

CALIFORNIA PUBLIC UTILITIES COMMISSION
Safety and Enforcement Division
Wildfire Safety and Enforcement Branch

Incident Investigation Report

Report Date: June 28, 2024

Incident Number: E20220905-03 (Fairview Fire)

Regulated Utility Involved: Southern California Edison Company (SCE)

Incident Date and Time: September 5, 2022, at 1537 hours

Incident Location: South of the intersection of Fairview Avenue and Bautista Road, Hemet, Riverside County, California, between Pole 220029S (33.700255°, -116.893986°) and Pole 220028S (33.701591°, -116.893753°)

Fatality/Injury: Two civilian fatalities, one civilian injury, and two firefighter injuries.

Property Damage: 36 structures destroyed, eight structures damaged, \$38,850,000 in estimated fire suppression costs, and \$1,206,644 in utility facility damage.

Regulated Utility Facilities Involved: Sprague 12kV (12,000 volts) Distribution Circuit (Subject Distribution Circuit)

Summary

On September 5, 2022, at approximately 1537 hours, the Fairview Fire (Incident) ignited in the vicinity of Fairview Avenue and Bautista Road, Hemet, Riverside County, in a Tier 3 High Fire Threat District (HFTD). The Incident originated between two SCE Poles on a privately owned property. The California Department of Forestry and Fire Protection (CAL FIRE) Report concluded that the cause of the fire was contact and arcing between one of SCE's East electrical line conductor¹ and a messenger cable² owned by Frontier Communications due to insufficient clearance between the distribution conductor and the messenger cable, both of which were supported by Pole 220029S (Incident Pole) and Pole 220028S (Incident Span).

¹ All references to the phase 1B conductor, B phase, East phase, Edison conductor East line and/or Wire 2 by either CAL FIRE, SCE and/or SED refer to SCE's phase 1B conductor supported by Pole 220028S and Incident Pole 220029S in the Incident Span.

² A messenger cable does not carry any current or signal and is used as a physical support cable for another hung wire, in this instance, a fiber-optic communications line owned by Frontier Communications.

The Fairview Fire burned 28,098 acres³ and caused two civilian fatalities and three injuries, including two firefighters. The fire destroyed a total of 36 structures, including 22 single family dwellings, and damaged eight structures, including five single family dwellings. The estimated fire suppression cost was \$38,850,000.⁴

On September 5, 2022, SCE reported the Incident to the California Public Utilities Commission (CPUC) under Resolution E-4184's media criterion.⁵ The CPUC Safety and Enforcement Division's (SED) investigation of the Incident found that SCE violated several requirements of General Order (GO) 95, Rules of Overhead Electric Line Construction, as well as Section 316 of the California Public Utilities Code.

A. Rules and Requirements Violated

	Rule	Violation
1.	GO 95, Rule 31.1	SCE failed to maintain the Incident Span conductors ⁶ under the maximum sag limit set by SCE's internal construction manual.
2.	GO 95, Rule 31.1	SCE failed, on two separate grid patrol inspections and six overhead detailed inspections (ODI) and enhanced overhead inspections (EOI) to document, notify, and generate corrective actions on the excessive sag present on the phase 1A ⁷ and phase 1B ⁸ conductors in the Incident Span.
3.	GO 95, Rule 37	SCE failed to maintain the minimum height above ground for energized 12kV conductors in a rural area accessible only by pedestrians.
4.	GO 95, Rule 38	SCE failed to maintain the minimum required clearance between an energized 12kV conductor and a communication cable.
5.	GO 95, Rule 19	SCE failed to fully cooperate with SED's investigation by unreasonably delaying and providing piecemeal responses to SED's Data Request (DR) Number SCE-01-Fairview Fire (DR01).

³ CAL FIRE Fairview Fire Incident Site: <https://www.fire.ca.gov/incidents/2022/9/5/fairview-fire/>

⁴ SCE. "20 day-report – 202209870- CPUC 315 Letter," page 1. October 3, 2022.

⁵ Resolution E-4184 requires that utilities report an incident attributable to utility facilities to the CPUC if it meets of one of the following three criteria: (a) a fatality or injury, (b) significant media coverage, or (c) property damage in excess of \$50,000.

⁶ Southern California Edison's (SCE) phase 1A and phase 1B distribution conductors were supported by Pole 220028S and Incident Pole 220029S in the Incident Span. The phase 1B conductor (referred by CAL FIRE as the Edison conductor east line) struck the Frontier Communications messenger cable.

⁷ All references to the phase 1A conductor, A phase, West phase, and/or Wire 1 by either CAL FIRE, SCE and/or SED refer to SCE's phase 1A conductor supported by Pole 220028S and Incident Pole 220029S in the Incident Span.

⁸ All references to the phase 1B conductor, B phase, East phase, Edison conductor East line and/or Wire 2 by either CAL FIRE, SCE and/or SED refer to SCE's phase 1B conductor supported by Pole 220028S and Incident Pole 220029S in the Incident Span.

6.	Public Utilities Code Section 316	SCE failed to fully cooperate with SED's investigation by unreasonably delaying and providing piecemeal responses to DR01.
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General Order 95, Rule 31.1 – Design, Construction and Maintenance states in part:

For all particulars not specified in these rules, design, construction, and maintenance should be done in accordance with accepted good practice for the given local conditions known at the time by those responsible for the design, construction, or maintenance of communication or supply lines and equipment.

General Order 95, Rule 37 – Minimum Vertical Clearance of Wires Above Ground states in part:

The clearances specified in Table 1, Case 2 to 6 inclusive, shall in no case be reduced more than 10% below the tabular values...Table 1 – Vertical clearance of Wires above ground in areas accessible to pedestrians only - Case 5 Column E: Supply conductors 750-22,500 volts have a basic minimum vertical clearance of 17 feet.

General Order 95, Rule 38 – Minimum Clearance of Wires from Other Wires states in part:

The clearances in Table 2 shall in no case be reduced more than 10 percent, except mid-span in Tier 3 of the High Fire-Threat District where they shall be reduced by no more than 5 percent, because of temperature and loading as specified in Rule 43 or because of a difference in size or design of the supporting pins, hardware or insulators... Table 2, Case Number 11 Column C– Vertical clearance between supply conductors 7,500-20,000 Volts and/or communication conductors on separate crossarms or other supports at different levels on the same pole have a basic minimum clearance of 72 inches.

General Order 95, Rule 19 – Cooperation with Commission Staff; Preservation of Evidence Related to Incidents Applicability of Rules states in part:

Each utility shall provide full cooperation to Commission staff in an investigation into any major accident (as defined in Rule 17) or any reportable incident (as defined in CPUC Resolution E-4184), regardless of pending litigation or other investigations, including those which may be related to a Commission staff investigation.

Public Utilities Code, Section 316 – Cooperation with Commission Staff; Preservation of Evidence Related to Incidents Applicability of Rules states in part:

Each electrical corporation shall cooperate fully with the commission in an investigation into any major accident or any reportable incident, as these terms are defined by the commission, concerning overhead electric supply facilities,

regardless of pending litigation or other investigations, including, but not limited to, those that may be related to a commission investigation.

B. Witnesses

	Name	Title
1.	Mihail Cucu	CPUC Lead Investigator
2.	Will Dundon	CPUC Investigator
3.	Bernice Cordero	SCE Senior Advisor
4.		SCE Lineman

C. Evidence

	Source	Title
1.	SCE	Initial Incident Report, September 9, 2022
2.	SCE	20-Day Report, October 3, 2022
3.	CPUC	Site Visit Observation Report No. 1, October 11, 2022
4.	CPUC	Data Request SED-001-Fairview Fire (DR01), December 22, 2022
5.	SCE	Partial Response to DR01, January 30, 2023
6.	SCE	Partial Response to DR01, March 3, 2023
7.	SCE	Partial Response to DR01, March 30, 2023
8.	SCE	Partial Response to DR01, April 4, 2023
9.	SCE	Partial Response to DR01, April 17, 2023
10.	SCE	Partial Response to DR01, April 20, 2023
11.	SCE	Partial Response to DR01, April 28, 2023
12.	SCE	Partial Response to DR01, May 3, 2023
13.	SCE	Partial Response to DR01, May 5, 2023
14.	SCE	Response to DR01, May 17, 2023
15.	CPUC	Data Request SED-002-Fairview Fire (DR02), June 9, 2023
16.	SCE	Response to DR02, July 10, 2023
17.	SCE	Response to DR02, Supplemental Response Question (Q) 03(d), July 31, 2023
18.	SCE	Response to DR02, Supplemental Amended Response Q03(d), August 2, 2023
19.	CPUC	Data Request SED-003-Fairview Fire (DR03), August 11, 2023
20.	SCE	Partial Response to DR03, August 25, 2023
21.	SCE	Partial Response to DR03, September 1, 2023
22.	CPUC	Data Request SED-004-Fairview Fire (DR04), September 28, 2023
23.	SCE	Response to DR04, October 11, 2023
24.	SCE	Response to DR02, Q21 Amended, CAL FIRE Report (CALFIRE 0000001-0002514 Amended), December 1, 2023
25.	CPUC	Data Request SED-005-Fairview Fire (DR05), January 12, 2024
26.	SCE	Response to DR05, January 26, 2024

Background

On September 5, 2022, at 2020 hours, SCE reported to the CPUC a wildland fire named the “Fairview Fire” occurring in the vicinity of Fairview Avenue and Bautista Road, Hemet, Riverside County. CAL FIRE reported that the Fairview Fire started at approximately 1537 hours on September 5, 2022, burned 28,098⁹ acres, and caused two civilian fatalities and three injuries (including two firefighters).¹⁰ The Fairview Fire destroyed a total of 36 structures, including 22 single family dwellings; damaged eight structures, including five single family dwellings; and caused at least \$1,206,644 dollars in property damage to utility facilities.¹¹ Figure 1 below shows the extent of the Fairview Fire footprint, and the fire origin point (Incident Location).

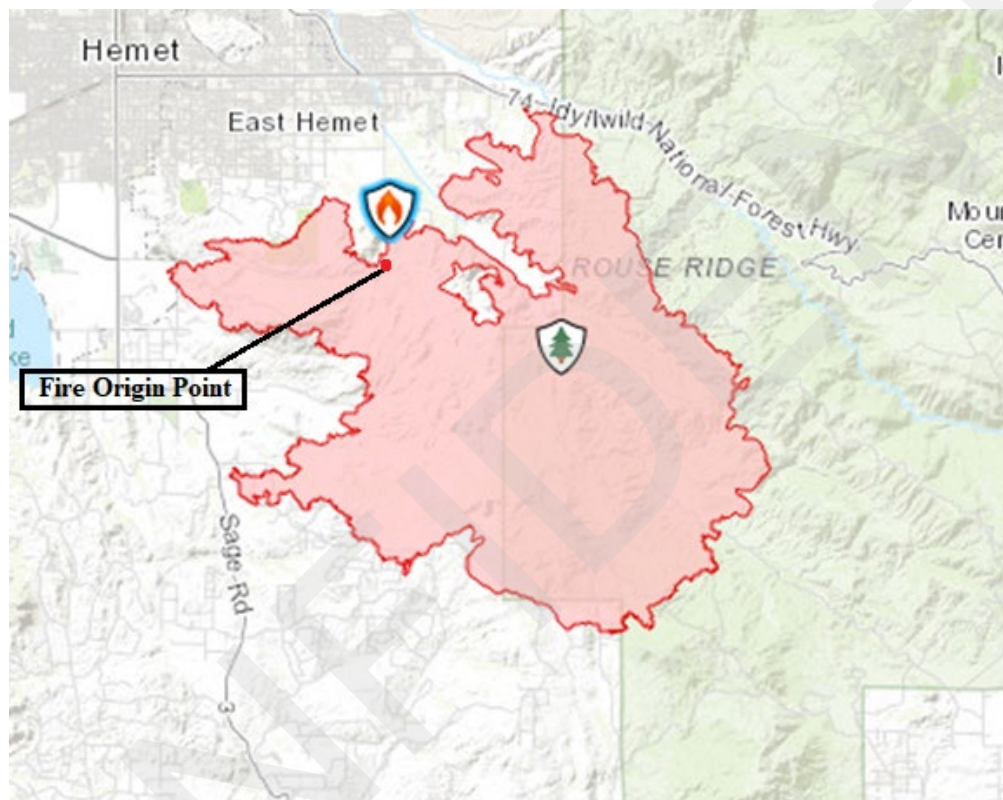


Figure 1: Fairview Fire incident map from CAL FIRE showing the fire footprint.

SCE’s weather station closest to the Incident Location, the Chia Trail weather station, was located 1.7 miles away. On September 5, 2022, at 1600 hours, the Chia Trail weather station recorded a temperature high of 100°F, a relative humidity of 17.5%, and a sustained wind speed

⁹ CAL FIRE. “Investigation Report for Incident Number 22CARRU129712,” (CAL FIRE Report), page 000006. September 5, 2023.

