Docket	:	A.25-06-017
Exhibit Number	:	CA-05A
Commissioner	:	M. Baker
Admin Law Judge	:	R. Haga
Witness	:	A. Asadi

PUBLIC ADVOCATES OFFICE
CALIFORNIA PUBLIC UTILITIES COMMISSION

TESTIMONY ON PREVENTIVE MEASURES FOR WILDFIRE RISK FOR MOUNTAIN VIEW FIRE COST-RECOVERY APPLICATION

Reasonableness of Operations Prior to Ignitions

(PUBLIC VERSION)

San Francisco, California
January 13, 2026

TABLE OF CONTENTS

Page

REASONABLENESS OF OPERATIONS

I. INTRODUCTION

This exhibit pertains to the application of Liberty Utilities (CalPeco Electric) LLC, ("Liberty") to recover costs associated with the Mountain View Fire (Application 25-06-017).

This exhibit presents the analyses of the Public Advocates Office (Cal Advocates) regarding the reasonableness of Liberty's practices and operations relating to its Public Safety Power Shutoff (PSPS) program and decision making.

This exhibit relates specifically to Exhibit Liberty-03, Liberty's testimony on prudence of operations.[1]

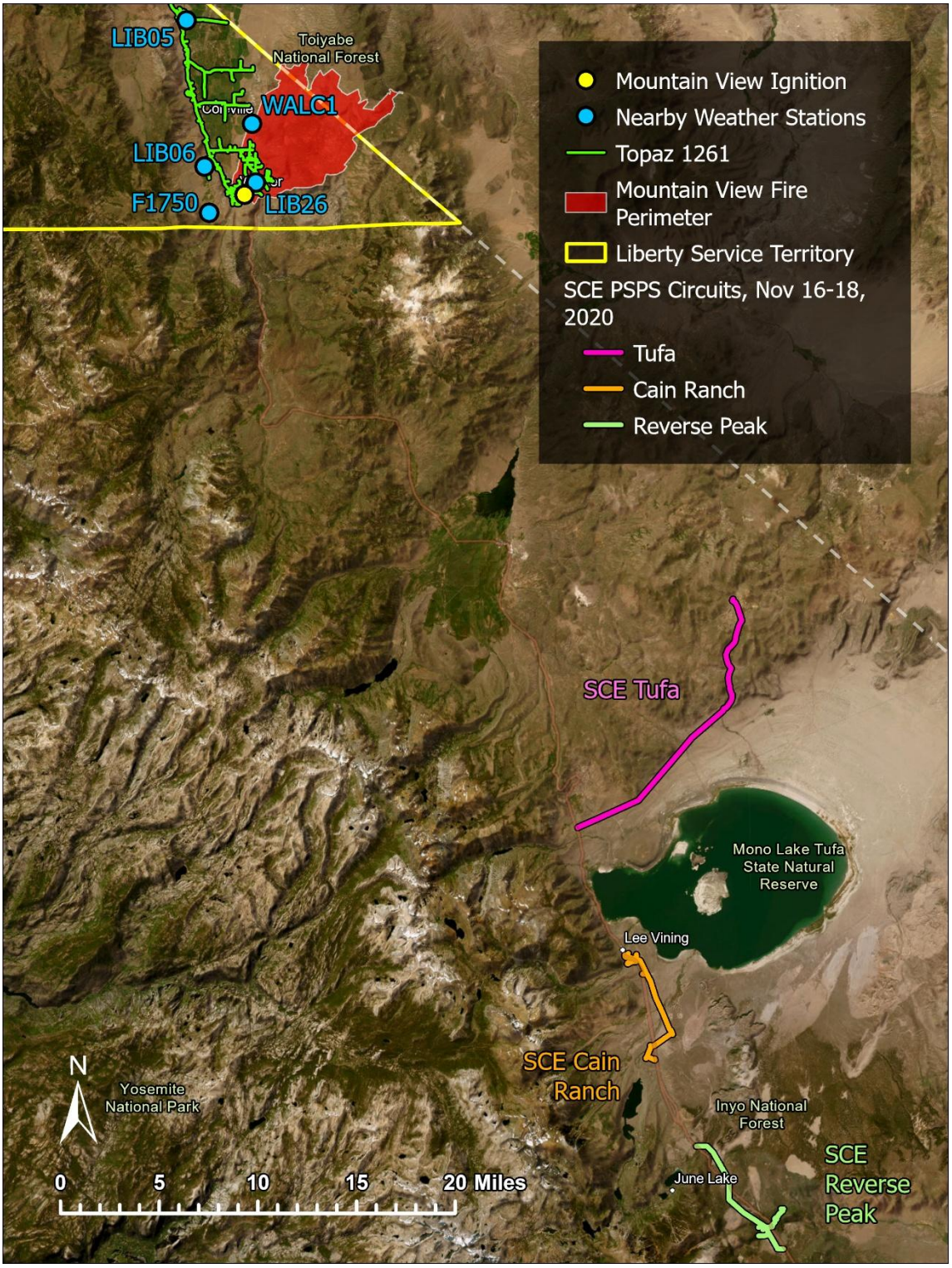
II. PREVENTIVE MEASURES FOR WILDFIRE RISK

A. SCE De-energized Its Own Circuits in Mono County Hours Prior to the Mountain View Fire Ignition in Response to the Same Weather Event.

On November 17, 2020, at the time of the Mountain View ignition, SCE had initiated a PSPS event and de-energized two circuits adjacent to Liberty's Mono County service territory and the Topaz 1261 circuit. Figure 1 below illustrates the location of SCE's de-energized circuits in relation to Topaz 1261 and the Mountain View ignition site. Figure 1 shows that SCE's Tufa circuit was approximately 30-35 miles away from the Mountain View ignition site.

[1] Exhibit (Ex.) Liberty-03.

Figure 1:
Map of the SCE circuits that SCE de-energized on November 17, 2020 in proximity to Topaz 1261 circuit.[2, 3]



On November 14, 2020, SCE notified the Southern California Geographical Coordination Center (GACC) and the Commission that it was activating its Public Safety Power Shutoff Incident Management Team (PSPS IMT) due to forecasted "elevated fire weather for portions of the SCE territory beginning November 17 at 12:00 pm and continuing through November 18 at 12:00 pm."[4] SCE's "weather forecasts identified circuits in Inyo, Mono, San Bernardino, Kern, and Ventura counties as having circuits that may require the use of PSPS."[5]

On Sunday, November 15, 2020, SCE forecasted that on Tuesday, November 17, 2020, its service territory in the Eastern Sierras of Mono County below 7000 feet would experience Moderate Fire Threat.[6] SCE's forecast stated to "[e]xpect strong winds to combine with humidity levels in the 10-20% range to bring peak fire weather threats on Tuesday Afternoon."[7]

On Monday, November 16, 2020, SCE continued to forecast that on Tuesday, November 17, 2020, its service territory in the Eastern Sierras of Mono County below 7000 feet would experience a period where "there will likely be several hours of [relative humidity] staying below 15% under partly to mostly sunny skies" and that "[f]uels in these areas remain very dry – especially in the dead fuels."[8] Further, SCE's forecast

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[2] Attachment 1, SCE Q4 2020 Quarterly Data Report, February 5, 2021 (Attachment 1). Provides SCE's PSPS de-energization data.

[3] Attachment 2, Liberty's response to data request CalAdvocates-LIB-A2506017-006, question 1, September 5, 2025, GIS geodatabase file "WEMA_RequestedData.gdb" (Attachment 2). Provides Topaz circuit data.

[4] Attachment 3, *SCE PSPS Post Event Report – November 14 to November 18, 2020, December 4, 2020* (Attachment 3) at 3.

[5] Attachment 3 at 3.

[6] Attachment 4, SCE's response to data request CalAdvocates-SCE-A2506017-001, question 1, September 22, 2025 (Attachment 4), attachment "ThreatLevelMatrix_Notes_20201115.pdf" at 1. SCE's categorized Fire Weather Threat on a scale of 1 (Low(Minor)) to 5 (Major(Extreme)) where 3 was Moderate(Critical) which meant "upon ignition, rapid fire spread may occur across portions of the region. Weather and fuels will be conducive to fire spread with the possibility of fuels being highly receptive. Peak FPIs will generally be around 13-15."

[7] Attachment 4, question 1, attachment "ThreatLevelMatrix_Notes_20201115.pdf" at 2.

[8] Attachment 4, question 1, attachment "ThreatLevelMatrix_Notes_20201116.pdf" at 2.

warned that the "gusty winds and low [relative humidity] would allow for very rapid rates of spread during the daylight hours."[9] SCE de-energized four of its circuits in Kern County that day.[10]

On November 17, 2020, at "approximately 4:00 am the PSPS IMT observed dangerous fire weather conditions exceeding wind and FPI thresholds on circuits in Mono, Inyo, and Los Angeles county."[11] On the morning of November 17, 2020, SCE de-energized two circuits in Mono County.[12] SCE de-energized one customer on its Tufa circuit at 7:45am and 22 customers on its Cain Ranch circuit at 8:41am.[13] Table 1 below shows the wind speeds that SCE observed just prior to de-energizing the Tufa and Cain Ranch circuits and their respective de-energization thresholds.

Table 1:
Sustained wind speeds and wind gusts of SCE's de-energized circuits.[14, 15]

Circuit	Time	Sustained Wind Threshold (mph)	Observed Sustained Wind (mph)	Wind Gust Threshold (mph)	Observed Wind Gust (mph)
Tufa[16]	7:45 am	31	26	46	38
Cain Ranch[17]	8:41 am	31	28.8	46	56.2

[9] Attachment 4, question 1, attachment "ThreatLevelMatrix_Notes_20201116.pdf" at 2.

[10] Attachment 3 at 5. SCE de-energized its Grapevine Peak, Frozen, Mettler, and Cuddeback circuits.

[11] Attachment 3 at 4.

[12] Attachment 3 at 5. SCE de-energized Tufa and Cain Ranch in the morning, one in the afternoon (SCE de-energized Birchim circuit at two isolation devices at 1:18 pm) and one at night (Reverse Peak at 8:51 pm) in Mono County.

[13] Attachment 3 at 5.

[14] Attachment 3 at 5 and 9.

[15] Attachment 5, SCE's response to data request CalAdvocates-SCE-A2506017-001, question 3(a) and (b), September 22, 2025 (Attachment 5). SCE clarified that the Sustained Wind and Wind Gust values were real-time or observed values.

[16] Attachment 3 at 9. SCE de-energized the Tufa circuit because of the high wind trend (expected to exceed wind threshold) and it exceeded its FPI threshold.

[17] Attachment 3 at 9. SCE de-energized the Cain Ranch circuit because it exceeded wind thresholds and exceeded its FPI threshold.

Meanwhile, Liberty's Topaz 1261 circuit experienced wind gusts that hit Liberty's own wind gust threshold of 45 mph[18] at 6:50 am and then again at 9:50 am.[19] From 9:50 am to the first 911 call reporting the fire at 11:58 am,[20] the wind speeds near the ignition site stayed above 40 mph and ultimately reached 66 mph.[21] Figure 2 below shows the wind gust speeds for the Topaz 1261 circuit using Liberty's nearest weather station (LIB26/LIB-2130) data. Wind gust speeds remained above SCE's standard wind gust threshold (46 mph)[22] as well as Liberty's 2019 wind gust threshold (50 mph)[23] in the period leading up to the ignition and afterwards while the Mountain View Fire grew.

[18] Ex. Liberty-03 at 39. Liberty's wind gust threshold for its Topaz 1261 and Muller 1296 circuits was 45 mph.

[19] Attachment 6, University of Utah, MesoWest at: https://mesowest.utah.edu/ (Attachment 6). For LIB26.

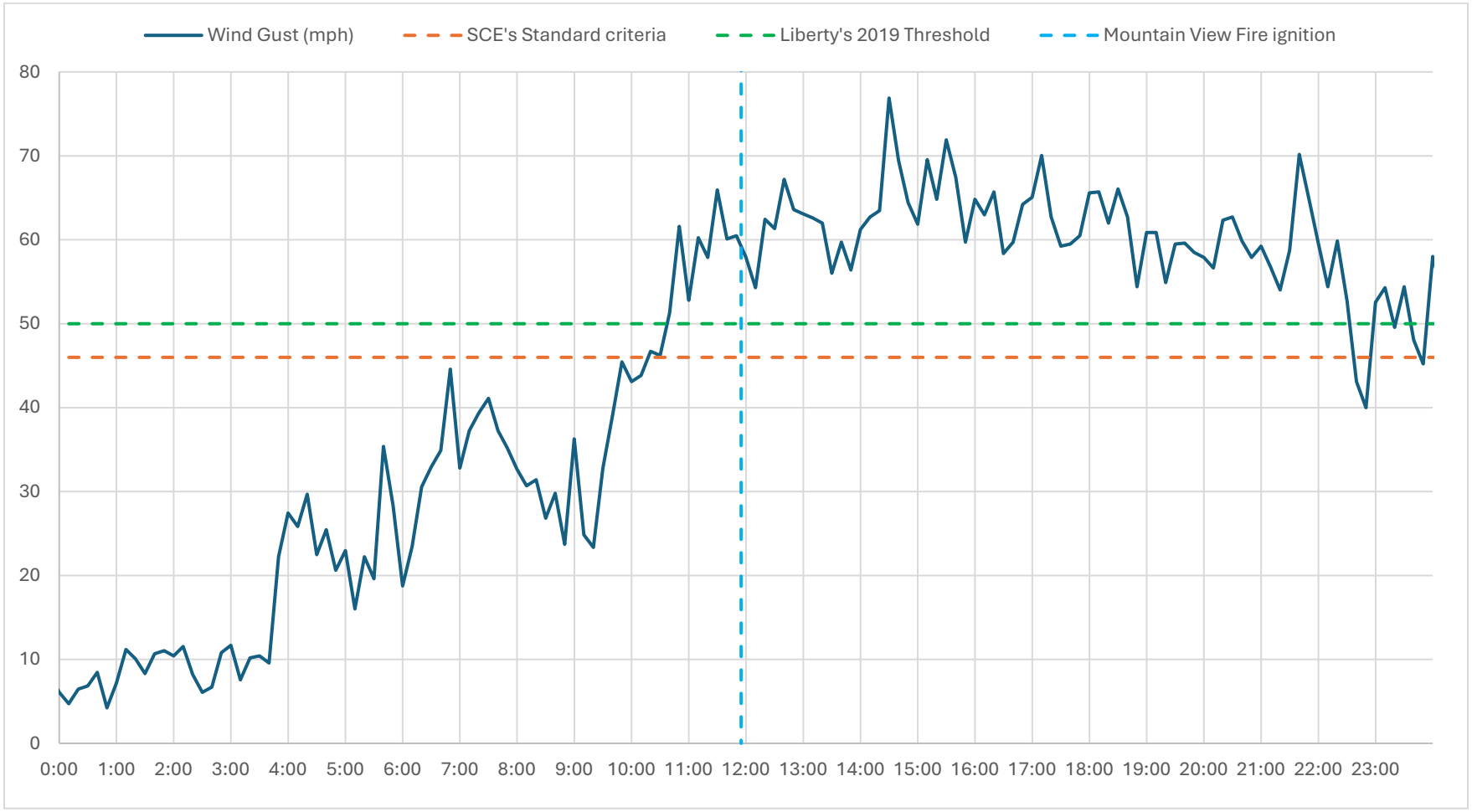
[20] Ex. Liberty-02 at 2.

[21] Attachment 6. For LIB26.

[22] Attachment 3 at 9. SCE's standard wind gust threshold of 46 mph was based on National Weather Service Wind Advisory levels.

[23] Ex. Liberty-03 at 37. "This early version of Liberty's PSPS protocol required the utility to dispatch crews to monitor field conditions when wind speeds reached 50 mph for greater than three seconds and allowed de-energization if wind speeds exceeded that threshold and a line posed a hazard."

Figure 2:
Graph of wind gust speeds on Topaz 1261 circuit on November 17, 2020.[24]



[24] Attachment 6. For LIB26.

B. SCE Used Lower Thresholds for Circuits That Had a History of Local Circuit Outages at Lower Wind Speeds.

In its November 14, 2020 PSPS event, SCE's thresholds were 31 mph for sustained wind and 46 mph for wind gust speeds for most of the circuits that SCE de-energized on November 17, 2020.[25] However, SCE assigned three circuits (Mettler, Cuddeback, and Shovel circuits) much lower sustained wind and wind gust thresholds than the other circuits that it de-energized on November 17, 2020, see Table 2 below.[26] SCE explained that the reason that it assigned its Mettler, Cuddeback, and Shovel circuits lower thresholds was because it considered those circuits "outage informed circuits," meaning that SCE was aware that these circuits had a "history of local circuit outages at lower wind speeds" than the NWS advisory level of 31 mph sustained wind and 46 mph wind gust thresholds.[27]

[25] Attachment 3 at 9-10.

[26] Attachment 3 at 9-10.

[27] Attachment 5, question 3e.

Table 2:
Sustained wind speed thresholds and wind gust thresholds of SCE's de-energized circuits.[28]

SCE's De-energized Circuit(s)	Sustained Wind Threshold (mph)	Wind Gust Threshold (mph)
Mettler	23	37
Cuddeback	23	37
Shovel	25	40
Grapevine Peak, Frozen, Tufa, Cain Ranch, Sand Canyon, Birchim, Birchim,[29] Reverse Peak	31	46

Notably, the two circuits that SCE de-energized (Tufa and Cain Ranch) in Mono county on the morning of the Mountain View Fire ignition were not included in SCE's outage informed circuit list and thus had higher sustained wind and wind gust thresholds than SCE's outage informed circuits (Mettler, Cuddeback, and Shovel). This shows that SCE used knowledge of its own local circuit outage history and made adjustments to thresholds based on that information.

C. Liberty's Topaz Circuit Had a History of Local Outages Due to Wire Slap, Sometimes Occurring at Relatively Low Wind Speeds.

1. Analysis Performed on Liberty's Original Data.

In contrast to SCE, Liberty set higher PSPS thresholds for the Topaz 1261 circuit than its typical circuits despite knowing that the Topaz 1261 circuit had an extensive history of outages from wire slap, which ultimately would cause the Mountain View

[28] Attachment 3 at 9-10.

[29] Attachment 3 at 9-10. Birchim is listed twice.

ignition. Wire slap (or conductor slap) occurs when two conductors come into contact due to outside factors, such as wind, which creates an ignition risk.[30]

In the amended response to CalAdvocates-LIB-A2506017-001, Liberty provided eight years of data (compared to four years of data in the original response) leading up to the Mountain View ignition. Liberty identified 21 outages in the original response and 34 outages in the amended response on the Topaz 1261 circuit likely to have been caused by wire slap.[31, 32] Liberty was well aware of the fragility of the Topaz 1261 circuit. In its 2019 GRC, Liberty explained that the Topaz "1261 circuit is located in an area that frequently experiences high winds and freezing temperatures" and that "[c]ombined with the age of overhead lines, these conditions have caused significant damage to the conductors" which "tend to break under the strain of ice and wind and exacerbate the deficiency of proper wire sag between poles causing the lines to be repeatedly spliced back together."[33] Cal Advocates did "not oppose Liberty's $0.81 million proposed 2019 forecast for this project."[34]

Table 3 shows the outages that Liberty identified as "suspected wire slapping events" from 2016 through 2020.[35] Cal Advocates approximated the wind speed and wind gust speed at the time of these outages using data from the nearest available weather station. (Liberty's LIB05 or LIB06, or the publicly available Walker Remote Automated Weather Station (RAWS) (WALC1) weather stations).

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[30] Attachment 7, American National Standards Institute, AMPP TR1505-2022: Wildfires Damage to Combustion Products, January 21, 2025 (Attachment 7). Available at: https://blog.ansi.org/ansi/ampp-tr1505-2022-wildfires-impact-on-power-lines/.

[31] Attachment 8, Liberty response to data request CalAdvocates-LIB-A2506017-032, question 4, October 31, 2025 (Attachment 8). Liberty identified 21 but only provided coordinates for 18 of them.

[32] Attachment 24, question 12, attachment "CalAdvocates-LIB-A2506017-001-Q12_Amended.xlsx."

[33] Attachment 9, Liberty Utilities 2019 General Rate Case (A.18-12-001), Ex. Liberty-02, Chapter 2: Capital, November 30, 2018 (Attachment 9) at 6.

[34] Attachment 10, A.18-12-001, Ex. Cal Advocates-07: Capital, July 23, 2019 (Attachment 10) at 6-7.

[35] Attachment 8, question 4. "Liberty identified wire slapping events by reviewing historical outage data for outages where the cause codes or remarks explicitly indicated wire-slapping-related causes…Liberty's OMS records date back to approximately 2016."

Table 3:
Suspected wire slap outages on Topaz 1261 circuit since 2016.[36, 37]

Incident ID	Date and time of outage	Nearest Weather Station	Wind Speed (mph)[38]	Wind Gust (mph)[39]
101[40]	1/29/16 1:54 PM Amended to 3:00 PM	WALC1	25.0 Amended to 24.0	48.0 Amended to 47.0
6264	4/14/16 4:36 AM	WALC1	22.0	44.0
7067	10/14/16 7:31 AM	WALC1	27.0	44.0
7392	11/19/16 8:22 AM	WALC1	34.0	50.0
7648	12/15/16 6:45 AM	WALC1	19.0	36.0
7755	1/1/17 6:00 PM	WALC1	21.0	42.0
8658	1/9/17 1:22 AM	WALC1	21.0	45.0
12703	1/23/17 2:25 PM	WALC1	12.0	19.0
13123[41]	2/1/17 11:39 PM Amended to AM	WALC1	38.0 Amended to 4.0	54.0 Amended to 7.0
15270	4/12/17 10:42 PM	WALC1	33.0	52.0

[36] Attachment 8, question 4. Liberty identified seven outages in 2016 (IDs: 101, 6264, 7067, **7144**, **7159**, 7392, 7648) and fourteen outages from 2017 to November 17, 2020 (IDs: 7755, 8658, 12703, 13123, 15270, 17187, **17190**, 17340, 17574, 17921, 22711, 24277, 24279, 27841).

[37] Attachment 11, Liberty response to data request CalAdvocates-LIB-A2506017-001, question 12, September 10, 2025 (Attachment 11), attachment "CalAdvocates-LIB-A2506017-001-Q12.xlsx." Liberty provided the coordinate information for 18 of the 21 wire slap outages. Liberty did not provide the coordinate locations for three outages (IDs: **7144, 7159, 17190**).

[38] Attachment 6. For WALC1, LIB05, and LIB06.

[39] Attachment 6. For WALC1, LIB05, and LIB06.

[40] Attachment 24, Liberty's amended response to data request CalAdvocates-LIB-A2506017-001, December 9, 2025, question 12, attachment "CalAdvocates-LIB-A2506017-001-Q12_Amended.xlsx."

[41] Attachment 24, Liberty's amended response to data request CalAdvocates-LIB-A2506017-001, December 9, 2025, question 12, attachment "CalAdvocates-LIB-A2506017-001-Q12_Amended.xlsx."

Incident ID	Date and time of outage	Nearest Weather Station	Wind Speed (mph)[38]	Wind Gust (mph)[39]
17187	10/20/17 12:18 AM	WALC1	34.0	52.0
17340	11/9/17 3:52 AM	WALC1	13.0	33.0
17574	11/26/17 4:52 PM	WALC1	27.0	52.0
17921	1/24/18 4:01 PM	WALC1	29.0	49.0
22711	2/25/19 11:45 PM	WALC1	20.0	39.0
24277	9/16/19 1:04 PM	LIB05	19.6	48.9
24279	9/16/19 6:03 PM	WALC1	17.0	31.0
27841	11/17/20 9:48 AM	LIB26	16.9	45.5

Liberty states that it "established slightly higher thresholds for wind gusts" for its Topaz 1261 and Muller 1296 circuits because these "zones were windier than other PSPS zones under normal weather conditions."[42] However, reviewing the available weather station data against the suspected wire slap outages shows 27% of outages in the original and 33% of these outages in the amended response occurred at wind gust speeds lower than 40 mph. Similarly, 44% of outages in the original and 50% of these outages in the amended response occurred at wind gust speeds lower than 45 mph. The analysis above does not support assigning the Topaz 1261 circuit a *higher* wind speed threshold (45 mph) than the rest of Liberty's circuits (40 mph).

As a result, Liberty states that it "was proactively rebuilding the Topaz 1261 Circuit to account for local conditions and mitigate wildfire risk," as part of its 2019 General Rate Case (GRC).[43] Liberty referred to this rebuild as the "Topaz Line Rebuild

[42] Ex. Liberty-03 at 39.

[43] Ex. Liberty-03 at 17.

Project."[44] Liberty states that it planned this as "a multi-year project and the original design specified upgrading overhead lines…[l]ater phases involved installation of covered conductor."[45] Liberty also stated that the Topaz Line Rebuild Project would "mitigate the risk of fires sparked from downed wires on the circuit" and that "[s]uch events have resulted in multiple outages (and at least one fire event) and present a potential hazard to public safety."[46]

2. Supplemental Analysis Performed on Liberty's Amended Outage Data.

On December 9, 2025, Liberty provided an amended list of outage incidents which included 12 additional outages on the Topaz 1261 circuit that it claims were caused by wire slap.[47] Table S1 shows those additional 12 outages and the wind speeds and wind gust speeds at which they occurred, as measured at the Walker RAWS. Table S1 shows that 58% of these wire slap caused outages occurred below Liberty's typical PSPS wind gust threshold (40 mph) and 83% occurred below Liberty's higher Topaz circuit PSPS wind gust threshold (45 mph).

[44] Ex. Liberty-03 at 16-17.

[45] Ex. Liberty-03 at 17. "Covered conductor has a protective sheath that protects the conductor from risks associated with contact by animals, vegetation, another line, or the ground, thereby significantly reducing the risk of ignition. The covering also helps protect the equipment from severe winds and extreme cold."

[46] Attachment 9 at 9.

[47] Attachment 24, question 12, attachment "CalAdvocates-LIB-A2506017-001-Q12_Amended.xlsx."

Table S1:
Supplemental suspected wire slap outages on Topaz 1261 circuit from 2012 through 2017.[48], [49]

Incident ID	Date and time of outage	Wind Speed (mph)	Wind Gust (mph)
240	11/30/2012 12:01:00 AM	28.0	51.0
239	2/15/2014 09:05:00 AM	15.0	26.0
250	3/26/2014 12:58:00 PM	12.0	26.0
338	6/19/2014 05:00:00 PM	14.0	22.0
455	12/11/2014 04:00:00 PM	34.0	66.0
446	12/12/2014 12:00:00 PM	3.0	7.0
523	7/1/2015 06:00:00 PM	12.0	23.0
570	10/2/2015 11:30:00 AM	9.0	15.0
7144	10/15/2016 12:43:00 PM	27.0	44.0
7159	10/16/2016 12:51:00 AM	20.0	44.0
814	2/6/2017 03:00:00 PM	23.0	42.0
17190	10/20/2017 09:47:00 AM	1.0	9.0

Liberty's 2020 WMP identified 18 outages as having been caused by wire slap.[50] However, Liberty's amended outage data reclassifies four of those outages as having a

[48] Attachment 24, question 12, attachment "CalAdvocates-LIB-A2506017-001-Q12_Amended.xlsx."

[49] Attachment 6. For WALC1.

[50] Attachment 25, Liberty's 2020 Wildfire Mitigation Plan Attachment 5 – Section 4.1.

cause other than wire slap.[51] Liberty confirmed that the remaining 14 wire slap outages identified in its 2020 WMP are correctly attributed.[52, 53]

Table S2 shows these four outages that Liberty no longer considers to have been caused by wire slap.[54] Similarly to Liberty's other wire slap outages identified in Table 3 and S1 above, these reclassified outages occurred at wind gust speeds that were much lower than Liberty's typical threshold (40 mph) or Liberty's threshold for the Topaz circuit (45 mph).

[51] Attachment 26, question 2d. "Due to the passage of time and the fact that Liberty employees who worked on "2020 WMP Attachment 5 – Section 4.1.xlsx" are no longer at the company, Liberty is unable to ascertain how the "wire slap" cause codes for "2020 WMP Attachment 5 – Section 4.1.xlsx" were determined."

[52] Attachment 8, question 4.

[53] Attachment 24, question 12, attachment "CalAdvocates-LIB-A2506017-001-Q12_Amended.xlsx."

[54] Attachment 26, question 2d.

Table S2:
Supplemental wire slap outages on Topaz 1261 circuit from 2016 through 2019.[55, 56]

Incident ID	Date and time of outage	Revised Cause of Outage[57]	Wind Speed (mph)	Wind Gust (mph)
7475	11/27/2016 06:51:55 AM	~~Moisture~~ Snow Unloading[58]	2.0	23.0
18087	2/22/2018 06:39:00 AM	Wind	6.0	16.0
19501	5/30/2018 04:10:22 PM	~~Deterioration~~ Wind[59]	22.0	33.0
21408	1/17/2019 09:29:33 AM	Deterioration	18.0	25.0

In sum, there appear to have been at least 30 outage incidents attributable to wire slap between 2012 and 2020, and another four incidents which may have been wire slap, but for which Liberty has provided inconsistent cause data. Table S3 consolidates the outage incidents in Tables 3, S1, and S2. Table S3 shows that of the 34 wire slap outages that occurred on Liberty's Topaz 1261 circuit, 50% occurred at wind gust speeds lower than Liberty's typical threshold (40 mph). Similarly, 67% of the 34 wire slap outages that occurred on Liberty's Topaz 1261 circuit occurred at wind gust speeds lower than Liberty's threshold for Topaz (45 mph). Consistent with Cal Advocates prior testimony, this outage data does not support assigning the Topaz 1261 circuit a *higher* wind speed threshold (45 mph) than the rest of Liberty's circuits (40 mph).

[55] Attachment 24, question 12, attachment "CalAdvocates-LIB-A2506017-001-Q12_Amended.xlsx."

[56] Attachment 6. For WALC1.

[57] Attachment 27, Liberty's response to data request CalAdvocates-LIB-A2506017-043, January 5, 2026, question 3, attachment "CalAdvocates-LIB-A2506017-043-Q3.xlsx."

[58] Liberty's original cause of the outage was "Moisture." Liberty's amended cause of the outage is "Snow Unloading." This change is demonstrated in Attachment 27, question 3, attachment "CalAdvocates-LIB-A2506017-043-Q3.xlsx."

[59] Liberty's original cause of the outage was "Deterioration." Liberty's amended cause of the outage is "Wind." This change is demonstrated in Attachment 27, question 3, attachment "CalAdvocates-LIB-A2506017-043-Q3.xlsx."

Table S3:

Total suspected wire slap outages on Topaz 1261 circuit between 2012 and 2020.[60, 61]

Incident ID	Start date and time of outage	DR-32, Q4 - wire slap[62]	DR-1, Q12 amended, Cause being Wire Slap[63]	2020 WMP Att 5 - Sec 4.1 – Wire Slap events, equivalent event ID[64]	Was this in original analysis (Table 3)?	Nearest wind speed (mph)	Nearest wind gust (mph)
240	11/30/2012 12:01:00 AM		Y			28.0	51.0
239	2/15/2014 09:05:00 AM		Y			15.0	26.0
250	3/26/2014 12:58:00 PM		Y			12.0	26.0
338	6/19/2014 05:00:00 PM		Y			14.0	22.0
455	12/11/2014 04:00:00 PM		Y			34.0	66.0
446	12/12/2014 12:00:00 PM		Y			3.0	7.0
523	7/1/2015 06:00:00 PM		Y	523		12.0	23.0
570	10/2/2015 11:30:00 AM		Y	570		9.0	15.0
101	1/29/2016 03:00:00 PM	Y	Y	618	Y	24.0	47.0
6264	4/14/2016 04:36:21 AM	Y	Y	650	Y	22.0	44.0
7067	10/14/2016 07:31:23 AM	Y	Y	712	Y	27.0	44.0
7144	10/15/2016 12:43:00 PM	Y	Y	697		27.0	44.0
7159	10/16/2016 12:51:00 AM	Y	Y	698		20.0	44.0
7392	11/19/2016 08:22:28 AM	Y	Y	719	Y	34.0	50.0
7475	11/27/2016 06:51:55 AM			732		2.0	23.0
7648	12/15/2016 06:45:56 AM	Y	Y	749	Y	19.0	36.0
7755	1/1/2017 06:00:27 PM	Y	Y		Y	21.0	42.0

8658	1/9/2017 01:30:00 AM	Y	Y		Y	21.0	45.0
12703	1/23/2017 02:25:13 PM	Y	Y		Y	12.0	19.0
13123	2/1/2017 11:39:30 AM	Y	Y		Y	4.0	7.0
814	2/6/2017 03:00:00 PM	Y	Y			23.0	42.0
15270	4/12/2017 10:42:14 PM	Y	Y	1039	Y	33.0	52.0
17187	10/20/2017 12:18:09 AM	Y	Y	17187	Y	34.0	52.0
17190	10/20/2017 09:47:00 AM	Y	Y			1.0	9.0
17340	11/9/2017 03:52:27 AM	Y	Y		Y	13.0	33.0
17574	11/26/2017 04:52:31 PM	Y	Y		Y	27.0	52.0
17921	1/24/2018 04:01:05 PM	Y	Y	17921	Y	29.0	49.0
18087	2/22/2018 06:39:00 AM			18087		6.0	16.0
19501	5/30/2018 04:10:22 PM			19501		22.0	33.0
21408	1/17/2019 09:29:33 AM			21408		18.0	25.0
22711	2/25/2019 11:45:31 PM	Y		22711	Y	20.0	39.0
24277	9/16/2019 01:04:37 PM	Y			Y	19.6	48.9
24279	9/16/2019 06:03:30 PM	Y		24279	Y	17.0	31.0
27841	11/17/2020 09:48:00 AM	Y			Y	16.9	45.5

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[60] Attachment 24, question 12, attachment "CalAdvocates-LIB-A2506017-001-Q12_Amended.xlsx."

[61] Attachment 6. For WALC1.

[62] Attachment 8, question 4.

[63] Attachment 24, question 12, attachment "CalAdvocates-LIB-A2506017-001-Q12_Amended.xlsx."

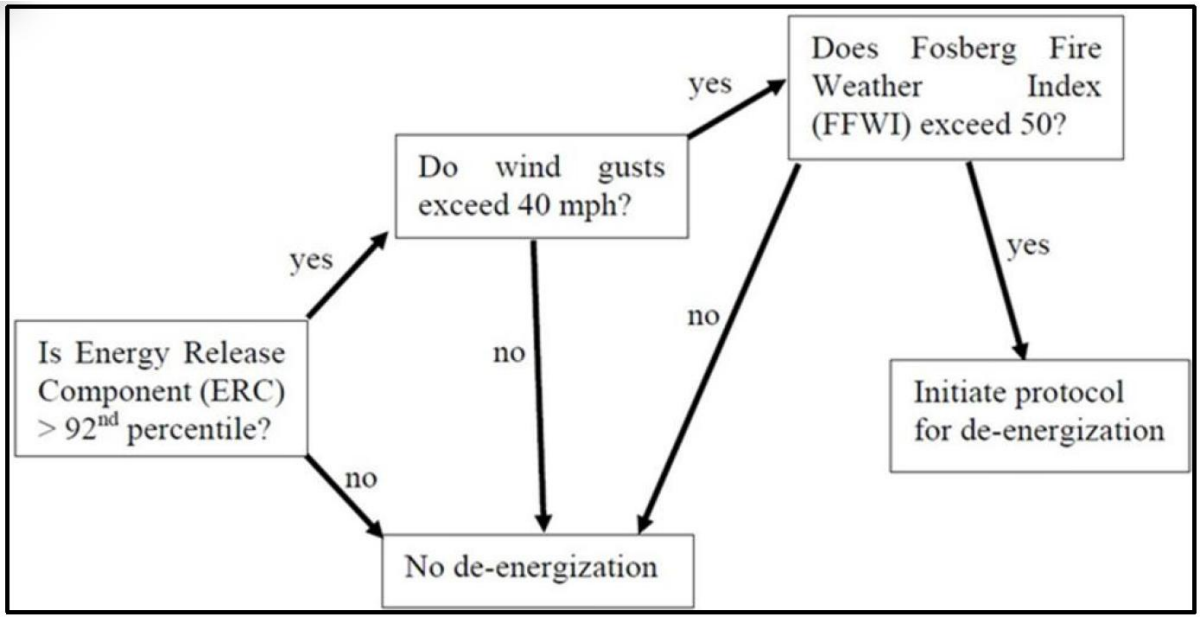
[64] Attachment 25.

D. Liberty's PSPS Thresholds Were Insufficient.

1. In 2019, Liberty Developed New PSPS Protocols.

Liberty hired a "fire science and risk modeling consultant in 2019 to support developing a more sophisticated PSPS protocol comprising a set of criteria and guidelines for de-energization."[65] Liberty's new PSPS protocol "used a predictive tool to capture three fire weather components: (a) Energy Release Component ('ERC'); (b) wind gusts; and (c) Fosberg Fire Weather Index ('FFWI')."[66] Figures 3 and 4 below show Liberty's de-energization decision trees. Liberty assigned a higher wind gust threshold and higher FFWI threshold for the Topaz 1261 and Muller 1296 circuits (Figure 4) than the rest of Liberty's circuits (Figure 3).

Figure 3:
Liberty's De-energization decision tree for most of Liberty's PSPS Zones (excluding the Topaz 1261 and Muller 1296 circuits).[67]



[65] Ex. Liberty-03 at 37.

[66] Ex. Liberty-03 at 37-38.

[67] Ex. Liberty-03 at 38.

Figure 4:
Liberty's De-energization decision tree for only Liberty's Topaz 1261 and Muller 1296 circuits.[68]

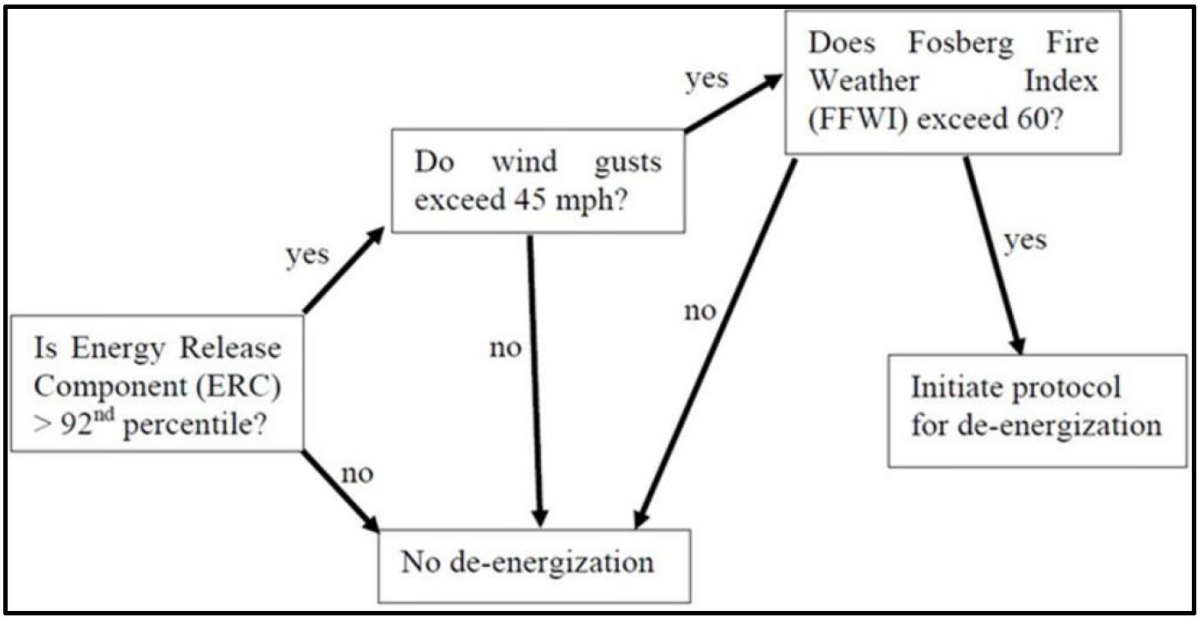


Table 4 summarizes Liberty's de-energization decision criteria. Liberty states that "its third-party fire science and risk modeling expert [Reax Engineering] evaluated practices of other utilities related to PSPS."[69] This review consisted of acknowledgment that eight utilities submitted 2019 Wildfire Mitigation Plans to the Commission but that only three of them "provided specific criteria for de-energization."[70] These three utilities that Reax Engineering chose to evaluate were Bear Valley Electric Service, Liberty Utilities, and PacifiCorp.[71] Notably, Reax does not include any analysis of the PSPS de-energization thresholds for SCE, which is the only other California public utility operating on the east side of the Siera Nevada range. Nor does it analyze thresholds for

[68] Ex. Liberty-03 at 39.

[69] Attachment 12, Liberty amended response to data request CalAdvocates-LIB-A2506017-011, question 4, October 22, 2025 (Attachment 12).

[70] Attachment 8, question 1, attachment "2019-08-20 Liberty Utilities de-energization thresholds_Redacted.pdf" at 3. Liberty's expert states that only three of the Wildfire Mitigation Plans provided specific criteria for de-energization, which were BVES, Liberty Utilities, and PacifiCorp.

[71] Attachment 8, question 1, attachment "2019-08-20 Liberty Utilities de-energization thresholds_Redacted.pdf" at 3.

of San Diego Gas & Electric (SDG&E), or Pacific Gas and Electric Company (PG&E), both companies with extensive experience with PSPS events.[72, 73]

Table 4:
Liberty's PSPS De-Energization Decision criteria.[74]

Liberty's Circuit(s)	Energy Release Component (ERC) Threshold	Wind Gust Threshold (mph)	Fosberg Fire Weather Index (FFWI)
Topaz 1261 and Muller 1296	92 percentile	45 mph	60
All other circuits[75]	92 percentile	40 mph	50

Reax Engineering determined that an "ERC percentile of 92 is recommended for use as a de-energization threshold" because that indicates "an increased probability of fires escaping initial attack and becoming extended attack fires."[76]

Reax Engineering analyzed several "catastrophic suspected powerline fires" and found that the "[m]easured gust speed for stations near the suspected ignition locations ranged from 32 mph to 79 mph, although gust speeds may have been higher at the ignition location, particularly for the lower readings."[77] Reax Engineering then

[72] Attachment 13, Archived PSPS Post-Event Reports 2017-2023 are available at: https://www.cpuc.ca.gov/consumer-support/psps/utility-company-psps-reports-post-event-and-post-season/archived-psps-post-event-reports-2017-2023 (Attachment 13).

