was attributed to the following:

1. EPSS and DCD settings installed on the distribution line equipment that contributed 234.1 minutes to the division's CAIDI performance.
2. On July 1st, a recloser level EPSS outage occurred on the Curtis 1703 feeder due to electrical overload. This outage contributed 1,061.3 minutes to the Division's CAIDI performance.
3. On August 19th, an overhead equipment failure caused a recloser level EPSS outage on the Curtis 1703 feeder. This outage contributed 977.5 minutes to the Division's CAIDI performance.
4. On July 2nd, an overhead equipment failure caused a recloser level EPSS outage on Curtis 1703 feeder. This outage contributed 959.2 minutes to the Division's CAIDI performance.
5. On July 2nd, a recloser level EPSS outage occurred on the Curtis 1703 feeder due to electrical overload. This outage contributed 1,215.0 minutes to the Division's CAIDI performance.

ii. 2023 Excludable Major Event Day (MED) CAIDI Performance

Excludable Major Event Days (MED) In 2023

This section contains PG&E's report on weather related excludable major event days (MED) for each division in which CAIDI[8] 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 four weather-related major events totaling 20 weather-related Major Event Days in 2023. The table below summarizes these major events that also includes wildfire related outages.

Table 28 – Summary MED days

2023 Weather-Related Major Event Days	# Weather-Related Events	MEDs
January 04-16, 2023	1	8
February 19-28, 2023	2	8
March 09-14, 2023	3	3
September 09, 2023	4	1
		20

1. January 4-16, 2023 Major Event Days

The first weather-related major event of the year resulted in 8 Major Event Days (MEDs) between January 4-16, 2023. January 4,5,7,8,9,10,14 and 16 became MEDs. On the heels of the previous "atmospheric river event" at the beginning of January, a series of weather systems continued to impact the territory. An "atmospheric river" event that started on January 1st, 2023 was a continuation of the wet weather that started in the last week of December 2023 and produced heavy

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.

rainfall and significant rainfall totals, gusty southerly winds, and thunderstorms across the territory, especially along the coastline. This event resulted in soil saturated and ground instability, leading to Many trees falling into PG&E overhead lines leading to continued outages. This event 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. This event resulted in the year's largest outage event that impacted a total of 1,630,090 customers in the service territory.

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

(January 4-16, 2023 vs. Prior 10 MED)

System / Division	Average CAIDI of Prior 10 System / Division Specific Excludable ME	January 04-16, 2023 / Division Specific CAIDI	Percent Difference From the Prior CAIDI Average	Exceeds the Investigation Threshold?
SYSTEM	585.9	582.6	99.4%	NO
CENTRAL COAST	320.9	702.2	218.8%	Yes
DE ANZA	340.4	642.3	188.7%	Yes
DIABLO	231.8	229.7	99.1%	NO
EAST BAY	161.0	327.2	203.2%	Yes
FRESNO	251.1	312.3	124.4%	NO
HUMBOLDT	1042.2	1706.7	163.8%	Yes
KERN	168.9	136.2	80.6%	NO
LOS PADRES	335.0	477.0	142.4%	Yes
MISSION	236.6	95.1	40.2%	NO
NORTH BAY	343.5	597.5	173.9%	Yes
NORTH VALLEY	636.2	441.1	69.3%	NO
PENINSULA	389.8	744.6	191.0%	Yes
SACRAMENTO	717.1	627.0	87.4%	NO
SAN FRANCISCO	132.2	151.9	115.0%	NO
SAN JOSE	235.4	311.5	132.3%	Yes
SIERRA	1879.3	614.8	32.7%	NO
SONOMA	548.7	933.7	170.2%	Yes
STOCKTON	1092.2	567.4	51.9%	NO
YOSEMITE	334.6	332.7	99.4%	NO

Table 29 – January 4-16, 2023 CAIDI Performance

1.1 Central Coast CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
CENTRAL COAST	January 11th 2021	352.7	44
CENTRAL COAST	January 17th 2022	120.2	20
CENTRAL COAST	January 24-25th, 2021	466.6	80
CENTRAL COAST	December 13-15th, 2021	181.3	41
CENTRAL COAST	December 25-27th, 2021	150.3	10
CENTRAL COAST	December 29th 2021	242.3	9
CENTRAL COAST	September 6-7th, 2022	104.1	12
CENTRAL COAST	December 10th 2022	222.4	103
CENTRAL COAST	December 20th 2022	359.0	2
CENTRAL COAST	December 31st 2022	487.6	97
	Average of 10 excludable major events	320.9	42
CENTRAL COAST	January 4 to 16, 2023	702.2	95
	% difference	54.3%	56%

Table 30 – Central Coast Historical Performance

As indicated in Table 30, the Central Coast Division CAIDI value of 702.2 minutes for the January 4th to 16th, 2023 major event was 54.3% higher than the 320.9 -minute average of the prior 10 weather-related excludable major events.

The top contributing factors to the higher division CAIDI value was due to the following outages:

- 370 outages related to tree falling into our lines contributed 1,195.8 minutes to the overall January 4th to 16th CAIDI performance.

1.2 De Anza CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
De Anza	January 11th 2021	310.1	9
De Anza	January 17th 2022	43.0	4
De Anza	January 24-25th, 2021	607.9	45
De Anza	December 13-15th, 2021	130.6	10
De Anza	December 25-27th, 2021	456.5	3
De Anza	December 29th 2021	232.9	2
De Anza	September 6-7th, 2022	287.7	18
De Anza	December 10th 2022	144.9	18
De Anza	December 20th 2022	42.5	2
De Anza	December 31st 2022	416.9	29
	Average of 10 excludable major events	340.4	15
De Anza	January 4 to 16, 2023	642.3	33
	% difference	47.0%	56%

Table 31 – De Anza Historical Performance

As indicated in Table 31, the De Anza Division CAIDI value of 642.3 minutes for the January 4th to 16th, 2023 major event was 47.0% higher than the 340.4 -minute average of the prior 10 weather-related excludable major events.

The top contributing factors to the higher division CAIDI value was due to the following outages:

- 77 outages related to tree falling into our lines contributed 897.9 minutes to the overall January 4th to 16th CAIDI performance.

1.3 East Bay CAIDI Assessment

System / Divisior	Major Event Day	CAIDI	SO / Day
EAST BAY	October 11th 2021	58.2	6
EAST BAY	October 17th 2021	204.5	21
EAST BAY	October 24-25th, 2021	123.2	20
EAST BAY	December 13-15th, 2021	129.4	8
EAST BAY	December 25-27th, 2021	59.9	3
EAST BAY	December 29th 2021	104.4	5
EAST BAY	September 6-7th, 2022	65.7	8
EAST BAY	December 10th 2022	46.8	5
EAST BAY	December 20th 2022	86.8	1
EAST BAY	December 31st 2022	183.8	29
	Average of 10 excludable major events	161.0	10
EAST BAY	January 4 to 16, 2023	327.2	13
	% difference	50.8%	17.1%

Table 32 – East Bay Historical Performance

As indicated in Table 32, the East Bay Division CAIDI value of 372.2 minutes for the January 4th to 16th, 2023 major event was 50.8% higher than the 161.0 -minute average of the prior 10 weather-related excludable major events.

The top contributing factors to the higher division CAIDI value was due to the following outages:

- 18 outages related to tree falling into our lines contributed 543.3 minutes to the overall January 4th to 16th CAIDI performance.

1.4 Humboldt CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
HUMBOLDT	October 11th 2021	1335.0	27
HUMBOLDT	October 17th 2021	393.9	11
HUMBOLDT	October 24-25th, 2021	260.4	32
HUMBOLDT	December 13-15th, 2021	330.7	15
HUMBOLDT	December 25-27th, 2021	2349.2	71
HUMBOLDT	December 29th 2021	716.4	7
HUMBOLDT	September 6-7th, 2022	181.6	6
HUMBOLDT	December 10th 2022	341.7	68
HUMBOLDT	December 20th 2022	1086.1	68
HUMBOLDT	December 31st 2022	249.2	6
	Average of 10 excludable major events	1042.2	31
HUMBOLDT	January 4 to 16, 2023	1706.7	84
	% difference	38.9%	63.1%

Table 33 – Humboldt Historical Performance

As indicated in Table 33, the Humboldt Division CAIDI value of 1706.7 minutes for the January 4th to 16th, 2023 major event was 38.9% higher than the 1042.2 -minute average of the prior 10 weather-related excludable major events.

The top contributing factors to the higher division CAIDI value was due to the following outages:

- 390 outages related to tree falling into our lines contributed 1639.9 minutes to the overall January 4th to 16th CAIDI performance.

1.5 Los Padres CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
LOS PADRES	September 10th 2021	229.9	6
LOS PADRES	October 11th 2021	198.8	20
LOS PADRES	October 24-25th, 2021	191.7	33
LOS PADRES	December 13-15th, 2021	168.1	27
LOS PADRES	December 25-27th, 2021	236.1	5
LOS PADRES	December 29th 2021	88.2	3
LOS PADRES	September 6-7th, 2022	129.6	3.5
LOS PADRES	December 10th 2022	469.0	50
LOS PADRES	December 20th 2022	174.9	3
LOS PADRES	December 31st 2022	177.2	19
	Average of 10 excludable major events	335.0	17
LOS PADRES	January 4 to 16, 2023	477.0	23
	% difference	29.8%	26.1%

Table 34 – Los Padres Historical Performance

As indicated in Table 34, the Los Padres Division CAIDI value of 477.0 minutes for the January 4th to 16th, 2023 major event was 29.8% higher than the 335.0 -minute average of the prior 10 weather-related excludable major events.

The top contributing factors to the higher division CAIDI value was due to the following outages:

- 45 outages related to tree falling into our lines contributed 602.8 minutes to the overall January 4th to 16th CAIDI performance.

1.6 North Bay CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
NORTH BAY	October 11th 2021	1118.7	43
NORTH BAY	October 17th 2021	107.2	15
NORTH BAY	October 24-25th, 2021	342.0	69
NORTH BAY	December 13-15th, 2021	144.8	13
NORTH BAY	December 26-27th, 2021	135.3	4
NORTH BAY	December 29th 2021	78.2	4
NORTH BAY	September 6-7th, 2022	139.5	7
NORTH BAY	December 10th 2022	138.0	14
NORTH BAY	December 20th 2022	151.0	2
NORTH BAY	December 31st 2022	84.3	7
	Average of 10 excludable major events	343.5	18
NORTH BAY	January 4 to 16, 2023	597.5	30
	% difference	42.5%	40.6%

Table 35 – North Bay Historical Performance

As indicated in Table 35, the North Bay Division CAIDI value of 597.5 minutes for the January 4th to 16th, 2023 major event was 42.5% higher than the 343.5 -minute average of the prior 10 weather-related excludable major events.

The top contributing factors to the higher division CAIDI value was due to the following outages:

- 68 outages related to tree falling into our lines contributed 768.4 minutes to the overall January 4th to 16th CAIDI performance.

1.7 Peninsula CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
PENINSULA	October 11th 2021	438.3	2
PENINSULA	October 17th 2021	343.5	22
PENINSULA	October 24-25th, 2021	603.7	68
PENINSULA	December 13-15th, 2021	182.8	26
PENINSULA	December 25-27th, 2021	279.7	3
PENINSULA	December 29th 2021	344.4	3
PENINSULA	September 6-7th, 2022	143.8	16
PENINSULA	December 10th 2022	181.5	20
PENINSULA	December 20th 2022	332.6	3
PENINSULA	December 31st 2022	372.6	40
	Average of 10 excludable major events	389.8	20
PENINSULA	January 4 to 16, 2023	744.6	36
	% difference	47.7%	43.4%

Table 36 – Peninsula Historical Performance

As indicated in Table 36, the Peninsula Division CAIDI value of 744.6 minutes for the January 4th to 16th, 2023 major event was 47.7% higher than the 389.8 - minute average of the prior 10 weather-related excludable major events.

The top contributing factors to the higher division CAIDI value was due to the following outages:

- 87 outages related to overhead equipment failure contributed 1,082.5 minutes to the overall January 4th to 16th CAIDI performance.
- 106 outages related to tree falling into our lines contributed 646.0 minutes to the overall January 4th to 16th CAIDI performance.

1.8 San Jose CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
SAN JOSE	October 11th 2021	228.9	17
SAN JOSE	October 17th 2021	165.2	6
SAN JOSE	October 24-25th, 2021	355.1	36
SAN JOSE	December 13-15th, 2021	69.1	8
SAN JOSE	December 25-27th, 2021	333.6	3
SAN JOSE	December 29th 2021	456.3	6
SAN JOSE	September 6-7th, 2022	269.8	56
SAN JOSE	December 10th 2022	160.2	17
SAN JOSE	December 20th 2022	123.6	2
SAN JOSE	December 31st 2022	199.7	22
	Average of 10 excludable major events	235.4	16
SAN JOSE	January 4 to 16, 2023	311.5	21
	% difference	24.4%	23.5%

Table 37 – San Jose Historical Performance

As indicated in Table 327, the San Jose Division CAIDI value of 311.5 minutes for the January 4th to 16th, 2023 major event was 24.4% higher than the 235.4 - minute average of the prior 10 weather-related excludable major events.

The top contributing factors to the higher division CAIDI value was due to the following outages:

- 14 outages related to tree falling into our lines contributed 647.1 minutes to the overall January 4th to 16th CAIDI performance.

1.9 Sonoma CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
SONOMA	September 10th 2021	563.4	16
SONOMA	October 11th 2021	440.4	6
SONOMA	October 17th 2021	275.8	7
SONOMA	October 24-25th, 2021	745.8	70
SONOMA	December 13-15th, 2021	236.1	14
SONOMA	December 25-27th, 2021	151.0	5
SONOMA	December 29th 2021	511.7	4
SONOMA	September 6-7th, 2022	235.6	12
SONOMA	December 10th 2022	345.5	30
SONOMA	December 31st 2022	83.4	10
	Average of 10 excludable major events	548.7	16
SONOMA	January 4 to 16, 2023	933.7	50
	% difference	41.2%	67.9%

Table 38 – Sonoma Historical Performance

As indicated in Table 38, the Sonoma Division CAIDI value of 933.7 minutes for the January 4th to 16th, 2023 major event was 41.2% higher than the 548.7 -minute average of the prior 10 weather-related excludable major events.

The top contributing factors to the higher division CAIDI value was due to the following outages:

- 160 outages related to tree falling into our lines contributed 1,275.6 minutes to the overall January 4th to 16th CAIDI performance.

2. February 19 -23, 2023 Major Event Day

A large substation outage affecting 54,447 customers in Oakland resulted in a major event day on February 19th, 2023. This was followed by a weather system that 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. 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. 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. There were a total of 7 Major event days between February 19th and 28th, 2023, impacting a total of 1,018,376 customers in the service territory.

Table 39 summarizes the system and division CAIDI performances during this event and the average of the prior ten weather related major events.

(February 19 - 23, 2023 vs. Prior 10 MED)

System / Division	Average CAIDI of Prior 10 System / Division Specific Excludable ME	February 19-28, 2023 / Division Specific CAIDI	Percent Difference From the Prior CAIDI Average	Exceeds the Investigation Threshold?
SYSTEM	585.9	847.6	144.7%	Yes
CENTRAL COAST	320.9	867.1	270.2%	Yes
DE ANZA	340.4	940.7	276.4%	Yes
DIABLO	231.8	201.4	86.9%	NO
EAST BAY	161.0	472.4	293.4%	Yes
FRESNO	251.1	405.5	161.5%	Yes
HUMBOLDT	1042.2	990.9	95.1%	NO
KERN	168.9	337.9	200.0%	Yes
LOS PADRES	335.0	259.0	77.3%	NO
MISSION	236.6	197.8	83.6%	NO
NORTH BAY	343.5	511.1	148.8%	Yes
NORTH VALLEY	636.2	610.9	96.0%	NO
PENINSULA	389.8	1113.4	285.6%	Yes
SACRAMENTO	717.1	229.4	32.0%	NO
SAN FRANCISCO	132.2	174.0	131.7%	Yes
SAN JOSE	235.4	324.8	138.0%	Yes
SIERRA	1879.3	2318.2	123.4%	NO
SONOMA	548.7	314.9	57.4%	NO
STOCKTON	1092.2	850.5	77.9%	NO
YOSEMITE	334.6	1481.2	442.7%	Yes

Table 39 – February 19 - 23, 2023 CAIDI Performance

2.1 System CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
SYSTEM	October 11th 2021	478.5	713
SYSTEM	October 17th 2022	230.2	229
SYSTEM	October 24-25th, 2021	351.6	896
SYSTEM	December 13-15th, 2021	358.6	471
SYSTEM	December 25-27th, 2021	3,366.4	564
SYSTEM	December 29th 2021	594.2	202
SYSTEM	September 6-7th, 2022	265.8	282
SYSTEM	December 10th 2022	248.9	627
SYSTEM	December 20th 2022	1,025.3	115
SYSTEM	December 31st 2022	693.9	728
	Average of 10 excludable major events	585.9	483
SYSTEM	February 19 to 28, 2023	847.6	518
	% difference	30.9%	7%

Table 340 – System Historical Performance

As indicated in Table 40, the System historical CAIDI value of 847.6 minutes for the February 19th to 28th major event was 30.9% higher than the 585.9 -minute average of the prior 10 weather-related excludable major events.

The top contributing factors to the higher System CAIDI value was due to the following outages:

- 1,412 Vegetation related outages contributed 1755.2 minutes to the overall February 19th to 28th, 2023 CAIDI performance.

2.2 Central Coast CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
CENTRAL COAST	January 11th 2021	352.7	44
CENTRAL COAST	January 17th 2022	120.2	20
CENTRAL COAST	January 24-25th, 2021	466.6	80
CENTRAL COAST	December 13-15th, 2021	181.3	41
CENTRAL COAST	December 25-27th, 2021	150.3	10
CENTRAL COAST	December 29th 2021	242.3	9
CENTRAL COAST	September 6-7th, 2022	104.1	12
CENTRAL COAST	December 10th 2022	222.4	103
CENTRAL COAST	December 20th 2022	359.0	2
CENTRAL COAST	December 31st 2022	487.6	97
	Average of 10 excludable major events	320.9	42
CENTRAL COAST	February 19 to 28, 2023	867.1	45
	% difference	63.0%	7%

Table 41 – Central Coast Historical Performance

As indicated in Table 41, the Central Coast Division CAIDI value of 867.1 minutes for the February 19th to 28th, 2023 major event was 63.0% higher than the 320.9 -minute average of the prior 10 weather-related excludable major events.

The top contributing factors to the higher division CAIDI value was due to the following outages:

- 159 outages related to tree falling into our lines contributed 1083.4 minutes to the overall February 19th to 28th, 2023 CAIDI performance.

2.3 De Anza CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
DE ANZA	January 11th 2021	310.1	9
DE ANZA	January 17th 2022	43.0	4
DE ANZA	January 24-25th, 2021	607.9	45
DE ANZA	December 13-15th, 2021	130.6	10
DE ANZA	December 25-27th, 2021	456.5	3
DE ANZA	December 29th 2021	232.9	2
DE ANZA	September 6-7th, 2022	287.7	18
DE ANZA	December 10th 2022	144.9	18
DE ANZA	December 20th 2022	42.5	2
DE ANZA	December 31st 2022	416.9	29
	Average of 10 excludable major events	340.4	15
DE ANZA	February 19 to 28, 2023	940.7	22
	% difference	63.8%	34%

Table 42 – De Anza Historical Performance

As indicated in Table 42, the De Anza Division CAIDI value of 940.7 minutes for the February 19th to 28th, 2023 major event was 63.8% higher than the 340.4 -minute average of the prior 10 weather-related excludable major events.

The top contributing factors to the higher division CAIDI value was due to the following outages:

- 74 outages related to tree falling into our lines contributed 62.7 minutes to the overall February 19th to 28th, 2023 CAIDI performance.

2.4 East Bay CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
EAST BAY	October 11th 2021	58.2	6
EAST BAY	October 17th 2021	204.5	21
EAST BAY	October 24-25th, 2021	123.2	20
EAST BAY	December 13-15th, 2021	129.4	8
EAST BAY	December 25-27th, 2021	59.9	3
EAST BAY	December 29th 2021	104.4	5
EAST BAY	September 6-7th, 2022	65.7	8
EAST BAY	December 10th 2022	46.8	5
EAST BAY	December 20th 2022	86.8	1
EAST BAY	December 31st 2022	183.8	29
	Average of 10 excludable major events	161.0	10
EAST BAY	February 19 to 28, 2023	472.4	4
	% difference	65.9%	-162%

Table 43 – East Bay Historical Performance

As indicated in Table 43, the East Bay Division CAIDI value of 472.4 minutes for the February 19th to 28th, 2023 major event was 65.9% higher than the 161.0 - minute average of the prior 10 weather-related excludable major events.

The top contributing factors to the higher division CAIDI value was due to the following outages:

- 20 outages related to tree falling into our lines contributed 525.4 minutes to the overall February 19th to 28th, 2023 CAIDI performance.

2.5 Fresno CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
FRESNO	October 11th 2021	364.0	130
FRESNO	October 17th 2021	198.8	13
FRESNO	October 24-25th, 2021	153.7	53
FRESNO	December 13-15th, 2021	290.7	24
FRESNO	December 25-27th, 2021	242.3	9
FRESNO	December 29th 2021	196.5	7
FRESNO	September 6-7th, 2022	97.9	22
FRESNO	December 10th 2022	234.0	30
FRESNO	December 20th 2022	385.1	8
FRESNO	December 31st 2022	233.8	49
	Average of 10 excludable major events	251.1	34
FRESNO	February 19 to 28, 2023	405.5	35
	% difference	38.1%	1%

Table 44 – Fresno Historical Performance

As indicated in Table 44, the Fresno Division CAIDI value of 405.5 minutes for the February 19th to 28th, 2023 major event was 38.1% higher than the 251.1 - minute average of the prior 10 weather-related excludable major events.

The top contributing factors to the higher division CAIDI value was due to the following outages:

- 21 outages related to tree branch falling into our lines contributed 1124.4 minutes to the overall February 19th to 28th, 2023 CAIDI performance.

2.6 Kern CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
KERN	October 11th 2021	566.5	22
KERN	October 17th 2021	83.4	4
KERN	October 24-25th, 2021	180.9	29
KERN	December 13-15th, 2021	140.0	22
KERN	December 25-27th, 2021	86.1	7
KERN	December 29th 2021	224.4	6
KERN	September 6-7th, 2022	93.5	15
KERN	December 10th 2022	92.1	11
KERN	December 20th 2022	173.0	1
KERN	December 31st 2022	106.4	3
	Average of 10 excludable major events	168.9	12
KERN	February 19 to 28, 2023	337.9	14
	% difference	50.0%	16%

Table 45 – Kern Historical Performance

As indicated in Table 45, the Kern Division CAIDI value of 337.9 minutes for the February 19th to 28th, 2023 major event was 50.0% higher than the 168.9 -minute average of the prior 10 weather-related excludable major events.

The top contributing factors to the higher division CAIDI value was due to the following outages:

- 49 outages related to overhead equipment failure contributed 296.8 minutes to the overall February 19th to 28th, 2023 CAIDI performance.

2.7 North Bay CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
NORTH BAY	October 11th 2021	1,118.7	43
NORTH BAY	October 17th 2021	107.2	15
NORTH BAY	October 24-25th, 2021	342.0	69
NORTH BAY	December 13-15th, 2021	144.8	13
NORTH BAY	December 26-27th, 2021	135.3	4
NORTH BAY	December 29th 2021	78.2	4
NORTH BAY	September 6-7th, 2022	139.5	7
NORTH BAY	December 10th 2022	138.0	14
NORTH BAY	December 20th 2022	151.0	2
NORTH BAY	December 31st 2022	84.3	7
	Average of 10 excludable major events	343.5	18
NORTH BAY	February 19 to 28, 2023	511.1	15
	% difference	32.8%	-17%

Table 46 – North Bay Historical Performance

As indicated in Table 46, the North Bay Division CAIDI value of 511.1 minutes for the February 19th to 28th, 2023 major event was 32.8% higher than the 343.5 -minute average of the prior 10 weather-related excludable major events.

The top contributing factors to the higher division CAIDI value was due to the following outages:

- 68 outages related to tree falling into our lines contributed 768.4 minutes to the overall February 19th to 28th, 2023 CAIDI performance.

2.8 Peninsula CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
PENINSULA	October 11th 2021	438.3	2
PENINSULA	October 17th 2021	343.5	22
PENINSULA	October 24-25th, 2021	603.7	68
PENINSULA	December 13-15th, 2021	182.8	26
PENINSULA	December 25-27th, 2021	279.7	3
PENINSULA	December 29th 2021	344.4	3
PENINSULA	September 6-7th, 2022	143.8	16
PENINSULA	December 10th 2022	181.5	20
PENINSULA	December 20th 2022	332.6	3
PENINSULA	December 31st 2022	372.6	40
	Average of 10 excludable major events	389.8	20
PENINSULA	February 19 to 28, 2023	1,113.4	31
	% difference	65.0%	34%

Table 47 – Peninsula Historical Performance

As indicated in Table 47, the Peninsula Division CAIDI value of 1113.4 minutes for the February 19th to 28th, 2023 major event was 65.0% higher than the 389.8 -minute average of the prior 10 weather-related excludable major events.

The top contributing factors to the higher division CAIDI value was due to the following outages:

- 71 outages related to overhead equipment failure contributed 1308.5 minutes to the overall January 4th to 16th CAIDI performance.

2.9 San Francisco CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
SAN FRANCISCO	October 17th 2021	20.3	2
SAN FRANCISCO	October 24-25th, 2021	328.1	18
SAN FRANCISCO	December 13-15th, 2021	103.8	4
SAN FRANCISCO	December 25th 2021	324.0	1
SAN FRANCISCO	December 27th 2021	19.0	1
SAN FRANCISCO	December 29th 2021	1,130.0	1
SAN FRANCISCO	September 6th 2022	42.1	4
SAN FRANCISCO	December 10th 2022	78.7	3
SAN FRANCISCO	December 20th 2022	8.0	1
SAN FRANCISCO	December 31st 2022	206.2	10
	Average of 10 excludable major events	132.2	5
SAN FRANCISCO	February 19 to 28, 2023	174.0	5
	% difference	24.1%	7%

Table 48 – San Francisco Historical Performance

As indicated in Table 48, the San Francisco Division CAIDI value of 174.0 minutes for the February 19th to 28th, 2023 major event was 24.1% higher than the 132.2 -minute average of the prior 10 weather-related excludable major events.

The top contributing factors to the higher division CAIDI value was due to the following outages:

- 1 outage related 3rd party drone hitting our overhead line contributed 285.7 minutes to the overall February 26th, 2023 CAIDI performance.

2.10 San Jose CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
SAN JOSE	October 11th 2021	228.9	17
SAN JOSE	October 17th 2021	165.2	6
SAN JOSE	October 24-25th, 2021	355.1	36
SAN JOSE	December 13-15th, 2021	69.1	8
SAN JOSE	December 25-27th, 2021	333.6	3
SAN JOSE	December 29th 2021	456.3	6
SAN JOSE	September 6-7th, 2022	269.8	56
SAN JOSE	December 10th 2022	160.2	17
SAN JOSE	December 20th 2022	123.6	2
SAN JOSE	December 31st 2022	199.7	22
	Average of 10 excludable major events	235.4	16
SAN JOSE	February 19 to 28, 2023	324.8	15
	% difference	27.5%	-11%

Table 49 – San Jose Historical Performance

As indicated in Table 49, the San Jose Division CAIDI value of 324.8 minutes for the February 19th to 28th, 2023 major event was 27.5% higher than the 235.4 -minute average of the prior 10 weather-related excludable major events.

The top contributing factors to the higher division CAIDI value was due to the following outages:

- 34 outages related to tree falling into our lines contributed 700.0 minutes to the overall February 19th to 28th, 2023 CAIDI performance.

2.11 Yosemite CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
YOSEMITE	October 11th 2021	310.2	92
YOSEMITE	October 17th 2021	233.5	15
YOSEMITE	October 24-25th, 2021	154.1	53
YOSEMITE	December 13-15th, 2021	265.6	33
YOSEMITE	December 25-27th, 2021	1,497.1	47
YOSEMITE	December 29th 2021	1,497.1	17
YOSEMITE	September 6-7th, 2022	92.9	25
YOSEMITE	December 10th 2022	148.6	75
YOSEMITE	December 20th 2022	262.9	6
YOSEMITE	December 31st 2022	126.9	24
	Average of 10 excludable major events	334.6	39
YOSEMITE	February 19 to 28, 2023	1,481.2	63
	% difference	77.4%	39%

Table 50 – Yosemite Historical Performance

As indicated in Table 50, the Yosemite Division CAIDI value of 1481.2 minutes for the February 19th to 28th, 2023 major event was 77.4% higher than the 334.6 -minute average of the prior 10 weather-related excludable major events.

The top contributing factors to the higher division CAIDI value was due to the following outages:

- 191 outages related to tree falling into our lines contributed 3373.0 minutes to the overall February 19th to 28th, 2023 CAIDI performance.

3. March 9-21, 2023 Major Event Day

The third major event of the year resulted in an MED on March 9 - 21, 2023 due to 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. While the system was addressing residual outages from the storm on the 12th and 13th another “atmospheric river” event started and produced heavy rainfall and significant rainfall accumulations, isolated thunderstorms, and gusty southerly winds to the territory with reports of wind gusts in the 70-100 mph range. This atmospheric activity led to 3 MEDs - March 9th, 14th and 21st.

(March 9-21, 2023 vs. Prior 10 MED)

System / Division	Average CAIDI of Prior 10 System / Division Specific Excludable ME	March 9-21, 2023 / Division Specific CAIDI	Percent Difference From the Prior CAIDI Average	Exceeds the Investigation Threshold?
SYSTEM	585.9	704.8	120.3%	Yes
CENTRAL COAST	320.9	1467.4	457.3%	Yes
DE ANZA	340.4	1115.4	327.7%	Yes
DIABLO	231.8	442.8	191.0%	Yes
EAST BAY	161.0	648.7	402.9%	Yes
FRESNO	251.1	201.1	80.1%	NO
HUMBOLDT	1042.2	146.6	14.1%	NO
KERN	168.9	255.5	151.2%	Yes
LOS PADRES	335.0	153.8	45.9%	NO
MISSION	236.6	369.5	156.2%	Yes
NORTH BAY	343.5	213.8	62.2%	NO
NORTH VALLEY	636.2	403.7	63.5%	NO
PENINSULA	389.8	873.0	224.0%	Yes
SACRAMENTO	717.1	269.6	37.6%	NO
SAN FRANCISCO	132.2	415.3	314.3%	Yes
SAN JOSE	235.4	523.7	222.5%	Yes
SIERRA	1879.3	206.0	11.0%	NO
SONOMA	548.7	216.3	39.4%	NO
STOCKTON	1092.2	98.8	9.0%	NO
YOSEMITE	334.6	127.3	38.1%	NO

Table 51 – March 9-21, 2023 CAIDI Performance

3.1 SYSTEM CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
SYSTEM	October 11th 2021	478.5	713
SYSTEM	October 17th 2022	230.2	229
SYSTEM	October 24-25th, 2021	351.6	896
SYSTEM	December 13-15th, 2021	358.6	471
SYSTEM	December 25-27th, 2021	3,366.4	564
SYSTEM	December 29th 2021	594.2	202
SYSTEM	September 6-7th, 2022	265.8	281.5
SYSTEM	December 10th 2022	248.9	627
SYSTEM	December 20th 2022	1,025.3	115
SYSTEM	December 31st 2022	693.9	728
	Average of 10 excludable major events	585.9	483
SYSTEM	March 9 to 21, 2023	704.8	901
	% difference	16.9%	46%

Table 52 – SYSTEM Historical Performance

As indicated in Table 52, the System Division CAIDI value of 704.8 minutes for the March 9,14 and 21st major event was 16.9% higher than the 585.9-minute average of the prior 10 weather-related excludable major events.

The top contributing factors to the higher System CAIDI value was due to the following outages:

- 877 Vegetation related outages contributed 1034.0 minutes to the overall system, 2023 CAIDI performance.

3.2 Central coast CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
CENTRAL COAST	January 11th 2021	352.7	44
CENTRAL COAST	January 17th 2022	120.2	20
CENTRAL COAST	January 24-25th, 2021	466.6	80
CENTRAL COAST	December 13-15th, 2021	181.3	41
CENTRAL COAST	December 25-27th, 2021	150.3	10
CENTRAL COAST	December 29th 2021	242.3	9
CENTRAL COAST	September 6-7th, 2022	104.1	12
CENTRAL COAST	December 10th 2022	222.4	103
CENTRAL COAST	December 20th 2022	359.0	2
CENTRAL COAST	December 31st 2022	487.6	97
	Average of 10 excludable major events	320.9	42
CENTRAL COAST	March 9 to 21, 2023	1,467.4	182
	% Difference	78.1%	77%

Table 53 – Central Coast Historical Performance

As indicated in Table 53, the Central Coast 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 factor to the higher division CAIDI value was due to the following outage:

- 320 Vegetation related outages contributed 1701.5 minutes to the overall division, 2023 CAIDI performance.

3.3 De Anza CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
DE ANZA	January 11th 2021	310.1	9
DE ANZA	January 17th 2022	43.0	4
DE ANZA	January 24-25th, 2021	607.9	45
DE ANZA	December 13-15th, 2021	130.6	10
DE ANZA	December 25-27th, 2021	456.5	3
DE ANZA	December 29th 2021	232.9	2
DE ANZA	September 6-7th, 2022	287.7	18
DE ANZA	December 10th 2022	144.9	18
DE ANZA	December 20th 2022	42.5	2
DE ANZA	December 31st 2022	416.9	29
	Average of 10 excludable major events	340.4	15
DE ANZA	March 9 to 21, 2023	1,115.4	99
	% Difference	69.5%	85%

Table 54 – De Anza Historical Performance

As indicated in Table 54, the De Anza Division CAIDI value of 1115.4 minutes for the March 9,14 and 21st major event was 69.5% higher than the 340.4 minutes average of the prior 10 weather-related excludable major events.

The top contributing factor to the higher division CAIDI value was due to the following outage:

- 101 Vegetation related outages contributed 1538.8 minutes to the overall division, 2023 CAIDI performance.

3.4 Diablo CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
DIABLO	September 10th 2021	86.4	2
DIABLO	October 11th 2021	292.4	23
DIABLO	October 17th 2021	10.0	5
DIABLO	October 24-25th, 2021	273.2	42
DIABLO	December 13-15th, 2021	68.2	7
DIABLO	December 25-27th, 2021	141.7	3
DIABLO	December 29th 2021	98.0	5.0
DIABLO	September 6-7th, 2022	104.1	14
DIABLO	December 10th 2022	45.2	7
DIABLO	December 31st 2022	330.7	32
	Average of 10 excludable major events	231.8	14
DIABLO	March 9 to 21st, 2023	442.8	52
	% Difference	47.7%	73%

Table 55 – Diablo Historical Performance

As indicated in Table 55, the Diablo Division CAIDI value of 442.8 minutes for the March 9,14 and 21st major event was 47.7% higher than the 231.8 minutes average of the prior 10 weather-related excludable major events.

The top contributing factor to the higher division CAIDI value was due to the following outage:

- 320 Vegetation related outages contributed 1701.5 minutes to the overall division, 2023 CAIDI performance.

3.4 East Bay CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
EAST BAY	October 11th 2021	58.2	6
EAST BAY	October 17th 2021	204.5	21
EAST BAY	October 24-25th, 2021	123.2	20
EAST BAY	December 13-15th, 2021	129.4	8
EAST BAY	December 25-27th, 2021	59.9	3
EAST BAY	December 29th 2021	104.4	5
EAST BAY	September 6-7th, 2022	65.7	7.5
EAST BAY	December 10th 2022	46.8	5
EAST BAY	December 20th 2022	86.8	1
EAST BAY	December 31st 2022	183.8	29
	Average of 10 excludable major events	161.0	10
EAST BAY	March 9 to 21, 2023	648.7	53
	% Difference	75.2%	80%

Table 56 – East Bay Historical Performance

As indicated in Table 56, the East Bay Division CAIDI value of 648.7 minutes for the December 20, 2022 major event was 75.2% higher than the 161.0 minutes average of the prior 10 weather-related excludable major events.

The top contributing factor to the higher division CAIDI value was due to the following outage:

- 36 Vegetation related outages contributed 1036.4 minutes to the overall division CAIDI performance.

3.5 Kern CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
KERN	October 11th 2021	566.5	22
KERN	October 17th 2021	83.4	4
KERN	October 24-25th, 2021	180.9	29
KERN	December 13-15th, 2021	140.0	22
KERN	December 25-27th, 2021	86.1	7
KERN	December 29th 2021	224.4	6
KERN	September 6-7th, 2022	93.5	14.5
KERN	December 10th 2022	92.1	11
KERN	December 20th 2022	173.0	1
KERN	December 31st 2022	106.4	3
	Average of 10 excludable major events	168.9	12
KERN	March 9 to 21, 2023	255.5	14
	% Difference	33.9%	15%

Table 57 – Kern Historical Performance

As indicated in Table 57, the Kern Division CAIDI value of 255.5 minutes for the March 9,14 and 21st major event was 33.9% higher than the 168.9 minutes average of the prior 10 weather-related excludable major events.

The top contributing factor to the higher division CAIDI value was due to the following outage:

- Two 3rd Party vehicle related outages contributed 1258.6 minutes to the overall CAIDI performance.
- Two Vegetation related outages contributed 303.9 minutes to the overall division CAIDI performance.

3.6 Mission CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
MISSION	September 10th 2021	115.4	7
MISSION	October 11th 2021	99.0	13
MISSION	October 17th 2021	369.0	35
MISSION	October 24-25th, 2021	111.8	23
MISSION	December 13-15th, 2021	64.3	5
MISSION	December 25th 2021	118.9	2
MISSION	December 29th 2021	96.2	4.0
MISSION	September 6-7th, 2022	209.7	14
MISSION	December 10th 2022	205.3	7
MISSION	December 31st 2022	626.1	18
	Average of 10 excludable major events	236.6	13
MISSION	March 9 to 21, 2023	369.5	29
	% Difference	36.0%	56%

Table 58 –Mission Historical Performance

As indicated in Table 58, the Mission Division CAIDI value of 369.5 minutes for the March 9,14 and 21st major event was 36.0% higher than the 236.6 minutes average of the prior 10 weather-related excludable major events.

The top contributing factor to the higher division CAIDI value was due to the following outage:

- 25 Vegetation related outages contributed 561.9 minutes to the overall division CAIDI performance.

3.7 Peninsula CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
PENINSULA	October 11th 2021	438.3	2
PENINSULA	October 17th 2021	343.5	22
PENINSULA	October 24-25th, 2021	603.7	68
PENINSULA	December 13-15th, 2021	182.8	26
PENINSULA	December 25-27th, 2021	279.7	3
PENINSULA	December 29th 2021	344.4	3
PENINSULA	September 6-7th, 2022	143.8	15.5
PENINSULA	December 10th 2022	181.5	20
PENINSULA	December 20th 2022	332.6	3
PENINSULA	December 31st 2022	372.6	40
	Average of 10 excludable major events	389.8	20
PENINSULA	March 9 to 21, 2023	873.0	93
	% Difference	55.4%	78%

Table 59 – Peninsula Historical Performance

As indicated in Table 59, the Peninsula Division CAIDI value of 873.0 minutes for the March 9,14 and 21st major event was 55.4% higher than the 389.8 minutes average of the prior 10 weather-related excludable major events.

The top contributing factor to the higher division CAIDI value was due to the following outage:

- 86 Vegetation related outages contributed 1285.5 minutes to the overall

3.8 San Francisco CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
SAN FRANCISCO	October 17th 2021	20.3	2
SAN FRANCISCO	October 24-25th, 2021	328.1	18
SAN FRANCISCO	December 13-15th, 2021	103.8	4
SAN FRANCISCO	December 25th 2021	324.0	1
SAN FRANCISCO	December 27th 2021	19.0	1
SAN FRANCISCO	December 29th 2021	1,130.0	1
SAN FRANCISCO	September 6th 2022	42.1	4.0
SAN FRANCISCO	December 10th 2022	78.7	3
SAN FRANCISCO	December 20th 2022	8.0	1
SAN FRANCISCO	December 31st 2022	206.2	10
	Average of 10 excludable major events	132.2	5
SAN FRANCISCO	March 9 to 21, 2023	415.3	15
	% Difference	68.2%	70%

Table 60 – San Francisco Historical Performance

As indicated in Table 60, the San Francisco Division CAIDI value of 415.3 minutes for the March 9,14 and 21st major event was 68.2% higher than the 132.2 minutes average of the prior 10 weather-related excludable major events.

The top contributing factor to the higher division CAIDI value was due to the following outage:

- 21 overhead equipment failure related outages contributed 399.7 minutes to the overall CAIDI performance.
- 9 Vegetation related outages contributed 613.8 minutes to the overall division CAIDI performance.

3.9 San Jose CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
SAN JOSE	October 11th 2021	228.9	17
SAN JOSE	October 17th 2021	165.2	6
SAN JOSE	October 24-25th, 2021	355.1	36
SAN JOSE	December 13-15th, 2021	69.1	8
SAN JOSE	December 25-27th, 2021	333.6	3
SAN JOSE	December 29th 2021	456.3	6
SAN JOSE	September 6-7th, 2022	269.8	55.5
SAN JOSE	December 10th 2022	160.2	17
SAN JOSE	December 20th 2022	123.6	2
SAN JOSE	December 31st 2022	199.7	22
	Average of 10 excludable major events	235.4	16
SAN JOSE	March 9 to 21, 2023	523.7	39
	% Difference	55.1%	59%

Table 61 – San Jose Historical Performance

As indicated in Table 61, the San Jose Division CAIDI value of 523.7 minutes for the March 9,14 and 21st major event was 55.1% higher than the 235.4 minutes average of the prior 10 weather-related excludable major events.

The top contributing factor to the higher division CAIDI value was due to the following outage:

- 27 overhead equipment failure related outages contributed 1017.5 minutes to the overall CAIDI performance.
- 26 Vegetation related outages contributed 512.7 minutes to the overall division CAIDI performance.

4. September 9th, 2023 Major Event Day

A Major heat event with several areas in the service territory experiencing multiple days of record hot temperatures occurred. This late season heat with temperatures reaching 100-110F across the Interior and around 90F in the Bay lead to high electric load and heat related outages on September 9th. Heat impact continued for the next few days across the San Joaquin Valley; meanwhile, during the evening a weather system moved onshore across Northern California and produced lightning and flashover impact that continued into September 11th.

(September 9, 2023 vs. Prior 10 MED)

Table 62 – September 9, 2023 CAIDI Performance

System / Division	Average CAIDI of Prior 10 System / Division Specific Excludable ME	September 9, 2023 / Division Specific CAIDI	Percent Difference From the Prior CAIDI Average	Exceeds the Investigation Threshold?
SYSTEM	585.9	527.9	90.1%	NO
CENTRAL COAST	320.9	349.4	108.9%	NO
DE ANZA	340.4	209.6	61.6%	NO
DIABLO	231.8	607.0	261.9%	Yes
EAST BAY	161.0	121.7	75.6%	NO
FRESNO	251.1	196.3	78.2%	NO
HUMBOLDT	1042.2	265.0	25.4%	NO
KERN	168.9	169.7	100.5%	NO
LOS PADRES	335.0	159.0	47.5%	NO
MISSION	236.6	655.1	276.9%	Yes
NORTH BAY	343.5	506.2	147.4%	Yes
NORTH VALLEY	636.2	813.0	127.8%	Yes
PENINSULA	389.8	0.0	0.0%	NO
SACRAMENTO	717.1	159.9	22.3%	NO
SAN FRANCISCO	132.2	0.0	0.0%	NO
SAN JOSE	235.4	721.3	306.5%	Yes
SIERRA	1879.3	100.0	5.3%	NO
SONOMA	548.7	161.9	29.5%	NO
STOCKTON	1092.2	162.2	14.9%	NO
YOSEMITE	334.6	675.0	201.7%	Yes

4.1 Diablo CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
DIABLO	September 10th 2021	86.4	2
DIABLO	October 11th 2021	292.4	23
DIABLO	October 17th 2021	10.0	5
DIABLO	October 24-25th, 2021	273.2	42
DIABLO	December 13-15th, 2021	68.2	7
DIABLO	December 25-27th, 2021	141.7	3
DIABLO	December 29th 2021	98.0	5
DIABLO	September 6-7th, 2022	104.1	14
DIABLO	December 10th 2022	45.2	7
DIABLO	December 31st 2022	330.7	32
	Average of 10 excludable major events	231.8	14
DIABLO	September 9, 2023	607.0	2
	% Difference	61.8%	-596%

Table 63 – Diablo Historical Performance

As indicated in Table 63, the Diablo Division CAIDI value of 607.0 minutes for the September 9th 2023 major event was 61.8% higher than the 231.8-minute average of the prior 10 weather-related excludable major events.

The top contributing factor to the higher division CAIDI value was due to the following outage:

- A Planned outage in order to perform wildfire safe work on Brentwood 2112 feeder contributed 1081.0 minutes to the overall September 9th, 2023 CAIDI performance.

4.2 Mission CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
MISSION	September 10th 2021	115.4	7
MISSION	October 11th 2021	99.0	13
MISSION	October 17th 2021	369.0	35
MISSION	October 24-25th, 2021	111.8	23
MISSION	December 13-15th, 2021	64.3	5
MISSION	December 25th 2021	118.9	2
MISSION	December 29th 2021	96.2	4
MISSION	September 6-7th, 2022	209.7	14
MISSION	December 10th 2022	205.3	7
MISSION	December 31st 2022	626.1	18
	Average of 10 excludable major events	236.6	13
MISSION	September 9, 2023	655.1	2
	% Difference	63.9%	-538%

Table 64 – Mission Historical Performance

As indicated in Table 64, the Mission Division CAIDI value of 655.1 minutes for the September 9th 2023 major event was 63.9% higher than the 236.6-minute average of the prior 10 weather-related excludable major events.

The top contributing factor to the higher division CAIDI value was due to the following outages:

- An underground equipment failure on Dixon Landing 2109 feeder contributed 662.3 minutes to the overall September 9th, 2023 CAIDI performance.

4.3 North Bay CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
NORTH BAY	October 11th 2021	1,118.7	43
NORTH BAY	October 17th 2021	107.2	15
NORTH BAY	October 24-25th, 2021	342.0	69
NORTH BAY	December 13-15th, 2021	144.8	13
NORTH BAY	December 26-27th, 2021	135.3	4
NORTH BAY	December 29th 2021	78.2	4
NORTH BAY	September 6-7th, 2022	139.5	7
NORTH BAY	December 10th 2022	138.0	14
NORTH BAY	December 20th 2022	151.0	2
NORTH BAY	December 31st 2022	84.3	7
	Average of 10 excludable major events	343.5	18
NORTH BAY	September 9, 2023	506.2	2
	% Difference	32.1%	-783%

Table 65 – North Bay Historical Performance

As indicated in Table 65, the North Bay Division CAIDI value of 906.2 minutes for the September 9th 2023 major event was 32.1% higher than the 343.5-minute average of the prior 10 weather-related excludable major events.

The top contributing factor to the higher division CAIDI value was due to an outage on Alto 1121 feeder caused by overhead equipment failure. This outage contributed 622.0 minutes to the overall September 9th, 2023 CAIDI performance.

4.4 North Valley CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
NORTH VALLEY	October 11th 2021	1,129.7	86
NORTH VALLEY	October 17th 2021	258.7	16
NORTH VALLEY	October 24-25th, 2021	311.3	60
NORTH VALLEY	December 13-15th, 2021	1,037.2	68
NORTH VALLEY	December 25-27th, 2021	656.4	21
NORTH VALLEY	December 29th 2021	429.6	53
NORTH VALLEY	September 6-7th, 2022	152.1	7
NORTH VALLEY	December 10th 2022	220.3	45
NORTH VALLEY	December 20th 2022	122.8	4
NORTH VALLEY	December 31st 2022	184.5	9
	Average of 10 excludable major events	636.2	37
NORTH VALLEY	September 9, 2023	813.0	3
	% Difference	21.7%	-1126%

Table 66 – North Bay Historical Performance

As indicated in Table 66, the North Valley Division CAIDI value of 813.0 minutes for the September 9th 2023 major event was 21.7% higher than the 636.2-minute average of the prior 10 weather-related excludable major events.

The top contributing factor to the higher division CAIDI value was due to an outage on Willows A -1104 feeder caused by the failure of an underground cable. This outage contributed 1007.6 minutes to the overall September 9th, 2023 CAIDI performance.

4.5 San Jose CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
SAN JOSE	October 11th 2021	228.9	17
SAN JOSE	October 17th 2021	165.2	6
SAN JOSE	October 24-25th, 2021	355.1	36
SAN JOSE	December 13-15th, 2021	69.1	8
SAN JOSE	December 25-27th, 2021	333.6	3
SAN JOSE	December 29th 2021	456.3	6
SAN JOSE	September 6-7th, 2022	269.8	56
SAN JOSE	December 10th 2022	160.2	17
SAN JOSE	December 20th 2022	123.6	2
SAN JOSE	December 31st 2022	199.7	22
	Average of 10 excludable major events	235.4	16
SAN JOSE	September 9, 2023	721.3	3
	% Difference	67.4%	-439%

Table 67 – North Bay Historical Performance

As indicated in Table 67, the North Valley Division CAIDI value of 721.3 minutes for the September 9th 2023 major event was 67.4% higher than the 235.4-minute average of the prior 10 weather-related excludable major events.

The top contributing factor to the higher division CAIDI value was a planned maintenance outage on El Patio 1112 feeder. This outage contributed 211.0 minutes to the overall September 9th, 2023 CAIDI performance.

4.6 Yosemite CAIDI Assessment

System / Division	Major Event Day	CAIDI	SO / Day
YOSEMITE	October 11th 2021	310.2	92
YOSEMITE	October 17th 2021	233.5	15
YOSEMITE	October 24-25th, 2021	154.1	53
YOSEMITE	December 13-15th, 2021	265.6	33
YOSEMITE	December 25-27th, 2021	1,497.1	47
YOSEMITE	December 29th 2021	1,497.1	17
YOSEMITE	September 6-7th, 2022	92.9	25
YOSEMITE	December 10th 2022	148.6	75
YOSEMITE	December 20th 2022	262.9	6
YOSEMITE	December 31st 2022	126.9	24
	Average of 10 excludable major events	334.6	39
YOSEMITE	September 9, 2023	675.0	96
	% Difference	50.4%	60%

Table 68 – North Bay Historical Performance

As indicated in Table 68, the North Valley Division CAIDI value of 675.0 minutes for the September 9th 2023 major event was 50.4% higher than the 334.6-minute average of the prior 10 weather-related excludable major events.

The top contributing factor to the higher division CAIDI value was due to the following outage:

- 67 lightning related outages contributed 56,645.9 minutes to the overall CAIDI performance.

3. System and Division Indices Based on IEEE 1366 for the past 10 years including Planned Outages and including and excluding MED

Table 115 below provides the T&D system reliability indices from 2013 to 2022 (excluding ISO outages) for unplanned and planned outages combined (both including and excluding Major Event Days).