¹⁰ SCE. “20 day-report – 202209870- CPUC 315 Letter,” page 1. October 3, 2022.

¹¹ SCE. “Data Request Response to DR02, “Data Request Response to DR02, Question 20(a),” page 1. July 10, 2023.

of 10.6 mph with maximum gusts of 20.6 mph.¹² Additionally, in a data request response, SCE provided weather station data from Bautista Creek, a secondary weather station located 2.2 miles away from the Incident Location.¹³ On September 5, 2022, at 1600 hours, Bautista Creek recorded a temperature high of 99.5°F, a relative humidity of 15.8%, and a sustained wind speed of 8.9 mph with gusts of 16.1 mph.¹⁴ The weather conditions did not meet SCE's requirements for a Public Safety Power Shutoff (PSPS) activation per the utility's internal procedures and decision making for a PSPS event.¹⁵

Fire Authority Report

SED obtained the CAL FIRE report from SCE on December 1, 2023. The CAL FIRE report found SCE in violation of the California Penal Code, California Public Resources Code, California Health and Safety Code, and GO 95, Rule 31.1. CAL FIRE determined the cause of the fire was the East electrical line¹⁶ at the Incident Span contacting the Frontier Communications messenger cable, which arc and caused sparks to fall and ignite the vegetation below.¹⁷ CAL FIRE observed the conductor and messenger line showing signs of damage and molten metal, indicating that the two lines made contact, as shown in Figure 2 below.

¹² SCE. "Data Request Response to DR01, Question 37," page 2. March 30, 2023.

¹³ SCE. "Data Request Response to DR02, "Data Request Response to DR02, Question 10(b)" page 1. July 10, 2023.

¹⁴ SCE. "Data Request Response to DR02, Question 10(a), "SCE Bautista Creek – 090522 1600.xlsx". July 10, 2023.

¹⁵ SCE. "Data Request Response to DR01 Question 36," page 1. March 30, 2023.

¹⁶ All references to the phase 1B conductor, B phase, East phase, Edison conductor East line and/or Wire 2 by either CAL FIRE, SCE and/or SED refer to SCE's phase 1B conductor supported by Pole 220028S and Incident Pole 220029S in the Incident Span.

¹⁷ CAL FIRE. "Investigation Report for Incident Number 22CARRU129712" (CAL FIRE Report), page 000006. September 5, 2023.

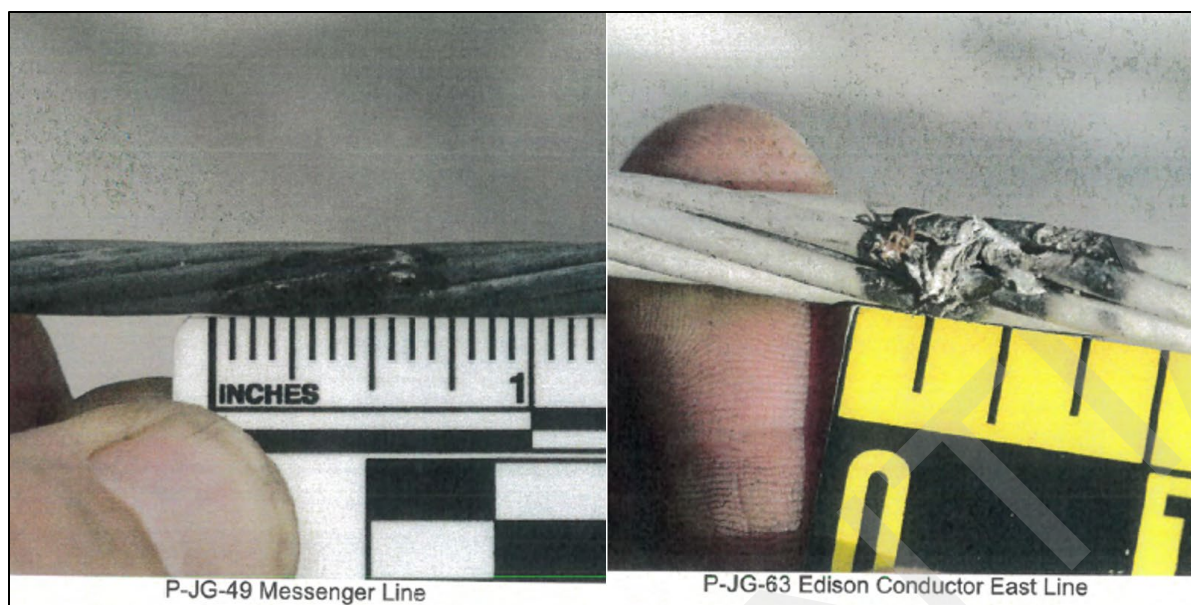


Figure 2: Photographs from CAL FIRE's report of the Frontier Communications messenger cable and SCE's East phase conductor.¹⁸

CAL FIRE performed a LIDAR scan of the area which showed the excessive sag on the eastern electrical line, as seen in Figures 3 and 4. CAL FIRE concluded that excessive sag likely led to the conductor swaying a greater distance due to the over 20 mile per hour winds in the area, which led the East phase to make contact with the Frontier Communications messenger cable and ignite the Fairview Fire.

¹⁸ CAL FIRE. "Investigation Report for Incident Number 22CARRU129712" (CAL FIRE Report), page 0000183 for Photo P-JG-49 and page 0000190 for Photo P-JG-63. September 5, 2023.

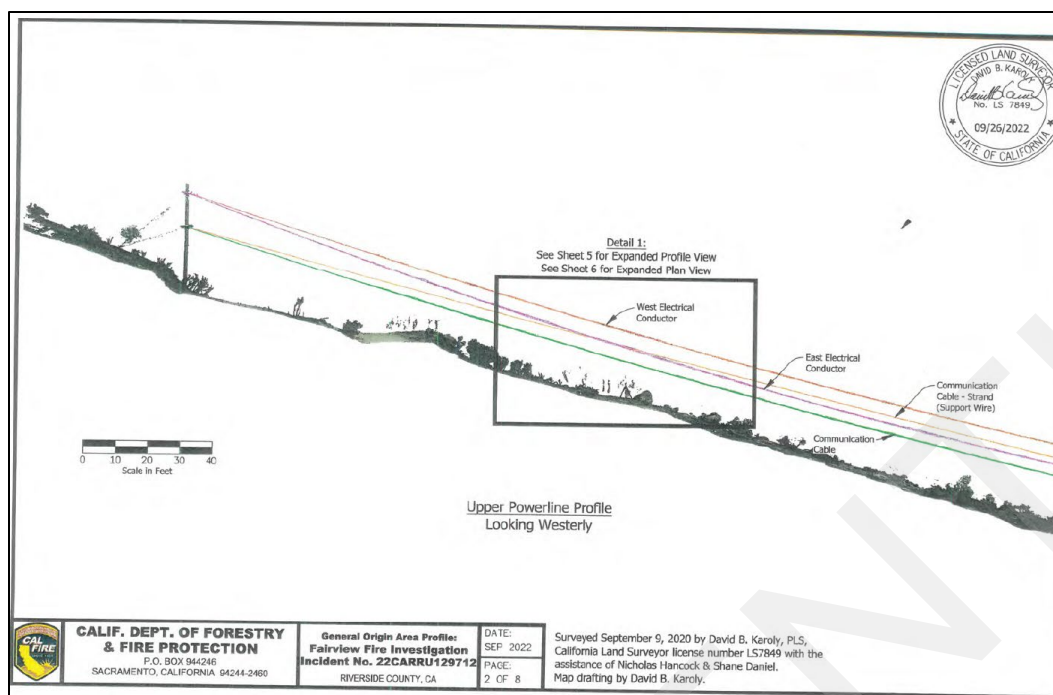


Figure 3: CAL FIRE LiDAR scan of the Incident Span.¹⁹

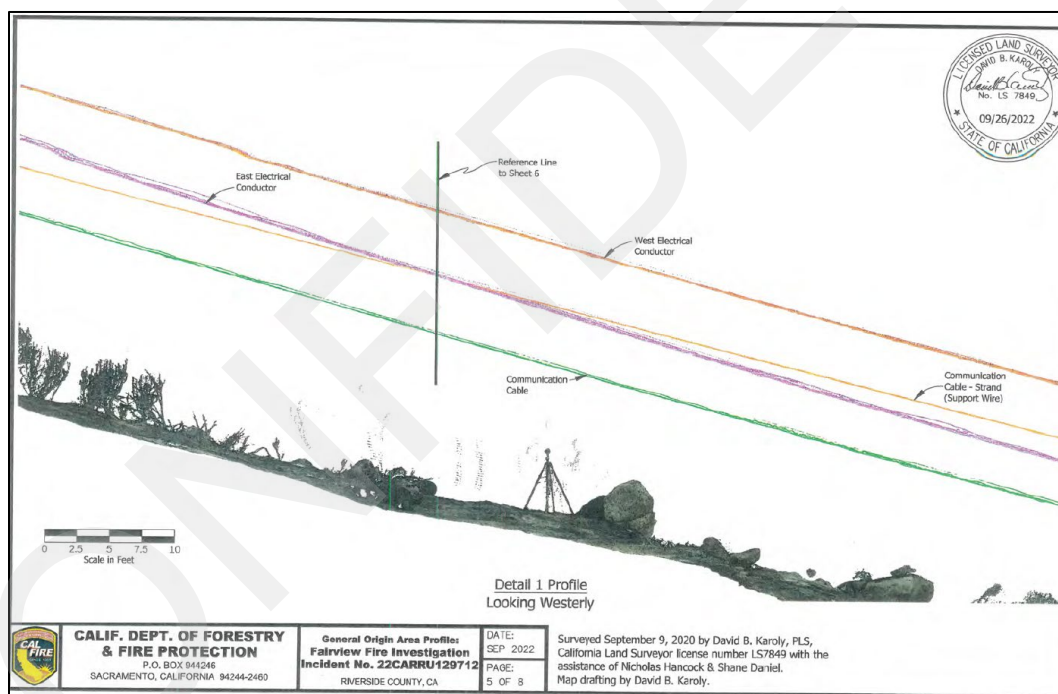


Figure 4: Detailed view of CAL FIRE LiDAR scan of the Incident Span.²⁰

¹⁹ CAL FIRE. "Investigation Report for Incident Number 22CARRU129712" (CAL FIRE Report), page 0000832. September 5, 2023.

²⁰ CAL FIRE. "Investigation Report for Incident Number 22CARRU129712" (CAL FIRE Report), page 0000835. September 5, 2023.

IV. SED Review and Analysis

A. Review of Event Timeline

SED reviewed the timeline of events provided by SCE in a response to DR01.²¹

1. Incident Timeline on September 4, 2022 (24-hours Prior to Ignition)

- The California Independent System Operator (CAISO) issued a Grid Restricted Maintenance Operations notice from 1200 hours through 2200 hours, due to anticipated high loads and temperatures across the CAISO Grid.
- CAISO issued a statewide Flex Alert from 1600 hours through 2100 hours.
- SCE activated several incident response teams to manage the incident.
- SCE issued a Fire Weather Threat (FWT) in effect for portions of Kern and Los Angeles counties through 0800 hours, based on weather forecasts.

2. Incident Timeline on September 5, 2022 (Day of Ignition)

- CAISO issued a Grid Restricted Maintenance Operations notice from 1200 hours through 2200 hours and a statewide Flex Alert from 1600 hours through 2200 hours.
- SCE issued a FWT for portions of Kern and Los Angeles counties, based on weather forecasts. SCE's System Operating Bulletin's (SOB) 322 operating requirements and restrictions were in effect and expired at 0800 hours on September 5, 2022.
- At 1529 hours, a portion of the Subject Distribution Circuit out of the Mayberry Substation relayed to lockout Remote Automatic Recloser (RAR) 0139 due to direct fire impact and was under imminent threat.
- At approximately 1537 hours, the Fairview Fire was reported to the Riverside County Fire Department Emergency Command Center, according to CAL FIRE's report.²²
- At 1753 hours, an SCE troubleman manually de-energized the Corsair 12kV (12,000 volts) circuit out of Stetson Substation, which was under imminent threat due to direct fire impact.
- At 1830 hours, SCE dispatched its Demand Response Events for commercial and residential customers through 2012 hours.
- At 2020 hours, SCE restored a partial load on the Subject Distribution Circuit.

3. Timeline of Events After the Incident Ignition

September 6, 2022

- CAISO issued a Grid Restricted Maintenance Operations notice from 1200 hours through 2200 hours and issued a statewide Flex Alert from 1600 hours through 2100 hours.

²¹ SCE. "Data Request Response to DR01 Question 1," pages 1-4, March 23, 2023.

²² CAL FIRE. "Investigation Report for Incident Number 22CARRU129712" (CAL FIRE Report), page 000006. September 5, 2023.