[73] Attachment 14, Resolution ESRB-8, July 12, 2018 (Attachment 14) at 5. This required the IOUs to file a report to the Commission within 10 business days after each PSPS event, whether it resulted in de-energization or not.

[74] Ex. Liberty-03 at 38-39.

[75] Attachmen.t 12, question 7b. Liberty states that these thresholds were applicable to "all PSPS zones other than the Topaz 1261 and Muller 1296 circuit zones."

[76] Attachment 8, question 1, attachment "2019-08-20 Liberty Utilities de-energization thresholds_Redacted.pdf" at 9-10.

[77] Attachment 8, question 1, attachment "2019-08-20 Liberty Utilities de-energization thresholds_Redacted.pdf" at 2-3.

concluded that "a wind gust speed threshold of 40 – 45 mph is recommended as a threshold for de-energization of distribution lines."[78]

Reax Engineering stated that a Fosberg Fire Weather Index thresholds "above 50 – 60 are considered conducive to rapid wind-driven fire spread" and that based on the National Oceanic and Atmospheric Administration (NOAA) Storm Prediction Center, "temperatures above 60 F, [relative humidity] values less than 20%, and sustained surface winds above 20 mph will result in Fosberg values above 50, which is a minimum threshold for critical fire weather conditions."[79]

Although Reax Engineering provided Liberty analysis to show how it determined Liberty's de-energization thresholds, it was premature of Liberty to rely on these thresholds without understanding the implications of the decision tree.[80] There were some issues with each decision tree level, as will be discussed further next.

2. Liberty's Energy Release Component Data for the Topaz Zone was Inadequate.

Liberty's fire science and risk modeling expert described the "Energy Release Component (ERC) as "a key index **calculated from Remote Automated Weather Station ('RAWS') observations** as part of the US National Fire Danger Rating System ('NFDRS')."[81] The "physical meaning of an ERC value is 4% of the energy per unit area that would be released during a fire in units of [British Thermal Units (Btu) per square foot" such that "an ERC of 10 corresponds to 250 Btu [per square foot]."[82] Liberty

[78] Attachment 8, question 1, attachment "2019-08-20 Liberty Utilities de-energization thresholds_Redacted.pdf" at 8.

[79] Attachment 8, question 1, attachment "2019-08-20 Liberty Utilities de-energization thresholds_Redacted.pdf" at 9-10.

[80] Attachment 15, Liberty response to data request CalAdvocates-LIB-A2506017-008, question 4, September 5, 2025 (Attachment 15). When asked if Liberty conducted research and examine the practices of other utilities, Liberty answered that it "learned about PSPS practices of other utilities through their wildfire mitigation plans and joint workshops and other discussions in CPUC proceedings."

[81] Attachment 8, question 1, attachment "2019-08-20 Liberty Utilities de-energization thresholds_Redacted.pdf" at 4.

[82] Attachment 8, question 1, attachment "2019-08-20 Liberty Utilities de-energization thresholds_Redacted.pdf" at 4.

"obtained [ERC percentile forecasts] from the U.S. Forest Service Wildland Fire Assessment System ("WFAS") and updated [these forecasts] on Liberty's fire weather dashboard daily."[83]

Indeed, even Reax Engineering's analysis in determining Liberty's de-energization threshold used the seasonal "variations in ERC (for fuel model G) at **Walker RAWS** from 1975-2018."[84] Reax Engineering found that "[d]ata quality from this station [Walker RAWS] is questionable" because "[a]pproximately 500 hourly records were identified wherein wind gust and FFWI thresholds were exceeded between June and October."[85] Further, Reax Engineering stated that "[a]dditional analysis is required to understand if these readings are affected by data quality and whether Walker RAWS is representative of conditions in the Topaz PSPS Zone."[86] When asked to provide this additional analysis, Liberty was unable to and instead stated "the need to rely on RAWS decreased over time as Liberty installed weather stations and began to accrue a statistically significant set of weather data."[87]

The Walker RAWS was the nearest RAWS that it would make sense to calculate ERC from for the Topaz zone, especially since Liberty's consultant Reax Engineering already explained that its analysis was based on the ERC from the Walker RAWS in determining the thresholds for the Topaz zone.[88] However, Reax Engineering indicated

[83] Attachment 16, Liberty amended response to data request CalAdvocates-LIB-A2506017-017, question 1c, October 22, 2025 (Attachment 16).

[84] Attachment 8, question 1, attachment "2019-08-20 Liberty Utilities de-energization thresholds_Redacted.pdf" at 24 and 26.

[85] Attachment 8, question 1, attachment "2019-08-20 Liberty Utilities de-energization thresholds_Redacted.pdf" at 24.

[86] Attachment 8, question 1, attachment "2019-08-20 Liberty Utilities de-energization thresholds_Redacted.pdf" at 24.

[87] Attachment 17, Liberty response to data request CalAdvocates-LIB-A2506017-037, question 2c, November 22, 2025 (Attachment 17).

[88] Attachment 8, question 1, attachment "2019-08-20 Liberty Utilities de-energization thresholds_Redacted.pdf" at 24 and 26.

that data "quality from this station is questionable."[89] Liberty's consultant questioned the validity of the nearest weather station, the Walker RAWS. Since the ERC percentile forecast relies on the Walker RAWS data, the questionable quality of the data undermines the use of ERC percentile forecasts as a reliable first threshold for the Topaz circuit.

Moreover, when asked which weather station Liberty derived its ERC percentile forecasts from, Liberty was unable to provide this because it obtained these forecasts from the U.S. Forest Service Wildland Fire Assessment System (WFAS) as "an end-user, not a developer, of these ERC percentile forecasts"[90] Liberty did not know which weather station the forecasts came from, therefore Liberty cannot demonstrate that any of the ERC percentile forecasts displayed on its fire weather dashboard were for the correct area.

3. Liberty's Wind Gust Threshold Should Not Have Been Higher for Topaz Compared to the Rest of Liberty's Service Territory Because Liberty Knew That the Circuit Was Prone Wire Slap Risk Events.

Liberty states that because the "Topaz and Muller 1296 R3 PSPS zones were windier than other PSPS zones under normal weather conditions, Liberty's protocol established slightly higher thresholds for wind gusts."[91] Liberty's consultant, Reax Engineering, determined that Liberty's wind gust threshold for Topaz and Muller 1296 circuits should be higher than the "baseline values established earlier due to consistently higher wind speeds in these areas."[92] However, Section C shows in detail Liberty's history of wire slap related outages and how approximately 27% of those outages occurred at wind speeds lower than 40 mph and 44% of those outages occurred at wind speeds lower than 45 mph. Liberty's and REAX's decision to increase the wind speed

[89] Attachment 8, question 1, attachment "2019-08-20 Liberty Utilities de-energization thresholds_Redacted.pdf" at 24.

[90] Attachment 18, Liberty response to data request CalAdvocates-LIB-A2506017-035, question 2, November 13, 2025 (Attachment 18).

[91] Ex. Liberty-03 at 39.

[92] Attachment 8, question 1, attachment "2019-08-20 Liberty Utilities de-energization thresholds_Redacted.pdf" at 28.

threshold for de-energization had the functional effect of reducing the likelihood of a PSPS event, which if timely implemented would mitigate the risk of wildfire ignition on a circuit that has a history of wire slap risk events.

4. Fosberg Fire Weather Index Should Have Been Given Higher Priority When Assessing Wildfire Risk.

Absent an actual Red Flag Warning declared by the National Weather Service (NWS), the Fosberg Fire Weather Index would be an appropriate proxy that Liberty could have used for its own localized assessment of Topaz zone.[93] Table 5 shows a comparison of the conditions of an NWS Red Flag Warning with the conditions of a Fosberg Fire Weather value above 50. A Fosberg Fire Weather Index value above 50 "is a minimum threshold for critical fire weather conditions."[94]

While the Fosberg Fire Weather Index "is a commonly-used measure of fire risk that takes into account short-term variations in temperature, relative humidity, and wind speed," it does not "take into account fuel type, topography, or fuel moisture."[95] Because Fosberg Fire Weather Index did not take into account fuels, Liberty had to account for fuels using its Energy Release Component, which was discussed above.

[93] Attachment 18, question 15a.

[94] Attachment 8, question 1, attachment "2019-08-20 Liberty Utilities de-energization thresholds_Redacted.pdf" at 9-10.

[95] Ex. Liberty-03 at 38.

Table 5:
For a Fosberg Fire Weather Index above 50 compared to NWS Red Flag Warning.[96]

Condition	Fosberg Fire Weather Index above 50[97]	NWS Red Flag Warning[98]
Temperature	Above 60 degrees F	N/A
Wind gusts	Greater than or equal to 28.6 mph[99]	Greater than or equal to 30 mph
Relative humidity	Less than 20%	Less than or equal to 15%
Fuel moisture	N/A	Critical fuel moisture levels for 3 hours or greater

Liberty's weather stations could record Fosberg Fire Weather Index if that weather station had "sensors for rain gauge, soil moisture, and fuel moisture."[100] As explained in Chapter CA-04, Section II.D., Liberty had to retrofit ten of its weather stations with fuel moisture sensors. Of the three weather stations that Liberty had installed on the Topaz circuit, only one "was equipped with these sensors" and was able to record Fosberg Fire Weather Index data.[101]

As will be seen in Section II.E. below, Figure 7, Liberty's fire weather dashboard FFWI forecast made at 6:00 am on November 17, 2020 predicted a high of approximately 42 for the afternoon of November 17, 2020, which would have been well below the

[96] Ex. Liberty-03 at 38-39.

[97] Attachment 8, question 1, attachment "2019-08-20 Liberty Utilities de-energization thresholds_Redacted.pdf" at 9-10.

[98] Attachment 18, question 15a.

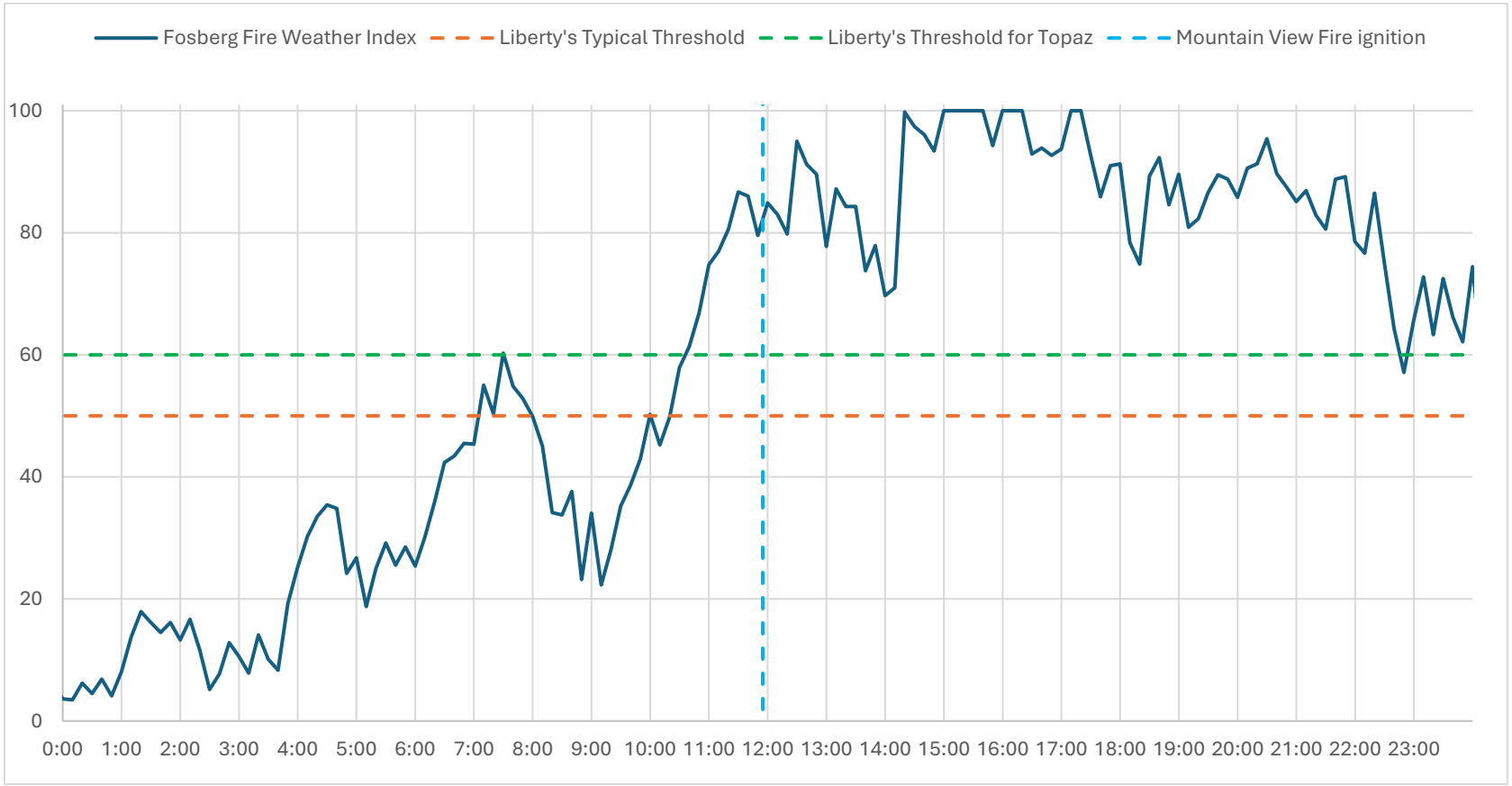
[99] Attachment 8, question 1, attachment "2019-08-20 Liberty Utilities de-energization thresholds_Redacted.pdf" at 8. Using Liberty's fire weather expert's approximation, a sustained wind speed of 20 mph can be multiplied by 1.43 to convert it to a wind gust speed of 28.6 mph.

[100] Attachment 18, question 16a.

[101] Attachment 18, question 16a. Only LIB-3130 could record FFWI, LIB-3105 and LIB-3106 could not because the sensors were retrofit onto these weather stations in 2021.

threshold of 60 for Topaz. Figure 5 below shows that the real-time calculation for Fosberg Fire Weather Index hit Liberty's threshold for Topaz at 7:30 am and then again exceeded this threshold at 10:40 am and stayed above this value through the time of the Mountain View Fire ignition.

Figure 5:
Liberty's Fosberg Fire Weather Index as calculated by its LIB-26 weather station on November 17, 2020.[102]



[102] Attachment 6. For LIB26.

Reax Engineering's analysis of the Topaz PSPS zone stated that "[a]pproximately 500 hourly records were identified [between 1999 and 2018] wherein wind gust and FFWI thresholds were exceeded between June and October."[103] This would imply the Topaz zone had a history of risky weather conditions (high winds and high potential for fire weather). Instead, Reax Engineering interpreted this to mean that the data "quality from this station is questionable."[104]

Liberty had available the real-time FFWI[105] that could proxy RFW conditions at the local level,[106] but instead Liberty relied on regional weather forecasts[107] and positioned FFWI as third in its decision tree, thus making it a lower priority in its decision-making process.

E. Liberty's PSPS Decision Criteria Were Newly Developed, But Its Documentation and Implementation Within Liberty's Fire Weather Dashboard Was Confusing and Incorrectly Calibrated for the Topaz Zone.

Liberty assigned PSPS de-energization decision criteria to its circuits, as discussed in Section II.D.i above, but stated that its fire weather dashboard "provides notification when conditions are forecast to exceed 80%, 90%, and 100% of the screening criteria in each PSPS zone."[108] However, these thresholds were not accurately displayed on Liberty's fire weather dashboard forecasts in the days leading up to the Mountain View fire ignition. Table 6 shows Liberty's three de-energization criteria thresholds for its Topaz zone's expected values (at 80% or 90% 100%) compared to Liberty's fire weather dashboard, which demonstrates that:

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[103] Attachment 8, question 1, attachment "2019-08-20 Liberty Utilities de-energization thresholds_Redacted.pdf" at 24.

[104] Attachment 8, question 1, attachment "2019-08-20 Liberty Utilities de-energization thresholds_Redacted.pdf" at 24.

[105] Liberty's weather station LIB26 provided this data, as shown in Figure 5.

[106] See Table 5 for comparison of NWS Red Flag conditions to FFWI of at least 50.

[107] Ex. Liberty-03-E at 40E. "The NWS issued a high wind warning for the area but did not issue a Red Flag Warning."

[108] Attachment 8, question 1, attachment "2019-08-20 Liberty Utilities de-energization thresholds_Redacted.pdf" at 37.

- The ERC percentile forecasts showed no indications for meeting 80% or 90% or 100% of the threshold;
- The wind gust threshold was 11.1% higher than the expected values; and
- The FFWI threshold was 16.7% higher than the expected values.

The threshold, as represented in the graphs, was simply incorrectly displayed.

Table 6:
Liberty's PSPS De-Energization Decision criteria for Topaz 1261 and Muller 1296.

	Energy Release Component (ERC) Threshold[109]	Wind Gust Threshold (mph)[110]	Difference between threshold and dashboard	Fosberg Fire Weather Index (FFWI)[111]	Difference between threshold and dashboard
100% of Liberty's Thresholds[112]	92 percentile	45 mph	11.1% increase	60	16.7% increase
Dashboard 100%	None	Approximately 50 mph		Approximately 70	
90% of Liberty's Thresholds[113]	82.8 percentile	40.5 mph	11.1% increase	54	16.7% increase
Dashboard 90%	None	Approximately 45 mph		Approximately 63	
80% of Liberty's Thresholds[114]	73.6 percentile	36 mph	11.1% increase	48	16.7% increase
Dashboard 80%	None	Approximately 40 mph		Approximately 56	

[109] Attachment 15, question 8c, attachment "FPI Forecasts.pdf" at PDF p.1-2. Dashboard gives no indication of 80%, 90%, or 100% of threshold.

[110] Attachment 15, question 8c, attachment "FPI Forecasts.pdf" at PDF p.12. Dashboard 100%, Dashboard 90%, and Dashboard 80% approximated from forecast plot for the Topaz zone.

[111] Attachment 15, question 8c, attachment "FPI Forecasts.pdf" at PDF p.12. Dashboard 100%, Dashboard 90%, and Dashboard 80% approximated from forecast plot for the Topaz zone.

[112] Ex. Liberty-03 at 38-39.

[113] Calculated by multiplying respective threshold by 0.9.

[114] Calculated by multiplying respective threshold by 0.8.

Figure 6 shows an example of Liberty's fire weather dashboard displaying ERC values, and demonstrates that there were no visual indications to show whether the ERC met 80% or 90% or 100% of the threshold, it simply displayed a value.

Figure 6:
Excerpts from Liberty's fire weather dashboard forecast for Energy Release Component Forecasts for November 17, 2020 at 6:00 am.[115]

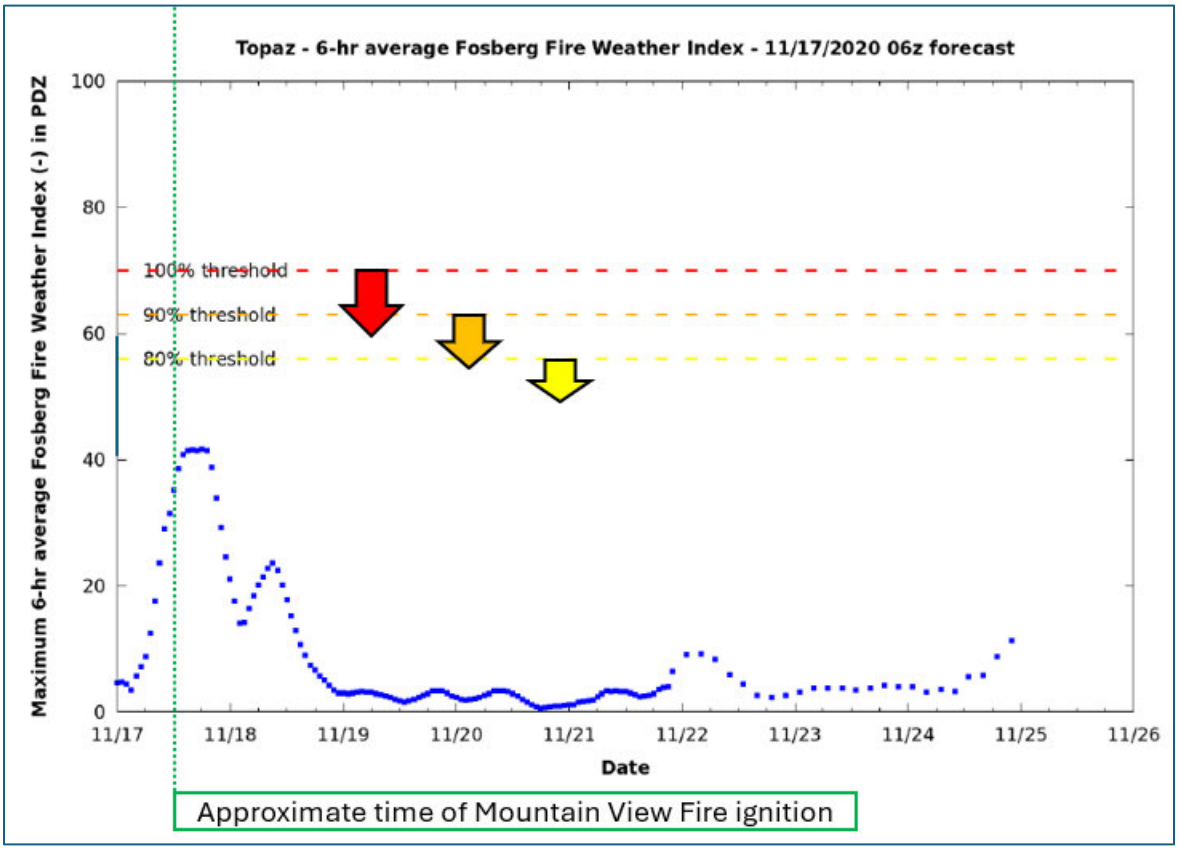
Liberty Utilities Energy Release Component Forecast for 11/17/20 - 11/23/20

Zone	Nov 17	Nov 18	Nov 19	Nov 20	Nov 21	Nov 22	Nov 23
111 Line	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Portola	56.9	55.7	44.6	39.3	41.2	42.2	45.3
Mul1296 r3	49.2	51.7	36.8	30.1	30.2	32.5	34.7
Topaz	60.5	61.3	44.8	38.0	38.4	39.2	45.1

As can be seen in Figure 7, which shows the FFWI forecast for the Topaz zone on November 17, 2020 at 6:00 am, this incorrect representation of the threshold values makes interpretation of the graphs difficult. The dotted blue curve represents the forecasted FFWI values while the dashed red, orange, and yellow lines are what Liberty's fire weather dashboard actually displayed. The red, orange, and yellow arrows were added to this image to show where the dashed lines respectively should approximately have been. The dotted green line was added to this image to show when the Mountain View Fire would approximately occur.

[115] Attachment 15, question 8c, attachment "FPI Forecasts.pdf" at PDF p. 501-502. This is only an excerpt of the top of the table and the Muller and Topaz zone rows, not the entire table for that day.

Figure 7:
Liberty's fire weather dashboard forecast for Topaz zone's FFWI at 6:00am on November 17, 2020.[116]



As can be seen in Figure 8, which shows the wind gust forecast for the Topaz zone on November 17, 2020 at 6:00 am, this incorrect representation of the threshold values makes interpretation of the graphs difficult. The dotted blue curve represents the forecasted wind gust values while the dashed red, orange, and yellow lines are what Liberty's fire weather dashboard actually displayed. The red, orange, and yellow arrows were added to this image to show where the dashed lines respectively should have been. The dotted green line was added to this image to show when the Mountain View Fire would approximately occur.

[116] Attachment 15, question 8c, attachment "FPI Forecasts.pdf" at PDF p. 512.

Figure 8:
Liberty's fire weather dashboard forecast for Topaz zone's wind gust at 6:00am on November 17, 2020.[117]

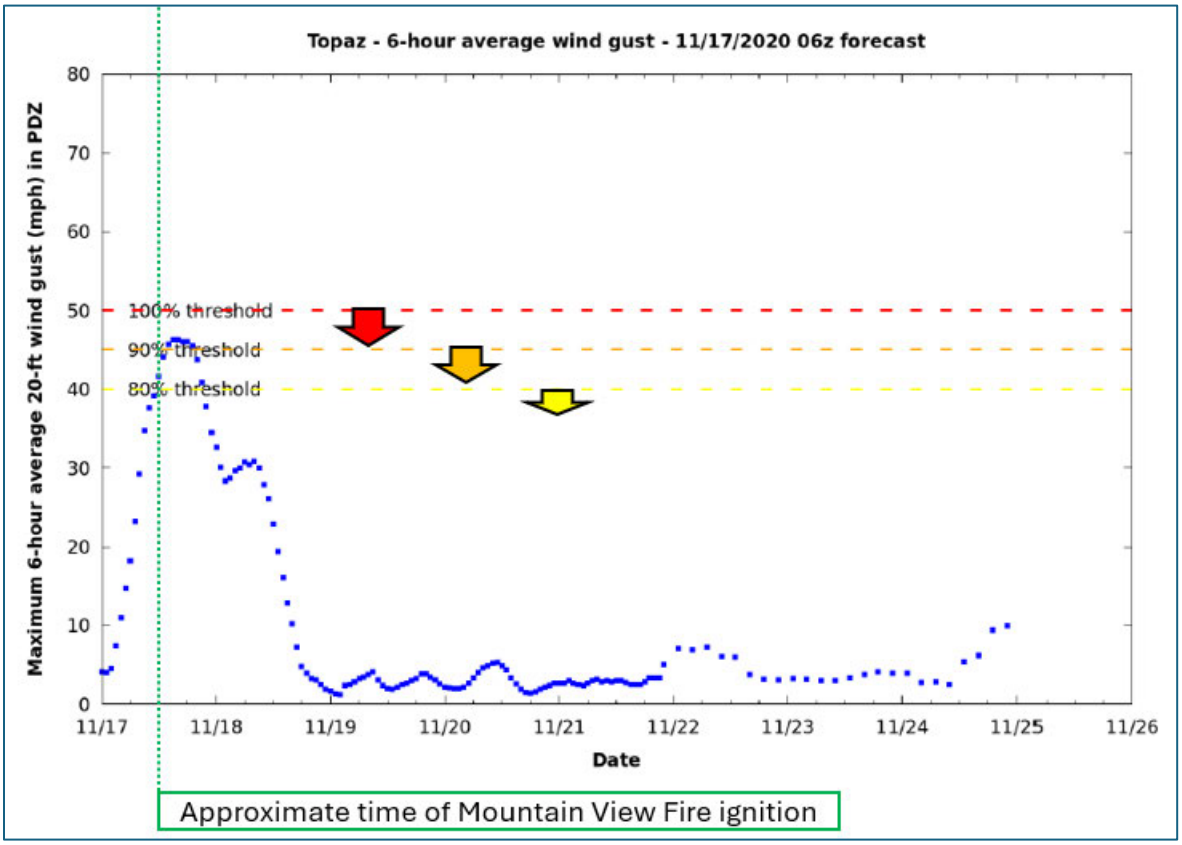


Table 7 shows Liberty's three de-energization criteria thresholds for its other typical zones' expected values (at 80% or 90% 100%) compared to Liberty's fire weather dashboard, which demonstrates that:

- The ERC percentile forecasts showed no indications for meeting 80% or 90% or 100% of the threshold;
- The wind gust thresholds were correct; and
- The FFWI thresholds were correct.

[117] Attachment 15, question 8c, attachment "FPI Forecasts.pdf" at PDF p. 512.

Table 7:
Liberty's PSPS De-Energization Decision criteria for all other circuits[118, 119]

	Energy Release Component (ERC) Threshold[120]	Wind Gust Threshold (mph)[121]	Fosberg Fire Weather Index (FFWI)[122]
100% of Liberty's Thresholds[123]	92 percentile	40 mph	50
Dashboard 100%	None	Approximately 40 mph	Approximately 50
90% of Liberty's Thresholds[124]	82.8 percentile	36 mph	45
Dashboard 90%	None	Approximately 36 mph	Approximately 45
80% of Liberty's Thresholds[125]	73.6 percentile	32 mph	40
Dashboard 80%	None	Approximately 32 mph	Approximately 40

As can be seen in Figure 9, which shows the FFWI forecast for a typical zone (in this case the Portola zone) on November 17, 2020 at 6:00 am, this is clear to read. The dotted blue curve represents the forecasted wind gust values while the dashed red, orange, and yellow lines are what Liberty's fire weather dashboard displayed. These lines appear to be correctly placed.

[118] Ex. Liberty-03 at 38-39.

[119] Attachment 12, question 7b. Liberty states that these thresholds were applicable to "all PSPS zones other than the Topaz 1261 and Muller 1296 circuit zones."

[120] Attachment 15, question 8c, attachment "FPI Forecasts.pdf" at PDF p. 1. Dashboard gives no indication of 80%, 90%, or 100% of threshold.

[121] Attachment 15, question 8c, attachment "FPI Forecasts.pdf" at PDF p. 3. Dashboard 100%, Dashboard 90%, and Dashboard 80% approximated from forecast plot for the Portola zone.

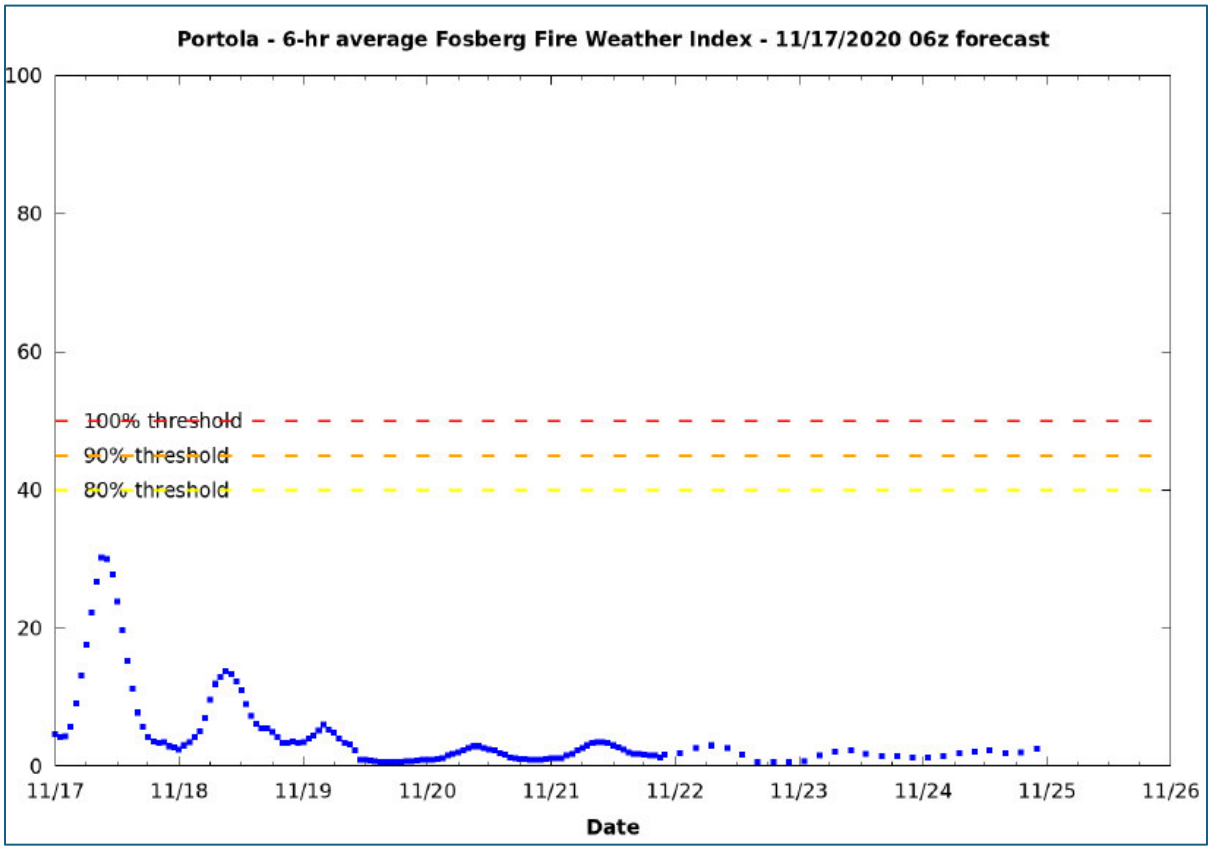
[122] Attachment 15, question 8c, attachment "FPI Forecasts.pdf" at PDF p. 3. Dashboard 100%, Dashboard 90%, and Dashboard 80% approximated from forecast plot for the Portola zone.

[123] Ex. Liberty-03 at 38-39.

[124] Calculated by multiplying respective threshold by 0.9.

[125] Calculated by multiplying respective threshold by 0.8.

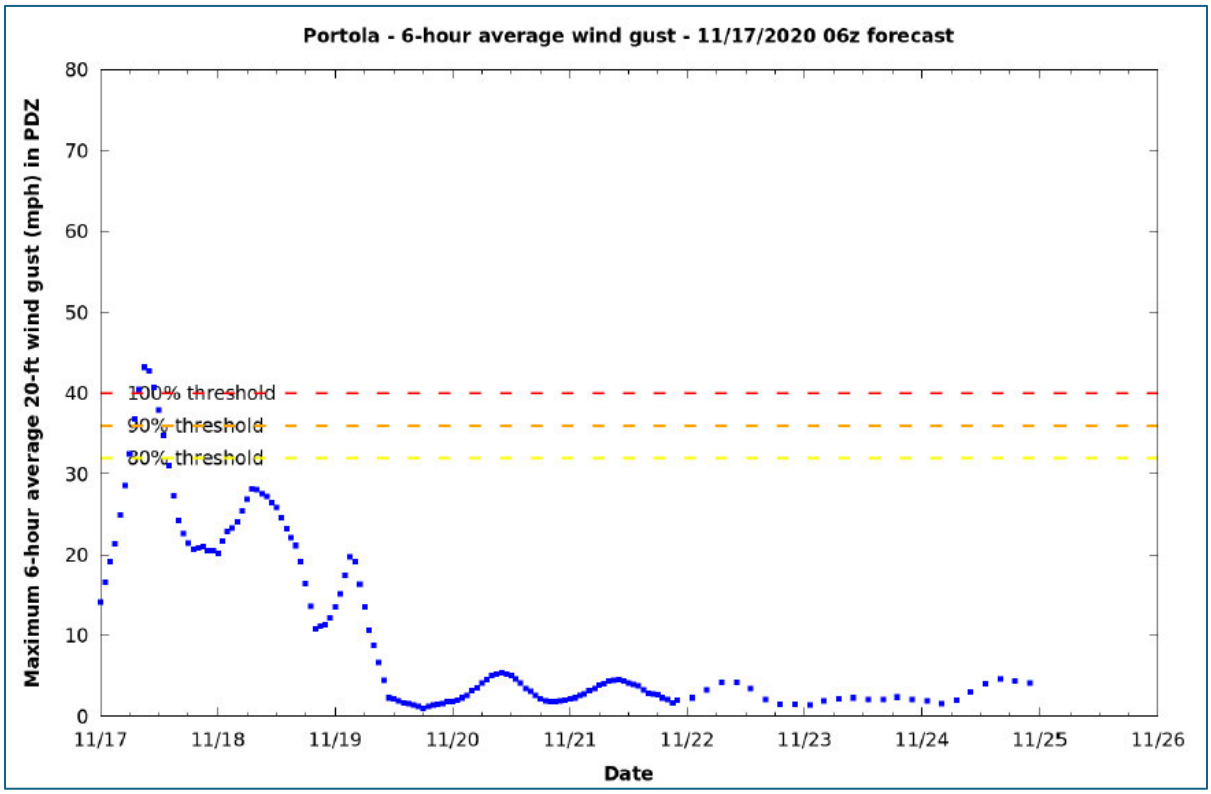
Figure 9:
Liberty's fire weather dashboard forecast for Portola zone's FFWI at 6:00am on November 17, 2020.[126]



As can be seen in Figure 10, which shows the wind gust forecast for a typical zone (in this case the Portola zone) on November 17, 2020 at 6:00 am, this is clear to read. The dotted blue curve represents the forecasted wind gust values while the dashed red, orange, and yellow lines are what Liberty's fire weather dashboard displayed. These lines appear to be correctly placed.

[126] Attachment 15, question 8c, attachment "FPI Forecasts.pdf" at PDF p. 503.

Figure 10:
Liberty's fire weather dashboard forecast for Portola zone's wind gust at 6:00am on November 17, 2020.[127]



Tables 6 and 7 above demonstrate that Liberty's fire weather dashboard failed to correctly indicate that the forecasts were reaching 80%, 90% or 100% of the threshold for Topaz and Muller zones. For all circuits, the dashboard did not provide any indication of the ERC percentile forecast reaching 80%, 90%, or 100% of the threshold of the 92nd percentile.

Liberty stated that "forecasts would typically have to simultaneously exceed 80%, 90%, or 100% of de-energization thresholds for all three PSPS criteria [ERC percentile, FFWI, and wind gust] for Liberty to consider activating its [Incident Management Team (IMT)] for a PSPS event."[128] However, had anyone at Liberty reviewed the fire weather

[127] Attachment 15, question 8c, attachment "FPI Forecasts.pdf" at PDF p. 503.

[128] Attachment 18, question 7b.

dashboard in the days leading up to the Mountain View fire ignition, they would have seen inaccurate 80%, 90%, and 100% thresholds for the Topaz zone.

While Liberty provided its fire weather dashboard forecasts from November 11, 2020 through November 17, 2020, each of these forecasts (provided daily at 12:00 am, 6:00 am, 12:00 pm, and 6:00 pm) showed the same incorrect indications (for 80% and 90% and 100% of thresholds) for FFWI and wind gust forecasts and lack of indication for ERC percentile forecasts.[129] Also, Liberty did not verify how long its dashboard was showing incorrect threshold demarcations since it "does not have access to fire weather dashboard data" from January 1, 2020 through November 10, 2020.[130] Similarly, Liberty would not have been able to verify the accuracy of its previous forecasts since it did not keep them.

F. Liberty's System Operators in New Hampshire Had No Ability to Implement a PSPS or Address Fire Weather Concerns Without Liberty's Operations in California.

Liberty states that its "System Control Center monitored the company's electric system and communicated with field personnel to address system alerts or other unanticipated outages or issues."[131] From 2011 until 2018, "Liberty's system was operated by NV Energy's system control center."[132] In 2018, Liberty "began the process of transitioning system control to Liberty Utilities' System Control Center in New Hampshire"[133] and finished transitioning by February 14, 2019.[134] Liberty states that, on November 17, 2020, "a System Operator was actively monitoring Liberty's electric

[129] Attachment 15, question 8c, attachment "FPI Forecasts.pdf" at PDF pp. 12, 32, 52, 72, 92, 112, 132, 152, 192, 212, 232, 252, 272, 292, 312, 332, 352, 372, 392, 412, 432, 452, 472, 492, 512, 532, and 552.

[130] Attachment 18, question 1e.

[131] Ex. Liberty-03-E at 2E.

[132] Ex. Liberty-03-E at 32E.

[133] Ex. Liberty-03-E at 32E.

[134] Attachment 16, question 4c.

operations, and communicated directly with field personnel about scheduled work and outages on the Topaz 1261 Circuit."[135]

However, Liberty states that its New Hampshire based "System Operators were not directly responsible for monitoring FPI or PSPS criteria."[136] Liberty further states that its "operations team in California was responsible for monitoring Liberty's fire weather dashboard and communicating PSPS and other operational decisions to Liberty Utilities' System Control Center in New Hampshire as needed."[137] Liberty's California-based operations team "included the Senior Manager of Wildfire Prevention, the Vice President of Operations, the Director of Operations, and the Emergency Management Manager" and was "responsible for monitoring Liberty's fire weather dashboard and communicating with Liberty's System Control Center and other personnel regarding potential PSPS events."[138]

When asked how many staff members from its California-based operations team were actively monitoring Liberty's fire weather dashboard and communicating to Liberty's Control Center, Liberty responded that it "does not have specific records tracking when and how many operations personnel accessed the data at any given time."[139] Liberty notes that its "fire weather dashboard and real-time weather data were accessible on publicly available websites and available to all employees at all times,"[140] however it did not provide any documentation showing how employees used its dashboard or otherwise observed real-time weather data.[141]

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[135] Ex. Liberty-03-E at 34E.

[136] Attachment 16, question 4e-f, October 22, 2025.

[137] Attachment 16, question 4e-f, October 22, 2025.

[138] Attachment 19, Liberty response to data request CalAdvocates-LIB-A2506017-029, question 9a, October 29, 2025 (Attachment 19).

[139] Attachment 19, question 9b.

[140] Attachment 19, question 9b.

[141] Attachment 19, question 5.

In sum, Liberty's System Control Center had no responsibility for monitoring weather conditions and forecasts.[142] Liberty's California operations team was responsible[143] but lacked any meaningful protocols to ensure that staff members utilized real-time weather data.[144]

Liberty's "forecasts did not meet Liberty's approved PSPS criteria or approach thresholds sufficient to initiate a potential PSPS event" and so even though the actual conditions on the morning of the ignition met the criteria for a red flag warning,[145] as demonstrated in Chapter CA-04, Section II.B, "Liberty did not initiate a PSPS event."[146]

G. Liberty's Function in California and its System Control Center in New Hampshire Were Inherently Siloed Such That the Control Center Did Not Perform a Proper Risk Assessment.

While Liberty states that it "had fully transitioned to Liberty Utilities' System Control in New Hampshire by February 14, 2019,"[147] the transition failed to ensure functionality and record retention prior to February 14, 2019, as discussed below.