Table 69: Combined Transmission and Distribution System Indices with Planned Outages

Year	Major Events Included				Major Events Excluded			
	SAIDI	SAIFI	MAIFI	CAIDI	SAIDI	SAIFI	MAIFI	CAIDI
2014	149.4	1.133	1.567	131.9	108.4	0.966	1.396	112.2
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	324.2	1.767	1.400	183.5	254.0	1.620	1.311	156.9
2023	711.7	2.222	2.011	320.3	255.9	1.558	1.220	164.3

a. System and Division Indices Based on IEEE 1366 for the past ten years including Planned Outages and including MED, and excluding ISO Outages

Table 70:

Division	Year	SAIDI	SAIFI	MAIFI	CAIDI
CENTRAL COAST	2014	214.1	1.432	2.134	149.5
CENTRAL COAST	2015	269.6	1.376	2.176	195.9
CENTRAL COAST	2016	202.8	1.714	2.739	118.3
CENTRAL COAST	2017	819.7	2.522	4.577	325.0
CENTRAL COAST	2018	217.7	1.733	2.507	125.6
CENTRAL COAST	2019	1,328.1	2.706	3.153	490.8
CENTRAL COAST	2020	417.0	2.215	1.968	188.3
CENTRAL COAST	2021	740.2	2.515	2.544	294.3
CENTRAL COAST	2022	520.8	3.117	2.987	167.1
CENTRAL COAST	2023	1,814.2	4.012	3.758	452.3
Division/System	**Year**	**SAIDI**	**SAIFI**	**MAIFI**	**CAIDI**
DE ANZA	2014	134.2	1.113	1.319	120.6
DE ANZA	2015	80.7	0.680	1.291	118.8
DE ANZA	2016	119.4	0.977	1.415	122.1
DE ANZA	2017	332.0	1.583	1.793	209.7
DE ANZA	2018	121.3	0.967	1.429	125.4
DE ANZA	2019	435.7	1.496	2.011	291.3
DE ANZA	2020	252.7	1.043	1.642	242.2
DE ANZA	2021	327.8	1.301	1.798	251.9
DE ANZA	2022	227.2	1.383	1.113	164.3
DE ANZA	2023	1,545.0	2.607	3.008	592.6
Division/System	**Year**	**SAIDI**	**SAIFI**	**MAIFI**	**CAIDI**
DIABLO	2014	97.0	1.060	1.375	91.5
DIABLO	2015	97.9	1.062	1.883	92.2
DIABLO	2016	97.8	1.121	1.736	87.3
DIABLO	2017	161.0	1.327	2.143	121.3
DIABLO	2018	122.1	1.278	1.544	95.6
DIABLO	2019	640.8	1.728	1.857	370.9
DIABLO	2020	269.0	1.523	1.825	176.6
DIABLO	2021	201.1	1.588	1.673	126.6
DIABLO	2022	243.3	1.835	1.378	132.6
DIABLO	2023	489.5	2.270	1.585	215.7
Division/System	**Year**	**SAIDI**	**SAIFI**	**MAIFI**	**CAIDI**
EAST BAY	2014	89.1	0.883	1.520	100.9
EAST BAY	2015	65.9	0.749	1.179	87.9
EAST BAY	2016	137.1	1.246	1.243	110.0
EAST BAY	2017	162.1	1.271	1.983	127.6
EAST BAY	2018	121.0	1.089	1.132	111.1
EAST BAY	2019	485.2	1.419	1.217	342.0
EAST BAY	2020	238.2	1.174	1.647	202.9
EAST BAY	2021	265.6	1.772	1.685	149.9
EAST BAY	2022	194.2	1.343	1.672	144.6
EAST BAY	2023	441.9	1.669	1.566	264.7

Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
FRESNO	2014	101.0	1.088	1.782	92.8
FRESNO	2015	115.2	1.238	2.060	93.1
FRESNO	2016	99.4	1.206	1.978	82.4
FRESNO	2017	116.6	1.064	1.866	109.6
FRESNO	2018	128.0	1.142	1.416	112.1
FRESNO	2019	139.2	1.090	1.697	127.8
FRESNO	2020	130.3	1.205	1.464	108.1
FRESNO	2021	227.8	1.424	1.699	159.9
FRESNO	2022	199.8	1.369	1.785	146.0
FRESNO	2023	303.9	1.594	1.986	190.6
Division/System	**Year**	**SAIDI**	**SAIFI**	**MAIFI**	**CAIDI**
HUMBOLDT	2014	350.5	1.528	1.941	229.4
HUMBOLDT	2015	738.9	2.388	2.739	309.4
HUMBOLDT	2016	251.0	1.757	2.100	142.9
HUMBOLDT	2017	955.5	2.526	3.511	378.2
HUMBOLDT	2018	448.5	2.333	1.571	192.3
HUMBOLDT	2019	7,018.7	4.731	2.490	1,483.6
HUMBOLDT	2020	1,058.7	2.460	1.499	430.4
HUMBOLDT	2021	1,717.4	3.196	2.145	537.4
HUMBOLDT	2022	1,155.2	3.586	1.448	322.1
HUMBOLDT	2023	2,524.4	4.612	3.643	547.3
Division/System	**Year**	**SAIDI**	**SAIFI**	**MAIFI**	**CAIDI**
KERN	2014	127.0	1.198	1.853	106.0
KERN	2015	104.5	1.022	1.929	102.2
KERN	2016	101.9	0.998	2.078	102.1
KERN	2017	149.9	1.132	1.959	132.4
KERN	2018	83.3	0.859	1.748	97.0
KERN	2019	172.4	1.391	2.080	123.9
KERN	2020	137.6	1.196	1.968	115.1
KERN	2021	193.7	1.454	1.869	133.2
KERN	2022	286.0	1.552	1.278	184.2
KERN	2023	212.4	1.479	2.147	143.6
Division/System	**Year**	**SAIDI**	**SAIFI**	**MAIFI**	**CAIDI**
LOS PADRES	2014	201.8	1.322	1.354	152.6
LOS PADRES	2015	148.2	0.931	1.814	159.1
LOS PADRES	2016	130.2	1.255	1.674	103.7
LOS PADRES	2017	335.7	1.688	2.127	198.9
LOS PADRES	2018	165.9	1.408	1.155	117.8
LOS PADRES	2019	261.0	1.670	1.134	156.3
LOS PADRES	2020	221.5	1.408	0.916	157.3
LOS PADRES	2021	341.5	1.825	1.951	187.1
LOS PADRES	2022	360.4	2.195	0.996	164.2
LOS PADRES	2023	484.2	2.593	1.813	186.7

Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
MISSION	2014	82.7	0.812	0.820	101.9
MISSION	2015	71.7	0.654	1.152	109.6
MISSION	2016	95.2	0.828	0.972	114.9
MISSION	2017	149.1	1.074	1.471	138.8
MISSION	2018	79.5	0.738	0.853	107.6
MISSION	2019	308.2	1.014	0.943	303.9
MISSION	2020	231.5	1.258	1.389	184.0
MISSION	2021	172.2	1.287	1.225	133.8
MISSION	2022	141.4	0.907	0.913	155.9
MISSION	2023	183.1	1.149	1.095	159.3
Division/System	**Year**	**SAIDI**	**SAIFI**	**MAIFI**	**CAIDI**
NORTH BAY	2014	253.7	1.352	2.724	187.7
NORTH BAY	2015	156.3	1.171	2.162	133.5
NORTH BAY	2016	133.5	1.040	1.436	128.3
NORTH BAY	2017	752.8	1.840	2.812	409.0
NORTH BAY	2018	204.7	1.145	1.856	178.9
NORTH BAY	2019	3,551.3	3.321	2.276	1,069.4
NORTH BAY	2020	555.2	1.897	2.536	292.6
NORTH BAY	2021	405.0	1.839	2.293	220.2
NORTH BAY	2022	294.6	1.778	1.201	165.7
NORTH BAY	2023	556.8	2.154	1.921	258.5
Division/System	**Year**	**SAIDI**	**SAIFI**	**MAIFI**	**CAIDI**
NORTH VALLEY	2014	212.2	1.302	1.816	163.0
NORTH VALLEY	2015	505.6	1.920	2.536	263.4
NORTH VALLEY	2016	194.4	1.357	2.195	143.3
NORTH VALLEY	2017	417.4	1.760	3.164	237.1
NORTH VALLEY	2018	4,318.7	1.774	1.401	2,434.4
NORTH VALLEY	2019	4,960.1	4.212	2.515	1,177.5
NORTH VALLEY	2020	2,102.1	2.964	1.685	709.3
NORTH VALLEY	2021	2,223.8	3.224	3.269	689.7
NORTH VALLEY	2022	456.2	2.571	1.328	177.4
NORTH VALLEY	2023	824.7	3.064	2.152	269.2
Division/System	**Year**	**SAIDI**	**SAIFI**	**MAIFI**	**CAIDI**
PENINSULA	2014	110.7	1.129	1.363	98.1
PENINSULA	2015	90.5	0.940	1.798	96.3
PENINSULA	2016	102.6	1.065	1.383	96.3
PENINSULA	2017	181.4	1.394	2.383	130.1
PENINSULA	2018	106.1	0.991	1.256	107.0
PENINSULA	2019	771.5	1.661	1.642	464.5
PENINSULA	2020	196.8	1.288	1.383	152.8
PENINSULA	2021	436.2	1.762	1.927	247.6
PENINSULA	2022	205.2	1.276	1.408	160.8
PENINSULA	2023	1,281.8	2.581	2.978	496.7

Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
SACRAMENTO	2014	126.2	1.020	1.437	123.7
SACRAMENTO	2015	113.0	1.009	1.776	112.0
SACRAMENTO	2016	118.5	1.133	1.810	104.6
SACRAMENTO	2017	300.0	1.970	3.218	152.3
SACRAMENTO	2018	134.3	1.190	1.937	112.8
SACRAMENTO	2019	686.8	1.761	2.349	390.1
SACRAMENTO	2020	302.1	1.690	1.797	178.7
SACRAMENTO	2021	608.9	1.849	2.892	329.4
SACRAMENTO	2022	412.3	1.639	1.698	251.6
SACRAMENTO	2023	475.3	1.892	2.112	251.2
Division/System	**Year**	**SAIDI**	**SAIFI**	**MAIFI**	**CAIDI**
SAN FRANCISCO	2014	141.7	0.858	0.353	165.1
SAN FRANCISCO	2015	44.2	0.569	0.553	77.7
SAN FRANCISCO	2016	49.7	0.597	0.398	83.3
SAN FRANCISCO	2017	127.0	0.906	0.514	140.3
SAN FRANCISCO	2018	62.2	0.506	0.300	123.0
SAN FRANCISCO	2019	104.9	0.817	0.363	128.4
SAN FRANCISCO	2020	66.8	0.713	0.429	93.7
SAN FRANCISCO	2021	94.4	0.770	0.595	122.6
SAN FRANCISCO	2022	75.8	0.609	0.474	124.6
SAN FRANCISCO	2023	171.9	0.974	0.561	176.4
Division/System	**Year**	**SAIDI**	**SAIFI**	**MAIFI**	**CAIDI**
SAN JOSE	2014	120.0	1.107	1.071	108.4
SAN JOSE	2015	90.1	0.872	1.165	103.4
SAN JOSE	2016	80.8	0.753	1.203	107.2
SAN JOSE	2017	201.1	1.342	1.808	149.8
SAN JOSE	2018	112.1	0.986	1.351	113.7
SAN JOSE	2019	290.8	1.154	1.425	252.0
SAN JOSE	2020	193.6	1.145	1.528	169.1
SAN JOSE	2021	189.4	1.079	1.252	175.5
SAN JOSE	2022	233.3	1.480	1.325	157.6
SAN JOSE	2023	341.8	1.489	1.624	229.5
Division/System	**Year**	**SAIDI**	**SAIFI**	**MAIFI**	**CAIDI**
SIERRA	2014	208.2	1.478	2.419	140.9
SIERRA	2015	197.3	1.378	3.224	143.2
SIERRA	2016	188.4	1.341	1.887	140.4
SIERRA	2017	641.5	2.193	3.112	292.4
SIERRA	2018	445.6	1.693	1.446	263.3
SIERRA	2019	5,898.4	4.364	2.630	1,351.5
SIERRA	2020	2,402.7	2.901	2.076	828.3
SIERRA	2021	3,142.9	3.236	2.544	971.3
SIERRA	2022	789.2	3.639	1.202	216.9
SIERRA	2023	1,573.1	3.665	2.590	429.2

Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
SONOMA	2014	239.4	1.395	2.050	171.6
SONOMA	2015	140.7	0.985	1.993	142.8
SONOMA	2016	114.5	0.931	1.605	123.0
SONOMA	2017	1,868.6	2.064	2.887	905.3
SONOMA	2018	150.4	1.152	1.242	130.5
SONOMA	2019	3,929.2	2.801	1.786	1,402.9
SONOMA	2020	643.8	1.819	1.621	353.9
SONOMA	2021	454.1	1.989	1.891	228.3
SONOMA	2022	297.0	1.777	1.475	167.1
SONOMA	2023	572.0	2.015	1.210	283.9
Division/System	**Year**	**SAIDI**	**SAIFI**	**MAIFI**	**CAIDI**
STOCKTON	2014	136.3	0.918	1.446	148.6
STOCKTON	2015	135.0	1.105	2.249	122.1
STOCKTON	2016	118.1	1.087	1.778	108.7
STOCKTON	2017	289.5	1.718	1.930	168.5
STOCKTON	2018	239.2	1.232	2.000	194.1
STOCKTON	2019	1,602.3	2.465	1.920	650.0
STOCKTON	2020	678.8	1.680	1.596	403.9
STOCKTON	2021	1,152.2	2.178	2.421	529.0
STOCKTON	2022	510.8	2.017	1.186	253.3
STOCKTON	2023	668.6	2.723	2.148	245.5
Division/System	**Year**	**SAIDI**	**SAIFI**	**MAIFI**	**CAIDI**
YOSEMITE	2014	147.6	1.350	2.675	109.3
YOSEMITE	2015	130.6	1.162	3.098	112.4
YOSEMITE	2016	147.9	1.333	2.164	111.0
YOSEMITE	2017	323.8	1.796	3.053	180.2
YOSEMITE	2018	190.6	1.544	1.841	123.5
YOSEMITE	2019	1,425.6	2.767	2.689	515.2
YOSEMITE	2020	809.2	2.077	1.592	389.6
YOSEMITE	2021	1,366.4	3.353	2.644	407.6
YOSEMITE	2022	404.8	2.413	1.862	167.7
YOSEMITE	2023	1,154.1	3.363	2.614	343.2
Division/System	**Year**	**SAIDI**	**SAIFI**	**MAIFI**	**CAIDI**
SYSTEM	2014	149.4	1.133	1.567	131.9
SYSTEM	2015	147.2	1.052	1.821	139.9
SYSTEM	2016	121.9	1.103	1.603	110.6
SYSTEM	2017	374.2	1.549	2.297	241.6
SYSTEM	2018	309.4	1.175	1.428	263.3
SYSTEM	2019	1,395.4	1.996	1.793	699.3
SYSTEM	2020	478.4	1.556	1.571	307.5
SYSTEM	2021	626.3	1.837	1.907	341.0
SYSTEM	2022	324.2	1.767	1.400	183.5
SYSTEM	2023	711.7	2.222	2.011	320.3

b. System and Division Indices Based on IEEE 1366 for the past 10 years including Planned Outages and excluding ISO, and MED

Table 71:

Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
CENTRAL COAST	2014	136.9	1.168	1.835	117.2
CENTRAL COAST	2015	118.6	0.934	1.847	126.9
CENTRAL COAST	2016	180.2	1.548	2.485	116.4
CENTRAL COAST	2017	157.8	1.352	2.590	116.7
CENTRAL COAST	2018	193.0	1.582	2.247	122.0
CENTRAL COAST	2019	235.7	1.587	2.235	148.5
CENTRAL COAST	2020	180.0	1.808	1.680	99.6
CENTRAL COAST	2021	317.1	1.774	1.906	178.7
CENTRAL COAST	2022	414.7	2.794	2.858	148.4
CENTRAL COAST	2023	458.7	2.626	2.176	174.7
Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
DE ANZA	2014	110.4	0.985	1.214	112.1
DE ANZA	2015	68.2	0.561	1.182	121.7
DE ANZA	2016	96.8	0.806	1.337	120.2
DE ANZA	2017	114.3	1.063	1.150	107.5
DE ANZA	2018	117.8	0.918	1.406	128.3
DE ANZA	2019	124.0	0.982	1.660	126.4
DE ANZA	2020	108.7	0.793	1.257	137.0
DE ANZA	2021	153.5	0.896	1.001	171.2
DE ANZA	2022	168.7	1.171	1.064	144.1
DE ANZA	2023	226.1	1.189	1.475	190.2
Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
DIABLO	2014	80.9	0.973	1.220	83.1
DIABLO	2015	87.8	0.935	1.676	93.9
DIABLO	2016	95.2	1.107	1.701	86.0
DIABLO	2017	97.9	0.982	1.625	99.8
DIABLO	2018	110.7	1.168	1.501	94.7
DIABLO	2019	105.8	1.057	1.215	100.1
DIABLO	2020	130.1	1.295	1.623	100.5
DIABLO	2021	148.4	1.328	1.354	111.7
DIABLO	2022	214.3	1.704	1.292	125.7
DIABLO	2023	213.5	1.492	1.083	143.1
Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
EAST BAY	2014	72.7	0.762	1.303	95.5
EAST BAY	2015	51.1	0.611	1.085	83.6
EAST BAY	2016	110.2	1.091	1.080	101.0
EAST BAY	2017	88.3	0.956	1.528	92.4
EAST BAY	2018	111.9	0.999	1.081	112.0
EAST BAY	2019	109.1	0.924	0.957	118.1
EAST BAY	2020	111.1	0.896	1.453	124.0
EAST BAY	2021	181.0	1.341	1.369	135.0
EAST BAY	2022	181.9	1.257	1.652	144.7
EAST BAY	2023	138.8	1.093	0.782	127.0

Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
FRESNO	2014	98.6	1.069	1.710	92.3
FRESNO	2015	84.8	0.935	1.832	90.7
FRESNO	2016	97.5	1.184	1.955	82.4
FRESNO	2017	85.9	0.874	1.549	98.2
FRESNO	2018	87.3	0.955	1.369	91.4
FRESNO	2019	96.6	0.920	1.478	105.0
FRESNO	2020	99.4	0.931	1.364	106.7
FRESNO	2021	156.1	1.149	1.469	135.9
FRESNO	2022	192.8	1.318	1.724	146.3
FRESNO	2023	193.2	1.262	1.497	153.1
Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
HUMBOLDT	2014	274.3	1.377	1.810	199.3
HUMBOLDT	2015	319.8	1.774	2.426	180.2
HUMBOLDT	2016	234.5	1.657	2.040	141.6
HUMBOLDT	2017	310.5	1.469	2.281	211.4
HUMBOLDT	2018	271.4	1.976	1.503	137.4
HUMBOLDT	2019	391.2	1.964	1.900	199.2
HUMBOLDT	2020	280.3	1.631	1.346	171.8
HUMBOLDT	2021	569.3	2.368	1.481	240.4
HUMBOLDT	2022	616.7	3.028	1.370	203.7
HUMBOLDT	2023	724.6	3.109	1.703	233.1
Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
KERN	2014	99.1	1.024	1.640	96.7
KERN	2015	92.8	0.938	1.855	99.0
KERN	2016	101.3	0.982	2.071	103.1
KERN	2017	88.5	0.790	1.403	112.0
KERN	2018	82.4	0.852	1.721	96.7
KERN	2019	116.1	1.162	1.744	99.9
KERN	2020	122.5	1.099	1.843	111.4
KERN	2021	151.7	1.155	1.516	131.3
KERN	2022	282.7	1.519	1.200	186.2
KERN	2023	164.1	1.274	1.829	128.9
Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
LOS PADRES	2014	110.1	1.125	1.135	97.8
LOS PADRES	2015	88.1	0.773	1.438	113.9
LOS PADRES	2016	128.4	1.230	1.672	104.4
LOS PADRES	2017	126.3	1.054	1.443	119.8
LOS PADRES	2018	154.5	1.325	1.011	116.6
LOS PADRES	2019	184.0	1.319	0.798	139.5
LOS PADRES	2020	162.4	1.252	0.837	129.8
LOS PADRES	2021	233.6	1.320	1.330	177.0
LOS PADRES	2022	274.1	1.988	0.867	137.9
LOS PADRES	2023	266.7	2.016	1.204	132.3

Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
MISSION	2014	71.8	0.732	0.771	98.2
MISSION	2015	65.6	0.601	1.055	109.3
MISSION	2016	85.1	0.766	0.927	111.1
MISSION	2017	71.1	0.664	1.004	107.1
MISSION	2018	74.3	0.710	0.829	104.7
MISSION	2019	77.0	0.732	0.697	105.1
MISSION	2020	103.2	0.821	1.061	125.6
MISSION	2021	129.2	1.027	0.922	125.7
MISSION	2022	123.4	0.851	0.875	145.0
MISSION	2023	119.7	0.853	0.800	140.3
Division/System	**Year**	**SAIDI**	**SAIFI**	**MAIFI**	**CAIDI**
NORTH BAY	2014	132.9	0.974	2.509	136.4
NORTH BAY	2015	117.9	1.014	1.978	116.2
NORTH BAY	2016	107.2	0.887	1.210	120.8
NORTH BAY	2017	167.7	1.033	1.835	162.3
NORTH BAY	2018	156.0	1.082	1.790	144.2
NORTH BAY	2019	180.8	1.449	1.652	124.8
NORTH BAY	2020	188.8	1.413	2.107	133.6
NORTH BAY	2021	210.7	1.267	1.555	166.3
NORTH BAY	2022	289.9	1.739	1.148	166.7
NORTH BAY	2023	270.4	1.557	0.982	173.7
Division/System	**Year**	**SAIDI**	**SAIFI**	**MAIFI**	**CAIDI**
NORTH VALLEY	2014	150.0	1.092	1.559	137.3
NORTH VALLEY	2015	158.7	1.195	1.938	132.9
NORTH VALLEY	2016	165.7	1.220	1.959	135.9
NORTH VALLEY	2017	130.9	0.949	2.008	138.0
NORTH VALLEY	2018	218.5	1.508	1.333	144.9
NORTH VALLEY	2019	277.4	1.751	1.473	158.4
NORTH VALLEY	2020	390.3	1.940	1.400	201.1
NORTH VALLEY	2021	517.0	1.999	2.219	258.6
NORTH VALLEY	2022	439.9	2.496	1.223	176.2
NORTH VALLEY	2023	476.0	2.402	1.339	198.1
Division/System	**Year**	**SAIDI**	**SAIFI**	**MAIFI**	**CAIDI**
PENINSULA	2014	89.4	0.965	1.164	92.7
PENINSULA	2015	74.8	0.826	1.602	90.6
PENINSULA	2016	94.4	0.984	1.197	96.0
PENINSULA	2017	75.6	0.704	1.176	107.3
PENINSULA	2018	99.7	0.940	1.204	106.0
PENINSULA	2019	124.1	0.920	0.983	134.9
PENINSULA	2020	112.5	0.943	1.043	119.3
PENINSULA	2021	204.3	1.199	0.945	170.4
PENINSULA	2022	173.9	1.149	1.345	151.3
PENINSULA	2023	248.2	1.418	1.367	175.1

Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
SACRAMENTO	2014	112.4	0.913	1.258	123.1
SACRAMENTO	2015	100.7	0.913	1.561	110.3
SACRAMENTO	2016	102.6	1.042	1.545	98.5
SACRAMENTO	2017	137.9	1.168	1.713	118.1
SACRAMENTO	2018	126.6	1.152	1.827	110.0
SACRAMENTO	2019	114.3	0.939	1.575	121.7
SACRAMENTO	2020	193.7	1.438	1.500	134.7
SACRAMENTO	2021	183.6	1.228	1.878	149.6
SACRAMENTO	2022	203.7	1.389	1.553	146.7
SACRAMENTO	2023	222.2	1.380	1.437	161.0
Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
SAN FRANCISCO	2014	52.2	0.535	0.236	97.5
SAN FRANCISCO	2015	41.8	0.551	0.516	75.8
SAN FRANCISCO	2016	48.7	0.577	0.356	84.4
SAN FRANCISCO	2017	46.5	0.543	0.372	85.6
SAN FRANCISCO	2018	58.9	0.466	0.273	126.5
SAN FRANCISCO	2019	88.4	0.707	0.259	125.0
SAN FRANCISCO	2020	61.7	0.651	0.389	94.8
SAN FRANCISCO	2021	73.8	0.622	0.500	118.7
SAN FRANCISCO	2022	72.0	0.576	0.458	125.0
SAN FRANCISCO	2023	104.1	0.691	0.366	150.5
Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
SAN JOSE	2014	96.8	0.935	1.031	103.6
SAN JOSE	2015	80.4	0.785	1.022	102.3
SAN JOSE	2016	77.4	0.719	1.155	107.6
SAN JOSE	2017	92.9	0.837	1.172	111.0
SAN JOSE	2018	110.1	0.972	1.324	113.3
SAN JOSE	2019	96.1	0.815	1.256	117.8
SAN JOSE	2020	136.4	0.974	1.276	140.0
SAN JOSE	2021	112.5	0.835	0.910	134.7
SAN JOSE	2022	174.5	1.242	1.177	140.4
SAN JOSE	2023	158.5	1.003	1.060	158.0
Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
SIERRA	2014	155.5	1.277	2.198	121.8
SIERRA	2015	138.4	1.218	2.887	113.6
SIERRA	2016	135.8	1.118	1.728	121.4
SIERRA	2017	176.3	1.308	1.864	134.8
SIERRA	2018	198.9	1.482	1.366	134.3
SIERRA	2019	239.3	1.408	1.555	170.0
SIERRA	2020	265.4	1.695	1.328	156.5
SIERRA	2021	415.4	2.016	1.105	206.0
SIERRA	2022	615.8	3.426	1.040	179.8
SIERRA	2023	456.2	2.798	1.199	163.1

Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
SONOMA	2014	138.2	1.024	1.588	135.0
SONOMA	2015	94.3	0.790	1.535	119.5
SONOMA	2016	107.7	0.887	1.508	121.3
SONOMA	2017	139.0	0.998	1.567	139.3
SONOMA	2018	147.9	1.133	1.203	130.5
SONOMA	2019	202.1	1.325	1.358	152.5
SONOMA	2020	166.7	1.232	1.351	135.2
SONOMA	2021	221.2	1.492	1.429	148.2
SONOMA	2022	286.7	1.737	1.413	165.0
SONOMA	2023	226.6	1.516	0.665	149.5
Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
STOCKTON	2014	118.3	0.823	1.311	143.7
STOCKTON	2015	106.5	0.944	1.952	112.8
STOCKTON	2016	102.1	0.994	1.664	102.7
STOCKTON	2017	102.3	1.033	1.270	99.1
STOCKTON	2018	121.8	1.115	1.878	109.3
STOCKTON	2019	196.8	1.372	1.146	143.4
STOCKTON	2020	149.3	1.271	1.315	117.5
STOCKTON	2021	208.5	1.323	1.481	157.6
STOCKTON	2022	275.1	1.792	1.061	153.5
STOCKTON	2023	317.1	2.067	1.342	153.4
Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
YOSEMITE	2014	129.6	1.286	2.452	100.8
YOSEMITE	2015	120.4	1.073	2.641	112.2
YOSEMITE	2016	141.3	1.277	2.032	110.6
YOSEMITE	2017	155.5	1.242	2.155	125.2
YOSEMITE	2018	171.4	1.433	1.780	119.6
YOSEMITE	2019	186.0	1.581	1.607	117.6
YOSEMITE	2020	222.6	1.542	1.304	144.3
YOSEMITE	2021	479.6	2.359	1.818	203.3
YOSEMITE	2022	379.0	2.227	1.648	170.2
YOSEMITE	2023	459.3	2.435	1.710	188.6
Division/System	Year	SAIDI	SAIFI	MAIFI	CAIDI
SYSTEM	2014	108.4	0.966	1.396	112.2
SYSTEM	2015	96.0	0.871	1.594	110.2
SYSTEM	2016	108.9	1.021	1.494	106.7
SYSTEM	2017	113.4	0.958	1.489	118.3
SYSTEM	2018	126.3	1.080	1.361	117.0
SYSTEM	2019	148.8	1.128	1.282	131.9
SYSTEM	2020	153.2	1.179	1.316	130.0
SYSTEM	2021	218.2	1.318	1.327	165.5
SYSTEM	2022	254.0	1.620	1.311	156.9
SYSTEM	2023	255.9	1.558	1.220	164.3