- At 0928 hours, SCE Fire Management facilitated access into the fire area for troublemen and line crews to clear hazards for firefighters. The Fairview Fire was 5% contained.
- At 1700 hours, SCE dispatched its Demand Response Events for commercial and residential customers through 2100 hours.

September 7, 2022

- CAISO issued a Grid Restricted Maintenance Operations notice from 1200 hours through 2200 hours and issued a Flex Alert watch from 1600 hours through 2100 hours.
- An SCE-issued FWT was declared for portions of Mono County from 1300 hours through 2000 hours, based on weather forecasts.
- At 1600 hours, SCE dispatched its Demand Response Events for commercial and residential customers through 2100 hours.
- At 1819 hours, SCE Fire Management revised the start time for the Fairview Fire to 1537 hours per CAL FIRE updates. The fire footprint was at approximately 9,846 acres with a 5% containment as of 0838 hours.
- At 1820 hours, a portion of the Subject Distribution Circuit out of Mayberry Substation was manually de-energized due to direct fire impact.

September 8, 2022

- CAISO issued a Grid Restricted Maintenance Operations notice from 1200 hours through 2200 hours and issued a statewide Flex Alert watch from 1500 hours through 2200 hours.
- An SCE issued FWT was declared for portions of Kern, Los Angeles, Orange, Riverside, San Bernardino, Santa Barbara, and Ventura counties from 0700 hours on September 8, 2022, through 2300 hours on September 9, 2022, based on weather forecasts.
- At 1600 hours, SCE dispatched its Demand Response Events for commercial and residential customers through 2100 hours.
- At 1648 hours, a portion of the Corsair 12kV Circuit out of Stetson substation was re-energized.
- At 2122 hours, the Resort 33kV Circuit out of Nelson substation was re-energized.

September 9, 2022

- CAISO issued a Grid Restricted Maintenance Operations notice from 1200 hours through 2200 hours and issued a statewide Flex Alert from 1600 hours through 2100 hours.
- An SCE issued FWT was declared for portions of Kern, Los Angeles, Orange, Riverside, San Bernardino, Santa Barbara, and Ventura through 2000 hours, based on weather forecasts.
- At 1815 hours, the Corsair 12kV Circuit out of Stetson substation was re-energized.
- At 2000 hours, PSPS conditions had abated, and no circuits remained in scope for de-energization.

September 10, 2022

- SCE activated several incident support teams to manage the incident.
- At 1200 hours, SCE demobilized the support teams.

September 11, 2022

- At 0949 hours, according to SCE's Fire Management, the Fairview Fire was at 45% containment. The fire showed minimal activity and fire crews made good progress. No threat was present to SCE facilities.

September 12, 2022

- At the request of CAL FIRE, SCE personnel removed both overhead primary conductors, four insulators, two crossarms, and a down guy wire from Incident Pole 220029S and Pole 220028S. All items removed were retained by CAL FIRE. There were no repairs to the subject span and no need for SCE to re-conductor since there was no load to service.
- CAL FIRE released the incident scene.

B. SED Field Observations

SED investigators conducted a site visit to the Incident Span on October 11, 2022, to inspect the Incident Location and the Incident Span where the Fairview Fire ignited. During the October 11, 2022, site visit, SED was unable to view certain evidence because prior to SED's arrival, CAL FIRE had removed the East and West²³ phase conductors supported by Pole 220028S and Incident Pole 220029S, the Frontier Communications cable, and the crossarm on Incident Pole 220029S.

1. Site Visit – Incident Location

Prior to visiting the Incident location, SED was aware of the following:

- CAL FIRE had collected SCE equipment from the Subject Distribution Circuit.
- The Fairview Fire ignited at approximately 1537 hours, in the vicinity of Fairview Avenue and Bautista Road, Hemet, Riverside County, in a Tier 3 HFTD.
- The Incident originated between two SCE Poles on a privately owned property.
- As of 1227 hours on Monday, October 3, 2022, the fire had covered approximately 28,307 acres and was 98 percent contained.
- On Monday, September 5, 2022, SCE reported the Incident to the CPUC under the media criteria.

On October 11, 2022, at 1200 hours, SED investigators met with SCE Senior Advisor Bernice Cordero and SCE Lineman [REDACTED] at Valle Vista Community Center, 43935 Acacia Avenue, Hemet, California. SED investigators followed SCE staff to the Incident Location to inspect Incident Pole 220029S and the Incident Span. Figures 5 and 6 show marked-up maps of the Incident Location.

²³ All references to the phase 1A conductor, A phase, West phase, and/or Wire 1 by either CAL FIRE, SCE and/or SED refer to SCE's phase 1A conductor supported by Pole 220028S and Incident Pole 220029S in the Incident Span.

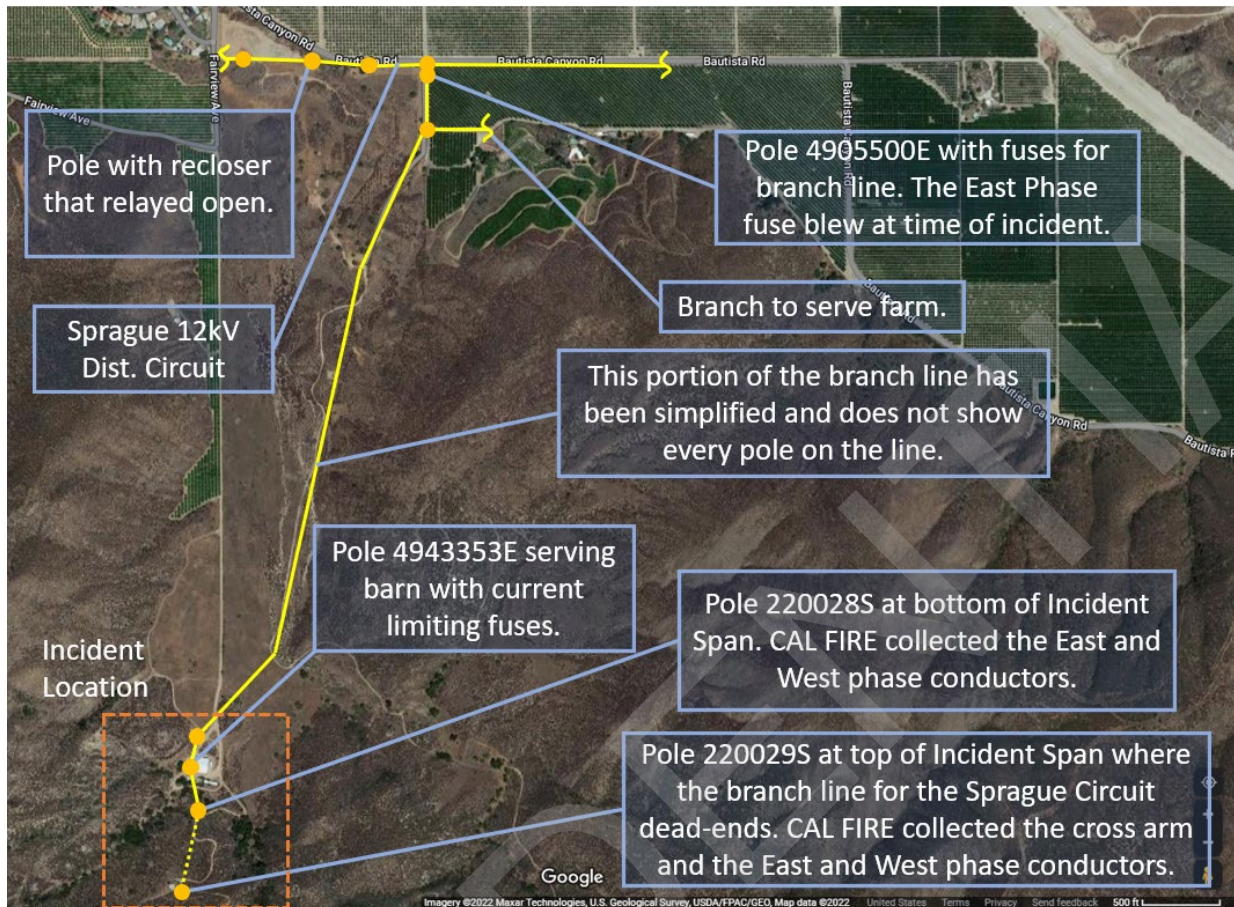


Figure 5: The Subject Distribution Circuit (Sprague 12kV) and the Incident Location outlined at the point where the Fairview Fire originated. The top of image is pointing north.

SCE staff stated that the Subject Distribution Circuit serves the area, and power flows from the Mayberry substation west to east along Bautista Road and into private farmland. The circuit has a branch line that goes south from Bautista Road to serve a farm and well, and then continues into the canyon towards the private barn where SED investigators parked their car. From there, the branch circuit travels up the hill of the canyon along the Incident Span until the line dead-ends at Incident Pole 220029S (Figure 6).

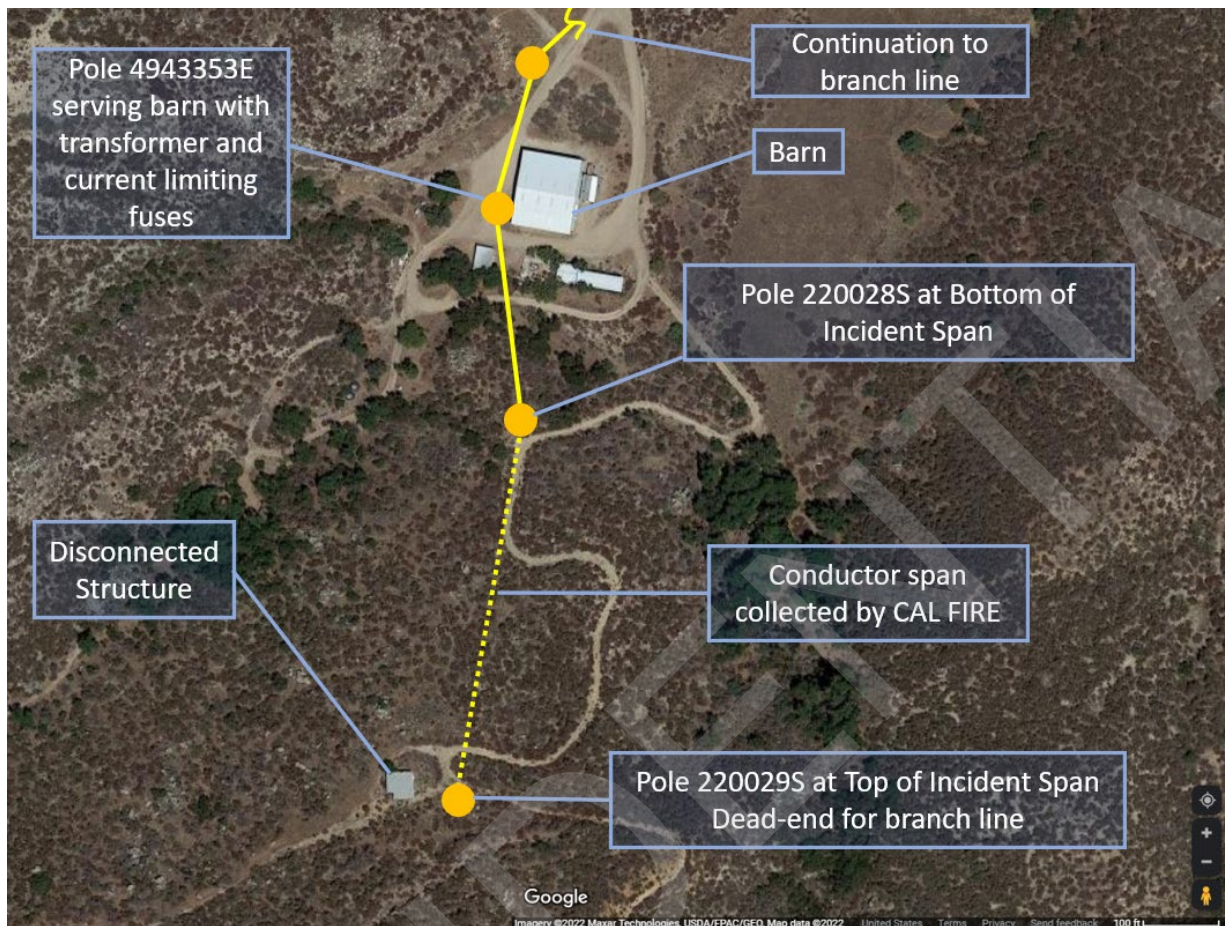


Figure 6: Detailed view of Incident Location.

SED investigators observed Incident Pole 220029S and the surrounding area at the top of the Incident Span. SCE staff informed SED investigators that CAL FIRE collected the crossarms, conductor lines, and communication lines from Incident Pole 220029S to Pole 220028S. SED investigators photographed the Incident Span from the top of the hill facing south towards the private barn, as seen in Figure 7.