There were a number of suspected wire slap outages that Liberty could not provide data for. When asked for data of all the outages that occurred on Liberty's Topaz 1261 circuit between 2010 and 2020, Liberty could not provide these records because its "records for the requested data date back to approximately 2016."[148] Liberty's 2016 Electric System Reliability Report states that the Topaz 1261 circuit "experienced twelve

[142] Attachment 16, question 4e-f.

[143] Attachment 16, question 4e-f.

[144] Attachment 19, question 5.

[145] Attachment 16, question 2, attachment "LU Fire Prevention Plan 10-9-2020.pdf" at 1. Liberty states it used "a combination of Red Flag Warning (RFW) notifications, interpretations from the Reax predictive tool, and information gathered from Liberty CalPeco weather stations [to] help determine avenues and countermeasures to mitigate the threat of utility-caused fire ignitions."

[146] Attachment 12, question 1a.

[147] Attachment 16, question 4c.

[148] Attachment 11, question 12, attachment "CalAdvocates-LIB-A2506017-001-Q12.xlsx." Liberty began operating this utility system in approximately 2011.

outages that were suspected wire slapping events" in 2016.[149] However, Liberty found "seven outages in 2016 that were identified as suspected wire slapping events" and that, because "Liberty's system was operated by NV Energy's system control center," Liberty "has not identified [the five] additional outages in 2016."[150] Additionally, "Liberty does not have Incident IDs for nine outages in 2015 identified as suspected wire-slapping events in its historical outage data because Liberty's [Outage Management System (OMS)] records date back to approximately 2016."[151] On January 5, 2026, Liberty clarified that it meant it could not identify "nine outage events on Liberty's entire system identified as suspected wire-slapping events, and only two of those outages occurred on the Topaz 1261 Circuit."[152, 153] Furthermore, "For an incident described as number "814" in its 2017 historical outage data, Liberty has not located a corresponding OMS record."[154, 155]

In total, there are at least five suspected wire slap outages that Liberty has no record of. This information, which could have been analyzed to provide vital information determining the appropriate wind gust threshold for the Topaz 1261 circuit, could not be analyzed because Liberty did not incorporate records from NV Energy. <conf>[redacted]<conf>

[149] Attachment 20, Liberty's 2016 Electric System Reliability Report, July 15, 2017 (Attachment 20) at 22.

[150] Attachment 8, question 4a.

[151] Attachment 8, question 4b.

[152] Attachment 27, question 6.

[153] Attachment 24. Liberty provided information for these two outages on December 9, 2025.

[154] Attachment 8, question 4c.

[155] Attachment 24. Liberty provided information for this outage on December 9, 2025.

[156] [redacted]

While a PSPS is a last resort, there must be steps that come before it, such as awareness of inherent risks in a system (circuit with known wire slap risk events),[157] especially in a place with ubiquitous dead fuels (visually[158] and quantitatively[159]). Liberty's Control Center and its System Operators, if given the whole picture of a risky circuit, should have been the last line of defense.

On the morning of November 17, 2020, at 9:48am, Liberty's Topaz 1261 circuit experienced a suspected wire slapping event,[160] which caused an outage[161] that occurred at a wind gust speed of approximately 45.5 mph.[162] Notably, this wind gust speed approached Liberty's wind gust forecast (approximately 45 mph, which was incorrectly shown as below the 100% threshold)[163] (see Figure 11 below) and surpassed Liberty's PSPS criteria predefined wind gust threshold (45 mph).[164] This should have alarmed anyone monitoring the system. Indeed, this warranted a risk assessment.

[157] See Section C above for discussion of Topaz 1261 circuit's wire slap related outages.

[158] Ex. Liberty-03 at 42.

[159] See Chapter CA-04, Section II.C on situational awareness.

[160] Attachment 8, question 4b.

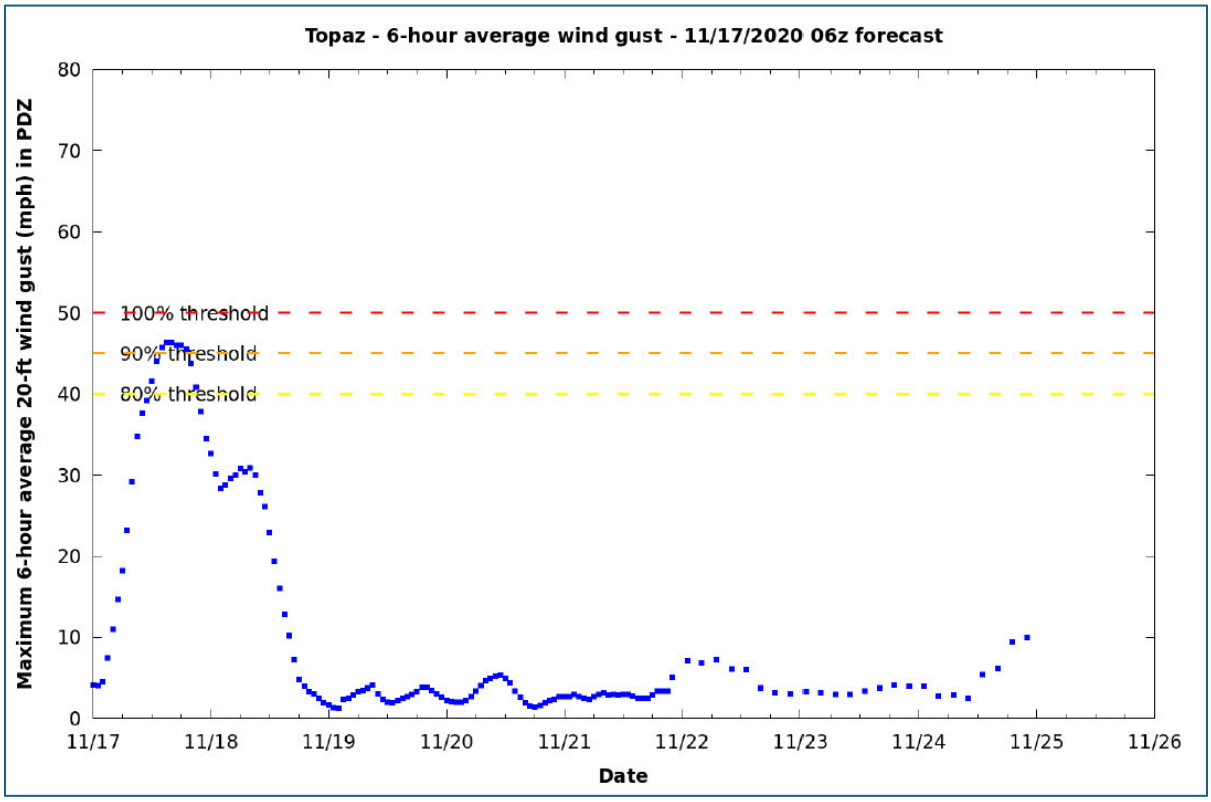
[161] Attachment 11, question 12, attachment "CalAdvocates-LIB-A2506017-001-Q12.xlsx." Incident ID 27841.

[162] See Table 3 in Section II.C.

[163] Attachment 15, question 8c, attachment "FPI Forecasts.pdf" at PDF p. 512.

[164] Ex. Liberty-03 at 39.

Figure 11:
Topaz zone forecast from Liberty's fire weather dashboard made at 6:00 am on November 17, 2020.[165]



Liberty states that "Depending on the circumstances surrounding the outage (e.g., whether there was a non-reclose assurance at the time), the System Operator would investigate the cause prior to re-energizing, such as by contacting field personnel nearby, looking for evidence of a fault, or conducting a Risk Assessment that would evaluate factors such as weather conditions, time of day and location, SCADA information, potential bird, animal, or public contact with facilities, and others. The System Operator could re-energize a circuit only after a Risk Assessment and any necessary line patrols, inspections, and remediation of safety hazards were completed."[166]

[165] Attachment 15, question 8c, attachment "FPI Forecasts.pdf" at PDF p. 512.

[166] Ex. Liberty-03-E at 33E-34E.

<conf>[redacted]<conf>

Thus, "Following a patrol of the affected line, at 10:41 a.m. the 1261 R2 Recloser was closed, re-energizing the line and restoring power to the affected customers" and later "the hotline tag mode was disabled and the 1261 R2 Recloser was returned to normal mode."[170]

H. Brief History of Liberty's Proactive De-energization Programs.

Liberty had a limited history of PSPS events prior to the Mountain View ignition. Liberty initiated a proactive de-energization event in 2018, and experienced a near de-energization event in 2019, before developing formal PSPS decision making protocols. Liberty developed the PSPS protocol in use at the time of the Mountain View ignition in August 2019.[171]

[167] [redacted]

[168] [redacted]

[169] [redacted]

[170] Ex. Liberty-03-E at 43E.

[171] Attachment 12, question 2.

1. Liberty Initiated a Proactive De-energization on November 21, 2018 Prior to the Development of its Formalized PSPS Protocols.

On Wednesday, November 21, 2018 at 12:00 pm, Liberty proactively de-energized three circuits (111 Line circuit, 625 Line circuit, 3400 circuit laterals)[172] until 3:00 pm.[173] Liberty states that it "did not have a formal PSPS protocol at the time, but proactively initiated a power shutoff based on weather conditions."[174] Liberty had "received weather reports from the [NWS] indicating a storm was approaching with high winds, and the conditions warranted a Fire Weather Watch."[175] Liberty stated that "NWS reports indicated wind speeds would reach 50-60 mph, with ridges experiencing 70-90 mph gusts, humidity in the 25-35% range, and temperatures around 50°."[176] Liberty explained that the "area had not received any appreciable amount of precipitation in several weeks, and the vegetation was extremely dry."[177]

Further, Liberty stated that its "3400 circuit laterals reside in rugged terrain that experienced a similar scenario in October 2016, which resulted in the Emerald fire." In determining to proactively de-energize its 3400 circuit laterals, Liberty had an awareness that "[i]n both the Emerald fire and the circumstances leading into this PSPS event, weather forecasts called for **significant wind preceding the rain and snow**."[178] Thus, Liberty previously showed awareness that a fire could occur, and had occurred, during a window of significant wind right before a period of wet weather.

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[172] These circuits are located near Lake Tahoe.

[173] Attachment 19, question 12b, attachment "Liberty Utilities (CalPeco Electric) LLC - Report to SED on 11-21-18 De-Energization Event" at 1.

[174] Ex. Liberty-03 at 37.

[175] Attachment 19, question 12b, attachment "Liberty Utilities (CalPeco Electric) LLC - Report to SED on 11-21-18 De-Energization Event" at 1.

[176] Attachment 19, question 12b, attachment "Liberty Utilities (CalPeco Electric) LLC - Report to SED on 11-21-18 De-Energization Event" at 1.

[177] Attachment 19, question 12b, attachment "Liberty Utilities (CalPeco Electric) LLC - Report to SED on 11-21-18 De-Energization Event" at 1.

[178] Attachment 19, question 12b, attachment "Liberty Utilities (CalPeco Electric) LLC - Report to SED on 11-21-18 De-Energization Event" at 1.

Notably, Liberty could not confirm whether it used real-time weather station data in its 2018 decision to de-energize, instead referring to the report and stating that "Liberty had not yet installed its own weather stations."[179] Liberty refers to its November 21, 2018 De-Energization report for "discussion of Liberty's decision-making based on forecast and actual conditions."[180] However, the report excludes what observed or actual weather data was used in Liberty's decision-making and refers only to the "NWS weather briefing report that includes relevant details to Liberty CalPeco's PSPS decision."[181] The NWS weather briefing report appears to include only forecasted weather data for the week ahead.[182]

2. Liberty Had a Potential PSPS De-energization Event in September 2019.

On Tuesday, September 10, 2019, Liberty's "Tahoe Fire Weather Monitoring tool provided a forecast alert predicting high wind gusts, warming temperatures, and dry conditions beginning Sunday morning, September 15, 2019."[183] Liberty noted "although the tool did not currently predict PSPS criteria to be exceeded," Liberty would monitor conditions at the direction of its fire weather consultant.[184]

On Wednesday, September 11, 2019, Liberty's "PSPS criteria was still not predicted to be exceeded."[185]

On Thursday, September 12, 2019, Liberty's consultant forecasted "sustained elevated wind speeds, high wind gusts, hot temperatures, and very dry conditions for

[179] Attachment 19, question 12b.

[180] Attachment 19, question 12b.

[181] Attachment 19, question 12b, attachment "Liberty Utilities (CalPeco Electric) LLC - Report to SED on 11-21-18 De-Energization Event" at 5.

[182] Attachment 19, question 12b, attachment "Liberty Utilities (CalPeco Electric) LLC - Report to SED on 11-21-18 De-Energization Event," Attachment 1 "National Weather Service Briefing."

[183] Attachment 19, question 11b, attachment "PSPS Post Event Report for September 10 to September 14, 2019" at PDF p. 5.

[184] Attachment 19, question 11b, attachment "PSPS Post Event Report for September 10 to September 14, 2019" at PDF p. 5.

[185] Attachment 19, question 11b, attachment "PSPS Post Event Report for September 10 to September 14, 2019" at PDF p. 5.

Sunday" and the NWS "had issued a Fire Weather Watch for the same time period."[186] At 5:30 pm, Liberty began notifying public safety partners, critical facilities, and medical baseline customers of the potential for a de-energization event.[187]

On Friday, September 13, 2019, Liberty's forecast for Sunday, September 15, 2019, "predicted lower wind speeds than previously forecast" and Liberty confirmed "through the sampling of live fuels that live fuel moisture and the energy release component were below PSPS criteria."[188] Thus, Liberty decided to cancel the event.

The 2019 event provided some good learning opportunities for Liberty. Liberty provided some lessons that it learned from this event in its Revised 2020 WMP such as:

- Although the "[b]right red line threshold is clear," there seemed to be a need for "potential action items" as thresholds were approached.[189]
- There also seemed to be a need for "[m]ore patrols if there is a forecast threshold exceed[ed]."[190]
- Liberty found that, regarding its System Control Center, there were "indications [that] staffing could be a challenge"[191] to coordinate with its "local emergency operations personnel."[192]

Between that event in September 2019 until the Mountain View Fire ignition on November 17, 2020, it remains unclear how much of these lessons learned were really addressed. As demonstrated in Section II.D., there were no threshold indications for ERC percentile forecasts on Liberty's fire weather dashboard, and the thresholds were

[186] Attachment 19, question 11b, attachment "PSPS Post Event Report for September 10 to September 14, 2019" at PDF p. 5.

[187] Attachment 19, question 11b, attachment "PSPS Post Event Report for September 10 to September 14, 2019" at PDF p. 5.

[188] Attachment 19, question 11b, attachment "PSPS Post Event Report for September 10 to September 14, 2019" at PDF p. 5.

[189] Attachment 23, Liberty's Revised 2020 Wildfire Mitigation Plan, February 28, 2020 (Attachment 23) at 34.

[190] Attachment 23 at 34.

[191] Attachment 23 at 34.

[192] Attachment 16, question 5b.

incorrectly indicated for wind gust forecast and FFWI forecast on the Topaz circuit at the time of the Mountain View Fire ignition. Additionally, Liberty "does not have access to fire weather dashboard data from" September 7, 2019 through September 14, 2019, which would cover its September 2019 potential PSPS event, "given the passage of time."[193]

III. CONCLUSION

Liberty did not appropriately address the inherent ignition risks of a circuit with a history of outages due to wire slap. Liberty's staff were siloed such that the people who needed to know were not aware of the inherent risks. Liberty failed to examine (or keep) actual outage data of its Topaz circuit in determining its PSPS de-energization thresholds. Liberty unquestioningly accepted the thresholds determined by its consultant without considering more experienced utilities or its own known risk factors. Liberty unquestioningly used a forecasting tool that was not properly calibrated. Liberty did not use the real-time information that was available to it from its own weather stations.

[193] Attachment 19, question 11a.

APPENDIX A

QUALIFICATIONS OF WITNESS

PREPARED TESTIMONY AND QUALIFICATIONS
OF
AMANDA ASADI

My name is Amanda Asadi. My business address is 505 Van Ness Avenue, San Francisco, California. I am employed by the Public Advocates Office as a Utilities Engineer in the Safety Branch.

I received a Bachelor of Science degree in Mechanical Engineering from the University of Hawai'i at Manoa. I have worked at the California Public Utilities Commission since 2021, initially as a Utilities Engineer in the Safety and Enforcement Division. While in the Safety and Enforcement Division, I investigated electric utility incidents, resolved customer complaints, and performed audits of electric and communication utilities, and generation facilities.

I joined Cal Advocates in May 2022 as a Utilities Engineer. While at Cal Advocates, I have primarily worked on analysis and commentary on the Investor-Owned Utilities' Public Safety Power Shutoff (PSPS) programs. I have also provided comments to the Office of Energy Infrastructure Safety regarding the electric utilities' Wildfire Mitigation Plans (WMPs). In particular, I have reviewed and analyzed the WMPs of SCE, SDG&E, and PG&E. In 2024 to 2025, I participated in SCE's cost-recovery application related to the Woolsey Fire (A.24-10-002). I prepared and sponsored testimony regarding situational awareness and preventive measures for wildfire risk related to the Woolsey Fire ignition.

Prior to joining Cal Advocates I worked as a mechanical engineer for the Pearl Harbor Naval Shipyard & IMF from 2014 to 2018, and as a multidiscipline engineer for Boeing from 2018 to 2020.

This concludes my statement of qualifications.

APPENDIX B

SUPPORTING DOCUMENTS

APPENDIX C

SUPPLEMENTAL SUPPORTING ATTACHMENTS

LIST OF ATTACHMENTS FOR APPENDIX C

Attachment	Title
Attachment 24	Liberty's amended response to data request CalAdvocates-LIB-A2506017-001, December 9, 2025.
Attachment 25	Liberty's 2020 Wildfire Mitigation Plan Attachment 5 – Section 4.1.
Attachment 26	Liberty's response to data request CalAdvocates-LIB-A2506017-044, January 6, 2026.
Attachment 27	Liberty's response to data request CalAdvocates-LIB-A2506017-043, January 5, 2026.

Attachment 24

Liberty's amended response to data request CalAdvocates-LIB-A2506017-001, December 9, 2025

Liberty Utilities (CalPeco Electric) LLC
933 Eloise Avenue
South Lake Tahoe, CA 96150
Tel: 800-782-2506
Fax: 530-544-4811

December 9, 2025

Liberty Utilities (CalPeco Electric) LLC

A.25-06-017
WEMA

The Public Advocates Office

Data Request No.:	CalAdvocates-LIB-A2506017-001
Requesting Party:	Public Advocates Office
Originator:	Charles Madison, Charles.Madison@cpuc.ca.gov
	Aaron Louie, Aaron.Louie@cpuc.ca.gov
	Patrick Huber, Patrick.Huber@cpuc.ca.gov
Cc:	Matthew Karle, Matthew.Karle@cpuc.ca.gov
Date Received:	August 19, 2025
Due Date:	September 3, 2025
Extension Granted:	September 10, 2025
Response Date:	September 10, 2025
Amended Response Date:	December 9, 2025

Attachments to these responses contain information marked confidential in accordance with applicable law and regulation. The basis for confidentiality is set forth in accompanying confidentiality declaration. Public disclosure is restricted.

REQUEST NO. 1:

Provide an Excel file that contains all corrective work identified in 2010-2020 by the routine or annual patrol program affecting the Topaz 1261 circuit.

Each asset work order should be in a row. The file should contain the following columns of data:

a) Structure number
b) Work Order Number

c) Notification Number (if applicable)
d) Equipment Number
e) Inspection Date
f) Equipment Type
g) HFTD/HFRA Tier
h) Priority
i) Ignition Risk (Y/N)
j) Date Created
k) Due Date
l) Revised Due Date (if applicable)
m) Priority Change (if applicable)
n) Reason for Change (if applicable)
o) Date Completed
p) Latitude in degrees
q) Longitude in degrees.

AMENDED RESPONSE:

Liberty objects to this Question as vague and ambiguous. Liberty further objects to this Question as unduly burdensome to the extent it seeks information not maintained by Liberty in the ordinary course of business. Liberty further objects to this Question to the extent it seeks information from prior to the start of Liberty's operations in approximately 2011, when it purchased the California utility system from NV Energy. Subject to and without waiving its objections, Liberty responds as follows:

As explained in *Liberty-03: Prudence of Operations*, Liberty conducted routine patrols using hard-copy circuit maps and inspectors noted any corrective work on these maps. *See* Liberty-03 at 20. After a reasonable search and diligent inquiry, Liberty located Topaz 1261 maps used for Liberty's patrols from 2013, 2015, and 2017, which were provided in response to CalAdvocates-LIB-A2306017-004, Question 2. These maps do not indicate any corrective work identified by those patrols.

REQUEST NO. 2:

Provide an Excel file that contains all corrective work identified in 2010 - 2020 by the detailed inspection program affecting the Topaz 1261 circuit.

Each asset work order should be in a row. The file should contain the same columns of data listed in Question 1 above.

AMENDED RESPONSE:

This response contains confidential attachments. Liberty objects to this Question as vague and ambiguous. Liberty further objects to this Question as unduly burdensome to the extent it seeks information not maintained by Liberty in the ordinary course of business. Liberty further objects to this Question to the extent it seeks information from prior to the start of Liberty's operations in approximately 2011, when it purchased the California utility system from NV Energy. Subject to and without waiving its objections, Liberty responds as follows:

As described in *Liberty-03: Prudence of Operations,* Liberty transitioned to Fulcrum for detailed inspection records in 2020 and has continued to refine its data collection process since that time. As also described in *Liberty-03: Prudence of Operations*, prior to 2020, inspectors recorded the results of detailed inspections on physical forms and thus, Liberty is unable to provide an Excel file with the requested information for detailed inspections prior to 2020 due to the significant burden of compiling such a file based on information contained within hard-copy records for the entire Topaz 1261 Circuit over a nearly 10-year period.

Liberty is providing information requested by this Question in *CONFIDENTIAL-CalAdvocates-LIB-A2506017-001-Q2_Amended.xlsx*, to the extent available in its Fulcrum database for detailed inspection records in 2020. This spreadsheet contains a list of inspection records from 2020 detailed inspections on the Topaz 1261 Circuit that Liberty understands to indicate corrective work identified during those inspections. Liberty identified these records by reviewing the full event history output for inspection records for the Topaz 1261 Circuit from the 2020 detailed inspections, which Liberty produced in response to Question 31 of CalAdvocates-LIB-A2506017-031 as confidential attachment *CONFIDENTIAL-CalAdvocates-LIB-A2506017-31-Q3.csv*. Liberty selected records that were updated in 2020 and that had a priority level identified as Level 1, 2, or 3. Liberty also selected records updated in 2020 where inspectors selected or filled in condition codes for issues identified during the inspection. In some instances, the spreadsheet contains multiple event history records corresponding to the same inspection at the same pole, if the record was updated multiple times in 2020. Liberty is providing the information requested in subparts (k) and (o) by producing the full event record for the most recent event history available in Fulcrum, as of October 3, 2025, for the aforementioned inspection records. Please note that Liberty did not track some of the information requested by this Question.

REQUEST NO. 3:

Provide an Excel file that contains all corrective work identified in 2010 - 2020 by any infrared inspection programs affecting the Topaz 1261 circuit.

Each asset work order should be in a row. The file should contain the same columns of data listed in Question 1 above.

RESPONSE:

Liberty objects to this Question as vague and ambiguous. Liberty further objects to this Question to the extent it seeks information from prior to the start of Liberty's operations in approximately 2011, when it purchased the California utility system from NV Energy. Subject to and without waiving its objections, Liberty responds as follows: Liberty did not have an infrared inspection program during the specified time frame.

REQUEST NO. 4:

Provide an Excel file that contains all corrective work identified in 2010 - 2020 by the intrusive pole inspection program affecting the Topaz 1261 circuit.

Each asset work order should be in a row. The file should contain the same columns of data listed in Question 1 above.

RESPONSE:

Liberty objects to this Question as vague and ambiguous. Liberty further objects to this Question as unduly burdensome to the extent it seeks information not maintained by Liberty in the ordinary course of business. Liberty further objects to this Question to the extent it seeks information from prior to the start of Liberty's operations in approximately 2011, when it purchased the California utility system from NV Energy. Subject to and without waiving its objections, Liberty responds as follows:

Please see attachment *CalAdvocates-LIB-A2506017-001-Q4_Amended.xlsx*, which contains available data related to intrusive pole inspections conducted on the Topaz 1261 Circuit in 2013, the only year between 2011 and 2020 in which such inspections were performed on this circuit. This spreadsheet contains three tabs for corrective work identified by these inspections: "Restorable" – poles that were identified for reinforcement; "Non-Restorable" – poles that were identified for replacement; and "Hazard Poles" – poles that were identified for urgent replacement. Liberty addressed corrective work using hard-copy work packets during the specified time frame. For purposes of this response, Liberty is providing in Column AK of the spreadsheet information regarding when the poles identified in the "Non-Restorable" and "Hazard Poles" tabs were replaced. Liberty identified this information using a combination of data sources, including pole replacement design packets, installation dates of poles available in its GIS database, records of pole inspections available within the Fulcrum database, and field verification.

REQUEST NO. 5:

a) What constituted an asset work order being "overdue," according to Liberty's policies at the time of the Mountain View Fire?

b) What were considered valid reasons for delays in remediating asset work orders, according to Liberty policies at the time of the Mountain View Fire?

RESPONSE:

Liberty objects to this Question as vague and ambiguous as to the term "asset work order" and "valid reasons for delays." Subject to and without waiving its objections, Liberty responds as follows:

a) Liberty understands the term "asset work order" to refer to conditions requiring corrective actions in relation to a Liberty asset. At the time of the Mountain View Fire, Liberty assigned due dates for conditions based on the regulatory requirements set forth by GO 95, Rule 18. An "overdue" condition is one that is past the due date assigned by Liberty and applicable regulatory requirements.

b) Liberty understands the phrase "valid reasons for delays" to refer to reasons by which remediation times may be extended beyond the deadlines prescribed by regulatory

requirements. Not all conditions were compliance-based issues. Those conditions not related to compliance were not subject to regulatory requirements. For compliance-based conditions, Liberty attempted to complete all remediation by the assigned due dates. For some conditions, factors beyond Liberty's control, such as permitting, customer refusal, access difficulties, and emergencies such as the Covid-19 pandemic, may cause Liberty to require additional time to complete the remediation. GO 95, Rule 18(A)(2)(b) allows such "reasonable circumstances" to justify an extension of correction times.

REQUEST NO. 6:

a) How did Liberty assess the wildfire risk associated with overdue asset work orders at the time of the Mountain View Fire?

b) What criteria did Liberty use to determine whether an overdue asset work order posed an immediate wildfire risk?

c) At the time of the Mountain View Fire, what role did fire risk play in determining the priority classification of conditions (with respect to asset work orders)?

RESPONSE:

Liberty objects to this Question as vague and ambiguous as to the term "asset work order." Subject to and without waiving its objections, Liberty responds as follows:

a) Liberty understands the term "asset work order" to refer to conditions requiring corrective actions in relation to a Liberty asset. Liberty assessed the wildfire risk associated with asset work orders by assessing whether an asset was located within the Commission's High Fire Threat District and assigning the corresponding due dates as set forth in GO 95, Rule 18. As explained in its response to Question 5 of this set of data requests, Liberty attempted to complete all compliance-based conditions by the assigned due dates.
b) - c) Please see Liberty's response to subpart (a).

REQUEST NO. 7:

Please provide all records of any asset maintenance notifications on the Topaz 1261 circuit that were open as of November 17, 2020. Provide a spreadsheet with a row for each notification.

Please provide the following columns of data:

a) Structure number
b) Work Order Number
c) Equipment Number
d) Inspection Date
e) Equipment Type
f) HFTD/HFRA Tier
g) Priority
h) Ignition Risk (Y/N)

i) Date Created
j) Due Date
k) Revised Due Date (if applicable)
l) Priority Change (if applicable).
m) Reason for Change (if applicable)
n) Date Completed
o) Latitude in degrees
p) Longitude in degrees

AMENDED RESPONSE:

This response contains confidential attachments. Liberty objects to this Question as vague and ambiguous. Liberty further objects to this Question as unduly burdensome to the extent it seeks information not kept in the ordinary course of business. Subject to and without waiving its objections, Liberty responds as follows:

Liberty understands this Question to be asking for conditions that were identified on or before November 17, 2020, and not yet remediated as of November 17, 2020. As described in *Liberty-03: Prudence of Operations,* Liberty transitioned to Fulcrum for detailed inspection records in 2020 and has continued to refine its data collection process since that time. Prior to 2020, inspectors recorded the results of inspections, including corrective work identified, on hard-copy maps and forms and thus, Liberty is unable to provide an Excel file with the requested information for asset maintenance notifications identified during inspections prior to 2020 due to the significant burden involved with compiling such a file based on identifying, collecting, and reviewing hard-copy records for the entire circuit.

Please refer to *CONFIDENTIAL-CalAdvocates-LIB-A2506017-001-Q2_Amended.xlsx* and Liberty's response to Question 2 of this set of data requests. The spreadsheet *CONFIDENTIAL-CalAdvocates-LIB-A2506017-001-Q2_Amended.xlsx* contains a list of inspection records from 2020 detailed inspections on the Topaz 1261 Circuit that Liberty understands to indicate corrective work identified during those inspections, whether or not the corrective work was addressed prior to or after November 17, 2020.

REQUEST NO. 8:

In the ten years prior to the Mountain View Fire (2010 - 2020), were any splices installed on the conductor on the Topaz 1261 16kV circuit? If so, provide an Excel spreadsheet with the following information for each splice installed:

a) Date the splice was determined to be necessary.
b) Structure number at the upstream end of the span where the splice was installed.
c) Structure number at the downstream end of the span where the splice was installed.
d) Method(s) used to identify the need for a splice.
e) Work order number used to install splice.
f) Date work order was created.
g) Date work order was completed.

AMENDED RESPONSE:

Liberty objects to this Question as overly burdensome to the extent it seeks records and information not kept in the ordinary course of business. Liberty further objects to this Question to the extent it seeks information from prior to the start of Liberty's operations in approximately 2011, when it purchased the California utility system from NV Energy. Subject to and without waiving its objections, Liberty responds as follows:

Liberty installed splices on the Topaz 1261 Circuit as needed in connection with operation of the distribution system. As referenced in *Liberty-02: Ignition*, splices were present on the lines in the Subject Span. *See* Liberty-02 at 7. After a reasonable search and diligent inquiry, Liberty has not located records containing the detailed information regarding splices requested by subparts (a)-(g). Although Liberty did not typically document installation of splices on its system as a matter of course, Liberty documented the general location and number of splices on the Topaz 1261 Circuit as part of the 2020 asset survey. Liberty is producing a spreadsheet of select fields from 2020 inspection records of the Topaz 1261 Circuit from Fulcrum, with information regarding the location and number of splices, to the extent available. See attachment *CalAdvocates-LIB-A2506017-001-Q8.xlsx*. Columns (a)-(f) in this spreadsheet contain basic information from each inspection record, including pole number, inspection date, and latitude/longitude. Columns (g) and (h) contain information regarding whether splices were present and, if so, the number of splices present. Liberty understands that it was the practice of some inspectors to input the number of splices on the upstream span (source-side) for an associated pole. Please also refer to 2020 asset survey records Liberty previously provided in response to CalAdvocates-LIB-A2506017-004, Question 2.

REQUEST NO. 9:

In the ten year period leading up to the Mountain View Fire (2010 - 2020), was the Topaz 1261 circuit reviewed under Liberty's circuit reliability program?

a) Provide a list of any recommendations that resulted from any reviews in the 10 year period leading up to the Mountain View Fire.
b) Under the program's risk assessment process, what was the Topaz 1261 circuit ranked?
c) Was the Topaz 1261 circuit's rank determined by an overall average circuit score?
d) Were there any circuit segments of the Topaz 1261 circuit that scored high enough to warrant an urgent replacement?
e) If the answer to (d) is "yes", provide a list of the relevant circuit segments (i.e. structure numbers at each end).

AMENDED RESPONSE:

Liberty objects to this Question to the extent it seeks information from prior to the start of Liberty's operations in approximately 2011, when it purchased the California utility system from NV Energy. Liberty further objects to the phrase "any recommendations that resulted from any reviews" in subpart (a) as vague, ambiguous and overbroad. Subject to and without waiving its objections, Liberty responds as follows:

a) Consistent with D.16-01-008, Liberty reviewed the reliability of its electric system on an annual basis, including the Topaz 1261 Circuit. Liberty's reliability reports are publicly

available on the Commission's website at: https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/infrastructure/electric-reliability/electric-system-reliability-annual-reports. Liberty's reliability reports identified the Topaz 1261 as a circuit that experienced more frequent outages. As a result of these findings and because the Topaz 1261 Circuit is exposed to harsh weather conditions, Liberty prioritized this circuit for system hardening. As explained in SCE-03: Prudence of Operations (pp. 17-18), the Topaz 1261 Rebuild Project was a Commission-approved multiyear project designed to improve circuit reliability and mitigate wildfire risk on Liberty's portion of the Topaz 1261 Circuit. As of November 17, 2020, Liberty was in the process of implementing phase five of the project.

b) See Liberty's response to subpart (a).
c) See Liberty's response to subpart (a).
d) See Liberty's response to subpart (a).
e) See Liberty's response to subpart (a).

REQUEST NO. 10:

Provide an Excel spreadsheet listing all ignitions in 2010 through 2020 on the Topaz 1261 Circuit.

Each ignition should be a row. Provide the following data as columns:

a) Ignition date
b) Ignition time
c) Latitude of ignition
d) Longitude of ignition
e) Number of nearest pole
f) Acres burned
g) Cause, if identified
h) Whether the ignition was a CPUC-reportable incident (Y/N)
i) Whether Liberty had any asset corrective notifications at the ignition location, that were open at the time of the ignition (Y/N)
j) Whether the ignition was linked to an asset corrective notification that existed at the time (Y/N)
k) ID number of the nearest protective device upstream of the ignition
l) Longitude in degrees of the device identified in part (k)
m) Latitude in degrees of the device identified in part (k)
n) Whether the device identified in part (k) tripped

AMENDED RESPONSE:

Liberty objects to this Question as overly burdensome to the extent it seeks records and information not kept in the ordinary course of business. Liberty further objects to this Question to the extent it seeks information from prior to the start of Liberty's operations in approximately 2011, when it purchased the California utility system from NV Energy. Subject to and without waiving these objections, Liberty responds as follows:

Liberty is not subject to ignition reporting under D.14-02-015. From the start of Liberty's operations in approximately 2011 to 2020, Liberty has identified one ignition associated with the Topaz 1261 Circuit prior to November 17, 2020. Liberty is providing the information requested by this Question to the extent available in its records in attachment *CalAdvocates-LIB-A2506017-001-Q10.xlsx*. Liberty is providing information requested in (a)-(g) using information available in its database of ignitions. Liberty's database of ignitions does not track the information requested in (k)-(m) and Liberty is providing this information based on its knowledge of the location of its protective devices and comparing it to the ignition location. With respect to subpart (k), Liberty is providing a general description of the type of protective device as it did not track the device ID number in its database of ignitions. Please note that Liberty is unable to provide the information requested in (h) because Liberty is not subject to ignition reporting under D.14-02-015 as noted above and in (i)-(j) because Liberty is not aware of records formally tracking ignition events in relation to corrective work, which was tracked through hard-copy records prior to 2020. As explained in *Libery-03: Prudence of Operations* (at pp. 32-33), Liberty's system was operated by NV Energy's system control center for a portion of the time period requested in this Question and Liberty's records for the information requested in subpart (n) in its Outage Management System (OMS) date back to approximately 2016.

REQUEST NO. 11:

Provide an Excel spreadsheet listing all wire-down events in 2010 through 2020 on the Topaz 1261 circuit. Each wire-down event should be a row. Provide the following data as columns:

a) Date of wire-down event
b) Time of wire-down event
c) Latitude of wire-down event
d) Longitude of wire-down event
e) Number of nearest pole
f) Cause, if identified
g) Whether Liberty had any asset corrective notifications at the location, that were open at the time of the wire-down event (Y/N)
h) Whether the wire-down event was linked to an asset corrective notification that existed at the time (Y/N)
i) ID number of the nearest protective device upstream of the wire-down event
j) Longitude in degrees of the device identified in part (i)
k) Latitude in degrees of the device identified in part (i)
l) Whether the device identified in part (i) tripped

AMENDED RESPONSE:

Liberty objects to this Question as overly burdensome to the extent it seeks records and information not kept in the ordinary course of business. Liberty further objects to this Question to the extent it seeks information from prior to the start of Liberty's operations in approximately 2011, when it purchased the California utility system from NV Energy. Subject to and without waiving these objections, Liberty responds as follows: Please see *CalAdvocates-LIB-A2506017-001-Q11_Amended.xlsx*, which contains available information in Liberty's possession regarding reported wire down events between 2011-2020. Liberty identified these events by reviewing its historical outage data dating back to 2011 and querying its outage management system (OMS)

data (which goes back to approximately 2016) for wire down events and reviewing comments and resolution to determine if a valid wire down condition existed. As explained in *Libery-03: Prudence of Operations* (at pp. 32-33), Liberty's system was operated by NV Energy's system control center for a portion of the time period requested in this Question.

Please note that Liberty is unable to provide the information requested in (g)-(h) of this Question because it is not aware of records formally tracking wire-down events in relation to asset corrective work, which were tracked through hard-copy records prior to 2020. Please also note that for some wire down events, Liberty is unable to provide the information requested in subparts (d)-(e) and (i)-(l) because Liberty's historical outage data did not track such information. For events identified from Liberty's OMS, Liberty is producing the information requested in subparts (c)-(d) and (j)-(k) in the projected coordinate system format (NAD_1983_UTM_Zone_11N) as maintained in its GIS. The unit used in the projected coordinate system format (NAD_1983_UTM_Zone_11N) in Liberty's GIS system is U.S. survey feet.

REQUEST NO. 12:

Please provide an Excel spreadsheet listing each outage that occurred from 2010 - 2020 on the Topaz 1261 circuit (or any portion of the Topaz 1261 circuit). The spreadsheet should list each outage in a row, with the following column headings:

a) Circuit segment ID #
b) Date of outage
c) Start time of outage
d) Cause of outage
e) For outages due to equipment failures, please state the specific type of equipment that failed. (for example: transformer failure, conductor failure, splice failure, etc.)
f) Outage duration in minutes
g) The type of protective device that tripped
h) The equipment number of the protective device that tripped
i) Latitude in degrees of the protective device that tripped
j) Longitude in degrees of the protective device that tripped

AMENDED RESPONSE:

Liberty objects to this Question as overbroad to the extent that it seeks information prior to the start of its operation in approximately 2011, when it purchased the utility system from NV Energy. Subject to and without waiving these objections, Liberty responds as follows: Please see *CalAdvocates-LIB-A2506017-001-Q12_Amended.xlsx*, which contains the available outage information in Liberty's possession between 2011-2020. This spreadsheet contains information from Liberty historical outage data dating back to 2011 and its outage management system (OMS) data (which goes back to approximately 2016). As explained in *Libery-03: Prudence of Operations* (pp. 32-33), Liberty's system was operated by NV Energy's system control center for a portion of the time period requested in this Question. Please note that Liberty is unable to provide the information requested in subpart (a) of this Question because Liberty's OMS system did not have a field to track circuit segment IDs. Please also note that for certain outages, Liberty is unable to provide the information requested in subparts (f)-(j) because Liberty's

historical outage data did not track such information. For events identified from Liberty's OMS, Liberty is producing the information requested in subparts (i)-(j) in the projected coordinate system format (NAD_1983_UTM_Zone_11N) as maintained in its GIS. The unit used in the projected coordinate system format (NAD_1983_UTM_Zone_11N) in Liberty's GIS system is U.S. survey feet.

REQUEST NO. 13:

Provide a complete list of all wildfire risk mitigation measures Liberty developed or implemented between 2010 and November 2020.

a) Among the identified wildfire risk mitigation measures, which ones were proactive (that is, not implemented in response to specific, prior safety failures)?
b) How did Liberty determine the necessity and priority of the proactive wildfire risk mitigation measures identified in your response to part (a)?
c) What criteria or guidelines did Liberty follow in developing and implementing wildfire risk mitigation measures during the specified period?