c. 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 MED

1. SAIDI Performance Results (MED Excluded)

Chart 222: Division Reliability – AIDI Indices

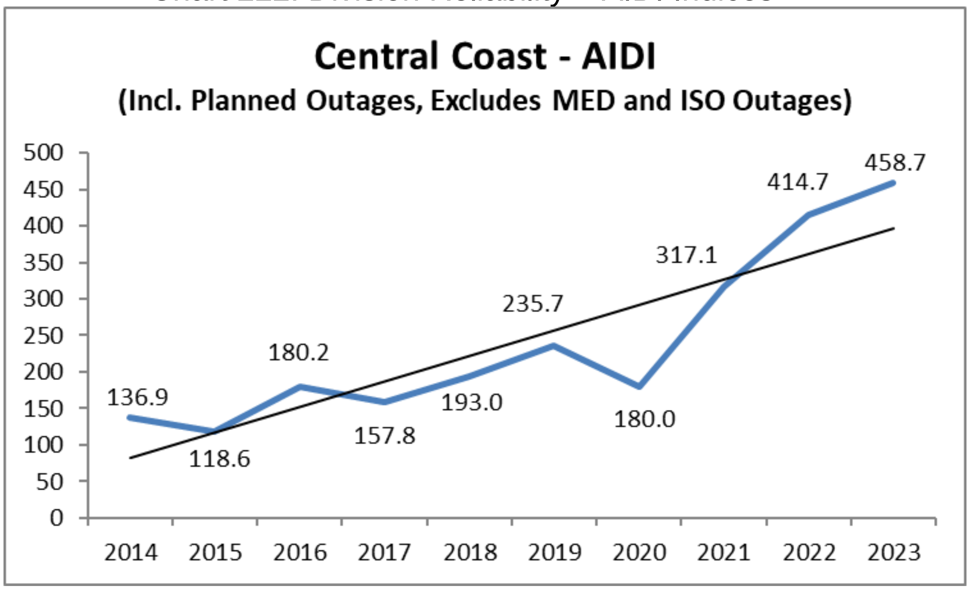


Chart 223: Division Reliability – AIDI Indices

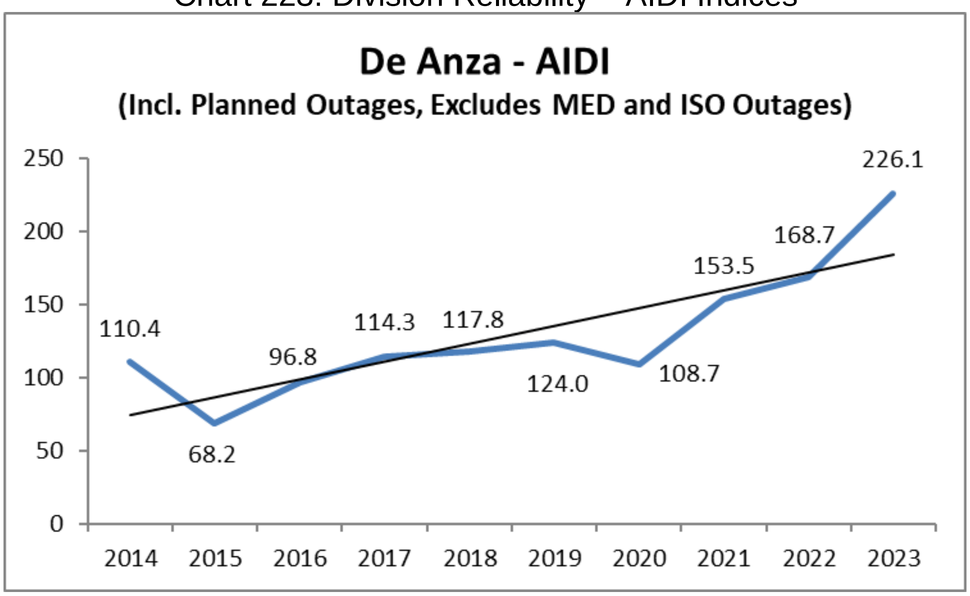


Chart 224: Division Reliability – AIDI Indices

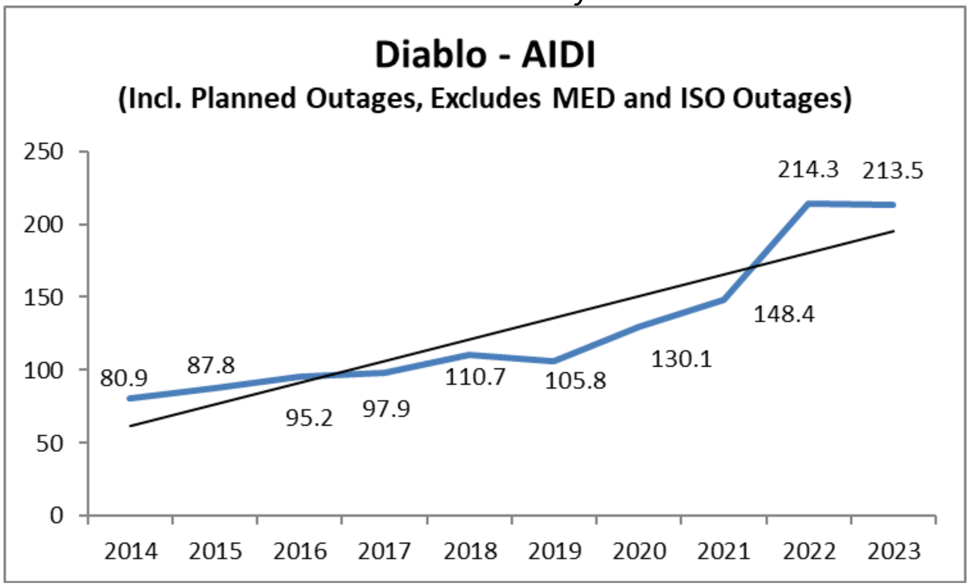


Chart 225: Division Reliability – AIDI Indices

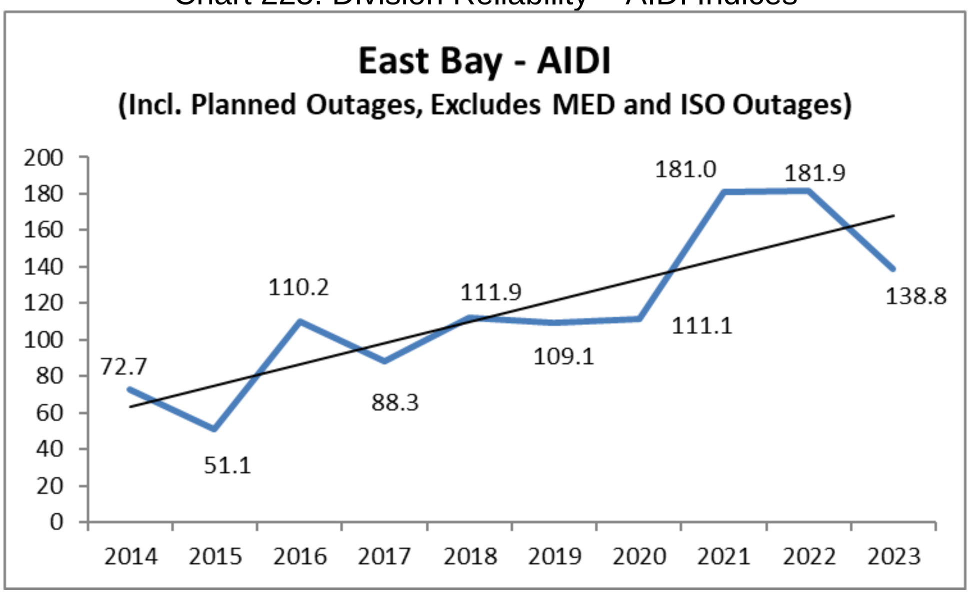


Chart 226: Division Reliability – AIDI Indices

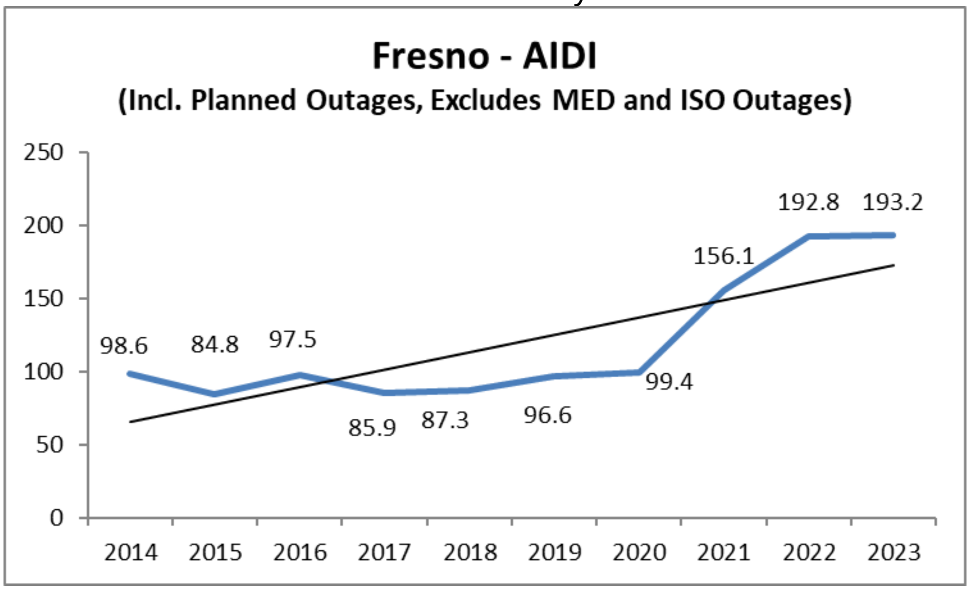


Chart 227: Division Reliability – AIDI Indices

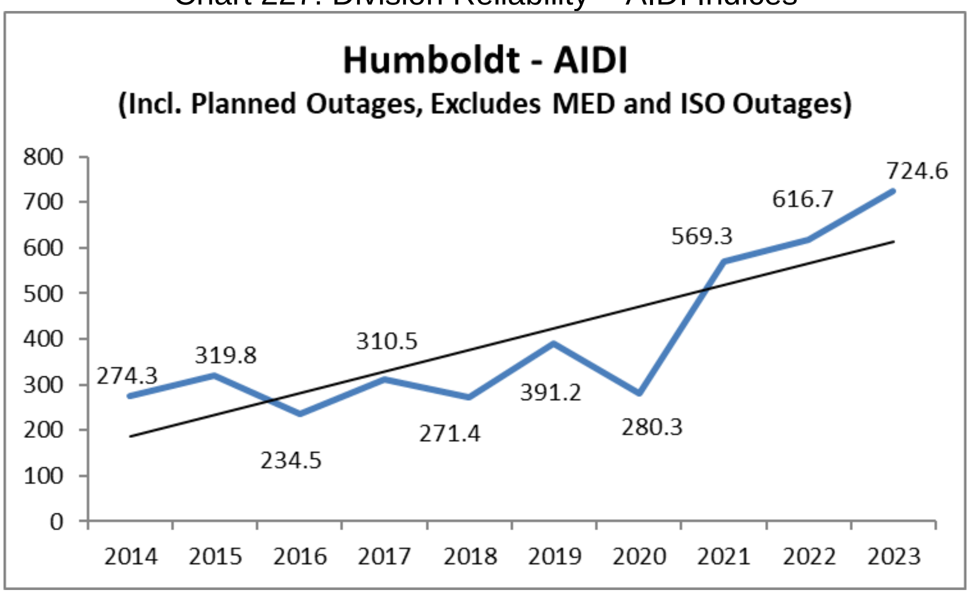


Chart 228: Division Reliability – AIDI Indices

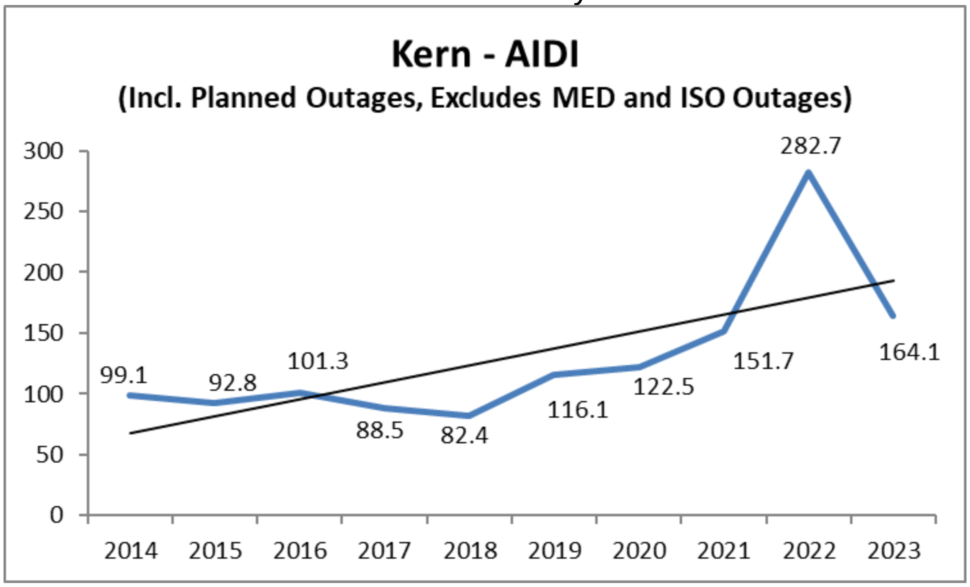


Chart 229: Division Reliability – AIDI Indices

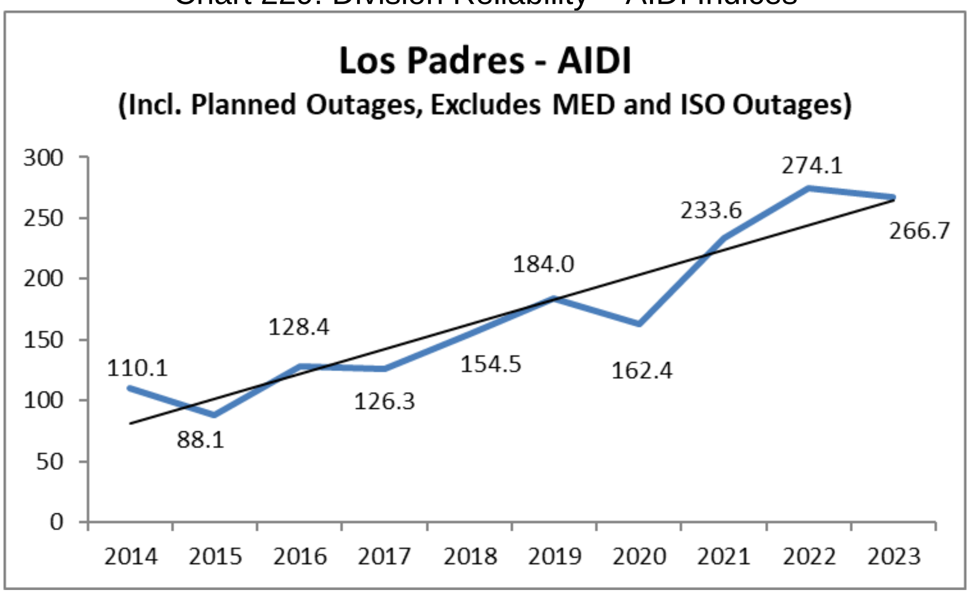


Chart 230: Division Reliability – AIDI Indices

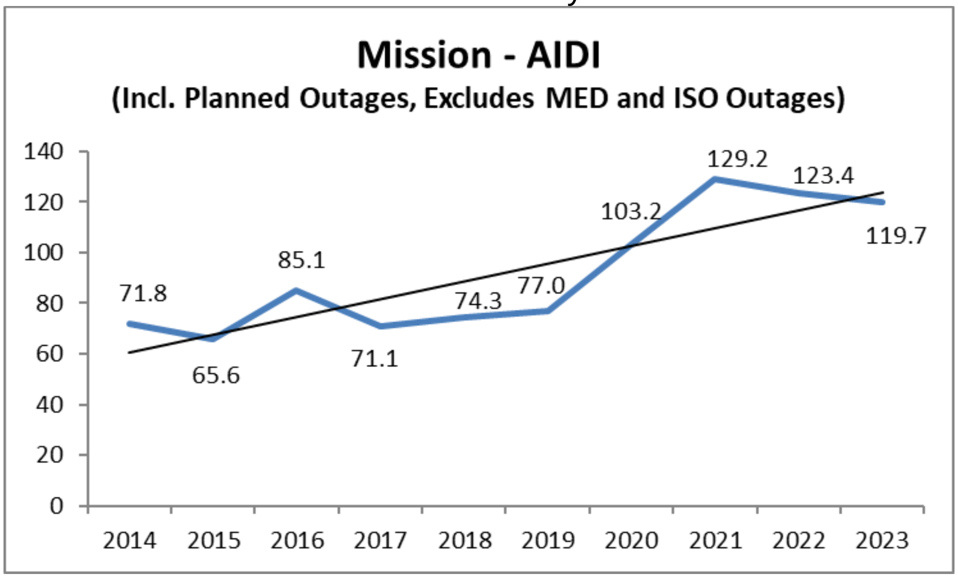


Chart 231: Division Reliability – AIDI Indices

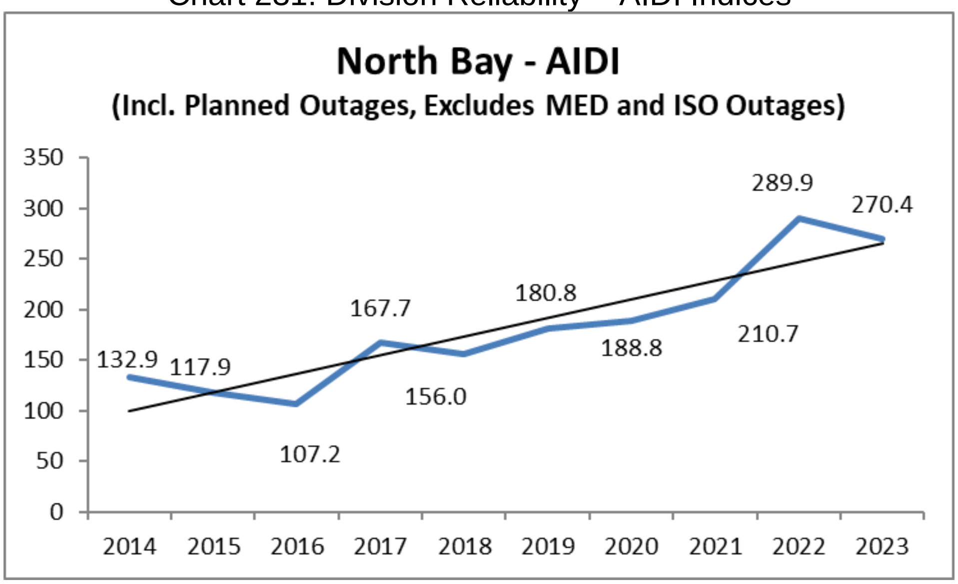


Chart 232: Division Reliability – AIDI Indices

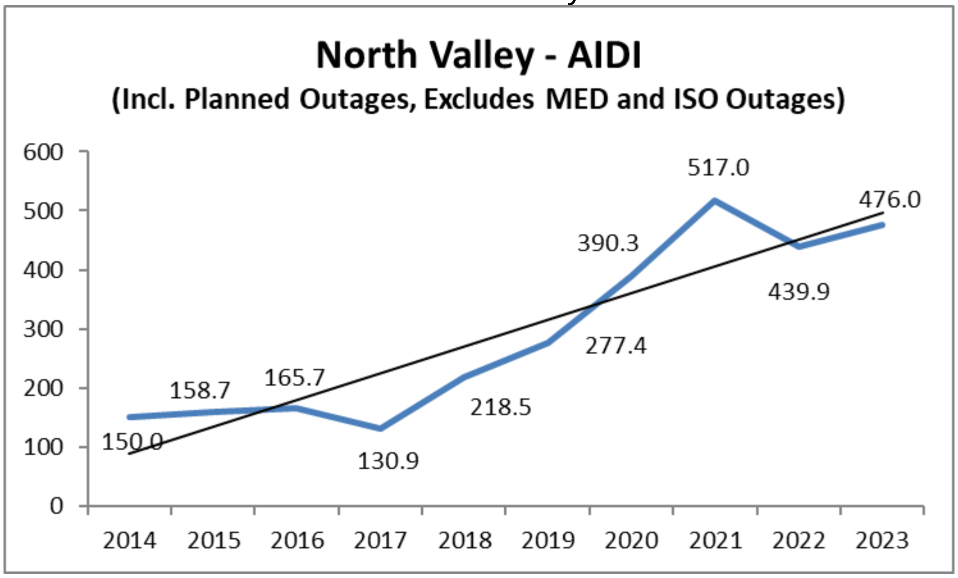


Chart 233: Division Reliability – AIDI Indices

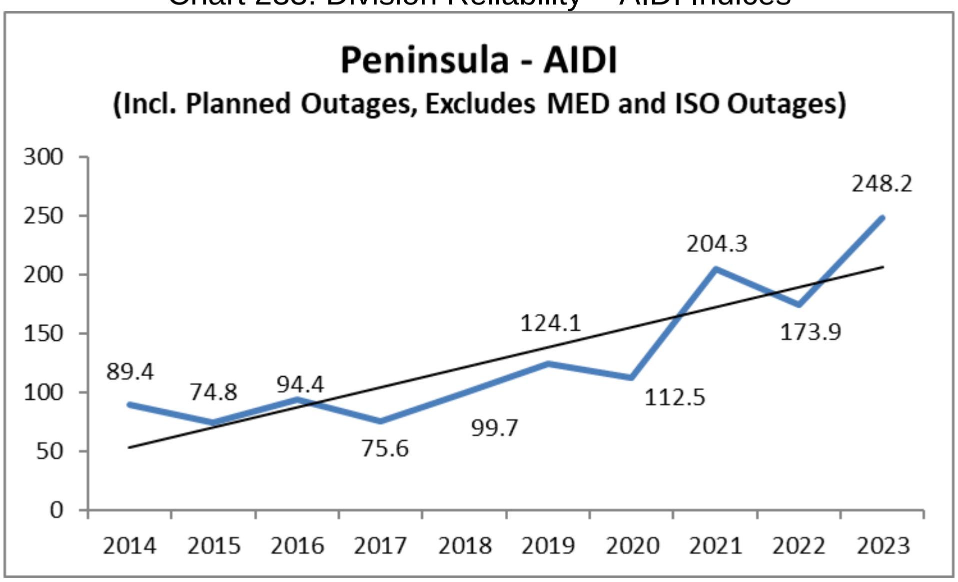


Chart 234: Division Reliability – AIDI Indices

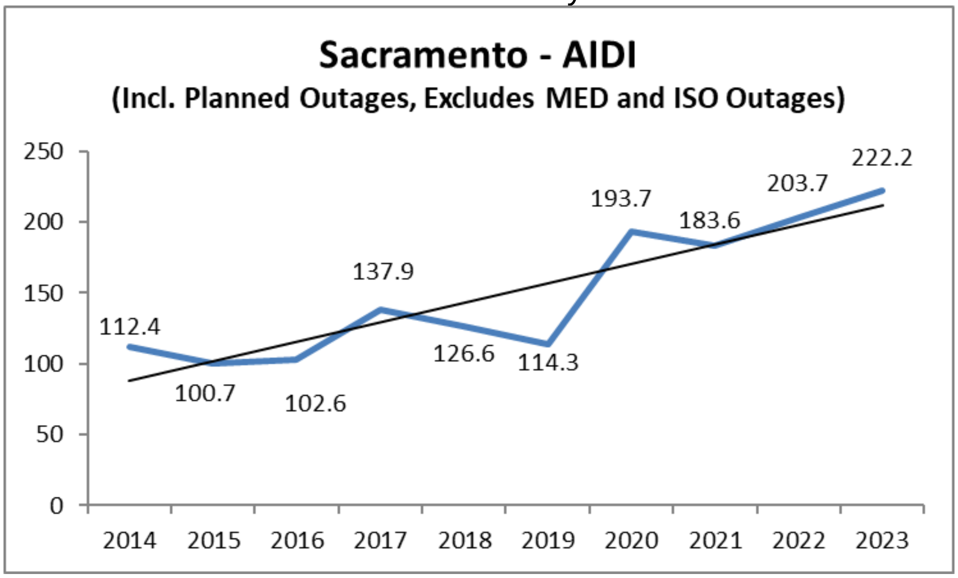


Chart 235: Division Reliability – AIDI Indices

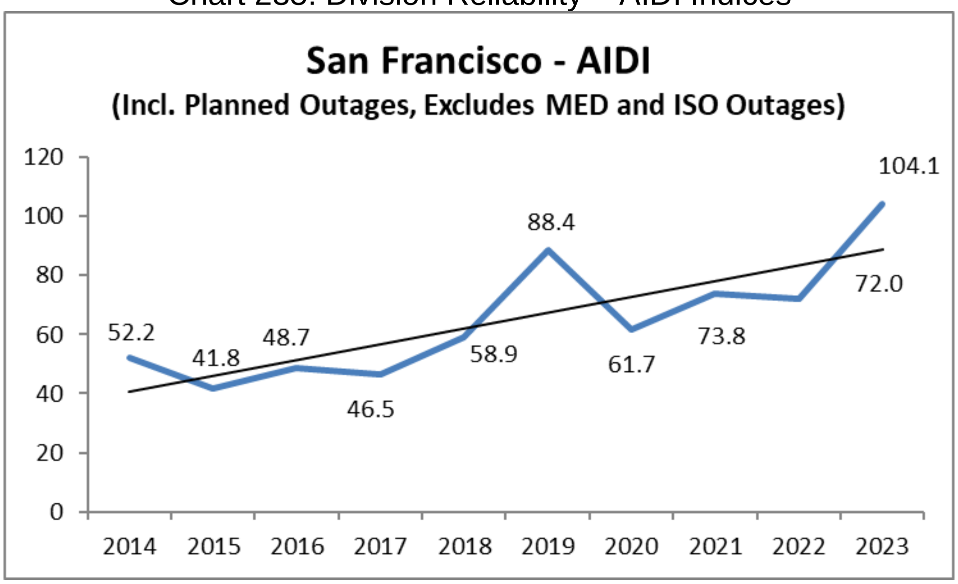


Chart 236: Division Reliability – AIDI Indices

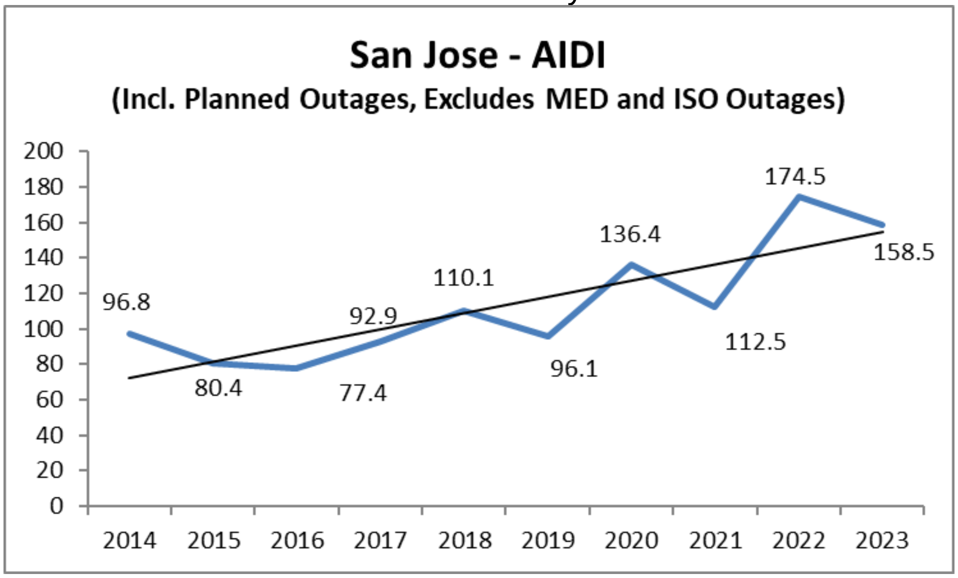


Chart 237: Division Reliability – AIDI Indices

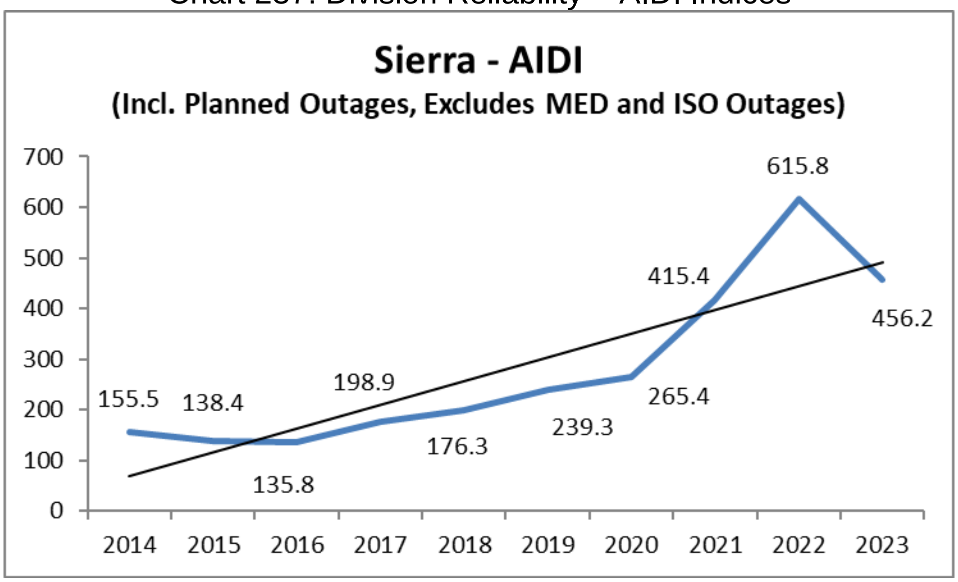


Chart 238: Division Reliability – AIDI Indices

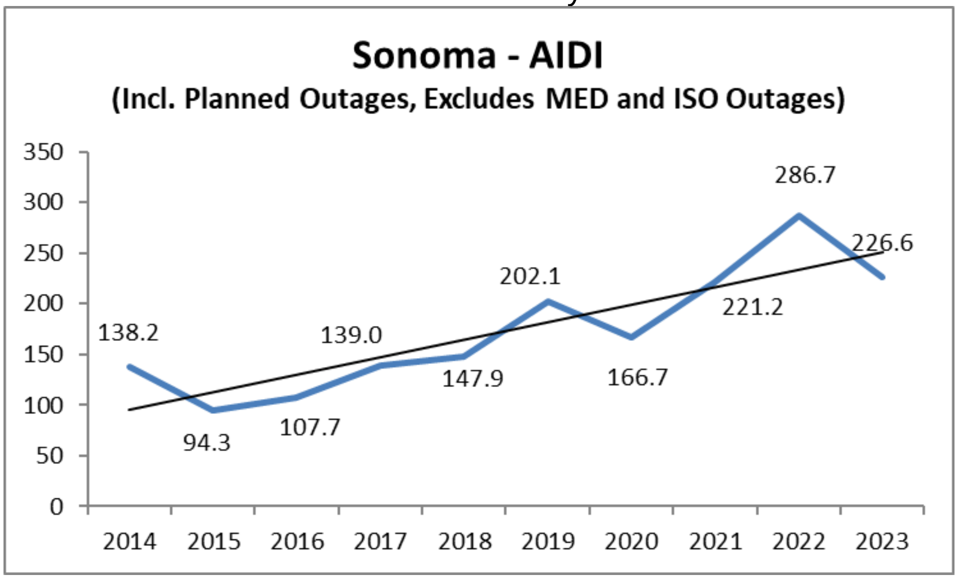


Chart 239: Division Reliability – AIDI Indices

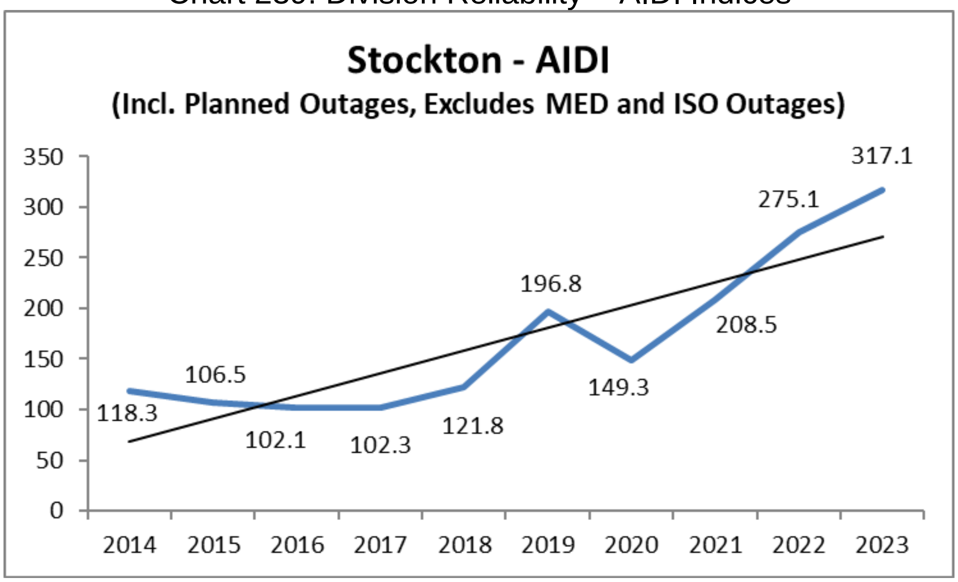


Chart 240: Division Reliability – AIDI Indices

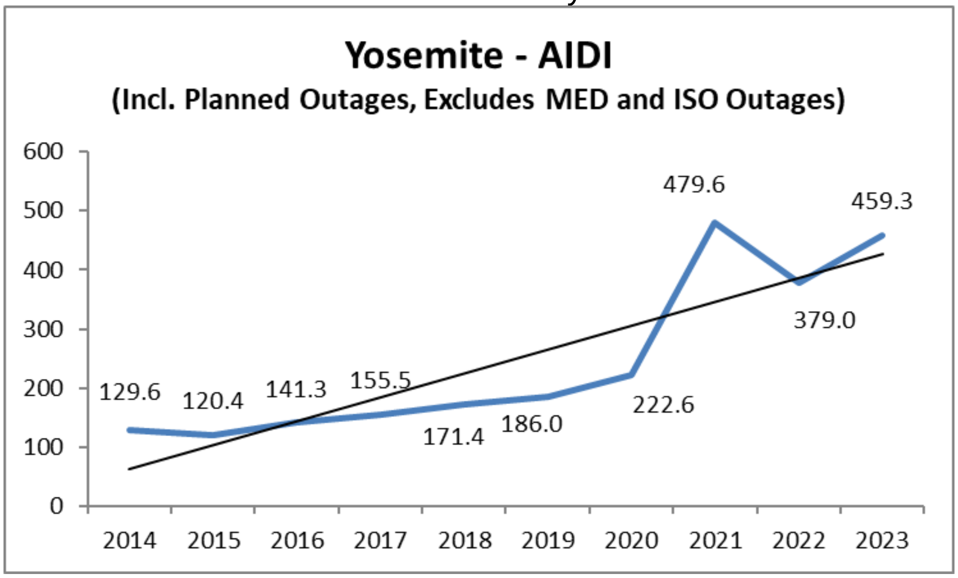
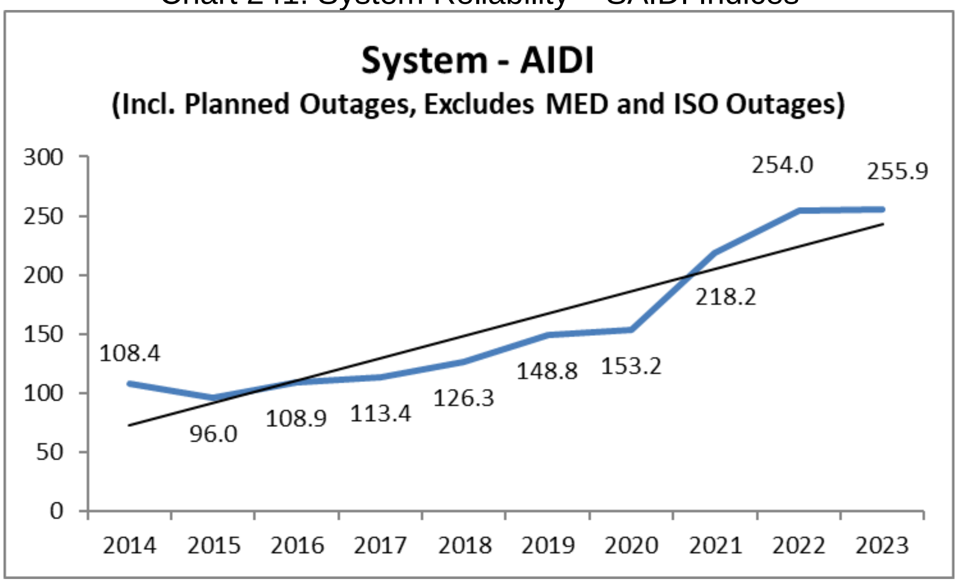


Chart 241: System Reliability – SAIDI Indices



2. SAIFI Performance Results (MED Excluded)

Chart 242: Division Reliability – AIFI Indices

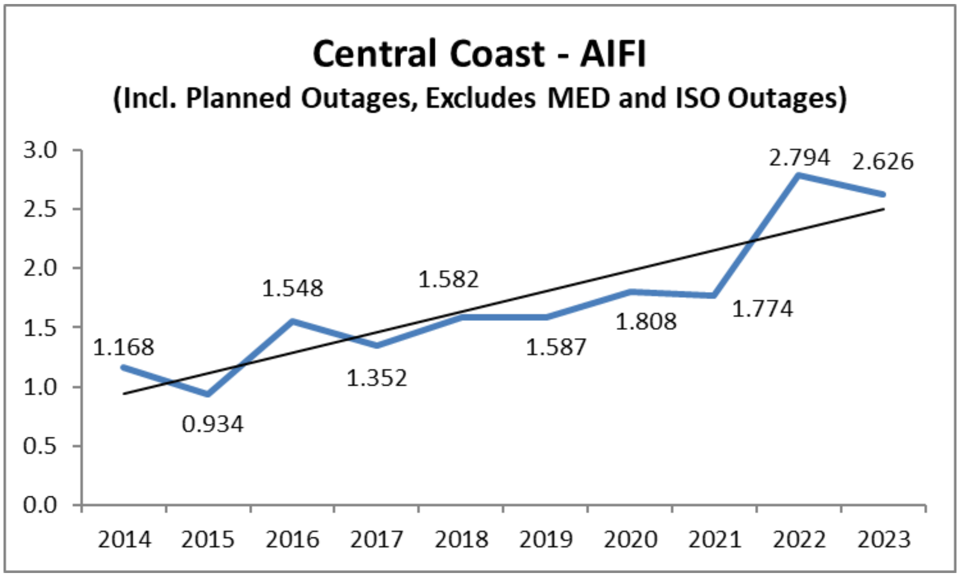


Chart 243: Division Reliability – AIFI Indices

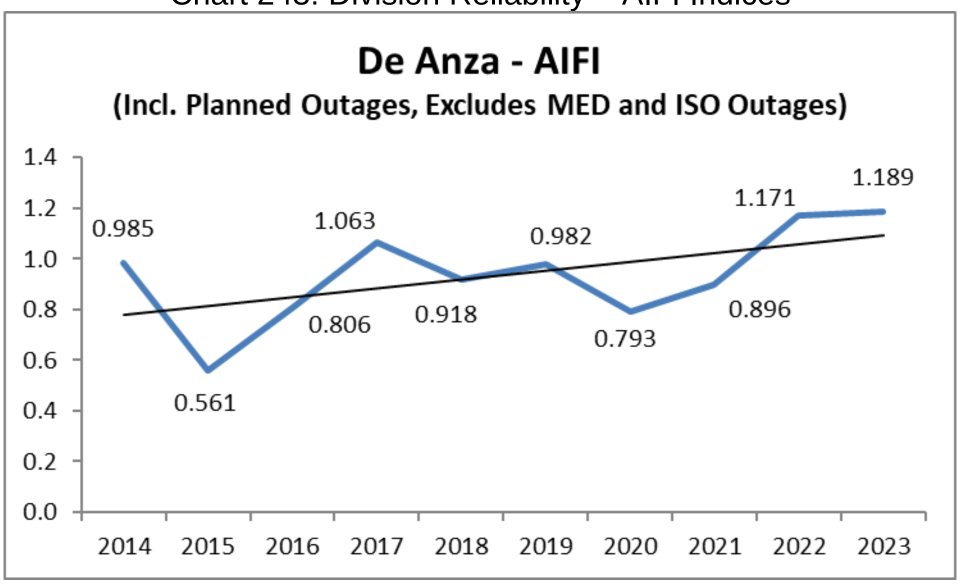


Chart 244: Division Reliability – AIFI Indices

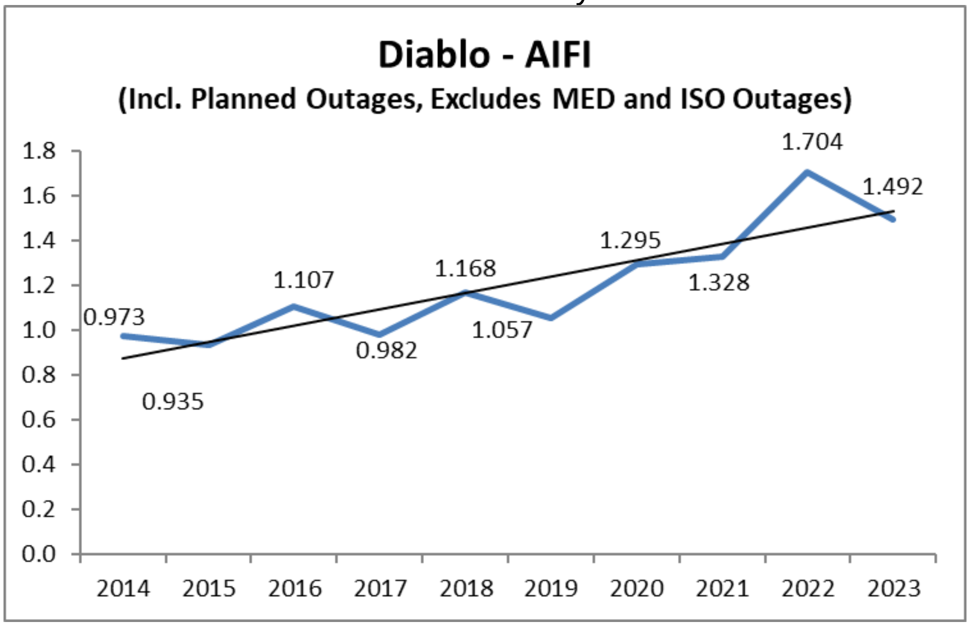


Chart 245: Division Reliability – AIFI Indices

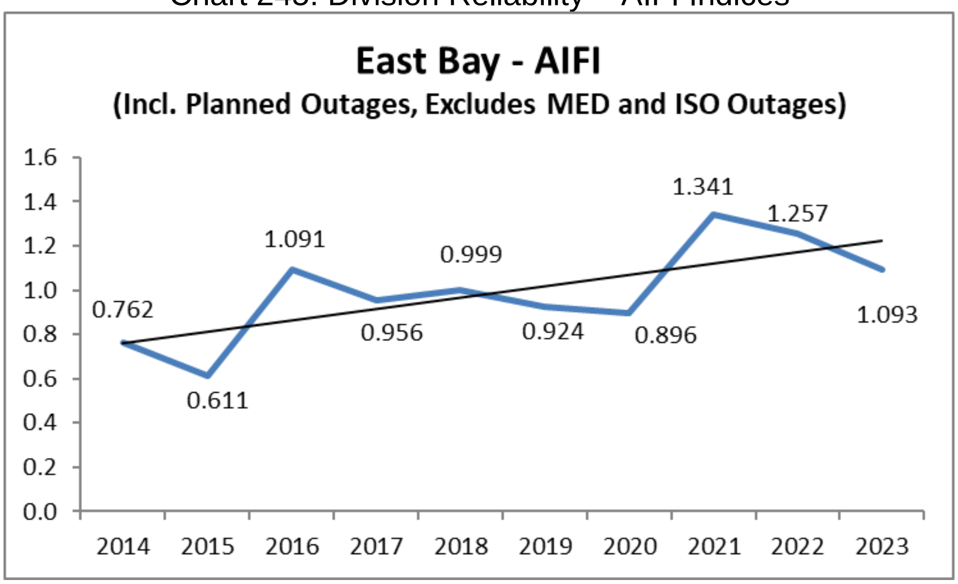


Chart 246: Division Reliability – AIFI Indices

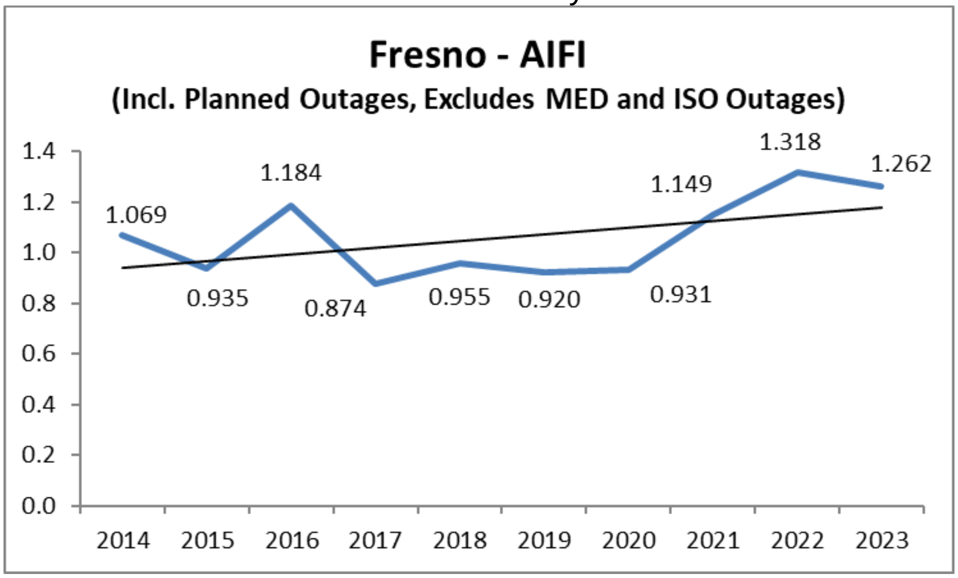


Chart 247: Division Reliability – AIFI Indices

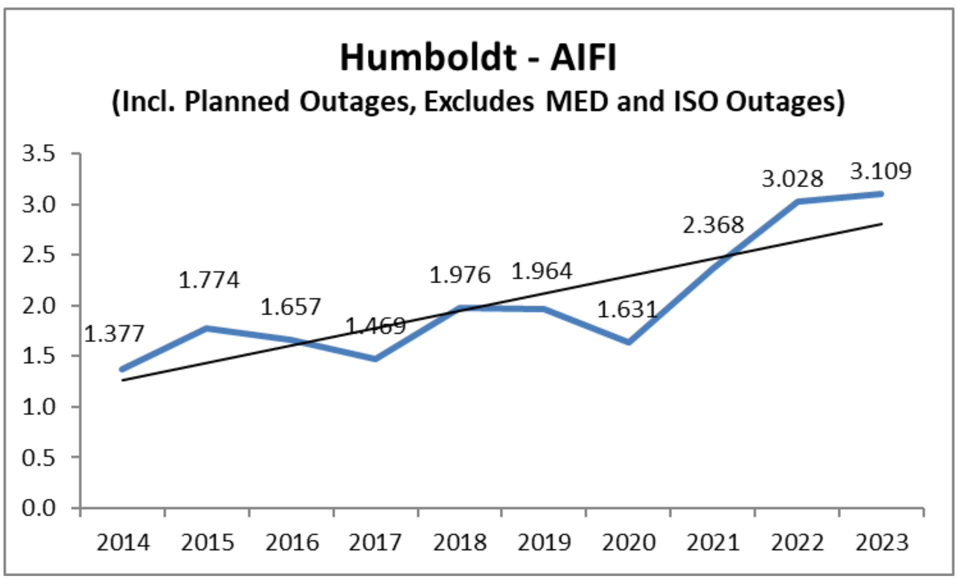


Chart 248: Division Reliability – AIFI Indices

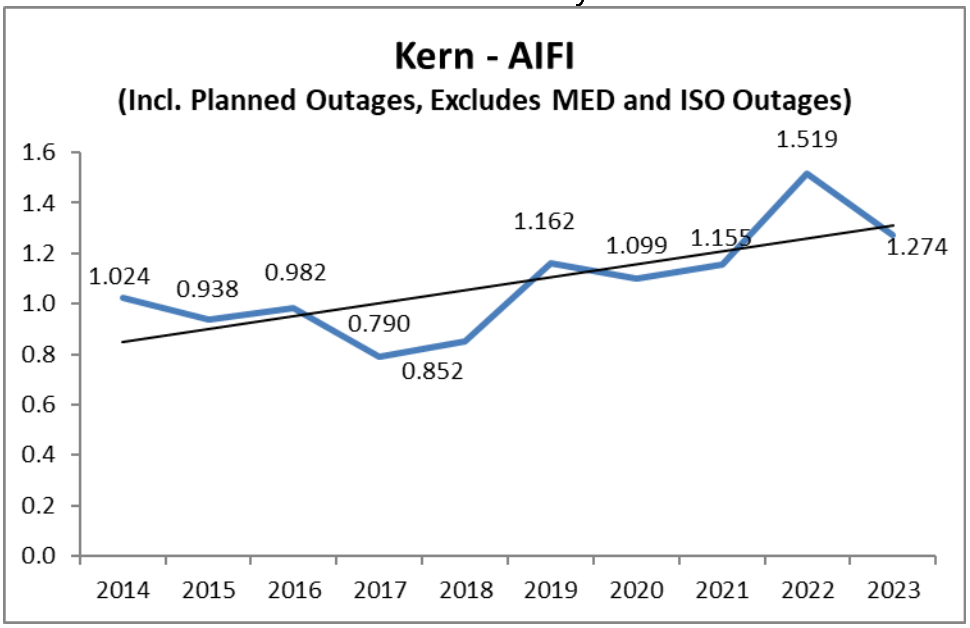


Chart 249: Division Reliability – AIFI Indices

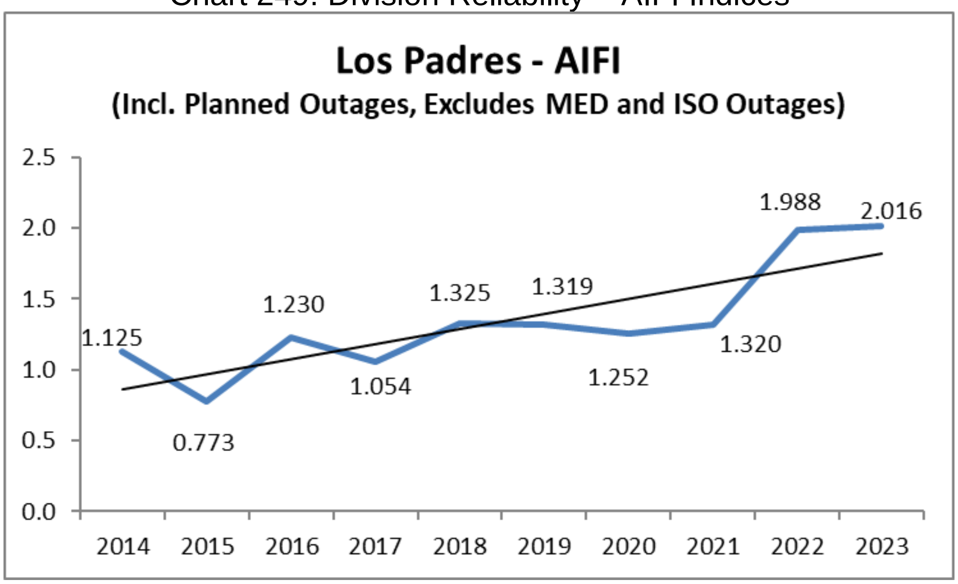


Chart 250: Division Reliability – AIFI Indices

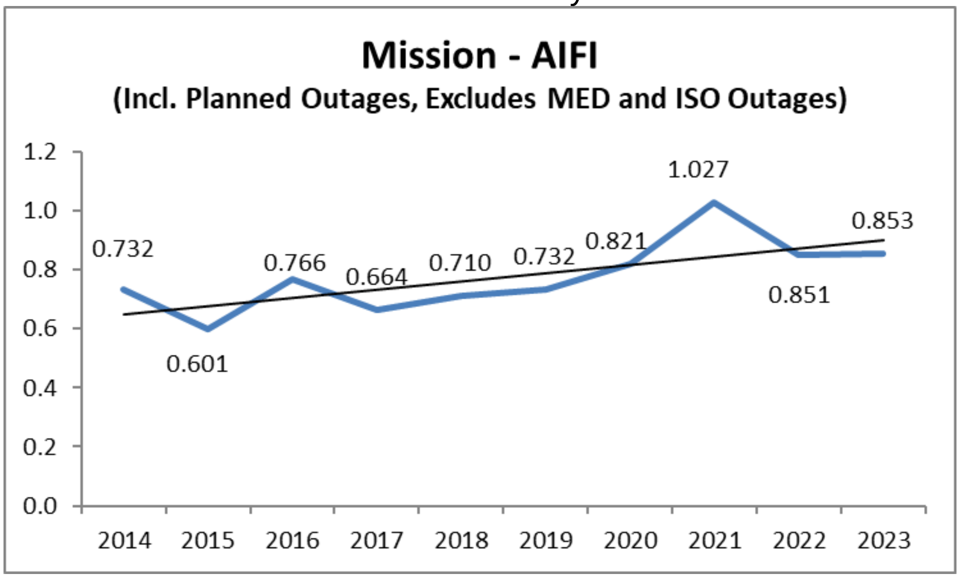


Chart 251: Division Reliability – AIFI Indices

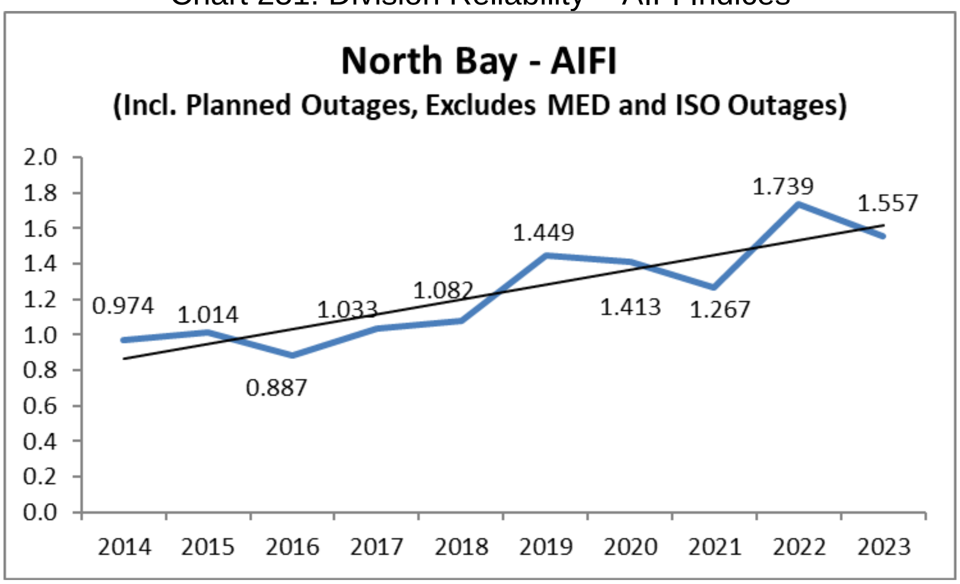


Chart 252: Division Reliability – AIFI Indices

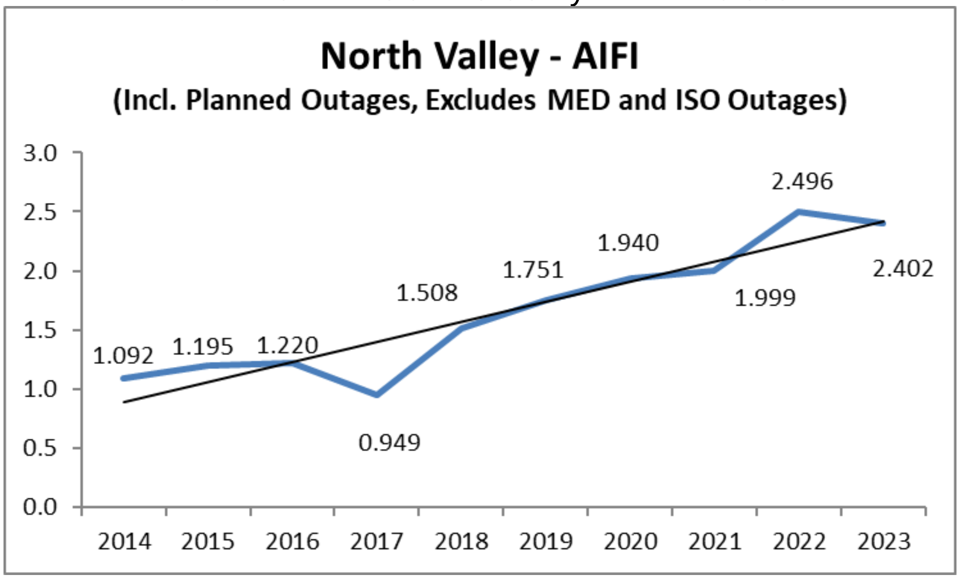


Chart 253: Division Reliability – AIFI Indices

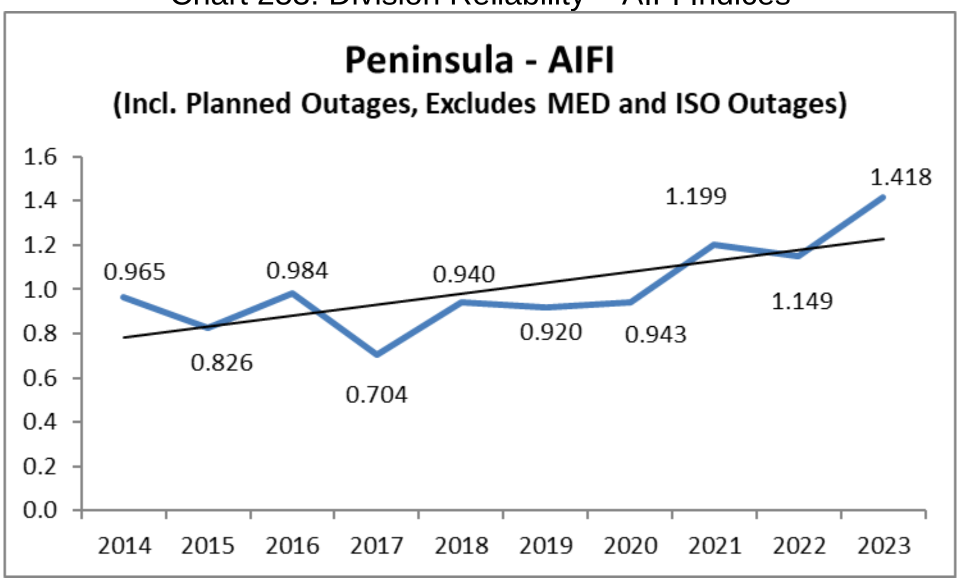


Chart 254: Division Reliability – AIFI Indices

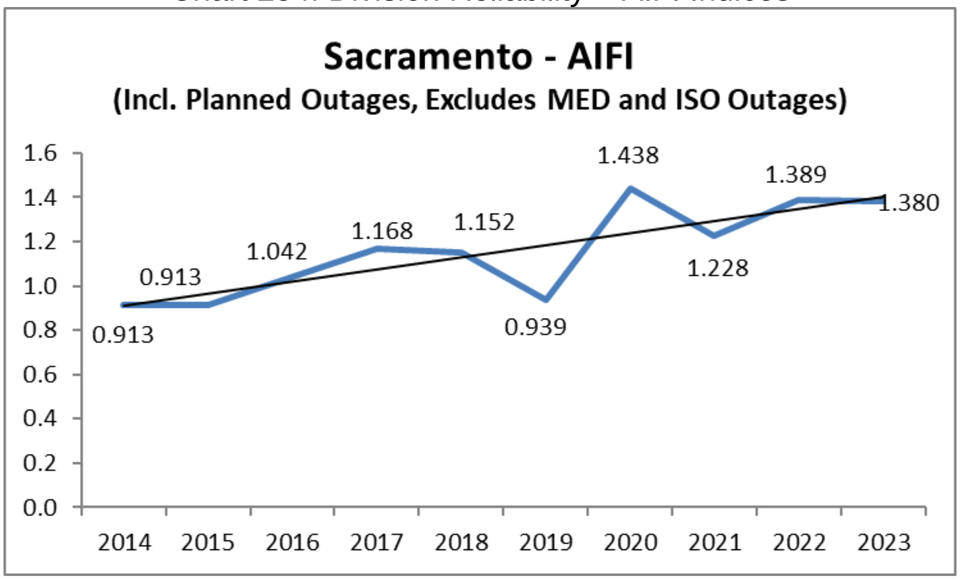


Chart 255: Division Reliability – AIFI Indices

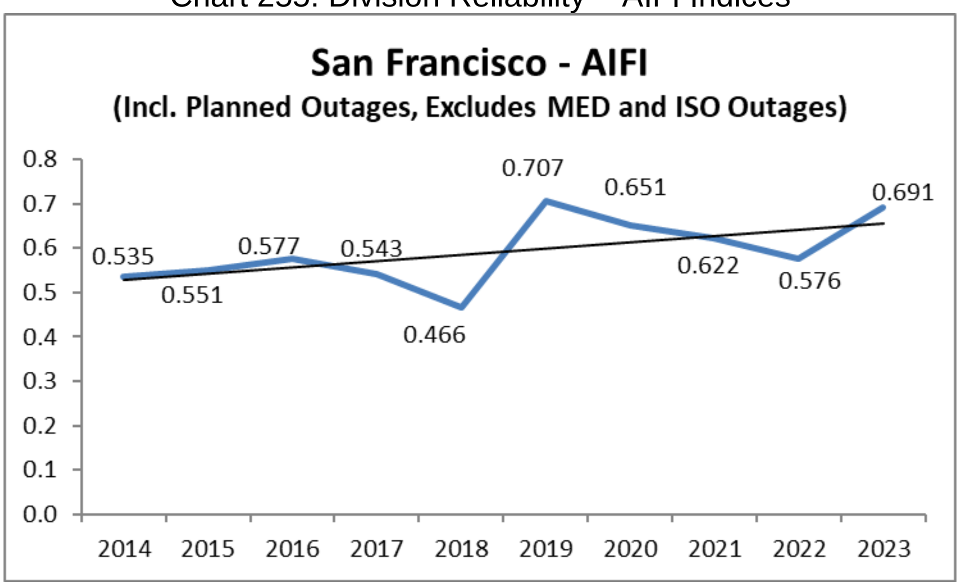


Chart 256: Division Reliability – AIFI Indices

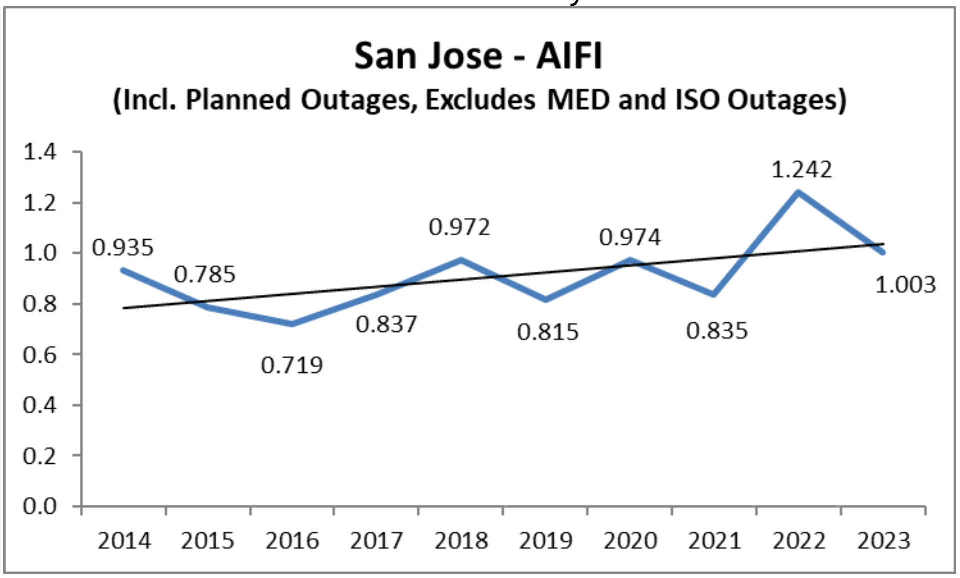


Chart 257: Division Reliability – AIFI Indices

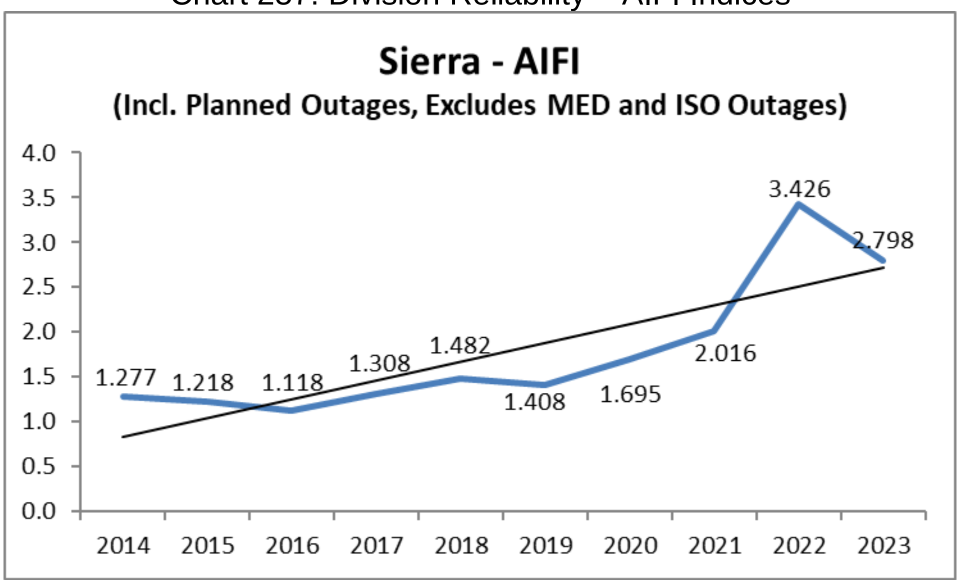


Chart 258: Division Reliability – AIFI Indices

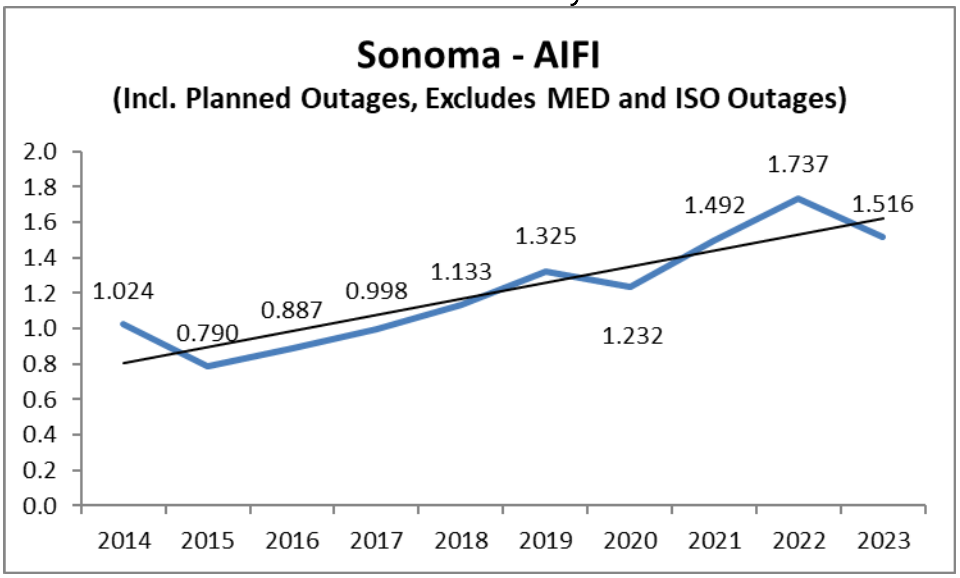


Chart 259: Division Reliability – AIFI Indices

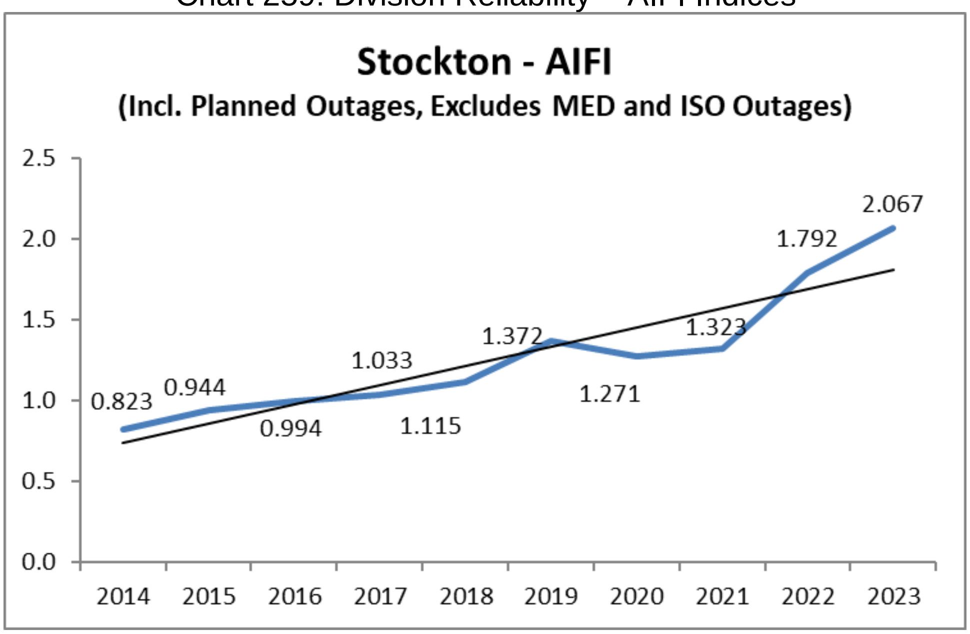


Chart 260: Division Reliability – AIFI Indices

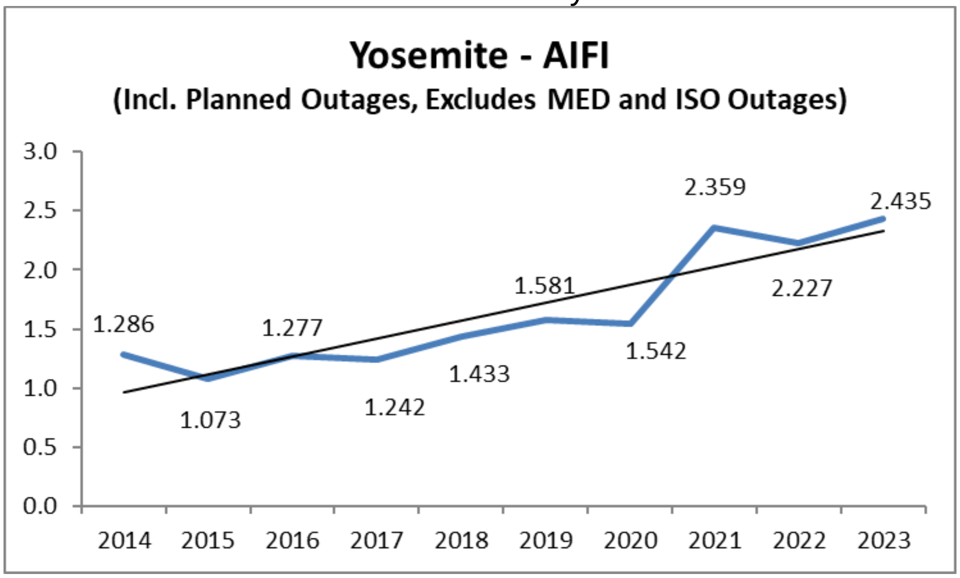
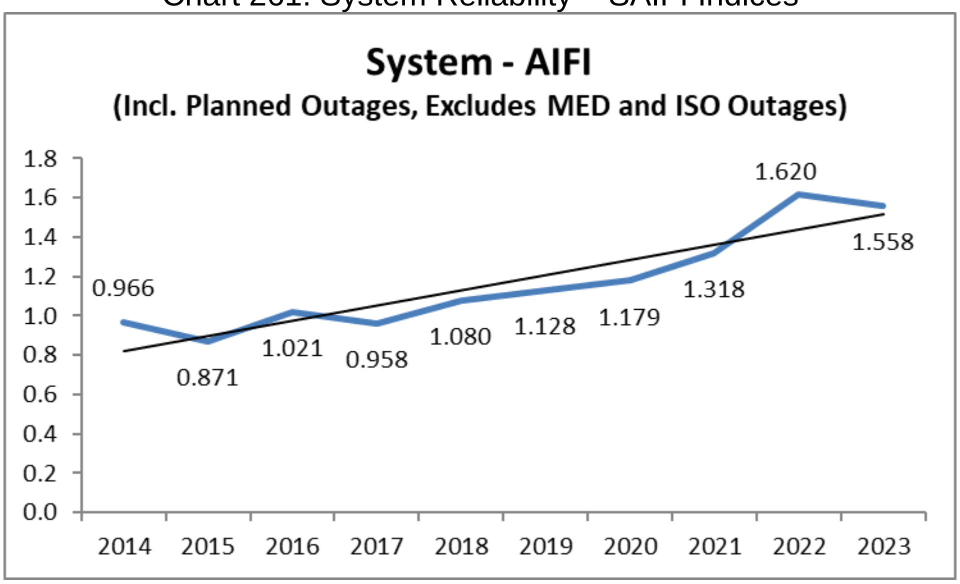


Chart 261: System Reliability – SAIFI Indices



3. MAIFI[10] Performance Results (MED Excluded)

Chart 262: Division Reliability – MAIFI Indices

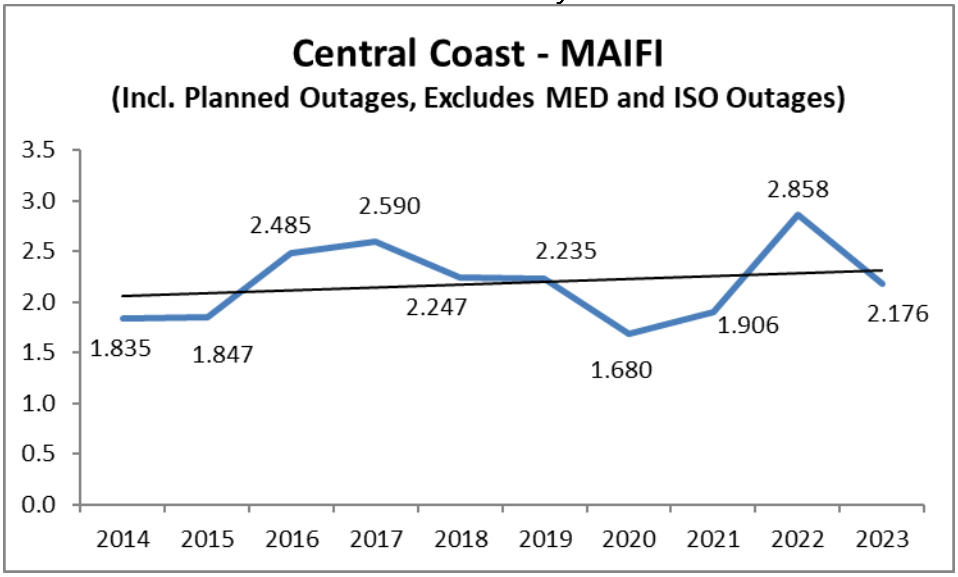
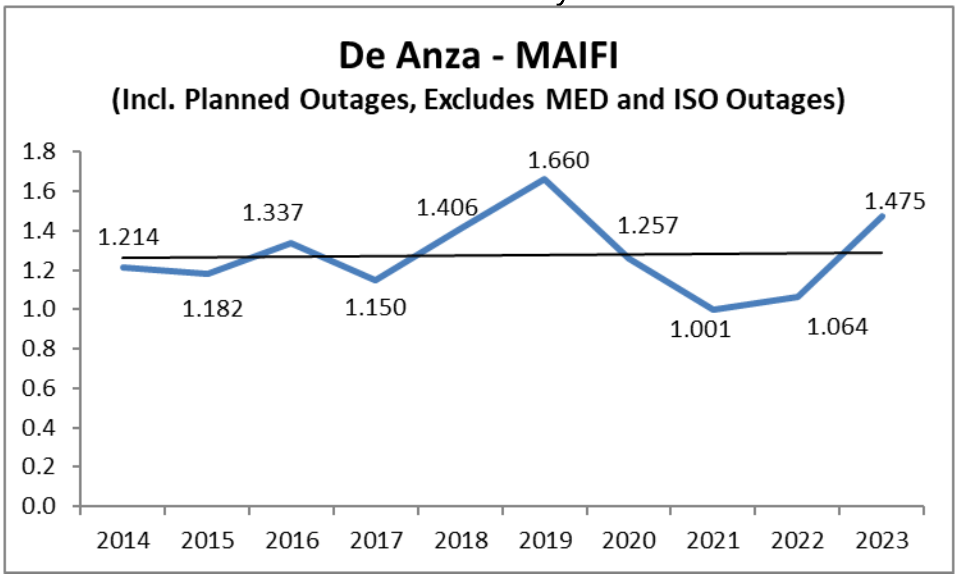