Figure 7: View of Incident Span between Incident Pole 220029S at the top of hill (behind the camera) and Pole 220028S (brown pole in front of barn).

SED investigators used a range finder to estimate the distance between Incident Pole 220029S (See Figure 8) and Pole 220028S (See Figure 9) to be approximately 480 feet from the base of Pole 220028S to the top of Incident Pole 220029S. Prior to the site visit, SED was informed by CAL FIRE that it collected approximately 400 feet of conductor as evidence, which would match the entire span between the poles.



Figure 8: Incident Pole 220029S without the crossarms, conductor lines, and telecommunication lines which were removed and collected by CAL FIRE.



Figure 9: Close up view of Pole 220028S at the bottom of the Incident Span with conductor lines and communication lines collected by CAL FIRE.

SCE staff stated that the only evidence SCE collected were three “power fuses” which SCE removed from Pole 4905500E. SCE staff explained that power fuses are used in HFTDs because they are non-expulsive and do not result in blowing out flames or creating sparks when they activate. SCE staff did not know what caused the East phase fuse to activate. The three fuses are shown in Figure 10 below.



Figure 10: East, Middle, and West phase fuses collected by SCE from Pole 4905500E.

SCE staff stated that Pole 4905500E was located at the entrance to the private farmland with the locked gate. SED investigators asked for permission to take photos of this pole at the end of the site visit. SCE staff agreed and displayed the three power fuses for SED investigators to photograph. The Middle phase and West phase fuse did not activate while the East phase fuse blew open (See Figure 11).



Figure 11: The East phase fuse is missing the red cap, indicating that the fuse activated and opened the circuit.

SED investigators asked SCE staff about the unoccupied structure (See Figure 12) to the west of Incident Pole 220029S, and SCE staff stated that the structure had been disconnected from the Subject Distribution Circuit branch line before the Fairview Fire incident but did not know the exact date of the disconnection and would need to look through internal records in order to determine this information. In addition, SCE staff stated that they believe the property owner did not have proper permits for the structure to be a dwelling unit and that may be the reason why the structure was disconnected from service. Lastly, SCE staff stated that the dead-end Incident Pole 220029S did not have a transformer installed, and that the Incident Span was energized during the incident but did not serve any equipment.



Figure 12: Unoccupied structure on the top of the hill, which was unconnected to the dead-end Incident Pole 220029S.

After walking the Incident Span, SED investigators arrived back at the private barn and Pole 4943353E (See Figure 13). SED investigators asked SCE staff to explain why the fuses at Pole 4943353E serving the barn did not blow and SCE staff explained that the fuses at this location are current limiting fuses which protect the circuit line from the transformer rather than to protect the transformer from the line. In addition, SCE staff explained that these types of current limiting fuses do not activate when there is a fault on the distribution primary circuit.



Figure 13: Pole 4943353E with a transformer and the current limiting fuses serving the private barn.

SED investigators drove with SCE staff to Pole 4905500E. This pole is located just inside the private gate and supported the three power fuses that SCE collected, including the East phase fuse that blew eight minutes before the Fairview Fire reportedly started. Pole 4905500E had new fuses installed at the time of the site visit and is shown in Figure 14.



Figure 14: Pole 4905500E serving a branch line of the Subject Distribution Circuit into private farmland.

Lastly, SCE staff stated that a pole towards the west (parallel to Bautista Road) contained the RAR 0139 which recorded circuit activity eight minutes before the reported time of the Fairview Fire ignition. The pole containing RAR 0139 is shown in Figure 15.



Figure 15: Pole with RAR 0139 which relayed open on September 5, 2022, at 1529 hours.

2. Site Visit – Evidence Viewing

On February 15, 2024, SED investigators and SED counsel met with CAL FIRE staff counsel at CAL FIRE's training facility at 23300 Castle Street in Riverside, California. CAL FIRE staff displayed the evidence that CAL FIRE collected on September 12, 2022. Other attendees included California Attorney General's Office attorneys, private law firm fire investigators, several consultants, and SCE's counsel and metallurgist.

CAL FIRE arranged the 11 items of evidence on tables in the outside courtyard of the training facility. SED investigators inspected the items, including the Incident Pole 220029S crossarm, insulators, a guy wire, and various metal brackets. SED investigators observed the following items of importance related to the Fairview Fire ignition:

- 499 feet of SCE's East and West phase conductors, Frontier Communications' fiber optic cable, and Frontier Communications' messenger cable²⁴ laid out by CAL FIRE on 25 outdoor tables.
- Several small fragments of metallic debris collected by CAL FIRE at or around the Incident Location on September 8, 2022, and September 10, 2022.

²⁴ A steel messenger cable is wrapped around a communication/fiber optic cable to provide structural support.

As shown in Figure 16 below, CAL FIRE bubble wrapped areas of interest on the Frontier Communications messenger cable and SCE's East phase conductor.



Figure 16: SCE's East and West phase conductors and Frontier Communications' fiber optic cable and messenger cable.

SED investigators observed CAL FIRE staff unwrap the areas of interest for all parties to inspect and photograph. As shown in Figure 17 below, SCE's East phase conductor displayed two distinctive scorch marks consistent with arcing and/or electrical damage spaced approximately seven inches apart.

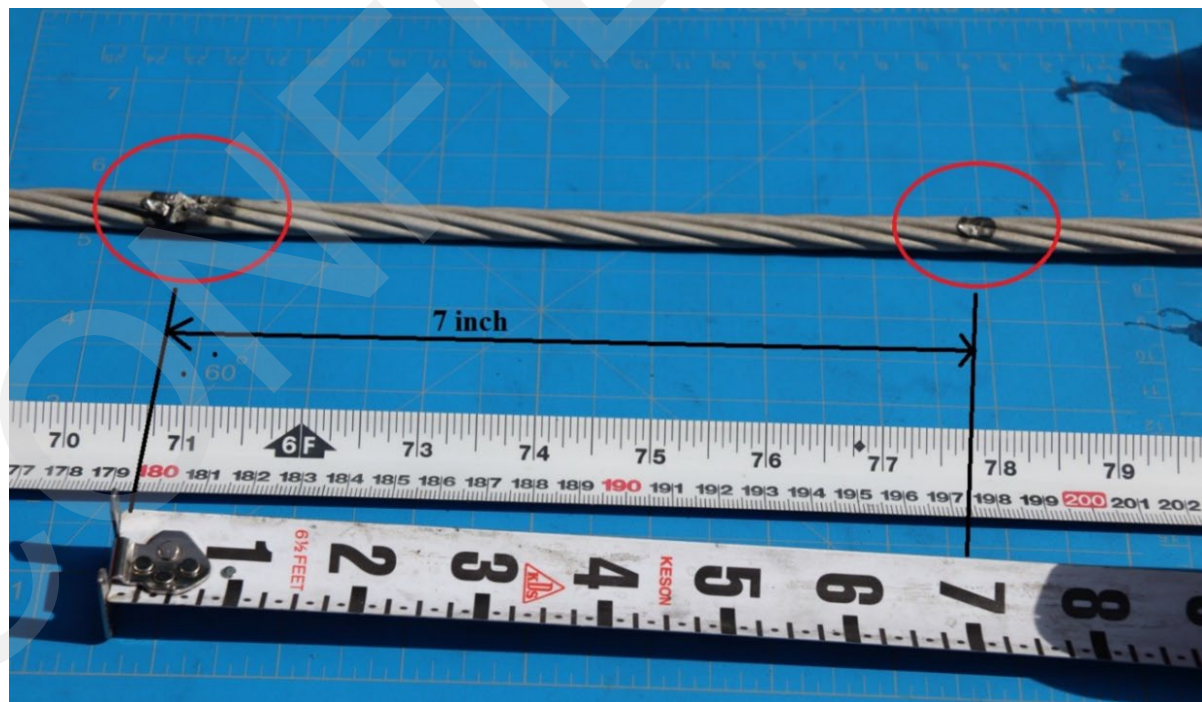


Figure 17: SCE's East phase conductor with two scorch marks.

Figure 18 below shows a close-up of the damaged area on SCE's East phase conductor. In this photo, metal from the woven conductor strands appears to have melted off and dark discoloration consistent with arcing appears all around the area.

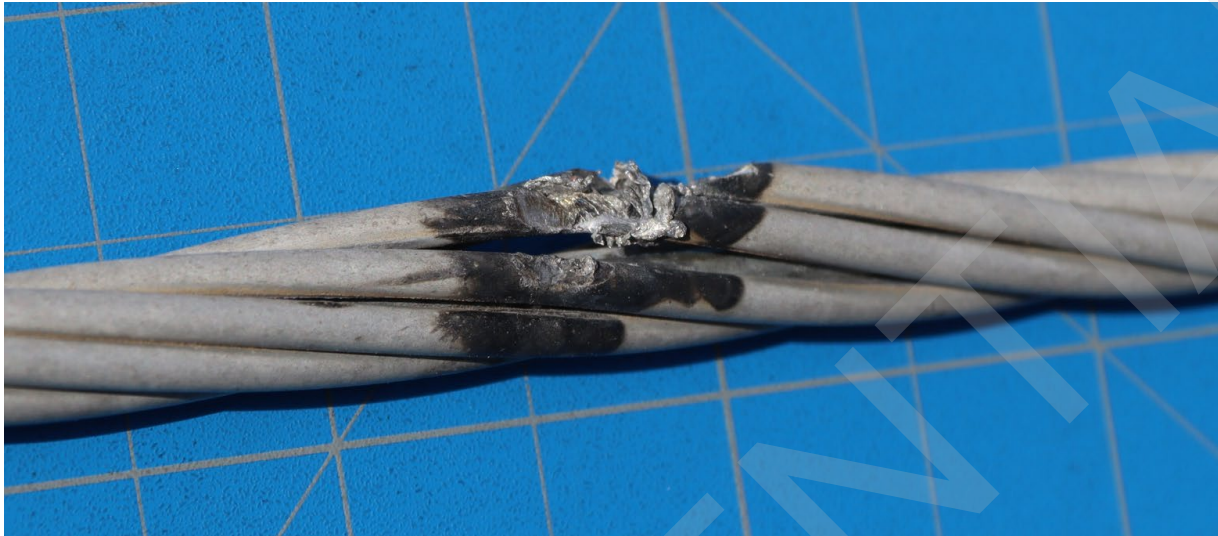


Figure 18: Detailed view of one of the scorch marks on SCE's East phase conductor showing missing metal.

SED investigators observed similar black marks on the Frontier Communications messenger cable, as shown below in Figure 19 below. The black marks on the messenger cable were also spaced seven inches apart just like the black scorch marks seen on SCE's East phase conductor.

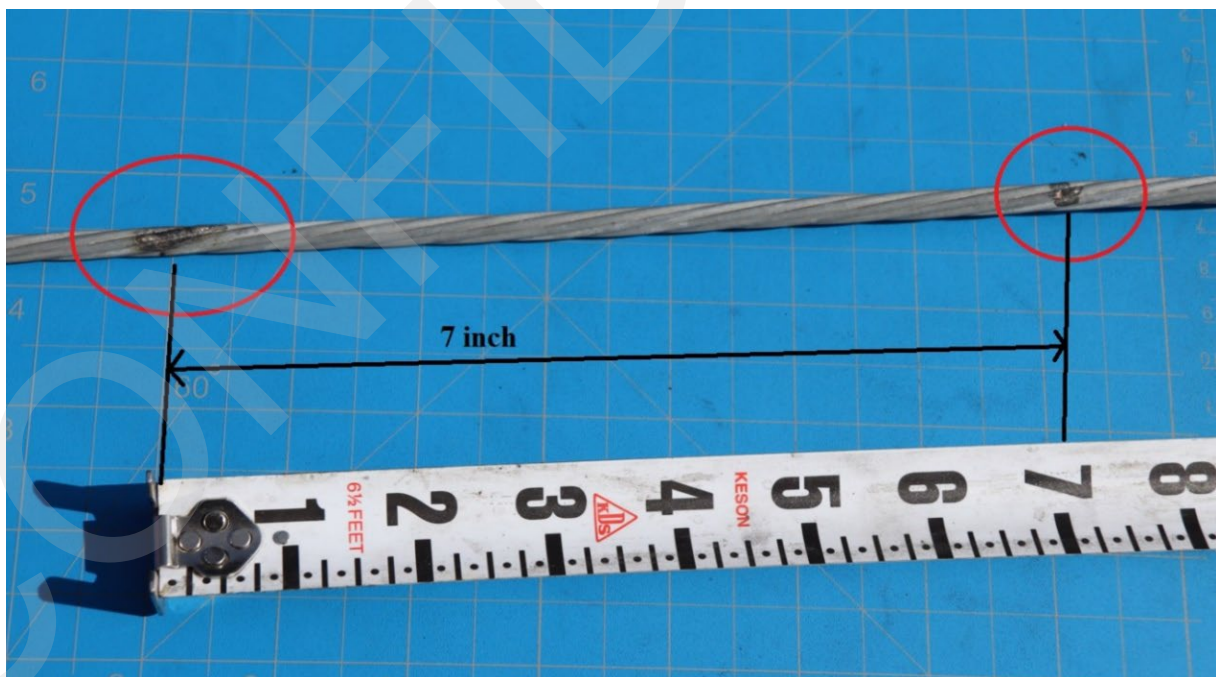


Figure 19: Frontier Communications' messenger cable exhibiting two distinct scorch marks.