RESPONSE:

Liberty objects to this Question as vague, ambiguous, and overbroad as framed. Liberty further objects to the extent that this Question seeks information prior to the start of its operation in approximately 2011, when it purchased the utility system from NV Energy. Liberty further objects to the term "proactive" in subparts (a) and (b). Wildfire mitigation measures are generally based on a utility's specific risk profile and past experience and are intended to proactively mitigate future wildfire risk. Distinguishing between measures that are "proactive" and those "in response to specific, prior safety failures" is not possible. Subject to and without waiving its objections, Liberty responds as follows:

Please refer to attachments *Fire Prevention Plan for Overhead Electric Facilities (2012).pdf*, *Wildfire Mitigation Plan (2019).pdf*, *Revised 2020 Wildfire Mitigation Plan.pdf*, and *2021 Wildfire Mitigation Plan Update (Public Version).pdf*. for detailed information regarding Liberty's wildfire mitigation efforts during the specified time frame. Although Liberty had not experienced a large wildfire attributed to its electrical infrastructure since taking over from Sierra Pacific in 2011, Liberty recognized the risk of wildfires within its service area and took steps to mitigate that risk. Liberty's opening testimony described wildfire risk mitigation measures that Liberty had adopted or was in the process of developing as of November 2020 (*see, e.g.*, Liberty-03 at 10-13), including:

- Patrols of circuits in high-fire areas during high wind conditions
- Implementing "fire settings" for reclosers
- Pausing discretionary maintenance and vegetation management activities during fire threat conditions
- Conducting a detailed system-wide asset survey
- Piloting a LiDAR inspection of its distribution system for vegetation clearance
- Installing covered conductor, including on the Topaz 1261 Circuit
- Undergrounding certain lines
- Installing larger size conductors

- Replacing and upgrading distribution poles
- Replacing expulsion fuses
- Deploying monitoring sensors and SCADA-enabled devices
- Installing weather stations to support situational awareness
- Developing a Fire Potential Index (FPI) to forecast wildfire risk
- Implementing a Public Safety Power Shutoff (PSPS) program
- Increasing the frequency of vegetation management inspections
- Removing dead and dying trees in high tree mortality areas
- Hiring additional personnel to manage emergency response activities

Incident ID	Circuit Segment ID a)	Date of Outage b)	Start time of Outage c)	Cause of Outage d)	Equipment failure e)	Outage duration in minutes f)	Protective device type g)	ID number Protective device h)	Geolocation of Protective device i) - j)
119	N/A	4/6/2011	9:05:00 AM	Other (Explain)		<Unknown>	<Unknown>	<Unknown>	<Unknown>
125	N/A	5/15/2011	7:00:00 PM	Cutout		<Unknown>	<Unknown>	<Unknown>	<Unknown>
135	N/A	6/3/2011	8:30:00 PM	<Unknown>		<Unknown>	<Unknown>	<Unknown>	<Unknown>
154	N/A	7/3/2011	6:15:00 AM	<Unknown>		<Unknown>	<Unknown>	<Unknown>	<Unknown>
159	N/A	7/14/2011	2:30:00 PM	<Unknown>		<Unknown>	<Unknown>	<Unknown>	<Unknown>
172	N/A	8/22/2011	3:00:00 PM	<Unknown>		<Unknown>	<Unknown>	<Unknown>	<Unknown>
216	N/A	11/19/2011	9:00:00 AM	Other (Explain)		<Unknown>	<Unknown>	<Unknown>	<Unknown>
102	N/A	3/1/2012	10:50:00 AM	<Unknown>		<Unknown>	<Unknown>	<Unknown>	<Unknown>
150	N/A	5/13/2012	12:01:00 AM	<Unknown>		<Unknown>	<Unknown>	<Unknown>	<Unknown>
151	N/A	5/19/2012	9:30:00 AM	<Unknown>		<Unknown>	<Unknown>	<Unknown>	<Unknown>
157	N/A	6/5/2012	5:30:00 AM	<Unknown>		<Unknown>	<Unknown>	<Unknown>	<Unknown>
182	N/A	7/28/2012	2:00:00 PM	<Unknown>		<Unknown>	<Unknown>	<Unknown>	<Unknown>
189	N/A	8/12/2012	10:00:00 AM	<Unknown>		<Unknown>	<Unknown>	<Unknown>	<Unknown>
194	N/A	8/21/2012	1:50:00 PM	<Unknown>		<Unknown>	<Unknown>	<Unknown>	<Unknown>
240	N/A	11/30/2012	12:01:00 AM	Wire Slapping		<Unknown>	<Unknown>	<Unknown>	<Unknown>
251	N/A	12/26/2012	4:45:00 AM	<Unknown>		<Unknown>	<Unknown>	<Unknown>	<Unknown>
180	N/A	2/13/2013	10:15:00 AM	Car Pole/Guy		7h 48m	<Unknown>	<Unknown>	<Unknown>
51	N/A	2/13/2013	10:15:00 AM	Car Pole/Guy		7h 48m	<Unknown>	<Unknown>	<Unknown>
92	N/A	2/21/2013	7:40:00 AM	Car Pole/Guy		2h 20m	<Unknown>	<Unknown>	<Unknown>
80	N/A	4/14/2013	8:30:00 PM	Trees Structure Down		4h 30m	<Unknown>	<Unknown>	<Unknown>
245	N/A	4/14/2013	8:30:00 PM	Trees Structure Down		12h 45m	<Unknown>	<Unknown>	<Unknown>
112	N/A	7/12/2013	2:15:00 PM	Hardware/Material Other (Explain)		1h 45m	<Unknown>	<Unknown>	<Unknown>
130	N/A	8/4/2013	7:36:00 AM	External System		2h 14m	<Unknown>	<Unknown>	<Unknown>
206	N/A	12/12/2013	3:15:00 PM	Fuse Overload		1h 15m	Fuse	<Unknown>	<Unknown>
208	N/A	1/18/2014	9:30:00 AM	<Unknown>		1h 55m	<Unknown>	<Unknown>	<Unknown>
219	N/A	1/30/2014	8:33:00 AM	Snow Unloading		3h 42m	<Unknown>	<Unknown>	<Unknown>
216	N/A	1/30/2014	12:15:00 PM	Snow Unloading		1h 15m	<Unknown>	<Unknown>	<Unknown>
218	N/A	1/30/2014	5:00:00 PM	Snow Unloading		2h 30m	<Unknown>	<Unknown>	<Unknown>
239	N/A	2/15/2014	9:05:00 AM	Wire Slapping		6h 40m	<Unknown>	<Unknown>	<Unknown>
250	N/A	3/26/2014	12:58:00 PM	Wire Slapping		2h 9m	<Unknown>	<Unknown>	<Unknown>
260	N/A	4/16/2014	8:30:00 PM	<Unknown>		2h 50m	<Unknown>	<Unknown>	<Unknown>
323	N/A	4/22/2014	11:13:00 AM	External System		1h 25m	<Unknown>	<Unknown>	<Unknown>

Incident ID	Circuit Segment ID a)	Date of Outage b)	Start time of Outage c)	Cause of Outage d)	Equipment failure e)	Outage duration in minutes f)	Protective device type g)	ID number Protective device h)	Geolocation of Protective device i) - j)
326	N/A	5/3/2014	7:45:00 AM	Trees		7h 5m	<Unknown>	<Unknown>	<Unknown>
338	N/A	6/19/2014	5:00:00 PM	Wire Slapping		2h 29m	<Unknown>	<Unknown>	<Unknown>
355	N/A	7/13/2014	5:37:00 PM	Cutout		3h 9m	<Unknown>	<Unknown>	<Unknown>
421	N/A	10/25/2014	3:13:00 PM	Trees		1h 47m	<Unknown>	<Unknown>	<Unknown>
455	N/A	12/11/2014	4:00:00 PM	Wire Slapping		4h 30m	<Unknown>	<Unknown>	<Unknown>
456	N/A	12/11/2014	8:30:00 PM	Trees		2h 10m	<Unknown>	<Unknown>	<Unknown>
446	N/A	12/12/2014	12:00:00 PM	Wire Slapping		5h 45m	<Unknown>	<Unknown>	<Unknown>
524	N/A	7/3/2015	11:30:00 AM	Transformer		4h 0m	<Unknown>	<Unknown>	<Unknown>
498	N/A	4/21/2015	10:45:00 PM	Transformer		7h 0m	<Unknown>	<Unknown>	<Unknown>
507	N/A	5/22/2015	9:00:00 PM	Lightning/Blown Fuse		2h 30m	<Unknown>	<Unknown>	<Unknown>
509	N/A	5/23/2015	8:00:00 AM	Lightning/Blown Fuse		1h 30m	<Unknown>	<Unknown>	<Unknown>
476	N/A	2/6/2015	6:30:00 AM	Trees		67h 58m	<Unknown>	<Unknown>	<Unknown>
518	N/A	6/29/2015	6:15:00 PM	Lightning/Blown Fuse		2h 20m	<Unknown>	<Unknown>	<Unknown>
523	N/A	7/1/2015	6:00:00 PM	Wire Slapping		1h 40m	<Unknown>	<Unknown>	<Unknown>
500	N/A	5/7/2015	7:48:00 PM	<Unknown>		3h 52m	<Unknown>	<Unknown>	<Unknown>
547	N/A	8/20/2015	4:00:00 PM	Fuse Overload		3h 29m	<Unknown>	<Unknown>	<Unknown>
570	N/A	10/2/2015	11:30:00 AM	Wire Slapping		3h 0m	<Unknown>	<Unknown>	<Unknown>
592	N/A	12/10/2015	6:45:00 AM	Lightning/Blown Fuse		2h 45m	<Unknown>	<Unknown>	<Unknown>
597	N/A	12/29/2015	3:03:00 PM	Wire Down		7h 9m	<Unknown>	<Unknown>	<Unknown>
101	N/A	1/29/2016	3:00:00 PM	Wire Slapping		2h 40m	Fuse Bank	2134	920981.7054217280,14030900.3681720000
6264	N/A	4/14/2016	4:36:21 AM	Wire Slapping		1h 43m	Fuse Bank	2088	934640.7419948470,13994244.9266298000
6692	N/A	7/29/2016	4:35:39 PM	External System		4h 48m	Dynamic Protective Device Bank	480	913257.5317722730,14058990.2944441000
6695	N/A	7/30/2016	4:11:52 AM	External System		13m	Dynamic Protective Device Bank	52	917451.5000000000,14045002.8600000000
7095	N/A	10/14/2016	3:17:00 PM	External System		0h 13m	Dynamic Protective Device Bank	52	917451.5000000000,14045002.8600000000
7067	N/A	10/14/2016	7:31:23 AM	Wire Slapping		1h 43m	Dynamic Protective Device Bank	51	926316.6798177180,14005024.5267405000
7091	N/A	10/14/2016	10:59:38 AM	External System		4h 0m	Dynamic Protective Device Bank	52	917451.5000000000,14045002.8600000000
7144	N/A	10/15/2016	12:43:00 PM	Wire Slapping		1h 27m	Transformer Bank	6661	937207.8635270900,14000303.1233527000
7159	N/A	10/16/2016	12:51:00 AM	Wire Slapping		2h 39m	Dynamic Protective Device Bank	51	926316.6798177180,14005024.5267405000
7313	N/A	10/29/2016	10:31:55 PM	<Unknown>		6h 6m	Dynamic Protective Device Bank	51	926316.6798177180,14005024.5267405000
7386	N/A	11/16/2016	2:01:33 AM	<Unknown>		1h 13m	Dynamic Protective Device Bank	881	913460.3049176840,14056601.5204244000
7430	N/A	11/19/2016	4:31:00 PM	Wire Down		2h 26m	Transformer Bank	600106	934281.2470174880,13993645.2155094000
7392	N/A	11/19/2016	8:22:28 AM	Wire Slapping		1h 47m	Dynamic Protective Device Bank	52	917451.5000000000,14045002.8600000000

Incident ID	Circuit Segment ID a)	Date of Outage b)	Start time of Outage c)	Cause of Outage d)	Equipment failure e)	Outage duration in minutes f)	Protective device type g)	ID number Protective device h)	Geolocation of Protective device i) - j)
7475	N/A	11/27/2016	6:51:55 AM	Snow Unloading		2h 46m	lecalpeco.LEGIS.ServiceLocation, Fuse Bank	7167, 2134	920981.7054217280,14030900.3681720000
7589	N/A	12/6/2016	2:54:39 PM	<Unknown>		2h 13m	Fuse Bank	2088	934640.7419948470,13994244.9266298000
7598	N/A	12/10/2016	4:25:00 AM	<Unknown>		1h 46m	Fuse Bank	266731	934538.4596045520,13994591.5331094000
7641	N/A	12/15/2016	2:29:43 AM	<Unknown>		1h 35m	Dynamic Protective Device Bank	881	913460.3049176840,14056601.5204244000
7648	N/A	12/15/2016	6:45:56 AM	Wire Slapping		1h 38m	Fuse Bank, lecalpeco.LEGIS.ServiceLocation	2132, 141913	937137.9091311430,13995212.1149143000
7710	N/A	12/24/2016	7:55:49 AM	<Unknown>		3 h 2 min	lecalpeco.LEGIS.ServiceLocation	6794	930577.247, 13996448.127
7755	N/A	1/1/2017	6:00:27 PM	Wire Slapping		44m	Fuse Bank	2132	934577.0708743950,13994787.3185069000
7764	N/A	1/1/2017	10:26:59 PM	Trees		1h 18m	Fuse Bank	2132	934577.0708743950,13994787.3185069000
8658	N/A	1/9/2017	1:30:00 AM	Snow Unloading Wire Slapping		7h 16m	lecalpeco.LEGIS.ServiceLocation, Dynamic Protective Device Bank	480	913257.5317722730,14058990.2944441000
9054	N/A	1/11/2017	6:27:27 AM	<Unknown>		14h 32m	Fuse Bank	2134	920981.7054217280,14030900.3681720000
12693	N/A	1/23/2017	2:30:00 PM	Wire Down		8h 16m	Fuse Bank	102677	934885.1558550040,14028530.8720833000
12687	N/A	1/23/2017	6:01:05 AM	<Unknown>		5h 28m	Dynamic Protective Device Bank	480	913257.5317722730,14058990.2944441000
12703	N/A	1/23/2017	2:25:13 PM	Wire Slapping		3h 4m	Fuse Bank	2105	933798.4891313820,13994936.0596521000
12711	N/A	1/23/2017	4:59:00 PM	Wire Down		5h 47m	lecalpeco.LEGIS.ServiceLocation, Transformer Bank	6687, 1260, 128949, 616946	936818.7732240160,14018392.9544001000
13123	N/A	2/1/2017	11:39:30 AM	Wire Slapping		13h 57m	Fuse Bank	2134	920981.7054217280,14030900.3681720000
814	N/A	2/6/2017	3:00:00 PM	Wire Slapping		1h 45m	Dynamic Protective Device Bank	480	913257.5317722730,14058990.2944441000
13401	N/A	2/9/2017	7:30:00 AM	Hardware/Material		1d 0h 45m	Dynamic Protective Device Bank	480	913257.5317722730,14058990.2944441000
13939	N/A	2/15/2017	12:46:21 PM	Hardware/Material		1h 53m	Dynamic Protective Device Bank	51	926316.6798177180,14005024.5267405000
14405	N/A	2/21/2017	10:42:29 PM	<Unknown>		9h 24m	Transformer Bank	1268	937250.0200000000,13995593.2200000000
825	N/A	2/23/2017	12:30:00 PM	Transformer Overload		1h 0m	Transformer Bank	<Unknown>	<Unknown>
15028	N/A	3/21/2017	6:51:15 PM	External System		12h 1m	Dynamic Protective Device Bank	480	913257.5317722730,14058990.2944441000
15270	N/A	4/12/2017	10:42:14 PM	Wire Slapping		2h 8m	Fuse Bank	2104	920096.4500248660,14035231.9625932000
15305	N/A	4/20/2017	8:10:59 AM	Birds/Animals		1h 59m	Fuse Bank	2142	925644.9859155740,14006949.2569906000
15336	N/A	4/28/2017	1:27:54 PM	Cutout Other (Explain)		7h 11m	Primary OH Conductor	15174	934801.4160209990,14028169.8812592000
15763	N/A	6/6/2017	3:16:43 PM	External System		18h 43m	Dynamic Protective Device Bank	480	913257.5317722730,14058990.2944441000
16236	N/A	7/25/2017	8:36:00 PM	<Unknown>		1h 49m	Transformer Bank	242916	936971.2895547550,14008497.7953468000
16409	N/A	8/8/2017	7:08:00 AM	<Unknown>		3h 12m	Fuse Bank	295173	929957.7827337430,14016394.4397449000
16693	N/A	8/31/2017	11:00:00 AM	Range Fire		23h 51m	lecalpeco.LEGIS.ServiceLocation, Dynamic Protective Device Bank	7156, 128911, 6937, 7182, 6823, 6700, 480, 128894	931542.0824877750,13994689.7877581000
17190	N/A	10/20/2017	9:47:00 AM	Wire Slapping		0h 53m	Fuse Bank	204112	929559.3082260530,14019113.5574537000
17187	N/A	10/20/2017	12:18:09 AM	Wire Slapping		1h 41m	Fuse Bank	2104	920096.4500248660,14035231.9625932000
17188	N/A	10/20/2017	2:10:45 AM	Trees		1h 24m	Fuse Bank	2110	918916.8287626770,14041987.9404365000
17340	N/A	11/9/2017	3:52:27 AM	Wire Slapping		1h 37m	Dynamic Protective Device Bank	881	913460.3049176840,14056601.5204244000
17555	N/A	11/26/2017	2:25:00 PM	Insulator		3h 50m	Fuse Bank	2142	925644.9859155740,14006949.2569906000
17574	N/A	11/26/2017	4:52:31 PM	Wire Slapping		4h 17m	Fuse Bank	2104	920096.4500248660,14035231.9625932000
17767	N/A	12/19/2017	10:43:44 PM	<Unknown>		2h 36m	Fuse Bank	2104	920096.4500248660,14035231.9625932000
17868	N/A	1/11/2018	1:43:31 PM	3rd Party Outage		33m	lecalpeco.LEGIS.ServiceLocation, Transformer Bank, Fuse Bank	6716, 6601, 1469, 6792, 6939, 7006, 7126, 6661, 2134, 6737, 7056, 7117, 141904, 6700, 6834	937367.5095547560,14008007.4017405000
17921	N/A	1/24/2018	4:01:05 PM	Wire Slapping		1h 58m	Fuse Bank	2104	920096.4500248660,14035231.9625932000
18074	N/A	2/21/2018	5:52:10 AM	3rd Party Outage		1h 18m	Dynamic Protective Device Bank	480	913257.5317722730,14058990.2944441000
18087	N/A	2/22/2018	6:39:00 AM	Wind		1h 41m	Fuse Bank	266623	920169.5579262560,14035324.3879345000

Incident ID	Circuit Segment ID a)	Date of Outage b)	Start time of Outage c)	Cause of Outage d)	Equipment failure e)	Outage duration in minutes f)	Protective device type g)	ID number Protective device h)	Geolocation of Protective device i) - j)
18165	N/A	3/1/2018	6:15:50 PM	<Unknown>		3h 29m	Dynamic Protective Device Bank	881	913460.3049176840,14056601.5204244000
18203	N/A	3/1/2018	10:46:00 PM	<Unknown>		8h 14m	lecalpeco.LEGIS.ServiceLocation, Dynamic Protective Device Bank, Fuse Bank	6661, 7006, 6645, 6842, 6700, 7111, 7050, 128896, 881, 2094	932872.9585760440,13992844.8953547000
18527	N/A	3/28/2018	3:42:46 PM	3rd Party Outage		22m	Dynamic Protective Device Bank	480	913257.5317722730,14058990.2944441000
19501	N/A	5/30/2018	4:10:22 PM	Wind		1h 31m	Fuse Bank	2129	920915.7235175410,14033409.6475384000
19611	N/A	6/14/2018	10:01:32 AM	Planned Outage		7h 55m	Primary OH Conductor	15666	922017.0558224620,14021280.0509991000
19612	N/A	6/14/2018	10:48:24 AM			7m	Dynamic Protective Device Bank	881	913460.3049176840,14056601.5204244000
19625	N/A	6/17/2018	4:32:44 PM	Wildfire		5h 46m	Dynamic Protective Device Bank	480	913257.5317722730,14058990.2944441000
<Unknown>	N/A	6/21/2018	7:00:00 AM	Hardware Fail		4h 0m	<Unknown>	<Unknown>	<Unknown>
19656	N/A	6/23/2018	10:00:48 AM	Animal		2h 40m	Dynamic Protective Device Bank	881	913460.3049176840,14056601.5204244000
20230	N/A	10/2/2018	12:17:17 PM	<Unknown>		18m	Dynamic Protective Device Bank	881	913460.3049176840,14056601.5204244000
21042	N/A	12/14/2018	5:11:16 PM	Hardware Failure	Tap Wire	2h 18m	Transformer Bank	1620	934056.5598079120,13994839.4499911000
21347	N/A	1/16/2019	2:34:29 AM	<Unknown>		2h 25m	Fuse Bank	2048	922573.2640090220,14019014.4793104000
21408	N/A	1/17/2019	9:29:33 AM	Deterioration		4h 10m	Transformer Bank	1538	920125.6199999990,14035289.7500000000
21957	N/A	2/14/2019	5:11:08 AM	3rd Party Outage		8m	lecalpeco.LEGIS.ServiceLocation	128911	933539.0590635020,13993241.1658517000
22003	N/A	2/14/2019	5:37:25 PM	Tree - Broken Limb		1d 1h 57m	Transformer Bank	1552	932785.8401863540,13993680.0802972000
22668	N/A	2/25/2019	1:16:18 PM	Device Failed		2h 43m	Dynamic Protective Device Bank	881	913460.3049176840,14056601.5204244000
22711	N/A	2/25/2019	11:45:31 PM	Non-Company Activities		3h 19m	Dynamic Protective Device Bank	881	913460.3049176840,14056601.5204244000
22740	N/A	2/26/2019	5:12:48 AM	Deterioration		4h 47m	Fuse Bank	2048	922573.2640090220,14019014.4793104000
22950	N/A	3/14/2019	7:04:58 AM	Animal		2h 47m	Fuse Bank	2072	936621.2030854290,14006816.1521873000
22993	N/A	3/15/2019	7:24:52 AM	Device Failed		4h 35m	Dynamic Protective Device Bank	881, 51	913460.3049176840,14056601.5204244000
23022	N/A	3/22/2019	8:05:00 AM	Planned Outage		36m	Dynamic Protective Device Bank	881	913460.3049176840,14056601.5204244000
23049	N/A	3/22/2019	9:05:37 AM	Planned Outage		3d 8h 20m	Dynamic Protective Device Bank	881, 51	913460.3049176840,14056601.5204244000
23101	N/A	3/26/2019	12:01:36 PM	<Unknown>		38m	Transformer Bank	1587	933423.9803551800,13993089.4803972000
23105	N/A	3/26/2019	11:53:06 AM	<Unknown>		47m	Dynamic Protective Device Bank	881	913460.3049176840,14056601.5204244000
23164	N/A	4/11/2019	11:17:56 AM	3rd Party Outage		7m	Transformer Bank	1431	931609.6804722000,13996694.5526952000
23168	N/A	4/11/2019	11:18:01 AM	3rd Party Outage		6m	lecalpeco.LEGIS.ServiceLocation	6716, 7110	937367.5095547560,14008007.4017405000
23171	N/A	4/11/2019	11:17:29 AM	3rd Party Outage		7m	lecalpeco.LEGIS.ServiceLocation	7006, 128919	935373.2320017840,13994120.2254942000
23175	N/A	4/11/2019	11:18:40 AM	3rd Party Outage		6m	lecalpeco.LEGIS.ServiceLocation	141908, 6737	931551.0252783800,14008012.3169707000
24277	N/A	9/16/2019	1:04:37 PM	Tree - Broken Limb		8h 15m	Fuse Bank	2118	919720.3092361710,14036233.1157568000
24279	N/A	9/16/2019	6:03:30 PM	Flying Debris		1h 52m	Transformer Bank	1478	934064.8693632600,14006359.0000768000
24360	N/A	9/28/2019	7:10:50 AM	<Unknown>		4h 34m	Transformer Bank	1614	920754.5099999990,14033172.1900000000
25414	N/A	4/9/2020	9:06:54 AM	Fire on Company Equipment		49m	Fuse Bank	2134	920981.7054217280,14030900.3681720000
25424	N/A	4/13/2020	9:37:16 AM	Planned Outage		4h 18m	Fuse Bank	2134	920981.7054217280,14030900.3681720000
25429	N/A	4/16/2020	4:45:00 PM	Planned Outage		3h 30m	Fuse Bank	2110	918916.8287626770,14041987.9404365000
25492	N/A	5/19/2020	8:48:51 AM	Planned Outage		8h 18m	Secondary OH Conductor	9629	923458.8721172410,14015412.4700548000
25532	N/A	6/3/2020	8:30:14 AM	Planned Outage		7h 57m	Transformer Bank	1606	923685.1300000000,14014595.8200000000
25543	N/A	6/5/2020	11:29:34 AM	Planned Outage		5h 34m	Fuse Bank	2123	923804.9440835340,14014333.9966943000
25564	N/A	6/8/2020	8:34:29 AM	Planned Outage		8h 13m	Transformer Bank	1540	923862.0281625300,14013972.9845607000
25635	N/A	6/16/2020	2:32:00 PM	<Unknown>		49m	Dynamic Protective Device Bank	881	913460.3049176840,14056601.5204244000
26618	N/A	8/14/2020	2:36:04 PM	<Unknown>		51m	lecalpeco.LEGIS.ServiceLocation, Dynamic Protective Device Bank	6937, 881	933592.2564358840,13992230.6572890000
26776	N/A	9/12/2020	3:29:42 PM	Flying Debris		1h 20m	Fuse Bank	2124	931377.5143581960,13995364.6024104000
27841	N/A	11/17/2020	9:48:00 AM	Weather - wind		55m	Dynamic Protective Device Bank	51	926198.5101381660,14005033.2151270000
27871	N/A	11/17/2020	11:55:00 AM	Wildfire		2d 8h 16m	Dynamic Protective Device Bank	51	926198.5101381660,14005033.2151270000
27873	N/A	11/17/2020	12:32:00 PM	Planned Outage		2d 23h 10m	Fuse Bank, Primary OH Conductor	2142, 15534	925654.6838216140,14006910.6963192000

Incident ID	Circuit Segment ID a)	Date of Outage b)	Start time of Outage c)	Cause of Outage d)	Equipment failure e)	Outage duration in minutes f)	Protective device type g)	ID number Protective device h)	Geolocation of Protective device i) - j)
27875	N/A	11/17/2020	12:51:00 PM	Planned Outage		20h 9m	Dynamic Protective Device Bank	881	913460.3049176840,14056601.5204244000
27955	N/A	11/17/2020	12:32:00 PM	Planned Outage		1d 1h 11m	Dynamic Protective Device Bank	881	913460.3049176840,14056601.5204244000
27973	N/A	11/17/2020	11:55:00 AM	Planned Outage		2d 23h 55m	Fuse Bank	2065	929176.5235477980,13999641.5887330000
27975	N/A	11/17/2020	11:55:00 AM	Planned Outage		4d 7h 35m	Fuse Bank	2044	931501.5966649770,13995937.7862738000
27977	N/A	11/17/2020	11:55:00 AM	Planned Outage		5d 3h 8m	Fuse Bank	2105	933798.4891313820,13994936.0596521000
27979	N/A	11/17/2020	11:55:00 AM	Planned Outage		3d 2h 25m	Fuse Bank	2115	935417.0951424200,13994794.1802897000
27981	N/A	11/17/2020	11:55:00 AM	Planned Outage		2d 5h 5m	Fuse Bank	2057	936046.7096045070,13994751.3013339000
27990	N/A	11/17/2020	11:55:00 AM	Planned Outage		3d 14m	Fuse Bank	2069	929613.7014589190,13998041.1946656000
27994	N/A	11/17/2020	11:55:00 AM	Planned Outage		3d 23h 5m	Transformer Bank	1443	930680.5399999990,13996379.8100000000
27997	N/A	11/17/2020	11:55:00 AM	Planned Outage		3d 1h 4m	Fuse Bank	2053	931608.8403785120,13995851.9865628000
28004	N/A	11/17/2020	11:55:00 AM	Planned Outage		3d 1h 1m	Primary OH Conductor	15907	933341.2961903360,13994970.8949846000
28005	N/A	11/17/2020	11:55:00 AM	Planned Outage		3d 1h 9m	Fuse Bank	2137	933730.3401880150,13994820.4646377000
28007	N/A	11/17/2020	11:55:00 AM	Planned Outage		3d 1h 16m	Fuse Bank	2132	934577.0708743950,13994787.3185069000
28009	N/A	11/17/2020	11:55:00 AM	Planned Outage		3d 2h 25m	Fuse Bank	52145	935420.9397720050,13994776.2423594000
28014	N/A	11/17/2020	12:32:00 PM	Planned Outage		4d 2h 25m	Primary OH Conductor	15475	936622.5896180680,14006879.2793699000
28015	N/A	11/17/2020	12:32:00 PM	Planned Outage		4d 2h 26m	Primary OH Conductor	15471	936594.1529342590,14006610.2164531000
28026	N/A	11/17/2020	12:32:00 PM	Planned Outage		4d 5h 0m	Fuse Bank	2052	936221.1306212680,14004015.8065377000
28027	N/A	11/17/2020	12:32:00 PM	Planned Outage		5d 3h 28m	Primary OH Conductor	15327	935785.2512628820,14002880.5655680000
28028	N/A	11/17/2020	12:32:00 PM	Planned Outage		5d 1h 23m	Fuse Bank	2076	938004.6950405980,14000659.7515725000
28029	N/A	11/17/2020	12:32:00 PM	Planned Outage		5d 1h 23m	Fuse Bank	2074	937989.9016502550,14000654.5812423000
27963	N/A	11/18/2020	11:40:00 AM	Planned Outage		6h 38m	Dynamic Protective Device Bank	881	913460.3049176840,14056601.5204244000
27967	N/A	11/18/2020	5:35:00 PM	<Unknown>		15h 35m	Fuse Bank	2048	922573.2640090220,14019014.4793104000
27976	N/A	11/19/2020	5:00:00 PM	Planned Outage		1d 23m	Fuse Bank	2120	933047.9657727530,13995236.6405441000
27985	N/A	11/19/2020	8:00:00 PM	Planned Outage		21h 0m	Transformer Bank	1295	926755.9757641240,14004261.9074566000
27993	N/A	11/19/2020	8:00:00 PM	Planned Outage		1d 15h 0m	Transformer Bank	1445	930611.6900000020,13996457.9000000000
27995	N/A	11/19/2020	8:00:00 PM	Planned Outage		1d 15h 0m	Transformer Bank	1254	930928.8099999990,13996177.8100000000
27999	N/A	11/19/2020	8:00:00 PM	Planned Outage		16h 37m	Fuse Bank	2056	932163.1206961070,13995583.8716623000
28002	N/A	11/19/2020	8:00:00 PM	Planned Outage		1d 15h 0m	Transformer Bank	1608	932743.0593336460,13995397.1003823000
28006	N/A	11/19/2020	8:00:00 PM	Planned Outage		1d 15h 0m	Transformer Bank	1620	934056.5598079120,13994839.4499911000
28019	N/A	11/19/2020	5:00:00 PM	Planned Outage		2d 18h 0m	Fuse Bank	2133	937400.6710185150,13995250.6994880000
28020	N/A	11/19/2020	5:00:00 PM	Planned Outage		22h 0m	Transformer Bank	1147	936541.6798180930,13995168.3407599000
28018	N/A	11/20/2020	3:27:21 PM	<Unknown>		6h 39m	lecalpeco.LEGIS.ServiceLocation	6850	925763.9396387830,14004857.4920219000
28024	N/A	11/21/2020	10:18:13 AM	<Unknown>		41m	Transformer Bank	1358	931485.2002004600,13995574.6301103000
28225	N/A	12/10/2020	7:57:50 PM	<Unknown>		5h 32m	Transformer Bank	1431	931609.6804722000,13996694.5526952000

Attachment 25

Liberty's 2020 Wildfire Mitigation Plan
Attachment 5 – Section 4.1

	Identifying Information			Location Information						Utility facility information							Situational awareness information						Year
ID	Type of event	Date	Time	Latitude	Longitude	Circuit name	Land use (rural / urban)	Enhanced inspections and maintenance conducted according to 2019 WMP at location prior to event (Yes / No)	Enhanced vegetation management conducted according to 2019 WMP at location prior to event (Yes / No)	Type of equipment involved	Facility identification	Voltage	Age of involved equipment	Overhead or underground	Covered conductor or other	Other companies' equipment involved (or N/A)	Local temperature at itme of event	Local wind speed at time of event	Nearest weather station by weather station ID	Last inspection data of involved equipment	Time-to-expected failure of involved equipment on date of incident (in number of days until the involved equipment was expected to fail)	Over capacity history of involved equipment (percent of time equipment operated over nameplate capacity)	
24122	Animal contact	8/24/19 0:00	10:41:00			31	rural	No	No			14.4kV		Overhead	Other	N/A							2019
24209	Animal contact	9/7/19 0:00	10:23:00			31	rural	No	No			14.4kV		Overhead	Other	N/A							2019
24553	Animal contact	10/6/19 0:00	10:31:00			31	rural	No	No			14.4kV		Overhead	Other	N/A							2019
20289	Equipment failure	10/13/18 0:00	11:18:00			31	rural	No	No	Transformer		14.4kV		Overhead	Other	N/A							2018
590	Hardware failure	2015-11-10	04:00:00			31	rural	No	No	Cutout		14.4kV		Overhead	Other	N/A							2015
20789	Hardware failure	11/19/18 0:00	8:24:00			31	rural	No	No	Cutout		14.4kV		Overhead	Other	N/A							2018
22708	Hardware failure	2/26/19 0:00	0:45:00			31	rural	No	No	Insulator		14.4kV		Overhead	Other	N/A							2019
22731	Hardware failure	2/26/19 0:00	6:36:00			31	rural	No	No	Insulator		14.4kV		Overhead	Other	N/A							2019
24954	Hardware failure	12/31/19 0:00	12:11:00			31	rural	No	No			14.4kV		Overhead	Other	N/A							2019
479	Lightning	2015-02-07	11:20:00			31	rural	No	No			14.4kV		Overhead	Other	N/A							2015
1047	Vegetation contact	2017-04-08	09:45:00			31	rural	No	No			14.4kV		Overhead	Other	N/A							2017
1044	Vehicle contact	2017-04-27	22:34:00			31	rural	No	No			14.4kV		Overhead	Other	N/A							2017
487	Wire slap	2015-02-28	07:00:00			31	rural	No	No	Conductor		14.4kV		Overhead	Other	N/A							2015
621	Wire slap	2015-12-11	01:30:00			31	rural	No	No	Conductor		14.4kV		Overhead	Other	N/A							2015
624	Wire slap	2016-02-18	02:59:00			31	rural	No	No	Conductor		14.4kV		Overhead	Other	N/A							2016
625	Wire slap	2016-02-18	04:40:00			31	rural	No	No	Conductor		14.4kV		Overhead	Other	N/A							2016
21186	Wire slap	1/6/19 0:00	19:14:00			31	rural	No	No	Conductor		14.4kV		Overhead	Other	N/A							2019
21327	Wire slap	1/15/19 0:00	18:54:00			31	rural	No	No	Conductor		14.4kV		Overhead	Other	N/A							2019
21782	Wire slap	2/9/19 0:00	13:12:00			31	rural	No	No	Conductor		14.4kV		Overhead	Other	N/A							2019
1114	Animal contact	2017-08-02	05:54:00			32	rural	No	No			14.4kV		Overhead	Other	N/A							2017
1158	Animal contact	2017-09-13	16:40:00			32	rural	No	No			14.4kV		Overhead	Other	N/A							2017
17365	Animal contact	11/9/17 0:00	9:47:22			32	rural	No	No			14.4kV		Overhead	Other	N/A							2017
18025	Animal contact	2/8/18 0:00	12:28:00			32	rural	No	No			14.4kV		Overhead	Other	N/A							2018
19934	Animal contact	8/4/18 0:00	18:13:00			32	rural	No	No			14.4kV		Overhead	Other	N/A							2018
21803	Equipment failure	2/12/19 0:00	11:58:00			32	rural	No	No	Transformer		14.4kV		Overhead	Other	N/A							2019
591	Hardware failure	2015-11-26	14:42:00			32	rural	No	Yes			14.4kV		Overhead	Other	N/A							2015
616	Hardware failure	2016-01-07	19:03:00			32	rural	No	No	Cutout		14.4kV		Overhead	Other	N/A							2016
721	Hardware failure	2016-11-19	13:47:00			32	rural	No	No			14.4kV		Overhead	Other	N/A							2016
23693	Hardware failure	7/2/19 0:00	15:09:00			32	rural	No	No	Cutout		14.4kV		Overhead	Other	N/A							2019
1157	Lightning	2017-09-11	20:26:00			32	rural	No	No			14.4kV		Overhead	Other	N/A							2017
24949	Third Party	12/27/19 0:00	11:30:00			32	rural	No	No			14.4kV		Overhead	Other	N/A							2019
17527	Unknown	11/26/17 0:00	11:33:40			32	rural	No	No			14.4kV		Overhead	Other	N/A							2017
17302	Unknown	11/2/17 0:00	13:34:11			32	rural	No	No			14.4kV		Overhead	Other	N/A							2017
21531	Unknown	1/22/19 0:00	17:30:00			32	rural	No	No			14.4kV		Overhead	Other	N/A							2019
23199	Unknown	4/17/19 0:00	19:54:00			32	rural	No	No			14.4kV		Overhead	Other	N/A							2019
622	Vegetation contact	2015-12-11	10:30:00			32	rural	No	Yes			14.4kV		Overhead	Other	N/A							2015
1087	Vegetation contact	2017-07-15	20:30:00			32	rural	No	No			14.4kV		Overhead	Other	N/A							2017
1046	Vegetation contact	2017-04-08	18:45:00			32	rural	No	No			14.4kV		Overhead	Other	N/A							2017
21350	Vegetation contact	1/16/19 0:00	3:45:00			32	rural	No	No			14.4kV		Overhead	Other	N/A							2019
24286	vehicle contact	9/21/19 0:00	18:03:00			32	rural	No	No			14.4kV		Overhead	Other	N/A							2019
481	Wire slap	2015-02-06	10:00:00			32	rural	No	Yes	Conductor		14.4kV		Overhead	Other	N/A							2015
617	Wire slap	2016-01-15	03:00:00			32	rural	No	No	Conductor		14.4kV		Overhead	Other	N/A							2016
626	Wire slap	2016-02-18	04:25:00			32	rural	No	No	Conductor		14.4kV		Overhead	Other	N/A							2016
627	Wire slap	2016-02-18	10:00:00			32	rural	No	No	Conductor		14.4kV		Overhead	Other	N/A							2016
1048	Wire slap	2017-04-08	12:05:00			32	rural	No	No	Conductor		14.4kV		Overhead	Other	N/A							2017
1035	Wire slap	2017-04-08	14:00:00			32	rural	No	No	Conductor		14.4kV		Overhead	Other	N/A							2017
17924	Wire slap	1/25/18 0:00	1:00:00			32	rural	No	No			14.4kV		Overhead	Other	N/A							2018
21342	Wire slap	1/15/19 0:00	21:26:00			32	rural	No	No	Conductor		14.4kV		Overhead	Other	N/A							2019
21358	Wire slap	1/16/19 0:00	4:19:00			32	rural	No	No	Conductor		14.4kV		Overhead	Other	N/A							2019
21684	Wire slap	2/4/19 0:00	20:07:00			32	rural	No	No	Conductor		14.4kV		Overhead	Other	N/A							2019
17135	Equipment failure	10/3/17 0:00	0:00:00			41	rural	No	Yes	Transformer		14.4kV		Overhead	Other	N/A							2017
722	Hardware failure	2016-11-15	16:16:00			41	rural	No	Yes			14.4kV		Overhead	Other	N/A							2016
23689	Other	7/1/19 0:00	17:22:00			41	rural	No	Yes			14.4kV		Overhead	Other	N/A							2019
23806	Unknown	7/23/19 0:00	8:50:00			41	rural	No	Yes			14.4kV		Overhead	Other	N/A							2019
21335	Wire slap	1/15/19 0:00	21:50:00			41	rural	No	Yes	Conductor		14.4kV		Overhead	Other	N/A							2019
17519	Hardware failure	11/26/2017	9:27:00			42	rural	No	Yes	Cutout		14.4kV		Overhead	Other	N/A							2017
17759	Hardware failure	12/17/2017	9:29:00			42	rural	No	Yes	Cutout		14.4kV		Overhead	Other	N/A							2017
1022	Unknown	2017-03-05	05:22:00			42	rural	No	Yes			14.4kV		Overhead	Other	N/A							2017
478	Wire slap	2015-02-08	10:00:00			42	rural	No	Yes	Conductor		14.4kV		Overhead	Other	N/A							2015
580	Wire slap	2015-11-26	16:00:00			42	rural	No	Yes	Conductor		14.4kV		Overhead	Other	N/A							2015
1088	Equipment failure	2017-07-02	18:39:00			51	rural	No	Yes	Transformer		14.4kV		Overhead	Other	N/A							2017
1089	Equipment failure	2017-07-03	18:28:00			51	rural	No	Yes	Transformer		14.4kV		Overhead	Other	N/A							2017
1092	Equipment failure	2017-07-06	19:11:00			51	rural	No	Yes	Transformer		14.4kV		Overhead	Other	N/A							2017
1093	Equipment failure	2017-07-07	16:38:00			51	rural	No	Yes	Transformer		14.4kV		Overhead	Other	N/A							2017
1094	Equipment failure	2017-07-07	20:28:00			51	rural	No	Yes	Transformer		14.4kV		Overhead	Other	N/A							2017
484	Hardware failure	2015-02-20	17:00:00			51	rural	No	Yes	Terminator		14.4kV		Underground	Other	N/A							2015
23822	Unknown	7/26/19 0:00	22:03:00			51	rural	No	Yes			14.4kV		Overhead	Other	N/A							2019
1115	Vegetation contact	2017-08-20	16:14:00			51	rural	No	Yes			14.4kV		Overhead	Other	N/A							2017
587	Hardware failure	2015-11-10	11:55:00			201	rural	No	Yes	Cutout		14.4kV		Overhead	Other	N/A							2015
1155	Lightning	2017-09-11	19:16:00			201	rural	No	Yes			14.4kV		Overhead	Other	N/A							2017
704	Wire slap	2016-10-15	18:17:00			201	rural	No	Yes	Conductor		14.4kV		Overhead	Other	N/A							2016
502	Hardware failure	2015-05-15	15:30:00			204	rural	No	Yes	Cutout		14.4kV		Overhead	Other	N/A							2015
21344	Hardware failure	1/16/19 0:00	1:24:00			204	rural	No	No	Cutout		14.4kV		Overhead	Other	N/A							2019
23997	Hardware failure	8/13/19 0:00	9:52:00			204	rural	No	No			14.4kV		Overhead	Other	N/A							2019
21050	Unknown	12/19/18 0:00	8:33:00			204	rural	No	No			14.4kV		Overhead	Other	N/A							2018
21618	Unknown	2/4/19 0:00	8:40:00			204	rural	No	No			14.4kV		Overhead	Other	N/A							2019
24754	Unknown	12/2/19 0:00	9:12:00			204	rural	No	No			24.9kV		Overhead	Other	N/A							2019
599	Wire slap	2015-12-10	18:43:00			204	rural	No	Yes	Conductor		14.4kV		Overhead	Other	N/A							2015
600	Wire slap	2015-12-10	20:00:00			204	rural	No	Yes	Conductor		14.4kV		Overhead	Other	N/A							2015
628	Wire slap	2016-02-18	14:45:00			204	rural	No	Yes	Conductor		14.4kV		Overhead	Other	N/A							2016
21180	Wire slap	1/6/19 0:00	18:36:00			204	rural	No	No	Conductor		14.4kV		Overhead	Other	N/A							2019
21212	Wire slap	1/6/19 0:00	23:17:00			204	rural	No	No	Conductor		14.4kV		Overhead	Other	N/A							2019
21215	Wire slap	1/6/19 0:00	23:20:00			204	rural	No	No	Conductor		14.4kV		Overhead	Other	N/A							2019
24759	Wire slap	12/2/19 0:00	13:50:00			204	rural	No	No	Conductor		14.4kV		Overhead	Other	N/A							2019
529	Hardware failure	2015-07-07	08:30:00			608	rural	No	No			60kV		Overhead	Other	N/A							2015
535	Hardware failure	2015-07-17	11:20:00			608	rural	No	No	Insulator		60kV		Overhead	Other	N/A							2015
1119	Hardware failure	2017-08-02	15:28:00			608	rural	No	No	Insulator		60kV		Overhead	Other	N/A							2017
530	Lightning	2015-07-04	11:30:00			608	rural	No	No			60kV		Overhead	Other	N/A							2015
21752	Vegetation contact	2/5/19 0:00	17:19:00			608	rural	No	No			60kV		Overhead	Other	N/A							2019
663	Equipment failure	2016-07-16	07:00:00			619	rural	No	Yes	Transformer		60kV		Overhead	Other	N/A							2016
664	Equipment failure	2016-07-16	16:45:00			619	rural	No	Yes	Transformer		60kV		Overhead	Other	N/A							2016
658	Lightning	2016-05-05	14:00:00			619	rural	No	Yes			60kV		Overhead	Other	N/A							2016
1141	Lightning	2017-09-12	14:37:00			619	rural	No	Yes			60kV		Overhead	Other	N/A							2017
1142	Lightning	2017-09-13	18:25:00			619	rural	No	Yes			60kV		Overhead	Other	N/A							2017
22376, 224(	Equipment failure	2/22/19 0:00	20:45:00			629	rural	No	No	Transformer		60kV		Overhead	Other	N/A							2019
1041	Animal contact	2017-04-20	08:10:00			1261	rural	No	Yes			12.47kV		Overhead	Other	N/A							2017