Chart 263: Division Reliability – MAIFI Indices



10 See footnote 4.

Chart 264: Division Reliability – MAIFI Indices

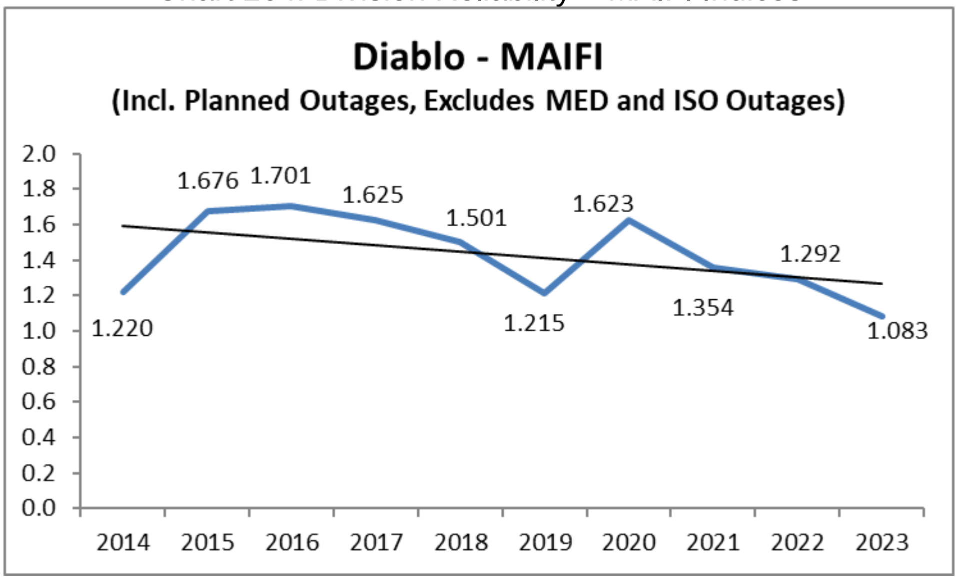


Chart 265: Division Reliability – MAIFI Indices

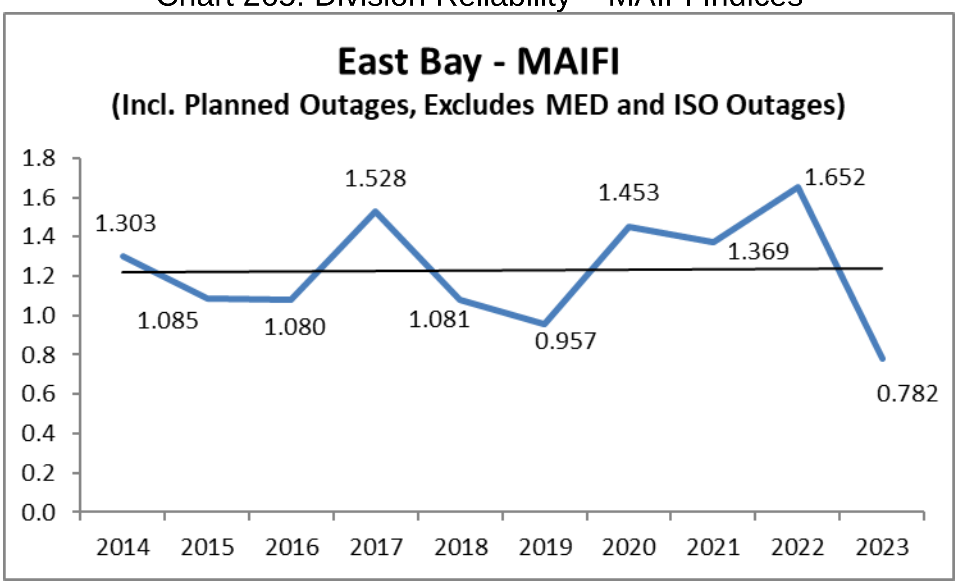


Chart 266: Division Reliability – MAIFI Indices

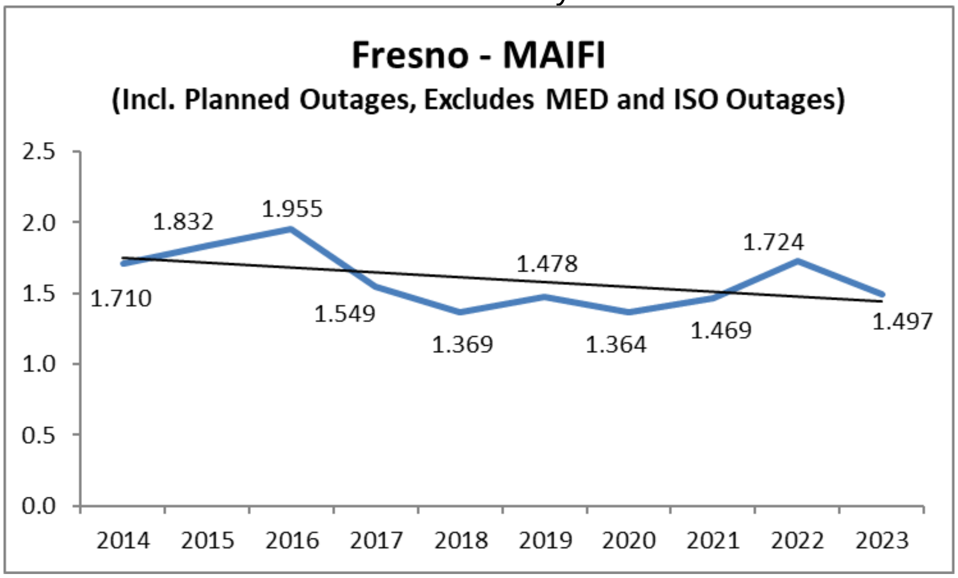


Chart 267: Division Reliability – MAIFI Indices

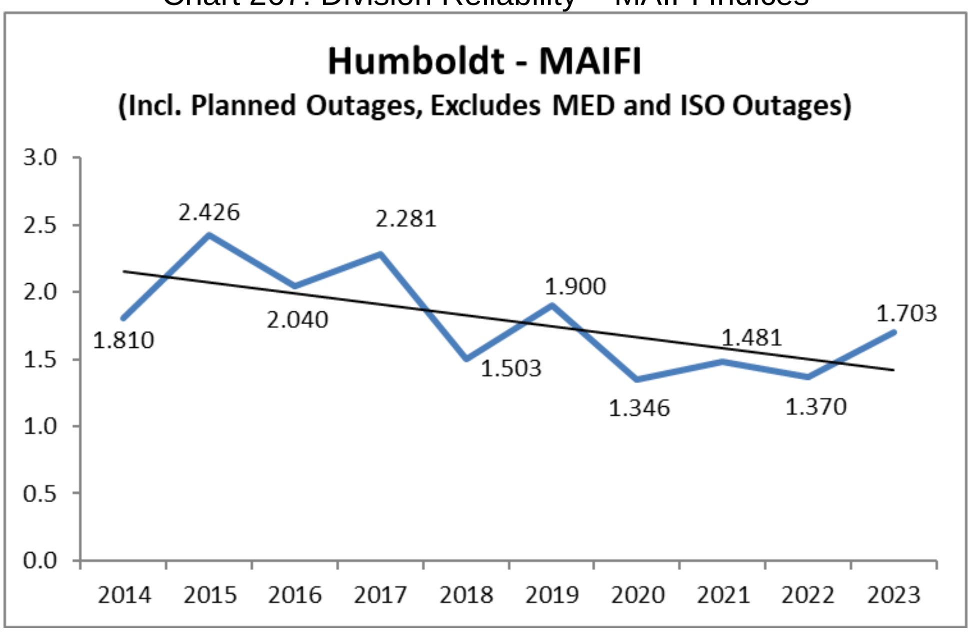


Chart 268: Division Reliability – MAIFI Indices

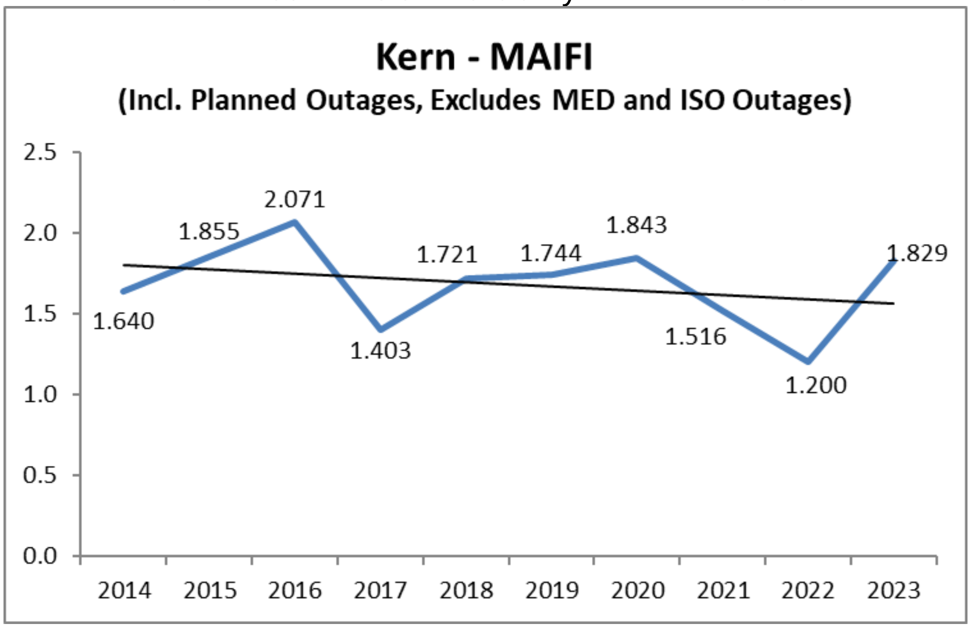


Chart 269: Division Reliability – MAIFI Indices

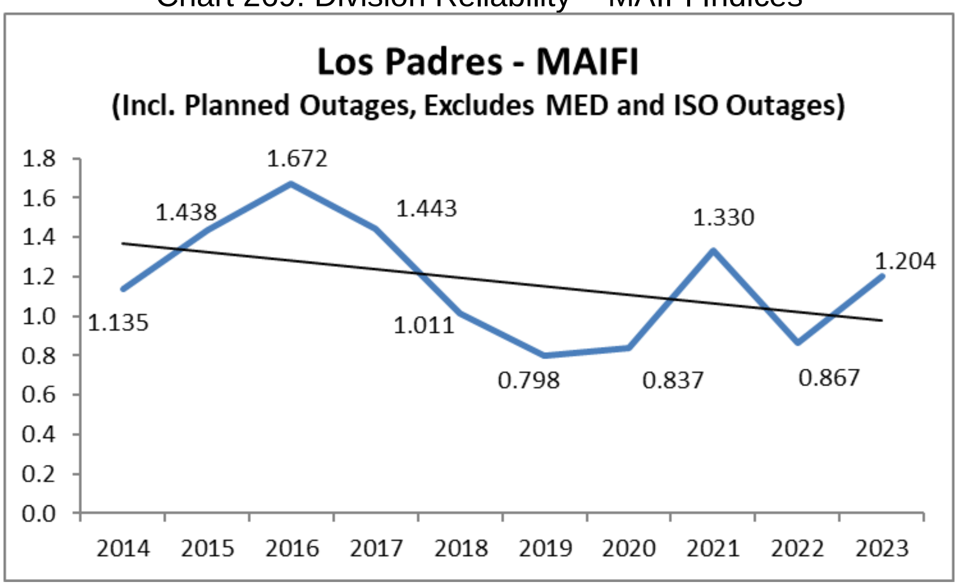


Chart 270: Division Reliability – MAIFI Indices

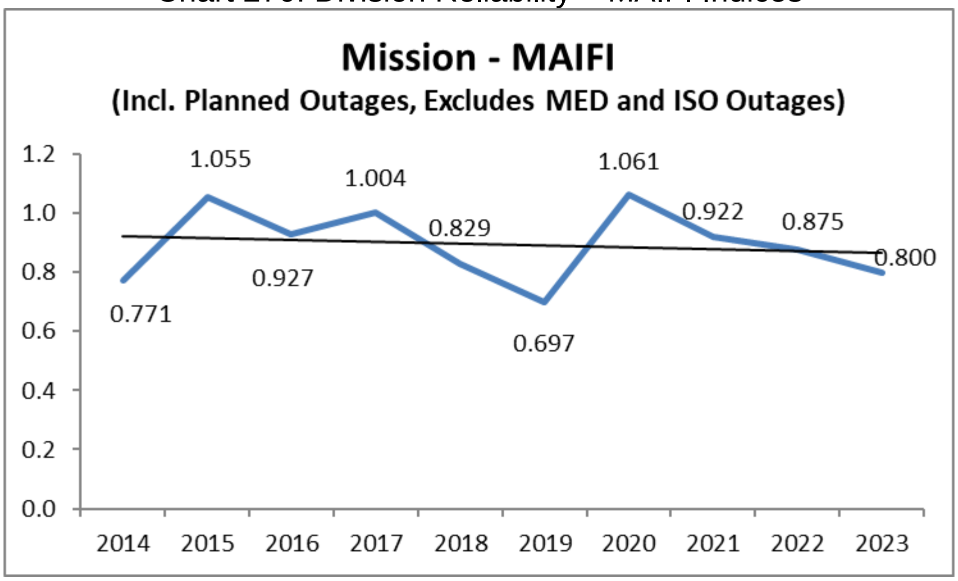


Chart 271: Division Reliability – MAIFI Indices

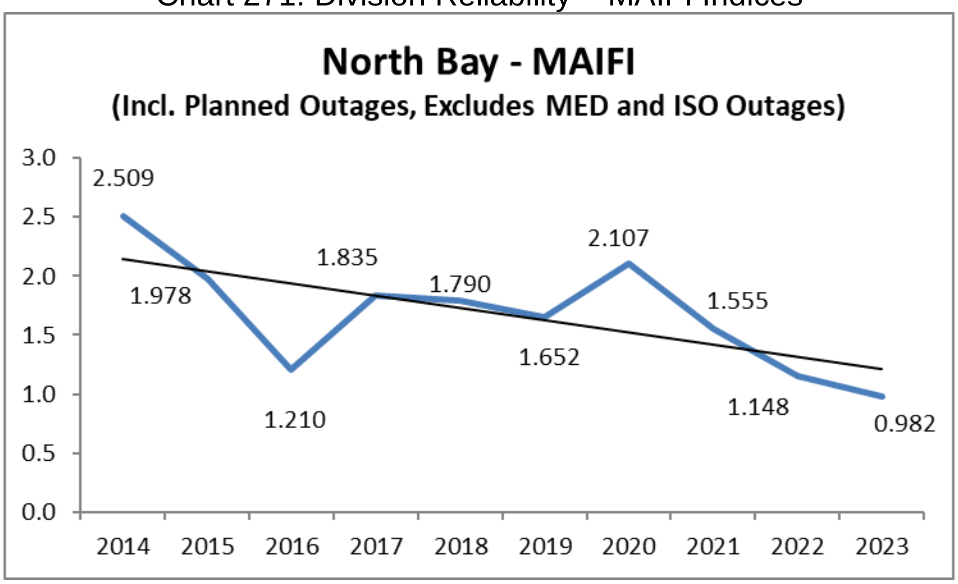


Chart 272: Division Reliability – MAIFI Indices

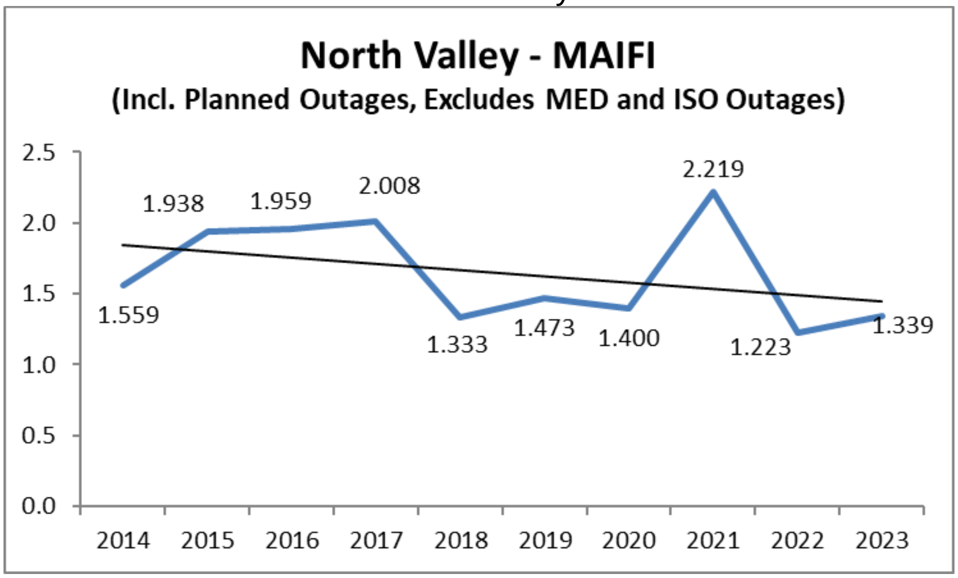


Chart 273: Division Reliability – MAIFI Indices

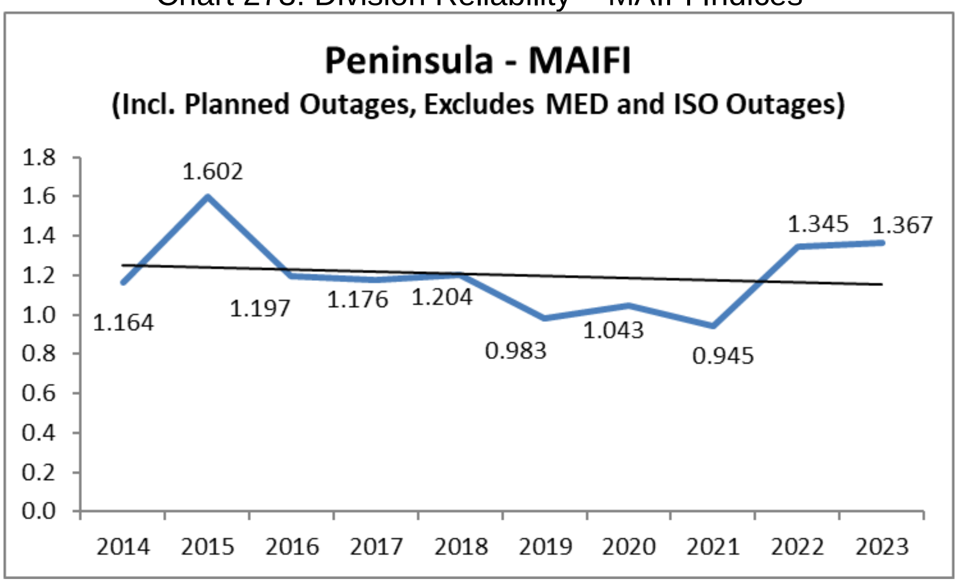


Chart 274: Division Reliability – MAIFI Indices

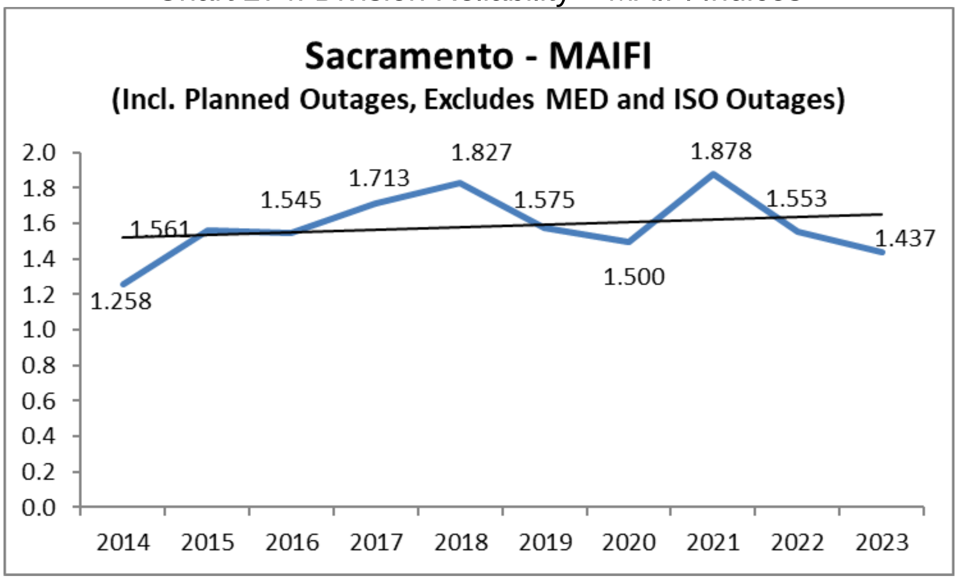


Chart 275: Division Reliability – MAIFI Indices

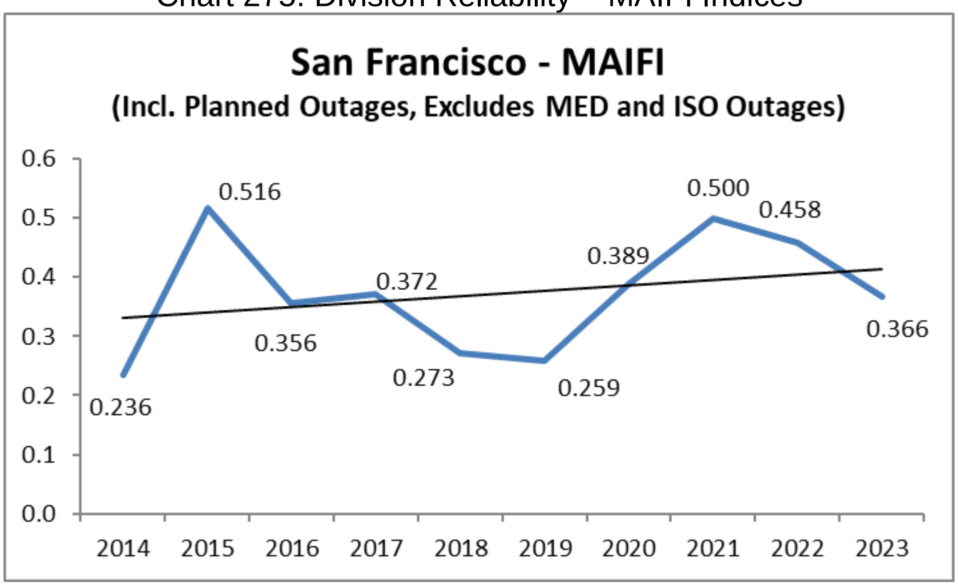


Chart 276: Division Reliability – MAIFI Indices

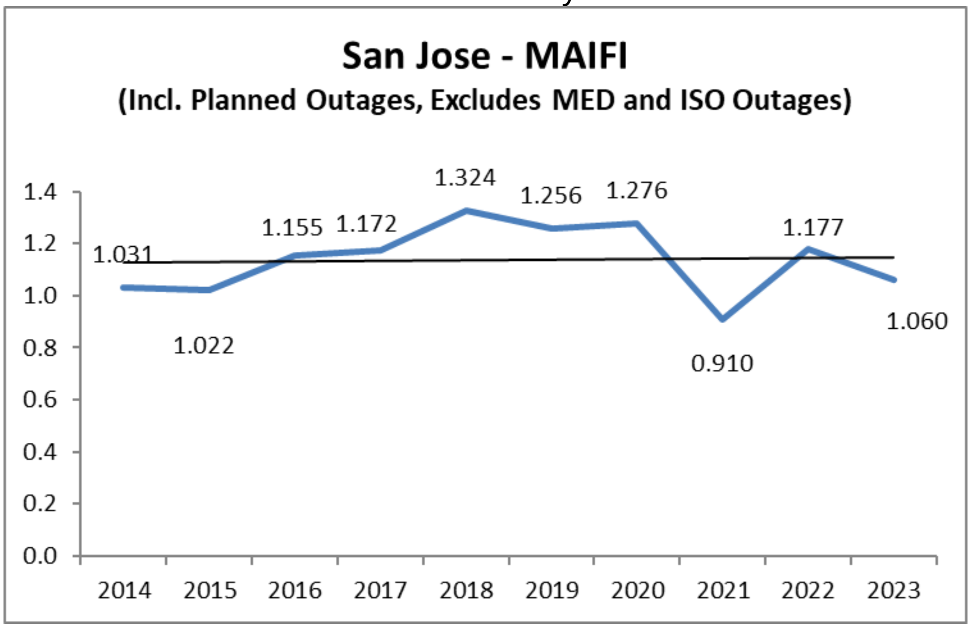


Chart 277: Division Reliability – MAIFI Indices

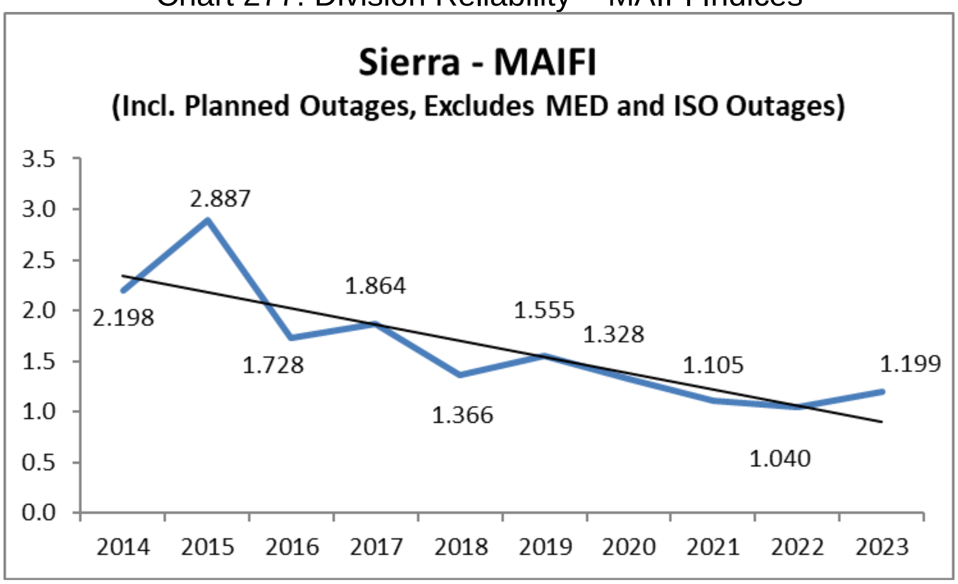


Chart 278: Division Reliability – MAIFI Indices

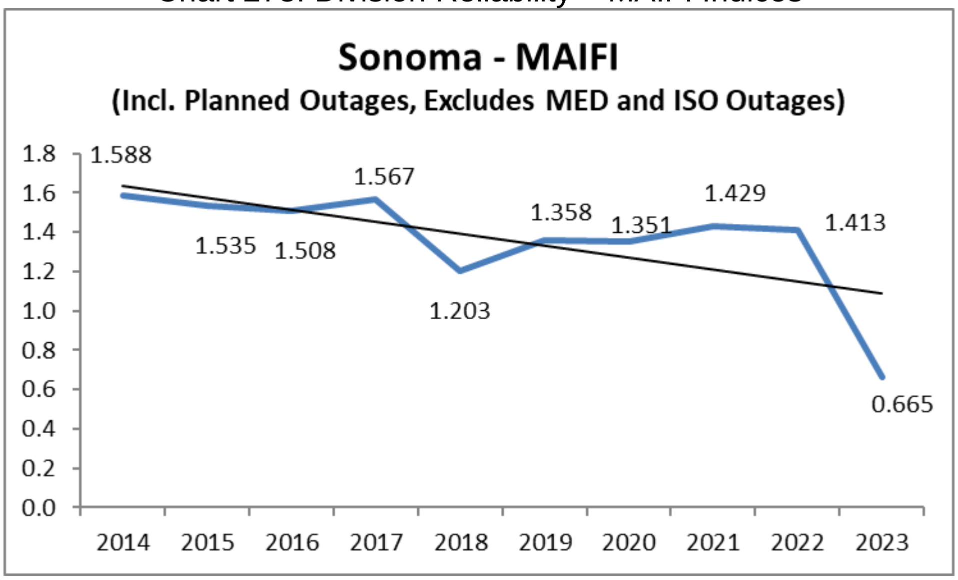


Chart 279: Division Reliability – MAIFI Indices

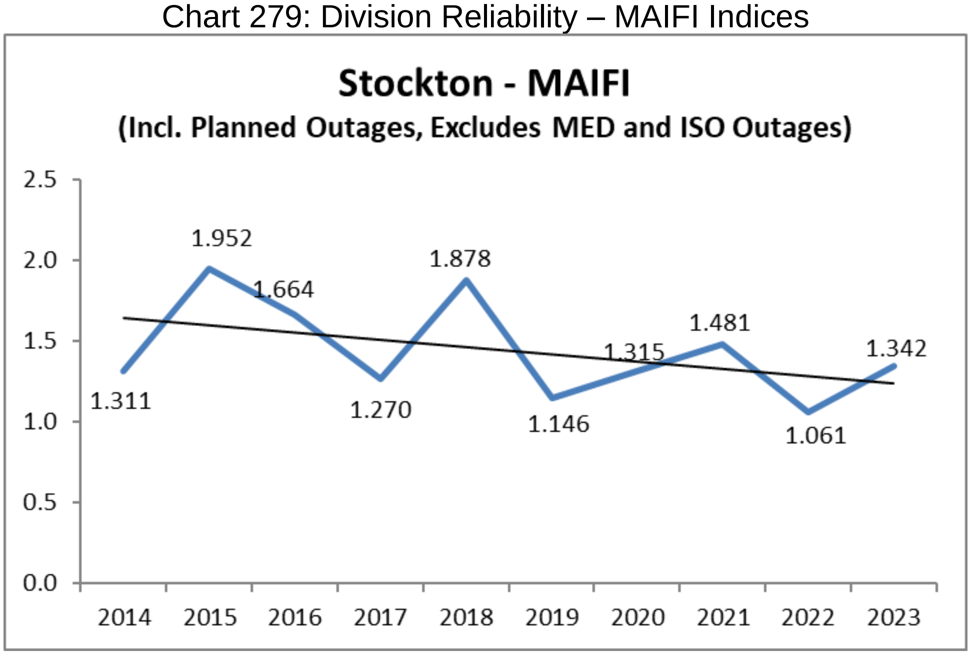


Chart 280: Division Reliability – MAIFI Indices

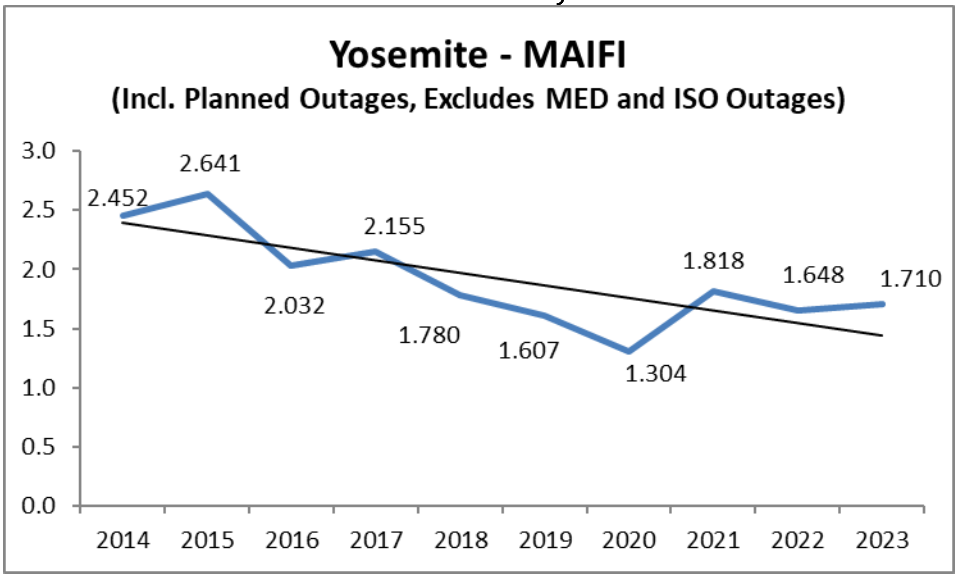
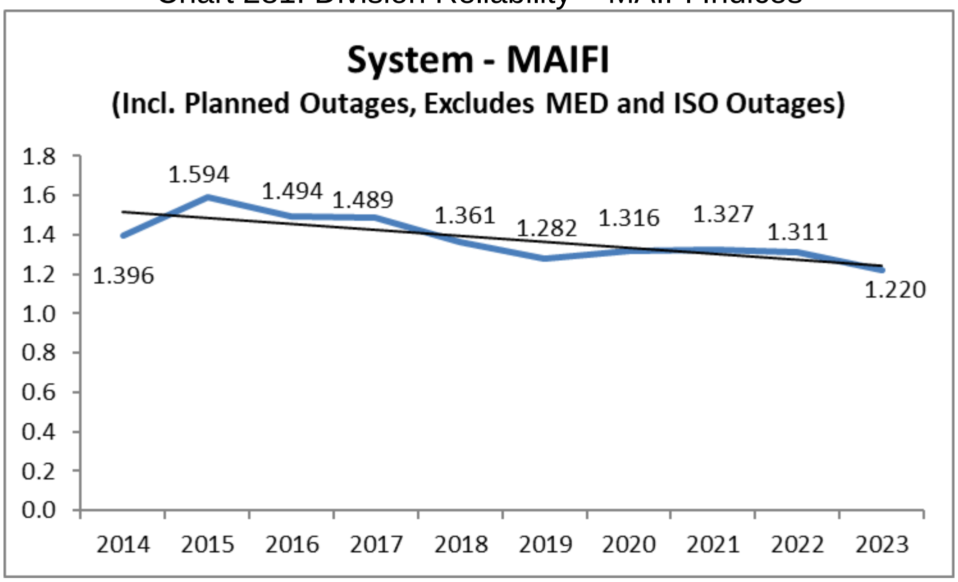