The scorch marks and visible damage seen on both SCE's East phase conductor and Frontier Communications' messenger cable are consistent with electrical arcing damage.

CAL FIRE staff opened and displayed several metallic fragments collected by CAL FIRE investigators at the Incident Location on September 8, 2022. As seen in Figure 20 below, the metallic fragments appear to have broken off or separated from a larger metal structure. SED investigators were unable to verify if the metallic fragments melted off of SCE's East phase conductor or the Frontier Communications messenger cable.



Figure 20: Miscellaneous metal pieces/fragments recovered by CAL FIRE at the Incident Location.

In addition, CAL FIRE staff displayed several pieces of fire debris collected at the Incident Location using a magnet on September 10, 2022. The fire debris is shown in Figure 21 below.



Figure 21: Fire debris collected by CAL FIRE using a magnet.

C. SED Document Review and Investigation

This section discusses SED's review of SCE's manuals, inspection guidelines, Data Request (DR) responses and other documentation related to the Fairview Fire Incident.

1. Analysis of Conductor Clearances

SCE stated in the 20-day report that the RAR 0139 operated at 1529 hours and relayed which caused a lock-out of the Subject Distribution Circuit and a fuse to blow on Pole No. 4905500E.²⁵ The Fairview Fire ignition was reported at approximately 1537 hours, eight minutes after RAR 0139 relayed.

SED asked SCE to provide outage information from the Subject Distribution Circuit between 24 hours before the start of the fire and 24 hours after the fire ignition. SCE provided the Sprague Interruption Log Sheet which showed that on September 5, 2022, at 1529 hours, RAR 0139 tripped open due a phase to ground fault.²⁶

²⁵ SCE. "20 day-report – 202209870- CPUC 315 Letter," page 1. October 3, 2022.

²⁶ SCE. "Data Request Response to DR01 Question 16(b)," page 1. January 30, 2023.

SED then asked SCE to explain how RAR 0139 detected a phase to ground fault. SCE responded that at 1529 hours, the phase 1A²⁷ relay on RAR 0139 recorded an overcurrent of 641 amps, which triggered RAR 0139.²⁸ However, SCE later clarified that phase 1B²⁹ of the Subject Distribution Circuit was wired to the phase 1A input of RAR 0139 and phase 1B triggered RAR 0139 to trip open due to the phase to ground fault, not phase 1A as SCE had initially stated.³⁰

SED then requested SCE to run a simulation of a phase to ground fault located at or near the pole closest to the Fire Ignition area, for the worst-case scenario involving an energized conductor touching a communication line. SCE responded that based on their internal simulation, a phase to ground fault created 646 amps of current.³¹ The 646 amps of current SCE provided in the simulation resembled the 641 amps of current recorded by RAR 0139 at the time of the Fairview Fire reported ignition. Moreover, SED asked SCE if a phase to ground fault detected by a recloser due to an overcurrent is indicative of a phase to ground fault between an energized conductor and communication cable. SCE responded that a phase to ground fault can happen anytime a grounded object contacts an energized conductor.³²

GO 95, Rule 38 requires that utility maintain minimum clearances between multiple wires and provides a table with the minimum clearances that are required. The clearances specified in Rule 38 are based on the conditions of a temperature of 60°F and no wind and prohibit a clearance reduction of more than five percent in Tier 3 HFTD, and 10 percent in Tier 2 HFTD. The Subject Distribution Circuit spans above the Incident Span between Pole 220028S and Incident Pole 220029S is in a Tier 3 HFTD. GO 95, Rule 38, Table 2, Case No. 11 Column C requires a vertical separation for 7,500-20,000-volt conductors and communication cables supported on the same pole of 72 inches (6 feet).³³ In Tier 3 HFTD, the clearance between conductors and communication cables cannot reduce below 68.4 inches (5.7 feet) at any time, according to the five percent minimum clearance allowance of Rule 38.

SED asked SCE to provide the minimum distance between phase 1A and phase 1B³⁴ and the Frontier Communications messenger cable³⁵ supported by Incident Pole 220029S and Pole 220028S. SCE stated that on a LiDAR scan taken on June 2, 2020, the minimum distances between the phase 1A and phase 1B conductors and the Frontier Communications messenger

²⁷ SCE sometimes refers to the phase 1A conductor as A-Phase and the phase 1B conductor as the B-Phase.

²⁸ SCE. "Data Request Response to DR02 Question 4(b)," page 1. July 10, 2023.

²⁹ SCE sometimes refers to phase 1B conductor as B-Phase

³⁰ SCE. "Data Request Response to DR02 Question 16(a)," page 2. July 10, 2023.

³¹ SCE. "Data Request Response to DR02 Question 6," page 1. July 10, 2023.

³² SCE. "Data Request Response to DR02 Question 5(c)," page 1, July 10, 2023.

³³ GO 95, Rule 38, page III-28.

³⁴ SCE sometimes refers to Wire 1 as the A phase conductor and Wire 2 as the B phase conductor.

³⁵ The steel messenger cable provides structural support for the Frontier Communications fiber optic cable.

cable were 6 feet and 6.68 feet, respectively,³⁶ which meets the minimum clearance required by GO 95, Rule 38. However, SED then asked SCE to provide the same distances between the phase 1A and phase 1B conductors and Frontier Communications messenger cable taken in a post-fire LiDAR scan fire by SCE on September 8, 2022. SCE stated that on the September 8, 2022 postfire LiDAR scan, the distance between the phase 1A conductor and the Frontier Communications messenger cable was 5 feet and the distance between the phase 1B conductor and the Frontier Communications messenger cable was 4.8 feet.³⁷ The clearance measurements from the June 2, 2020, LiDAR scan, the September 8, 2022, post-fire LiDAR scan, and the GO 95, Rule 38 minimum clearance between an energized conductor and a messenger cable are listed in Table 1 below.

Date of LiDAR Scan	Phase 1A Clearance	Phase 1B Clearance
6/2/2020	6 feet	6.68 feet
9/8/2022	5 feet	4.8 feet
GO 95, Rule 38 (minimum clearance requirement)	5.7 feet	5.7 feet

Table 1: SCE's phase 1A and phase 1B clearance measurement from the Frontier Communications messenger cable.

GO 95, Rule 38, Table 2, Case No. 11 Column C requires the distance between an energized conductor and a communication cable to be no less than 5.7 feet at any time. Based on the September 8, 2022, LiDAR scan measurements provided by SCE, the clearance between the phase 1A and phase 1B conductors and the Frontier Communications messenger cable reduced beyond the 5.7 feet maximum allowable clearance set by GO 95, Rule 38.

In the investigation, SED also asked SCE to provide all photos taken by SCE related to the incident not provided in the 20-day report. SCE provided photos of one of its conductors³⁸ and photos of the Frontier Communications messenger cable which showed damage to both the conductor and the messenger cable.³⁹ However, SCE did not identify or provide a description of the photos in the submittals. SED cross referenced SCE's photos of a damaged conductor and messenger cable with similar photos in the CAL FIRE investigation report and determined that the photos provided by SCE were the phase 1B conductor and the Frontier Communications messenger cable.

Figures 21 and 22 below both show photos of SCE's phase 1B conductor. Both sets of photos show a similar black scorch mark damage and location (circled red) on the phase 1B conductor. SCE provided the photo shown in Figure 21 but did identify and label the conductor. SED

³⁶ SCE. "Data Request Response to DR03 Question 4(a) and 4(b)," page 1. August 25, 2023.

³⁷ SCE. "Data Request Response to DR03 Question 5(b) and 5(c)" page 1, August 25, 2023.

³⁸ SCE refers to its phase 1B conductor as Wire 2.

³⁹ SCE. "Data Request Response to DR01 Question 39," IMG_3596. April 28, 2023. SCE did not identify the conductor in the photo shown in IMG_3596.

identified a similar photo (See Figure 22) in the CAL FIRE investigation report that shows the same damage area and location on SCE's phase 1B conductor.

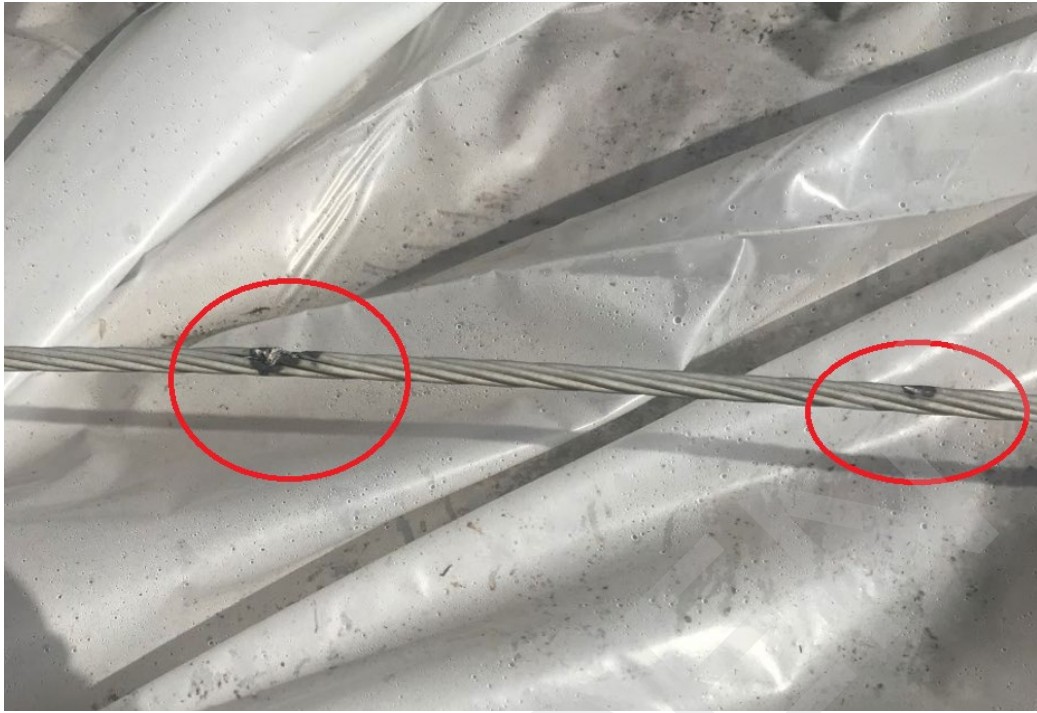


Figure 21: SCE provided a photo of the phase 1B conductor showing damaged areas.

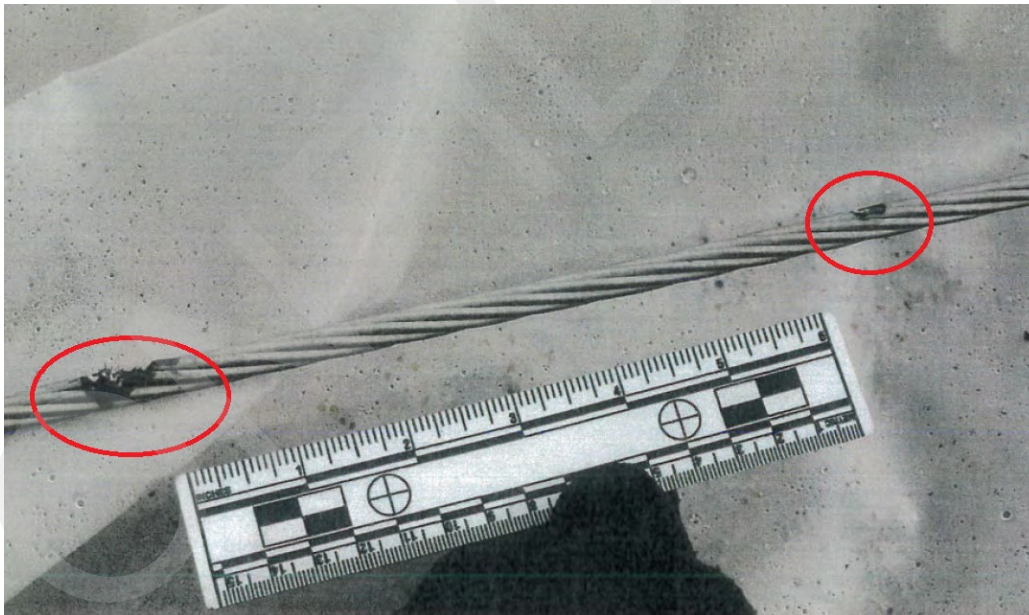


Figure 22: CAL FIRE's photo of SCE's phase 1B conductor showing damaged areas.⁴⁰

⁴⁰ CAL FIRE. "Investigation Report for Incident Number 22CARRU129712" (CAL FIRE Report), page 0000185, P-JG-54. September 5, 2023. CAL FIRE refers to SCE's phase 1B conductor as the Edison Conductor East Line.