Identifying Information				Location Information						Utility facility information						Situational awareness information						Year
ID	Type of event	Date	Time	Latitude	Longitude	Circuit name	Land use (rural / urban)	Enhanced inspections and maintenance conducted according to 2019 WMP at location prior to event (Yes / No)	Enhanced vegetation management conducted according to 2019 WMP at location prior to event (Yes / No)	Type of equipment involved	Facility identification	Voltage	Age of involved equipment	Overhead or underground	Covered conductor or other	Other companies' equipment involved (or N/A)	Local temperature at itme of event	Local wind speed at time of event	Nearest weather station by weather station ID	Last inspection data of involved equipment	Time-to-expected failure of involved equipment on date of incident (in number of days until the involved equipment was expected to fail)	Over capacity history of involved equipment (percent of time equipment operated over nameplate capacity)	
498	Equipment failure	2015-04-21	22:45:00			1261	rural	No	Yes	Transformer		12.47kV		Overhead	Other	N/A						2015
524	Equipment failure	2015-07-03	11:30:00			1261	rural	No	Yes	Transformer		12.47kV		Overhead	Other	N/A						2015
17554	Equipment failure	11/26/17 0:00	14:25:00			1261	rural	No	Yes	Conductor		12.47kV		Overhead	Other	N/A						2017
21178	Equipment failure	1/5/19 0:00	22:55:00			1261	rural	No	Yes	Transformer		12.47kV		Overhead	Other	N/A						2019
23186	Equipment failure	4/13/19 0:00	12:34:00			1261	rural	No	Yes	Transformer		12.47kV		Overhead	Other	N/A						2019
1045	Hardware failure	2017-04-28	13:27:00			1261	rural	No	Yes			12.47kV		Overhead	Other	N/A						2017
	Hardware failure	6/21/18 0:00	7:00:00			1261	rural	No	Yes	Crossarm		12.47kV		Overhead	Other	N/A						2018
21042	Hardware failure	12/14/18 0:00	17:11:00			1261	rural	No	Yes	Transformer		12.47kV		Overhead	Other	N/A						2018
23077	Hardware failure	3/26/19 0:00	7:32:00			1261	rural	No	Yes	Cutout		12.47kV		Overhead	Other	N/A						2019
507	Lightning	2015-05-22	21:00:00			1261	rural	No	Yes			12.47kV		Overhead	Other	N/A						2015
509	Lightning	2015-05-23	08:00:00			1261	rural	No	Yes			12.47kV		Overhead	Other	N/A						2015
518	Lightning	2015-06-29	18:15:00			1261	rural	No	Yes			12.47kV		Overhead	Other	N/A						2015
592	Lightning	2015-12-10	06:45:00			1261	rural	No	Yes			12.47kV		Overhead	Other	N/A						2015
23049	Operations	3/22/19 0:00	9:05:00			1261	rural	No	Yes			12.47kV		Overhead	Other	N/A						2019
547	Other	2015-08-20	16:00:00			1261	rural	No	Yes			12.47kV		Overhead	Other	N/A						2015
500	Unknown	2015-05-07	19:48:00			1261	rural	No	Yes			12.47kV		Overhead	Other	N/A						2015
711	Unknown	2016-10-29	22:32:00			1261	rural	No	Yes			12.47kV		Overhead	Other	N/A						2016
720	Unknown	2016-11-16	02:01:00			1261	rural	No	Yes			12.47kV		Overhead	Other	N/A						2016
744	Unknown	2016-12-06	14:55:00			1261	rural	No	Yes			12.47kV		Overhead	Other	N/A						2016
746	Unknown	2016-12-10	04:25:00			1261	rural	No	Yes			12.47kV		Overhead	Other	N/A						2016
741	Unknown	2016-12-15	02:29:00			1261	rural	No	Yes			12.47kV		Overhead	Other	N/A						2016
17340	Unknown	11/9/17 0:00	3:52:27			1261	rural	No	Yes			12.47kV		Overhead	Other	N/A						2017
1107	Unknown	2017-07-25	20:36:00			1261	rural	No	Yes			12.47kV		Overhead	Other	N/A						2017
1125	Unknown	2017-08-08	07:08:00			1261	rural	No	Yes			12.47kV		Overhead	Other	N/A						2017
17188	Unknown	10/20/17 0:00	0:00:00			1261	rural	No	Yes			12.47kV		Overhead	Other	N/A						2017
17190	Unknown	10/20/17 0:00	0:00:00			1261	rural	No	Yes			12.47kV		Overhead	Other	N/A						2017
17574	Unknown	11/26/17 0:00	16:52:31			1261	rural	No	Yes			12.47kV		Overhead	Other	N/A						2017
17767	Unknown	12/19/17 0:00	22:43:00			1261	rural	No	Yes			12.47kV		Overhead	Other	N/A						2017
18165	Unknown	3/1/18 0:00	18:15:00			1261	rural	No	Yes			12.47kV		Overhead	Other	N/A						2018
18203	Unknown	3/1/18 0:00	22:46:00			1261	rural	No	Yes			12.47kV		Overhead	Other	N/A						2018
23685	Unknown	7/1/19 0:00	7:31:00			1261	rural	No	Yes			12.47kV		Overhead	Other	N/A						2019
23760	Unknown	7/13/19 0:00	6:52:00			1261	rural	No	Yes			12.47kV		Overhead	Other	N/A						2019
24705	Unknown	11/20/19 0:00	21:21:00			1261	rural	No	Yes			12.47kV		Overhead	Other	N/A						2019
24360	Unknown	9/28/19 0:00	7:10:00			1261	rural	No	Yes			12.47kV		Overhead	Other	N/A						2019
21209	Unknown	1/6/19 0:00	22:39:00			1261	rural	No	Yes			12.47kV		Overhead	Other	N/A						2019
21347	Unknown	1/16/19 0:00	2:34:00			1261	rural	No	Yes			12.47kV		Overhead	Other	N/A						2019
22003	Unknown	2/14/19 0:00	17:37:00			1261	rural	No	Yes			12.47kV		Overhead	Other	N/A						2019
22668	Unknown	2/25/19 0:00	13:16:00			1261	rural	No	Yes			12.47kV		Overhead	Other	N/A						2019
22740	Unknown	2/26/19 0:00	5:12:00			1261	rural	No	Yes			12.47kV		Overhead	Other	N/A						2019
22794	Unknown	3/2/19 0:00	10:11:00			1261	rural	No	Yes			12.47kV		Overhead	Other	N/A						2019
22950	Unknown	3/14/19 0:00	7:04:00			1261	rural	No	Yes			12.47kV		Overhead	Other	N/A						2019
23157	Unknown	4/10/19 0:00	8:27:00			1261	rural	No	Yes			12.47kV		Overhead	Other	N/A						2019
476	Vegetation contact	2015-02-06	06:30:00			1261	rural	No	Yes			12.47kV		Overhead	Other	N/A						2015
24277	Vegetation contact	9/16/19 0:00	13:04:00			1261	rural	No	Yes			12.47kV		Overhead	Other	N/A						2019
1140	Wildfire	2017-08-31	11:00:00			1261	rural	No	Yes			12.47kV		Overhead	Other	N/A						2017
523	Wire slap	2015-07-01	18:00:00			1261	rural	No	Yes	Conductor		12.47kV		Overhead	Other	N/A						2015
570	Wire slap	2015-10-02	11:30:00			1261	rural	No	Yes	Conductor		12.47kV		Overhead	Other	N/A						2015
618	Wire slap	2016-01-29	15:00:00			1261	rural	No	Yes	Conductor		12.47kV		Overhead	Other	N/A						2016
650	Wire slap	2016-04-14	04:36:00			1261	rural	No	Yes	Conductor		12.47kV		Overhead	Other	N/A						2016
712	Wire slap	2016-10-14	07:31:00			1261	rural	No	Yes	Conductor		12.47kV		Overhead	Other	N/A						2016
697	Wire slap	2016-10-15	12:43:00			1261	rural	No	Yes	Conductor		12.47kV		Overhead	Other	N/A						2016
698	Wire slap	2016-10-16	00:51:00			1261	rural	No	Yes	Conductor		12.47kV		Overhead	Other	N/A						2016
719	Wire slap	2016-11-19	08:22:00			1261	rural	No	Yes	Conductor		12.47kV		Overhead	Other	N/A						2016
732	Wire slap	2016-11-27	06:52:00			1261	rural	No	Yes	Conductor		12.47kV		Overhead	Other	N/A						2016
749	Wire slap	2016-12-15	06:46:00			1261	rural	No	Yes	Conductor		12.47kV		Overhead	Other	N/A						2016
1039	Wire slap	2017-04-12	22:42:00			1261	rural	No	Yes	Conductor		12.47kV		Overhead	Other	N/A						2017
17187	Wire slap	10/20/17 0:00	0:00:00			1261	rural	No	Yes	Conductor		12.47kV		Overhead	Other	N/A						2017
17921	Wire slap	1/24/18 0:00	16:01:00			1261	rural	No	Yes			12.47kV		Overhead	Other	N/A						2018
18087	Wire slap	2/22/18 0:00	6:39:00			1261	rural	No	Yes			12.47kV		Overhead	Other	N/A						2018
19501	Wire slap	5/30/18 0:00	16:10:00			1261	rural	No	Yes			12.47kV		Overhead	Other	N/A						2018
21408	Wire slap	1/17/19 0:00	9:29:00			1261	rural	No	Yes	Conductor		12.47kV		Overhead	Other	N/A						2019
22711	Wire slap	2/25/19 0:00	23:45:00			1261	rural	No	Yes	Conductor		12.47kV		Overhead	Other	N/A						2019
24279	Wire slap	9/16/19 0:00	18:03:00			1261	rural	No	Yes	Conductor		12.47kV		Overhead	Other	N/A						2019
537	Animal contact	2015-07-14	06:58:00			1296	rural	No	Yes			12.47kV		Overhead	Other	N/A						2015
558	Animal contact	2015-08-31	12:46:00			1296	rural	No	Yes			12.47kV		Overhead	Other	N/A						2015
23801	Animal contact	7/21/19 0:00	10:57:00			1296	rural	No	No			12.47kV		Overhead	Other	N/A						2019
23867	Animal contact	8/1/19 0:00	14:47:00			1296	rural	No	No			12.47kV		Overhead	Other	N/A						2019
579	Hardware failure	2015-10-31	14:15:00			1296	rural	No	Yes			12.47kV		Overhead	Other	N/A						2015
583	Hardware failure	2015-11-24	23:30:00			1296	rural	No	Yes	Cutout		12.47kV		Overhead	Other	N/A						2015
610	Hardware failure	2016-01-01	18:59:00			1296	rural	No	Yes	Cutout		12.47kV		Overhead	Other	N/A						2016
1043	Hardware failure	2017-04-27	00:59:00			1296	rural	No	Yes	Crossarm		12.47kV		Overhead	Other	N/A						2017
1084	Hardware failure	2017-06-10	11:17:00			1296	rural	No	Yes	Cutout		12.47kV		Overhead	Other	N/A						2017
17923	Hardware failure	1/24/18 0:00	17:12:00			1296	rural	No	No			12.47kV		Overhead	Other	N/A						2018
23888	Hardware failure	8/4/19 0:00	23:45:00			1296	rural	No	No	Arrester		12.47kV		Overhead	Other	N/A						2019
24929	Hardware failure	12/22/19 0:00	11:26:00			1296	rural	No	No			12.47kV		Overhead	Other	N/A						2019
18180	Unknown	3/1/18 0:00	0:00:00			1296	rural	No	No			12.47kV		Overhead	Other	N/A						2018
18188	Unknown	3/1/18 0:00	0:00:00			1296	rural	No	No			12.47kV		Overhead	Other	N/A						2018
18759	Unknown	5/1/18 0:00	14:11:00			1296	rural	No	No			12.47kV		Overhead	Other	N/A						2018
23705	Unknown	7/4/19 0:00	16:52:00			1296	rural	No	No			12.47kV		Overhead	Other	N/A						2019
24370	Unknown	9/30/19 0:00	10:45:00			1296	rural	No	No			12.47kV		Overhead	Other	N/A						2019
21578	Unknown	2/4/19 0:00	7:24:00			1296	rural	No	No			12.47kV		Overhead	Other	N/A						2019
22650	Unknown	2/25/19 0:00	11:32:00			1296	rural	No	No			12.47kV		Overhead	Other	N/A						2019
22112	Vegetation contact	2/15/19 0:00	3:37:00			1296	rural	No	No			12.47kV		Overhead	Other	N/A						2019
22793	Vegetation contact	3/2/19 0:00	8:17:00			1296	rural	No	No			12.47kV		Overhead	Other	N/A						2019
23816	Vegetation contact	7/26/19 0:00	13:28:00			1296	rural	No	No			12.47kV		Overhead	Other	N/A						2019
748	Wire slap	2016-12-15	05:33:00			1296	rural	No	Yes	Conductor		12.47kV		Overhead	Other	N/A						2016
750	Wire slap	2016-12-15	09:04:00			1296	rural	No	Yes	Conductor		12.47kV		Overhead	Other	N/A						2016
17932	Wire slap	1/25/18 0:00	2:19:00			1296	rural	No	No			12.47kV		Overhead	Other	N/A						2018
21544	Wire slap	2/3/19 0:00	8:02:00			1296	rural	No	No	Conductor		12.47kV		Overhead	Other	N/A						2019
21703	Wire slap	2/5/19 0:00	0:11:00			1296	rural	No	No	Conductor		12.47kV		Overhead	Other	N/A						2019
24726	Wire slap	11/26/19 0:00	18:53:00			1296	rural	No	No	Conductor		12.47kV		Overhead	Other	N/A						2019
17902	Equipment failure	1/21/18 0:00	17:40:00			2300	urban	No	No	Pole		14.4kV		Overhead	Other	N/A						2018
727	Hardware failure	2016-11-20	02:06:00			2300	urban	No	No			14.4kV		Overhead	Other	N/A						2016
17575	Hardware failure	11/26/2017	16:00:00			2300	urban	No	No	Arrester		14.4kV		Overhead	Other	N/A						2017
613	Unknown	2016-01-21	07:30:00			2300	urban	No	No			14.4kV		Overhead	Other	N/A						2016
615	Unknown	2016-01-25	10:35:00			2300	urban	No	No			14.4kV		Overhead	Other	N/A						2016

	Identifying Information			Location Information						Utility facility information						Situational awareness information						Year
ID	Type of event	Date	Time	Latitude	Longitude	Circuit name	Land use (rural / urban)	Enhanced inspections and maintenance conducted according to 2019 WMP at location prior to event (Yes / No)	Enhanced vegetation management conducted according to 2019 WMP at location prior to event (Yes / No)	Type of equipment involved	Facility identification	Voltage	Age of involved equipment	Overhead or underground	Covered conductor or other	Other companies' equipment involved (or N/A)	Local temperature at itme of event	Local wind speed at time of event	Nearest weather station by weather station ID	Last inspection data of involved equipment	Time-to-expected failure of involved equipment on date of incident (in number of days until the involved equipment was expected to fail)	Over capacity history of involved equipment (percent of time equipment operated over nameplate capacity)	
23148	Unknown	4/7/19 0:00	14:00:00			2300	urban	No	No			14.4kV		Overhead	Other	N/A							2019
499	Animal contact	2015-05-02	12:20:00			3100	urban	No	No			14.4kV		Overhead	Other	N/A							2015
539	Animal contact	2015-07-22	19:30:00			3100	urban	No	No			14.4kV		Overhead	Other	N/A							2015
595	Animal contact	2015-12-26	12:40:00			3100	urban	No	No			14.4kV		Overhead	Other	N/A							2015
1131	Animal contact	2017-08-21	09:26:00			3100	urban	No	No			14.4kV		Overhead	Other	N/A							2017
1075	Animal contact	2017-06-11	19:22:00			3100	urban	No	No			14.4kV		Overhead	Other	N/A							2017
18314	Equipment failure	3/10/18 0:00	19:44:00			3100	urban	No	Yes	Transformer		14.4kV		Overhead	Other	N/A							2018
22189	Equipment failure	2/16/19 0:00	21:08:00			3100	urban	No	Yes	Transformer		14.4kV		Overhead	Other	N/A							2019
1105	Hardware failure	2017-07-23	09:55:00			3100	urban	No	No			14.4kV		Overhead	Other	N/A							2017
19787	Hardware failure	7/8/18 0:00	15:17:00			3100	urban	No	Yes	Cutout		14.4kV		Overhead	Other	N/A							2018
21635	Hardware failure	2/4/19 0:00	10:37:00			3100	urban	No	Yes	Arrester		14.4kV		Overhead	Other	N/A							2019
536	Lightning	2015-07-09	12:05:00			3100	urban	No	No			14.4kV		Overhead	Other	N/A							2015
527	Lightning	2015-07-09	12:05:00			3100	urban	No	No			14.4kV		Overhead	Other	N/A							2015
22216	Third Party	2/17/19 0:00	10:58:00			3100	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019
693	Unknown	2016-09-13	08:37:00			3100	urban	No	No			14.4kV		Overhead	Other	N/A							2016
723	Unknown	2016-11-12	13:58:00			3100	urban	No	No			14.4kV		Overhead	Other	N/A							2016
20200	Unknown	9/26/18 0:00	10:59:00			3100	urban	No	Yes			14.4kV		Overhead	Other	N/A							2018
24313	Unknown	9/25/19 0:00	8:32:00			3100	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019
24871	Unknown	12/8/19 0:00	16:41:00			3100	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019
21637	Unknown	2/4/19 0:00	11:28:00			3100	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019
21639	Unknown	2/4/19 0:00	11:45:00			3100	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019
21744	Unknown	2/5/19 0:00	14:33:00			3100	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019
22185	Unknown	2/16/19 0:00	18:19:00			3100	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019
23665	Unknown	6/26/19 0:00	15:05:00			3100	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019
660	Vegetation contact	2016-06-17	20:12:00			3100	urban	No	No			14.4kV		Overhead	Other	N/A							2016
699	Vegetation contact	2016-10-16	16:11:00			3100	urban	No	No			14.4kV		Overhead	Other	N/A							2016
725	Vegetation contact	2016-11-19	13:15:00			3100	urban	No	No			14.4kV		Overhead	Other	N/A							2016
1090	Vegetation contact	2017-07-04	21:01:00			3100	urban	No	No			14.4kV		Overhead	Other	N/A							2017
20650	Vegetation contact	10/17/18 0:00	22:41:00			3100	urban	No	Yes			14.4kV		Overhead	Other	N/A							2018
21634	Vegetation contact	2/4/19 0:00	6:24:00			3100	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019
21826	Vegetation contact	2/12/19 0:00	20:07:00			3100	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019
23619	Vegetation contact	6/11/19 0:00	9:22:00			3100	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019
678	Vehicle contact	2016-08-09	03:42:00			3100	urban	No	No			14.4kV		Overhead	Other	N/A							2016
1068	Vehicle contact	2017-06-06	12:47:00			3100	urban	No	No			14.4kV		Overhead	Other	N/A							2017
18689	Vehicle contact	4/18/18 0:00	12:59:00			3100	urban	No	Yes			14.4kV		Underground	Other	N/A							2018
22225	Wire slap	2/17/19 0:00	12:36:00			3100	urban	No	Yes	Conductor		14.4kV		Overhead	Other	N/A							2019
555	Animal contact	2015-08-31	08:20:00			3101	urban	No	No			14.4kV		Overhead	Other	N/A							2015
688	Animal contact	2016-09-06	10:26:00			3101	urban	No	Yes			14.4kV		Overhead	Other	N/A							2016
740	Animal contact	2016-12-19	10:00:00			3101	urban	No	Yes			14.4kV		Overhead	Other	N/A							2016
1055	Animal contact	2017-05-17	08:36:00			3101	urban	No	Yes			14.4kV		Overhead	Other	N/A							2017
23755	Animal contact	7/12/19 0:00	15:07:00			3101	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019
665	Equipment failure	2016-07-02	18:16:00			3101	urban	No	Yes	Transformer		14.4kV		Overhead	Other	N/A							2016
707	Equipment failure	2016-10-16	06:40:00			3101	urban	No	Yes	Pole		14.4kV		Overhead	Other	N/A							2016
17308	Equipment failure	11/3/17 0:00	8:30:42			3101	urban	No	Yes	Transformer		14.4kV		Overhead	Other	N/A							2017
18183	Equipment failure	3/1/18 0:00	21:16:00			3101	urban	No	Yes	Transformer		14.4kV		Overhead	Other	N/A							2018
21094	Equipment failure	12/29/18 0:00	21:05:00			3101	urban	No	Yes	Transformer		14.4kV		Overhead	Other	N/A							2018
23585	Equipment failure	6/10/19 0:00	20:27:00			3101	urban	No	Yes	Transformer		14.4kV		Overhead	Other	N/A							2019
23605	Equipment failure	6/13/19 0:00	10:43:00			3101	urban	No	Yes	Transformer		14.4kV		Overhead	Other	N/A							2019
22884	Fuse overload	3/4/19 0:00	8:59:00			3101	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019
1164	Hardware failure	2017-09-13	08:21:00			3101	urban	No	Yes	Cutout		14.4kV		Overhead	Other	N/A							2017
19932	Hardware failure	8/3/18 0:00	7:57:00			3101	urban	No	Yes	Arrester		14.4kV		Overhead	Other	N/A							2018
20832	Hardware failure	11/22/18 0:00	11:13:00			3101	urban	No	Yes			14.4kV		Overhead	Other	N/A							2018
751	Unknown	2016-12-22	19:26:00			3101	urban	No	Yes			14.4kV		Overhead	Other	N/A							2016
754	Unknown	2016-12-26	17:41:00			3101	urban	No	Yes			14.4kV		Overhead	Other	N/A							2016
755	Unknown	2016-12-26	20:07:00			3101	urban	No	Yes			14.4kV		Overhead	Other	N/A							2016
17758	Unknown	12/16/17 0:00	22:51:00			3101	urban	No	Yes			14.4kV		Overhead	Other	N/A							2017
20036	Unknown	8/22/18 0:00	11:53:00			3101	urban	No	Yes			14.4kV		Overhead	Other	N/A							2018
23985	Unknown	8/10/19 0:00	9:18:00			3101	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019
21730	Unknown	2/5/19 0:00	10:31:00			3101	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019
572	Vegetation contact	2015-10-01	13:52:00			3101	urban	No	No			14.4kV		Overhead	Other	N/A							2015
1101	Vegetation contact	2017-07-15	09:16:00			3101	urban	No	Yes			14.4kV		Overhead	Other	N/A							2017
17755	Vegetation contact	12/16/17 0:00	17:56:00			3101	urban	No	Yes			14.4kV		Overhead	Other	N/A							2017
21034	Vegetation contact	12/14/18 0:00	13:54:00			3101	urban	No	Yes			14.4kV		Overhead	Other	N/A							2018
21201	Vegetation contact	1/6/19 0:00	21:35:00			3101	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019
692	Vehicle contact	2016-09-18	02:06:00			3101	urban	No	Yes			14.4kV		Overhead	Other	N/A							2016
17600	Vehicle contact	12/4/17 0:00	15:14:00			3101	urban	No	Yes			14.4kV		Overhead	Other	N/A							2017
24244	Animal contact	9/15/19 0:00	8:31:00			3200	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019
24678	Animal contact	11/11/19 0:00	13:22:00			3200	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019
24680	Animal contact	11/11/19 0:00	13:58:00			3200	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019
18842	Equipment failure	5/16/18 0:00	15:40:00			3200	urban	No	Yes	Transformer		14.4kV		Overhead	Other	N/A							2018
20292	Equipment failure	10/15/18 0:00	7:22:00			3200	urban	No	Yes	Transformer		14.4kV		Overhead	Other	N/A							2018
21977	Equipment failure	2/14/19 0:00	11:54:00			3200	urban	No	Yes	Transformer		14.4kV		Overhead	Other	N/A							2019
554	Hardware failure	2015-08-29	07:25:00			3200	urban	No	No	Cutout		14.4kV		Overhead	Other	N/A							2015
596	Hardware failure	2015-12-28	17:35:00			3200	urban	No	No			14.4kV		Overhead	Other	N/A							2015
654	Hardware failure	2016-05-10	13:45:00			3200	urban	No	No	Cutout		14.4kV		Overhead	Other	N/A							2016
1080	Hardware failure	2017-06-24	16:08:00			3200	urban	No	No	Crossarm		14.4kV		Overhead	Other	N/A							2017
17129	Hardware failure	10/1/2017	8:35:00			3200	urban	No	No	Cutout		14.4kV		Overhead	Other	N/A							2017
18456	Hardware failure	3/22/18 0:00	17:16:00			3200	urban	No	Yes			14.4kV		Underground	Other	N/A							2018
18818	Hardware failure	5/13/18 0:00	8:46:00			3200	urban	No	Yes			14.4kV		Overhead	Other	N/A							2018
21950	Hardware failure	2/14/19 0:00	1:22:00			3200	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019
21975	Hardware failure	2/14/19 0:00	8:00:00			3200	urban	No	Yes			14.4kV		Underground	Other	N/A							2019
22000	Hardware failure	2/14/19 0:00	15:12:00			3200	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019
24537	Hardware failure	10/3/19 0:00	16:06:00			3200	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019
1133	Lightning	2017-08-22	14:41:00			3200	urban	No	No			14.4kV		Overhead	Other	N/A							2017
687	Unknown	2016-09-05	08:12:00			3200	urban	No	No			14.4kV		Overhead	Other	N/A							2016
17440	Unknown	11/15/17 0:00	9:07:13			3200	urban	No	No			14.4kV		Overhead	Other	N/A							2017
19670	Unknown	6/25/18 0:00	6:18:00			3200	urban	No	Yes			14.4kV		Overhead	Other	N/A							2018
20146	Unknown	9/12/18 0:00	14:01:00			3200	urban	No	Yes			14.4kV		Overhead	Other	N/A							2018
24006	Unknown	8/14/19 0:00	1:56:00			3200	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019
24073	Unknown	8/14/19 0:00	2:02:00			3200	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019
24234	Unknown	9/13/19 0:00	9:38:00			3200	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019
24579	Unknown	10/17/19 0:00	8:03:00			3200	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019
24671	Unknown	11/7/19 0:00	14:12:00			3200	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019
24697	Unknown	11/15/19 0:00	13:25:00			3200	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019
21989	Unknown	2/14/19 0:00	15:37:00			3200	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019
22071	Unknown	2/15/19 0:00	5:24:00			3200	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019

Identifying Information				Location Information						Utility facility information							Situational awareness information						Year
ID	Type of event	Date	Time	Latitude	Longitude	Circuit name	Land use (rural / urban)	Enhanced inspections and maintenance conducted according to 2019 WMP at location prior to event (Yes / No)	Enhanced vegetation management conducted according to 2019 WMP at location prior to event (Yes / No)	Type of equipment involved	Facility identification	Voltage	Age of involved equipment	Overhead or underground	Covered conductor or other	Other companies' equipment involved (or N/A)	Local temperature at itme of event	Local wind speed at time of event	Nearest weather station by weather station ID	Last inspection data of involved equipment	Time-to-expected failure of involved equipment on date of incident (in number of days until the involved equipment was expected to fail)	Over capacity history of involved equipment (percent of time equipment operated over nameplate capacity)	
22239	Unknown	2/19/19 0:00	13:11:00			3200	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019
474	Vegetation contact	2015-02-06	00:17:00			3200	urban	No	No			14.4kV		Overhead	Other	N/A							2015
584	Vegetation contact	2015-11-24	04:03:00			3200	urban	No	No			14.4kV		Overhead	Other	N/A							2015
634	Vegetation contact	2016-03-01	13:56:00			3200	urban	No	No			14.4kV		Overhead	Other	N/A							2016
1032	Vegetation contact	2017-04-06	13:25:00			3200	urban	No	No			14.4kV		Overhead	Other	N/A							2017
1071	Vegetation contact	2017-06-08	08:23:00			3200	urban	No	No			14.4kV		Overhead	Other	N/A							2017
20145	Vegetation contact	9/12/18 0:00	12:53:00			3200	urban	No	Yes			14.4kV		Overhead	Other	N/A							2018
1137	Vehicle contact	2017-08-28	22:58:00			3200	urban	No	No			14.4kV		Underground	Other	N/A							2017
1024	Wire slap	2017-03-05	05:39:00			3200	urban	No	No	Conductor		14.4kV		Overhead	Other	N/A							2017
22030	Wire slap	2/14/19 0:00	21:24:00			3200	urban	No	Yes	Conductor		14.4kV		Overhead	Other	N/A							2019
22198	Wire slap	2/17/19 0:00	8:24:00			3200	urban	No	Yes	Conductor		14.4kV		Overhead	Other	N/A							2019
550	Animal contact	2015-08-20	11:00:00			3300	urban	No	Yes			14.4kV		Underground	Other	N/A							2015
552	Animal contact	2015-08-24	19:30:00			3300	urban	No	Yes			14.4kV		Underground	Other	N/A							2015
23565	Animal contact	6/7/19 0:00	6:33:00			3300	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019
757	Equipment failure	2016-12-29	11:38:00			3300	urban	No	No	Transformer		14.4kV		Overhead	Other	N/A							2016
22778	Equipment failure	2/28/19 0:00	8:34:00			3300	urban	No	Yes	Transformer		14.4kV		Overhead	Other	N/A							2019
494	Hardware failure	2015-04-17	10:00:00			3300	urban	No	Yes	Lightning arrester		14.4kV		Overhead	Other	N/A							2015
496	Hardware failure	2015-04-25	13:20:00			3300	urban	No	Yes	Cutout		14.4kV		Overhead	Other	N/A							2015
594	Hardware failure	2015-12-22	07:50:00			3300	urban	No	Yes	Cutout		14.4kV		Overhead	Other	N/A							2015
638	Hardware failure	2016-03-12	12:04:00			3300	urban	No	No			14.4kV		Overhead	Other	N/A							2016
1028	Hardware failure	2017-03-12	22:49:00			3300	urban	No	No	Cutout		14.4kV		Overhead	Other	N/A							2017
1085	Hardware failure	2017-06-07	07:23:00			3300	urban	No	No			14.4kV		Overhead	Other	N/A							2017
1162	Hardware failure	2017-09-11	22:52:00			3300	urban	No	No	Insulator		14.4kV		Overhead	Other	N/A							2017
17633	Hardware failure	12/4/2017	20:49:00			3300	urban	No	No			14.4kV		Overhead	Other	N/A							2017
17978	Hardware failure	1/31/18 0:00	12:57:00			3300	urban	No	No	Cutout		14.4kV		Overhead	Other	N/A							2018
18423	Hardware failure	3/22/18 0:00	9:10:00			3300	urban	No	No	Cutout		14.4kV		Overhead	Other	N/A							2018
18767	Hardware failure	5/3/18 0:00	9:21:00			3300	urban	No	No	Cutout		14.4kV		Overhead	Other	N/A							2018
19649	Hardware failure	6/22/18 0:00	11:35:00			3300	urban	No	No	Cutout		14.4kV		Overhead	Other	N/A							2018
22895	Hardware failure	3/4/19 0:00	12:49:00			3300	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019
23130	Hardware failure	3/30/19 0:00	23:57:00			3300	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019
1120	Lightning	2017-08-06	14:05:00			3300	urban	No	No			14.4kV		Overhead	Other	N/A							2017
1160	Lightning	2017-09-11	19:34:00			3300	urban	No	No			14.4kV		Overhead	Other	N/A							2017
19831	Lightning	7/14/18 0:00	19:00:00			3300	urban	No	No			14.4kV		Overhead	Other	N/A							2018
1064	Unknown	2017-05-05	13:59:00			3300	urban	No	No			14.4kV		Overhead	Other	N/A							2017
1099	Unknown	2017-07-13	08:19:00			3300	urban	No	No			14.4kV		Overhead	Other	N/A							2017
17598	Unknown	12/4/17 0:00	11:10:00			3300	urban	No	No			14.4kV		Overhead	Other	N/A							2017
17848	Unknown	1/4/18 0:00	3:33:00			3300	urban	No	No			14.4kV		Overhead	Other	N/A							2018
20840	Unknown	11/23/18 0:00	1:10:00			3300	urban	No	No			14.4kV		Overhead	Other	N/A							2018
24584	Unknown	10/18/19 0:00	15:21:00			3300	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019
24770	Unknown	12/5/19 0:00	6:44:00			3300	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019
24882	Unknown	12/12/19 0:00	10:00:00			3300	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019
21784	Unknown	2/9/19 0:00	15:09:00			3300	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019
22110	Unknown	2/15/19 0:00	9:51:00			3300	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019
23528	Unknown	6/3/19 0:00	12:39:00			3300	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019
23670	Unknown	6/27/19 0:00	1:10:00			3300	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019
492	Vegetation contact	2015-03-31	15:30:00			3300	urban	No	Yes			14.4kV		Overhead	Other	N/A							2015
1040	Vegetation contact	2017-04-17	07:28:00			3300	urban	No	No			14.4kV		Overhead	Other	N/A							2017
19550	Vegetation contact	6/9/18 0:00	17:36:00			3300	urban	No	No			14.4kV		Overhead	Other	N/A							2018
20894	Vegetation contact	11/30/18 0:00	20:38:00			3300	urban	No	No			14.4kV		Overhead	Other	N/A							2018
24915	Vegetation contact	12/22/19 0:00	10:07:00			3300	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019
24146	Vehicle contact	8/25/19 0:00	23:23:00			3300	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019
633	Wire slap	2016-03-06	13:00:00			3300	urban	No	No	Conductor		14.4kV		Overhead	Other	N/A							2016
706	Wire slap	2016-10-16	15:38:00			3300	urban	No	No	Conductor		14.4kV		Overhead	Other	N/A							2016
718	Wire slap	2016-11-27	04:49:00			3300	urban	No	No	Conductor		14.4kV		Overhead	Other	N/A							2016
731	Wire slap	2016-11-27	04:50:00			3300	urban	No	No	Conductor		14.4kV		Overhead	Other	N/A							2016
17901	Wire slap	1/20/18 0:00	15:15:00			3300	urban	No	No			14.4kV		Overhead	Other	N/A							2018
22122	Wire slap	2/15/19 0:00	13:50:00			3300	urban	No	Yes	Conductor		14.4kV		Overhead	Other	N/A							2019
22190	Wire slap	2/16/19 0:00	22:12:00			3300	urban	No	Yes	Conductor		14.4kV		Overhead	Other	N/A							2019
23115	Wire slap	3/28/19 0:00	10:15:00			3300	urban	No	Yes	Conductor		14.4kV		Overhead	Other	N/A							2019
506	Animal contact	2015-05-22	07:30:00			3400	urban	No	No			14.4kV		Overhead	Other	N/A							2015
546	Animal contact	2015-08-17	17:19:00			3400	urban	No	No			14.4kV		Overhead	Other	N/A							2015
1104	Animal contact	2017-07-20	08:55:00			3400	urban	No	Yes			14.4kV		Overhead	Other	N/A							2017
23795	Animal contact	7/19/19 0:00	6:50:00			3400	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019
24184	Animal contact	9/5/19 0:00	9:42:00			3400	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019
24200	Animal contact	9/5/19 0:00	9:38:00			3400	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019
24577	Animal contact	10/13/19 0:00	17:43:00			3400	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019
23566	Animal contact	6/7/19 0:00	6:33:00			3400	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019
724	Equipment failure	2016-11-17	12:51:00			3400	urban	No	No	Transformer		14.4kV		Overhead	Other	N/A							2016
1029	Equipment failure	2017-03-16	00:04:00			3400	urban	No	Yes	Transformer		14.4kV		Overhead	Other	N/A							2017
18392	Equipment failure	3/21/18 0:00	6:06:00			3400	urban	No	Yes	Transformer		14.4kV		Overhead	Other	N/A							2018
24858	Equipment failure	12/8/19 0:00	18:10:00			3400	urban	No	Yes	Conductor		14.4kV		Overhead	Other	N/A							2019
585	Hardware failure	2015-11-24	02:53:00			3400	urban	No	No			14.4kV		Overhead	Other	N/A							2015
705	Hardware failure	2016-10-15	23:00:00			3400	urban	No	No	Cutout		14.4kV		Overhead	Other	N/A							2016
1042	Hardware failure	2017-04-22	18:55:00			3400	urban	No	Yes			14.4kV		Overhead	Other	N/A							2017
23004	Hardware failure	3/20/19 0:00	8:52:00			3400	urban	No	Yes	Cutout		14.4kV		Overhead	Other	N/A							2019
1159	Lightning	2017-09-11	18:39:00			3400	urban	No	Yes			14.4kV		Overhead	Other	N/A							2017
19819	Lightning	7/14/18 0:00	18:20:00			3400	urban	No	Yes			14.4kV		Overhead	Other	N/A							2018
19822	Lightning	7/14/18 0:00	18:25:00			3400	urban	No	Yes			14.4kV		Overhead	Other	N/A							2018
19917	Lightning	7/31/18 0:00	17:21:00			3400	urban	No	Yes			14.4kV		Overhead	Other	N/A							2018
24514	Third Party	10/3/19 0:00	16:02:00			3400	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019
1170	Unknown	2017-09-27	22:32:00			3400	urban	No	Yes			14.4kV		Overhead	Other	N/A							2017
20834	Unknown	11/22/18 0:00	16:50:00			3400	urban	No	Yes			14.4kV		Overhead	Other	N/A							2018
24026	Unknown	8/14/19 0:00	6:15:00			3400	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019
21224	Unknown	1/6/19 0:00	21:24:00			3400	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019
21864	Unknown	2/13/19 0:00	11:11:00			3400	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019
23425	Unknown	5/4/19 0:00	11:38:00			3400	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019
23654	Unknown	6/22/19 0:00	10:58:00			3400	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019
630	Vegetation contact	2016-02-03	11:30:00			3400	urban	No	No			14.4kV		Overhead	Other	N/A							2016
636	Vegetation contact	2016-03-18	10:00:00			3400	urban	No	No			14.4kV		Overhead	Other	N/A							2016
742	Vegetation contact	2016-12-14	18:04:00			3400	urban	No	No			14.4kV		Overhead	Other	N/A							2016
19535	Vegetation contact	6/9/18 0:00	10:18:00			3400	urban	No	Yes			14.4kV		Overhead	Other	N/A							2018
21045	Vegetation contact	12/16/18 0:00	12:25:00			3400	urban	No	Yes			14.4kV		Overhead	Other	N/A							2018
21219	Vegetation contact	1/7/19 0:00	0:53:00			3400	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019
21552	Vegetation contact	2/3/19 0:00	13:24:00			3400	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019
21813	Vegetation contact	2/12/19 0:00	15:51:00			3400	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019
24911	Vegetation contact	12/22/19 0:00	9:45:00			3400	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019