Chart 281: Division Reliability – MAIFI Indices



4. CAIDI Performance Results (MED Excluded)

Chart 282: Division Reliability – CAIDI Indices

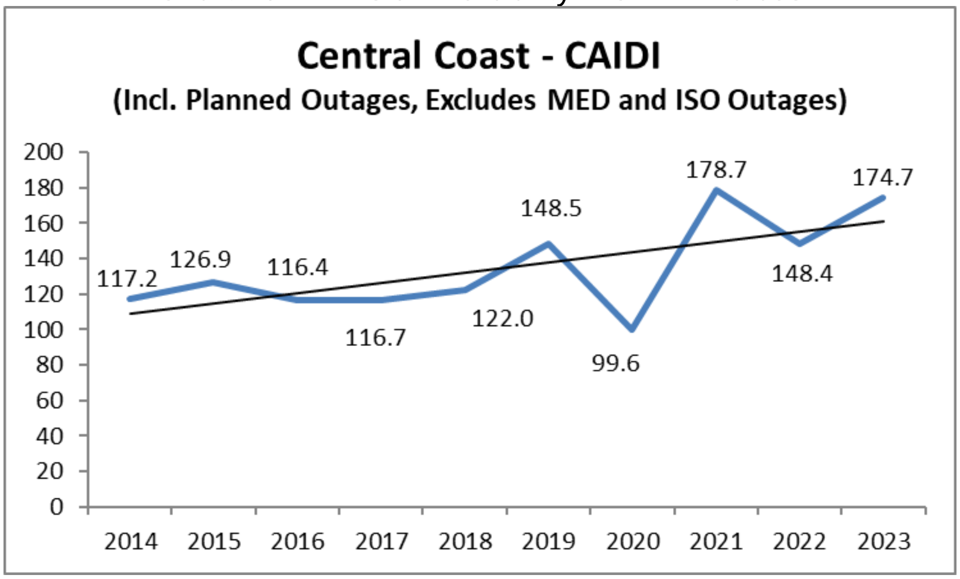


Chart 283: Division Reliability – CAIDI Indices

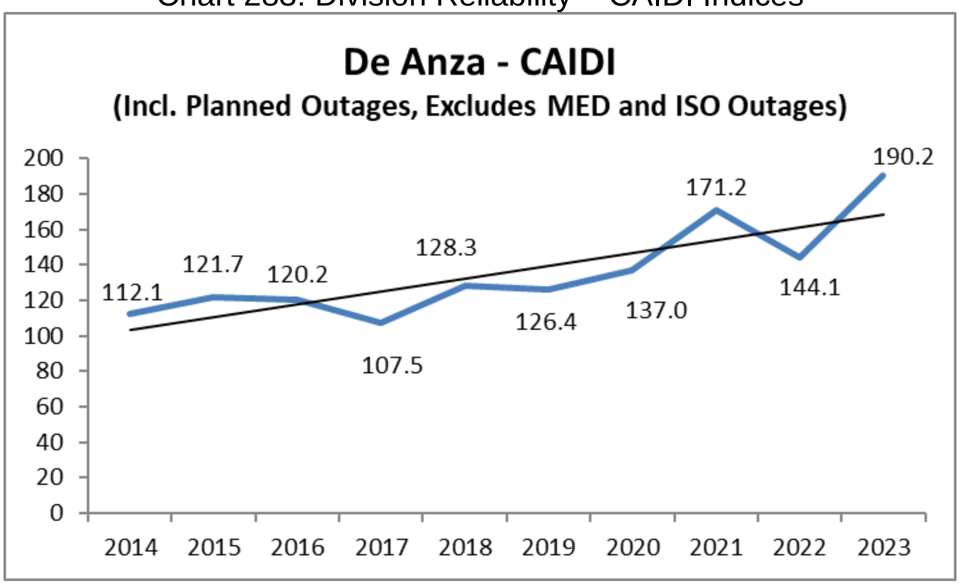


Chart 284: Division Reliability – CAIDI Indices

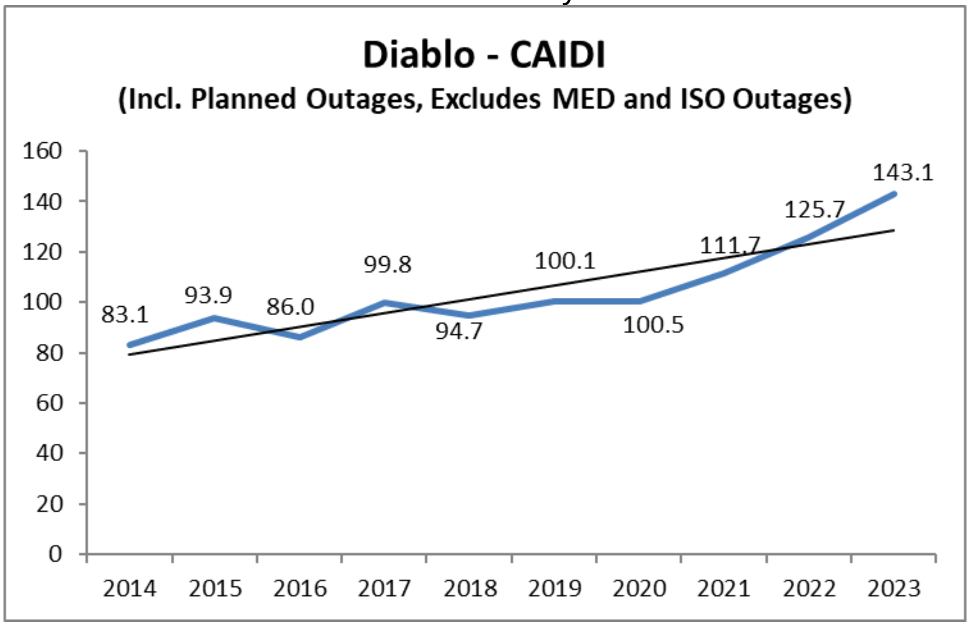


Chart 285: Division Reliability – CAIDI Indices

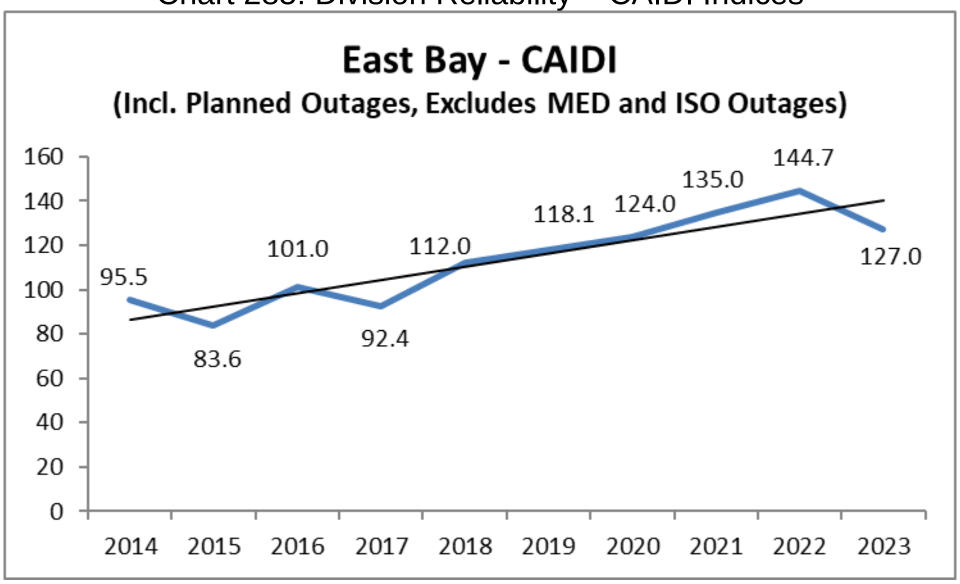


Chart 286: Division Reliability – CAIDI Indices

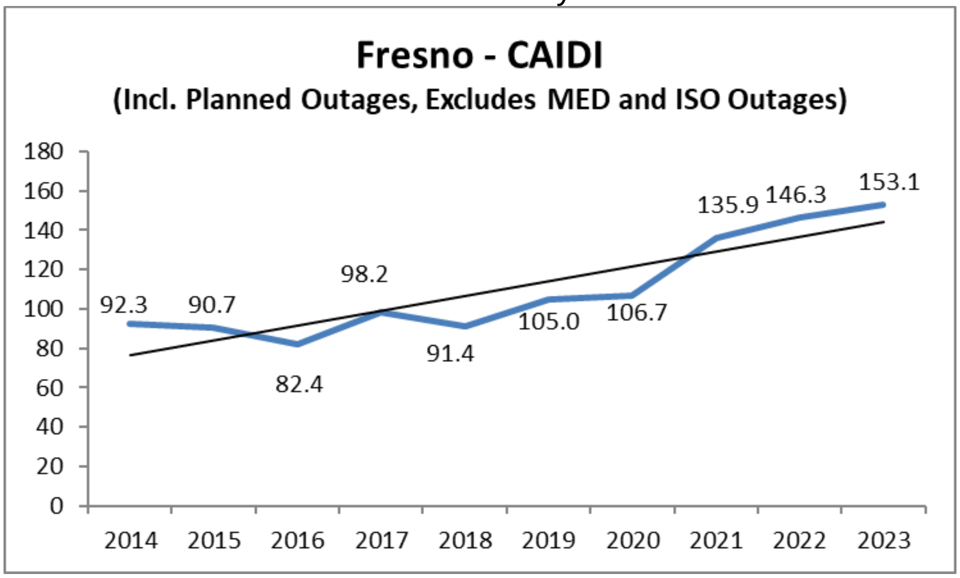


Chart 287: Division Reliability – CAIDI Indices

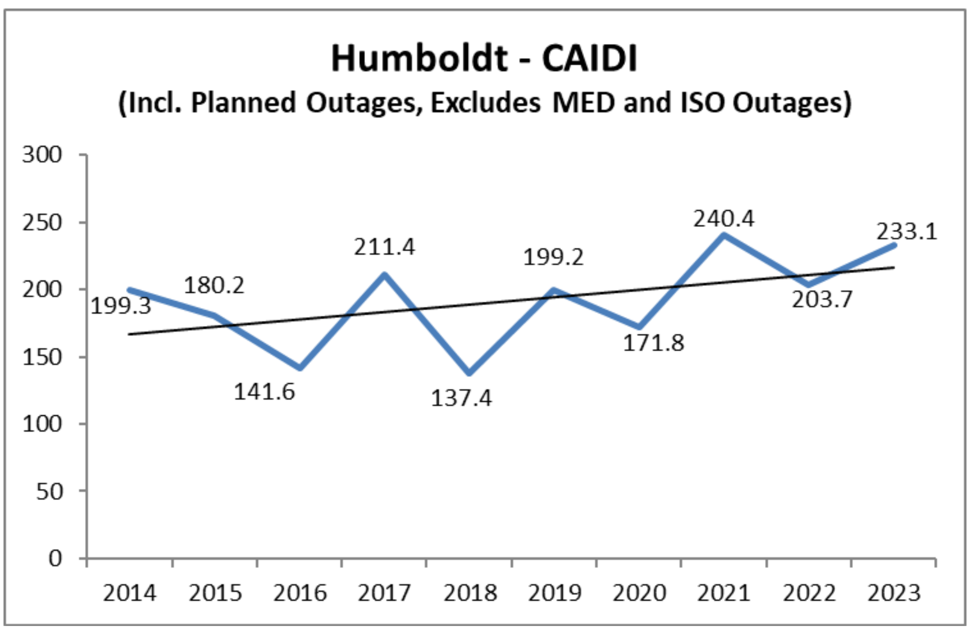


Chart 288: Division Reliability – CAIDI Indices

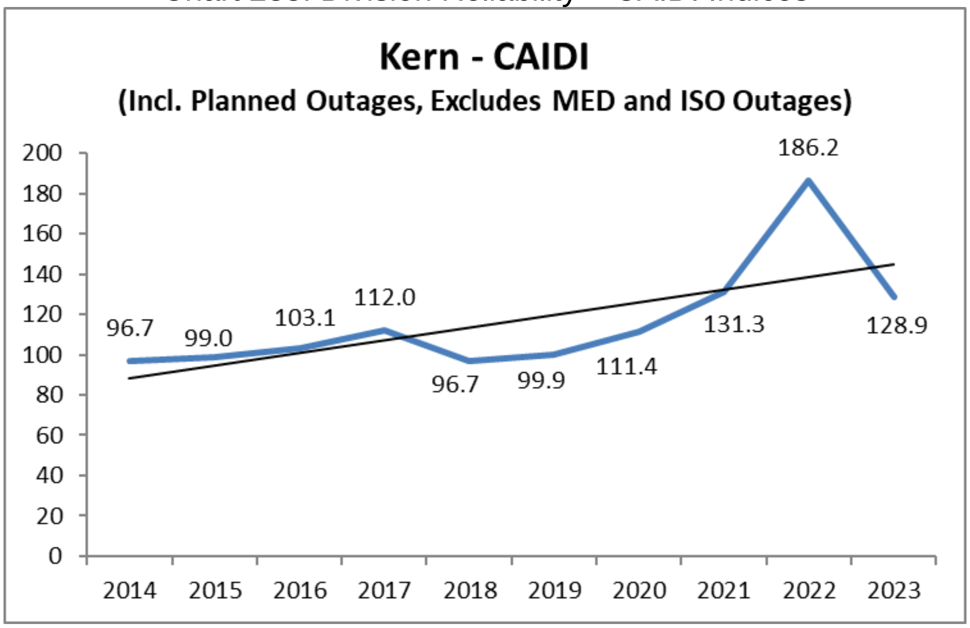


Chart 289: Division Reliability – CAIDI Indices

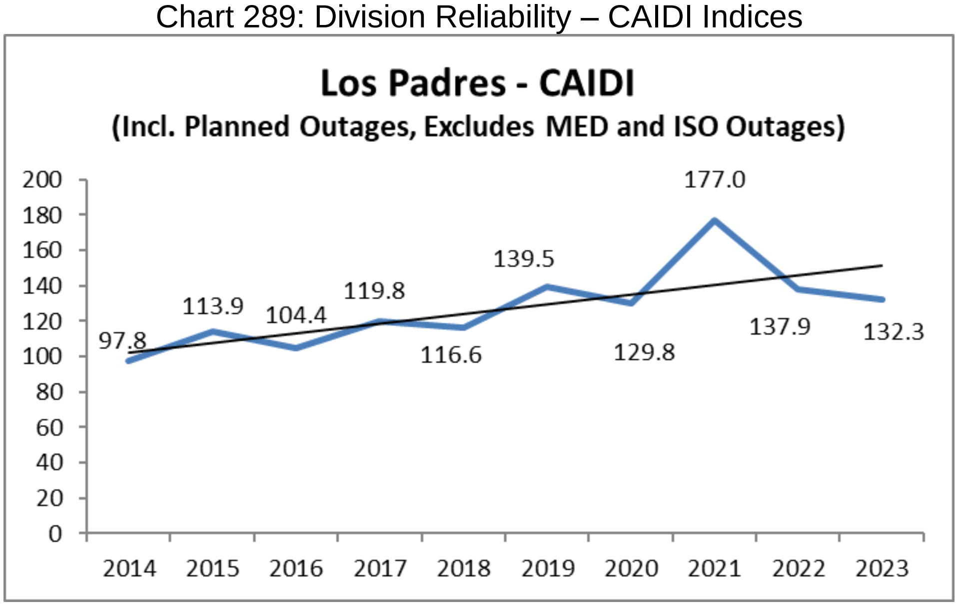


Chart 290: Division Reliability – CAIDI Indices

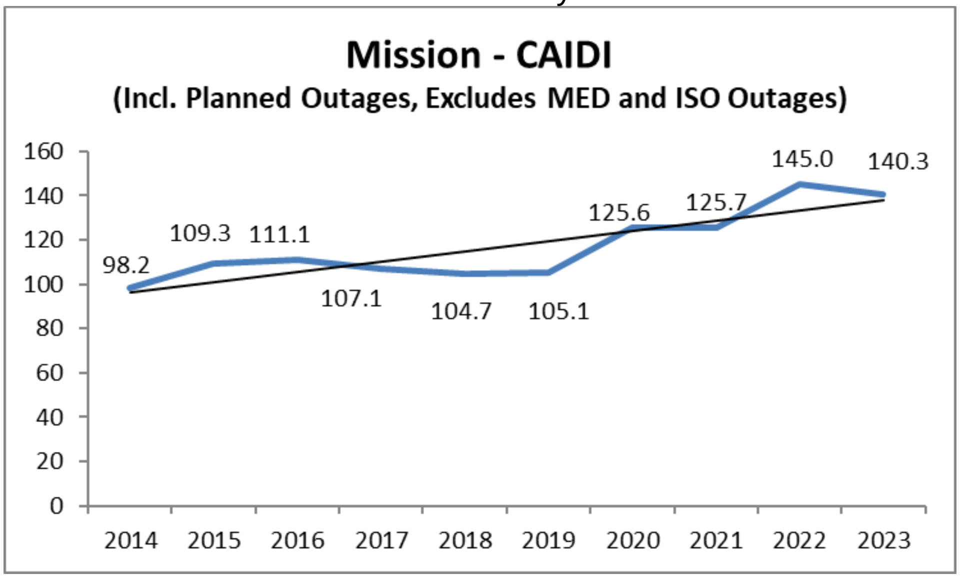


Chart 291: Division Reliability – CAIDI Indices

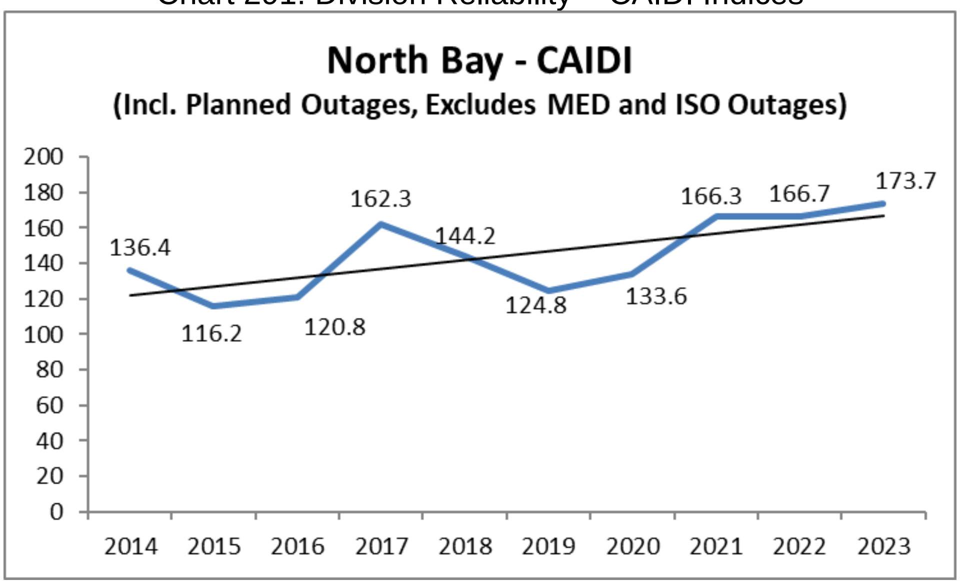


Chart 292: Division Reliability – CAIDI Indices

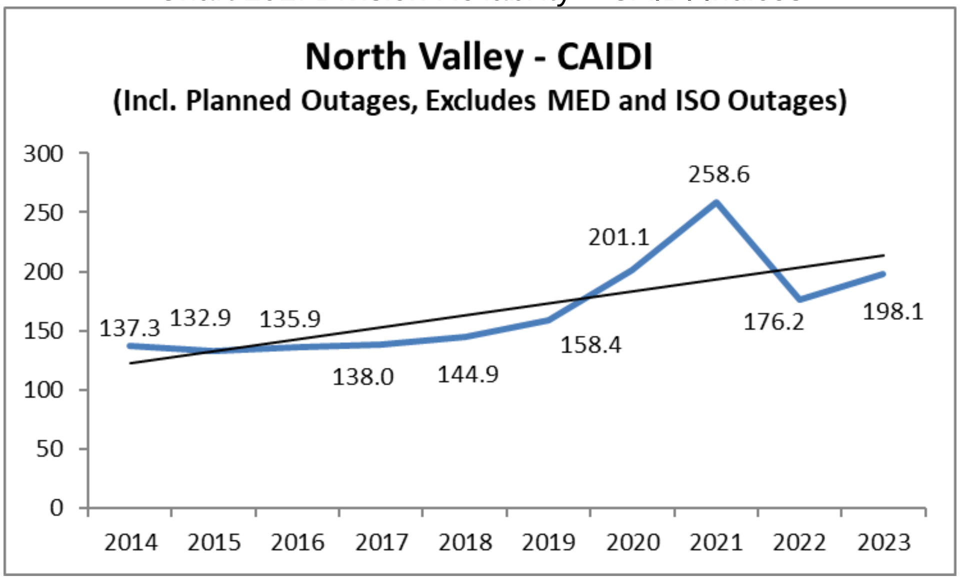


Chart 293: Division Reliability – CAIDI Indices

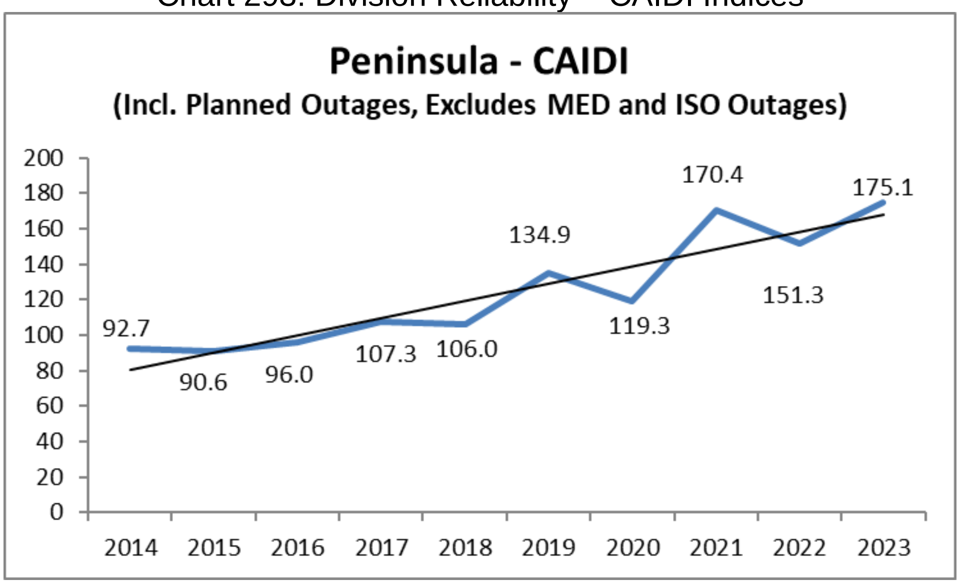


Chart 294: Division Reliability – CAIDI Indices

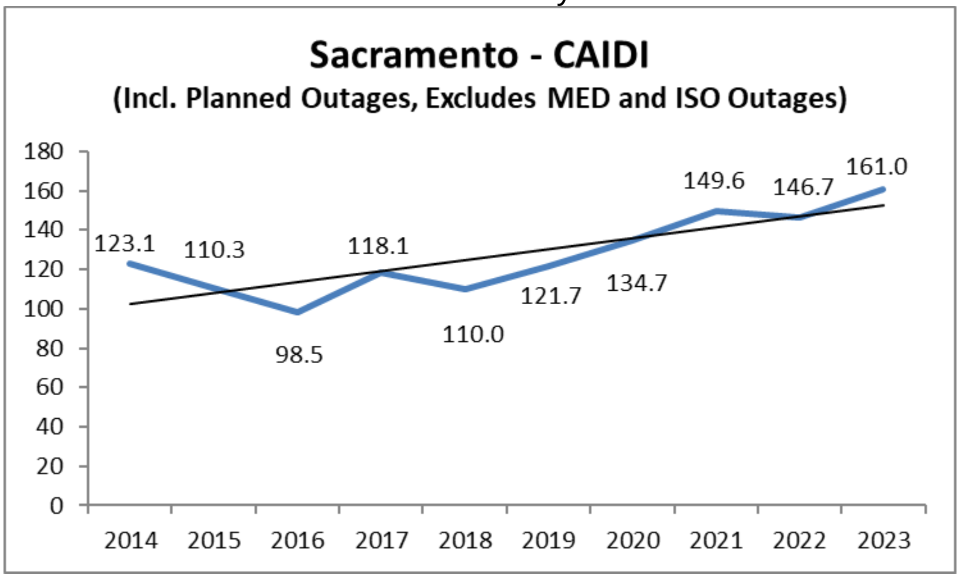


Chart 295: Division Reliability – CAIDI Indices

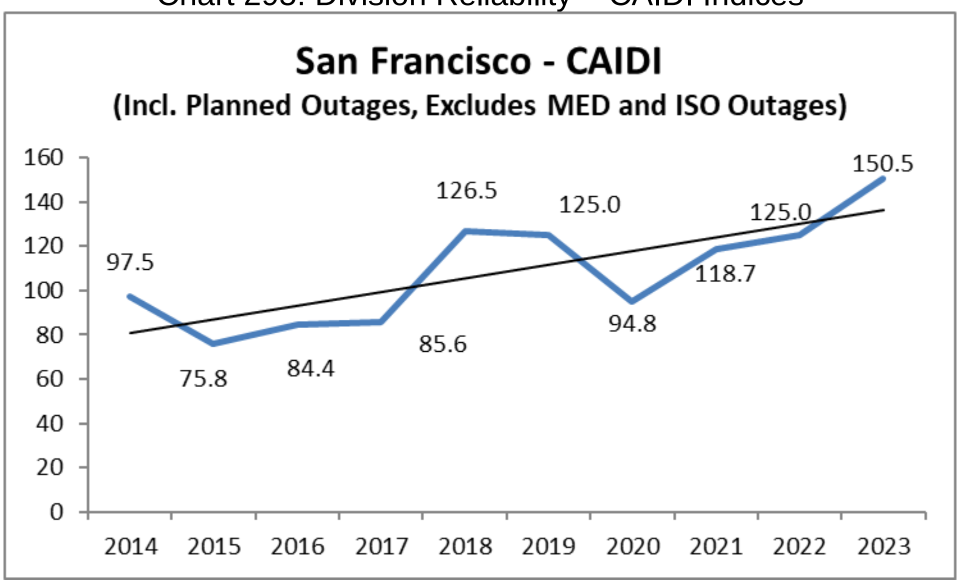


Chart 296: Division Reliability – CAIDI Indices

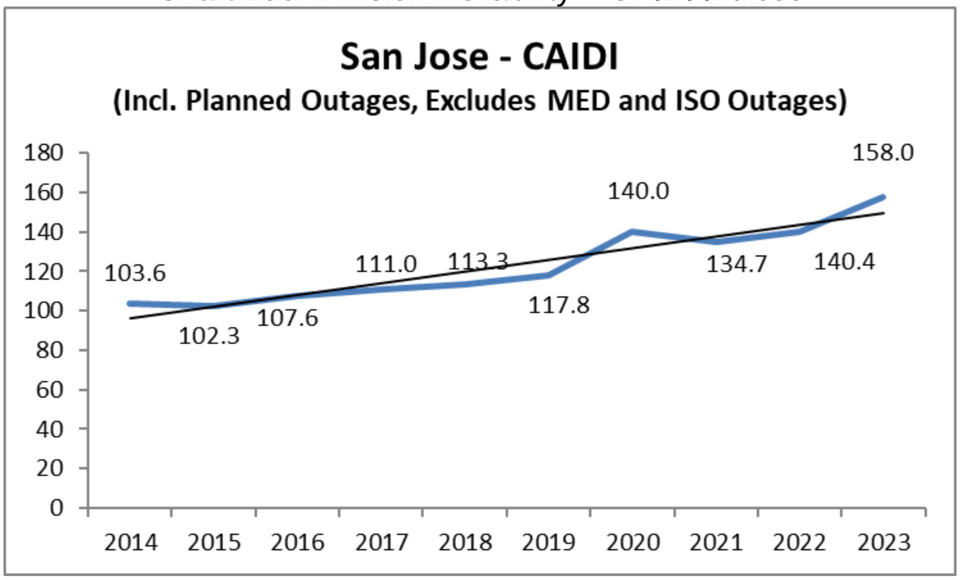


Chart 297: Division Reliability – CAIDI Indices

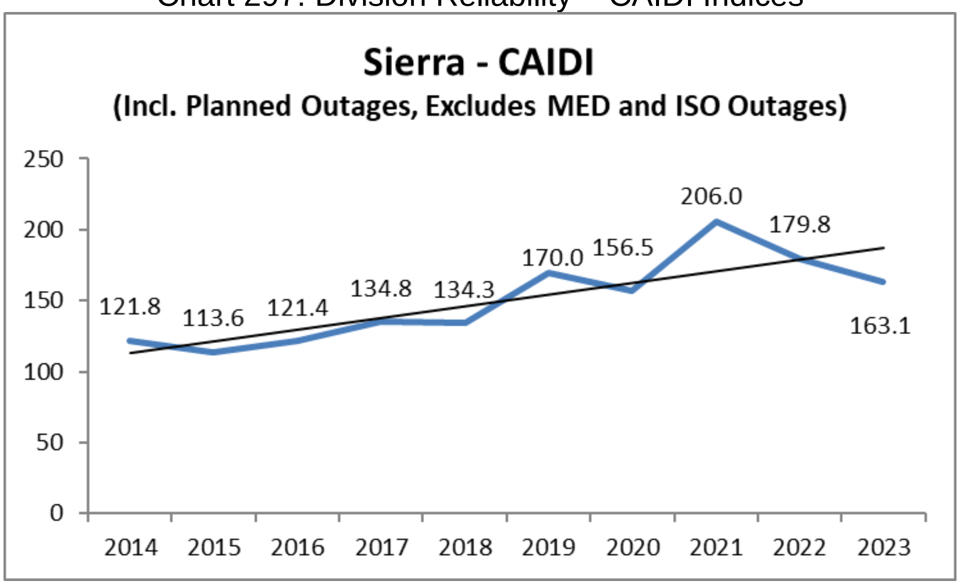


Chart 298: Division Reliability – CAIDI Indices

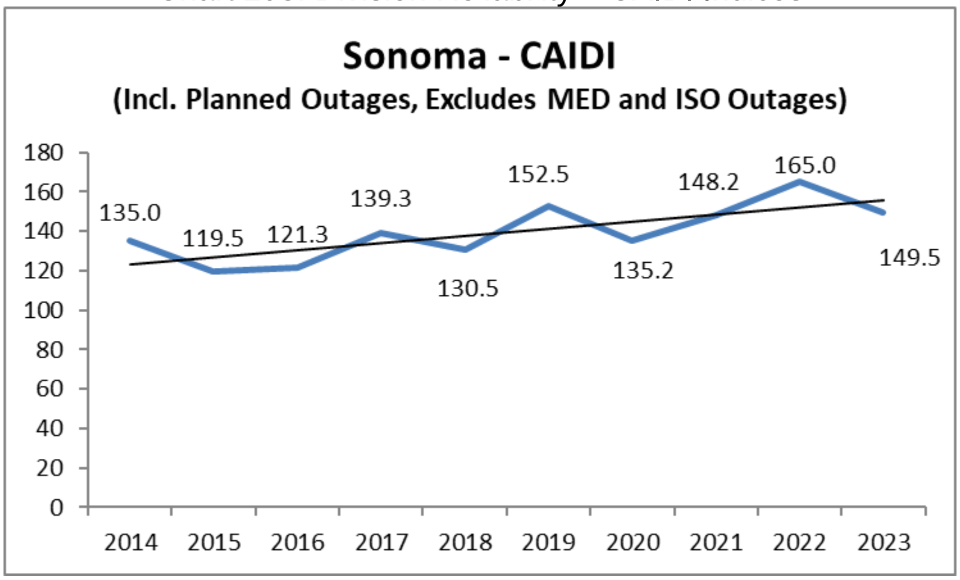


Chart 299: Division Reliability – CAIDI Indices

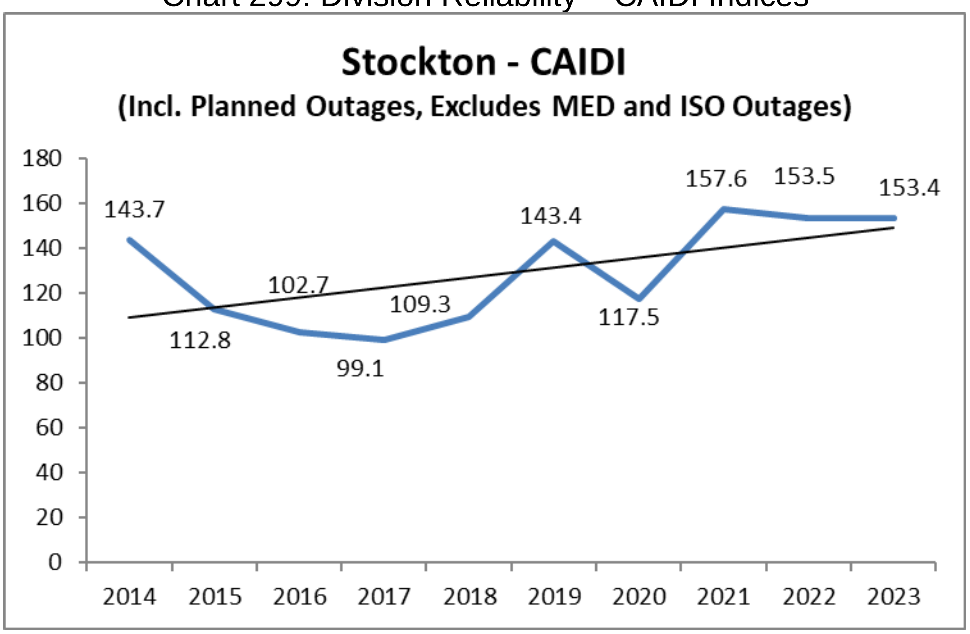


Chart 300: Division Reliability – CAIDI Indices

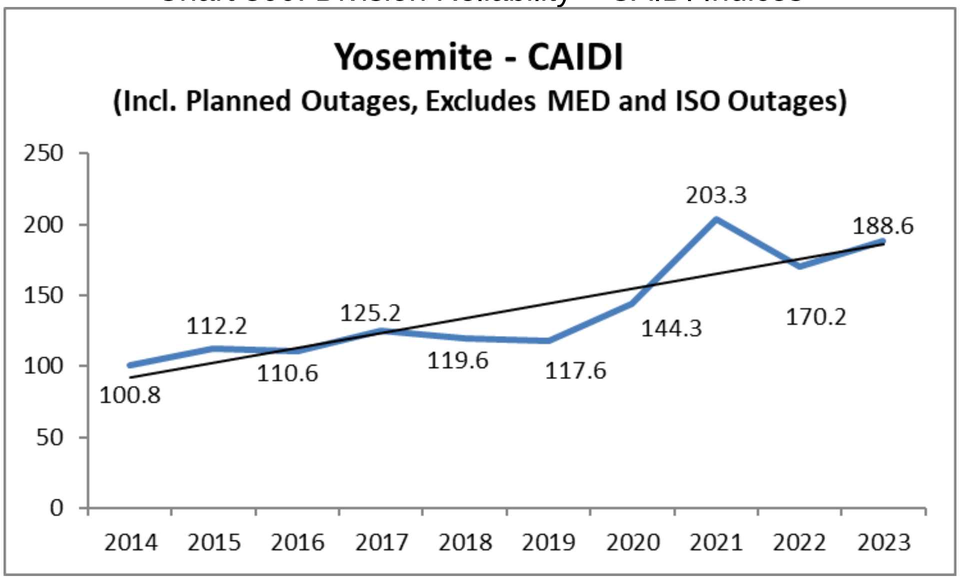
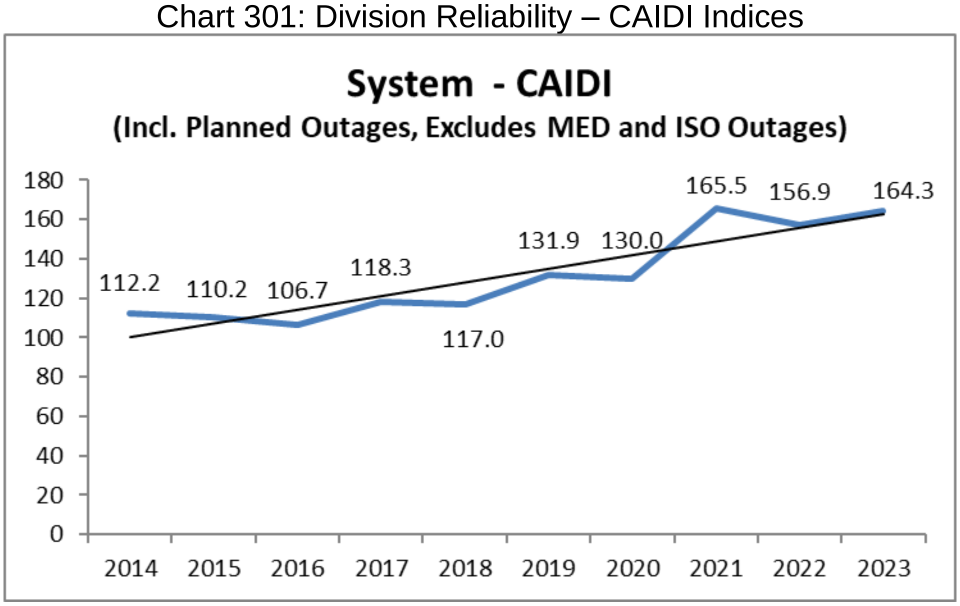


Chart 301: Division Reliability – CAIDI Indices



ii. Charts for System and Division Reliability Indices based on IEEE 1366 for the past 10 years including planned outages and including MED

1. SAIDI Performance Results (MED Included)

Chart 302: Division Reliability – AIDI Indices

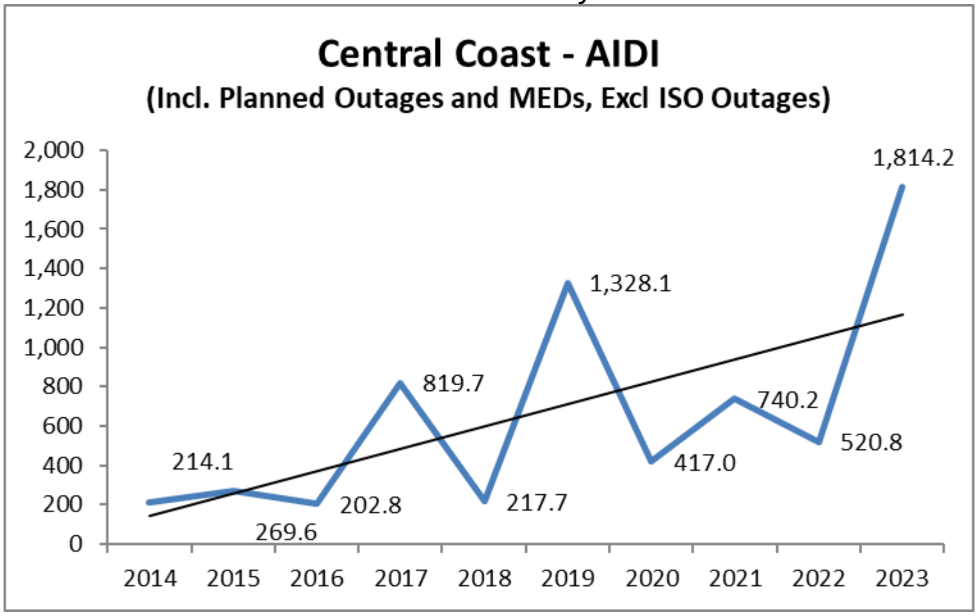


Chart 303: Division Reliability – AIDI Indices

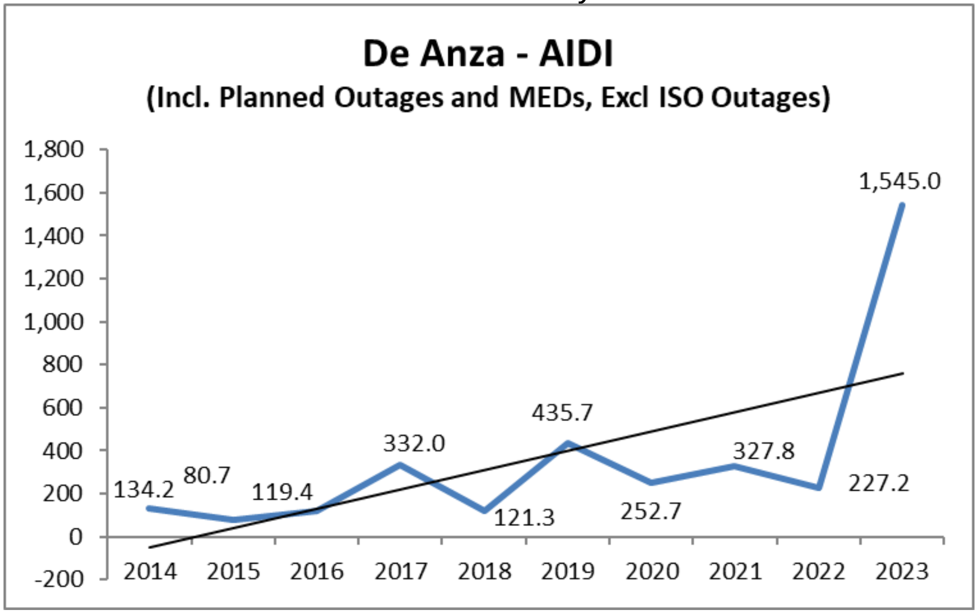


Chart 304: Division Reliability – AIDI Indices

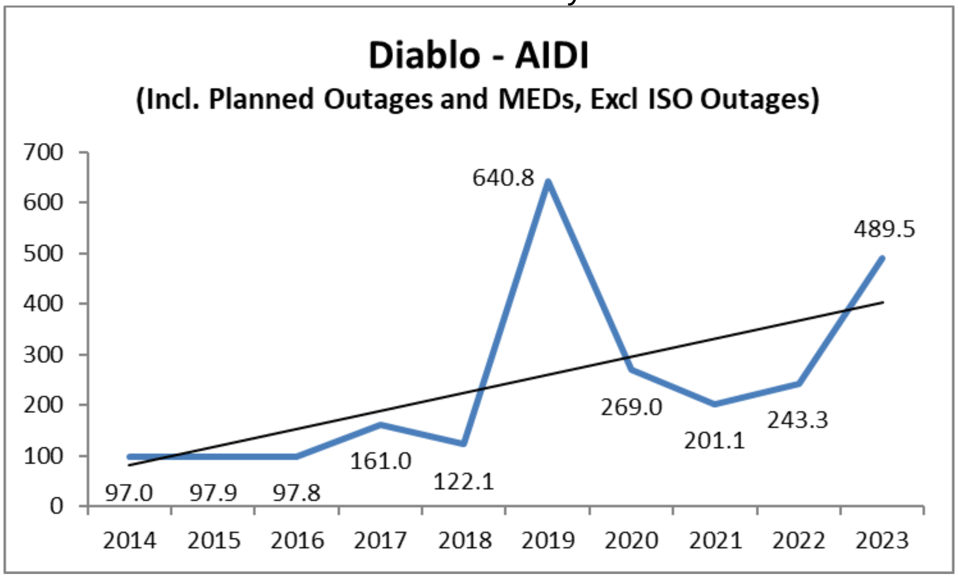


Chart 305: Division Reliability – AIDI Indices

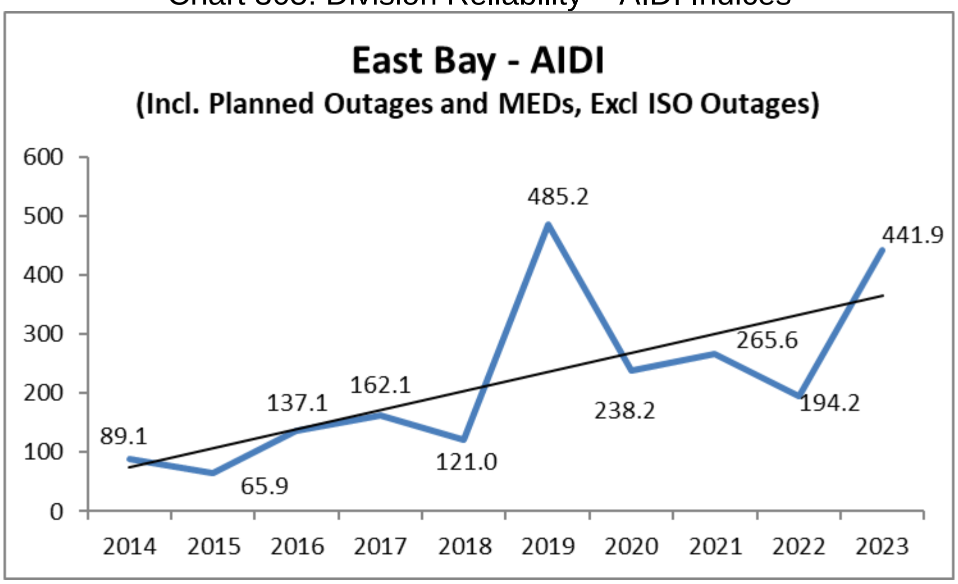


Chart 306: Division Reliability – AIDI Indices

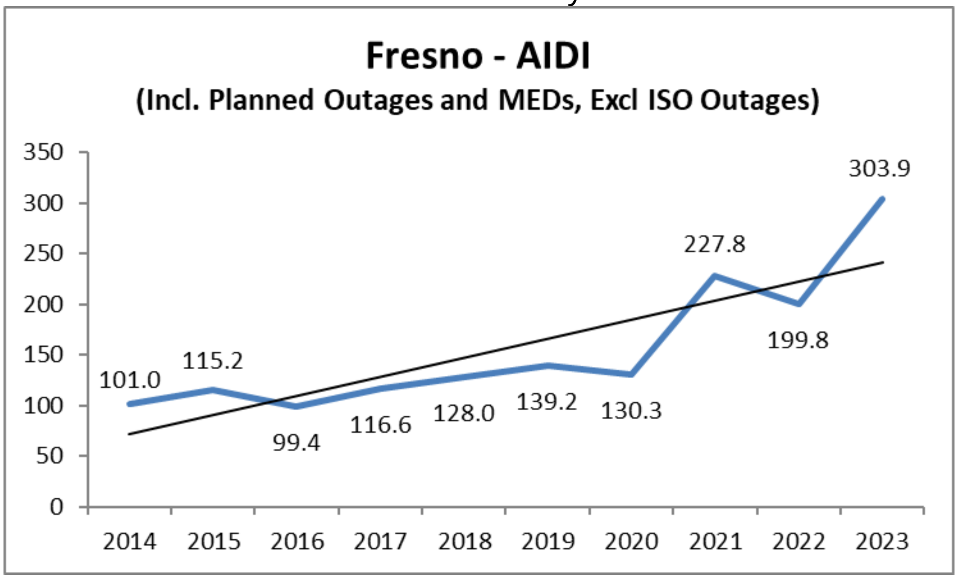


Chart 307: Division Reliability – AIDI Indices

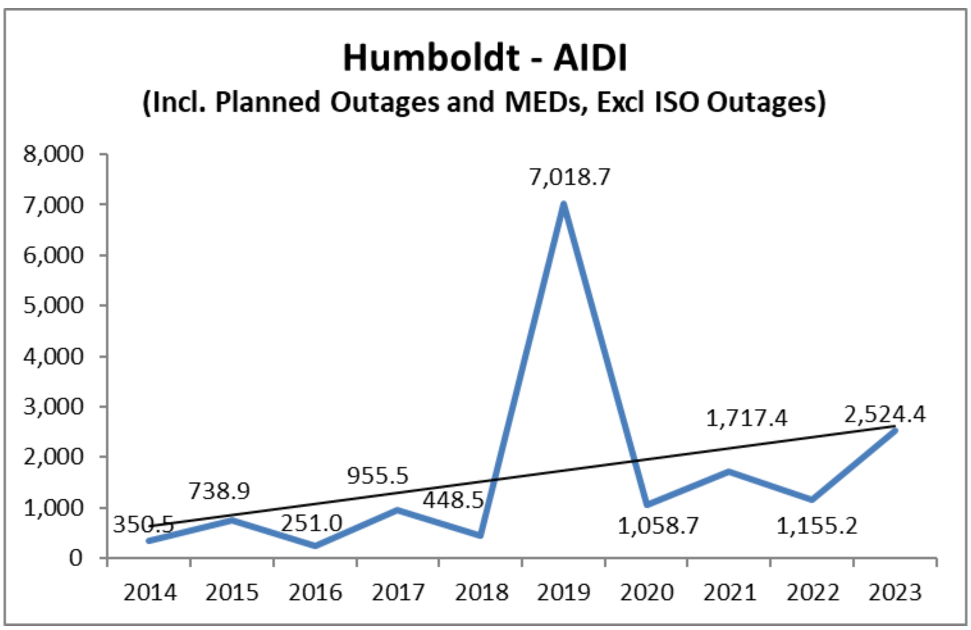


Chart 308: Division Reliability – AIDI Indices

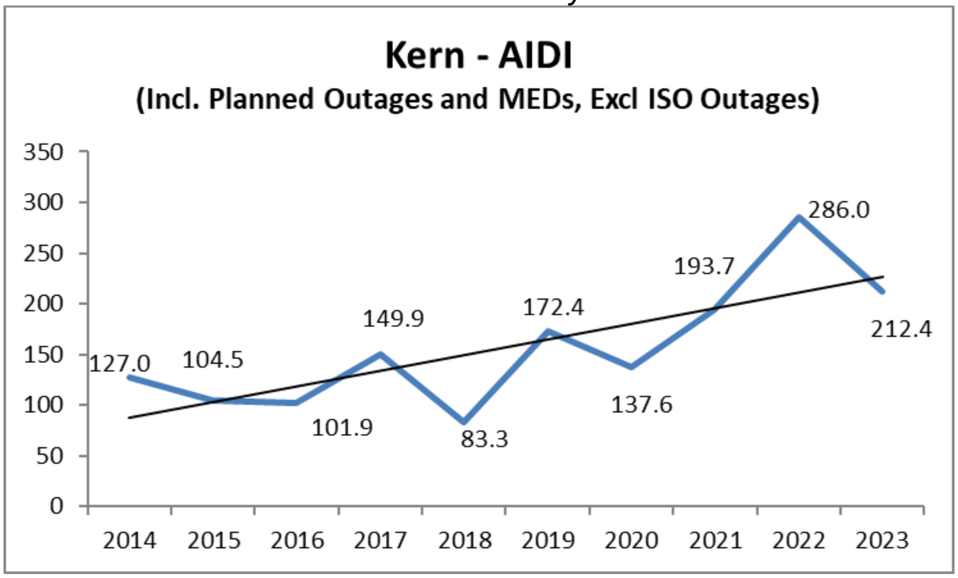


Chart 309: Division Reliability – AIDI Indices

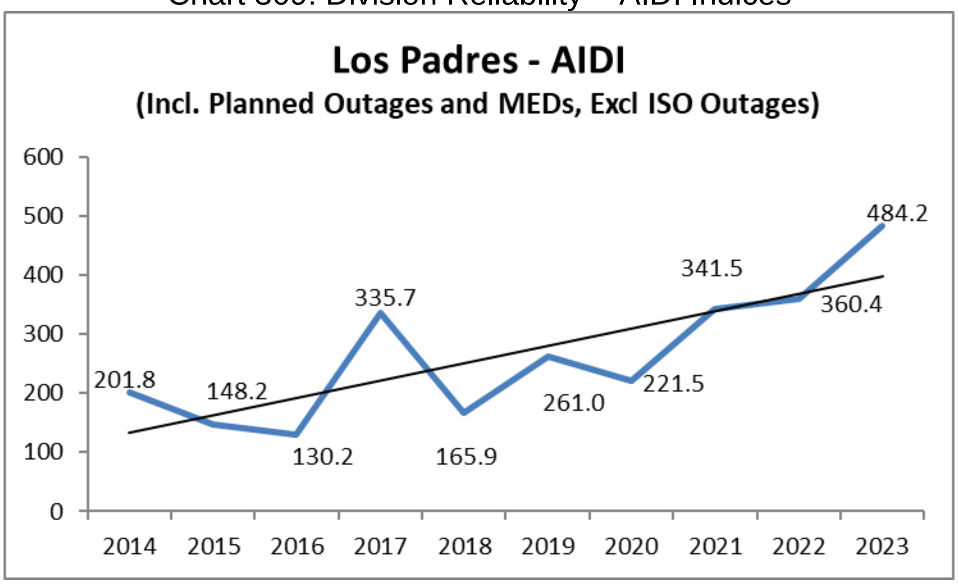


Chart 310: Division Reliability – AIDI Indices

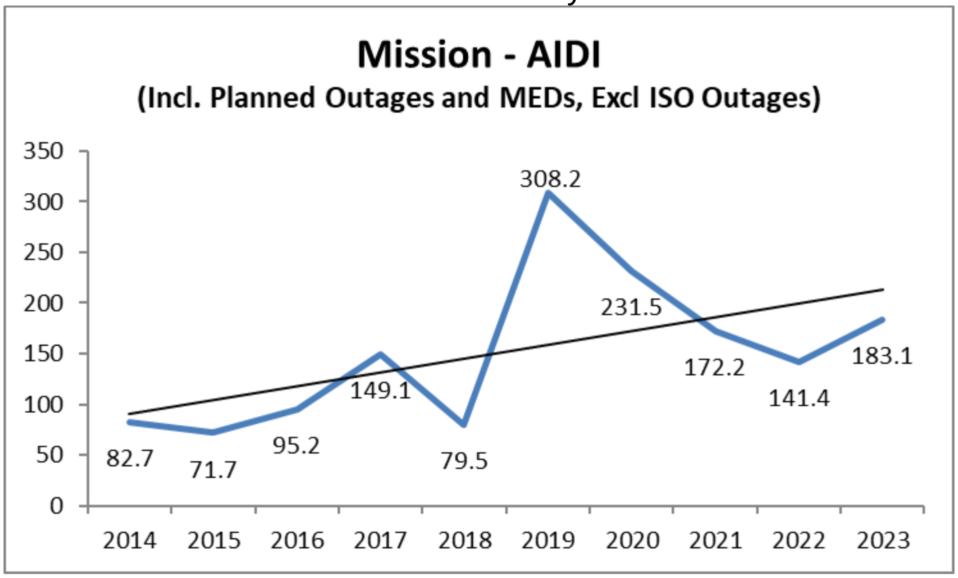


Chart 311: Division Reliability – AIDI Indices

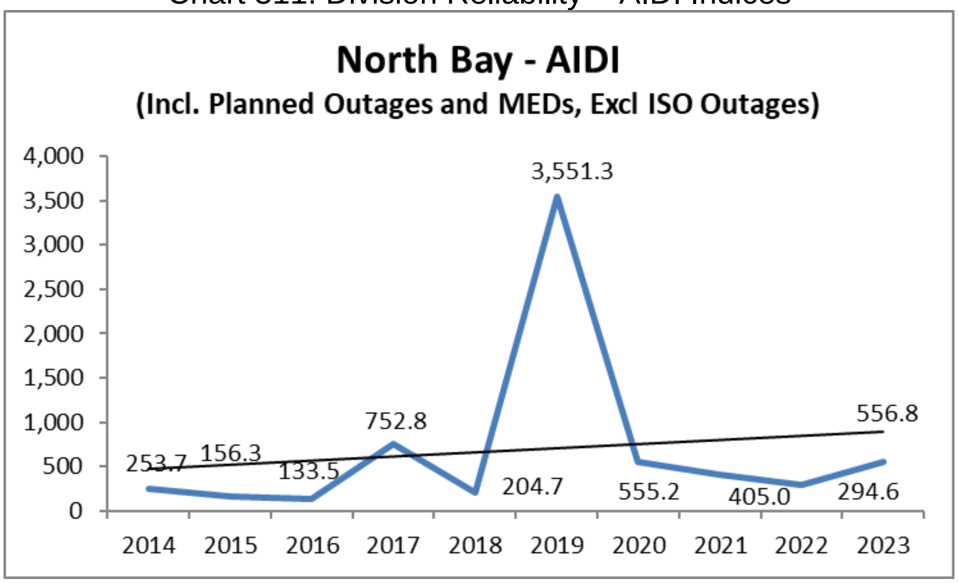


Chart 312: Division Reliability – AIDI Indices

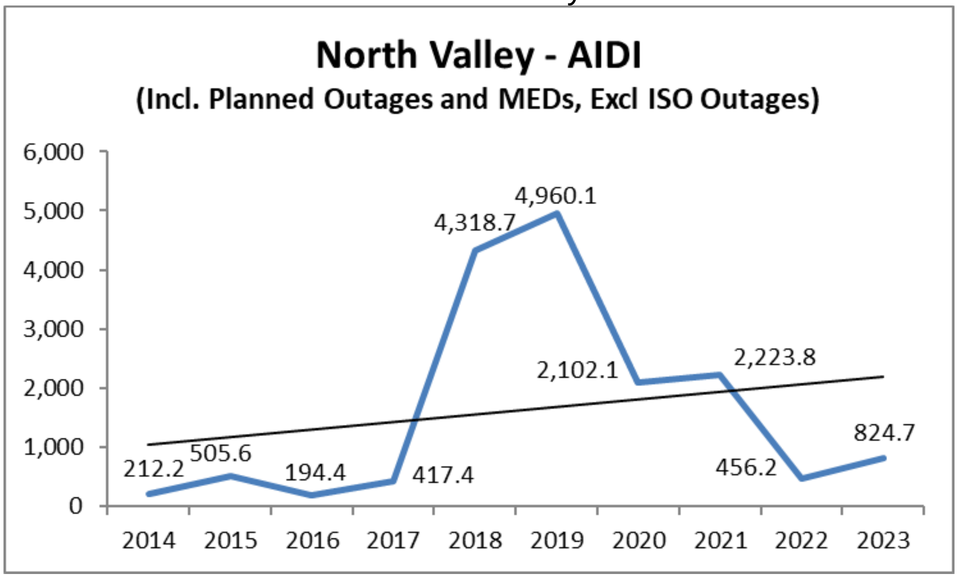


Chart 313: Division Reliability – AIDI Indices

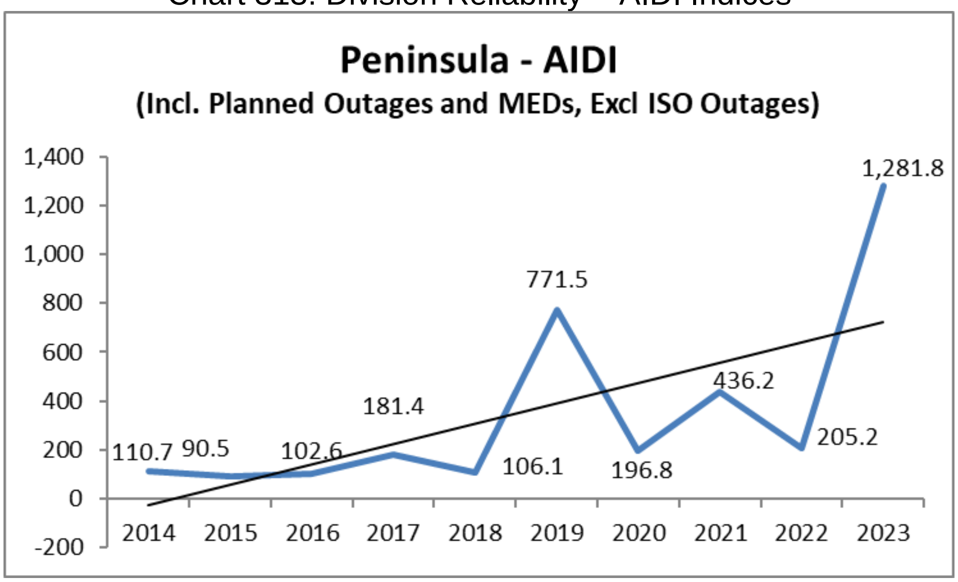


Chart 314: Division Reliability – AIDI Indices

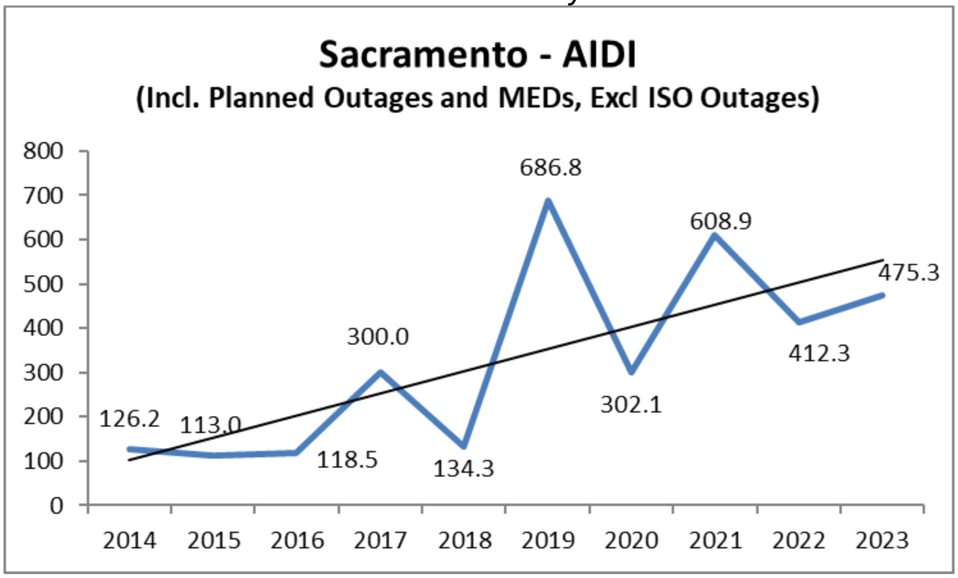


Chart 315: Division Reliability – AIDI Indices

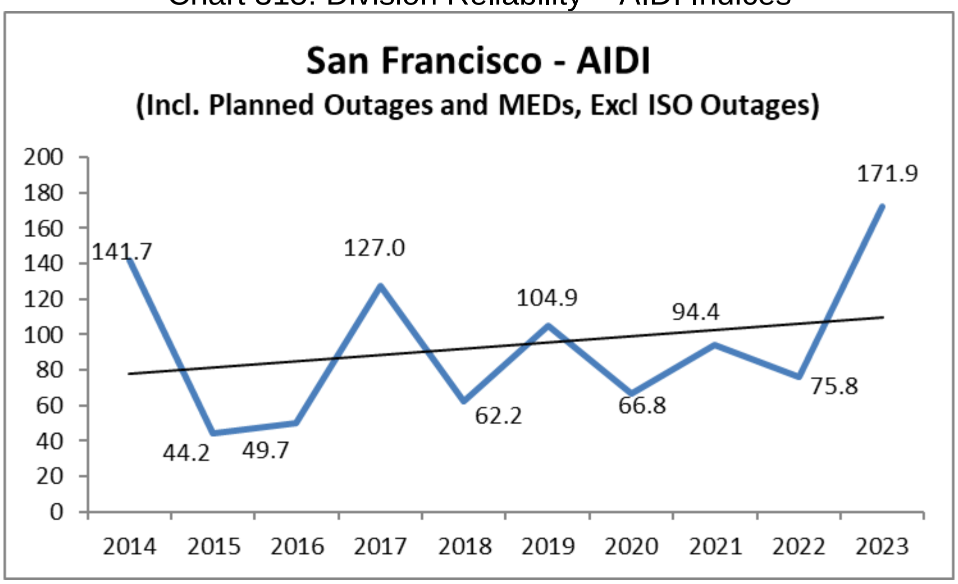


Chart 316: Division Reliability – AIDI Indices

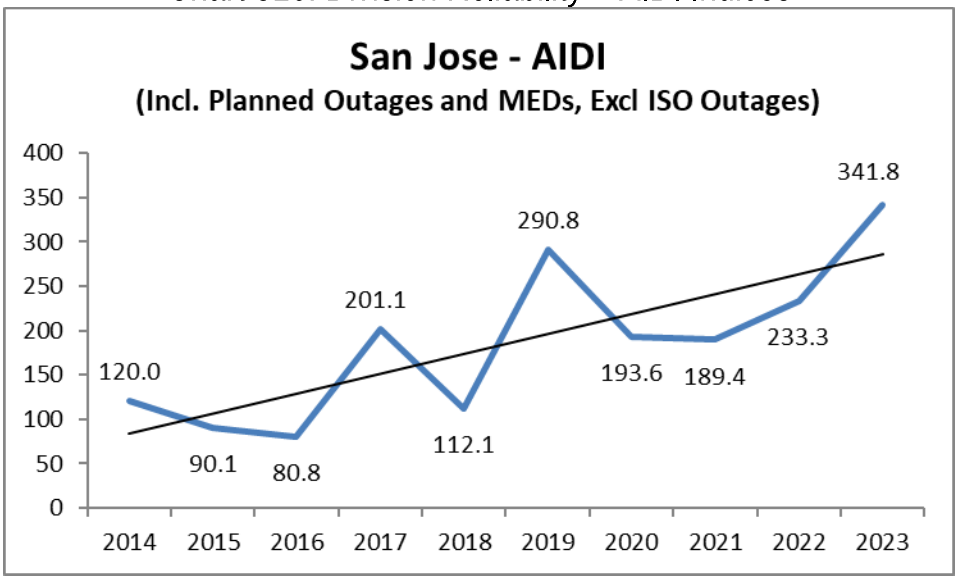


Chart 317: Division Reliability – AIDI Indices

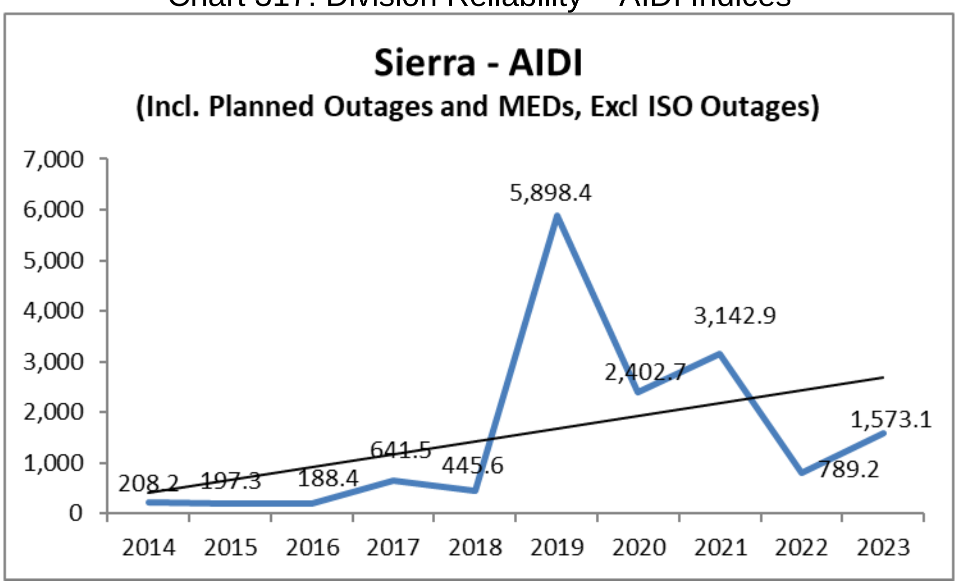


Chart 318: Division Reliability – AIDI Indices

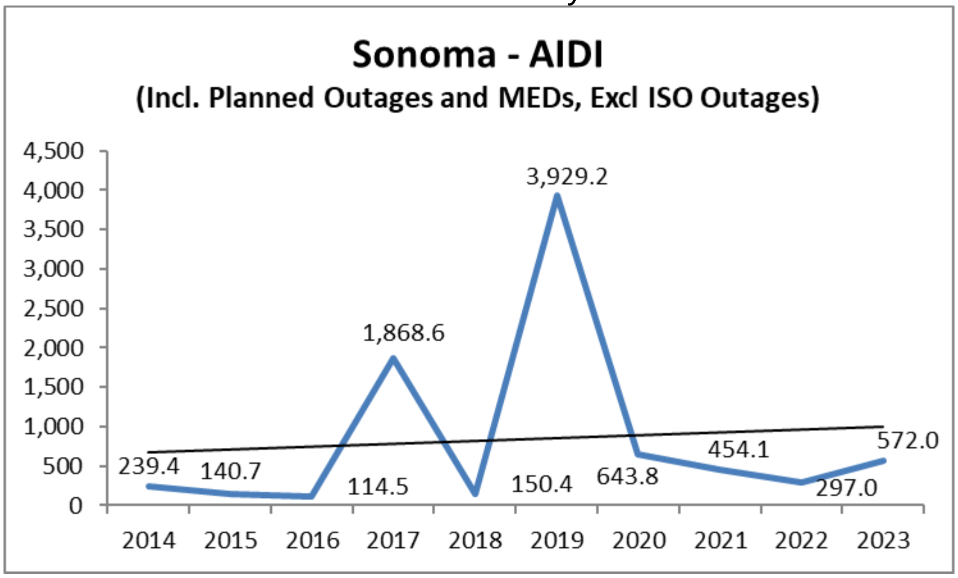


Chart 319: Division Reliability – AIDI Indices

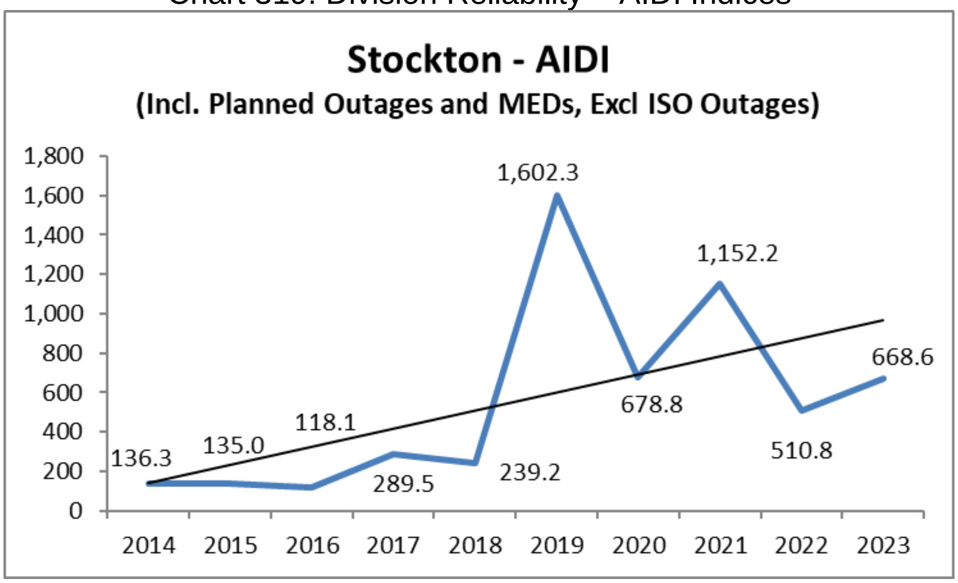


Chart 320: Division Reliability – AIDI Indices

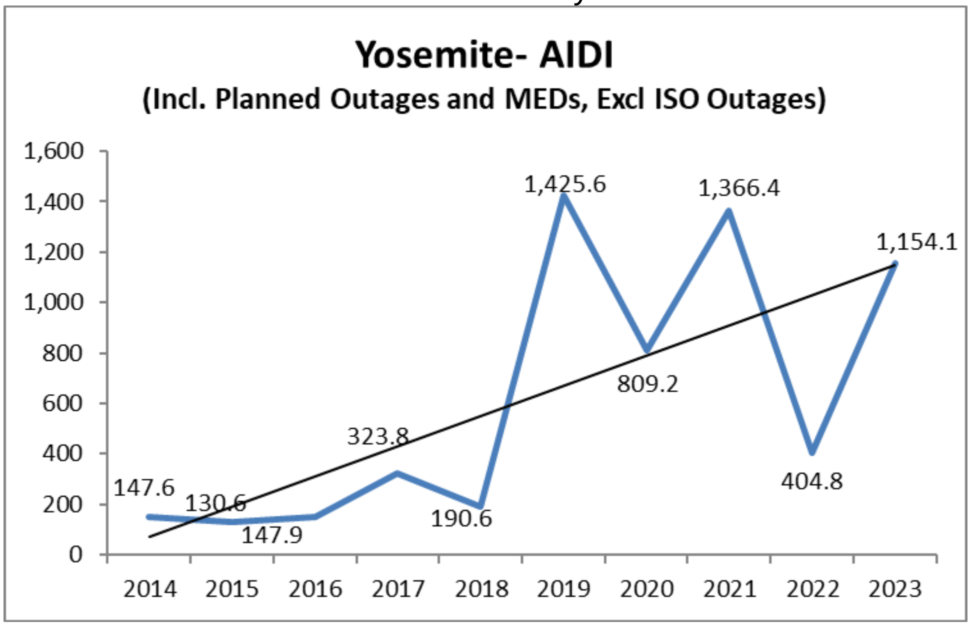
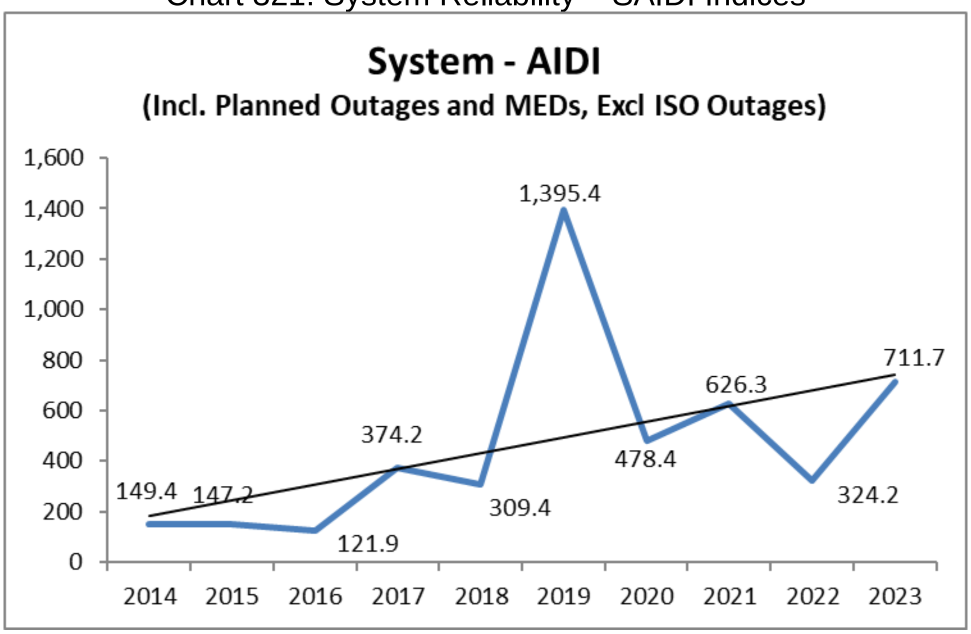