Additionally, SCE provided photos of the Frontier Communications messenger cable, which SED analyzed and matched with a similar photo seen in the CAL FIRE investigation report. Both photos (See Figures 23 and 24) show the same damage and location where SCE's phase 1B conductor most likely struck the Frontier Communications messenger cable. The red circled areas in the photos show the Frontier Communications messenger cable and signs of damage consistent with electrical arcing.

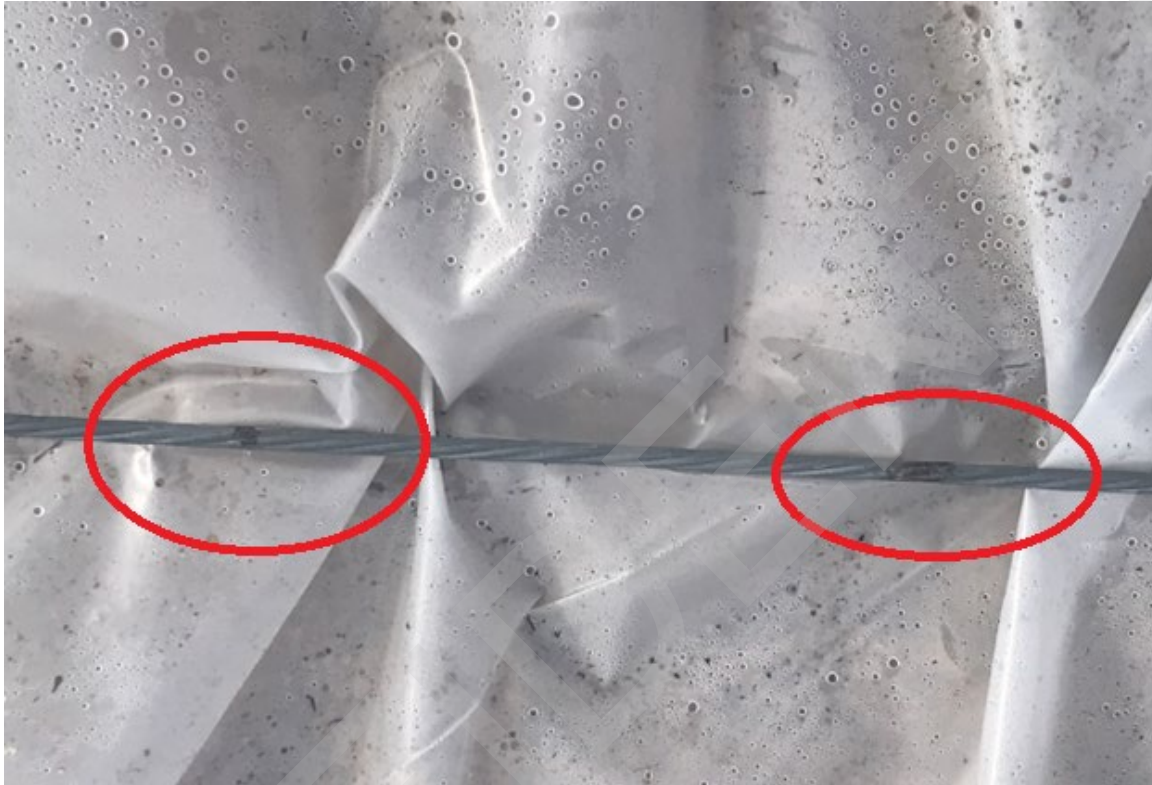


Figure 23: SCE provided a photo of the Frontier Communications messenger cable showing damage.⁴¹

⁴¹ SCE. "Data Request Response to DR01 Question 39," IMG_3603. April 28, 2023.



Figure 24: CAL FIRE's photo of the Frontier Communications messenger cable showing damage.⁴²

The black scorch mark damage seen on both the phase 1B conductor and the Frontier Communications messenger cable, the phase to ground fault detected by RAR 0139 at the time of the Fairview Fire ignition, and the post-fire LiDAR scan measurements that showed a reduced conductor to messenger cable clearance are all evidence of the phase 1B conductor striking the Frontier Communications messenger cable.

2. Analysis of Sag Dimensions on the Phase 1A and Phase 1B Conductors

SED asked SCE to state the maximum allowable sag of both conductors supported by Pole 220028S and Incident Pole 220029S, as required by SCE's internal procedures. SCE stated that the maximum allowable sag for the Incident Span ACSR (Aluminum Conductor Steel Reinforced) conductors supported by Pole 220028S and Incident Pole 220029S was 9 feet and 10 inches at a temperature of 130 degrees Fahrenheit per SCE's Distribution Overhead Construction Standards manual.⁴³

SED asked SCE to explain why the sag on the phase 1A and phase 1B conductors was greater than the maximum allowable sag for the Incident Span. However, SCE could not provide an

⁴² CAL FIRE. "Investigation Report for Incident Number 22CARRU129712" (CAL FIRE Report), page 0000187, P-JG-57. September 5, 2023.

⁴³ SCE. "Data Request Response to DR03 Question 3(c)," page 2. August 25, 2023.

explanation or identify a specific reason why the phase 1A and phase 1B conductors in the Incident Span were sagging below SCE's allowable limit as far back as June 2, 2020.⁴⁴

GO 95, Rule 23.3(b) defines the apparent conductor sag as the maximum distance measured vertically in a given span from a straight line between the two points of support of the span at uneven ground.⁴⁵ Thus, per Rule 23.3(b), the sag measurements of the phase 1A and phase 1B conductors are shown in Figure 25 below.

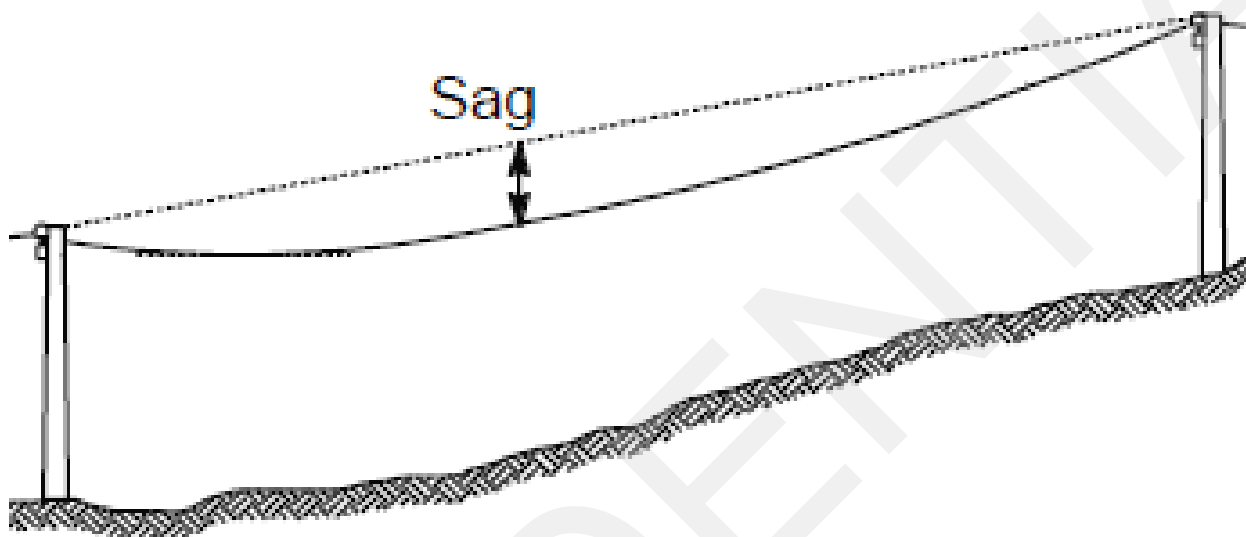


Figure 25: Profile drawing of conductor sag measurements, as defined by GO 95, Rule 23.3(b).

SED asked SCE to provide LiDAR scan measurement data for the five most recent LiDAR inspections conducted on the Incident Span between 2012 and 2022. However, SCE could only produce data from the LiDAR scan taken on June 2, 2020. SCE stated that it had no other records of LiDAR scan data in its possession and there were no notifications or work orders generated from the June 2, 2020, LiDAR scan.⁴⁶

SED then asked SCE to provide the sag measurements taken in the June 2, 2020, LiDAR scan of the phase 1A and phase 1B conductors supported by Pole 220028S and Incident Pole 220029S in the Incident Span. SCE provided a profile drawing of the Incident Span between Incident Pole 220029S and Pole 220028S with 10.5 feet of sag for the phase 1A conductor and 11.1 feet of sag for the phase 1B conductor.⁴⁷ Figure 26 below shows the profile drawing of the Incident Span as well as the sag measurements of the phase 1A and phase 1B conductors provided by SCE from the June 2, 2020, LiDAR scan.

⁴⁴ SCE. "Data Request Response to DR04 Question 1(a) and 1(b)," page 1. October 11, 2023.

⁴⁵ General Order 95, Rule 23.3(b), Apparent Sag, page II-19.

⁴⁶ SCE. "Data Request Response to DR01 Question 14," page 1. April 17, 2023.

⁴⁷ SCE. "Data Request Response to DR02 Question 3(c)ii," page 1. July 10, 2023.

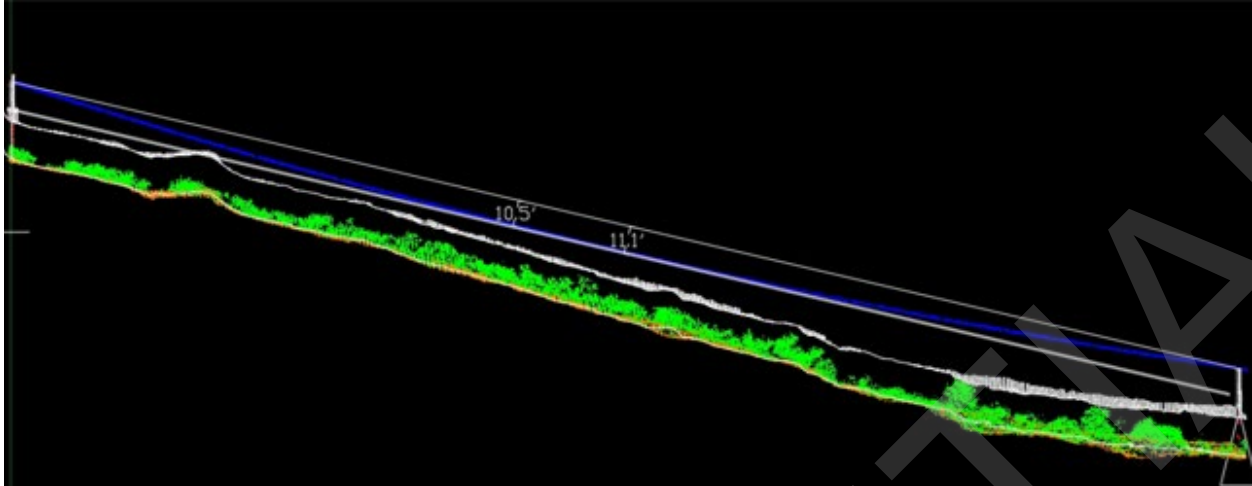


Figure 26: Profile drawing of the Incident Span based on SCE's June 2, 2020, LiDAR scan with sag measurements of the Incident Span conductors.

As SCE's internal construction manual sets the sag limit for the phase 1A and phase 1B conductors, SED considers any sag beyond the maximum allowable limit as excessive. Therefore, excess sag on both the phase 1A and phase 1B conductors directly violated SCE's internal sag limit for conductors as of June 2, 2020. SCE was unable to provide SED any other LiDAR scans or measurements of the Incident Span conductors prior to June 2, 2020. As a result, SED is unable to confirm the sag on the conductors prior to June 2, 2020.

Furthermore, SED asked SCE to provide LiDAR scan measurements for the phase 1A and phase 1B conductors taken on September 8, 2022, in a post-fire LiDAR scan. SCE provided the post-fire LiDAR scan measurements which showed that on September 8, 2022, the sag on the phase 1A conductor was 11.9 feet and the sag on the phase 1B conductor was 18.3 feet.⁴⁸ The pre-fire and post-fire LiDAR scan sag measurements as well as SCE's internal maximum sag limit are shown in Table 2 below.