	Identifying Information			Location Information						Utility facility information							Situational awareness information						Year
ID	Type of event	Date	Time	Latitude	Longitude	Circuit name	Land use (rural / urban)	Enhanced inspections and maintenance conducted according to 2019 WMP at location prior to event (Yes / No)	Enhanced vegetation management conducted according to 2019 WMP at location prior to event (Yes / No)	Type of equipment involved	Facility identification	Voltage	Age of involved equipment	Overhead or underground	Covered conductor or other	Other companies' equipment involved (or N/A)	Local temperature at itme of event	Local wind speed at time of event	Nearest weather station by weather station ID	Last inspection data of involved equipment	Time-to-expected failure of involved equipment on date of incident (in number of days until the involved equipment was expected to fail)	Over capacity history of involved equipment (percent of time equipment operated over nameplate capacity)	
21818	Vegetation contact	2/12/19 0:00	16:07:00			3400	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019
17220	Vehicle contact	10/21/17 0:00	0:00:00			3400	urban	No	Yes			14.4kV		Overhead	Other	N/A							2017
21770	vehicle contact	2/8/19 0:00	11:04:00			3400	urban	No	Yes			14.4kV		Overhead	Other	N/A							2019
473	Wire slap	2015-02-05	22:45:00			3400	urban	No	No	Conductor		14.4kV		Overhead	Other	N/A							2015
641	Wire slap	2016-03-13	08:20:00			3400	urban	No	No	Conductor		14.4kV		Overhead	Other	N/A							2016
17662	Wire slap	12/9/17 0:00	12:43:00			3400	urban	No	Yes	Conductor		14.4kV		Overhead	Other	N/A							2017
1126	Animal contact	2017-08-10	07:30:00			3500	urban	No	Yes			14.4kV		Overhead	Other	N/A							2017
1073	Animal contact	2017-06-10	07:28:00			3500	urban	No	Yes			14.4kV		Overhead	Other	N/A							2017
23567	Animal contact	6/7/19 0:00	6:33:00			3500	urban	No	No			14.4kV		Overhead	Other	N/A							2019
21538	Equipment failure	1/28/19 0:00	19:30:00			3500	urban	No	No	Transformer		14.4kV		Overhead	Other	N/A							2019
460	Hardware failure	2015-01-04	16:10:00			3500	urban	No	Yes	Lightning arrester		14.4kV		Overhead	Other	N/A							2015
490	Hardware failure	2015-03-20	14:30:00			3500	urban	No	Yes	Cutout		14.4kV		Overhead	Other	N/A							2015
514	Hardware failure	2015-06-18	09:51:00			3500	urban	No	Yes	Cutout		14.4kV		Overhead	Other	N/A							2015
695	Hardware failure	2016-10-14	02:34:00			3500	urban	No	Yes	Cutout		14.4kV		Overhead	Other	N/A							2016
17409	Hardware failure	11/10/2017	16:46:00			3500	urban	No	Yes			14.4kV		Overhead	Other	N/A							2017
23414	Hardware failure	4/27/19 0:00	13:09:00			3500	urban	No	No	Cutout		14.4kV		Overhead	Other	N/A							2019
24885	Hardware failure	12/16/19 0:00	15:03:00			3500	urban	No	No			14.4kV		Overhead	Other	N/A							2019
19486	Lightning	5/25/18 0:00	6:36:00			3500	urban	No	No			14.4kV		Overhead	Other	N/A							2018
553	Other	2015-08-26	10:30:00			3500	urban	No	Yes			14.4kV		Overhead	Other	N/A							2015
24149	Third Party	8/26/19 0:00	10:33:00			3500	urban	No	No			14.4kV		Overhead	Other	N/A							2019
459	Unknown	2015-01-01	00:00:00			3500	urban	No	Yes			14.4kV		Overhead	Other	N/A							2015
512	Unknown	2015-06-07	16:20:00			3500	urban	No	Yes			14.4kV		Overhead	Other	N/A							2015
1130	Unknown	2017-08-15	14:33:00			3500	urban	No	Yes			14.4kV		Overhead	Other	N/A							2017
17839	Unknown	1/3/18 0:00	18:23:00			3500	urban	No	No			14.4kV		Overhead	Other	N/A							2018
19477	Unknown	5/24/18 0:00	15:25:00			3500	urban	No	No			14.4kV		Overhead	Other	N/A							2018
24002	Unknown	8/13/19 0:00	13:10:00			3500	urban	No	No			14.4kV		Overhead	Other	N/A							2019
24004	Unknown	8/13/19 0:00	12:57:00			3500	urban	No	No			14.4kV		Overhead	Other	N/A							2019
24560	Unknown	10/7/19 0:00	10:29:00			3500	urban	No	No			14.4kV		Overhead	Other	N/A							2019
24535	Unknown	10/3/19 0:00	10:20:00			3500	urban	No	No			14.4kV		Overhead	Other	N/A							2019
21593	Unknown	2/4/19 0:00	5:37:00			3500	urban	No	No			14.4kV		Overhead	Other	N/A							2019
501	Vegetation contact	2015-05-13	20:45:00			3500	urban	No	Yes			14.4kV		Overhead	Other	N/A							2015
551	Vegetation contact	2015-08-22	16:16:00			3500	urban	No	Yes			14.4kV		Overhead	Other	N/A							2015
551	Vegetation contact	2015-08-22	16:16:00			3500	urban	No	Yes			14.4kV		Overhead	Other	N/A							2015
21516	Vegetation contact	1/20/19 0:00	5:17:00			3500	urban	No	No			14.4kV		Overhead	Other	N/A							2019
21741	Vegetation contact	2/5/19 0:00	11:51:00			3500	urban	No	No			14.4kV		Overhead	Other	N/A							2019
588	Vehicle contact	2015-11-29	22:00:00			3500	urban	No	Yes			14.4kV		Overhead	Other	N/A							2015
639	Vehicle contact	2016-03-13	04:22:00			3500	urban	No	Yes			14.4kV		Overhead	Other	N/A							2016
1051	Vehicle contact	2017-05-11	16:00:00			3500	urban	No	Yes			14.4kV		Overhead	Other	N/A							2017
1069	Vehicle contact	2017-06-06	12:48:00			3500	urban	No	Yes			14.4kV		Overhead	Other	N/A							2017
1091	Vehicle contact	2017-07-05	15:41:00			3500	urban	No	Yes			14.4kV		Overhead	Other	N/A							2017
23973	vehicle contact	8/9/19 0:00	11:58:00			3500	urban	No	No			14.4kV		Overhead	Other	N/A							2019
23981	vehicle contact	8/9/19 0:00	11:58:00			3500	urban	No	No			14.4kV		Overhead	Other	N/A							2019
20905	Wire slap	12/1/18 0:00	20:56:00			3500	urban	No	No			14.4kV		Overhead	Other	N/A							2018
24285	Wire slap	9/21/19 0:00	15:06:00			3500	urban	No	No	Conductor		14.4kV		Overhead	Other	N/A							2019
612	Animal contact	2016-01-05	10:15:00			3501	urban	No	No			14.4kV		Overhead	Other	N/A							2016
24675	Animal contact	11/9/19 0:00	9:13:00			3501	urban	No	No			14.4kV		Overhead	Other	N/A							2019
24567	Animal contact	10/9/19 0:00	16:42:00			3501	urban	No	No			14.4kV		Overhead	Other	N/A							2019
17912	Equipment failure	1/22/18 0:00	19:12:00			3501	urban	No	No	Transformer		14.4kV		Overhead	Other	N/A							2018
21923	Equipment failure	2/13/19 0:00	11:50:00			3501	urban	No	No	Pole		14.4kV		Overhead	Other	N/A							2019
24100	Equipment failure	8/21/19 0:00	19:42:00			3501	urban	No	No	Transformer		14.4kV		Overhead	Other	N/A							2019
548	Hardware failure	2015-08-20	09:30:00			3501	urban	No	Yes	Lightning arrester		14.4kV		Overhead	Other	N/A							2015
619	Hardware failure	2016-01-31	21:25:00			3501	urban	No	No	Cutout		14.4kV		Overhead	Other	N/A							2016
629	Hardware failure	2016-02-18	09:30:00			3501	urban	No	No			14.4kV		Overhead	Other	N/A							2016
1121	Hardware failure	2017-08-06	10:22:00			3501	urban	No	No			14.4kV		Overhead	Other	N/A							2017
17677	Hardware failure	12/10/2017	15:10:00			3501	urban	No	No	Cutout		14.4kV		Overhead	Other	N/A							2017
19788	Hardware failure	7/8/18 0:00	10:28:00			3501	urban	No	No			14.4kV		Underground	Other	N/A							2018
21033	Hardware failure	12/14/18 0:00	13:31:00			3501	urban	No	No	Transformer		14.4kV		Overhead	Other	N/A							2018
620	Unknown	2016-01-22	12:30:00			3501	urban	No	No			14.4kV		Overhead	Other	N/A							2016
730	Unknown	2016-11-24	12:42:00			3501	urban	No	No			14.4kV		Overhead	Other	N/A							2016
17311	Unknown	11/4/17 0:00	8:54:10			3501	urban	No	No			14.4kV		Overhead	Other	N/A							2017
1057	Unknown	2017-05-21	20:08:00			3501	urban	No	No			14.4kV		Overhead	Other	N/A							2017
1117	Unknown	2017-08-02	08:30:00			3501	urban	No	No			14.4kV		Overhead	Other	N/A							2017
24600	Unknown	10/23/19 0:00	9:44:00			3501	urban	No	No			14.4kV		Overhead	Other	N/A							2019
703	Vegetation contact	2016-10-14	16:52:00			3501	urban	No	No			14.4kV		Overhead	Other	N/A							2016
1138	Vegetation contact	2017-08-28	14:46:00			3501	urban	No	No			14.4kV		Overhead	Other	N/A							2017
21720	Vegetation contact	2/5/19 0:00	8:17:00			3501	urban	No	No			14.4kV		Overhead	Other	N/A							2019
549	Vehicle contact	2015-08-20	09:45:00			3501	urban	No	Yes			14.4kV		Overhead	Other	N/A							2015
20711	Vehicle contact	11/6/18 0:00	15:47:00			3501	urban	No	No			14.4kV		Overhead	Other	N/A							2018
20873	Vehicle contact	11/29/18 0:00	8:29:00			3501	urban	No	No			14.4kV		Overhead	Other	N/A							2018
714	Equipment failure	2016-10-17	03:13:00			4201	rural	No	No	Transformer		14.4kV		Overhead	Other	N/A							2016
18360	Fuse overload	3/20/18 0:00	5:19:00			4201	rural	No	No			14.4kV		Overhead	Other	N/A							2018
1112	Hardware failure	2017-07-26	14:30:00			4201	rural	No	No	Arrester		14.4kV		Overhead	Other	N/A							2017
18092	Hardware failure	2/23/18 0:00	11:12:00			4201	rural	No	No	Cutout		14.4kV		Overhead	Other	N/A							2018
18371	Hardware failure	3/21/18 0:00	4:04:00			4201	rural	No	No			14.4kV		Underground	Other	N/A							2018
19636	Hardware failure	6/20/18 0:00	3:32:00			4201	rural	No	No			14.4kV		Underground	Other	N/A							2018
22153	Hardware failure	2/16/19 0:00	10:08:00			4201	rural	No	No			14.4kV		Overhead	Other	N/A							2019
22757	Hardware failure	2/26/19 0:00	14:36:00			4201	rural	No	No	Crossarm		14.4kV		Overhead	Other	N/A							2019
17697	Unknown	12/16/17 0:00	13:08:00			4201	rural	No	No			14.4kV		Overhead	Other	N/A							2017
708	Vegetation contact	2016-10-16	22:56:00			4201	rural	No	No			14.4kV		Overhead	Other	N/A							2016
589	Vehicle contact	2015-11-06	12:00:00			4201	rural	No	No			14.4kV		Overhead	Other	N/A							2015
513	Animal contact	2015-06-14	14:00:00			4202	rural	No	No			14.4kV		Overhead	Other	N/A							2015
522	Animal contact	2015-07-06	19:00:00			4202	rural	No	No			14.4kV		Overhead	Other	N/A							2015
23835	Animal contact	7/28/19 0:00	7:30:00			4202	rural	No	No			14.4kV		Overhead	Other	N/A							2019
17374	Equipment failure	11/9/17 0:00	15:13:26			4202	rural	No	No	Transformer		14.4kV		Overhead	Other	N/A							2017
1026	Hardware failure	2017-03-05	13:18:00			4202	rural	No	No	Crossarm		14.4kV		Overhead	Other	N/A							2017
1059	Hardware failure	2017-05-22	19:54:00			4202	rural	No	No	Cutout		14.4kV		Overhead	Other	N/A							2017
1109	Hardware failure	2017-07-26	14:30:00			4202	rural	No	No	Arrester		14.4kV		Overhead	Other	N/A							2017
23684	Third Party	6/29/19 0:00	21:47:00			4202	rural	No	No			14.4kV		Overhead	Other	N/A							2019
758	Unknown	2016-12-02	11:26:00			4202	rural	No	No			14.4kV		Overhead	Other	N/A							2016
20705	Unknown	10/30/18 0:00	19:58:00			4202	rural	No	No			14.4kV		Overhead	Other	N/A							2018
20715	Unknown	11/7/18 0:00	17:37:00			4202	rural	No	No			14.4kV		Overhead	Other	N/A							2018
20779	Unknown	11/16/208	15:23:00			4202	rural	No	No			14.4kV		Overhead	Other	N/A							2018
1061	Vehicle contact	2017-05-27	14:44:00			4202	rural	No	No			14.4kV		Overhead	Other	N/A							2017
710	Wire slap	2016-10-17	00:58:00			4202	rural	No	No	Conductor		14.4kV		Overhead	Other	N/A							2016
21373	Wire slap	1/17/19 0:00	1:26:00			4202	rural	No	No	Conductor		14.4kV		Overhead	Other	N/A							2019
22022	Wire slap	2/14/19 0:00	21:07:00			4202	rural	No	No	Conductor		14.4kV		Overhead	Other	N/A							2019

	Identifying Information			Location Information						Utility facility information							Situational awareness information						Year
ID	Type of event	Date	Time	Latitude	Longitude	Circuit name	Land use (rural / urban)	Enhanced inspections and maintenance conducted according to 2019 WMP at location prior to event (Yes / No)	Enhanced vegetation management conducted according to 2019 WMP at location prior to event (Yes / No)	Type of equipment involved	Facility identification	Voltage	Age of involved equipment	Overhead or underground	Covered conductor or other	Other companies' equipment involved (or N/A)	Local temperature at itme of event	Local wind speed at time of event	Nearest weather station by weather station ID	Last inspection data of involved equipment	Time-to-expected failure of involved equipment on date of incident (in number of days until the involved equipment was expected to fail)	Over capacity history of involved equipment (percent of time equipment operated over nameplate capacity)	
22703	Wire slap	2/26/19 0:00	1:24:00			4202	rural	No	No	Conductor		14.4kV		Overhead	Other	N/A							2019
1113	Hardware failure	2017-07-26	14:30:00			5100	rural	No	No	Arrester		14.4kV		Overhead	Other	N/A							2017
1111	Animal contact	2017-07-29	15:01:00			5200	rural	No	No			14.4kV		Overhead	Other	N/A							2017
24105	Animal contact	8/22/19 0:00	18:32:00			5200	rural	No	Yes			14.4kV		Overhead	Other	N/A							2019
657	Equipment failure	2016-05-31	23:22:00			5200	rural	No	No	Transformer		14.4kV		Overhead	Other	N/A							2016
1027	Equipment failure	2017-03-09	15:06:00			5200	rural	No	No	Transformer		14.4kV		Overhead	Other	N/A							2017
17470	Equipment failure	11/20/17 0:00	5:01:09			5200	rural	No	No	Transformer		14.4kV		Overhead	Other	N/A							2017
21064	Equipment failure	12/24/18 0:00	13:00:00			5200	rural	No	No	Transformer		14.4kV		Overhead	Other	N/A							2018
23009	Equipment failure	3/20/19 0:00	20:13:00			5200	rural	No	Yes	Transformer		14.4kV		Overhead	Other	N/A							2019
1136	Hardware failure	2017-08-31	08:29:00			5200	rural	No	No			14.4kV		Overhead	Other	N/A							2017
1167	Hardware failure	2017-09-15	07:07:00			5200	rural	No	No	Terminator		14.4kV		Overhead	Other	N/A							2017
19506	Hardware failure	5/31/18 0:00	22:35:00			5200	rural	No	No			14.4kV		Overhead	Other	N/A							2018
24215	Hardware failure	9/7/19 0:00	18:00:00			5200	rural	No	Yes	Arrester		14.4kV		Overhead	Other	N/A							2019
22945	Hardware failure	3/12/19 0:00	21:10:00			5200	rural	No	Yes	Cutout		14.4kV		Overhead	Other	N/A							2019
1	Hardware failure	4/30/19 0:00	14:10:00			5200	rural	No	Yes	Cutout		14.4kV		Overhead	Other	N/A							2019
17981	Unknown	1/31/18 0:00	19:15:00			5200	rural	No	No			14.4kV		Overhead	Other	N/A							2018
21087	Unknown	12/28/18 0:00	18:48:00			5200	rural	No	No			14.4kV		Overhead	Other	N/A							2018
21480	Unknown	1/18/19 0:00	11:59:00			5200	rural	No	Yes			14.4kV		Overhead	Other	N/A							2019
21486	Unknown	1/18/19 0:00	11:32:00			5200	rural	No	Yes			14.4kV		Overhead	Other	N/A							2019
22107	Unknown	2/15/19 0:00	10:17:00			5200	rural	No	Yes			14.4kV		Overhead	Other	N/A							2019
563	Vegetation contact	2015-09-29	13:05:00			5200	rural	No	Yes			14.4kV		Overhead	Other	N/A							2015
662	Vegetation contact	2016-06-15	15:45:00			5200	rural	No	No			14.4kV		Overhead	Other	N/A							2016
17522	Vegetation contact	11/26/17 0:00	12:24:35			5200	rural	No	No			14.4kV		Overhead	Other	N/A							2017
21101	Vegetation contact	12/31/18 0:00	10:06:00			5200	rural	No	No			14.4kV		Overhead	Other	N/A							2018
21939	Wire slap	2/13/19 0:00	13:57:00			5200	rural	No	Yes	Conductor		14.4kV		Overhead	Other	N/A							2019
520	Equipment failure	2015-07-04	11:33:00			5201	rural	No	Yes	Transformer		14.4kV		Overhead	Other	N/A							2015
752	Equipment failure	2016-12-23	22:20:00			5201	rural	No	Yes	Pole		14.4kV		Overhead	Other	N/A							2016
734	Equipment failure	2016-11-10	10:41:00			5201	rural	No	Yes			14.4kV		Underground	Other	N/A							2016
18363	Equipment failure	3/20/18 0:00	20:27:00			5201	rural	No	No	Transformer		14.4kV		Overhead	Other	N/A							2018
21366	Equipment failure	1/17/19 0:00	1:14:00			5201	rural	No	Yes	Conductor		14.4kV		Overhead	Other	N/A							2019
541	Hardware failure	2015-08-03	10:50:00			5201	rural	No	Yes			14.4kV		Overhead	Other	N/A							2015
1023	Hardware failure	2017-03-05	04:32:00			5201	rural	No	No	Cutout		14.4kV		Overhead	Other	N/A							2017
1072	Hardware failure	2017-06-08	13:04:00			5201	rural	No	No	Cutout		14.4kV		Overhead	Other	N/A							2017
1122	Hardware failure	2017-08-07	09:24:00			5201	rural	No	No			14.4kV		Overhead	Other	N/A							2017
21325	Hardware failure	1/15/19 0:00	14:23:00			5201	rural	No	Yes	Terminator		14.4kV		Overhead	Other	N/A							2019
21642	Hardware failure	2/4/19 0:00	13:20:00			5201	rural	No	Yes	Crossarm		14.4kV		Overhead	Other	N/A							2019
22913	Hardware failure	3/6/19 0:00	11:30:00			5201	rural	No	Yes	Cutout		14.4kV		Overhead	Other	N/A							2019
23416	Hardware failure	5/1/19 0:00	8:20:00			5201	rural	No	Yes			14.4kV		Overhead	Other	N/A							2019
1123	Lightning	2017-08-09	02:11:00			5201	rural	No	No			14.4kV		Overhead	Other	N/A							2017
1161	Unknown	2017-09-11	19:07:00			5201	rural	No	No			14.4kV		Overhead	Other	N/A							2017
23946	Unknown	8/5/19 0:00	23:34:00			5201	rural	No	Yes			14.4kV		Overhead	Other	N/A							2019
21700	Unknown	2/5/19 0:00	2:17:00			5201	rural	No	Yes			14.4kV		Overhead	Other	N/A							2019
22144	Unknown	2/16/19 0:00	9:26:00			5201	rural	No	Yes			14.4kV		Overhead	Other	N/A							2019
470	Vegetation contact	2015-02-07	07:50:00			5201	rural	No	Yes			14.4kV		Overhead	Other	N/A							2015
647	Vegetation contact	2016-04-22	17:36:00			5201	rural	No	Yes			14.4kV		Overhead	Other	N/A							2016
1168	Vegetation contact	2017-09-21	10:59:00			5201	rural	No	No			14.4kV		Overhead	Other	N/A							2017
17509	Vegetation contact	11/26/17 0:00	11:52:57			5201	rural	No	No			14.4kV		Overhead	Other	N/A							2017
21708	Vegetation contact	2/5/19 0:00	4:15:00			5201	rural	No	Yes			14.4kV		Overhead	Other	N/A							2019
24193	Vegetation contact	9/5/19 0:00	10:34:00			5201	rural	No	Yes			14.4kV		Overhead	Other	N/A							2019
488	Vehicle contact	2015-03-07	02:56:00			5201	rural	No	Yes			14.4kV		Overhead	Other	N/A							2015
653	Vehicle contact	2016-05-17	21:24:00			5201	rural	No	Yes			14.4kV		Overhead	Other	N/A							2016
21380	Wire slap	1/17/19 0:00	7:43:00			5201	rural	No	Yes	Conductor		14.4kV		Overhead	Other	N/A							2019
21418	Wire slap	1/17/19 0:00	14:09:00			5201	rural	No	Yes	Conductor		14.4kV		Overhead	Other	N/A							2019
21430	Wire slap	1/17/19 0:00	17:11:00			5201	rural	No	Yes	Conductor		14.4kV		Overhead	Other	N/A							2019
21460	Wire slap	1/17/19 0:00	19:24:00			5201	rural	No	Yes	Conductor		14.4kV		Overhead	Other	N/A							2019
22759	Wire slap	2/26/19 0:00	23:04:00			5201	rural	No	Yes	Conductor		14.4kV		Overhead	Other	N/A							2019
22762	Wire slap	2/27/19 0:00	1:08:00			5201	rural	No	Yes	Conductor		14.4kV		Overhead	Other	N/A							2019
582	Equipment failure	2015-11-25	22:30:00			7100	rural	No	No	Transformer		14.4kV		Overhead	Other	N/A							2015
22933	Equipment failure	3/10/19 0:00	21:40:00			7100	rural	No	Yes	Conductor		14.4kV		Overhead	Other	N/A							2019
515	Hardware failure	2015-06-22	04:46:00			7100	rural	No	No	Cutout		14.4kV		Overhead	Other	N/A							2015
17481	Hardware failure	11/20/2017	13:48:00			7100	rural	No	Yes	Cutout		14.4kV		Overhead	Other	N/A							2017
21317	Hardware failure	1/12/19 0:00	8:32:00			7100	rural	No	Yes			14.4kV		Overhead	Other	N/A							2019
23582	Hardware failure	6/10/19 0:00	17:22:00			7100	rural	No	Yes	Crossarm		14.4kV		Overhead	Other	N/A							2019
24753	Hardware failure	12/2/19 0:00	8:33:00			7100	rural	No	Yes			14.4kV		Overhead	Other	N/A							2019
19422	Lightning	5/24/18 0:00	18:21:00			7100	rural	No	Yes			14.4kV		Overhead	Other	N/A							2018
656	Unknown	2016-05-25	04:21:00			7100	rural	No	No			14.4kV		Overhead	Other	N/A							2016
737	Unknown	2016-12-27	08:30:00			7100	rural	No	No			14.4kV		Overhead	Other	N/A							2016
21804	Unknown	2/12/19 0:00	13:23:00			7100	rural	No	Yes			14.4kV		Overhead	Other	N/A							2019
23446	Unknown	5/16/19 0:00	13:35:00			7100	rural	No	Yes			14.4kV		Overhead	Other	N/A							2019
491	Vegetation contact	2015-03-31	16:00:00			7100	rural	No	No			14.4kV		Overhead	Other	N/A							2015
18344	Vegetation contact	3/17/18 0:00	14:16:00			7100	rural	No	Yes			14.4kV		Overhead	Other	N/A							2018
24195	Vegetation contact	9/5/19 0:00	10:34:00			7100	rural	No	Yes			14.4kV		Overhead	Other	N/A							2019
652	Wire slap	2016-04-23	09:42:00			7100	rural	No	No	Conductor		14.4kV		Overhead	Other	N/A							2016
24743	Wire slap	12/2/19 0:00	2:26:00			7100	rural	No	Yes	Conductor		14.4kV		Overhead	Other	N/A							2019
566	Hardware failure	2015-10-02	03:20:00			7200	rural	No	No	Cutout		14.4kV		Overhead	Other	N/A							2015
598	Hardware failure	2015-12-07	07:30:00			7200	rural	No	No	Cutout		14.4kV		Overhead	Other	N/A							2015
24192	Vegetation contact	9/5/19 0:00	10:34:00			7200	rural	No	Yes			14.4kV		Overhead	Other	N/A							2019
690	Equipment failure	2016-09-10	14:10:00			7201	rural	No	No			14.4kV		Underground	Other	N/A							2016
20833	Hardware failure	11/22/18 0:00	12:33:00			7201	rural	No	Yes	Cutout		14.4kV		Overhead	Other	N/A							2018
735	Unknown	2016-11-05	16:47:00			7201	rural	No	No			14.4kV		Overhead	Other	N/A							2016
18127	Unknown	2/26/18 0:00	0:29:00			7201	rural	No	Yes			14.4kV		Overhead	Other	N/A							2018
18143	Unknown	3/1/18 0:00	13:30:00			7201	rural	No	Yes			14.4kV		Overhead	Other	N/A							2018
18148	Unknown	3/1/18 0:00	15:50:00			7201	rural	No	Yes			14.4kV		Overhead	Other	N/A							2018
18163	Unknown	3/1/18 0:00	17:58:00			7201	rural	No	Yes			14.4kV		Overhead	Other	N/A							2018
19817	Unknown	7/13/18 0:00	21:43:00			7201	rural	No	Yes			14.4kV		Overhead	Other	N/A							2018
19857	Unknown	7/20/18 0:00	10:58:00			7201	rural	No	Yes			14.4kV		Overhead	Other	N/A							2018
19868	Unknown	7/23/18 0:00	8:11:00			7201	rural	No	Yes			14.4kV		Overhead	Other	N/A							2018
19893	Unknown	7/25/18 0:00	2:24:00			7201	rural	No	Yes			14.4kV		Overhead	Other	N/A							2018
20838	Unknown	11/22/18 0:00	22:01:00			7201	rural	No	Yes			14.4kV		Overhead	Other	N/A							2018
20895	Unknown	12/1/18 0:00	6:57:00			7201	rural	No	Yes			14.4kV		Overhead	Other	N/A							2018
471	Vegetation contact	2015-02-05	15:00:00			7201	rural	No	No			14.4kV		Overhead	Other	N/A							2015
21543	Vegetation contact	2/2/19 0:00	19:41:00			7201	rural	No	Yes			14.4kV		Overhead	Other	N/A							2019
21963	Vegetation contact	2/14/19 0:00	7:17:00			7201	rural	No	Yes			14.4kV		Overhead	Other	N/A							2019
733	Vehicle contact	2016-11-20	19:43:00			7201	rural	No	No			14.4kV		Overhead	Other	N/A							2016
717	Vehicle contact	2016-11-27	05:21:00			7201	rural	No	No			14.4kV		Overhead	Other	N/A							2016
20824	Wire slap	11/22/18 0:00	8:45:00			7201	rural	No	Yes			14.4kV		Overhead	Other	N/A							2018

	Identifying Information			Location Information						Utility facility information							Situational awareness information						Year
ID	Type of event	Date	Time	Latitude	Longitude	Circuit name	Land use (rural / urban)	Enhanced inspections and maintenance conducted according to 2019 WMP at location prior to event (Yes / No)	Enhanced vegetation management conducted according to 2019 WMP at location prior to event (Yes / No)	Type of equipment involved	Facility identification	Voltage	Age of involved equipment	Overhead or underground	Covered conductor or other	Other companies' equipment involved (or N/A)	Local temperature at itme of event	Local wind speed at time of event	Nearest weather station by weather station ID	Last inspection data of involved equipment	Time-to-expected failure of involved equipment on date of incident (in number of days until the involved equipment was expected to fail)	Over capacity history of involved equipment (percent of time equipment operated over nameplate capacity)	
21357	Wire slap	1/16/19 0:00	7:31:00			7201	rural	No	Yes	Conductor		14.4kV		Overhead	Other	N/A							2019
22042	Wire slap	2/14/19 0:00	21:56:00			7201	rural	No	Yes	Conductor		14.4kV		Overhead	Other	N/A							2019
24861	Wire slap	12/8/19 0:00	10:53:00			7201	rural	No	Yes	Conductor		14.4kV		Overhead	Other	N/A							2019
681	Equipment failure	2016-08-17	15:59:00			7202	rural	No	Yes	Pole		14.4kV		Overhead	Other	N/A							2016
20904	Hardware failure	12/1/18 0:00	20:54:00			7202	rural	No	Yes	Cutout		14.4kV		Overhead	Other	N/A							2018
23721	Hardware failure	7/10/19 0:00	2:08:00			7202	rural	No	Yes			14.4kV		Overhead	Other	N/A							2019
668	Unknown	2016-07-18	23:46:00			7202	rural	No	Yes			14.4kV		Overhead	Other	N/A							2016
21556	Unknown	2/3/19 0:00	19:49:00			7202	rural	No	Yes			14.4kV		Overhead	Other	N/A							2019
22243	Unknown	2/20/19 0:00	10:55:00			7202	rural	No	Yes			14.4kV		Overhead	Other	N/A							2019
466	Vegetation contact	2015-02-04	18:20:00			7202	rural	No	No			14.4kV		Overhead	Other	N/A							2015
483	Vegetation contact	2015-02-06	13:30:00			7202	rural	No	No			14.4kV		Overhead	Other	N/A							2015
20871	Vegetation contact	11/29/18 0:00	8:20:00			7202	rural	No	Yes			14.4kV		Overhead	Other	N/A							2018
24363	Wire slap	9/28/19 0:00	15:00:00			7202	rural	No	Yes	Conductor		14.4kV		Overhead	Other	N/A							2019
18539	Hardware failure	3/29/18 0:00	4:50:00			7203	rural	No	No			14.4kV		Underground	Other	N/A							2018
18814	Hardware failure	5/11/18 0:00	4:12:00			7203	rural	No	No	Cutout		14.4kV		Overhead	Other	N/A							2018
21528	Hardware failure	1/21/19 0:00	3:08:00			7203	rural	No	No			14.4kV		Overhead	Other	N/A							2019
24874	Hardware failure	12/10/19 0:00	1:17:00			7203	rural	No	No			14.4kV		Overhead	Other	N/A							2019
24874	Hardware failure	12/10/19 0:00	1:17:00			7203	rural	No	No			14.4kV		Overhead	Other	N/A							2019
577	Unknown	2015-10-08	11:36:00			7203	rural	No	No			14.4kV		Overhead	Other	N/A							2015
1102	Unknown	2017-07-17	06:40:00			7203	rural	No	No			14.4kV		Overhead	Other	N/A							2017
24586	Unknown	10/18/19 0:00	17:15:00			7203	rural	No	No			14.4kV		Overhead	Other	N/A							2019
557	Equipment failure	2015-08-27	20:00:00			7300	rural	No	Yes	Transformer		14.4kV		Overhead	Other	N/A							2015
1038	Equipment failure	2017-04-12	15:40:00			7300	rural	No	Yes	Transformer		14.4kV		Overhead	Other	N/A							2017
604	Hardware failure	2016-01-29	02:00:00			7300	rural	No	Yes	Cutout		14.4kV		Overhead	Other	N/A							2016
635	Hardware failure	2016-03-10	14:00:00			7300	rural	No	Yes	Cutout		14.4kV		Overhead	Other	N/A							2016
648	Hardware failure	2016-04-23	07:30:00			7300	rural	No	Yes			14.4kV		Overhead	Other	N/A							2016
669	Hardware failure	2016-07-23	16:58:00			7300	rural	No	Yes	Cutout		14.4kV		Overhead	Other	N/A							2016
729	Hardware failure	2016-11-24	12:04:00			7300	rural	No	Yes	Cutout		14.4kV		Overhead	Other	N/A							2016
1033	Hardware failure	2017-04-09	10:20:00			7300	rural	No	Yes	Cutout		14.4kV		Overhead	Other	N/A							2017
1156	Hardware failure	2017-09-11	18:41:00			7300	rural	No	Yes			14.4kV		Overhead	Other	N/A							2017
20241	Hardware failure	10/3/18 0:00	16:33:00			7300	rural	No	Yes			14.4kV		Overhead	Other	N/A							2018
22908	Hardware failure	3/6/19 0:00	7:06:00			7300	rural	No	Yes	Arrester		14.4kV		Overhead	Other	N/A							2019
21772	Hardware failure	2/8/19 0:00	13:01:00			7300	rural	No	Yes	Cutout		14.4kV		Overhead	Other	N/A							2019
21948	Hardware failure	2/13/19 0:00	18:33:00			7300	rural	No	Yes			14.4kV		Overhead	Other	N/A							2019
22254	Hardware failure	2/22/19 0:00	8:38:00			7300	rural	No	Yes	Cutout		14.4kV		Overhead	Other	N/A							2019
22732	Hardware failure	2/26/19 0:00	6:52:00			7300	rural	No	Yes	Insulator		14.4kV		Overhead	Other	N/A							2019
22769	Hardware failure	2/27/19 0:00	12:05:00			7300	rural	No	Yes	Cutout		14.4kV		Overhead	Other	N/A							2019
521	Lightning	2015-07-05	07:30:00			7300	rural	No	Yes			14.4kV		Overhead	Other	N/A							2015
676	Lightning	2016-07-31	19:06:00			7300	rural	No	Yes			14.4kV		Overhead	Other	N/A							2016
745	Lightning	2016-12-06	16:49:00			7300	rural	No	Yes			14.4kV		Overhead	Other	N/A							2016
19877	Lightning	7/23/18 0:00	17:52:00			7300	rural	No	Yes			14.4kV		Overhead	Other	N/A							2018
1082	Unknown	2017-06-27	10:48:00			7300	rural	No	Yes			14.4kV		Overhead	Other	N/A							2017
1163	Unknown	2017-09-12	01:53:00			7300	rural	No	Yes			14.4kV		Overhead	Other	N/A							2017
17185	Unknown	10/19/17 0:00	0:00:00			7300	rural	No	Yes			14.4kV		Overhead	Other	N/A							2017
20751	Unknown	11/12/18 0:00	8:47:00			7300	rural	No	Yes			14.4kV		Overhead	Other	N/A							2018
20901	Unknown	12/1/18 0:00	11:45:00			7300	rural	No	Yes			14.4kV		Overhead	Other	N/A							2018
20911	Unknown	12/5/18 0:00	6:37:00			7300	rural	No	Yes			14.4kV		Overhead	Other	N/A							2018
23957	Unknown	8/5/19 0:00	23:04:00			7300	rural	No	Yes			14.4kV		Overhead	Other	N/A							2019
21645	Unknown	2/4/19 0:00	12:34:00			7300	rural	No	Yes			14.4kV		Overhead	Other	N/A							2019
22196	Unknown	2/17/19 0:00	3:55:00			7300	rural	No	Yes			14.4kV		Overhead	Other	N/A							2019
22774	Unknown	2/27/19 0:00	17:44:00			7300	rural	No	Yes			14.4kV		Overhead	Other	N/A							2019
23117	Unknown	3/28/19 0:00	12:22:00			7300	rural	No	Yes			14.4kV		Overhead	Other	N/A							2019
23738	Unknown	7/11/19 0:00	10:21:00			7300	rural	No	Yes			14.4kV		Overhead	Other	N/A							2019
468	Vegetation contact	2015-02-06	05:00:00			7300	rural	No	Yes			14.4kV		Overhead	Other	N/A							2015
467	Vegetation contact	2015-02-06	09:30:00			7300	rural	No	Yes			14.4kV		Overhead	Other	N/A							2015
495	Vegetation contact	2015-04-25	05:00:00			7300	rural	No	Yes			14.4kV		Overhead	Other	N/A							2015
601	Vegetation contact	2015-12-11	12:00:00			7300	rural	No	Yes			14.4kV		Overhead	Other	N/A							2015
573	Vegetation contact	2015-10-05	13:30:00			7300	rural	No	Yes			14.4kV		Overhead	Other	N/A							2015
640	Vegetation contact	2016-03-13	07:49:00			7300	rural	No	Yes			14.4kV		Overhead	Other	N/A							2016
682	Vegetation contact	2016-08-22	12:25:00			7300	rural	No	Yes			14.4kV		Overhead	Other	N/A							2016
700	Vegetation contact	2016-10-16	21:07:00			7300	rural	No	Yes			14.4kV		Overhead	Other	N/A							2016
1034	Vegetation contact	2017-04-07	05:24:00			7300	rural	No	Yes			14.4kV		Overhead	Other	N/A							2017
17919	Vegetation contact	1/24/18 0:00	11:02:00			7300	rural	No	Yes			14.4kV		Overhead	Other	N/A							2018
19548	Vegetation contact	6/9/18 0:00	14:56:00			7300	rural	No	Yes			14.4kV		Overhead	Other	N/A							2018
19591	Vegetation contact	6/9/18 0:00	17:37:00			7300	rural	No	Yes			14.4kV		Overhead	Other	N/A							2018
20027	Vegetation contact	8/19/18 0:00	14:55:00			7300	rural	No	Yes			14.4kV		Overhead	Other	N/A							2018
21466	Vegetation contact	1/18/19 0:00	9:42:00			7300	rural	No	Yes			14.4kV		Overhead	Other	N/A							2019
24196	Vegetation contact	9/5/19 0:00	10:34:00			7300	rural	No	Yes			14.4kV		Overhead	Other	N/A							2019
24791	Vegetation contact	12/6/19 0:00	18:41:00			7300	rural	No	Yes			14.4kV		Overhead	Other	N/A							2019
24908	Vegetation contact	12/22/19 0:00	8:59:00			7300	rural	No	Yes			14.4kV		Overhead	Other	N/A							2019
24597	vehicle contact	10/21/19 0:00	15:57:00			7300	rural	No	Yes			14.4kV		Overhead	Other	N/A							2019
489	Wire slap	2015-03-23	08:30:00			7300	rural	No	Yes	Conductor		14.4kV		Overhead	Other	N/A							2015
21437	Wire slap	1/17/19 0:00	19:01:00			7300	rural	No	Yes	Conductor		14.4kV		Overhead	Other	N/A							2019
21944	Wire slap	2/13/19 0:00	16:59:00			7300	rural	No	Yes	Conductor		14.4kV		Overhead	Other	N/A							2019
22023	Wire slap	2/14/19 0:00	21:01:00			7300	rural	No	Yes	Conductor		14.4kV		Overhead	Other	N/A							2019
24760	Wire slap	12/2/19 0:00	14:39:00			7300	rural	No	Yes	Conductor		14.4kV		Overhead	Other	N/A							2019
23510	Equipment failure	5/27/19 0:00	3:54:00			7400	rural	No	Yes	Transformer		14.4kV		Overhead	Other	N/A							2019
23769	Equipment failure	7/15/19 0:00	11:52:00			7400	rural	No	Yes	Transformer		14.4kV		Overhead	Other	N/A							2019
24852	Equipment failure	12/16/19 0:00	21:15:00			7400	rural	No	Yes	Transformer		14.4kV		Overhead	Other	N/A							2019
525	Hardware failure	2015-07-08	19:00:00			7400	rural	No	No	Cutout		14.4kV		Overhead	Other	N/A							2015
18741	Hardware failure	4/26/18 0:00	12:11:00			7400	rural	No	Yes	Cutout		14.4kV		Overhead	Other	N/A							2018
19881	Hardware failure	7/23/18 0:00	17:50:00			7400	rural	No	Yes	Insulator		14.4kV		Overhead	Other	N/A							2018
21483	Hardware failure	1/18/19 0:00	12:25:00			7400	rural	No	Yes	Cutout		14.4kV		Overhead	Other	N/A							2019
21672	Hardware failure	2/4/19 0:00	15:50:00			7400	rural	No	Yes	Crossarm		14.4kV		Overhead	Other	N/A							2019
21712	Hardware failure	2/5/19 0:00	7:00:00			7400	rural	No	Yes	Cutout		14.4kV		Overhead	Other	N/A							2019
24849	Hardware failure	12/7/19 0:00	20:33:00			7400	rural	No	Yes	Crossarm		14.4kV		Overhead	Other	N/A							2019
24852	Hardware failure	12/7/19 0:00	22:57:00			7400	rural	No	Yes	Crossarm		14.4kV		Overhead	Other	N/A							2019
543	Lightning	2015-08-07	07:00:00			7400	rural	No	No			14.4kV		Overhead	Other	N/A							2015
1132	Lightning	2017-08-22	14:36:00			7400	rural	No	Yes			14.4kV		Overhead	Other	N/A							2017
1074	Unknown	2017-06-11	15:00:00			7400	rural	No	Yes			14.4kV		Overhead	Other	N/A							2017
17999	Unknown	2/6/18 0:00	7:28:00			7400	rural	No	Yes			14.4kV		Overhead	Other	N/A							2018
20287	Unknown	10/13/18 0:00	4:12:00			7400	rural	No	Yes			14.4kV		Overhead	Other	N/A							2018
21733	Unknown	2/5/19 0:00	10:58:00			7400	rural	No	Yes			14.4kV		Overhead	Other	N/A							2019
469	Vegetation contact	2015-02-07	10:00:00			7400	rural	No	No			14.4kV		Overhead	Other	N/A							2015
713	Vegetation contact	2016-10-14	16:20:00			7400	rural	No	No			14.4kV		Overhead	Other	N/A							2016
17445	Vegetation contact	11/16/17 0:00	7:37:36			7400	rural	No	Yes			14.4kV		Overhead	Other	N/A							2017