Chart 321: System Reliability – SAIDI Indices



2. SAIFI Performance Results (MED Included)

Chart 322: Division Reliability – AIFI Indices

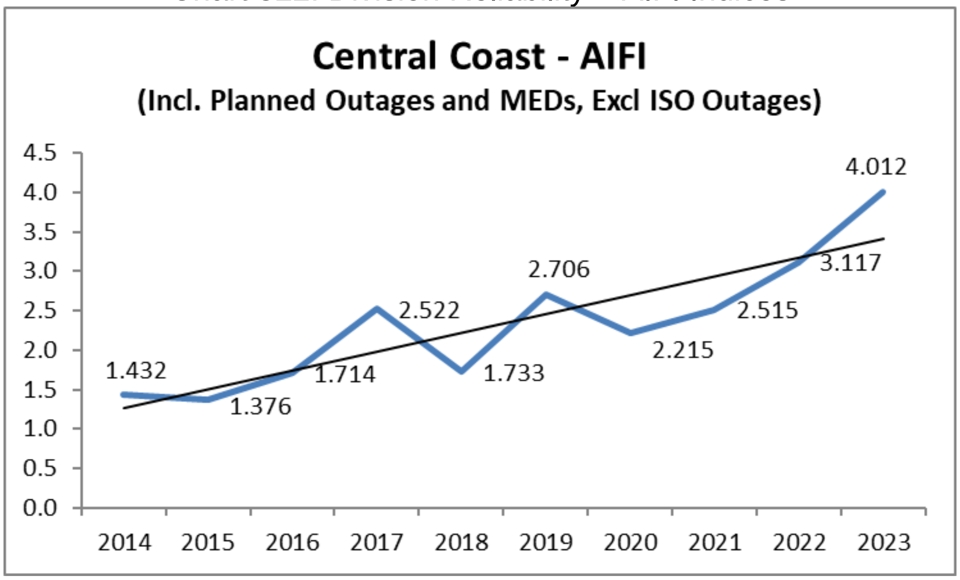


Chart 323: Division Reliability – AIFI Indices

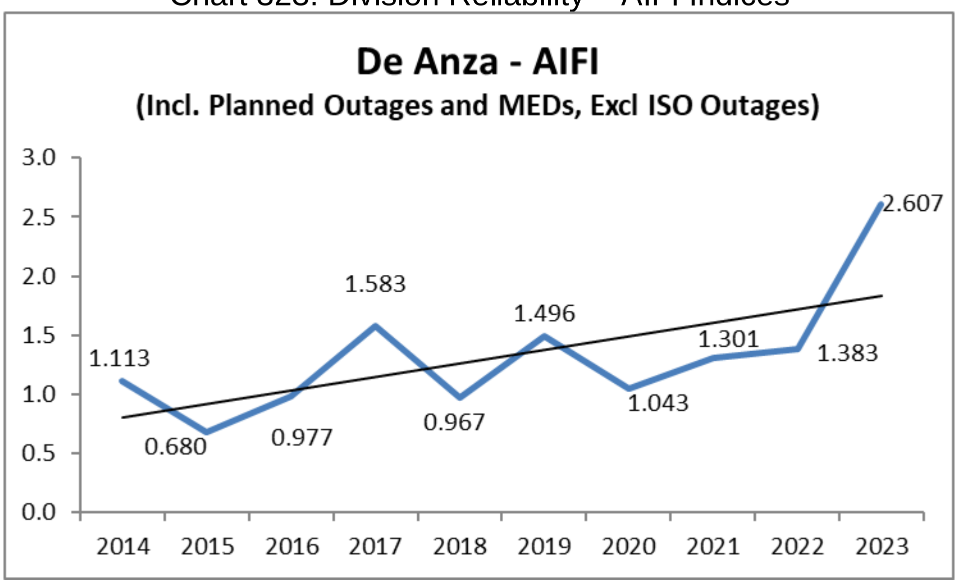


Chart 324: Division Reliability – AIFI Indices

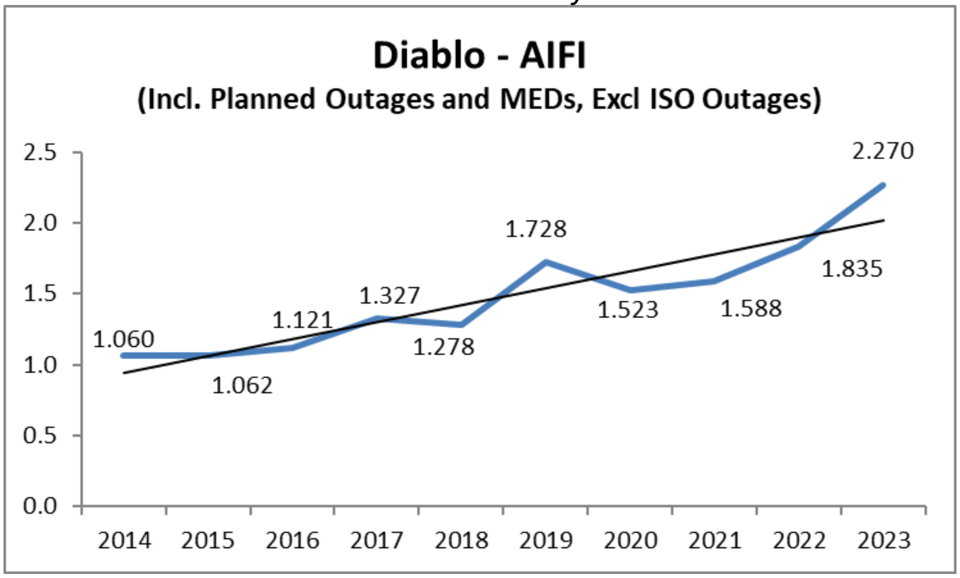


Chart 325: Division Reliability – AIFI Indices

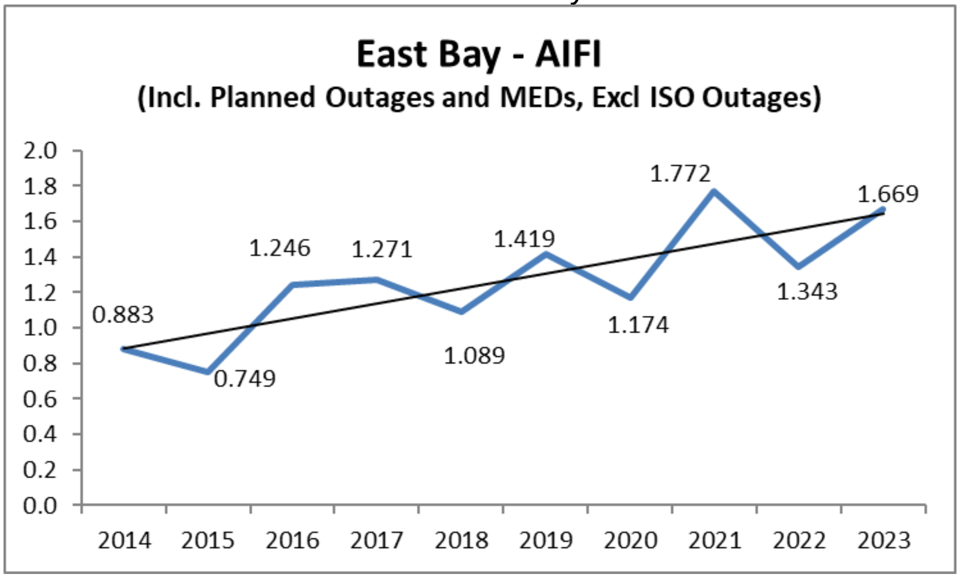


Chart 326: Division Reliability – AIFI Indices

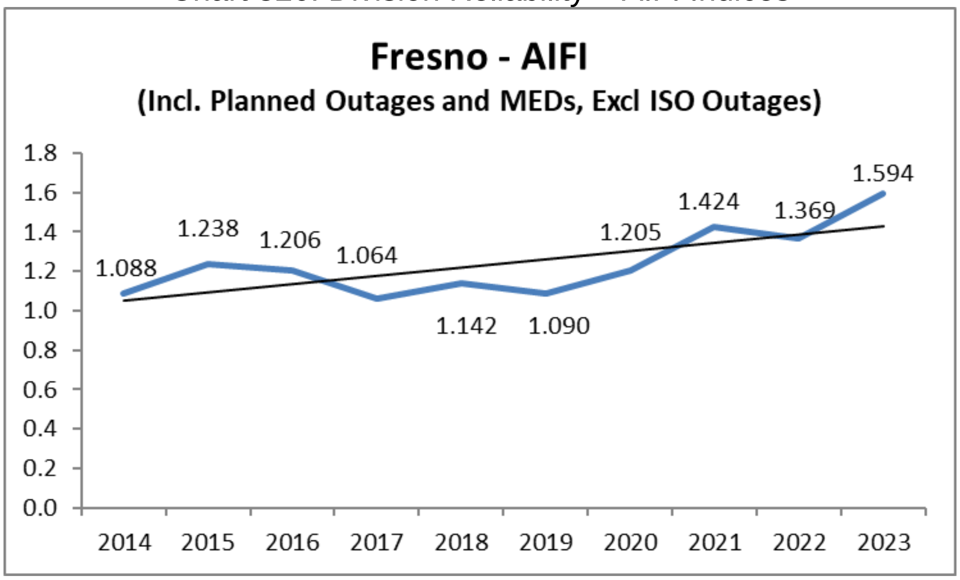


Chart 327: Division Reliability – AIFI Indices

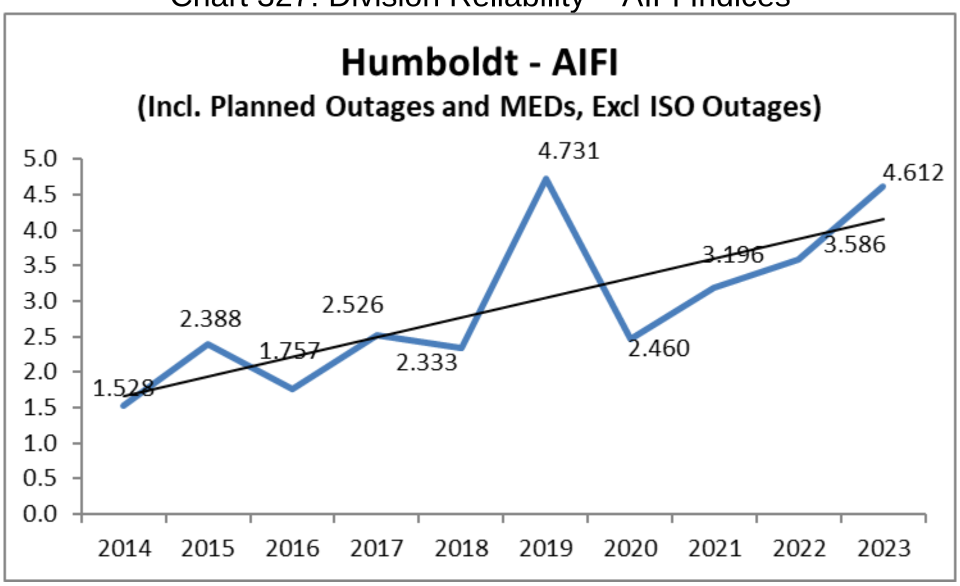


Chart 328: Division Reliability – AIFI Indices

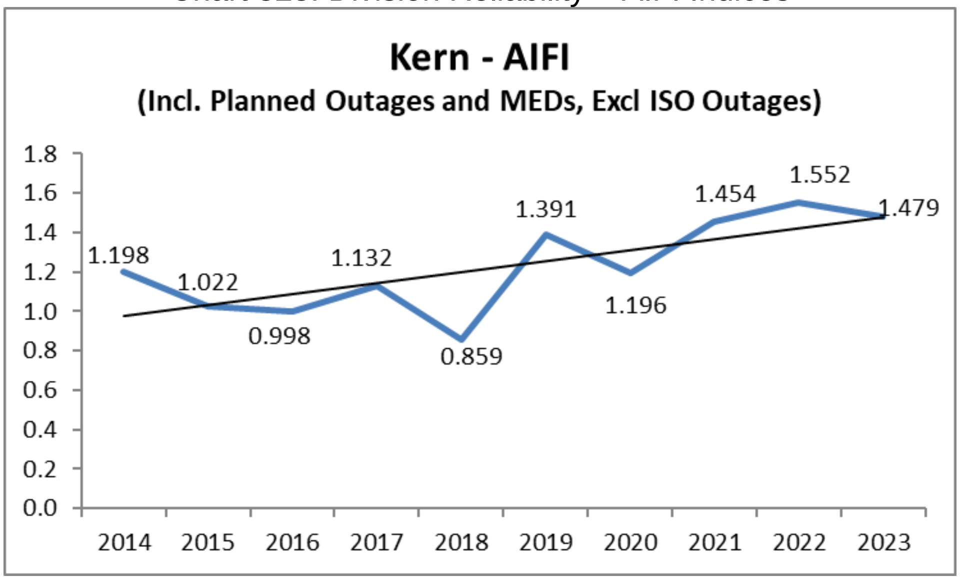


Chart 329: Division Reliability – AIFI Indices

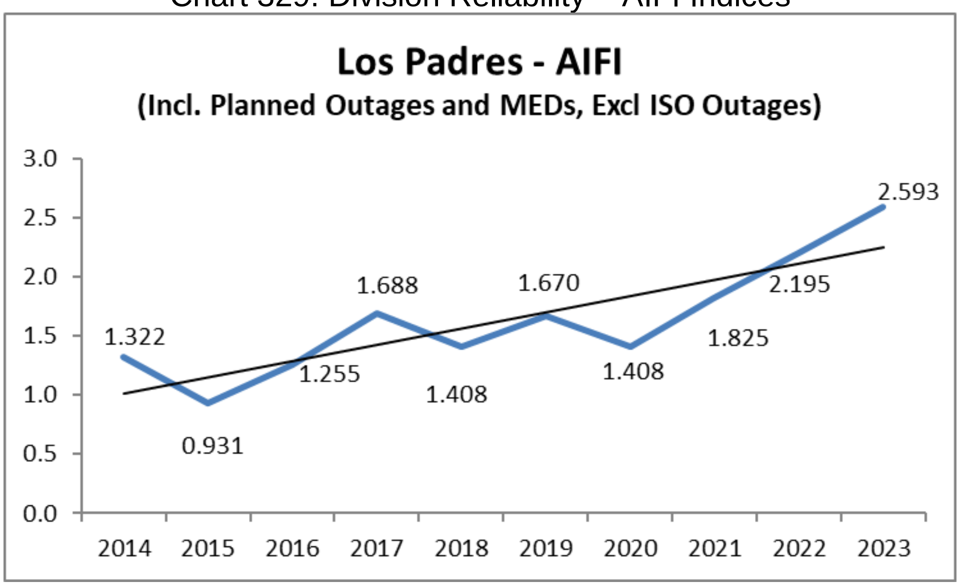


Chart 330: Division Reliability – AIFI Indices

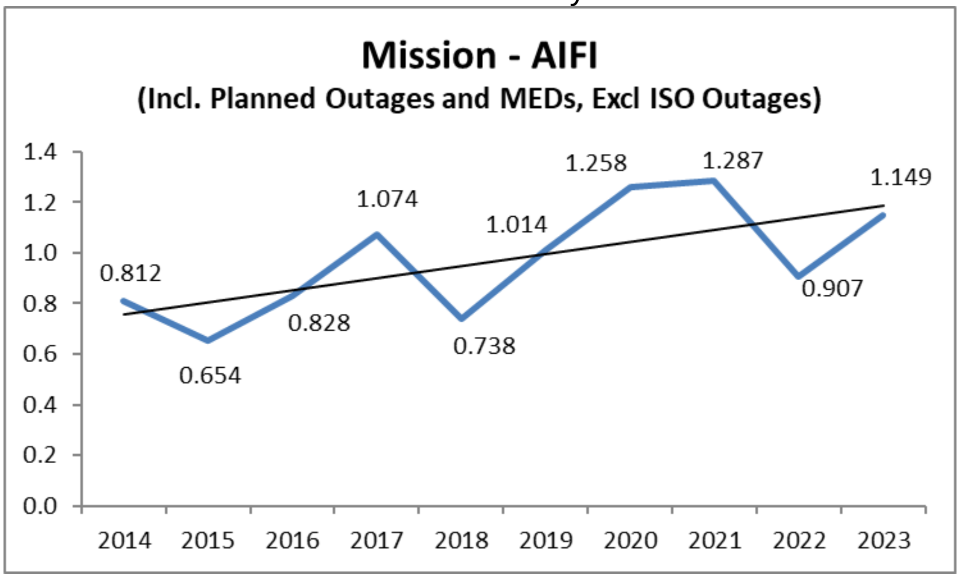


Chart 331: Division Reliability – AIFI Indices

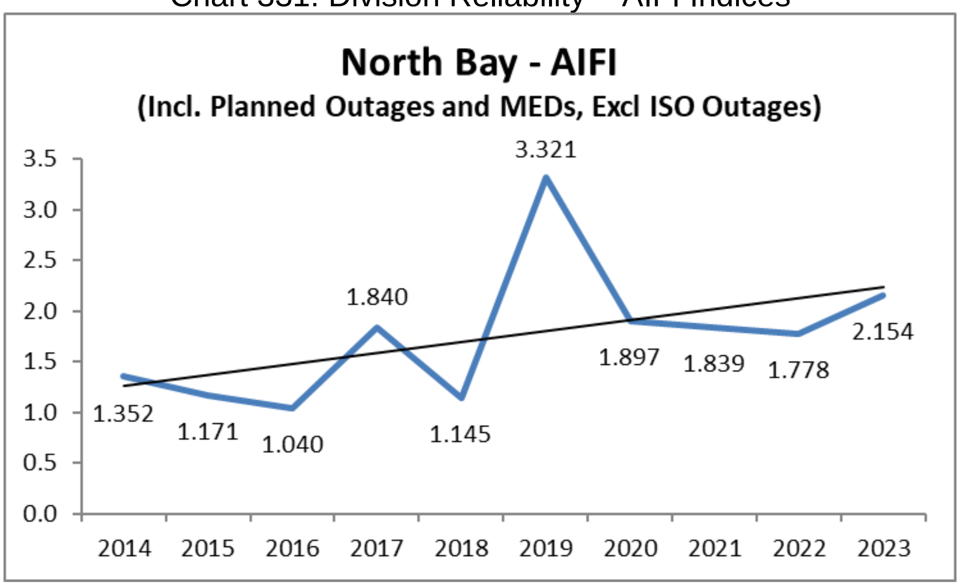


Chart 332: Division Reliability – AIFI Indices

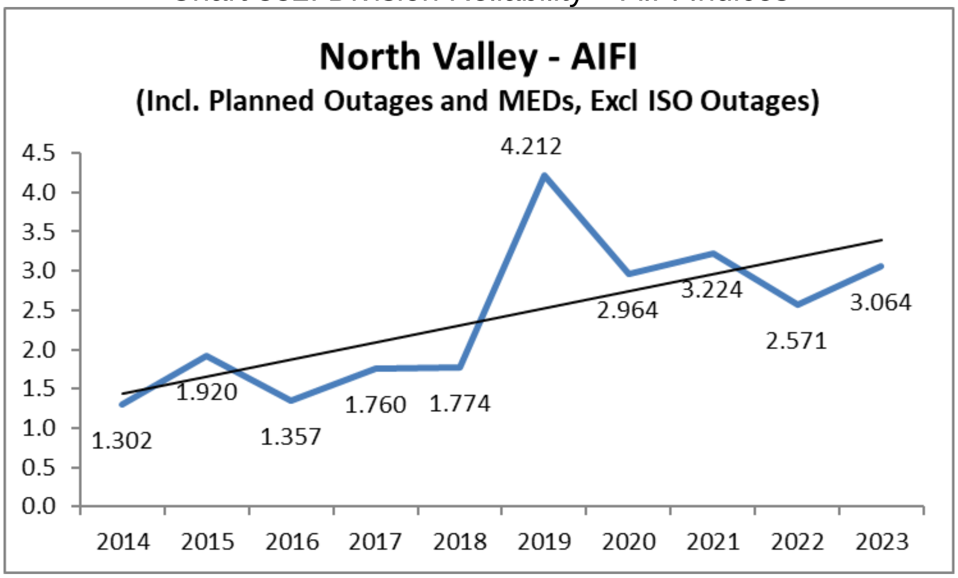


Chart 333: Division Reliability – AIFI Indices

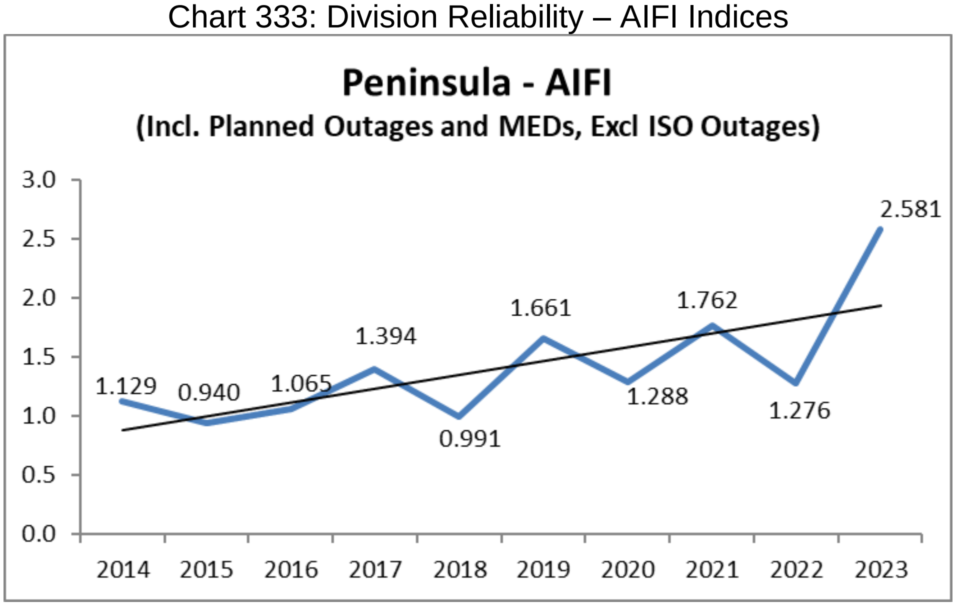


Chart 334: Division Reliability – AIFI Indices

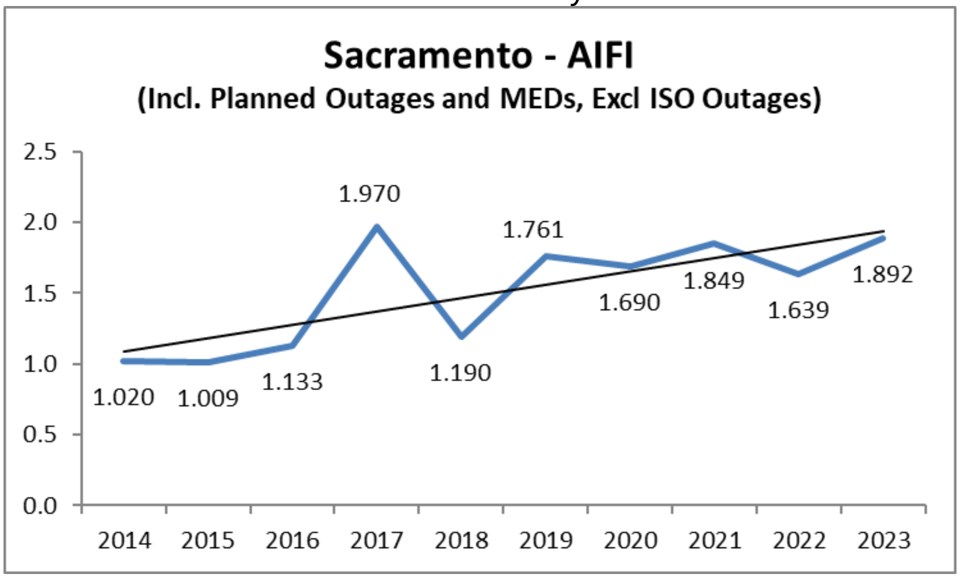


Chart 335: Division Reliability – AIFI Indices

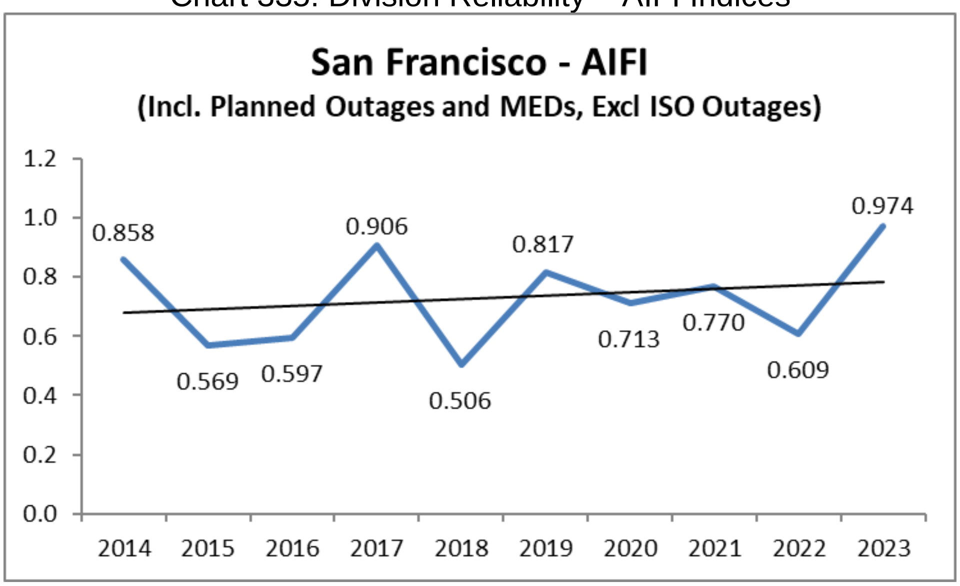


Chart 336: Division Reliability – AIFI Indices

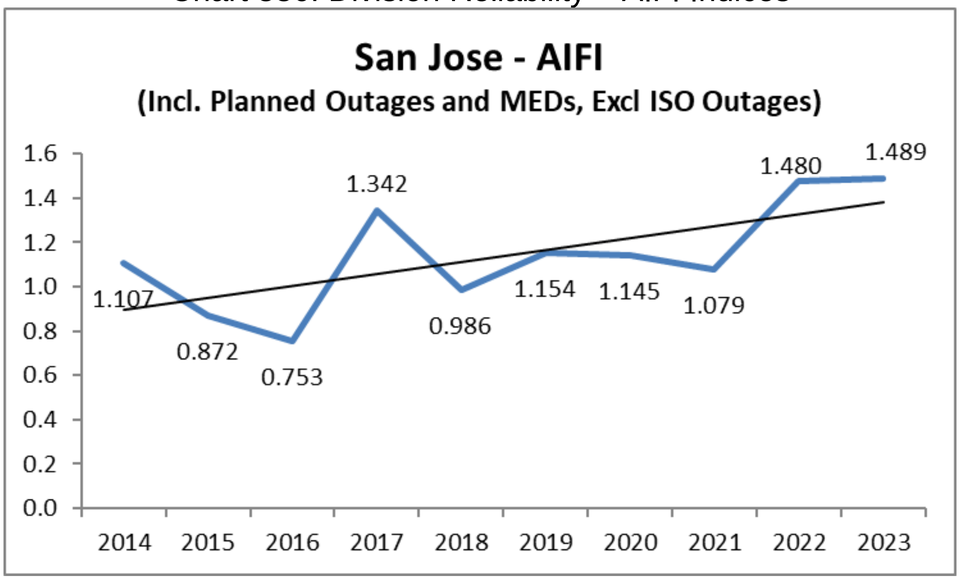


Chart 337: Division Reliability – AIFI Indices

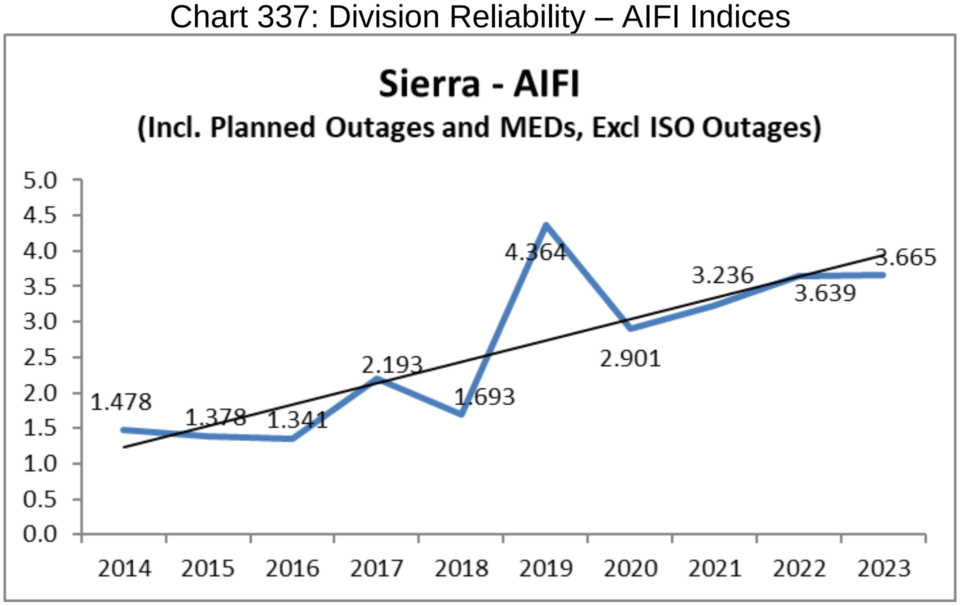


Chart 338: Division Reliability – AIFI Indices

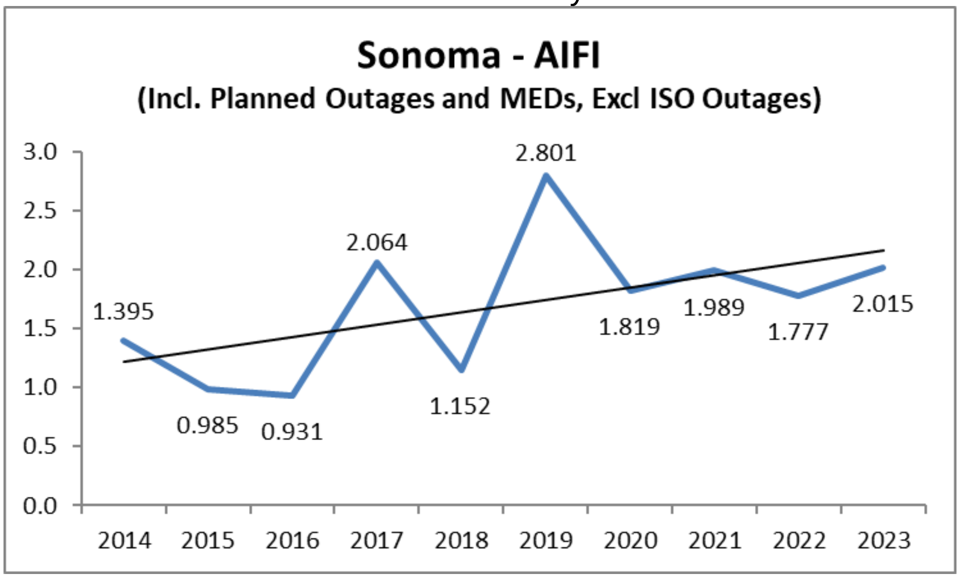


Chart 339: Division Reliability – AIFI Indices

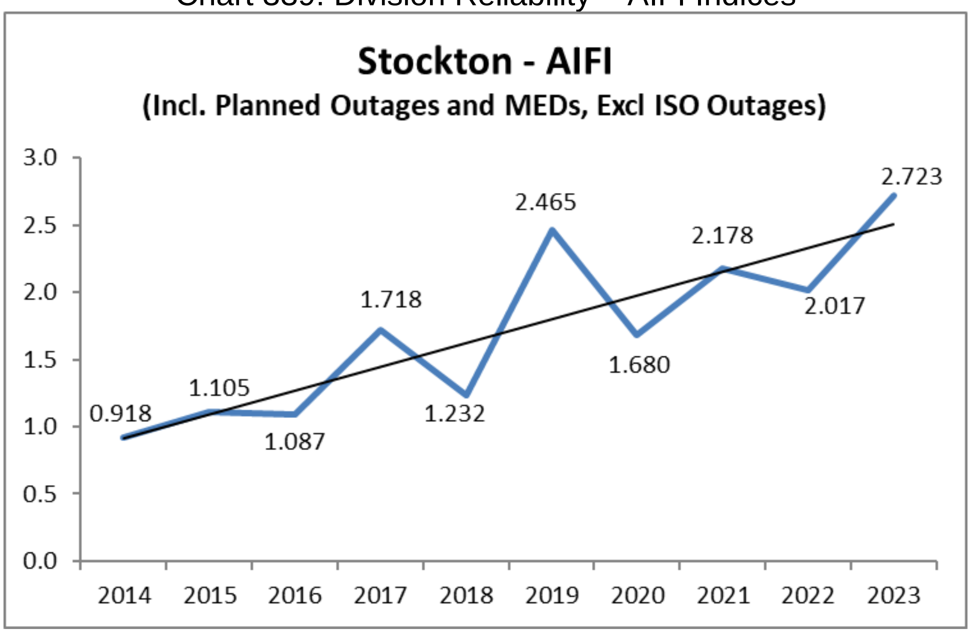


Chart 340: Division Reliability – AIFI Indices

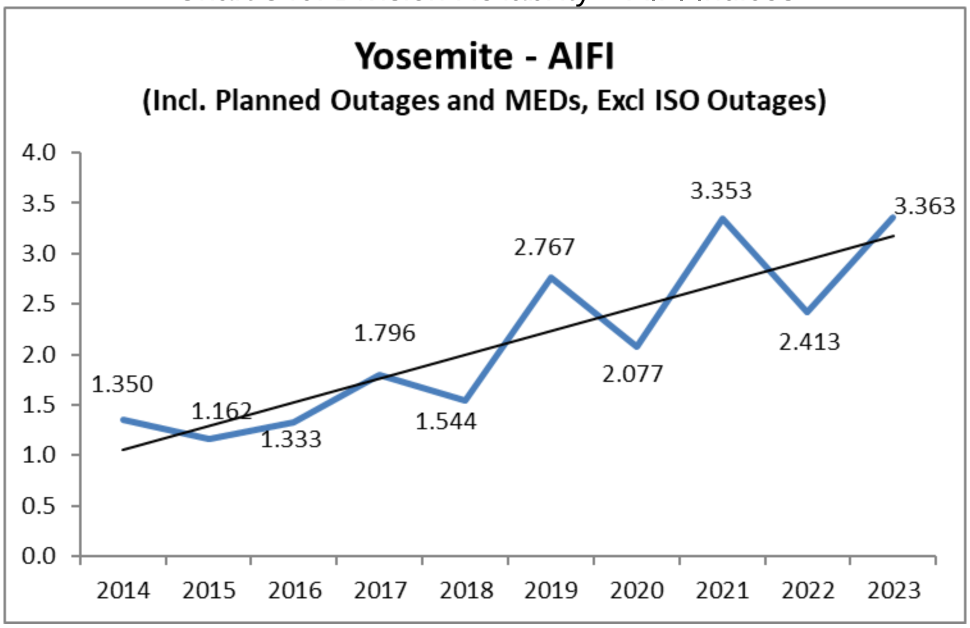
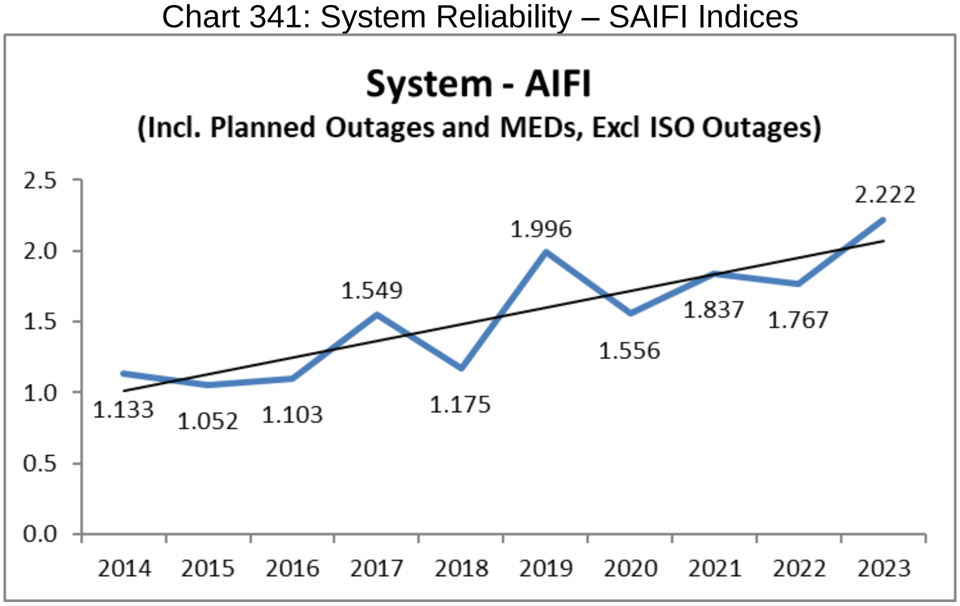


Chart 341: System Reliability – SAIFI Indices



3. MAIFI[11] Performance Results (MED Included)

Chart 342: Division Reliability – MAIFI Indices

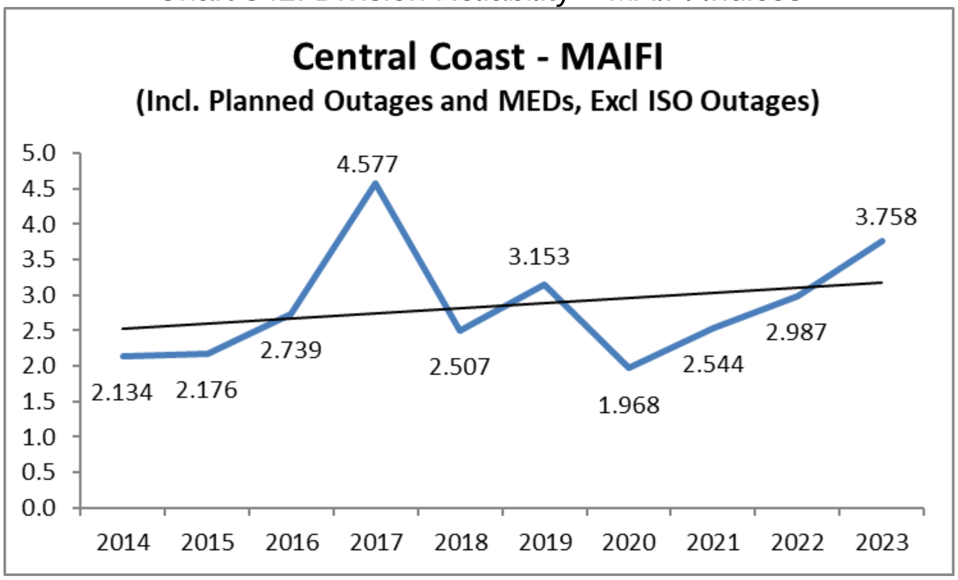
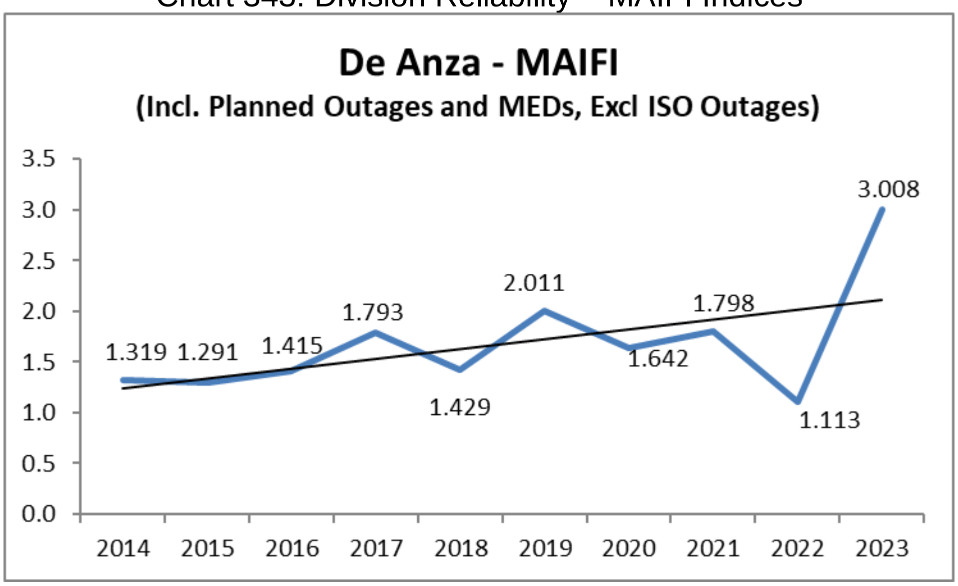