Date of LiDAR Scan	Phase 1A Sag Measurement	Phase 1B Sag Measurement
6/2/2020	10.5 feet	11.1 feet
9/8/2022	11.9 feet	18.3 feet
SCE's maximum sag limit	9.833 feet ⁴⁹	9.833 feet ⁵⁰

Table 2: SCE's phase 1A conductor and phase 1B conductor clearance from the Frontier Communications messenger cable.

⁴⁸ SCE. "Data Request Response to DR03 Question 5(a)," page 1. August 25, 2023.

⁴⁹ SCE Company Distribution Overhead Construction Standards manual limits the maximum sag limit at 9 feet and 10 inches which converts to 9.833 feet. This maximum sag requirement is listed on Table CO 140-1 of SCE's Distribution Overhead Construction Standards.

⁵⁰ SCE Company Distribution Overhead Construction Standards manual limits the maximum sag limit at 9 feet and 10 inches which converts to 9.833 feet. This maximum sag requirement is listed on Table CO 140-1 of SCE's Distribution Overhead Construction Standards.

Between the sag measurement taken on June 2, 2020, and the post-fire sag measurements taken on September 8, 2022, the sag on the Incident Span conductors increased dramatically and SCE did not identify a reason or provide an explanation for the increased sag between the specified time period. SCE also provided photos of the Incident Span taken on September 7, 2022. Figure 27 below shows the Incident Span viewed from the top of the hill towards the bottom of the hill. In the photo, the phase 1B conductor significantly sags compared to the phase 1A conductor.⁵¹



Figure 27: View of the Incident Span from the top of the hill taken by SCE on September 7, 2022.

⁵¹ SCE. "Data Request Response to DR01 Question 39," IMG_3535. April 28, 2023.

SCE provided a short video clip of the Incident Span viewed from the bottom of the hill near Pole 220028S looking up towards Incident Pole 220029S at the top of the hill. As shown in a frame from that video clip in Figure 28 below, SCE's phase 1B conductor appears to significantly sag lower than the phase 1A conductor.



Figure 28: Southern view of the Incident Span taken by SCE on September 7, 2022.⁵²

⁵² SCE. "Data Request Response to DR01 Question 39," screenshot of IMG_0161 at 2 seconds. April 28, 2023.

Figures 27 and 28 show two different views of the Incident Span, yet both display a significant difference in sag between the phase 1B conductor and the phase 1A conductor. Before the start of the Fairview Fire, both conductors already sagged beyond the maximum sag limit allowed by SCE's internal procedure, but the sag on phase 1B conductor increased dramatically in the September 8, 2022, post-fire LiDAR scan measurements.⁵³

3. Analysis of Utility's Compliance with Internal Procedures

GO 95, Rule 31.1 requires electrical utilities such as SCE to design, construct, and maintain their facilities in accordance with accepted good practices for the intended use under known local conditions.⁵⁴ Pursuant to Rule 31.1, SCE's own internal procedures constitute "accepted good practices." SED reviewed SCE's actions related to the Fairview Fire to evaluate the utility's compliance with its own internal procedures for inspections in the Incident Span.

SCE's phase 1A and phase 1B conductors in the Incident Span sagged below SCE's maximum allowable sag limit of 9 feet and 10 inches as of June 2, 2020.⁵⁵ SED asked SCE for the last five years of inspection records on the Incident Span to verify if SCE had identified and issued any corrective actions regarding the excessive sag of the phase 1A and phase 1B conductors that was present as of June 2, 2020.

SCE provided records of grid patrol inspections,⁵⁶ overhead detailed inspections (ODI), aerial and enhanced overhead inspections (EOI),⁵⁷ and three intrusive pole inspections⁵⁸ conducted on the Incident Span.

Table 3 below lists all the inspections conducted by SCE on Poles 220028S and Incident Pole 220029S in the Incident Span, and notifications and corrective actions SCE took to address the issues found during the inspections. As SCE had provided the June 2, 2022, LiDAR scan measurements that confirmed excessive sag existed on the phase 1A and phase 1B conductors as far back as June 2, 2020, SED wanted to review SCE's inspections between 2020 and 2022 in order to assess whether SCE had identified and generated notifications and repaired the excessive sag on the Incident Span conductors.

⁵³ On the September 8, 2022, LiDAR scan measurement, the phase 1B conductor had 18.3 feet of sag and the phase 1A conductor had 11.9 feet of sag, a difference of 6.4 feet.

⁵⁴ GO 95, Rule 31.1, page III-5.

⁵⁵ SCE's June 2, 2020, LiDAR scan measurement of the phase 1A and phase 1B conductors.

⁵⁶ SCE. "Data Request Response to DR01 Question 10," *Data Request SED-SCE-001 Fairview Fire Q10 Response.xlsx*, March 23, 2023.

⁵⁷ SCE. "Data Request Response to DR01 Question 11," *SED-SCE-001 Fairview Fire Q11.xlsx*, April 17, 2023.

⁵⁸ SCE. "Data Request Response to DR01 Question 7(a)," *Data Request SED-SCE-001 Fairview Fire Q7 Response.xlsx*, April 28, 2023.

Inspection Type	Date of Inspection	Structure(s) Inspected	Corrective Action	Issue identified	Work Order completed
Grid Patrol	3/15/2018	Pole 220029S and 220028S	No	No	N/A
Grid Patrol	4/8/2019	Pole 220029S and 220028S	No	No	N/A
Grid Patrol	5/26/2020	Pole 220029S and 220028S	No	No	N/A
Grid Patrol	5/11/2021	Pole 220029S and 220028S	No	No	N/A
Grid Patrol	5/11/2022	Pole 220029S and 220028S	No	No	N/A
Overhead Detailed Inspection	5/16/2017	Pole 220029S and 220028S	No	No	N/A
Overhead Detailed Inspection	7/31/2020	Pole 220029S and 220028S	No	No	N/A
Overhead Detailed Inspection	3/16/2021	Pole 220029S and 220028S	No	No	N/A
Overhead Detailed Inspection	2/10/2022	Pole 220028S only	No	No	N/A
Aerial and Enhanced Overhead Inspection	11/4/2019	Pole 220029S only	No	No	N/A
Aerial and Enhanced Overhead Inspection	4/29/2019	Pole 220029S and 220028S	Yes	Replace damaged molding on Pole 220029S	4/1/2022
Aerial and Enhanced Overhead Inspection	7/8/2020	Pole 220029S and 220028S	Yes	Primary crossarm on Pole 220028S damaged and needs replacement.	1/4/2021
Aerial and Enhanced Overhead Inspection	5/8/2021	Pole 220029S and 220028S	No	No	N/A
Aerial and Enhanced Overhead Inspection	2/23/2022	Pole 220029S and 220028S	No	No	N/A
Intrusive pole testing	12/15/2001	Pole 220028S only	No	No	N/A
Intrusive pole testing	3/11/2011	Pole 220029S and 220028S	No	No	N/A
Intrusive pole testing	6/16/2022	Pole 220029S and 220028S	No	No	N/A

Table 3: SCE's inspections conducted between 2017-2022.

SCE provided grid patrol inspections performed on May 11, 2021, and May 11, 2022, and ODIs performed on July 31, 2020, March 16, 2021, and February 16, 2022. In addition, SCE completed EOIs on July 8, 2020, May 8, 2021, and February 23, 2022.

SCE stated that the grid patrol inspections conducted on May 11, 2021, and May 5, 2022, did not identify any issues or generate any repair notifications on the Incident Span.⁵⁹ In addition, none of the ODIs and EOIs listed in Table 3 identified any issues related to excessive or improper sag on the Incident Span. SCE inspectors generated a single notification from the July 8, 2020, EOI on Pole 220028S that identified a damaged primary crossarm, which SCE subsequently replaced on January 4, 2021. Because SCE's June 2, 2020, LiDAR scan data of the Incident Span conductors confirmed that excessive sag existed on the phase 1A and phase 1B conductors as far

⁵⁹ SCE. "Data Request Response to DR01 Question 10," page 1. March 23, 2023.

back as of June 2, 2020,⁶⁰ SED asked SCE to provide documentation showing the initial sag measurements and line tension on the phase 1A and phase 1B conductors after SCE replaced the crossarm on Pole 220028S on January 4, 2021. However, SCE was unable to provide the requested documentation and stated that location specific line tension and sag is not captured during maintenance repairs and replacements.⁶¹

SED requested training manuals and guidelines to understand how SCE trains its inspectors and what criteria and procedures SCE inspectors use to determine notifications and corrective actions during inspections.

SCE provided SED with several versions of its ODI guidelines, annual grid patrol inspection guidelines, and a new inspector training manual that were updated quarterly between June 2020 and September 2022.⁶² All versions of the grid patrol inspection and ODI manuals submitted by SCE in effect between 2020 and 2022 require SCE's inspectors to document "excessive slack in high wind areas."⁶³ SCE's internal procedure manuals for both grid patrol inspections and ODIs refer to excessive sag as "excessive slack."⁶⁴

SED asked SCE to confirm if the one square mile around the Incident Span between Incident Pole 220029S and Pole 220028S is in a high wind area and to explain how SCE's inspectors are trained to observe and record excessive sag during grid patrol inspections and detailed inspections. SCE confirmed that the Incident Span is in a "high wind area"⁶⁵ and that "excessive slack" is not defined in its own procedures, but SCE inspectors are trained to address conditions and circumstances that may cause excessive slack.⁶⁶ However, SCE's LiDAR scan measurement from June 2, 2020, showed excessive sag present on both the phase 1A and phase 1B conductor in the Incident Span. Both conductors had a sag measurement that significantly exceeded SCE's maximum allowable sag limit therefore, this excessive sag issue should have been identified by the two annual grid patrols and six ODIs and EOIs conducted between July 2020 and February 2022, per SCE's internal inspection guidelines. SCE had eight different opportunities to identify and correct the excessive sag on its phase 1A and phase 1B conductors. SCE's inspectors should

⁶⁰ SCE's 2020 LiDAR scan measurement showed 10.5 feet of sag for the phase 1A conductor and 11.1 feet of sag for the phase 1B conductor. SCE confirmed the maximum allowable sag for the Incident Span conductors was 9 feet and 10 inches, or 9.833 feet.

⁶¹ SCE. "Data Request Response to DR05 Question 1(d)," page 2. January 26, 2024.

⁶² SCE. "Data Request Response to DR02 Question 7(a)," page 1. *DIMP_manuals.zip*, July 10, 2023.

⁶³ SCE. "Data Request Response to DR03 Question 3(a)," page 2, August 25, 2023. DIMP 2021 3Q, page 1-5.

⁶⁴ SCE refers to excessive sag as excessive slack. Both sag and slack refer to the maximum distance measured vertically in a given span from a straight line between the two points of support of the span at uneven ground as defined by GO 95 Rule 23.3(b).

⁶⁵ SCE. "Data Request Response to DR03 Question 2(d)," page 1, August 25, 2023.

⁶⁶ SCE. "Data Request Response to DR03 Question 2(c)," page 1, August 25, 2023.

have recorded, generated notifications, and issued repair work orders as outlined by SCE's grid patrol inspection and ODI guidelines.

4. Analysis of the Minimum Distance to Ground of Conductors

SCE provided LiDAR scan data of the Incident Span taken on June 2, 2020, as well as post-fire LiDAR scan data taken on September 8, 2022. SED requested the minimum distance to ground measurement of the phase 1A and phase 1B conductors taken in the June 2, 2020, LiDAR scan and the post-fire September 8, 2022, LiDAR scan. In response to SED's request of the minimum distance to ground measurement of the phase 1A and phase 1B conductors taken in the June 2, 2020, LiDAR scan and the post-fire September 8, 2022, LiDAR scan, SCE provided the following distances.

Date of LiDAR scan	Phase 1A distance to ground	Phase 1B distance to ground
6/2/2020	18.1 feet	19.4 feet
9/8/2022	17.6 feet	12 feet
GO 95 requirements	17 feet	17 feet

Table 4: Minimum distance to ground of SCE's phase 1A and phase 1B conductors.

The June 2, 2020, LiDAR scan measurement taken of Pole 220028S and Incident Pole 220029S showed an approximate minimum distance to ground of 18.1 feet for the phase 1A conductor and 19.4 feet for the phase 1B conductor.⁶⁷ The September 8, 2022, LiDAR scan showed the minimum distance to ground of the phase 1A conductor was 17.6 feet, while the minimum distance to ground of the phase 1B conductor reduced to 12 feet.⁶⁸

SED asked SCE to explain why the distance to ground of the phase 1B conductor reduced by more than seven feet between the pre-fire LiDAR scan and the post-fire LiDAR scan measurements and dropped below the minimum required distance to ground required by GO 95. However, SCE could not provide a reason or explain why the reduction in the minimum distance to ground of the phase 1B conductor dropped below the GO 95 requirement.⁶⁹

Per GO 95, Rule 37, a minimum distance to ground of 17 feet must be upheld at any given time for both the phase 1A and phase 1B conductors. SCE's post-fire LiDAR scan measurement showed that phase 1B's conductor minimum distance to ground was 12 feet and therefore violated the minimum distance requirement set by GO 95, Rule 37.