	Identifying Information			Location Information						Utility facility information							Situational awareness information						Year
ID	Type of event	Date	Time	Latitude	Longitude	Circuit name	Land use (rural / urban)	Enhanced inspections and maintenance conducted according to 2019 WMP at location prior to event (Yes / No)	Enhanced vegetation management conducted according to 2019 WMP at location prior to event (Yes / No)	Type of equipment involved	Facility identification	Voltage	Age of involved equipment	Overhead or underground	Covered conductor or other	Other companies' equipment involved (or N/A)	Local temperature at itme of event	Local wind speed at time of event	Nearest weather station by weather station ID	Last inspection data of involved equipment	Time-to-expected failure of involved equipment on date of incident (in number of days until the involved equipment was expected to fail)	Over capacity history of involved equipment (percent of time equipment operated over nameplate capacity)	
21494	Vegetation contact	1/18/19 0:00	17:49:00			7400	rural	No	Yes			14.4kV		Overhead	Other	N/A							2019
23454	Vegetation contact	5/19/19 0:00	10:24:00			7400	rural	No	Yes			14.4kV		Overhead	Other	N/A							2019
1049	Vehicle contact	5/6/17 0:00	0:00:00			7400	rural	No	Yes			14.4kV		Overhead	Other	N/A							2017
19644	Hardware failure	6/21/18 0:00	7:48:00			7600	rural	No	Yes			14.4kV		Underground	Other	N/A							2018
	Hardware failure	2/7/19 0:00	14:30:00			7600	rural	No	Yes	Arrester		14.4kV		Overhead	Other	N/A							2019
21759	Operations	2/6/19 0:00	23:03:00			7600	rural	No	Yes			14.4kV		Overhead	Other	N/A							2019
1079	Unknown	2017-06-22	19:30:00			7600	rural	No	Yes			14.4kV		Overhead	Other	N/A							2017
21761	Unknown	2/7/19 0:00	7:10:00			7600	rural	No	Yes			14.4kV		Overhead	Other	N/A							2019
651	Vegetation contact	2016-04-22	01:40:00			7600	rural	No	No			14.4kV		Overhead	Other	N/A							2016
1165	Lightning	2017-09-13	16:32:00			7700	rural	No	No			14.4kV		Overhead	Other	N/A							2017
21682	Vegetation contact	2/4/19 0:00	19:02:00			7700	rural	No	Yes			14.4kV		Overhead	Other	N/A							2019
22156	Vegetation contact	2/16/19 0:00	15:26:00			7700	rural	No	Yes			14.4kV		Overhead	Other	N/A							2019
21472	Vegetation contact	1/18/19 0:00	11:22:00			7700	rural	No	Yes			14.4kV		Overhead	Other	N/A							2019
24892	Hardware failure	12/17/19 0:00	8:51:00			7900	rural	No	No	Cutout		14.4kV		Overhead	Other	N/A							2019
17559	Vegetation contact	11/26/17 0:00	11:36:42			7900	rural	No	No			14.4kV		Overhead	Other	N/A							2017
608	Vehicle contact	2016-01-18	12:30:00			7900	rural	No	No			14.4kV		Underground	Other	N/A							2016
23982	Third Party	8/9/19 0:00	13:31:00			8100	rural	No	No			14.4kV		Overhead	Other	N/A							2019
581	Hardware failure	2015-11-25	19:00:00			8200	rural	No	Yes	Cutout		14.4kV		Overhead	Other	N/A							2015
1030	Hardware failure	2017-03-17	00:53:00			8200	rural	No	No	Terminator		14.4kV		Overhead	Other	N/A							2017
22642	Hardware failure	2/25/19 0:00	6:50:00			8200	rural	No	Yes			14.4kV		Overhead	Other	N/A							2019
22801	Hardware failure	3/2/19 0:00	15:14:00			8200	rural	No	Yes			14.4kV		Overhead	Other	N/A							2019
756	Lightning	2016-12-27	16:48:00			8200	rural	No	Yes			14.4kV		Overhead	Other	N/A							2016
679	Unknown	2016-08-17	16:10:00			8200	rural	No	Yes			14.4kV		Overhead	Other	N/A							2016
19730	Unknown	6/26/18 0:00	10:00:00			8200	rural	No	No			14.4kV		Overhead	Other	N/A							2018
24611	Unknown	10/25/19 0:00	8:01:00			8200	rural	No	Yes			14.4kV		Overhead	Other	N/A							2019
24657	Unknown	11/2/19 0:00	8:51:00			8200	rural	No	Yes			14.4kV		Overhead	Other	N/A							2019
22019	Unknown	2/4/19 0:00	18:24:00			8200	rural	No	Yes			14.4kV		Overhead	Other	N/A							2019
22736	Unknown	2/26/19 0:00	3:38:00			8200	rural	No	Yes			14.4kV		Overhead	Other	N/A							2019
574	Vegetation contact	2015-10-07	10:00:00			8200	rural	No	Yes			14.4kV		Overhead	Other	N/A							2015
23668	Vegetation contact	6/26/19 0:00	21:45:00			8200	rural	No	Yes			14.4kV		Overhead	Other	N/A							2019
21360	Wire slap	1/16/19 0:00	10:34:00			8200	rural	No	Yes	Conductor		14.4kV		Overhead	Other	N/A							2019
21461	Wire slap	1/18/19 0:00	5:14:00			8200	rural	No	Yes	Conductor		14.4kV		Overhead	Other	N/A							2019
23696	Animal contact	7/3/19 0:00	9:42:00			8300	rural	No	No			14.4kV		Overhead	Other	N/A							2019
609	Hardware failure	2016-01-23	12:30:00			8300	rural	No	Yes	Cutout		14.4kV		Overhead	Other	N/A							2016
1054	Hardware failure	2017-05-16	18:45:00			8400	rural	No	No	Terminator		14.4kV		Underground	Other	N/A							2017
19512	Hardware failure	6/5/18 0:00	3:44:00			8400	rural	No	No			14.4kV		Underground	Other	N/A							2018
22940	Equipment failure	3/12/19 0:00	2:51:00			8500	rural	No	No	Transformer		14.4kV		Underground	Other	N/A							2019
22936	Unknown	3/11/19 0:00	21:48:00			8500	rural	No	No			14.4kV		Underground	Other	N/A							2019
18433	Hardware failure	3/22/18 0:00	12:53:00			8600	rural	No	Yes			14.4kV		Underground	Other	N/A							2018
503	Lightning	2015-05-25	14:30:00			8600	rural	No	No			14.4kV		Overhead	Other	N/A							2015
17690	Unknown	12/16/17 0:00	13:08:00			8600	rural	No	Yes			14.4kV		Overhead	Other	N/A							2017
22657	Unknown	2/25/19 0:00	11:57:00			8600	rural	No	Yes			14.4kV		Overhead	Other	N/A							2019
24589	Animal contact	10/21/19 0:00	12:49:00				rural	No	No			14.4kV		Overhead	Other	N/A							2019
493	Hardware failure	2015-04-10	09:23:00				rural	No	No	Cutout		14.4kV		Overhead	Other	N/A							2015
23811	Unknown	7/24/19 0:00	11:28:00				rural	No	No			14.4kV		Overhead	Other	N/A							2019

Attachment 26

Liberty's response to data request CalAdvocates-LIB-A2506017-044, January 6, 2026

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Fax: 530-544-4811

January 6, 2026

Liberty Utilities (CalPeco Electric) LLC

A.25-06-017
WEMA

The Public Advocates Office

Data Request No.:	CalAdvocates-LIB-A2506017-044
Requesting Party:	Public Advocates Office
Originator:	Amanda Asadi, Amanda.Asadi@cpuc.ca.gov
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Date Received:	December 19, 2025
Due Date:	January 6, 2026

Amended outage data

REQUEST NO. 1:

In Liberty's amended response to data request CalAdvocates-LIB-A2506017-001, December 9, 2025, question 12, Liberty's amended file "CalAdvocates-LIB-A2506017-001-Q12_Amended.xlsx" includes 65 outages that were not previously included in Liberty's original response.[1] Nine outages, shown in Table 1 below excerpted from "CalAdvocates-LIB-A2506017-001-Q12_Amended.xlsx" had different start dates than the original DR response. Table 1 lists these outages by the Incident ID.

[1] The 65 newly included outages are Incident IDs: 51, 80, 92, 102, 112, 119, 125, 130, 135, 150, 151, 154, 157, 159, 172, 180, 182, 189, 194, 206, 208, 216, 216, 218, 219, 239, 240, 245, 250, 251, 260, 323, 326, 338, 355, 421, 446, 455, 456, 476, 498, 500, 507, 509, 518, 523, 524, 547, 570, 592, 597, 814,825, 7095, 7144, 7159, 7430, 7598, 7710, 12693, 16236, 16409, 17190, 18087, <Unknown>.

Table 1. Excerpt of "CalAdvocates-LIB-A2506017-001-Q12_Amended.xlsx" showing discrepant Outage Dates and Times.

Incident ID	Date of Outage	Start time of Outage
119	4/6/2011	3/22/2013 09:05:00 AM
125	5/15/2011	3/22/2013 07:00:00 PM
135	6/3/2011	3/22/2013 08:30:00 PM
154	7/3/2011	3/25/2013 06:15:00 AM
159	7/14/2011	3/25/2013 02:30:00 PM
172	8/22/2011	3/25/2013 03:00:00 PM
216	11/19/2011	3/25/2013 09:00:00 AM
240	11/30/2012	1/4/2013 12:01:00 AM
251	12/26/2012	1/7/2013 04:45:00 AM

a) For each of the Incident IDs in Table 1, clarify which date is correct.

b) Explain why these Incident IDs in Table 1 have two different dates provided.

RESPONSE:

a) For the outage events listed *CalAdvocates-LIB-A2506017-001-012_Amended.xslx*, Liberty understands the date shown in the "Date of Outage" column to be the date corresponding to the start of each outage event and the timestamp portion of the data contained within the "Start time of Outage" column to be the time corresponding to the start of each outage event. The data in the "Date of Outage" and "Start time of Outage" columns in *CalAdvocates-LIB-A2506017-001-012_Amended.xlsx* were from the additional records related to historical outages maintained by Liberty's Engineering team, as described in Liberty's responses to CalAdvocates-LIB-A2506017-043, Questions 2(a) and 3(b) and provided to Cal Advocates as attachments to Liberty's response to CalAdvocates-LIB-A2506017-043, Question 2. Due to the passage of time, Liberty is not aware of a specific explanation for why the date information in the "Start time of Outage" column differs from the dates shown in the "Date of Outage" column for the outage events listed in Table 1; Liberty believes this may be due to Excel formatting or data entry issues.

b) Please refer to Liberty's response to subpart (a).

REQUEST NO. 2:

In Liberty's amended response to data request CalAdvocates-LIB-A2506017-001, December 9, 2025, question 12, Liberty's amended file "CalAdvocates-LIB-A2506017-001-Q12_Amended.xlsx" includes 65 outages that were not previously included in Liberty's original

response.[2] Table 1 below shows an excerpt from "CalAdvocates-LIB-A2506017-001-Q12_Amended.xlsx" of the Incident IDs for the 18 events (categorized as "**Wire Slap**" events) that are possibly equivalent to IDs in Liberty's "2020 WMP Attachment 5 – Section 4.1."[3]

Table 2. Excerpt of "CalAdvocates-LIB-A2506017-001-Q12_Amended.xlsx" showing possibly equivalent event IDs in "2020 WMP Attachment 5 – Section 4.1.xlsx."

Incident ID	Date of Outage	Start time of Outage	"2020 WMP Attachment 5 – Section 4.1.xlsx" possible equivalent event ID
523	7/1/2015	6:00:00 PM	523
570	10/2/2015	11:30:00 AM	570
101	1/29/2016	3:00:00 PM	618
6264	4/14/2016	4:36:21 AM	650
7144	10/15/2016	12:43:00 PM	697
7159	10/16/2016	12:51:00 AM	698
7067	10/14/2016	7:31:23 AM	712
7392	11/19/2016	8:22:28 AM	719
7475	11/27/2016	6:51:55 AM	732
7648	12/15/2016	6:45:56 AM	749
15270	4/12/2017	10:42:14 PM	1039
17187	10/20/2017	12:18:09 AM	17187
17921	1/24/2018	4:01:05 PM	17921
18087	2/22/2018	6:39:00 AM	18087
19501	5/30/2018	4:10:22 PM	19501
21408	1/17/2019	9:29:33 AM	21408
22711	2/25/2019	11:45:31 PM	22711
24279	9/16/2019	6:03:30 PM	24279

a) Confirm whether each Incident ID in Table 2 is equivalent to the provided event IDs from Liberty's "2020 WMP Attachment 5 – Section 4.1.xlsx."
b) Explain why Liberty assigned different Incident IDs in its "2020 WMP Attachment 5 – Section 4.1.xlsx." compared to its "CalAdvocates-LIB-A2506017-001-Q12_Amended.xlsx."

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[2] The 65 newly included outages are Incident IDs: 51, 80, 92, 102, 112, 119, 125, 130, 135, 150, 151, 154, 157, 159, 172, 180, 182, 189, 194, 206, 208, 216, 216, 218, 219, 239, 240, 245, 250, 251, 260, 323, 326, 338, 355, 421, 446, 455, 456, 476, 498, 500, 507, 509, 518, 523, 524, 547, 570, 592, 597, 814,825, 7095, 7144, 7159, 7430, 7598, 7710, 12693, 16236, 16409, 17190, 18087, <Unknown>.

[3] Available at https://california.libertyutilities.com/north-lake-tahoe/residential/safety/electrical/wildfire-mitigation-plan-archive.html.

c) If Liberty cannot confirm that the Incident IDs per subpart (a) are equivalent, explain why Liberty did not include each of the event IDs from Liberty's "2020 WMP Attachment 5 – Section 4.1.xlsx" listed in Table 2 in Liberty's "CalAdvocates-LIB-A2506017-001-Q12_Amended.xlsx."
d) Explain why Liberty did not identify Incident IDs (523, 570, 7475, 18087, 19501, and 21408) as a suspected wire slap outage in its original response to data request CalAdvocates-LIB-A2506017-032, October 31, 2025, question 4.

RESPONSE:

Liberty objects to this Question as vague, ambiguous, and assuming facts. Subject to and without waiving its objections, Liberty responds as follows:

a) Liberty confirms that the Incident ID in Table 2 refers to the same outage associated with the ID in Liberty's "2020 WMP Attachment 5 – Section 4.1.xlsx," but Liberty's amended file *CalAdvocates-LIB-A2506017-001-Q12_Amended.xlsx* indicates that several of these outages were not wire slap events. As explained in Liberty's response to Question 3 in CalAdvocates-LIB-A2506017-043, Liberty generally considers the outage records underlying *CalAdvocates-LIB-A2506017-001-Q12_Amended.xlsx* as a more accurate source of information as it understands that Liberty personnel sometimes made updates and corrections to those records based on their knowledge of outage events or performed other data clean-up, which were not always reflected in Liberty's OMS. Due to the passage of time and the fact that Liberty employees who worked on "2020 WMP Attachment 5 – Section 4.1.xlsx" are no longer at the company, Liberty is unable to ascertain how the "wire slap" cause codes for "2020 WMP Attachment 5 – Section 4.1.xlsx" were determined.
b) Liberty notes that it began its transition to Responder OMS in 2016. Due to the passage of time, and after diligent inquiry, Liberty is not aware of the specific reason why the ID numbers differ from 2016 to approximately mid-2017.
c) N/A
d) Liberty did not identify Incident IDs 523, 570, 7475, 18087, 19501, and 21408 in its original response to Question 4 of CalAdvocates-LIB-A2506017-032 for the following reasons:
    - Liberty's response to Question 4 of CalAdvocates-LIB-A2506017-032 confirmed its listed Incident IDs in Liberty's OMS. Liberty did not identify specific IDs for 2015 incidents because, as explained in Liberty's response to Question 4, Liberty's OMS records date back to approximately 2016. Liberty's response to Question 4 nevertheless referenced suspected wire slapping events in 2015, which were identified in the outage records and then listed in *CalAdvocates-LIB-A2506017-001-Q12_Amended.xlsx* as Incident IDs 523 and 570.
    - Incident IDs 7475, 18087, 19501, and 21408 were categorized based on information in Liberty's outage records. Please see Liberty's response to subpart (a), and Liberty's response to Question 3 in CalAdvocates-LIB-A2506017-043, for why Liberty considers these records as a more accurate source of information as to causes. Due to the passage of time and the fact that Liberty employees who worked on "2020 WMP Attachment 5 – Section 4.1.xlsx" are no longer at the company, Liberty is

unable to ascertain how the “wire slap” cause codes for “2020 WMP Attachment 5 – Section 4.1.xlsx” were determined.

Attachment 27

Liberty's response to data request CalAdvocates-LIB-A2506017-043, January 6, 2026

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January 5, 2026

Liberty Utilities (CalPeco Electric) LLC

A.25-06-017
WEMA

The Public Advocates Office

Data Request No.:	CalAdvocates-LIB-A2506017-043
Requesting Party:	Public Advocates Office
Originator:	Amanda Asadi, Amanda.Asadi@cpuc.ca.gov
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	Cal Advocates Wildfire Discovery, CalAdvocates.WildfireDiscovery@cpuc.ca.gov
Date Received:	December 18, 2025
Due Date:	January 5, 2026

Attachments to these responses contain information marked confidential in accordance with applicable law and regulation. The basis for confidentiality is set forth in accompanying confidentiality declaration. Public disclosure is restricted.

Public Safety Power Shutoffs (PSPS)

REQUEST NO. 1:

In Liberty's Amended Response to Data Request CalAdvocates-LIB-A2506017-008, December 3, 2025, question 2, Liberty states:

> As of November 17, 2020, the tools Liberty used included its **PSPS predictive tool**, which provided forecasts for weather conditions relative to Liberty's PSPS thresholds.

Liberty utilized a **fire weather dashboard** (https://tahoefireweather.com/) to monitor forecasted weather conditions across its service territory (and to monitor **FPI forecasts** that guided operation and maintenance crew activities in the field)…Weather station data was used generally by Liberty's fire science and risk modeling consultant to validate Liberty's PSPS predictive tool through monitoring and comparison of weather forecast models with observed conditions.

a) Define Liberty's PSPS predictive tool and its specific outputs
b) State whether Liberty's PSPS predictive tool was separate from its FPI forecasts.
c) State whether Liberty's PSPS predictive tool outputs and FPI tool outputs were both displayed in its fire weather dashboard.
d) From 2018 through 2021, list the dates that Liberty's fire science and risk modeling consultant validated Liberty's PSPS predictive tool through monitoring and comparison of weather forecast models with observed conditions.
e) Provide a detailed explanation of how Liberty's fire science and risk modeling consultant validated Liberty's PSPS predictive tool.
f) Describe the work products and documents that Liberty's fire science and risk modeling consultant provided to Liberty showing that it performed validation of Liberty's PSPS predictive tool.
g) Provide a copy of the work products and documents showing Liberty's fire science and risk modeling consultant validated Liberty's PSPS predictive tool.

RESPONSE:

Liberty objects to this Question as vague and ambiguous as framed. Liberty further objects to this Question as duplicative and overly burdensome to the extent it seeks information Liberty has already provided in its prepared testimony and prior data request responses. Subject to and without waiving its objections, Liberty responds as follows:

a) The outputs of Liberty's PSPS predictive tool were forecasted ERC, wind gusts, and FFWI for each of Liberty's PSPS zones. Liberty refers Cal Advocates to information previously provided regarding Liberty's PSPS predictive tool and outputs, e.g., pages 37-38 of *Liberty-03E: Prudence of Operations* (which Cal Advocates quoted in Questions 3 and 4 of CalAdvocates-LIB-A2506017-035, served on Liberty on October 30, 2025, and Question 9 of CalAdvocates-LIB-A2506017-037, served on Liberty on November 7, 2025) and Liberty's amended responses to CalAdvocates-LIB-A2506017-006, Question 3 and to CalAdvocates-LIB-A2506017-008, Question 2.
b) The outputs of Liberty's PSPS predictive tool (forecasted ERC, wind gusts, and FFWI for each of Liberty's PSPS zones) were displayed separately from FPI forecasts. As of November 17, 2020, both were displayed on Liberty's fire weather dashboard.
c) See Liberty's response to subpart (b).
d) Liberty objects to this subpart as overbroad to the extent it seeks information regarding Liberty's PSPS predictive tool prior to its creation in 2019. As set forth in *Liberty-03E: Prudence of Operations*, Liberty engaged its fire science and risk modeling consultant in 2019. Subject to and without waiving its objections, Liberty responds as follows: Liberty understands that from the time Liberty began displaying its forecasts for its PSPS predictive tool on its fire weather dashboard through 2021, Liberty's fire science and risk modeling consultant validated the tool on an ongoing basis.

e) As Liberty explained in its response to CalAdvocates-LIB-A2506017-029, Question 2, in its amended responses to CalAdvocates-LIB-A2506017-006, Question 3 and to CalAdvocates-LIB-A2506017-008, Question 2, Liberty's fire science and risk modeling consultant validated Liberty's PSPS predictive tool through monitoring and comparison of weather forecast models with observed conditions.
f) Liberty's fire weather dashboard contained a page where observed conditions were plotted against forecasted conditions. See https://tahoefireweather.com/actuals/. Liberty understands that its fire science and risk modeling consultant sometimes discussed the results of its validation verbally with Liberty's operations personnel.
g) Please refer to Liberty's response to subpart (f). Liberty is not aware of other formal documentation of validation of its PSPS predictive tool performed by its fire science and risk modeling consultant.

Amended outage data

REQUEST NO. 2:

In Liberty's original response to data request CalAdvocates-LIB-A2506017-001, September 10, 2025, question 12, which asked for Liberty's outages on its Topaz 1261 circuit from 2010 – 2020, Liberty states, "Liberty's records for the requested data date back to approximately 2016."

In Liberty's amended response to data request CalAdvocates-LIB-A2506017-001, December 9, 2025, question 12, Liberty states:

> Please see CalAdvocates-LIB-A2506017-001-Q12_Amended.xlsx, which contains the available outage information in Liberty's possession between 2011-2020. This spreadsheet contains information from Liberty historical outage data dating back to 2011 and its outage management system (OMS) data (which goes back to approximately 2016).

Liberty's amended file "CalAdvocates-LIB-A2506017-001-Q12_Amended.xlsx" includes 65 outages that were not previously included in Liberty's original response.[1]

a) State when Liberty discovered the outage data for the 65 additional outages dating back to 2011.
b) State when Liberty obtained the outage data for the 65 additional outages dating back to 2011 that was not previously included.
c) Provide evidence showing when Liberty discovered the 65 additional outage data dating back to 2011.
d) Provide evidence showing when Liberty obtained the 65 additional outage data dating back to 2011.
e) Provide the documents detailing the amended outage data dating back to 2011.
f) Explain who had custody of the additional outage data dating back to 2011.
g) Explain how Liberty discovered the additional outage data dating back to 2011.

[1] The 65 newly included outages are Incident IDs: 51, 80, 92, 102, 112, 119, 125, 130, 135, 150, 151, 154, 157, 159, 172, 180, 182, 189, 194, 206, 208, 216, 216, 218, 219, 239, 240, 245, 250, 251, 260, 323, 326, 338, 355, 421, 446, 455, 456, 476, 498, 500, 507, 509, 518, 523, 524, 547, 570, 592, 597, 814, 825, 7095, 7144, 7159, 7430, 7598, 7710, 12693, 16236, 16409, 17190, 18087, <Unknown>.

h) Explain how Liberty obtained the additional outage data dating back to 2011.
i) Explain why Liberty submitted its Application 25-06-017 if the outage data dating back to 2011 was not available.
j) Explain why Liberty assigned two outages the Incident ID 216 when one occurred on November 19, 2011 and one occurred on January 30, 2014.

RESPONSE:

This response contains confidential attachments. Liberty objects to this Question as vague and ambiguous as framed. Liberty further objects to this Question to the extent it seeks information protected by the attorney-client privilege and/or the attorney work product doctrine. Subject to and without waiving its objections, Liberty responds as follows:

a) In connection with Liberty's original response to CalAdvocates-LIB-A2506017-001, Questions 12, Liberty conducted a search for outage events on the Topaz 1261 Circuit recorded in its Outage Management System (OMS) and produced a spreadsheet of such events in attachment *CalAdvocates-LIB-A2506017-001-Q12.xlsx*. As explained in that response, Liberty's system was operated by NV Energy's system control center for a portion of time after Liberty's acquisition of the utility from NV Energy in 2011 and the records date back to approximately 2016. In the process of responding to additional data requests in October 2025, Liberty became aware of additional records related to historical outages on its system dating back to 2011, maintained by Liberty's Engineering team in the form of Excel spreadsheets. Liberty used the information contained within these additional records in its responses to CalAdvocates-LIB-A2506017-032, served on Cal Advocates on October 31, 2025. Liberty subsequently updated attachment *CalAdvocates-LIB-A2506017-001-Q12.xlsx* using information contained within these additional records related to historical outages.
b) Please refer to Liberty's response to subpart (a).
c) Documents responsive to this subpart involve attorney-client communications and attorney work product as part of Liberty's participation in this proceeding. Accordingly, these documents are protected by the privileges asserted above.
d) Please refer to Liberty's response to subpart (c).
e) Liberty is providing the data requested by this subpart in the form maintained by Liberty in its ordinary course of business. See confidential attachment *CONFIDENTIAL-Attachments to CalAdvocates-LIB-A2506017-043, Q2.zip.*
f) Liberty understands that the files being provided in response to subpart (e) were maintained by Liberty's Engineering team.
g) Please refer to Liberty's response to subpart (a).
h) Please refer to Liberty's response to subpart (a).
i) Liberty objects to this Question as vague, ambiguous, and assuming facts. Liberty does not understand this subpart as framed. Liberty notes that its opening testimony explained in detail how its actions satisfied the reasonableness standard under Public Utilities Code section 451.1 and how external factors exacerbated the costs resulting from the Mountain View Fire.
j) Liberty understands that the same ID numbers sometimes appeared within its additional records related to historical outages across different years, corresponding to different outage events. Due to the passage of time, Liberty is not aware of the specific reason why the same ID number was used in the records related to historical outages maintained

by its Engineering department more than once across different years. As referenced in Liberty's response to subpart (a), Liberty's system was operated by NV Energy's system control center for a portion of time after Liberty's acquisition of the utility from NV Energy in 2011 and thus a portion of the additional records related to historical outages contain data from when Liberty's system was operated by NV Energy's system control center.

REQUEST NO. 3:

In Liberty's amended response to data request CalAdvocates-LIB-A2506017-001, December 9, 2025, question 12, Liberty provides an amended file "CalAdvocates-LIB-A2506017-001-Q12_Amended.xlsx" which includes 65 outages that were not previously included in Liberty's original response and also changes some of the "Cause of Outage" fields. For example, Incident ID 101 originally has a Cause of Outage being "Non-Company Activities," but in the amended response it was changed to "Wire Slapping."

Provide a supplement to "CalAdvocates-LIB-A2506017-001-Q12_Amended.xlsx" that includes a column for each of the following:

a) Description of what information Liberty changed for the applicable Incident ID.
b) Explanation of why Liberty made the change(s) described.

RESPONSE:

Liberty objects to this Question as vague and ambiguous as framed. Liberty further objects to this Question as overbroad and unduly burdensome. Subject to and without waiving its objections, Liberty responds as follows:

a) Liberty is providing a file comparing *CalAdvocates-LIB-A2506017-001-Q12.xlsx* with *CalAdvocates-LIB-A2506017-001-Q12_Amended.xlsx*. See attachment *CalAdvocates-LIB-A2506017-043-Q3.xlsx.* The differences between these two files are indicated in redlines.
b) Please refer to Liberty's response to Question 2 of this set of data requests. Liberty generally considers the additional records related to historical outages referenced in that response as a more accurate source of information as it understands that Liberty personnel sometimes made updates and corrections to those records based on their knowledge of outage events or performed other data clean-up, which were not always reflected in Liberty's OMS. Accordingly, Liberty made updates to *CalAdvocates-LIB-A2506017-001-Q12.xlsx* after consulting the additional records related to historical outages. These updates included adding information for outage events contained within the additional records related to historical outages that were not recorded in its OMS, deleting information for outage events not recorded in the additional records related to historical outages that were recorded in its OMS, and cross-referencing the details of outage events in the additional records related to historical outages with corresponding details recorded in OMS and conforming the spreadsheet to information contained within the additional records related to historical outages when discrepancies were identified between the two data sources.

REQUEST NO. 4:

In Liberty's original response to Data Request CalAdvocates-LIB-A2506017-032, October 31, 2025, question 4c, Liberty states:

> Incident ID 23177 should not have been listed as an outage in the attachment to CalAdvocates-LIB-A2506017-001, Question 12 given Liberty's OMS data indicates the event affected zero customers and the outage is not included in historical outage data. Liberty will amend its response to CalAdvocates-LIB-A2506017-001 to provide an updated attachment.

In Liberty's amended response to Data Request CalAdvocates-LIB-A2506017-001, December 9, 2025, question 12, Liberty provides amended outage data for the Topaz 1261 circuit.

Liberty explains why only one (Incident ID 23177) should not be included in the above response. Explain why this dataset no longer includes the following 12 Incident IDs (7314, 7350, 13211, 13934, 15337, 15339, 15414, 15423, 17554, 20233, 25882, and 25895).

RESPONSE:

Please refer to Liberty's response to Question 3(b) of this set of data requests.

REQUEST NO. 5:

In Liberty's amended response to data request CalAdvocates-LIB-A2506017-001, December 9, 2025, question 12, Liberty's amended file "CalAdvocates-LIB-A2506017-001-Q12_Amended.xlsx" includes 65 outages that were not previously included in Liberty's original response.[2]

In Liberty's original response to data request CalAdvocates-LIB-A2506017-032, October 31, 2025, question 4, Liberty provided that four of these outages (Incident IDs 814, 7144, 7159, 17190) were suspected wire slap events.

List the Incident IDs of the 65 newly included outages in "CalAdvocates-LIB-A2506017-001-Q12_Amended.xlsx" that were suspected wire slapping events.

RESPONSE:

Please refer to data contained within column D ("Cause of Outage") in *CalAdvocates-LIB-A2506017-001-Q12_Amended.xlsx*, attached to Liberty's amended response to CalAdvocates-LIB-A2506017-001, Question 12 and in *CalAdvocates-LIB-A2506017-043-Q3.xlsx*, attached to Liberty's response to Question 3 of this set of data requests, to identify suspected wire slapping events.

[2] The 65 newly included outages are Incident IDs: 51, 80, 92, 102, 112, 119, 125, 130, 135, 150, 151, 154, 157, 159, 172, 180, 182, 189, 194, 206, 208, 216, 216, 218, 219, 239, 240, 245, 250, 251, 260, 323, 326, 338, 355, 421, 446, 455, 456, 476, 498, 500, 507, 509, 518, 523, 524, 547, 570, 592, 597, 814,825, 7095, 7144, 7159, 7430, 7598, 7710, 12693, 16236, 16409, 17190, 18087, <Unknown>.

REQUEST NO. 6:

In Liberty's amended response to data request CalAdvocates-LIB-A2506017-001, December 9, 2025, question 12, Liberty's amended file "CalAdvocates-LIB-A2506017-001-Q12_Amended.xlsx" includes 65 outages that were not previously included in Liberty's original response.[3] These newly added outages include 12 outages that occurred in 2015 (Incident IDs: 476, 498, 500, 507, 509, 518, 523, 524, 547, 570, 592, and 597). Only two of these outages (Incident ID 523 and 570) state the "Cause of Outage" being "Wire Slapping."

In Liberty's original response to data request CalAdvocates-LIB-A2506017-032, October 31, 2025, question 4b, Liberty states "Liberty does not have Incident IDs for nine outages in 2015 identified as suspected wire-slapping events in its historical outage data because Liberty's OMS records date back to approximately 2016."

Explain why Liberty is still unable to provide incident IDs for the remaining outages in 2015 that were wire slapping events.

RESPONSE:

Liberty objects to this Question as vague and ambiguous as framed. Subject to and without waiving its objections, Liberty responds as follows: The referenced sentence from Liberty's response to CalAdvocates-LIB-A2506017-032, Question 4(b) is referring to nine outage events on Liberty's entire system identified as suspected wire-slapping events, and only two of those outages occurred on the Topaz 1261 Circuit. Accordingly, the first sentence of Liberty's response to CalAdvocates-LIB-A2506017-032, Question 4(b) should have stated that Liberty identified *twenty-four* (not thirty-one) outages on the Topaz 1261 Circuit from 2015 through 2020 based on review of historical outage data and OMS records. As indicated in this Question, Liberty provided information related to the two outage events identified as suspected wire-slapping events in 2015 on the Topaz 1261 Circuit in attachment *CalAdvocates-LIB-A2506017-001-Q12_Amended.xlsx*, attached to Liberty's amended response to CalAdvocates-LIB-A2506017-001, Question 12.

REQUEST NO. 7:

In Liberty's amended response to data request CalAdvocates-LIB-A2506017-001, December 9, 2025, question 12, Liberty's amended file "CalAdvocates-LIB-A2506017-001-Q12_Amended.xlsx" includes 65 outages that were not previously included in Liberty's original response.[4]

In Liberty's original response to data request CalAdvocates-LIB-A2506017-032, question 4a,

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[3] The 65 newly included outages are Incident IDs: 51, 80, 92, 102, 112, 119, 125, 130, 135, 150, 151, 154, 157, 159, 172, 180, 182, 189, 194, 206, 208, 216, 216, 218, 219, 239, 240, 245, 250, 251, 260, 323, 326, 338, 355, 421, 446, 455, 456, 476, 498, 500, 507, 509, 518, 523, 524, 547, 570, 592, 597, 814,825, 7095, 7144, 7159, 7430, 7598, 7710, 12693, 16236, 16409, 17190, 18087, <Unknown>.

[4] The 65 newly included outages are Incident IDs: 51, 80, 92, 102, 112, 119, 125, 130, 135, 150, 151, 154, 157, 159, 172, 180, 182, 189, 194, 206, 208, 216, 216, 218, 219, 239, 240, 245, 250, 251, 260, 323, 326, 338, 355, 421, 446, 455, 456, 476, 498, 500, 507, 509, 518, 523, 524, 547, 570, 592, 597, 814,825, 7095, 7144, 7159, 7430, 7598, 7710, 12693, 16236, 16409, 17190, 18087, <Unknown>.

where Cal Advocates asked for the 12 outages in 2016 that were suspected wire slapping events, Liberty stated:

> Liberty identified seven outages in 2016 that were identified as suspected wire slapping events…After a reasonable search and diligent inquiry, Liberty has not identified additional outages in 2016 that were identified as suspected wire slapping events as referenced in the 2016 Electric System Reliability Report.

Explain why Liberty is still unable to provide information on the remaining outages in 2016 that were suspected wire slapping events.

RESPONSE:

Liberty objects to this Question as vague and ambiguous. Subject to and without waiving its objections, Liberty responds as follows: Liberty does not understand this Question as framed. Please refer to Liberty's responses to Question 2(a) and Question 3(b) of this set of data requests. As explained in Liberty's response to Question 2(a) of this set of data requests, Liberty consulted the additional records related to historical outages it located in October 2025 and used the information contained within those records in its responses to CalAdvocates-LIB-A2506017-032.

REQUEST NO. 8:

In Liberty's amended response to data request CalAdvocates-LIB-A2506017-001, December 9, 2025, question 12, Liberty's amended file "CalAdvocates-LIB-A2506017-001-Q12_Amended.xlsx" includes 65 outages that were not previously included in Liberty's original response.[5] Table 1 below shows an excerpt from "CalAdvocates-LIB-A2506017-001-Q12_Amended.xlsx" of the Incident IDs for the 14 outages which had different start times.

[5] The 65 newly included outages are Incident IDs: 51, 80, 92, 102, 112, 119, 125, 130, 135, 150, 151, 154, 157, 159, 172, 180, 182, 189, 194, 206, 208, 216, 216, 218, 219, 239, 240, 245, 250, 251, 260, 323, 326, 338, 355, 421, 446, 455, 456, 476, 498, 500, 507, 509, 518, 523, 524, 547, 570, 592, 597, 814,825, 7095, 7144, 7159, 7430, 7598, 7710, 12693, 16236, 16409, 17190, 18087, <Unknown>.

Table 1. Excerpt of "CalAdvocates-LIB-A2506017-001-Q12_Amended.x showing discrepant Outage Dates and Times.

Incident ID	Date of Outage	Start time of Outage
208	1/18/2014 01:00:00 AM	9:30:00 AM
216	1/30/2014 01:00:00 AM	12:15:00 PM
218	1/30/2014 01:00:00 AM	5:00:00 PM
219	1/30/2014 01:00:00 AM	8:33:00 AM
239	2/15/2014 01:00:00 AM	9:05:00 AM
250	3/26/2014 02:00:00 AM	12:58:00 PM
260	4/16/2014 02:00:00 AM	8:30:00 PM
323	4/22/2014 02:00:00 AM	11:13:00 AM
326	5/3/2014 02:00:00 AM	7:45:00 AM
338	6/19/2014 02:00:00 AM	5:00:00 PM
355	7/13/2014 02:00:00 AM	5:37:00 PM
421	10/25/2014 02:00:00 AM	3:13:00 PM
446	12/12/2014 01:00:00 AM	12:00:00 PM
456	12/11/2014 01:00:00 AM	8:30:00 PM

a) For each of the Incident IDs in Table 1, clarify which time is correct.
b) Explain why these Incident IDs have two times provided.

RESPONSE:

a) For the outage events listed in Table 1, Liberty understands the times listed in the "Start time of Outage" column to be the time corresponding to the start of each outage event. The "Date of Outage" information for the outage events listed in Table 1 above was copied from the "Outage Date" column from the file *CONFIDENTIAL-2014 Outages.xlsx*, contained within confidential attachment *CONFIDENTIAL-Attachments to CalAdvocates-LIB-A2506017-043, Q2.zip*. This file was part of the additional records related to historical outages maintained by Liberty's Engineering team. Due to the passage of time, Liberty is not aware of a specific explanation for why these outage events have associated timestamps of 01:00:00 AM and 02:00:00 AM after the date stamp; Liberty believes these times were possibly system-generated defaults.
b) Please refer to Liberty's response to subpart (a).

REQUEST NO. 9:

Provide any post-incident root cause analyses, lessons learned, corrective action plans, and after-action reviews that Liberty developed related to wire slapping events on its system.

RESPONSE:

Liberty objects to this Question as vague, ambiguous, and overbroad as framed. Liberty further objects to this Question to the extent it seeks information protected by the attorney-client privilege and/or the attorney work product doctrine. Subject to and without waiving its objections, Liberty responds as follows: As of November 17, 2020, Liberty had developed and implemented various initiatives to reduce the risk and frequency of outage events on its system, including those caused by suspected wire-slapping events, and to mitigate the risk of wildfire more generally. Please refer generally to *Liberty-03E: Prudence of Operations*, e.g., at pp. 17-18 (system hardening efforts, including the Topaz Line Rebuild Project), pp. 18-19 (protective devices), pp. 36-40 (PSPS protocol), Liberty's 2016 Electric System Reliability Report, e.g., at p. 22 (describing system hardening efforts in the 2016-2017 timeframe), Liberty's 2019 GRC, e.g., at *Liberty-02: Capital*, pp. 6-9 (explaining the scope and benefits of the Topaz Line Rebuild Project), and Liberty's Revised 2020 WMP.

REQUEST NO. 10:

In Liberty's response to the Small Business Utility Advocates' (SBUA) data request SBUA-Liberty-DR-02, December 4, 2025, question 18, Liberty states "Liberty conducted an after-action review of its response to the Mountain View Fire on January 7, 2021. The contents of this after-action review are subject to the privileges asserted above."[6]

In Liberty's response to data request CalAdvocates-LIB-A2506017-002, September 10, 2025, question 3, Liberty makes no mention of its "after-action review of its response to the Mountain View Fire [conducted] on January 7, 2021."[7]

In Liberty's response to data request CalAdvocates-LIB-A2506017-010, September 15, 2025, question 7, Liberty makes no mention of its "after-action review of its response to the Mountain View Fire [conducted] on January 7, 2021."[8]

In Liberty's response to data request CalAdvocates-LIB-A2506017-026, October 24, 2025, question 1, Liberty makes no mention of its "after-action review of its response to the Mountain

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6 SBUA's question was: "Provide any post-incident root cause analyses, lessons learned, or corrective action plans developed in response to the Mountain View Fire."

7 Cal Advocates asked Liberty:
As of 2020, did Liberty regularly conduct any post-incident analysis or after-action reviews of significant wind events?
Such reviews could include (but are not limited to) analyzing the performance of Liberty's system in terms of safety and reliability; tracking damages to the system; evaluating whether system performance matched expectations; considering changes to protection settings or other operational changes; evaluating staff performance and communication during the event; or evaluating staffing needs for similar events in the future.
a) If so, describe the types of post-incident analysis and review that Liberty conducted.
b) If not, explain why.

8 Cal Advocates asked Liberty to "Provide a copy of all available investigative reports (including any attachments and appendices) into the origins and causes of the Mountain View Fire."

View Fire [conducted] on January 7, 2021."[9]

a) Explain why Liberty did not mention its after-action review to Cal Advocates in the Cal Advocates data requests referenced above.
b) Explain why Liberty did not mention its after-action review in its Testimony.
c) Provide this after-action review of Liberty's response to the Mountain View Fire on January 7, 2021.
d) Explain what about Liberty's after-action review conducted on January 7, 2021 makes it protected by client-attorney privilege

RESPONSE:

Liberty objects to this Question as vague, ambiguous, and assuming facts. Liberty further objects to this Question to the extent it seeks information protected by the attorney-client privilege and/or the attorney work product doctrine. Subject to and without waiving its objections, Liberty responds as follows:

a) As set forth in Liberty's response to SBUA-Liberty-DR-02, Question 18, the after-action review that Liberty conducted on January 7, 2021 focused on its response to the Mountain View Fire. At Cal Advocates' request, Liberty met and conferred with Cal Advocates on December 30, 2025 regarding the after-action review. Liberty confirmed that this review was privileged. Without waiving any applicable privilege, Liberty reiterated that the review focused on the emergency response to the fire, not the cause of the fire, and specifically Liberty's Incident Command Team. Thus, this after-action review is not responsive to CalAdvocates-LIB-A2506017-010, Question 7 and CalAdvocates-LIB-A2506017-026, Question 1.

   CalAdvocates-LIB-A2506017-002, Question 3 asked generally whether Liberty conducted "any post-incident analysis or after-action reviews of significant wind events" as of 2020 and the types of any such analysis or reviews. Liberty's response described the circumstances in which it conducted after-action reviews. CalAdvocates-LIB-A2506017-002, Question 3 did not ask whether Liberty conducted such an analysis or review in connection with the Mountain View Fire or request that Liberty produce such analysis or review.
b) Liberty objects to this subpart based on the privileges asserted above to the extent this Question seeks information involving the attorney-client privilege and/or attorney work product. See response to part (c).
c) As discussed when Liberty met and conferred with Cal Advocates on December 30, 2025, Liberty's after-action review of its response to the Mountain View Fire on January 7, 2021 is protected by the attorney-client privilege and attorney work product doctrine.
d) Liberty's after-action review conducted on January 7, 2021 was conducted under attorney-client privilege with the participation of Liberty's in-house counsel and outside counsel retained in connection with the Mountain View Fire.