Chart 343: Division Reliability – MAIFI Indices



11 See footnote 4 above.

Chart 344: Division Reliability – MAIFI Indices

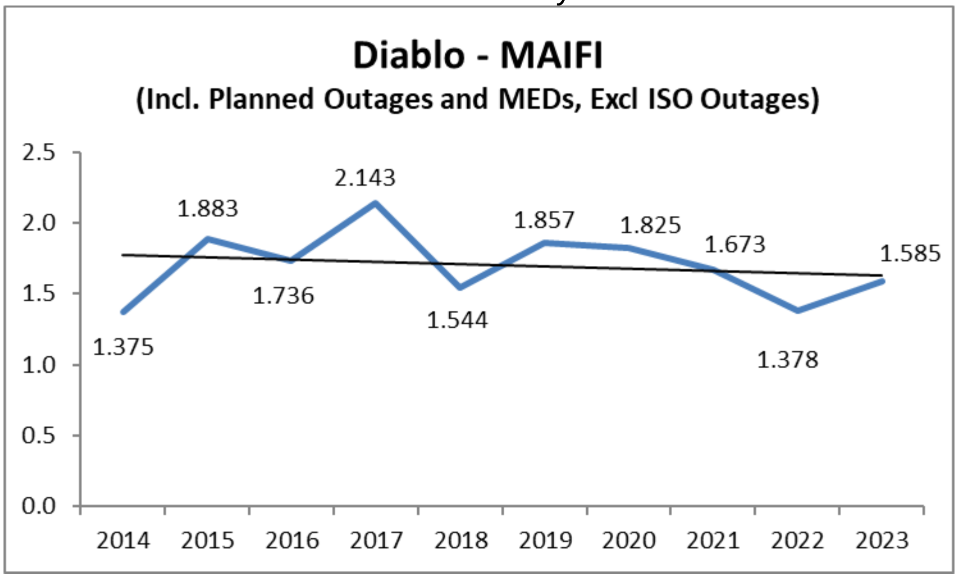


Chart 345: Division Reliability – MAIFI Indices

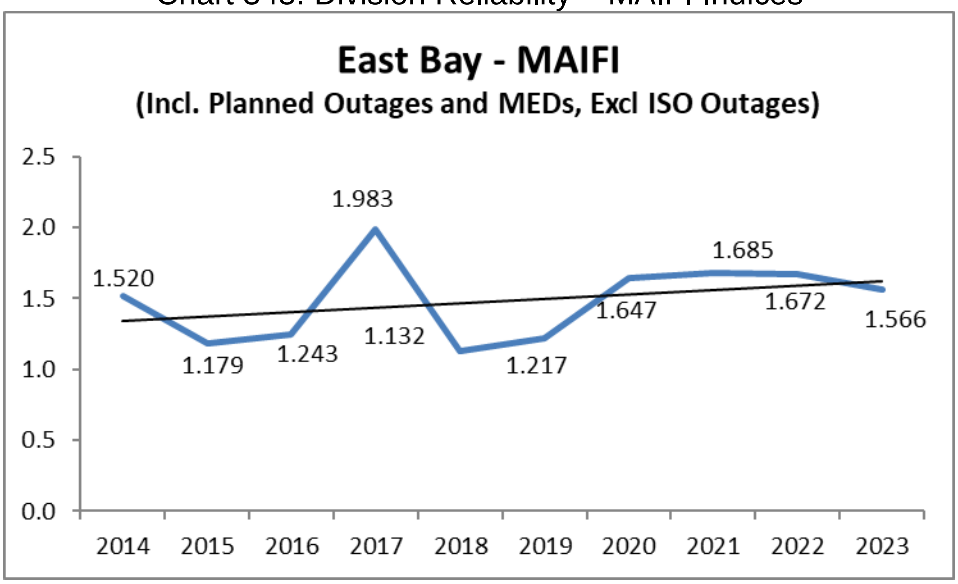


Chart 346: Division Reliability – MAIFI Indices

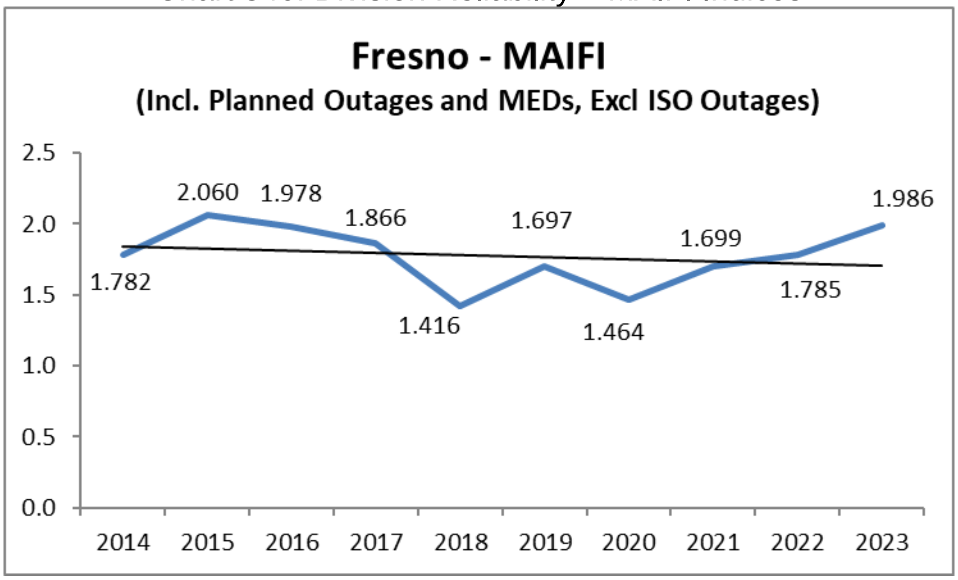


Chart 347: Division Reliability – MAIFI Indices

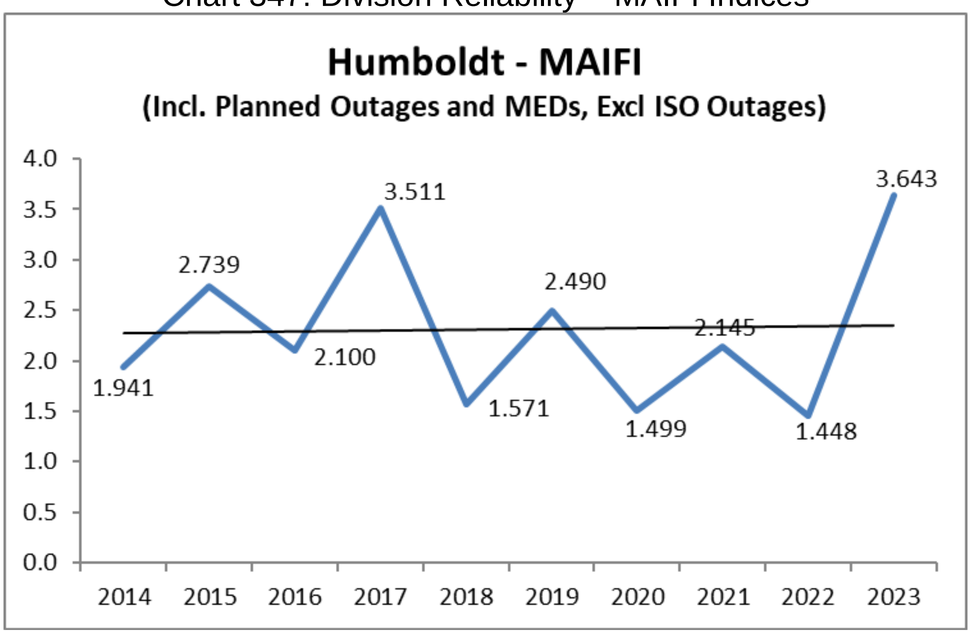


Chart 348: Division Reliability – MAIFI Indices

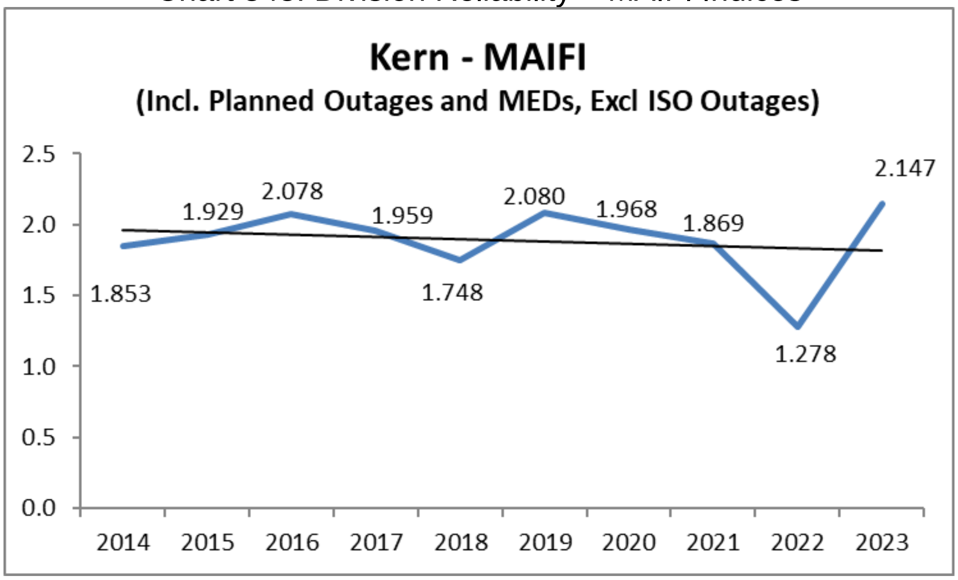


Chart 349: Division Reliability – MAIFI Indices

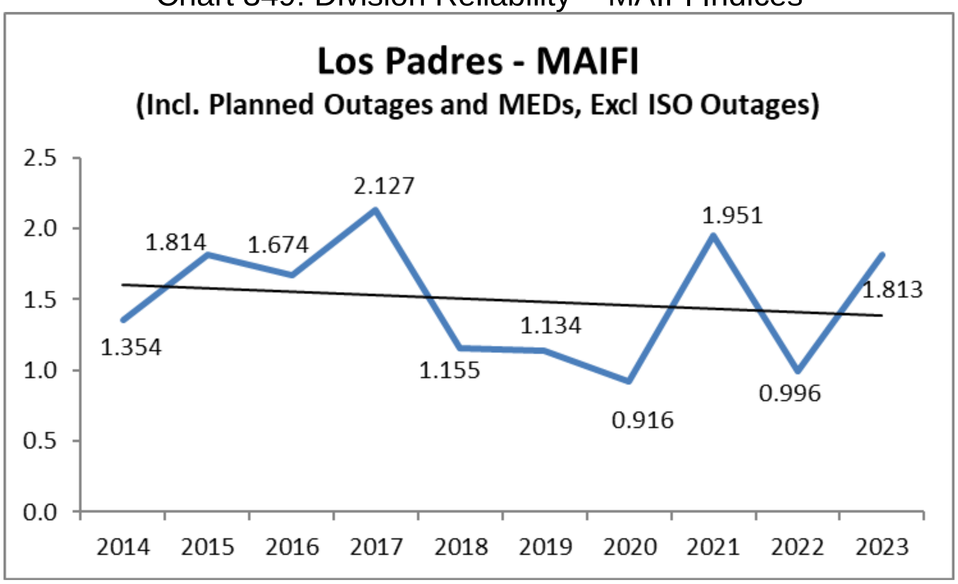


Chart 350: Division Reliability – MAIFI Indices

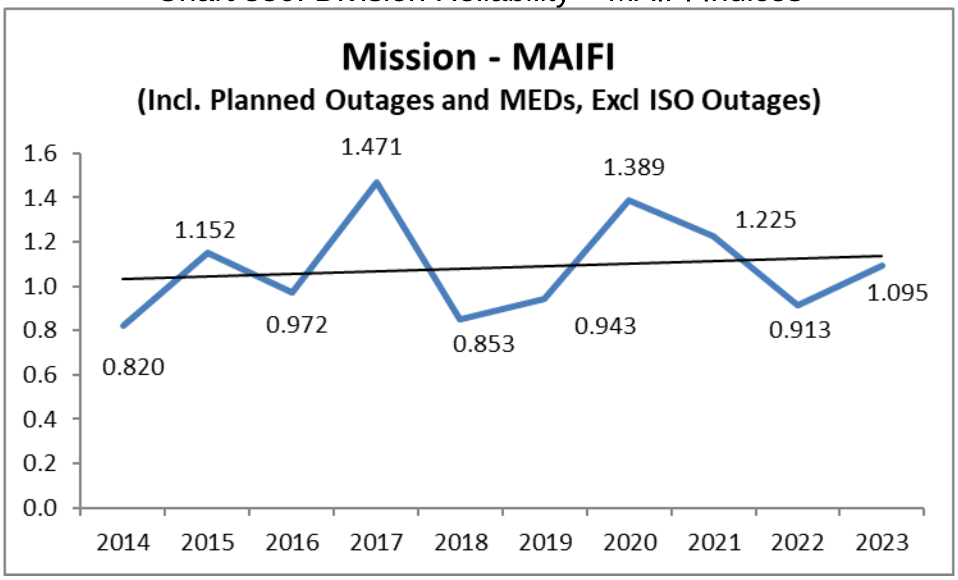


Chart 351: Division Reliability – MAIFI Indices

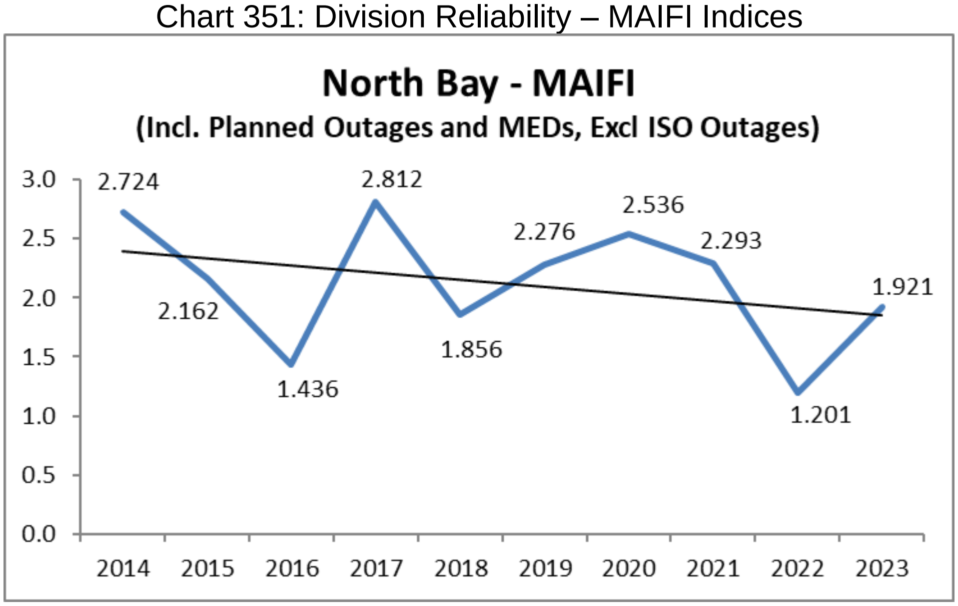


Chart 352: Division Reliability – MAIFI Indices

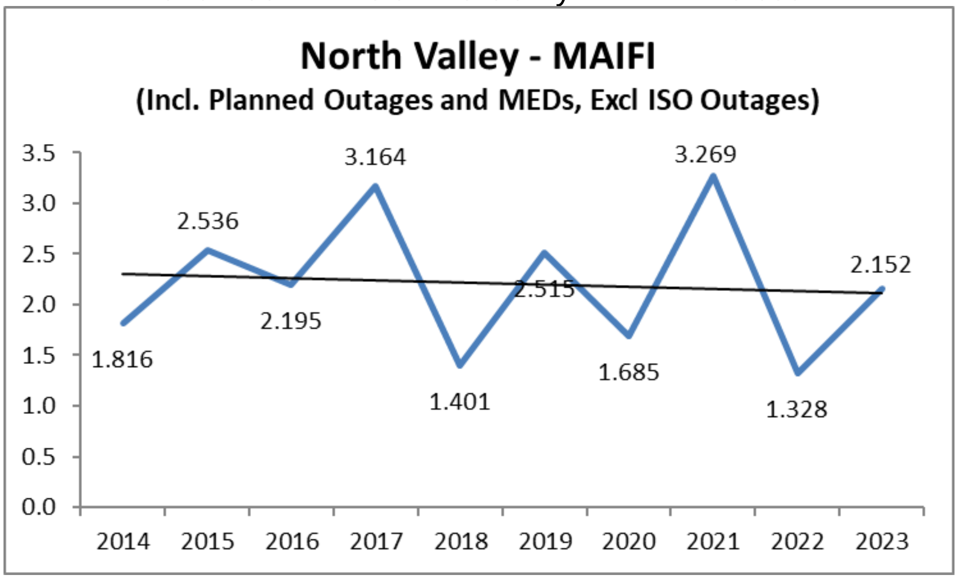


Chart 353: Division Reliability – MAIFI Indices

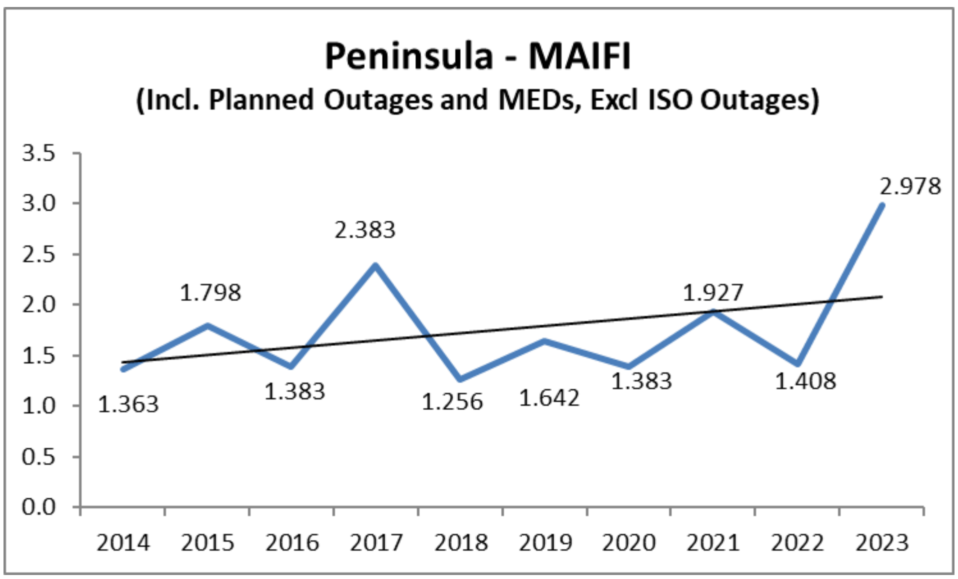


Chart 354: Division Reliability – MAIFI Indices

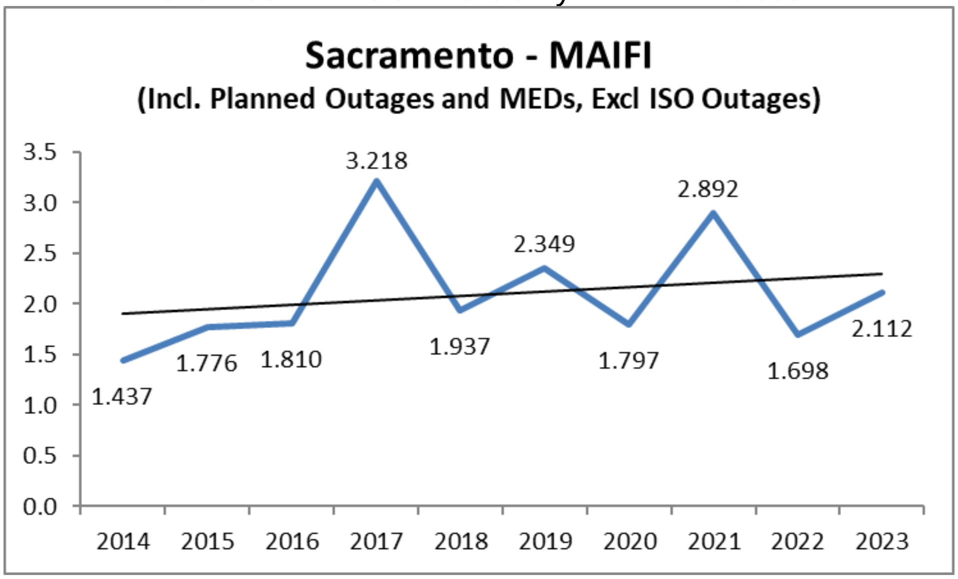


Chart 355: Division Reliability – MAIFI Indices

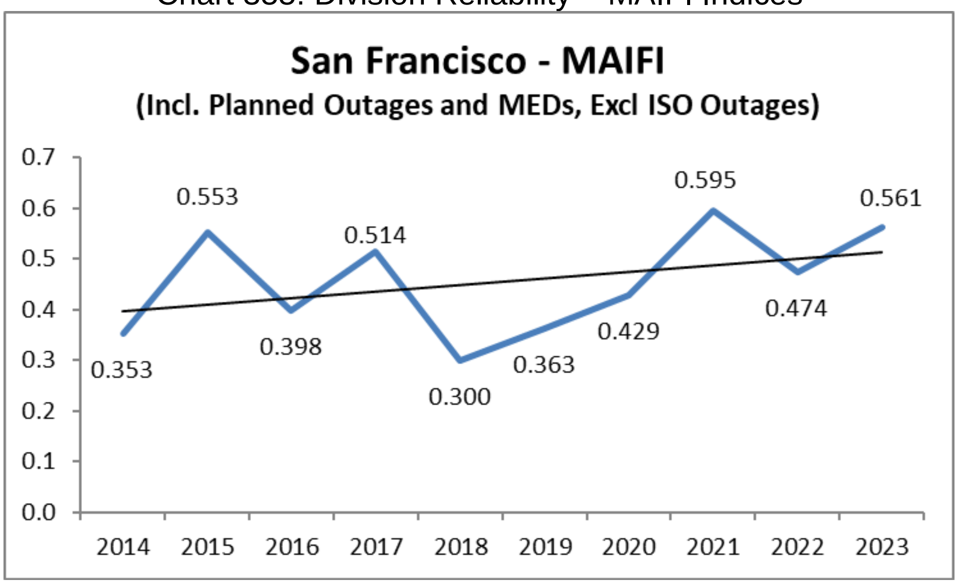


Chart 356: Division Reliability – MAIFI Indices

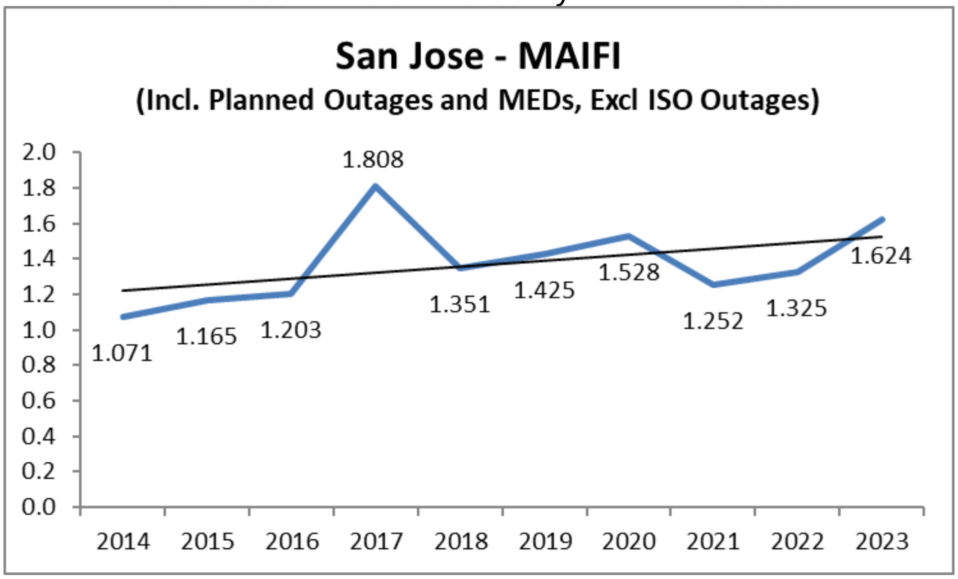


Chart 357: Division Reliability – MAIFI Indices

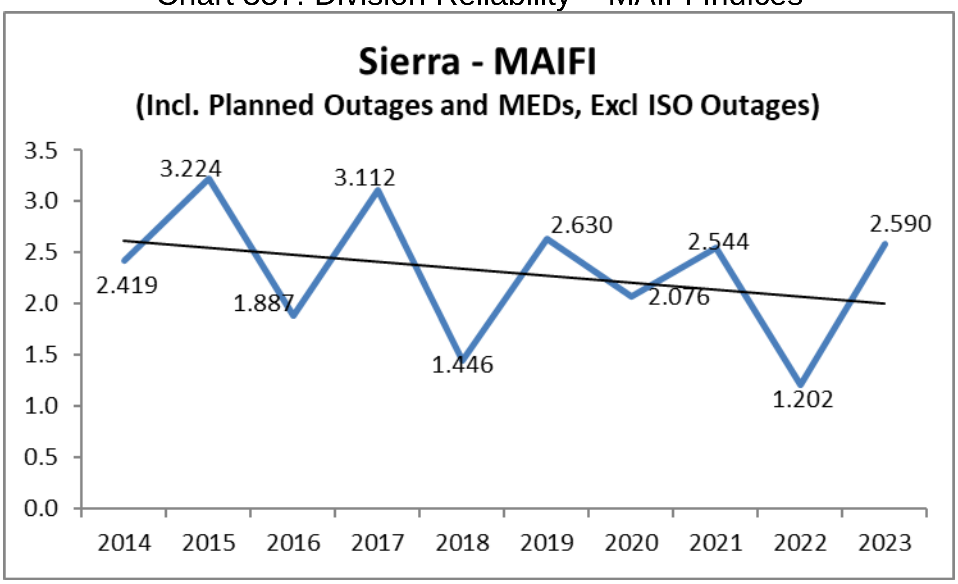


Chart 358: Division Reliability – MAIFI Indices

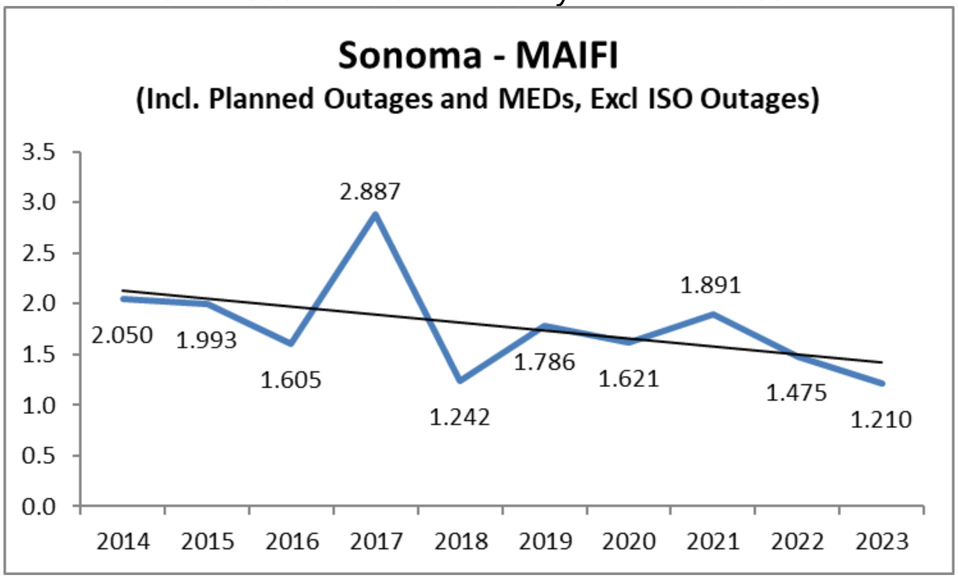


Chart 359: Division Reliability – MAIFI Indices

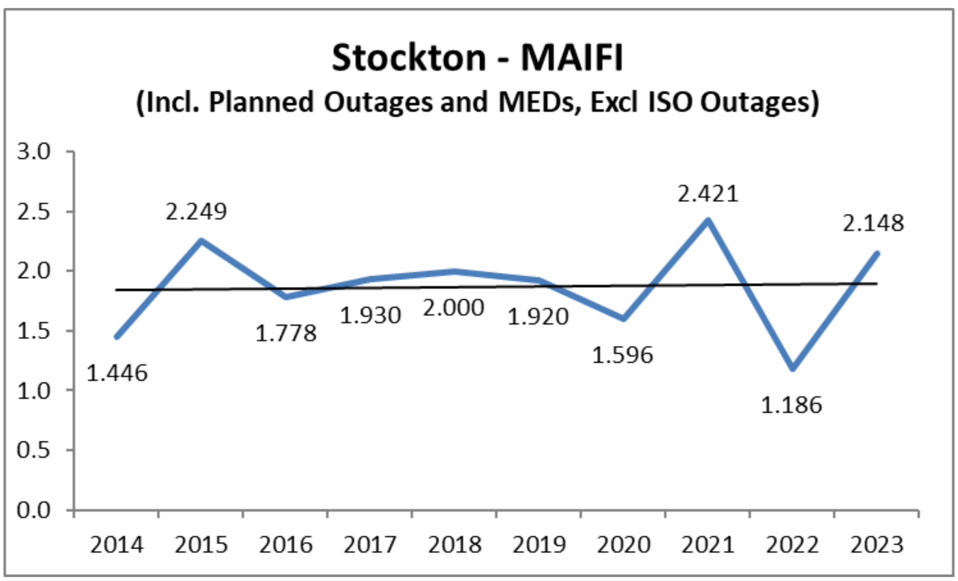


Chart 360: Division Reliability – MAIFI Indices

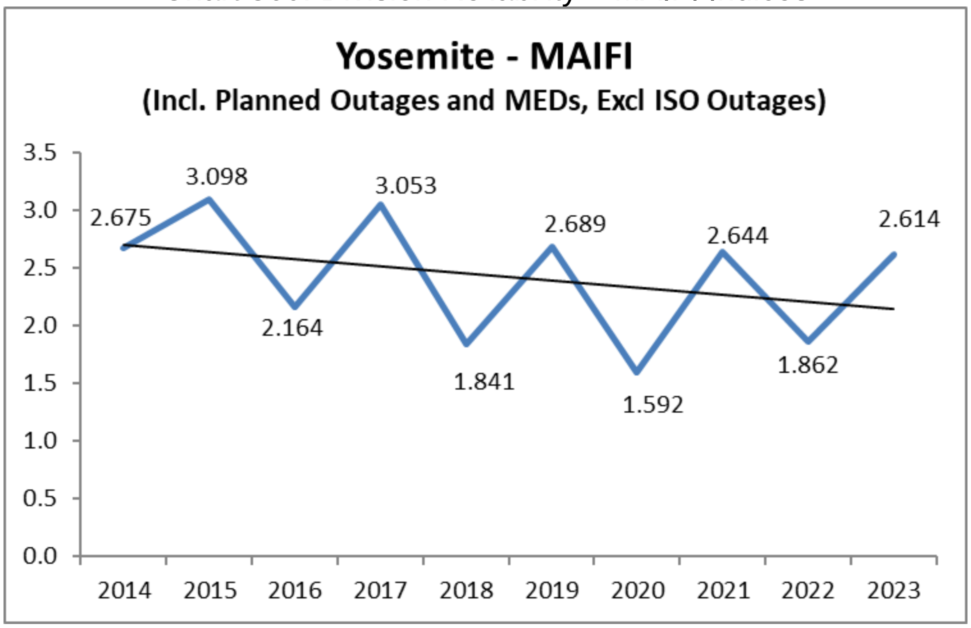
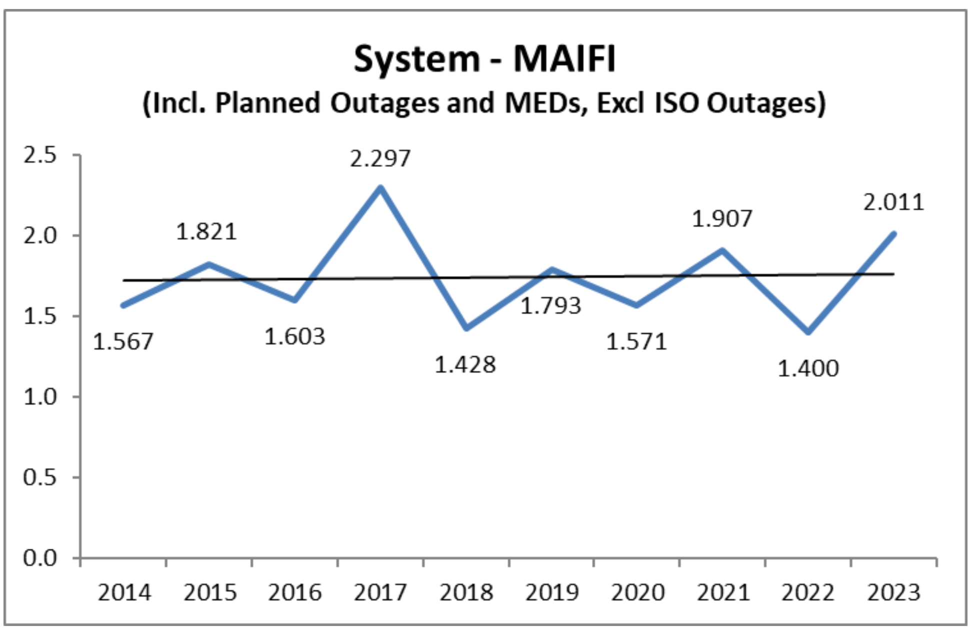


Chart 361: System Reliability – MAIFI Indices



4. CAIDI Performance Results (MED Included)

Chart 362: Division Reliability – CAIDI Indices

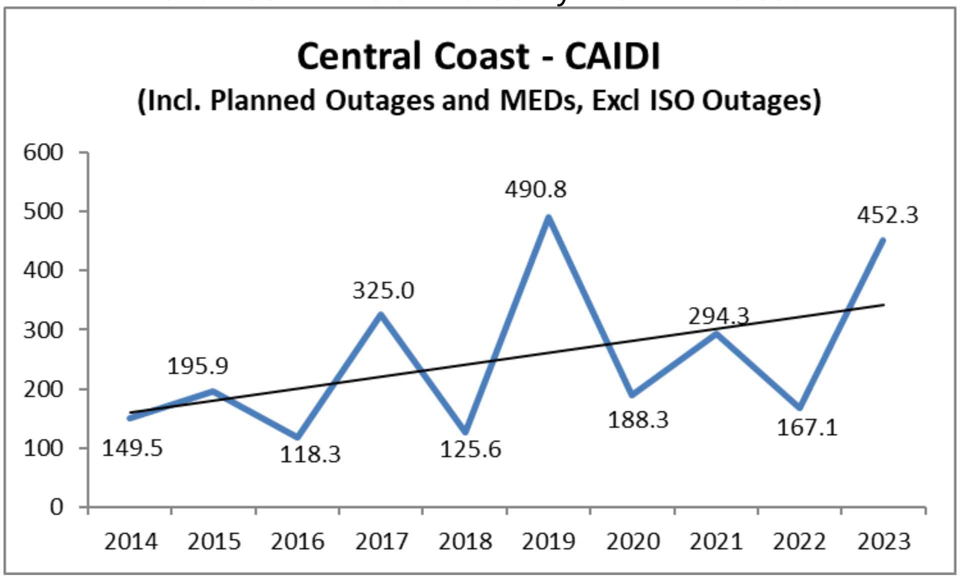


Chart 363: Division Reliability – CAIDI Indices

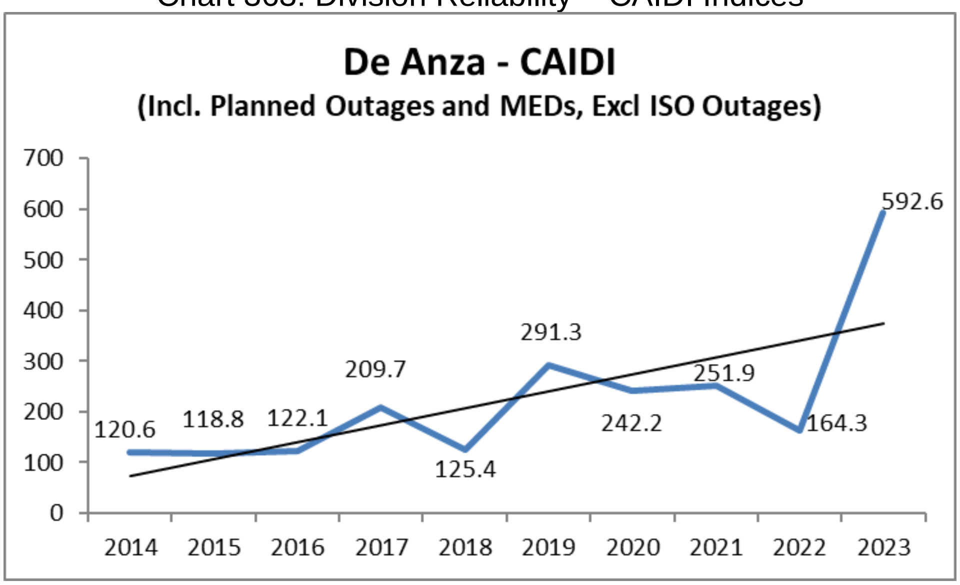


Chart 364: Division Reliability – CAIDI Indices

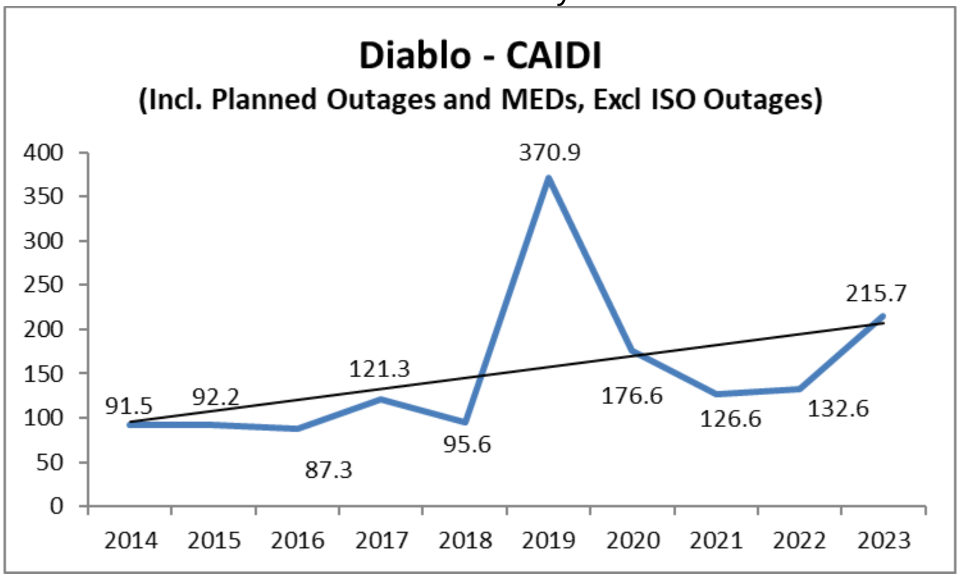


Chart 365: Division Reliability – CAIDI Indices

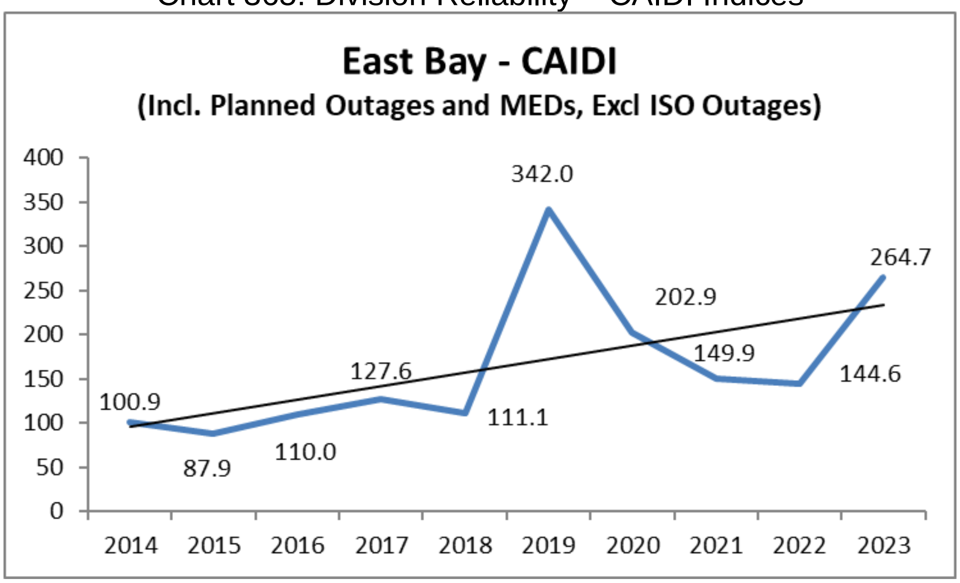


Chart 366: Division Reliability – CAIDI Indices

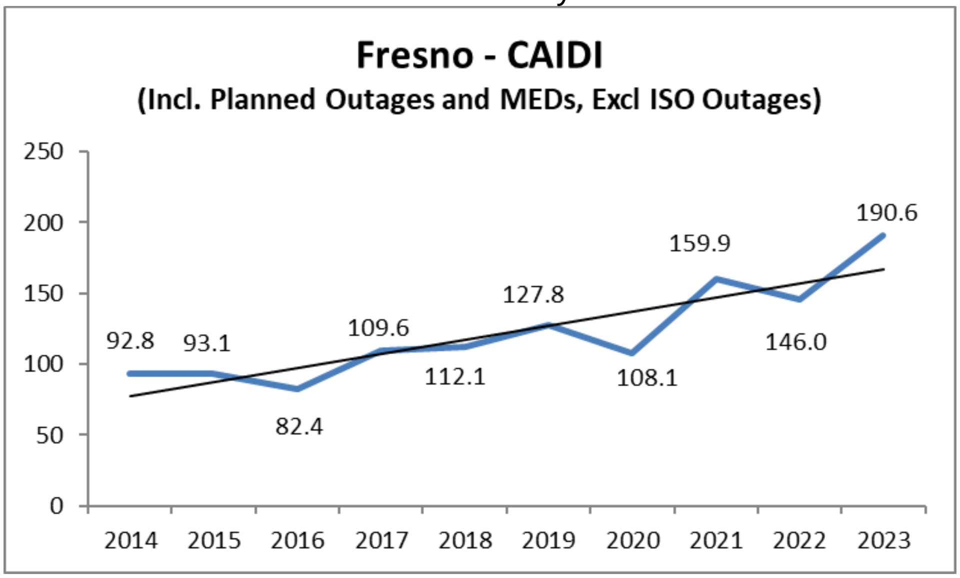


Chart 367: Division Reliability – CAIDI Indices

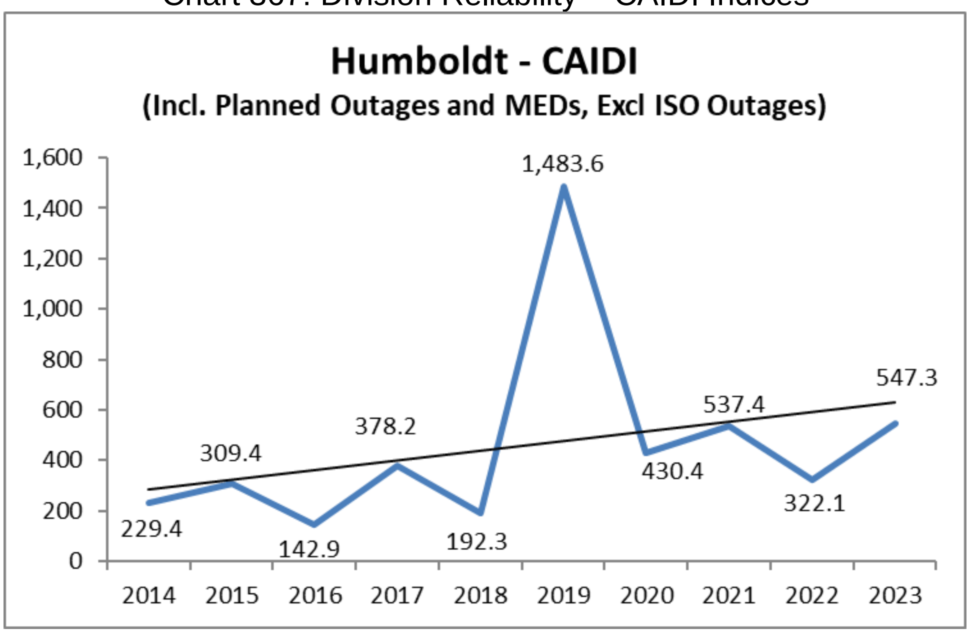


Chart 368: Division Reliability – CAIDI Indices

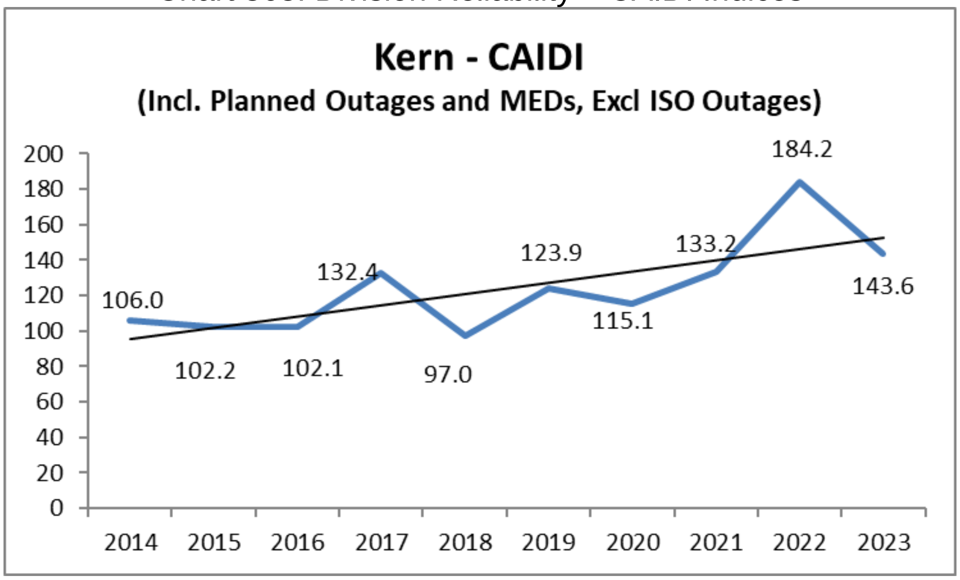


Chart 369: Division Reliability – CAIDI Indices

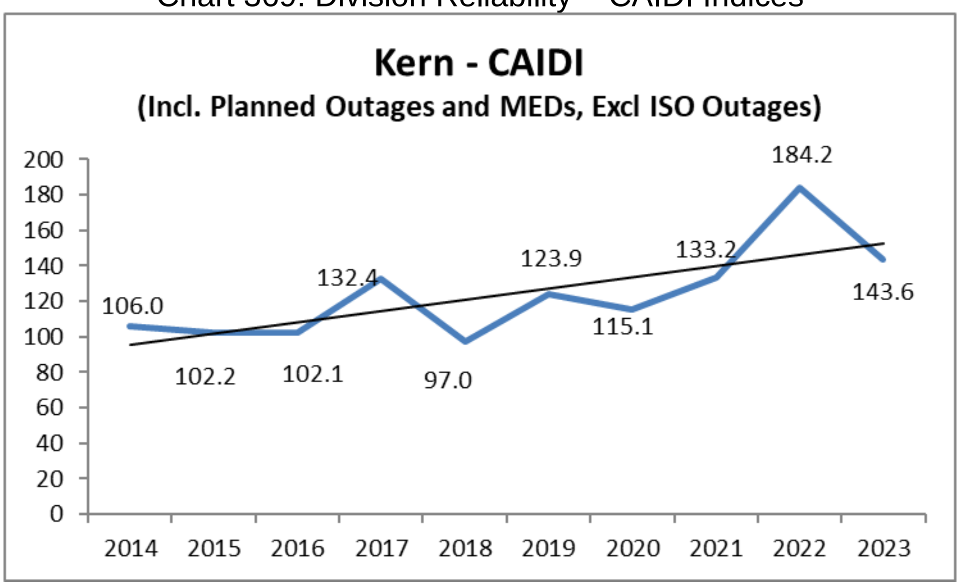


Chart 370: Division Reliability – CAIDI Indices

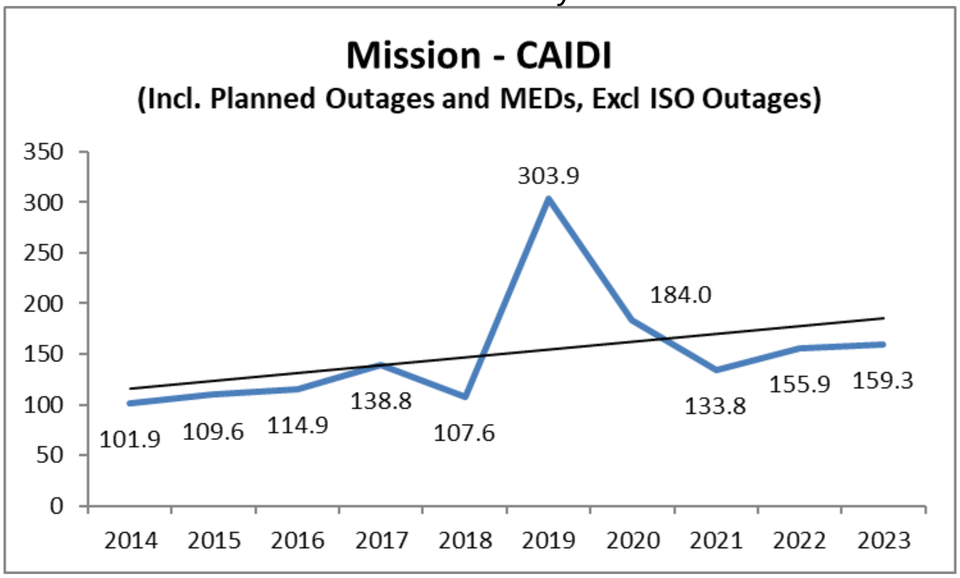


Chart 371: Division Reliability – CAIDI Indices

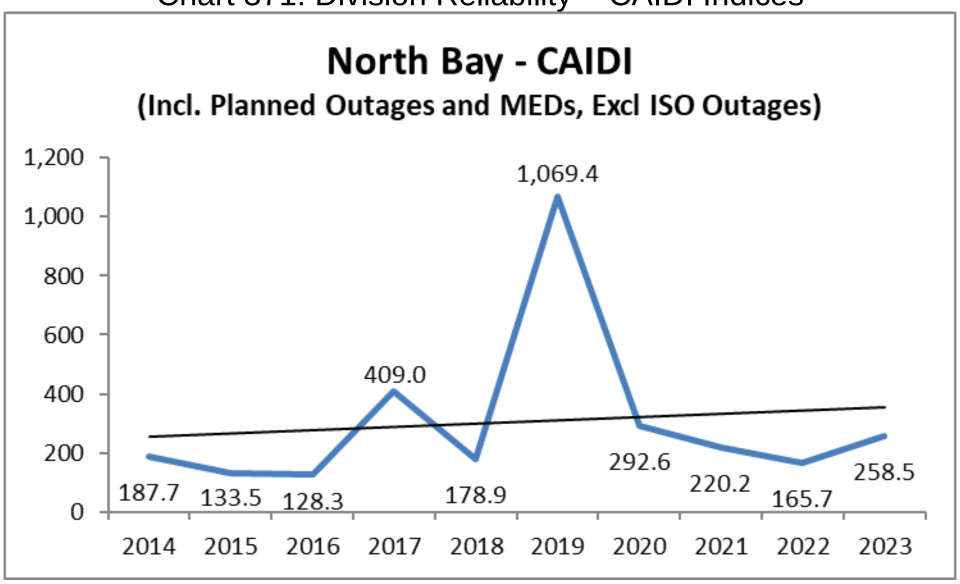


Chart 372: Division Reliability – CAIDI Indices

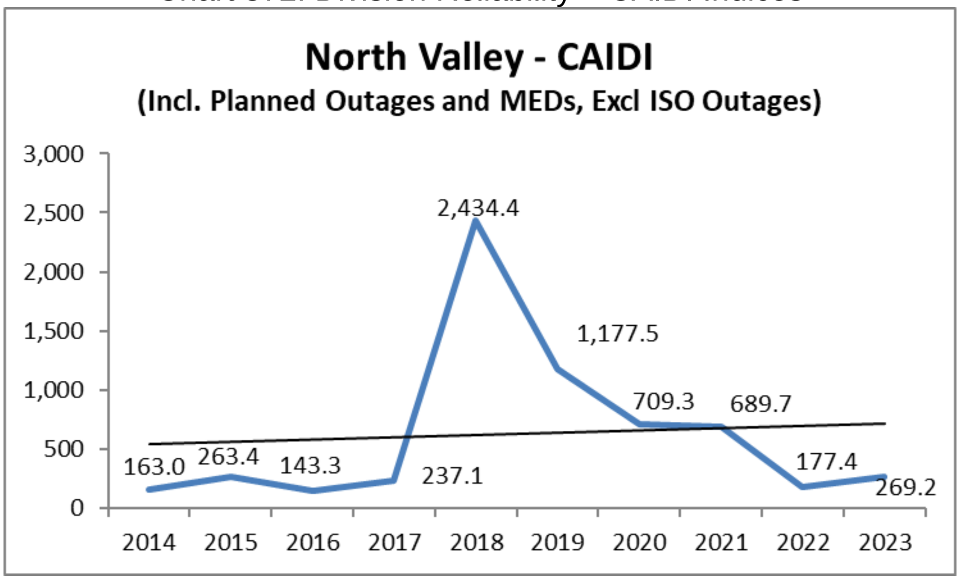


Chart 373: Division Reliability – CAIDI Indices

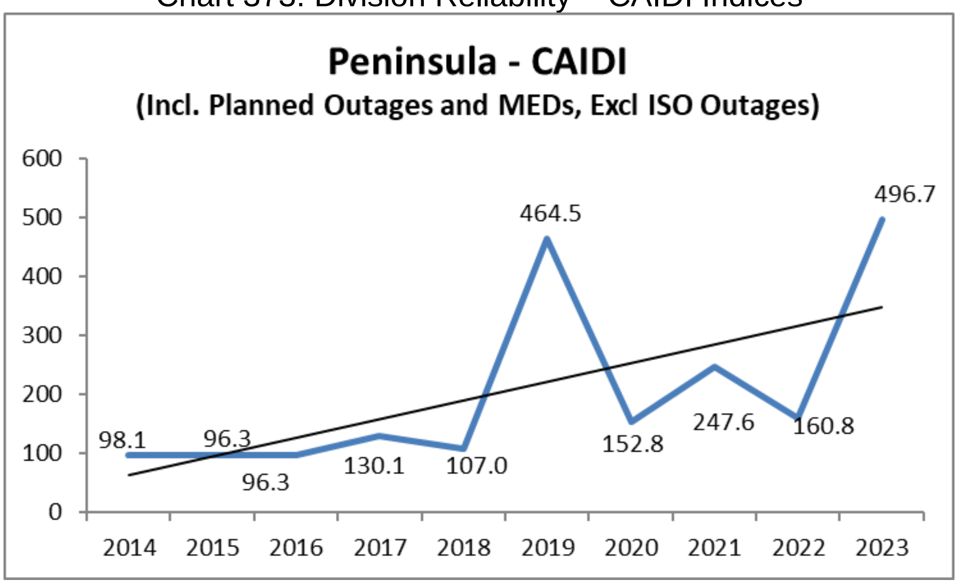


Chart 374: Division Reliability – CAIDI Indices

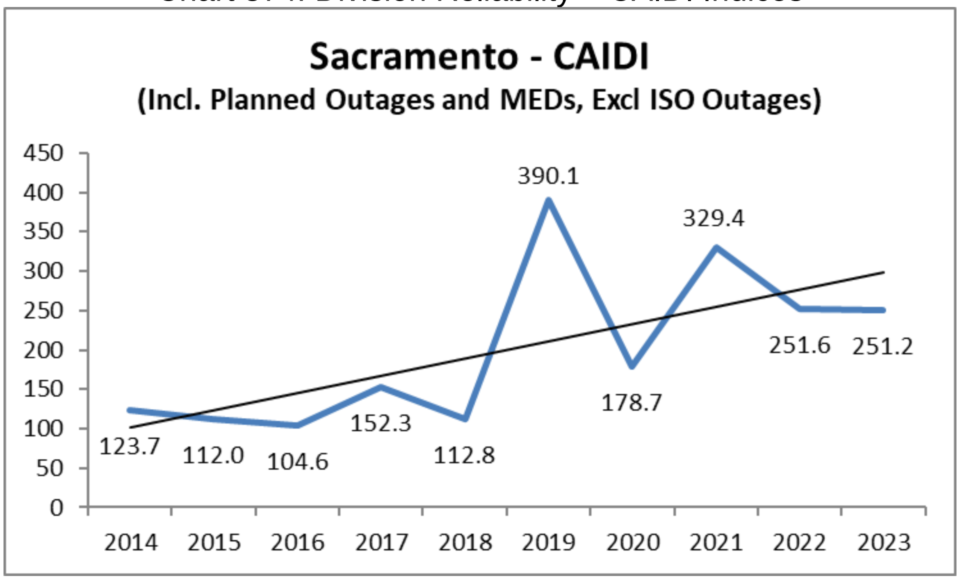


Chart 375: Division Reliability – CAIDI Indices

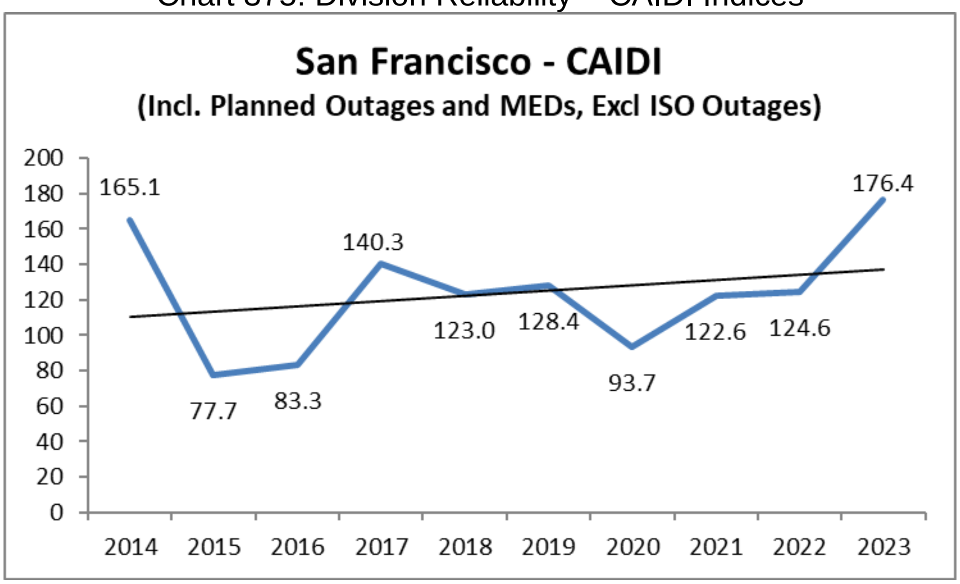


Chart 376: Division Reliability – CAIDI Indices

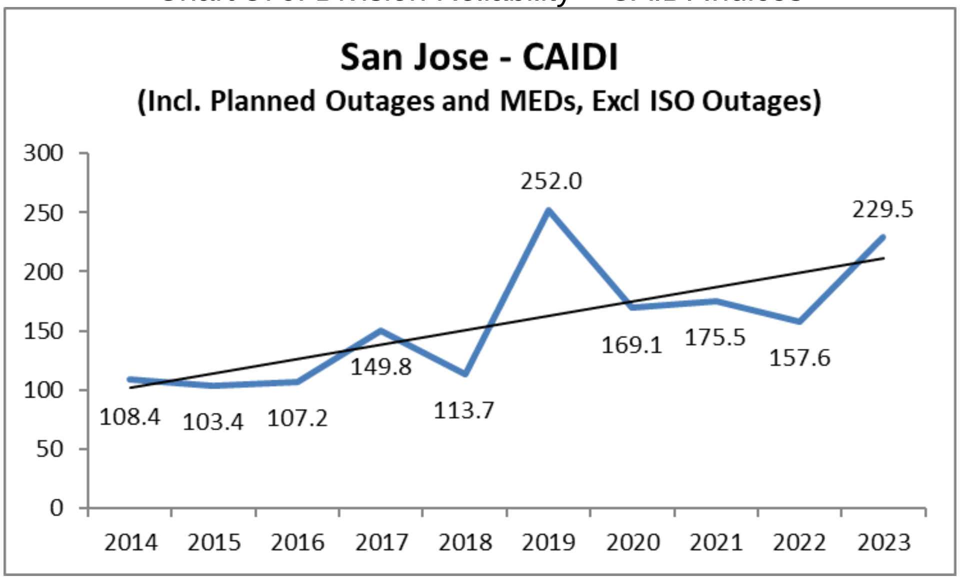


Chart 377: Division Reliability – CAIDI Indices

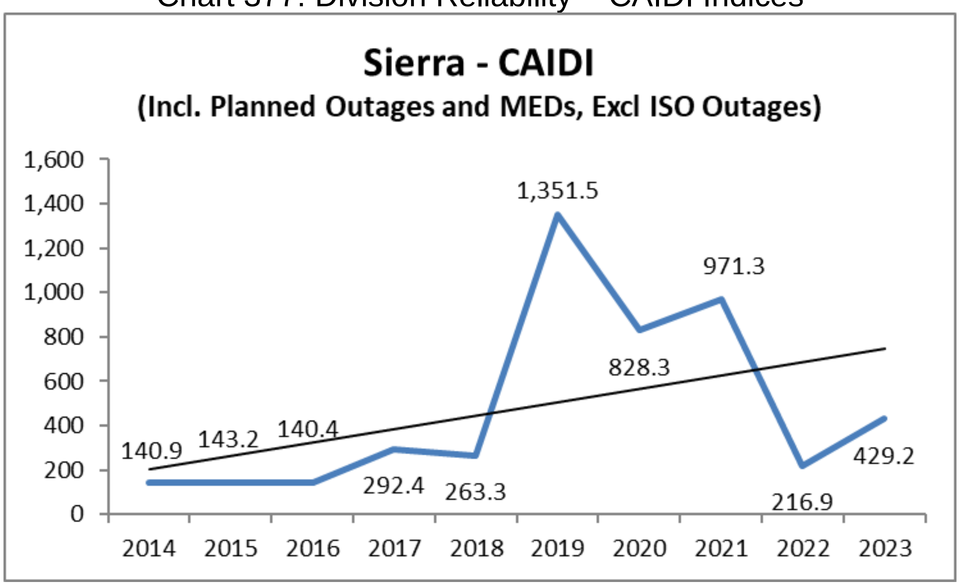


Chart 378: Division Reliability – CAIDI Indices

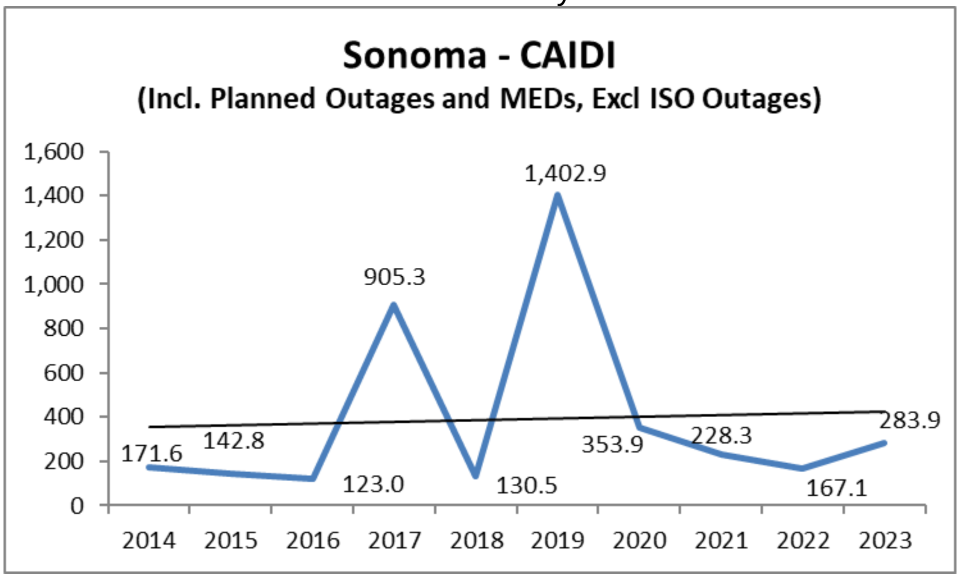


Chart 379: Division Reliability – CAIDI Indices

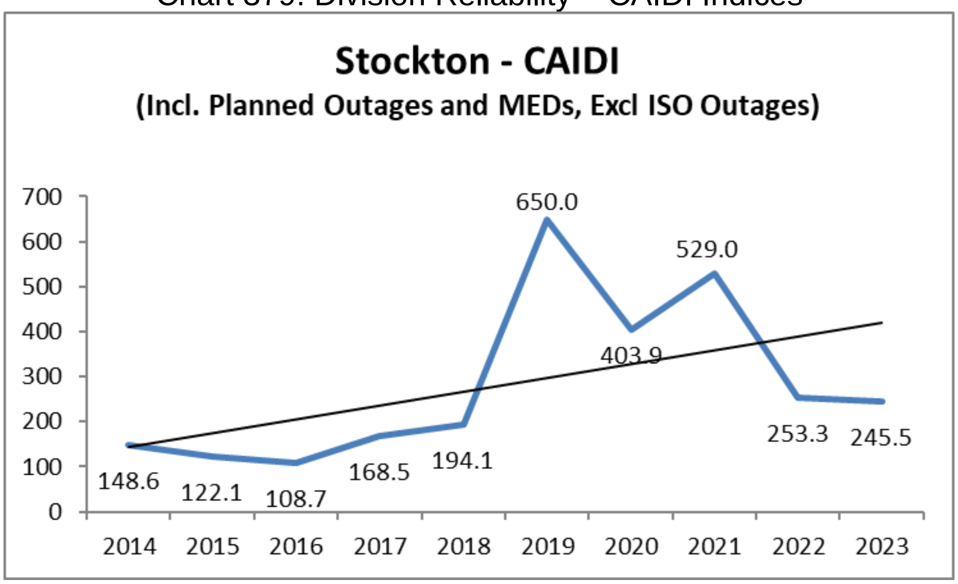


Chart 380: Division Reliability – CAIDI Indices

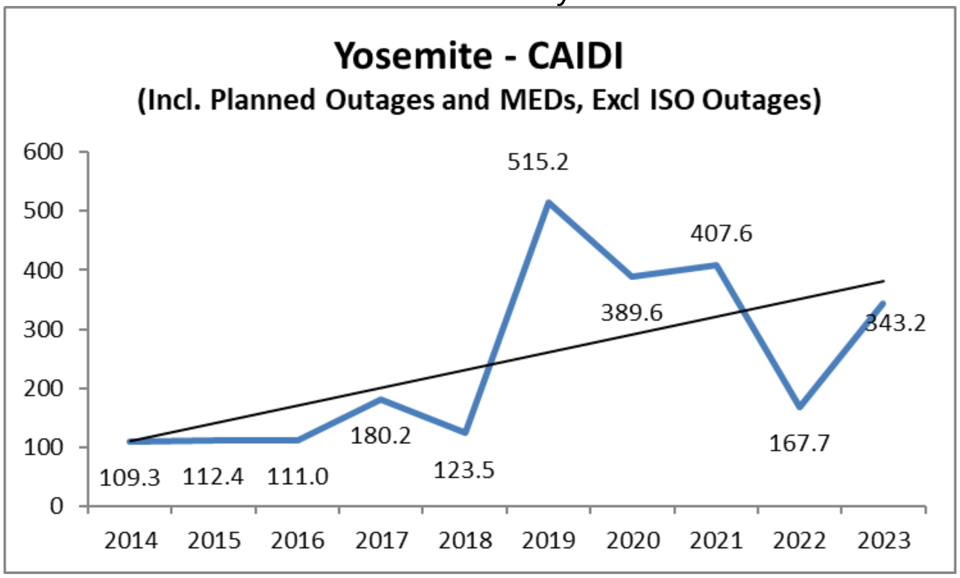
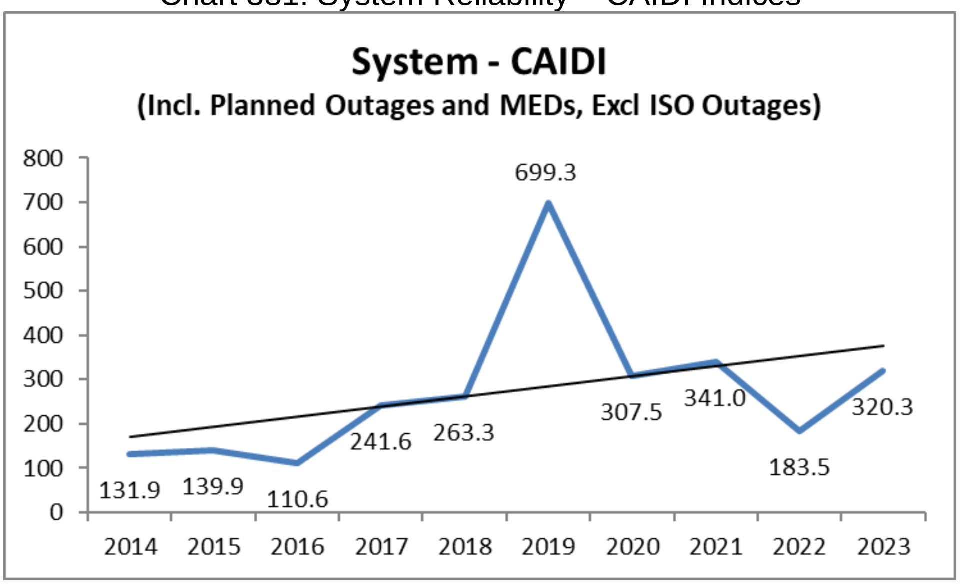


Chart 381: System Reliability – CAIDI Indices



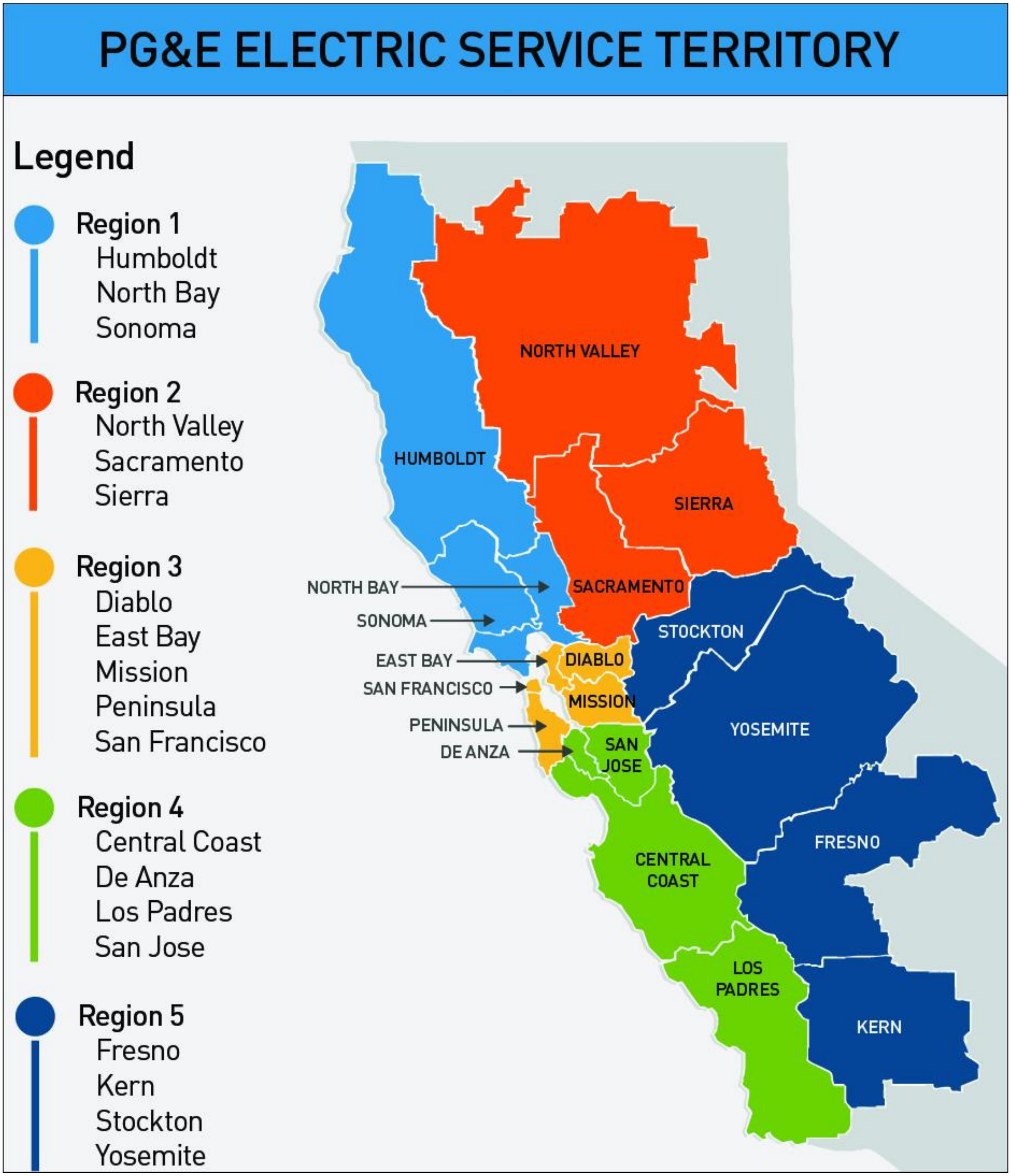
d. The number of planned outages, date, and location of planned outages in each division on an annual basis.