REQUEST NO. 11:

In Liberty's response to data request CalAdvocates-LIB-A2506017-002, September 10, 2025,

[9] Cal Advocates asked Liberty to "Please provide any and all documents that Liberty Utilities is aware of relating to any and all investigations into the root cause of the wire to wire contact between the East and West Poles on November 17, 2020."

question 3, Liberty states:

> As of November 17, 2020, Liberty conducted after-action reviews after major weather events or emergencies in which Liberty activated its Emergency Operations Center (EOC) pursuant to its Emergency Management Plan, attached to Liberty's response to Question 2 of this set of data requests.

a) Provide all of the above referenced after-action reviews that Liberty performed from 2011 through 2021, including but not limited to Topaz 1261 circuit.
b) State how long after Liberty activated its EOC Liberty required its staff to perform its after-action reviews.
c) State who in Liberty was responsible for performing after-action reviews.
d) Provide documents showing Liberty's requirements for its after-action reviews that were in effect on November 17, 2020.
e) Provide documents showing Liberty's requirements for its after-action reviews that were in effect after November 17, 2020.

RESPONSE:

This response contains confidential attachments. Liberty objects to this Question as vague and ambiguous as framed. Liberty further objects to this Question to the extent it seeks information protected by the attorney-client privilege and/or attorney work product doctrine. Subject to and without waiving its objections, Liberty responds as follows:

a) Liberty understands this question to be seeking reports of after-action reviews completed after emergency events or emergency preparedness exercises. See confidential attachment *CONFIDENTIAL-Attachments to CalAdvocates-LIB-A2506017-043, Q11(a).zip* for copies of non-privileged after-action review reports Liberty has located within the specified timeframe.
b) There was no specified timeframe after an EOC activation by which an after-action review was required to be conducted. Liberty's records show that such reviews were generally conducted within a few weeks after an emergency event had concluded.
c) After-action reviews were facilitated by Liberty's Emergency Manager and included members of the EOC who participated in Liberty's emergency response.
d) Liberty understands this subpart to be asking about policies and/or procedures regarding after-action reviews. Please refer to *CONFIDENTIAL-Corporate Emergency Management Plan_2020 GO 166 Report.pdf*, attached to Liberty's amended response to CalAdvocates-LIB-A2506017-029, Question 10, which requires that "debriefing, corrective action and evaluations must all be documented and accessible." Please refer also to page 105 of Liberty's 2020 Revised WMP, which states that lessons learned from wildfire events and emergency preparedness improvements would be generated and circulated with relevant personnel. Please see *CONFIDENTIAL-AAR & IP_2020 PSPS Exercise.pdf*, *CONFIDENTIAL-AAR & IP_2021 PSPS Exercise.pdf*, and *CONFIDENTIAL-AAR_IP_Winter Storm_Dec 2021.docx*, contained within confidential attachment *CONFIDENTIAL-Attachments to CalAdvocates-LIB-A2506017-043, Q11(a).zip*, for the improvement plan template that Liberty typically used for its after-action reviews in the 2020-2021 timeframe.
e) Liberty understands this subpart to be asking about policies and/or procedures regarding after-action reviews. After a reasonable search and diligent inquiry, Liberty is producing

its Incident Response Guides to wildland fires and winter storms, both of which contain information regarding after-action reports to be drafted by the Emergency Manager (on p. 10). See attachment *Attachments to CalAdvocates-LIB-A2506017-043, Q11(e).zip*. Liberty understands that these documents were created in the second half of 2022.

Ignition data

REQUEST NO. 12:

In Liberty's original response to data request CalAdvocates-LIB-A2506017-001, September 10, 2025, question 10, Liberty states:

> Liberty is not subject to ignition reporting under D.14-02-015. From the start of Liberty's operations in approximately 2011 to 2020, Liberty is not aware of any ignitions associated with the Topaz 1261 Circuit prior to November 17, 2020.

In Liberty's amended response to data request CalAdvocates-LIB-A2506017-001, December 9, 2025, question 10, Liberty states "From the start of Liberty's operations in approximately 2011 to 2020, Liberty has identified one ignition associated with the Topaz 1261 Circuit prior to November 17, 2020." In the same response, Liberty provided "CalAdvocates-LIB-A250601-001-Q10.xlsx" which contains one ignition that occurred on May 3, 2014 at 7:45 am.

In the *Response of Liberty Utilities (Calpeco Electric) LLC (U 933-E) In Opposition to Cal Advocates' Motion to Pause the Proceeding*, page 3, Liberty states

> Cal Advocates makes much of an amended response to a request for prior ignitions associated with the Topaz 1261 Circuit from 2010 through 2020. Yet it is not clear why this response is so significant or how it is "admitting to known relevant fire history" or otherwise relevant to the specific facts involved in this case related to the Mountain View Fire. Liberty submitted an initial response after a reasonable and diligent inquiry. Liberty subsequently amended that response after new information came to light, noting a single ignition that had occurred in May 2014 near a pole located approximately 3 miles away from the origin area of the 2020 Mountain View Fire; that 2014 ignition involved vegetation contact and resulted in less than 0.25 acres burned.

a) Explain why Liberty believes "it is not clear why this response is so significant."
b) Explain why Liberty believes that this ignition that occurred in 2014 on its Topaz 1261 circuit is not relevant to the Mountain View Fire ignition.

RESPONSE:

Liberty objects to this Question as vague and ambiguous as framed. Subject to and without waiving its objections, Liberty responds as follows:

a) Liberty refers Cal Advocates to its Response In Opposition to Cal Advocates' Motion to Pause the Proceeding. As discussed therein, the ignition referenced in Liberty's amended response to CalAdvocates-LIB-A2506017-001, Question 10 occurred six years prior to the Mountain View Fire, at a location approximately three miles from where the Mountain View Fire ignited, involved vegetation contact with electrical facilities, and

was contained to a size of less than 0.25 acres. The facts surrounding the May 3, 2014 ignition event were thus distinct from those surrounding the Mountain View Fire's ignition.

b) Please refer to Liberty's response to subpart (a).

Incident ID	Circuit Segment ID a)	Date of Outage b)	Start time of Outage c)	Cause of Outage d)	Equipment failure e)	Outage duration in minutes f)	Protective device type g)	ID number Protective device h)	Geolocation of Protective device i) - j)
119	N/A	4/6/2011	9:05:00 AM	Other (Explain)		<Unknown>	<Unknown>	<Unknown>	<Unknown>
125	N/A	5/15/2011	7:00:00 PM	Cutout		<Unknown>	<Unknown>	<Unknown>	<Unknown>
135	N/A	6/3/2011	8:30:00 PM	<Unknown>		<Unknown>	<Unknown>	<Unknown>	<Unknown>
154	N/A	7/3/2011	6:15:00 AM	<Unknown>		<Unknown>	<Unknown>	<Unknown>	<Unknown>
159	N/A	7/14/2011	2:30:00 PM	<Unknown>		<Unknown>	<Unknown>	<Unknown>	<Unknown>
172	N/A	8/22/2011	3:00:00 PM	<Unknown>		<Unknown>	<Unknown>	<Unknown>	<Unknown>
216	N/A	11/19/2011	9:00:00 AM	Other (Explain)		<Unknown>	<Unknown>	<Unknown>	<Unknown>
102	N/A	3/1/2012	10:50:00 AM	<Unknown>		<Unknown>	<Unknown>	<Unknown>	<Unknown>
150	N/A	5/13/2012	12:01:00 AM	<Unknown>		<Unknown>	<Unknown>	<Unknown>	<Unknown>
151	N/A	5/19/2012	9:30:00 AM	<Unknown>		<Unknown>	<Unknown>	<Unknown>	<Unknown>
157	N/A	6/5/2012	5:30:00 AM	<Unknown>		<Unknown>	<Unknown>	<Unknown>	<Unknown>
182	N/A	7/28/2012	2:00:00 PM	<Unknown>		<Unknown>	<Unknown>	<Unknown>	<Unknown>
189	N/A	8/12/2012	10:00:00 AM	<Unknown>		<Unknown>	<Unknown>	<Unknown>	<Unknown>
194	N/A	8/21/2012	1:50:00 PM	<Unknown>		<Unknown>	<Unknown>	<Unknown>	<Unknown>
240	N/A	11/30/2012	12:01:00 AM	Wire Slapping		<Unknown>	<Unknown>	<Unknown>	<Unknown>
251	N/A	12/26/2012	4:45:00 AM	<Unknown>		<Unknown>	<Unknown>	<Unknown>	<Unknown>
180	N/A	2/13/2013	10:15:00 AM	Car Pole/Guy		7h 48m	<Unknown>	<Unknown>	<Unknown>
51	N/A	2/13/2013	10:15:00 AM	Car Pole/Guy		7h 48m	<Unknown>	<Unknown>	<Unknown>
92	N/A	2/21/2013	7:40:00 AM	Car Pole/Guy		2h 20m	<Unknown>	<Unknown>	<Unknown>
80	N/A	4/14/2013	8:30:00 PM	Trees Structure Down		4h 30m	<Unknown>	<Unknown>	<Unknown>
245	N/A	4/14/2013	8:30:00 PM	Trees Structure Down		12h 45m	<Unknown>	<Unknown>	<Unknown>
112	N/A	7/12/2013	2:15:00 PM	Hardware/Material Other (Explain)		1h 45m	<Unknown>	<Unknown>	<Unknown>
130	N/A	8/4/2013	7:36:00 AM	External System		2h 14m	<Unknown>	<Unknown>	<Unknown>
206	N/A	12/12/2013	3:15:00 PM	Fuse Overload		1h 15m	Fuse	<Unknown>	<Unknown>
208	N/A	1/18/2014	9:30:00 AM	<Unknown>		1h 55m	<Unknown>	<Unknown>	<Unknown>
219	N/A	1/30/2014	8:33:00 AM	Snow Unloading		3h 42m	<Unknown>	<Unknown>	<Unknown>
216	N/A	1/30/2014	12:15:00 PM	Snow Unloading		1h 15m	<Unknown>	<Unknown>	<Unknown>
218	N/A	1/30/2014	5:00:00 PM	Snow Unloading		2h 30m	<Unknown>	<Unknown>	<Unknown>
239	N/A	2/15/2014	9:05:00 AM	Wire Slapping		6h 40m	<Unknown>	<Unknown>	<Unknown>
250	N/A	3/26/2014	12:58:00 PM	Wire Slapping		2h 9m	<Unknown>	<Unknown>	<Unknown>
260	N/A	4/16/2014	8:30:00 PM	<Unknown>		2h 50m	<Unknown>	<Unknown>	<Unknown>
323	N/A	4/22/2014	11:13:00 AM	External System		1h 25m	<Unknown>	<Unknown>	<Unknown>
326	N/A	5/3/2014	7:45:00 AM	Trees		7h 5m	<Unknown>	<Unknown>	<Unknown>
338	N/A	6/19/2014	5:00:00 PM	Wire Slapping		2h 29m	<Unknown>	<Unknown>	<Unknown>
355	N/A	7/13/2014	5:37:00 PM	Cutout		3h 9m	<Unknown>	<Unknown>	<Unknown>
421	N/A	10/25/2014	3:13:00 PM	Trees		1h 47m	<Unknown>	<Unknown>	<Unknown>
455	N/A	12/11/2014	4:00:00 PM	Wire Slapping		4h 30m	<Unknown>	<Unknown>	<Unknown>
456	N/A	12/11/2014	8:30:00 PM	Trees		2h 10m	<Unknown>	<Unknown>	<Unknown>
446	N/A	12/12/2014	12:00:00 PM	Wire Slapping		5h 45m	<Unknown>	<Unknown>	<Unknown>
524	N/A	7/3/2015	11:30:00 AM	Transformer		4h 0m	<Unknown>	<Unknown>	<Unknown>

Incident ID	Circuit Segment ID a)	Date of Outage b)	Start time of Outage c)	Cause of Outage d)	Equipment failure e)	Outage duration in minutes f)	Protective device type g)	ID number Protective device h)	Geolocation of Protective device i) - j)
498	N/A	4/21/2015	10:45:00 PM	Transformer		7h 0m	<Unknown>	<Unknown>	<Unknown>
507	N/A	5/22/2015	9:00:00 PM	Lightning/Blown Fuse		2h 30m	<Unknown>	<Unknown>	<Unknown>
509	N/A	5/23/2015	8:00:00 AM	Lightning/Blown Fuse		1h 30m	<Unknown>	<Unknown>	<Unknown>
476	N/A	2/6/2015	6:30:00 AM	Trees		67h 58m	<Unknown>	<Unknown>	<Unknown>
518	N/A	6/29/2015	6:15:00 PM	Lightning/Blown Fuse		2h 20m	<Unknown>	<Unknown>	<Unknown>
523	N/A	7/1/2015	6:00:00 PM	Wire Slapping		1h 40m	<Unknown>	<Unknown>	<Unknown>
500	N/A	5/7/2015	7:48:00 PM	<Unknown>		3h 52m	<Unknown>	<Unknown>	<Unknown>
547	N/A	8/20/2015	4:00:00 PM	Fuse Overload		3h 29m	<Unknown>	<Unknown>	<Unknown>
570	N/A	10/2/2015	11:30:00 AM	Wire Slapping		3h 0m	<Unknown>	<Unknown>	<Unknown>
592	N/A	12/10/2015	6:45:00 AM	Lightning/Blown Fuse		2h 45m	<Unknown>	<Unknown>	<Unknown>
597	N/A	12/29/2015	3:03:00 PM	Wire Down		7h 9m	<Unknown>	<Unknown>	<Unknown>
101	N/A	1/29/2016	1315:5400:4900 PM	Non-Company ActivitiesWire Slapping		32h 20 40m	Fuse Bank	2134	920981.7054217280,14030900.3681720000
6264	N/A	4/14/2016	4:36:21 AM	<Unknown>Wire Slapping		1h 43m	Fuse Bank	2088	934640.7419948470,13994244.9266298000
6692	N/A	7/29/2016	4:35:39 PM	Non-Company ActivitiesExternal System		4h 48m	Dynamic Protective Device Bank	480	913257.5317722730,14058990.2944441000
6695	N/A	7/30/2016	4:11:52 AM	Non-Company ActivitiesExternal System		13m	Dynamic Protective Device Bank	52	917451.5000000000,14045002.8600000000
7095	N/A	10/14/2016	3:17:00 PM	External System		0h 13m	Dynamic Protective Device Bank	52	917451.5000000000,14045002.8600000000
7067	N/A	10/14/2016	7:31:23 AM	3rd Party OutageWire Slapping		1h 43m	Dynamic Protective Device Bank	51	926316.6798177180,14005024.5267405000
7091	N/A	10/14/2016	10:59:38 AM	3rd Party OutageExternal System		4h 0m	Dynamic Protective Device Bank	52	917451.5000000000,14045002.8600000000
7144	N/A	10/15/2016	12:43:00 PM	Wire Slapping		1h 27m	Transformer Bank	6661	837207.8635270900,14000303.1233527000
73137159	N/A	10/2916/2016	220:3151:55 PM00 AM	<Unknown>Wire Slapping		62h 6 39m	Dynamic Protective Device Bank	51	926316.6798177180,14005024.5267405000
73147313	N/A	10/29/2016	10:31:55 PM	<Unknown>		6h 6m	lecalpeco.LEGIS.ServiceLocationDynamic Protective Device Bank	7006, 12891051	932872.9585760440,13992844.8953547000926316.6798177180,14005024.5267405000
7359	N/A	11/10/2016	10:48:31 AM	Planned Outage		1h 16m	Dynamic Protective Device Bank	52	917451.5000000000,14045002.8600000000
7386	N/A	11/16/2016	2:01:33 AM	<Unknown>		1h 13m	Dynamic Protective Device Bank	881	913460.3049176840,14056601.5204244000
7430	N/A	11/19/2016	4:31:00 PM	Wire Down		2h 26m	Transformer Bank	600106	934281.2470174880,13993645.2155094000
7392	N/A	11/19/2016	8:22:28 AM	Improper InstallationWire Slapping		1h 47m	Dynamic Protective Device Bank	52	917451.5000000000,14045002.8600000000
7475	N/A	11/27/2016	6:51:55 AM	MoistureSnow Unloading		2h 46m	lecalpeco.LEGIS.ServiceLocation, Fuse Bank	7167, 2134	920981.7054217280,14030900.3681720000
7589	N/A	12/6/2016	2:54:39 PM	<Unknown>		2h 13m	Fuse Bank	2088	934640.7419948470,13994244.9266298000
7598	N/A	12/10/2016	4:25:00 AM	<Unknown>		1h 46m	Fuse Bank	266731	934538.4596045520,13994591.5331094000
7641	N/A	12/15/2016	2:29:43 AM	<Unknown>		1h 35m	Dynamic Protective Device Bank	881	913460.3049176840,14056601.5204244000
7648	N/A	12/15/2016	6:45:56 AM	DeteriorationWire Slapping		1h 38m	Fuse Bank, lecalpeco.LEGIS.ServiceLocation	2132, 141913	937137.9091311430,13995212.1149143000
7710	N/A	12/24/2016	7:55:49 AM	<Unknown>		3 h 2 min	lecalpeco.LEGIS.ServiceLocation	6794	930577.247, 13996448.127
7755	N/A	1/1/2017	6:00:27 PM	<Unknown>Wire Slapping		44m	Fuse Bank	2132	934577.0708743950,13994787.3185069000
7764	N/A	1/1/2017	10:26:59 PM	<Unknown>Trees		1h 18m	Fuse Bank	2132	934577.0708743950,13994787.3185069000
8658	N/A	1/9/2017	1:2230:1800 AM	MoistureSnow Unloading Wire Slapping		7h 23 16m	lecalpeco.LEGIS.ServiceLocation, Dynamic Protective Device Bank	141915, 6906, 6767, 6814, 142814, 7109, 6593, 6661, 6803, 480	913257.5317722730,14058990.2944441000
9054	N/A	1/11/2017	6:27:27 AM	Deterioration<Unknown>		14h 32m	Fuse Bank	2134	920981.7054217280,14030900.3681720000
12693	N/A	1/23/2017	2:30:00 PM	Wire Down		8h 16m	Fuse Bank	102677	934885.1558550040,14028530.8720833000
12687	N/A	1/23/2017	6:01:05 AM	<Unknown>		5h 28m	Dynamic Protective Device Bank	480	913257.5317722730,14058990.2944441000
12703	N/A	1/23/2017	2:25:13 PM	<Unknown>Wire Slapping		3h 4m	Fuse Bank	2105	933798.4891313820,13994936.0596521000
12711	N/A	1/23/2017	4:59:00 PM	<Unknown>Wire Down		5h 47m	lecalpeco.LEGIS.ServiceLocation, Transformer Bank	6687, 1260, 128949, 616946	936818.7732240160,14018392.9544001000
13123	N/A	2/1/2017	2311:39:30 PM AM	DeteriorationWire Slapping		13h 57m	Fuse Bank	2134	920981.7054217280,14030900.3681720000
13211814	N/A	02/0206/2017	315:00:14 AM00 PM	<Unknown>Wire Slapping		4d 131h 44 45m	Dynamic Protective Device Bank	881480	913460.3049176840,14056601.5204244000913257.5317722730,14058990.2944441000
13401	N/A	2/9/2017	87:1530:1200 AM	<Unknown>Hardware/Material		231d 0h 59 45m	Dynamic Protective Device Bank	480	913257.5317722730,14058990.2944441000

Incident ID	Circuit Segment ID a)	Date of Outage b)	Start time of Outage c)	Cause of Outage d)	Equipment failure e)	Outage duration in minutes f)	Protective device type g)	ID number Protective device h)	Geolocation of Protective device i) - j)
13934	N/A	2/15/2017	12:48:30 PM	<Unknown>		2h 6m	Transformer Bank	1502	933901.6997498150,13993837.8800561000
13939	N/A	2/15/2017	12:46:21 PM	<Unknown>Hardware/Material		1h 53m	Dynamic Protective Device Bank	51	926316.6798177180,14005024.5267405000
14405	N/A	2/21/2017	10:42:29 PM	<Unknown>		9h 24m	Transformer Bank	1268	937250.0200000000,13995593.2200000000
825	N/A	2/23/2017	12:30:00 PM	Transformer Overload		1h 0m	Transformer Bank	<Unknown>	<Unknown>
15028	N/A	3/21/2017	6:51:15 PM	3rd Party OutageExternal System		12h 1m	Dynamic Protective Device Bank	480	913257.5317722730,14058990.2944441000
15270	N/A	4/12/2017	10:42:14 PM	Device FailedWire Slapping		2h 8m	Fuse Bank	2104	920096.4500248660,14035231.9625932000
15305	N/A	4/20/2017	8:10:59 AM	AnimalBirds/Animals		1h 59m	Fuse Bank	2142	925644.9859155740,14006949.2569906000
15336	N/A	4/28/2017	1:27:54 PM	Device FailedCutout Other (Explain)		17h 11m	Primary OH Conductor	15174	934801.4160209990,14028169.8812592000
15337	N/A	4/28/2017	1:27:54 PM	<Unknown>		1h 14m	Primary OH Conductor	15174	934796.4284122980,14028170.0514089000
15339	N/A	4/28/2017	4:44:06 PM	Device Failed	Anchor	3h 55m	lecalpeco.LEGIS.ServiceLocation, Primary OH Conductor	105845, 15174	934885.1558550040,14028530.8720833000
1541415763	N/A	0506/0906/2017	1615:16:5143 PM	<Unknown>External System		218h 19 43m	TransformerDynamic Protective Device Bank	1649480	926281.9641343710,14027783.7210385000 913257.5317722730,14058990.2944441000
1542316236	N/A	0507/1225/2017	1820:5336:3800 PM	3rd Party Outage<Unknown>		21h 50 49m	Transformer Bank	1649242916	926279.8104949060,14027788.6219214000 936971.2895547550,14008497.7953468000
1576316409	N/A	0608/0608/2017	157:1608:43 PM00 AM	<Unknown>		103h 43 12m	Dynamic Protective DeviceFuse Bank	480295173	913257.5317722730,14058990.2944441000 929957.7827337430,14016394.4397449000
16693	N/A	8/31/2017 611:3700:2200 AM		RangeFire on Company Equipment		1d 1023h 26 51m	lecalpeco.LEGIS.ServiceLocation, Dynamic Protective Device Bank	7156, 128911, 6937, 7182, 6823, 6700, 480, 128894	931542.0824877750,13994689.7877581000
17190	N/A	10/20/2017	9:47:00 AM	Wire Slapping		0h 53m	Fuse Bank	204112	929559.3082260530,14019113.5574537000
17187	N/A	10/20/2017	12:18:09 AM	<Unknown>Wire Slapping		1h 41m	Fuse Bank	2104	920096.4500248660,14035231.9625932000
17188	N/A	10/20/2017	2:10:45 AM	<Unknown>Trees		1h 24m	Fuse Bank	2110	918916.8287626770,14041987.9404365000
17340	N/A	11/9/2017	3:52:27 AM	<Unknown>Wire Slapping		1h 37m	Dynamic Protective Device Bank	881	913460.3049176840,14056601.5204244000
17554	N/A	11/26/2017	1:59:29 PM	<Unknown>		1h 35m	Dynamic Protective Device Bank	881	913460.3049176840,14056601.5204244000
17555	N/A	11/26/2017	2:25:00 PM	DeteriorationInsulator		3h 50m	Fuse Bank	2142	925644.9859155740,14006949.2569906000
17574	N/A	11/26/2017	4:52:31 PM	DeteriorationWire Slapping		4h 17m	Fuse Bank	2104	920096.4500248660,14035231.9625932000
17767	N/A	12/19/2017	10:43:44 PM	<Unknown>		2h 36m	Fuse Bank	2104	920096.4500248660,14035231.9625932000
17868	N/A	1/11/2018	1:43:31 PM	3rd Party Outage		33m	lecalpeco.LEGIS.ServiceLocation, Transformer Bank, Fuse Bank	6716, 6601, 1469, 6792, 6939, 7006, 7126, 6661, 2134, 6737, 7056, 7117, 141904, 6700, 6834	937367.5095547560,14008007.4017405000
17921	N/A	1/24/2018	4:01:05 PM	Device FailedWire Slapping		1h 58m	Fuse Bank	2104	920096.4500248660,14035231.9625932000
18074	N/A	2/21/2018	5:52:10 AM	3rd Party Outage		1h 18m	Dynamic Protective Device Bank	480	913257.5317722730,14058990.2944441000
18087	N/A	2/22/2018	6:39:00 AM	Wind		1h 41m	Fuse Bank	266623	920169.5579262560,14035324.3879345000
18165	N/A	3/1/2018	6:15:50 PM	<Unknown>		3h 29m	Dynamic Protective Device Bank	881	913460.3049176840,14056601.5204244000
18203	N/A	3/1/2018 2322:3646:00 PM		<Unknown>		78h 32 14m	lecalpeco.LEGIS.ServiceLocation, Dynamic Protective Device Bank, Fuse Bank	6661, 7006, 6645, 6842, 6700, 7111, 7050, 128896, 881, 2094	932872.9585760440,13992844.8953547000
18527	N/A	3/28/2018	3:42:46 PM	Other Company Activities3rd Party Outage		22m	Dynamic Protective Device Bank	480	913257.5317722730,14058990.2944441000
19501	N/A	5/30/2018	4:10:22 PM	DeteriorationWind		1h 31m	Fuse Bank	2129	920915.7235175410,14033409.6475384000
19611	N/A	6/14/2018	10:01:32 AM	Construction by Company ContractorPlanned Outage		7h 55m	Primary OH Conductor	15666	922017.0558224620,14021280.0509991000
19612	N/A	6/14/2018	10:48:24 AM	Construction by Company Contractor		7m	Dynamic Protective Device Bank	881	913460.3049176840,14056601.5204244000
19625	N/A	6/17/2018	4:32:44 PM	3rd Party OutageWildfire		5h 46m	Dynamic Protective Device Bank	480	913257.5317722730,14058990.2944441000
<Unknown>	N/A	6/21/2018	7:00:00 AM	Hardware Fail		4h 0m	<Unknown>	<Unknown>	<Unknown>
19656	N/A	6/23/2018	10:00:48 AM	Non-Company ActivitiesAnimal		2h 40m	Dynamic Protective Device Bank	881	913460.3049176840,14056601.5204244000
20230	N/A	10/2/2018	12:17:17 PM	<Unknown>		1418m	Dynamic Protective Device Bank	881	913460.3049176840,14056601.5204244000
20233	N/A	10/2/2018	12:22:50 PM	<Unknown>		12m	Dynamic Protective Device Bank	881	913460.3049176840,14056601.5204244000
21042	N/A	12/14/2018	5:11:16 PM	Device FailedHardware Failure	Tap Wire	2h 18m	Transformer Bank	1620	934056.5598079120,13994839.4499911000
21347	N/A	1/16/2019	2:34:29 AM	<Unknown>		2h 25m	Fuse Bank	2048	922573.2640090220,14019014.4793104000
21408	N/A	1/17/2019	9:29:33 AM	Deterioration		4h 10m	Transformer Bank	1538	920125.6199999990,14035289.7500000000
21957	N/A	2/14/2019	5:11:08 AM	3rd Party Outage		8m	lecalpeco.LEGIS.ServiceLocation	128911	933539.0590635020,13993241.1658517000
22003	N/A	2/14/2019	5:37:25 PM	Tree - Broken Limb		1d 1h 57m	Transformer Bank	1552	932785.8401863540,13993680.0802972000
22668	N/A	2/25/2019	1:16:18 PM	Device Failed		2h 43m	Dynamic Protective Device Bank	881	913460.3049176840,14056601.5204244000
22711	N/A	2/25/2019	11:45:31 PM	Non-Company Activities		3h 19m	Dynamic Protective Device Bank	881	913460.3049176840,14056601.5204244000
22740	N/A	2/26/2019	5:12:48 AM	Deterioration		4h 47m	Fuse Bank	2048	922573.2640090220,14019014.4793104000
22950	N/A	3/14/2019	7:04:58 AM	Animal		2h 47m	Fuse Bank	2072	936621.2030854290,14006816.1521873000
22993	N/A	3/15/2019	7:24:52 AM	Device Failed		4h 35m	Dynamic Protective Device Bank	881, 51	913460.3049176840,14056601.5204244000
23022	N/A	3/22/2019	8:05:00 AM	Planned Outage		36m	Dynamic Protective Device Bank	881	913460.3049176840,14056601.5204244000
23049	N/A	3/22/2019	9:05:37 AM	Planned Outage		3d 8h 20m	Dynamic Protective Device Bank	881, 51	913460.3049176840,14056601.5204244000

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23101	N/A	3/26/2019	12:01:36 PM	<Unknown>		38m	Transformer Bank	1587	933423.9803551800,13993089.4803972000
23105	N/A	3/26/2019	11:53:06 AM	<Unknown>		47m	Dynamic Protective Device Bank	881	913460.3049176840,14056601.5204244000
23164	N/A	4/11/2019	11:17:56 AM	3rd Party Outage		7m	Transformer Bank	1431	931609.6804722000,13996694.5526952000
23168	N/A	4/11/2019	11:18:01 AM	3rd Party Outage		6m	lecalpeco.LEGIS.ServiceLocation	6716, 7110	937367.5095547560,14008007.4017405000
23171	N/A	4/11/2019	11:17:29 AM	3rd Party Outage		7m	lecalpeco.LEGIS.ServiceLocation	7006, 128919	935373.2320017840,13994120.2254942000
23175	N/A	4/11/2019	11:18:40 AM	3rd Party Outage		6m	lecalpeco.LEGIS.ServiceLocation	141908, 6737	931551.0252783800,14008012.3169707000
~~23177~~	~~N/A~~	~~4/11/2019~~	~~11:24:22 AM~~	~~3rd Party Outage~~		~~0m~~	~~lecalpeco.LEGIS.ServiceLocation~~	~~6956, 128911~~	~~931316.4840082990,13994475.0927395000~~
24277	N/A	9/16/2019	1:04:37 PM	Tree - Broken Limb		8h 15m	Fuse Bank	2118	919720.3092361710,14036233.1157568000
24279	N/A	9/16/2019	6:03:30 PM	Flying Debris		1h 52m	Transformer Bank	1478	934064.8693632600,14006359.0000768000
24360	N/A	9/28/2019	7:10:50 AM	<Unknown>		4h 34m	Transformer Bank	1614	920754.5099999990,14033172.1900000000
25414	N/A	4/9/2020	9:06:54 AM	Fire on Company Equipment		49m	Fuse Bank	2134	920981.7054217280,14030900.3681720000
25424	N/A	4/13/2020	9:37:16 AM	Planned Outage		4h 18m	Fuse Bank	2134	920981.7054217280,14030900.3681720000
25429	N/A	4/16/2020	4:45:00 PM	Planned Outage		3h 30m	Fuse Bank	2110	918916.8287626770,14041987.9404365000
25492	N/A	5/19/2020	8:48:51 AM	Planned Outage		8h 18m	Secondary OH Conductor	9629	923458.8721172410,14015412.4700548000
25532	N/A	6/3/2020	8:30:14 AM	Planned Outage		7h 57m	Transformer Bank	1606	923685.1300000000,14014595.8200000000
25543	N/A	6/5/2020	11:29:34 AM	Planned Outage		5h 34m	Fuse Bank	2123	923804.9440835340,14014333.9966943000
25564	N/A	6/8/2020	8:34:29 AM	Planned Outage		8h 13m	Transformer Bank	1540	923862.0281625300,14013972.9845607000
25635	N/A	6/16/2020	2:32:00 PM	<Unknown>		49m	Dynamic Protective Device Bank	881	913460.3049176840,14056601.5204244000
~~25882~~	~~N/A~~	~~7/20/2020~~	~~10:49:37 AM~~	~~Planned Outage~~		~~4h 40m~~	~~Fuse Bank~~	~~2142~~	~~925654.6838216140,14006910.6963192000~~
~~25895~~	~~N/A~~	~~7/20/2020~~	~~2:57:00 PM~~	~~<Unknown>~~		~~5m~~	~~Dynamic Protective Device Bank~~	~~881~~	~~913460.3049176840,14056601.5204244000~~
26618	N/A	8/14/2020	2:36:04 PM	<Unknown>		51m	lecalpeco.LEGIS.ServiceLocation, Dynamic Protective Device Bank	6937, 881	933592.2564358840,13992230.6572890000
26776	N/A	9/12/2020	3:29:42 PM	Flying Debris		1h 20m	Fuse Bank	2124	931377.5143581960,13995364.6024104000
27841	N/A	11/17/2020	9:48:00 AM	Weather - wind		55m	Dynamic Protective Device Bank	51	926198.5101381660,14005033.2151270000
27871	N/A	11/17/2020	11:55:00 AM	Wildfire		2d 8h 16m	Dynamic Protective Device Bank	51	926198.5101381660,14005033.2151270000
27873	N/A	11/17/2020	12:32:00 PM	Planned Outage		2d 23h 10m	Fuse Bank, Primary OH Conductor	2142, 15534	925654.6838216140,14006910.6963192000
27875	N/A	11/17/2020	12:51:00 PM	Planned Outage		20h 9m	Dynamic Protective Device Bank	881	913460.3049176840,14056601.5204244000
27955	N/A	11/17/2020	12:32:00 PM	Planned Outage		1d 1h 11m	Dynamic Protective Device Bank	881	913460.3049176840,14056601.5204244000
~~27963~~	~~N/A~~	~~11/18/2020~~	~~11:40:00 AM~~	~~Planned Outage~~		~~6h 38m~~	~~Dynamic Protective Device Bank~~	~~881~~	~~913460.3049176840,14056601.5204244000~~
~~27967~~	~~N/A~~	~~11/18/2020~~	~~5:35:00 PM~~	~~<Unknown>~~		~~15h 35m~~	~~Fuse Bank~~	~~2048~~	~~922573.2640090220,14019014.4793104000~~
27973	N/A	11/17/2020	11:55:00 AM	Planned Outage		2d 23h 55m	Fuse Bank	2065	929176.5235477980,13999641.5887330000
27975	N/A	11/17/2020	11:55:00 AM	Planned Outage		4d 7h 35m	Fuse Bank	2044	931501.5966649770,13995937.7862738000
~~27976~~	~~N/A~~	~~11/19/2020~~	~~5:00:00 PM~~	~~Planned Outage~~		~~1d 23m~~	~~Fuse Bank~~	~~2120~~	~~933047.9657727530,13995236.6405441000~~
27977	N/A	11/17/2020	11:55:00 AM	Planned Outage		5d 3h 8m	Fuse Bank	2105	933798.4891313820,13994936.0596521000
27979	N/A	11/17/2020	11:55:00 AM	Planned Outage		3d 2h 25m	Fuse Bank	2115	935417.0951424200,13994794.1802897000
27981	N/A	11/17/2020	11:55:00 AM	Planned Outage		2d 5h 5m	Fuse Bank	2057	936046.7096045070,13994751.3013339000
~~27985~~	~~N/A~~	~~11/19/2020~~	~~8:00:00 PM~~	~~Planned Outage~~		~~21h 0m~~	~~Transformer Bank~~	~~1295~~	~~926755.9757641240,14004261.9074566000~~
27990	N/A	11/17/2020	11:55:00 AM	Planned Outage		3d 14m	Fuse Bank	2069	929613.7014589190,13998041.1946656000
~~27993~~	~~N/A~~	~~11/19/2020~~	~~8:00:00 PM~~	~~Planned Outage~~		~~1d 15h 0m~~	~~Transformer Bank~~	~~1445~~	~~930611.6900000020,13996457.9000000000~~
27994	N/A	11/17/2020	11:55:00 AM	Planned Outage		3d 23h 5m	Transformer Bank	1443	930680.5399999990,13996379.8100000000
~~27995~~	~~N/A~~	~~11/19/2020~~	~~8:00:00 PM~~	~~Planned Outage~~		~~1d 15h 0m~~	~~Transformer Bank~~	~~1254~~	~~930928.8099999990,13996177.8100000000~~
27997	N/A	11/17/2020	11:55:00 AM	Planned Outage		3d 1h 4m	Fuse Bank	2053	931608.8403785120,13995851.9865628000
~~27999~~	~~N/A~~	~~11/19/2020~~	~~8:00:00 PM~~	~~Planned Outage~~		~~16h 37m~~	~~Fuse Bank~~	~~2056~~	~~932163.1206961070,13995583.8716623000~~
~~28002~~	~~N/A~~	~~11/19/2020~~	~~8:00:00 PM~~	~~Planned Outage~~		~~1d 15h 0m~~	~~Transformer Bank~~	~~1608~~	~~932743.0593336460,13995397.1003823000~~
28004	N/A	11/17/2020	11:55:00 AM	Planned Outage		3d 1h 1m	Primary OH Conductor	15907	933341.2961903360,13994970.8949846000
28005	N/A	11/17/2020	11:55:00 AM	Planned Outage		3d 1h 9m	Fuse Bank	2137	933730.3401880150,13994820.4646377000
~~28006~~	~~N/A~~	~~11/19/2020~~	~~8:00:00 PM~~	~~Planned Outage~~		~~1d 15h 0m~~	~~Transformer Bank~~	~~1620~~	~~934056.5598079120,13994839.4499911000~~
28007	N/A	11/17/2020	11:55:00 AM	Planned Outage		3d 1h 16m	Fuse Bank	2132	934577.0708743950,13994787.3185069000
28009	N/A	11/17/2020	11:55:00 AM	Planned Outage		3d 2h 25m	Fuse Bank	52145	935420.9397720050,13994776.2423594000
28014	N/A	11/17/2020	12:32:00 PM	Planned Outage		4d 2h 25m	Primary OH Conductor	15475	936622.5896180680,14006879.2793699000
28015	N/A	11/17/2020	12:32:00 PM	Planned Outage		4d 2h 26m	Primary OH Conductor	15471	936594.1529342590,14006610.2164531000
28026	N/A	11/17/2020	12:32:00 PM	Planned Outage		4d 5h 0m	Fuse Bank	2052	936221.1306212680,14004015.8065377000
28027	N/A	11/17/2020	12:32:00 PM	Planned Outage		5d 3h 28m	Primary OH Conductor	15327	935785.2512628820,14002880.5655680000
28028	N/A	11/17/2020	12:32:00 PM	Planned Outage		5d 1h 23m	Fuse Bank	2076	938004.6950405980,14000659.7515725000
28029	N/A	11/17/2020	12:32:00 PM	Planned Outage		5d 1h 23m	Fuse Bank	2074	937989.9016502550,14000654.5812423000
27963	N/A	11/18/2020	11:40:00 AM	Planned Outage		6h 38m	Dynamic Protective Device Bank	881	913460.3049176840,14056601.5204244000
~~2801827~~967	N/A	11/~~20~~18/2020	~~15~~17:~~27~~35:~~21~~00 PM	<Unknown>		~~6~~15h~~39~~ 35m	~~lecalpeco.LEGIS.ServiceLocation~~Fuse Bank	~~6850~~2048	~~925763.9396387830,14004857.4920219000~~922573.2640090220,14019014.4793104000
~~2801927~~976	N/A	11/19/2020	5:00:00 PM	Planned Outage		~~2~~1d ~~18h 0~~ 23m	Fuse Bank	~~2133~~2120	~~937400.6710185150,13995250.6994880000~~933047.9657727530,13995236.6405441000
~~2802027~~985	N/A	11/19/2020	~~17~~20:00:00 PM	Planned Outage		~~22~~21h 0m	Transformer Bank	~~1147~~1295	~~936541.6798180930,13995168.3407599000~~926755.9757641240,14004261.9074566000

Incident ID	Circuit Segment ID a)	Date of Outage b)	Start time of Outage c)	Cause of Outage d)	Equipment failure e)	Outage duration in minutes f)	Protective device type g)	ID number Protective device h)	Geolocation of Protective device i) - j)
2802427993	N/A	11/21/2019	1020:1800:13 AM00 PM	<Unknown>Planned Outage		411d 15h 0m	Transformer Bank	13581445	931485.2002004600,13995574.6301103000 930611.6900000020,13996457.9000000000
2802627995	N/A	11/17/2019	1220:3200:00 PM	Planned Outage		41d 5 15h 0m	FuseTransformer Bank	20521254	936221.1306212680,14004015.8065377000 930928.8099999990,13996177.8100000000
27999	N/A	11/19/2020	8:00:00 PM	Planned Outage		16h 37m	Fuse Bank	2056	932163.1206961070,13995583.8716623000
2802728002	N/A	11/17/2019	1220:3200:00 PM	Planned Outage		51d 3 15h 28 0m	Primary OH ConductorTransformer Bank	153271608	935785.2512628820,14002880.5655680000 932743.0593336460,13995397.1003823000
2802828006	N/A	11/17/2019	1220:3200:00 PM	Planned Outage		5d 1d 15h 23 0m	FuseTransformer Bank	20761620	938004.6950405980,14000659.7515725000 934056.5598079120,13994839.4499911000
2802928019	N/A	11/17/2019	1217:3200:00 PM	Planned Outage		52d 1 18h 23 0m	Fuse Bank	20742133	937989.0016502550,14000654.5812423000 937400.6710185150,13995250.6994880000
28020	N/A	11/19/2020	5:00:00 PM	Planned Outage		22h 0m	Transformer Bank	1147	936541.6798180930,13995168.3407599000
28018	N/A	11/20/2020	3:27:21 PM	<Unknown>		6h 39m	lecalpeco.LEGIS.ServiceLocation	6850	925763.9396387830,14004857.4920219000
28024	N/A	11/21/2020	10:18:13 AM	<Unknown>		41m	Transformer Bank	1358	931485.2002004600,13995574.6301103000
28225	N/A	12/10/2020	7:57:50 PM	<Unknown>		5h 32m	Transformer Bank	1431	931609.6804722000,13996694.5526952000