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 2014 through 2023:

Unnumbered Table: Ten Years Planned Outage Summary (2014-2023)

Year	Total Planned Outages
2014	18,026
2015	18,891
2016	20,253
2017	18,912
2018	36,575
2019	31,407
2020	36,115
2021	45,087
2022	43,915
2023	38,879

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 72 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 73 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 22 circuits on each list with eleven circuits appearing on both lists. The net total of 33 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 (2021 - 2023) 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 72 lists the worst performing circuits by outage frequency and indicates the worst AIFI circuit was the Ben Lomond 0401 circuit. The average customer on the Ben Lomond 0401 circuit experienced 10.36 sustained mainline outages per year from 2021-2023 (resulting from the operation of a circuit breaker or an automatic recloser).

Table 73 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 3,629 sustained mainline outage minutes per year from 2021-2023 (resulting from the operation of a circuit breaker or an automatic recloser).

Eleven circuits (Ben Lomond 0401, Ben Lomond 1101, Devils Den 1101, Elk Creek 1101, Garberville 1102, Hoopa 1101, Los Gatos 1106, Los Ositos 2103, Placerville 2106, Paso Mountain 2101, and Willow Creek 1103) appear on both lists. These eleven circuits are highlighted in red within Tables 72 and 73. Additionally, fifteen circuits marked with an asterisk (*) indicates 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-0401*	889	24	96	4	3	14	10.36
2	CENTRAL COAST	BEN LOMOND	BEN LOMOND-1101	744	15	100	0	3	11	10.16
3	DE ANZA	LOS GATOS	LOS GATOS-1106*	1619	74	96	4	2 & 3	17	7.98
4	KERN	POSO MOUNTAIN	POSO MOUNTAIN-2101	147	59	100	0	1 & 2	17	7.97
5	HUMBOLDT	GARBERVILLE	GARBERVILLE-1102	1818	142	94	6	1 & 2	27	7.55
6	CENTRAL COAST	BIG TREES	BIG TREES-0402	868	17	100	0	1, 2, & 3	3	7.36
7	LOS PADRES	OILFIELDS	OILFIELDS-1103	2539	169	83	17	1 & 2	14	6.69
8	STOCKTON	ALPINE	ALPINE-1101*	281	8	12	88	1	7	6.51
9	HUMBOLDT	WILLOW CREEK	WILLOW CREEK-1103	1548	88	88	12	2 & 3	11	6.48
10	SACRAMENTO	GRAND ISLAND	GRAND ISLAND-2224	622	66	98	2	1	11	6.43
11	CENTRAL COAST	CAMP EVERS	CAMP EVERS-2105	3731	82	96	4	1, 2, & 3	24	6.39
12	HUMBOLDT	GUALALA	GUALALA-1112	1295	53	89	11	1 & 2	7	6.37
13	CENTRAL COAST	CASSERLY	CASSERLY-0401	215	3	100	0	1	6	6.33
14	FRESNO	DEVILS DEN	DEVILS DEN-1101	68	34	100	0	1	6	5.79
15	NORTH VALLEY	ELK CREEK	ELK CREEK-1101	901	175	91	9	1 & 2	16	5.76
16	SIERRA	PLACERVILLE	PLACERVILLE-2106	5344	287	95	5	1, 2, & 3	18	5.70
17	LOS PADRES	TEMPLETON	TEMPLETON-2113*	5548	352	92	8	1, 2, & 3	19	5.65
18	CENTRAL COAST	LOS OSITOS	LOS OSITOS-2103	845	110	94	6	1 & 2	14	5.65
19	HUMBOLDT	GARBERVILLE	GARBERVILLE-1101*	1014	148	98	2	1 & 2	16	5.64
20	HUMBOLDT	HOOPA	HOOPA-1101	2098	142	92	8	1, 2, & 3	19	5.60
21	HUMBOLDT	FRUITLAND	FRUITLAND-1141	385	26	100	0	1 & 2	7	5.49
22	YOSEMITE	MARIPOSA	MARIPOSA-2102	3332	262	98	2	1, 2, & 3	14	5.38

Table 72

#	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	1818	142	94	6	1 & 2	27	3629
2	NORTH VALLEY	PIT NO 5	PIT NO 5-1101*	123	27	89	11	2	9	3459
3	FRESNO	BALCH NO 1	BALCH NO 1-1101	27	15	100	0	2	2	3252
4	DE ANZA	LOS GATOS	LOS GATOS-1106*	1619	74	96	4	2 & 3	17	3024
5	KERN	POSO MOUNTAIN	POSO MOUNTAIN-2101	147	59	100	0	1 & 2	17	2859
6	HUMBOLDT	HOOPA	HOOPA-1101*	2098	142	92	8	1, 2, & 3	19	2447
7	HUMBOLDT	WILLOW CREEK	WILLOW CREEK-1103*	1548	88	88	12	2 & 3	11	2225
8	NORTH VALLEY	ELK CREEK	ELK CREEK-1101*	901	175	91	9	1 & 2	16	2129
9	PENINSULA	WOODSIDE	WOODSIDE-1101	1806	74	84	16	1, 2, & 3	7	2124
10	FRESNO	DEVILS DEN	DEVILS DEN-1101	68	34	100	0	1	6	2072
11	NORTH VALLEY	CHALLENGE	CHALLENGE-1101*	706	49	98	2	2 & 3	8	2022
12	CENTRAL COAST	BEN LOMOND	BEN LOMOND-0401*	889	24	96	4	3	14	2014
13	SIERRA	ALLEGHANY	ALLEGHANY-1102	165	18	94	6	3	4	1999
14	SIERRA	ALLEGHANY	ALLEGHANY-1101*	1078	78	97	3	1, 2, & 3	12	1909
15	CENTRAL COAST	FELTON	FELTON-0401	49	4	75	25	1, 2, & 3	1	1908
16	SIERRA	PLACERVILLE	PLACERVILLE-2106	5344	287	95	5	1, 2, & 3	18	1720
17	CENTRAL COAST	BEN LOMOND	BEN LOMOND-1101	744	15	100	0	3	11	1718
18	CENTRAL COAST	LOS OSITOS	LOS OSITOS-2103*	845	110	94	6	1 & 2	14	1715
19	NORTH BAY	SILVERADO	SILVERADO-2104*	3792	155	88	12	1, 2, & 3	19	1704
20	KERN	POSO MOUNTAIN	POSO MOUNTAIN-2103	26	20	100	0	1 & 2	5	1702
21	NORTH VALLEY	BUCKS CREEK	BUCKS CREEK-1101	5	5	100	0	2 & 3	0	1687
22	YOSEMITE	CURTIS	CURTIS-1703	3888	206	96	4	1, 2, & 3	10	1559

Table 73

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 to 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. PG&E completed 342, 210, and 332 miles of system hardening work in HFTD and HFRA areas in 2020, 2021, and 2022 respectively as part of the PG&E's Wildfire Mitigation Plan. In 2023-2026, PG&E overall system hardening mileage forecasts is approximately 2,008 circuit miles.

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. The VM program will continue to be a multi-year effort to address the approximately 24,911 overhead distribution circuit miles in the HFTD areas.

PG&E is conducting additional efforts for minimizing 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, 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.

In addition to the Wildfire Mitigation Plan, internal reviews of unplanned outages are performed on a regular basis through 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 72 and 73, 18 and 21 of PG&E's worst performing AIFI and AIDI circuits respectively are EPSS 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 (2019-2021) average AIDI score of 1,343.
        - Three-year (2020-2022) average AIDI score of 1,627.
        - Three-year (2021-2023) average AIDI score of 1,909.
    ii. A historical record of the metric:
        - AIDI 2019 = 2,231
        - AIDI 2020 = 330
        - AIDI 2021 = 1,468
        - AIDI 2022 = 3,077
        - AIDI 2023 = 1,178
    iii. An explanation of why it was on the deficiency list again:

        The Alleghany 1101 circuit provides electric service to approximately 1,078 customers in Sierra County through 78 circuit-miles of primarily overhead conductor. 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 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 including 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 overall 2019 AIDI performance was driven by a single unknown caused event. Securing helicopter resources to perform visual patrols of the mainline sections inaccessible by foot was the primary driver in the elevated outage restoration time. The elevated 2022 outage activity was primarily driven by vegetation caused outages, contributing over half of the AIDI performance. The 2023 outage activity is driven by equipment failures, particularly overhead conductor.

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 2024, the current plan is targeting approximately 5.7 miles to be hardened/undergrounded by year 2026. In addition, as part of the 2023 work plan 4 fault indicators were installed to help pin-point problem locations and to support the outage restoration efforts during the EPSS enablement season. And the 2024 work plan calls for the installation of an additional 6 fault indicators.

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 System Hardening/Undergrounding Plan to further minimize wildfire ignition risks on the EPPS circuit. Alleghany 1101 circuit observed improved reliability in 2023 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.

2. ALPINE 1101

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

- Three-year (2019-2021) average AIFI score of 3.73.
- Three-year (2020-2022) average AIFI score of 4.94.
- Three-year (2021-2023) average AIFI score of 6.51.

ii. A historical record of the metric:

- AIFI 2019 = 5.40
- AIFI 2020 = 1.80
- AIFI 2021 = 4.00
- AIFI 2022 = 9.00
- AIFI 2023 = 6.52

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

The Alpine 1101 circuit provides electric service to approximately 281 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:

It is anticipated any improvement work on the Salt Springs 2101 will also improve the Alpine 1101 reliability performance. A targeted circuit project had been initiated on the Salt Springs 2101 circuit but has since been repurposed to support the wildfire mitigation efforts. A 2023 base reliability project was successfully completed by installing 1 OH fuse for improve sectionalizing, and additional project has been identified for installing a new UG switch to aid with operational and restoration efforts with plan completion year of 2025. In addition, as part of the 2023 work 1 set of fault indicators was installed to help pin-point problem location and to support the outage restoration efforts during the EPSS enablement season. And the 2024 work plan calls for installing 5 additional fault indicators. Additionally, base reliability project initiated and planned for 2024 for updating trip saver to fuse saver device to minimize the impacts of EPSS by re-establishing proper protection coordination. The Salt Springs 2101 circuit is currently being re-evaluated as part of the multi-year System Hardening/Undergrounding Work Plan. As of June 2024, no specific system hardening projects have been identified.

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.

3. BEN LOMOND 0401

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

- Three-year (2019-2021) average AIFI score of 5.10 and AIDI score of 1,014.

- 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.

ii. A historical record of the metric:

- AIFI 2019 = 4.98
- AIFI 2020 = 2.00
- AIFI 2021 = 8.32
- AIFI 2022 = 12.27
- AIFI 2023 = 10.20

- AIDI 2019 = 762
- AIDI 2020 = 92
- AIDI 2021 = 2,186
- AIDI 2022 = 2,181
- AIDI 2023 = 1,699

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

The Ben Lomond 0401 circuit provides electric service to 889 primarily residential customers, along rural Highway 9 in Santa Cruz County. This circuit comprises about 24 circuit–miles of OH conductors, including its source circuit of 8 circuit–miles of 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, 50% (approx.) of the circuit are comprised of radial line sections. The primary driver for 2021 to 2023 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:

A system hardening project to replace over 7,000' of OH conductor was completed in 2019 and 2 fault indicators installed in 2022 on the Ben Lomond 0401 circuit; and 12 fault indicators installed on the Camp Evers 2105 in 2022 as part of the Wildfire Mitigation Plan. Base reliability projects have been initiated on Camp Evers 2105 and Ben Lemond 0401 circuits to minimize the impacts of EPSS. Specifically, the 2023 work plan installed 4 fault indicators on the Ben Lomond 0401 circuit and 17 fault indicators on the Camp Evers 2105 circuit to help pin-point problem locations and to support the outage restoration efforts during the EPSS enablement season. And the 2024 work plan calls for installing 1 additional fault indicator on the

Camp Evers 2105 circuit. In addition, projects to update 3 fuses to Fuse Saver devices have been initiated with 2 planned to be completed in 2024 and 1 in 2025. The Ben Lomond 0401 and Camp Evers 2105 circuits are currently being re-evaluated as part of the System Hardening/Undergrounding future work plan. As of June 2024, no specific system hardening projects have been identified.

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

After the successful completion of the system hardening project in 2019, no additional outages have been observed on the hardened line section from 2020 to 2023. Minimizing the negative impacts of the EPSS effort is anticipated after completion of the 2023 base reliability projects. In addition, incremental reliability improvement is anticipated after completion of the comprehensive Wildfire Mitigation Plan to minimize wildfire ignition risks in the Tier 3 High Fire Threat District. Ben Lomond 0401 and Camp Evers 2105 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. BIG TREES 0402

i. An explanation of why it was ranked as a "deficient" circuit:
- Three-year (2019-2021) average AIFI score of 4.40.
- Two-year (2020-2021) average AIFI score of 4.89. (see section iii)
- One-year (2021) average AIFI score of 7.36. (see section iii)

ii. A historical record of the metric:
- AIFI 2019 = 3.43
- AIFI 2020 = 2.41
- AIFI 2021 = 7.36
- AIFI 2022 = 0 (see section iii)
- AIFI 2023 = 0 (see section iii)

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

In 2019, the Big Trees 0402 circuit used to be served by a 21kv/4kv substation stepdown transformer with Camp Evers 2106 as the primary source. The substation stepdown has since been removed and replaced with a distribution stepdown transformer. As a result, the Big Trees Substation and its associated circuit was removed and as of year 2022, all customers are now entirely served by the Camp Evers 2106 circuit. The Big Trees 0402 circuit previously provided electric service to 868 customers to the communities of Felton, Brackney, Glen Arbor and Santa Cruz County through 17 circuit-miles of primarily overhead conductor. This circuit also served customers in the CPUC High Fire Threat District - Tier 2 (Elevated Risk) and Tier 3 (Extreme Risk) and is an EPSS circuit. The Big Trees 0402 circuit had two main branches along Hwy 9 through remote, mountainous terrain. The major factors driving the Big Trees 0402 reliability performance are the remote mountainous service territory with increased vegetation caused outage risks and overhead conductor exposure. The primary driver for 2021 reliability performance was due to vegetation caused outages.

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

It is anticipated any improvement work on the Camp Evers 2106 will also improve reliability performance for customers that used to be fed from the Big Trees 0402 circuit and now on the Camp Evers 2106. Base reliability projects have been initiated on Camp Evers 2106 circuit to minimize the impacts of EPSS. Specifically, as part of the 2022 and 2023 work plans 19 and 10 fault indicators were installed, respectively to help pin-point problem locations and to support the outage restoration efforts during the EPSS enablement season. Several system hardening projects have been completed on the Camp Evers 2106 circuit as part the Wildfire Mitigation Plan with 6.7 miles successfully completed in 2020-2021. New base reliability projects have been initiated on Camp Evers 2106 circuit to minimize the impacts of EPSS. Specifically, projects to update 3 fuses to Fuse Saver devices to help reestablish proper protection coordination successfully completed in 2023; and additional replacement of 2 fuses with Recloser devices in 2024. In addition, as part of the 2024 work plan, a capacity driven project calls to install new circuit out of Camp Evers Substation which includes transferring a section of Camp Evers 2106 circuit: thus, minimizing reliability customer impacts for circuit breaker level outages. The Camp Evers 2106 circuit is currently being re-evaluated for future System Hardening/Undergrounding projects. As of June 2024, no specific system hardening projects have been identified.

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

After the successful completion of the system hardening projects in 2021, no additional outages have been observed on the hardened line sections from 2022 to 2023. Incremental reliability improvement is anticipated after completion of the base reliability work and the System Hardening/Undergrounding Plan to further minimize wildfire ignition risks on the EPPS circuit. Because customers that used to be on the Big Trees 0402 circuit and are now entirely served on the

Camp Evers 2106 circuit, it is anticipated Big Trees 0402 will not be identified as a WPC in the 2024 CPUC Reliability Report. Going forward, reliability performance will be actively monitored and tracked on the Camp Evers 2106 circuit. 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.

5. CHALLENGE 1101

i. An explanation of why it was ranked as a "deficient" circuit:
   - Three-year (2019-2021) average AIDI score of 921.
   - Three-year (2020-2022) average AIDI score of 2,188.
   - Three-year (2021-2023) average AIDI score of 2,022.

ii. A historical record of the metric:
   - AIDI 2019 = 333
   - AIDI 2020 = 2,072
   - AIDI 2021 = 361
   - AIDI 2022 = 4,120
   - AIDI 2023 = 1,577

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

The Challenge 1101 circuit provides electric service to approximately 706 customers in Yuba, Butte, and Plumas Counties through 49 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 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 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, as part of the 2023 work plan 4 fault indicators were installed to help pin-point problem locations and to support the outage restoration efforts during the EPSS enablement season. Additionally, the 2024 work plan calls for installing 5 more fault indicators. The Challenge 1101 circuit is currently being re-evaluated as part of the multi-year System Hardening/Undergrounding Work Plan. As of June 2024, the current plan is targeting approximately 0.1 miles OH conductor removal by year 2024.

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. Challenge 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.

6. ELK CREEK 1101

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

- Three-year (2019-2021) average AIDI score of 862.
- Three-year (2020-2022) average AIDI score of 1,328.
- Three-year (2021-2023) average AIDI score of 2,129.

ii. A historical record of the metric:

- AIDI 2019 = 971
- AIDI 2020 = 614
- AIDI 2021 = 1,001
- AIDI 2022 = 2,384
- AIDI 2023 = 3,021

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

The Elk Creek 1101 circuit provides electric service to approximately 901 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 shut-off 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.

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 work plan 4 fault indicators were installed to help pin-point problem locations and to support the outage restoration efforts during the EPSS enablement season. Additionally, the 2024 work plan calls for installing 12 more fault indicators. Several system hardening projects have been completed on the Elk Creek 1101 circuit as part the Wildfire Mitigation Plan with 16.9 miles successfully completed in 2023. As of June 2024, the plan is to harden/underground and OH line removal of approximately 23.6 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.

7. FRUITLAND 1141

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

- Three-year (2019-2021) average AIFI score of 3.79.
- Three-year (2020-2022) average AIFI score of 5.26.
- Three-year (2021-2023) average AIFI score of 5.49.

ii. A historical record of the metric:

- AIFI 2019 = 2.42
- AIFI 2020 = 2.42
- AIFI 2021 = 6.59
- AIFI 2022 = 6.83
- AIFI 2023 = 3.04

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

The Fruitland 1141 circuit provides electric service to approximately 385 customers in Humboldt County including Myers Flat, Burlington and Weott communities through 26 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 main section of the Fruitland 1141 circuit travels north along the Highway 101 corridor through a 12-mile stretch of mountainous terrain including Humboldt Redwoods State Park. Major factors driving the Fruitland 1141 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. Vegetation caused outages represent about 75% of the AIFI contribution from the years 2019 to 2023.

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

The Fruitland 1141 circuit is currently being re-evaluated as part of the multi-year System Hardening/Undergrounding Work Plan. As of June 2024, an OH removal project targeting 0.4 miles successfully completed in 2020.

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

Fruitland 1141 circuit observed improved reliability in 2023 compared to 2021-22 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.

8. GARBERVILLE 1101

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

- Three-year (2019-2021) average AIFI score of 4.70.
- Three-year (2020-2022) average AIFI score of 5.22.
- Three-year (2021-2023) average AIFI score of 5.64.

ii. A historical record of the metric:

- AIFI 2019 = 5.46
- AIFI 2020 = 4.40
- AIFI 2021 = 4.24
- AIFI 2022 = 7.03
- AIFI 2023 = 5.65

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

The Garberville 1101 circuit provides electric service to approximately 1,014 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, mountainous terrain including zones with intermediate and heavy snow loading. The western branch serves about 182 customers through a 12-mile line section that traverses through coastal mountains to the Whitethorn community. The southern branch serves about 544 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 AIFI metric.

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 plan 11 and 6 fault indicators were installed, respectively to help pin-point problem locations and to support the outage restoration efforts during the EPSS enablement season. In addition, a pole replacement project that calls to also upgrade an existing sectionalizer to a recloser and 3 Fuse Saver installation projects have been identified and are currently being evaluated for feasibility. The Garberville 1101 circuit is currently being re-evaluated as part of the multi-year System Hardening/Undergrounding Work Plan. As of June 2024, no specific system hardening projects have been identified.

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. 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.

9. HOOPA 1101

i. An explanation of why it was ranked as a "deficient" circuit:
   - Three-year (2019-2021) average AIDI score of 962.
   - Three-year (2020-2022) average AIDI score of 1,645.
   - Three-year (2021-2023) average AIDI score of 2,447.

ii. A historical record of the metric:
   - AIDI 2019 = 795
   - AIDI 2020 = 213
   - AIDI 2021 = 1,885
   - AIDI 2022 = 2,847
   - AIDI 2023 = 2,607

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

   The Hoopa 1101 circuit provides electric service to 2,098 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 Hwy169 and Hwy 69 intersection. The main line splits into 2 main line branches. The eastern branch serves about 522 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 driven by vegetation caused outages contributing about half of AIDI metric.

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 pin-point problem locations and to support the outage restoration efforts during the EPSS enablement season. The Hoopa 1101 circuit is currently being re-evaluated as part of the multi-year System Hardening/Undergrounding Work Plan. As of June 2024, no specific system hardening projects have been identified.

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. 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.

10. LOS GATOS 1106

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

- Three-year (2019-2021) average AIFI score of 5.19 and AIDI score of 2,193.
- Three-year (2020-2022) average AIFI score of 7.27 and AIDI score of 2,457.
- Three-year (2021-2023) average AIFI score of 7.98 and AIDI score of 3,024.

ii. A historical record of the metric:

- AIFI 2019 = 1.24
- AIFI 2020 = 4.88
- AIFI 2021 = 9.43
- AIFI 2022 = 7.51
- AIFI 2023 = 7.01

- AIDI 2019 = 161
- AIDI 2020 = 741
- AIDI 2021 = 5,662
- AIDI 2022 = 968
- AIDI 2023 = 2,455

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

Los Gatos is located approximately seven miles southwest of San Jose in De Anza Division. The Los Gatos 1106 circuit provides electric service to approximately 1,619 customers in Santa Clara County through 74 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 comprises 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.

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. In addition, the Los Gatos 1106 circuit is currently being re-evaluated for future System Hardening/Undergrounding projects. As part of the 2022 and 2023 Wildfire Mitigation Plan, 3 and 7 sets of fault indicators were installed, respectively to help pin-point problem locations and to support the outage restoration efforts during the EPSS enablement season. Additionally, the 2024 work plan calls for installing 6 more fault indicators. New base reliability projects have been initiated on Los Gatos 1106 circuit to minimize the impacts of EPSS. Specifically, one project to update fuses to Fuse Saver device to help reestablish proper protection coordination completed in 2023 and 3 additional Fuse Saver projects are planned for 2024. In addition, the 2025 work plan calls for 1 Recloser installation project for improving main line sectionalizing, and project for upgrading 2 Reclosers' controls for enabling DCD (Down Conductor Detection) and improve sectionalizing/target detection during EPSS enablement.

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

After the successful completion of the system hardening projects from 2019 to 2023, no additional outages have been observed on the hardened line sections in 2023. 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 to minimize wildfire ignition risks in the Tiers 2 and 3 High Fire Threat Districts. Los Gatos 1106 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 OSITOS 2103

i. An explanation of why it was ranked as a "deficient" circuit:
  - Three-year (2019-2021) average AIFI score of 3.95 and AIDI score of 987.
  - Three-year (2020-2022) average AIFI score of 4.98 and AIDI score of 1,410.
  - Three-year (2021-2023) average AIFI score of 5.65 and AIDI score of 1,715.

ii. A historical record of the metric:
  - AIFI 2019 = 1.68
  - AIFI 2020 = 2.34
  - AIFI 2021 = 7.52
  - AIFI 2022 = 4.86
  - AIFI 2023 = 3.18

  - AIDI 2019 = 242
  - AIDI 2020 = 286
  - AIDI 2021 = 2,327
  - AIDI 2022 = 1,600
  - AIDI 2023 = 735

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

Los Ositos 2103 circuit provides electric service to approximately 845 customers in Monterey County including city of Greenfield through 110 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. Los Ositos 2103 is comprised of several main line branches east and west of Hwy 101 including rural/agriculture area west of city of Greenfield and mountainous terrain along Arroyo Seco Rd. The major factors driving the Los Ositos 2103 reliability performance is overhead equipment failures and 3rd party vehicle driven caused outages. The 2021 reliability performance was primarily driven by two circuit breaker level outages due to equipment failures with circuits in abnormal configuration. And the 2022 reliability performance was primarily driven by recloser zone with about 700 customers impacted by different caused outages including 3rd party.

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

Capacity driven projects successfully completed in 2020 by reconductoring approximately 3.6 miles of OH line and installation of 2 Reclosers; and additional 1.6 miles of OH line reconductor completed in 2024. In addition, as part of the 2024 work plan, 27 animal guard locations were successfully completed for minimizing bird/animal caused outages. Los Ositos 2103 circuit is included as part of the multi-year System Hardening/Undergrounding Work Plan. As of June 2024, several projects have been identified targeting over 60 miles; however, projects are currently being re-evaluated.

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

Minimizing circuits in abnormal configuration would improve service reliability impacts. Incremental reliability improvement is anticipated after completion of the capacity and system hardening projects. This includes the associated reliability benefits after completion of the comprehensive Wildfire Mitigation Plan to minimize wildfire ignition risks in the Tier 2 High Fire Threat District. Los Ositos 2103 circuit performance will be actively monitored on a continuous basis. 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.

12. PIT NO 5 1101

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

- Three-year (2019-2021) average AIDI score of 1,948.
- Three-year (2020-2022) average AIDI score of 2,035.
- Three-year (2021-2023) average AIDI score of 3,459.

ii. A historical record of the metric:

- AIDI 2019 = 12
- AIDI 2020 = 3,493
- AIDI 2021 = 2,353
- AIDI 2022 = 243
- AIDI 2023 = 7,790

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

The Pit No 5 1101 circuit provides electric service to about 123 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 Power Shut-off (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.

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 for improving 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 2024, the current plan is targeting approximately 0.9 miles to be hardened/undergrounded 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 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. SILVERADO 2104

i. An explanation of why it was ranked as a "deficient" circuit:
- Three-year (2019-2021) average AIDI score of 917.
- Three-year (2020-2022) average AIDI score of 1,277.
- Three-year (2021-2023) average AIDI score of 1,704.

ii. A historical record of the metric:
- AIDI 2019 = 274
- AIDI 2020 = 360
- AIDI 2021 = 2,133
- AIDI 2022 = 1,340
- AIDI 2023 = 1,642

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

Silverado 2104 circuit provides electric service to approximately 3,792 customers in St. Helena and Napa County including communities of Angwin, Howell Mountain, and Pope Valley through 155 circuit-miles of primarily overhead conductor. The Silverado 2104 circuit serves the area northeast of Hwy 128 including Deer Park Rd and Howell Mountain Rd, and Las Posadas State Forest. 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 major factors driving the Silverado 2104 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 reliability performance driver from the years 2021 to 2023 was implementation of the Enhance Powerline Safety Settings (EPSS) scheme and primarily driven by unknown and vegetation caused outages that required daylight foot and air patrols.

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

Base reliability projects have been initiated on Silverado 2104 circuit to minimize the impacts of EPSS. Specifically, as part of the 2022 and 2023 work plan 7 and 9 fault indicators were installed, respectively and 2024 work plan calls for additional 8 installations to help pin-point problem locations and to support the outage restoration efforts during the EPSS enablement season. In addition, as part of the 2022 work plan, the successfully completed projects are the following: 1 Fuse Saver; 1 automatic transfer pad mounted switch at St Helena Hospital; 1 subsurface SCADA switch installation; and 1 Recloser installation for operational flexibility. As part of 2023 work plan, 5 projects successfully completed by replacing 5 fuses with 3 Fuse Savers and 2 Reclosers devices to help reestablish proper protection coordination. In addition, the 2024 work plan calls for 1 additional Fuse Saver device installation. The Silverado 2104 circuit is included as part of the multi-year System Hardening/Undergrounding Work Plan with 19.6 miles completed from 2019 to 2022. As of June 2024, the current plan is targeting an additional 69.5 miles to be hardened/undergrounded/OH conductor removal by year 2026.

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

After the successful completion of the system hardening projects from 2019 to 2022, no additional outages have been observed on the hardened line sections in 2023. 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 to minimize wildfire ignition risks in the Tiers 2 and 3 High Fire Threat Districts. Silverado 2104 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.

14. TEMPLETON 2113

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

- Three-year (2019-2021) average AIFI score of 3.89.

- Three-year (2020-2022) average AIFI score of 4.60.
- Three-year (2021-2023) average AIFI score of 5.65.

vii. A historical record of the metric:

- AIFI 2019 = 1.67
- AIFI 2020 = 3.86
- AIFI 2021 = 6.12
- AIFI 2022 = 3.83
- AIFI 2023 = 6.99

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

Templeton 2113 circuit provides electric service to approximately 5,548 customers in the community of Atascadero and San Luis Obispo County through 352 circuit-miles of primarily overhead conductor. The Templeton 2113 circuit serves the area east of Hwy 101 and along and south of Hwy 41. 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 major factors driving Templeton 2113 reliability performance are overhead conductor exposure and foothill service territory with increase animal and unknown cause outage risks. The primary driver for 2021 to 2023 reliability performance was implementation of the Enhance Powerline Safety Settings (EPSS) scheme and primarily driven by unknown and overhead equipment failures caused outages.

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

Base reliability projects have been initiated on Templeton 2113 circuit to minimize the impacts of EPSS. Specifically, as part of the 2023 work plan several projects to install 5 Reclosers and 3 Fuse Savers were successfully completed to help reestablish proper protection coordination and for operational flexibility. In addition, as part of the 2022 and 2023 work plans 33 and 7 fault indicator sets were installed, respectively and 2024 work plan calls for additional 8 installations to help pin-point problem locations and to support the outage restoration efforts during the EPSS enablement season. In addition, as part the 2024 work plan 8 animal guard locations were successfully completed and 2 additional planned to be completed for minimizing bird/animal caused outages. The Templeton 2113 circuit is included as part of the multi-year System Hardening/Undergrounding Work Plan. As of June 2024, two projects have been identified targeting over 3.8 miles are being re-evaluated.

x. 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 to minimize wildfire ignition risks in the Tiers 2 and 3 High Fire Threat Districts. Templeton 2113 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.

15. WILLOW CREEK 1103

i. An explanation of why it was ranked as a "deficient" circuit:
   - Three-year (2019-2021) average AIDI score of 1,164.
   - Three-year (2020-2022) average AIDI score of 1,422.
   - Three-year (2021-2023) average AIDI score of 2,225.

ii. A historical record of the metric:
   - AIDI 2019 = 301
   - AIDI 2020 = 601
   - AIDI 2021 = 2,593
   - AIDI 2022 = 1,067
   - AIDI 2023 = 2,992

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

Willow Creek 1103 circuit provides electric service to approximately 1,548 customers in Humboldt and Trinity Counties through 88 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 Enhance Powerline Safety Settings (EPSS) scheme and primarily driven by unknown and 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 Willow Creek 1103 circuit to minimize the impacts of EPSS. Specifically, as part of the 2022 and 2023 work plans 7 and 15 fault indicators were installed, respectively to help pin-point problem locations and to support the outage restoration efforts during the EPSS enablement season. In addition, the 2024 work plan calls for the installation of 6 more fault indicators. 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 circuit currently being re-evaluated for future projects.

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

After the successful completion of the system hardening projects from 2019 to 2023, no additional outages have been observed on the hardened line sections in 2023. 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 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 2023

Significant Outage Events Of 2023

The table below lists the ten largest outage events experienced during 2023. 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 74 - 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

*Note: Values exclude planned outages. PG&E resources are through December 31, 2022. 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 12/31/2022 to restore outages that occurred in the year 2022 are reflected in this table.

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:

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

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

Table 75 – 2023 Major Event Day

Date	Description	Reason
January 04-16, 2023	An “atmospheric river” event that started on January 1st, 2023 was a continuation of the wet weather that started in the last week of December 2023 and produced heavy rainfall and significant rainfall totals, gusty southerly winds, and thunderstorms across the territory, especially along the coastline. This event resulted in soil saturated and ground instability, leading to Many trees falling into PG&E overhead lines leading to continued outages. This event 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. This event resulted in the year's largest outage event that impacted a total of 1,630,090 customers in the service territory.	IEEE MED
February 19-28, 2023	A large substation outage affecting 54,447 customers in Oakland resulted in a major event day on February 19th, 2023. This was followed by a weather system that 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. 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.	IEEE MED
March 09-21, 2023	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. While the system was addressing residual outages from the storm on the 12th and 13th another “atmospheric river” event started and produced heavy rainfall and significant rainfall accumulations, isolated thunderstorms, and gusty southerly winds to the territory with reports of wind gusts in the 70-100 mph range.	IEEE MED
September 9th, 2023	A Major heat event with several areas in the service territory experiencing multiple days of record hot temperatures occurred. This late season heat with temperatures reaching 100-110F across the Interior and around 90F in the Bay lead to high electric load and heat related outages on September 9th. Heat impact continued for the next few days across the San Joaquin Valley; meanwhile, during the evening a weather system moved onshore across Northern California and produced lightning and flashover impact that continued into September 11th.	IEEE MED

*MED is defined as Major Events Day

7.1 Major Event Day (MED) Discussions:

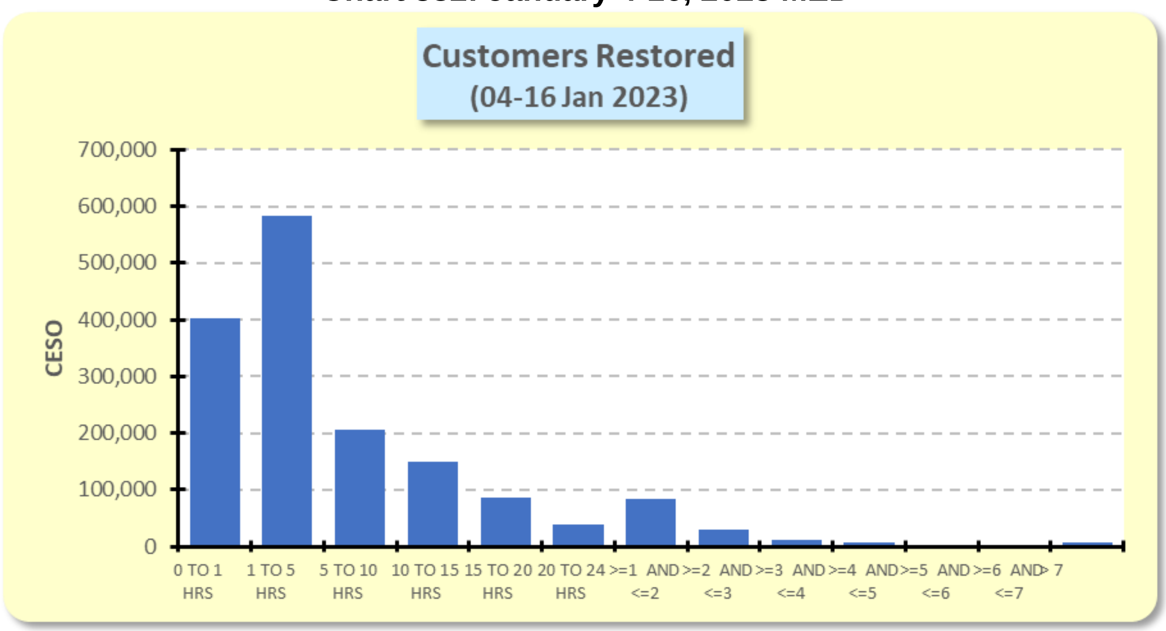
January 4-16, 2023 Major Event Days

Table 76 below indicates the number of customers without service at periodic intervals for this event (01/04/2023 – 01/16/2023). The numbers of customers noted in the table are for only those divisions impacted by this event.

Table 76 – January 4-16, 2023

Outage Duration	Customers impacted	Cumulative %
0 TO 1 HRS	402,026	25.00%
1 TO 5 HRS	583,054	36.25%
5 TO 10 HRS	207,008	12.87%
10 TO 15 HRS	148,618	9.24%
15 TO 20 HRS	85,646	5.32%
20 TO 24 HRS	39,608	2.46%
>=1 AND <=2	84,914	5.28%
>=2 AND <=3	29,104	1.81%
>=3 AND <=4	10,608	0.66%
>=4 AND <=5	7,669	0.48%
>=5 AND <=6	2,637	0.16%
>=6 AND <=7	1,530	0.10%
> 7	6,002	0.37%
Total	1,608,424	

Chart 382: January 4-16, 2023 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%.

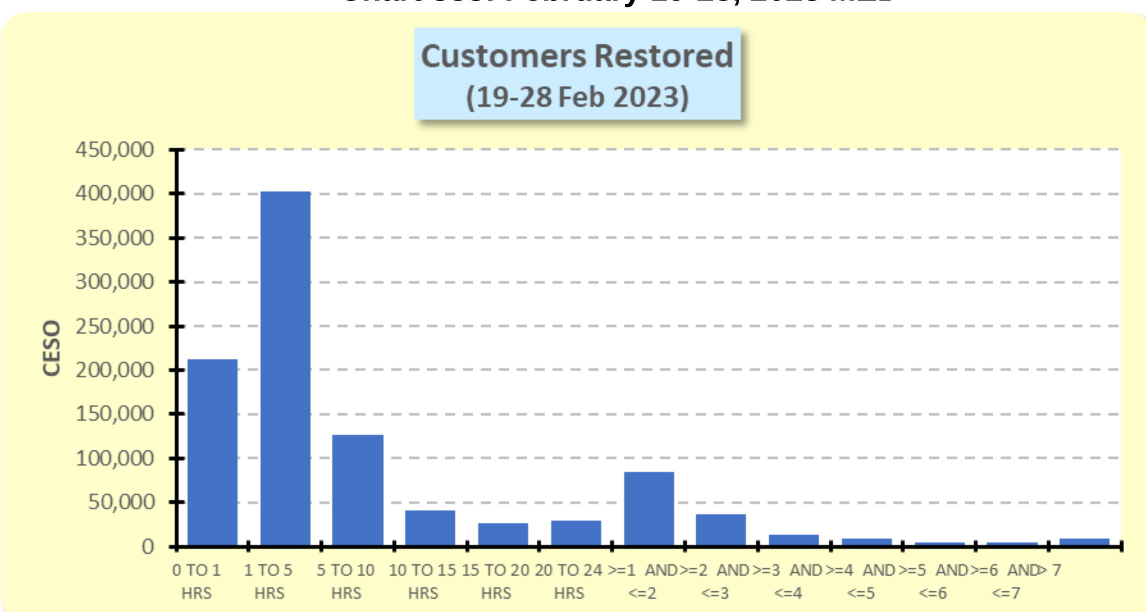
February 19-28, 2023 Major Event Days

Table 77 below indicates the number of customers without service at periodic intervals for this event (02/19/2023 – 02/28/2023). The number of customers noted in the table are for only those divisions impacted by this event.

Table 77 – February 19-28, 2023

Outage Duration	Customers impacted	Cumulative %
0 TO 1 HRS	212,280	21.18%
1 TO 5 HRS	403,174	40.22%
5 TO 10 HRS	126,208	12.59%
10 TO 15 HRS	41,137	4.10%
15 TO 20 HRS	26,585	2.65%
20 TO 24 HRS	29,341	2.93%
>=1 AND <=2	84,980	8.48%
>=2 AND <=3	37,058	3.70%
>=3 AND <=4	13,477	1.34%
>=4 AND <=5	8,788	0.88%
>=5 AND <=6	5,056	0.50%
>=6 AND <=7	4,679	0.47%
> 7	9,610	0.96%
Total	1,002,373	

Chart 383: February 19-28, 2023 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%.

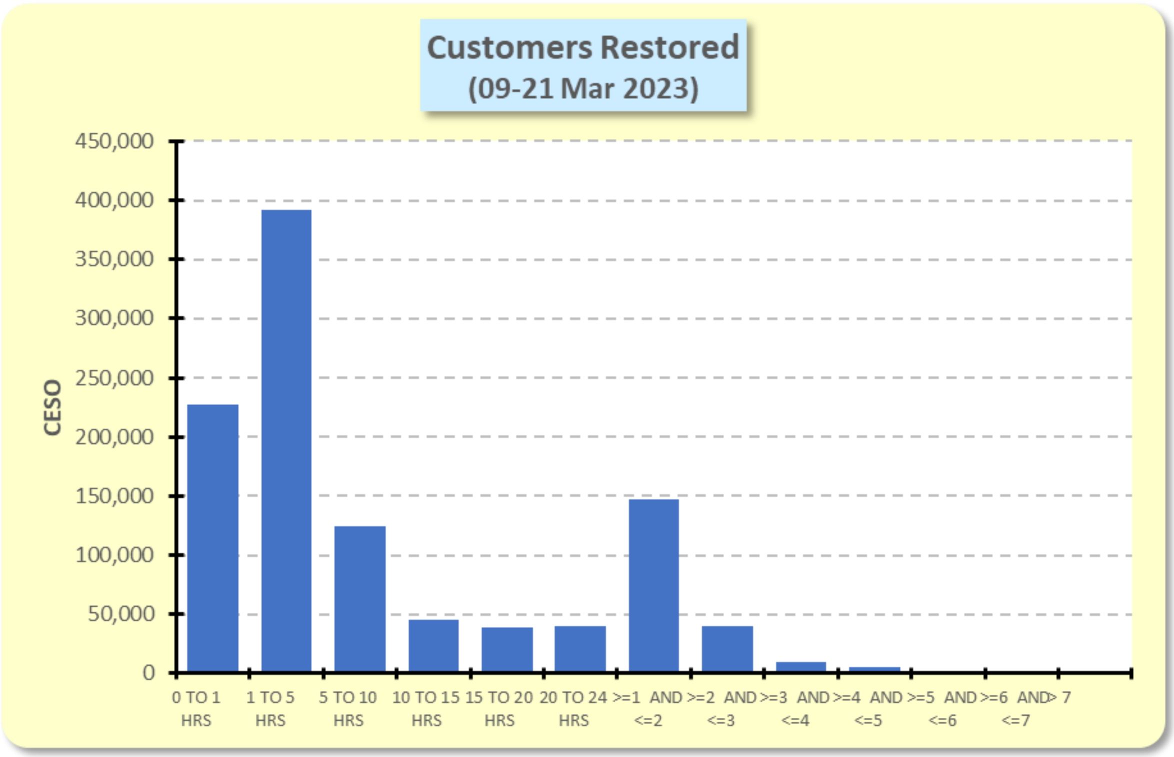
March 9-21, 2023 Major Event Day

Table 78 below indicates the number of customers without service at periodic intervals for this event (03/09/2023 – 03/21/2023). The numbers of customers noted in the table are for only those divisions impacted by this event.

Table 78 – March 9-21, 2023

Outage Duration	Customers impacted	Cumulative %
0 TO 1 HRS	226,792	21.16%
1 TO 5 HRS	392,358	36.60%
5 TO 10 HRS	124,704	11.63%
10 TO 15 HRS	45,234	4.22%
15 TO 20 HRS	38,638	3.60%
20 TO 24 HRS	39,918	3.72%
>=1 AND <=2	146,842	13.70%
>=2 AND <=3	40,247	3.75%
>=3 AND <=4	10,002	0.93%
>=4 AND <=5	5,538	0.52%
>=5 AND <=6	1,308	0.12%
>=6 AND <=7	335	0.03%
> 7	25	0.00%
Total	1,071,941	

Chart 384: March 9-21, 2023 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%.

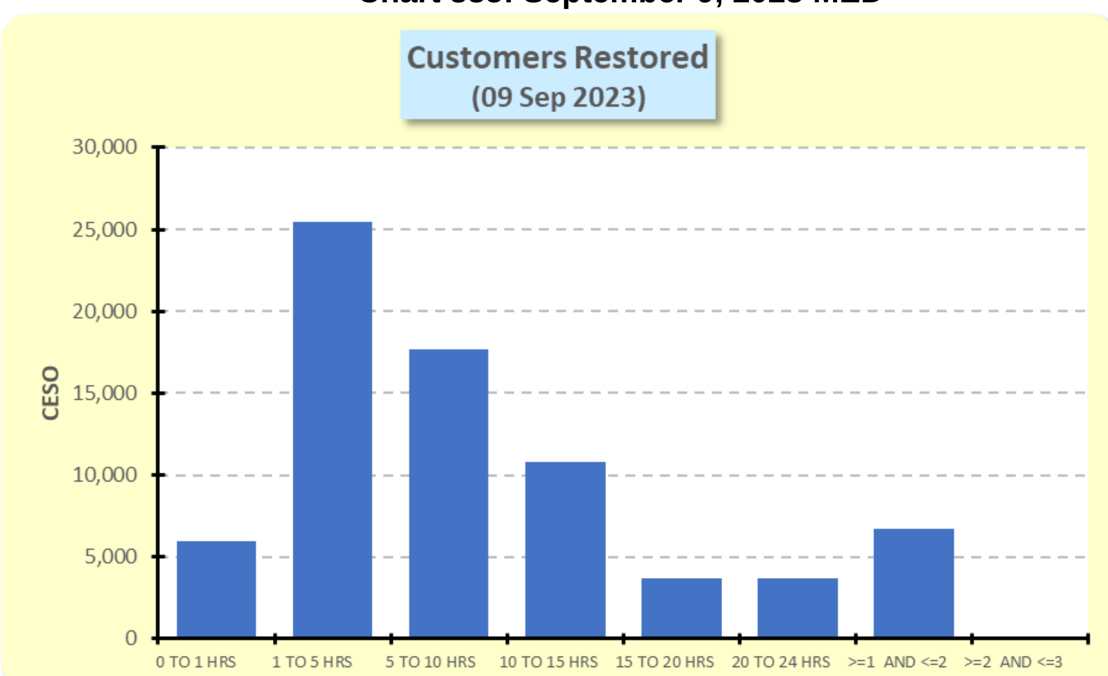
September 09, 2023 Major Event Day

Table 79 below indicates the number of customers without service at periodic intervals for this event (09/09/2023). The numbers of customers noted in the table are for only those divisions impacted by this event.

Table 79 – September 9th, 2023

Outage Duration	Customers impacted	Cumulative %
0 TO 1 HRS	5,936	8.02%
1 TO 5 HRS	25,481	34.43%
5 TO 10 HRS	17,676	23.88%
10 TO 15 HRS	10,791	14.58%
15 TO 20 HRS	3,724	5.03%
20 TO 24 HRS	3,658	4.94%
>=1 AND <=2	6,719	9.08%
>=2 AND <=3	27	0.04%
Total	74,012	

Chart 385: September 9, 2023 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%.

8. Historical Ten Largest Unplanned Outage Events for 2013-2022

Table 80 - 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,ooo 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 Monterrey 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

Table 81 - 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 Ocober 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 transformer and planned outages.

Table 82 - 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.

Table 83 - 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.

Table 84 - Ten Largest 2018 Outage Events

Rank	Description	Date	Number of Customers 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

Table 85 - 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

Table 86 - Ten Largest 2016 Outage Events

Rank	Description	Date	Number of Customers 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 5th)
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 50+ mph were also observed.	10/14/2016 – 10/16/2016	255,680	59	1,553	Yes (Oct 14th)
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 17th)
4	A weather system produced breezy northwest winds 25 – 35 mph with gusts to 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 near 2500 ft. and gusty northwest winds from 30 – 40 mph.	1/31/2016	48,120	52		No

* Note: Values exclude planned outages

Table 87 - 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 lighting 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

Table 88 - 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 30th)
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 3rd)
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.

Table 89 - Ten Largest 2013 Outage Events

Rank	Description	Date	Number of Customers Affected *	Longest Customer Interruption (Hours)	# of People Used To Restore Service (Major Events) **	CPUC Major Event?
1	On 11/19 into 11/20, a weather system moved into the territory and delivered up to 2 inches of rain over elevated terrain. It was the first significant rainstorm of the season. Then on 11/21 into 11/22 surface low pressure over southern California combined with developing high pressure in Nevada to deliver very strong north to northeast winds across the north half of the Service Territory. Winds were very strong over elevated terrain; wind gusts up to 65 mph were observed in the Oakland hills (Oakland North RAWS) and to 101 mph in the northern Sierra Nevada. (The wind gust at Oakland north was second only to the January 4th mega-storm gust of 71 mph). Wind speeds near 45 - 50 mph were also observed over lower elevation locations such as Oakland and Santa Rosa.	11/19/2013 - 11/22/2013	385,017	143		N
2	The marine layer surged onto the coast and delivered coastal mist and drizzle which ultimately resulted in an insulator flashover event. The event was preceded by a series of brisk wind events which may have increased salt contamination along the coast.	6/23/2013	170,429	15		N
3	Fair and dry weather was observed on 11/12/2013. An unplanned outage occurred in the Bellota substation.	11/12/2013	113,266	10		N
4	High pressure built over California and maximum temperatures from 99 - 107 were observed along the Central Valley. Temperature maximums near the coast were in the 60s to 70s with 70s - 90s for coastal to intermediate valleys. Most customers were impacted by trouble on the Transmission system.	7/19/2013	99,738	18		N
5	Overnight Sunday into the early morning hours of Monday April 8, 2013, a strong Pacific Jet Stream drove a small but intense cold front with very gusty northwest winds into the California coast and Bay Area. Gusts along the coast reached generally into the 50 - 60 mph range with the peak gust of 75 mph recorded at a station on the west edge of San Francisco County.	4/8/2013	93,200	42		N
6	A strong ridge of high pressure built over California bringing extreme heat to all locations except the coast and immediate coastal valleys. High temperatures on 7/1 near the coast ranged from the 70s - 80s with 90s - low 100s for coastal Valleys. Temperatures were extreme in the interior with maximum temperatures up to 111 in the Central Valley. The heat intensified on 7/2 where maximum soared again into the 100s, with Redding observing a 116-degree maximum.	7/1/2013- 7/2/2013	93,194	29		N
7	On Sunday a weak area of low pressure moved west to east through the Territory bringing increasing clouds, light showers and snow showers over the Sierra and a few light stray showers elsewhere, primarily across the south. Most customers were impacted by a fault on a substation relay.	3/3/2013	69,578	11		N
8	A classic California October offshore wind event unfolded 10/3/2013 as surface high pressure built north of the Service Territory. Wind speeds were generally 20 – 35 mph with gusts to 40 – 55 across the Sacramento valley, northern Sierra Nevada and elevated terrain around the Bay Area.	10/3/2013	56,573	25		N
9	The ridge of high pressure dramatically amplified delivering significant heat across the Territory. Maximum temperatures across the interior valley locations reached above 105 with Red Bluff reaching 112 degrees. Overnight temperatures remained warm on the far ends of the valley, with minimum temperatures only dipping into the upper 70s in the southern San Joaquin and mid 80s in the northern Sacramento Valley.	6/8/2013	52,442	22		N
10	A cold and dynamic weather system dropped southwestward into the territory and brought cooler and very unsettled weather in the form of rain, snow and gusty winds. Winds were strongest over elevated terrain of the Bay Area – Altamont pass gusted to 69 mph.	10/27/2013	49,692	36		N

* Note: Values exclude planned outages.
** Note: This data is requested only for Major Event days.

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 2023.

YTD 2023 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	80	36	10	34	45%	13%	43%
DeAnza	95	62	14	19	65%	15%	20%
Diablo	148	45	38	65	30%	26%	44%
East Bay	80	39	6	35	49%	8%	44%
Fresno	42	39	2	1	93%	5%	2%
Humboldt	11	10	0	1	91%	0%	9%
Kern	29	28	1	0	97%	3%	0%
Los Padres	21	19	0	2	90%	0%	10%
Mission	45	33	5	7	73%	11%	16%
North Valley	26	8	10	8	31%	38%	31%
North Bay	42	15	7	20	36%	17%	48%
Peninsula	131	32	20	79	24%	15%	60%
Sacramento	77	28	12	37	36%	16%	48%
San Francisco	53	15	6	32	28%	11%	60%
San Jose	95	41	24	30	43%	25%	32%
Sierra	107	58	19	30	54%	18%	28%
Sonoma	56	54	1	1	96%	2%	2%
Stockton	62	22	15	25	35%	24%	40%
Yosemite	69	30	13	26	43%	19%	38%
Grand Total	1269	614	203	452	48%	16%	36%

Table 90 – Electric Reliability Customer Inquiries

Note: ESR = Electric Service Reliability (Recurring Outages). This Includes ESR cases created on or after January 1, 2023 and closed as of December 31, 2023. It excludes canceled and re-directed ESR tickets. Re-directed help tickets are those 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 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.