⁶⁷ SCE. "Data Request Response to DR01 Question 8," page 1. May 5, 2023. In the response, SCE refers to the phase 1A conductor as Wire 1 and the phase 1B conductor as Wire 2.

⁶⁸ SCE. "Data Request Response to DR02 Question 3(d) Supplemental Amended," page 2. August 2, 2023.

⁶⁹ SCE. "Data Request Response to DR04 Question 3(a) and 3(b)," page 1. October 11, 2023.

5. Analysis of SCE's Communication and Responses

During SED's investigation of the Fairview fire, SCE chronically failed to communicate and respond in a reasonably timely fashion. On December 22, 2022, SED served DR01 to SCE with a response date of January 26, 2023. The 55 questions SED asked in DR01 fell squarely within the parameters of GO 95, Rule 19 and Section 316 of the Public Utilities Code.

SCE failed to respond to DR01 on the January 26, 2023, response date and did not seek an extension. Instead, SCE informed SED that it had decided to extend the deadline to respond to DR01 to January 20, 2023, February 10, 2023, and February 24, 2023, and that it would be providing the responses on a piecemeal basis. This action is explicitly contrary to instructions in DR01, which states:

*The Commission requests the following information to further investigate the Fairview Fire and to that end requests that you provide the information and documents on or before **January 26, 2023.***

Provide your response as it becomes available, but no later than the due date noted above. If you have any questions or concerns, communicate them with the above identified staff as soon as possible. If you are unable to provide a response, notify the above identified staff as soon as possible, with a written explanation as to why the response date cannot be met and a best estimate of when the information can be provided. If you have objections to any of the questions, please notify the identified staff no later than January 5, 2022.

Despite this self-granted extension, SCE proceeded to miss those deadlines as well, except for responding to five (out of 55) questions on January 30, 2023. SCE did not request any further extensions. Consequently, the responses received on January 30, 2023 were all that SCE provided to SED for almost two months after the DR01 issue date.

On March 23, 2023, SED and SCE met and conferred regarding the delinquent responses to DR01. During the meeting, SED made a good faith effort to reset expectations and investigate what was interfering with SCE's compliance. SCE informed SCE that SCE's main contact handling the DR01 responses had been out on medical leave and apologized for the delays. SED devised solutions to assist SCE in providing timely responses. For example, SED allowed SCE to submit Bates stamped copies of their responses after the due date to avoid delay in providing the unstamped responses. After the meet and confer meeting, SED thought that it had reached a mutual, achievable understanding with SCE to allow SCE to respond to DR01 without further undue delay. Pursuant to that perceived understanding, SED granted SCE's March 24 and 28, 2023 requests to submit the remaining responses to DR01 in three tranches, on March 24, 2023, March 30, 2023, and April 5, 2023. However, on March 28, 2023, SCE requested another extension and additional tranche submittals for the remaining outstanding DR01 responses which SED approved on March 29, 2023.

On April 18, 2023, SCE once again requested an extension with an expected production date of April 28, 2023. SED informed SCE that April 28, 2023, was the final deadline for all outstanding

responses. On April 27, 2023, SCE requested another extension for three remaining questions beyond the April 28, 2023, deadline. SED denied SCE's request for what would have been a fourth extension. On May 3, 2023, May 5, 2023, and May 17, 2023, SCE submitted late responses. On May 17, 2023, SCE responded to all the 55 questions in DR01.

SCE treated the DR01 deadline as unilaterally negotiable and with a lack of seriousness. When asked to provide a reason for the DR01 response delays, SCE often stated that the response coordinator has been out on medical leave. SCE unreasonably stretched out a response to DR01 to ten responses taking place over nearly four months.⁷⁰ Even after meeting and conferring with SED, and receiving three extensions, SCE sought to drag its response out even further. When SED denied SCE a fourth extension, SCE did not complete its response to DR01 for another two and half weeks.

SED extended a host of accommodations and offered every workable opportunity for SCE to achieve compliance. However, SCE's continuous failures to provide responses in a timely manner to SED's DR01 hindered and delayed SED's investigation. As a result, SED sent the utility a Notice of Violation (NOV) on May 24, 2023, notifying the utility of SCE's failure to cooperate with SED's Fairview Fire investigation and subsequent procedural violations.

D. Violations

SED reviewed and analyzed inspection and maintenance records, and investigation reports related to this Incident, to determine compliance with the Commission's regulations and relevant statutes. SED's investigation found seven violations as detailed below.

General Order 95, Rule 31.1 – Design, Construction and Maintenance states in part:

For all particulars not specified in these rules, design, construction, and maintenance should be done in accordance with accepted good practice for the given local conditions known at the time by those responsible for the design, construction, or maintenance of communication or supply lines and equipment.

Violation 1

GO 95, Rule 31.1 requires that utilities follow accepted good practices for the design, construction, and maintenance of their electric facilities, which extends to requiring utilities to follow their internal procedures as accepted good practices. SCE's phase 1A and phase 1B conductors sagged below the maximum limit of 9 feet and 10 inches (9.833 feet) and violated SCE's internal construction manual for conductor sag limits.

⁷⁰ SCE provided ten piecemeal responses to DR01 on January 30, 2023; March 24, and 30 2023; April 4, 17, 20, and 28, 2023; and May 3, 5, and 17, 2023.

SED asked SCE for the last five years of LiDAR scan measurements prior to the start of the Fairview Fire, but SCE could only produce the June 2, 2020, LiDAR scan. Because SCE could not provide any other LiDAR scans or sag measurements of the Incident Span prior to June 2, 2020, SED cannot confirm if the phase 1A and phase 1B conductors sagged below SCE's internal sag limit prior to June 2, 2020.

Therefore, SED finds SCE in violation of GO 95, Rule 31.1 for 825 days (June 2, 2020 - September 5, 2022) for failing to maintain the maximum sag limits on the Incident Span conductors as specified by SCE's internal construction manual.

Violation 2

GO 95, Rule 31.1's requirement to use accepted good practices extends to requiring regulated utilities to follow their internal procedures for conducting inspections. Both SCE's patrol inspections and ODIs (including EOIs) conducted between 2020 and 2022 failed to detect, identify, and correct the excessive sag of the Incident Span. Despite LiDAR data confirming that the sag exceeded the maximum sag limit set by SCE's internal construction manual of 9 feet and 10 inches, the following inspections did not identify any issues or generate any corrective actions on the Incident Span:

1. Distribution GO 165 Patrol, 5/11/2021
2. Distribution GO 165 Patrol, 5/11/2022
3. ODI, 7/31/2020
4. ODI, 3/16/2021
5. ODI, 2/10/2022
6. EOI, 7/8/2020
7. EOI, 5/8/2021
8. EOI, 2/23/2022

SCE's inspectors did not follow the utility's grid patrol inspection and ODI manuals, which require inspectors to note excessive sag on primary conductors in high wind areas.

SCE's failure to identify the excessive sag during the eight different inspections is a violation of GO 95, Rule 31.1 for failing to follow the utility's internal procedures.

General Order 95, Rule 37 – Minimum Vertical Clearance of Wires Above Ground states in part:

Table 1 – Vertical clearance of wires above ground in areas accessible to pedestrians only - Case 5 Column E: Supply conductors 750-22,500 Volts have a basic minimum vertical clearance of 17 feet.

Violation 3

GO 95, Rule 37, Table 1, Case 5 Column E requires that conductors operating between 750-22,500 volts maintain a minimum vertical clearance above ground of 17 feet in areas that can only be traversed by pedestrians.

SCE's post-fire LiDAR scan measurements on September 8, 2022, showed that SCE's phase 1B conductor had a minimum vertical clearance above ground of 12 feet, which violated the minimum vertical clearance required by GO 95, Rule 37, Table 1, Case 5 Column E.

General Order 95, Rule 38 – Minimum Clearance of Wires from Other Wires states in part:

The clearances in Table 2 shall in no case be reduced more than 10 percent, except mid-span in Tier 3 of the High Fire-Threat District where they shall be reduced by no more than 5 percent, because of temperature and loading as specified in Rule 43 or because of a difference in size or design of the supporting pins, hardware or insulators... Table 2, Case Number 11 Column C– Vertical clearance between supply conductors 7,500-20,000 Volts and/or communication conductors on separate crossarms or other supports at different levels on the same pole have a basic minimum clearance of 72 inches.

Violation 4

GO 95, Rule 38, Table 2, Case Number 11 Column C limits the distance between an energized conductor and a messenger cable to no less than 5.7 feet at any time according to the five percent maximum clearance reduction rule of Rule 38 applicable to Tier 3 HFTD. SCE's post-fire LiDAR scan measurements from September 8, 2022, showed that both the phase 1A and phase 1B conductors had a minimum distance to the Frontier Communications messenger cable of 5.0 feet and 4.8 feet which is reduced beyond the maximum limit of 5.7 feet required by GO 95, Rule 38.

SCE's failure to maintain the clearance required by Table 2, Case Number 11 Column C violates GO 95, Rule 38.

General Order 95, Rule 19 – Cooperation with Commission Staff; Preservation of Evidence Related to Incidents Applicability of Rules states in part:

Each utility shall provide full cooperation to Commission staff in an investigation into any major accident (as defined in Rule 17) or any reportable incident (as defined in CPUC Resolution E-4184), regardless of pending litigation or other investigations, including those which may be related to a Commission staff investigation.

Violation 5

SCE's consistently late and delayed responses to DR01 hindered and delayed SED's ability to investigate the Fairview Fire incident within a reasonable timeframe. SCE failed to provide Commission staff with full cooperation in its investigation which violated GO 95, Rule 19.

Public Utilities Code, Section 316 – Cooperation with Commission Staff; Preservation of Evidence Related to Incidents Applicability of Rules states in part:

Each electrical corporation shall cooperate fully with the commission in an investigation into any major accident or any reportable incident, as these terms are defined by the commission, concerning overhead electric supply facilities, regardless of pending litigation or other investigations, including, but not limited to, those that may be related to a commission investigation.

Violation 6

SCE treated the DR01 deadline as unilaterally negotiable and with a lack of seriousness. SCE did not provide SED with timely responses on DR01 and violated Public Utilities Code Section 316 for failing to cooperate fully with the commission in its investigation.

Conclusion

SED's investigation identified SCE's multiple violations of GO 95, which contributed to the Fairview Fire ignition. SCE failed to identify and correct the excessive sag on its phase 1A and phase 1B conductors for over two years prior to the start of the Fairview Fire.

In addition, SCE failed to maintain the minimum clearance between an energized conductor and a communication cable and failed to maintain the minimum height above ground for the conductors at the Incident Span. Lastly, SCE failed to fully cooperate with SED's Fairview Fire investigation by unreasonably delaying and providing piecemeal responses to SED's DR01 over the span of four months. SCE, through its actions, did not maintain respect due to the Commission and failed to comply with state law by not cooperating with SED's investigation in a major wildfire incident.

As of June 2, 2020, SCE had LiDAR data in its possession which showed that the sag on the conductors supported by Incident Pole 220029S and Pole 220028S on the Incident Span exceeded the maximum limit required by SCE's internal overhead construction manual. SCE conducted two grid patrol inspections and six ODIs and EOIs between 2020 and 2022 and did not identify and correct the excessive sag on the conductors. SCE, per their own procedures, could have, and should have, identified the excessive sag on the conductors, but SCE did not. As the Incident Span was in a high wind area, SCE should have taken the possibility of excessive sag more seriously, trained its inspectors better, and provided timely repairs on its facilities.

In addition, the Incident Span where the Fairview Fire ignited was next to an abandoned structure that was disconnected from SCE's electrical circuit. SED found no violations related to energized conductors in the vicinity of abandoned structures. However, SCE's inspection failures and lack of maintenance emphasize its operational negligence evident in the excessive sag on the phase 1B conductor which significantly increased before the Fairview Fire ignition on September 5, 2022. CAL FIRE's report found that significant excessive sag combined with dry gusty winds

allowed SCE's phase 1B conductor to swing and strike the Frontier Communications messenger cable. This contact created high voltage electrical arcing, molten sparks of metal, and subsequent ignition of the dry brush and vegetation below the Incident Span.

SCE's operational negligence and lack of facility maintenance resulted in two fatalities and multiple injuries, significant property damage, and over 28,000 acres of wildfire destruction. Because the Fairview Fire occurred in a Tier 3 HFTD, there is an increased risk of severe consequences when utilities neglect to maintain their equipment. SED urges SCE to use the LiDAR data it has available on other facilities to verify any apparent sag issues and re-train its inspectors to properly identify and prioritize repairs quickly after inspections are conducted. Public safety relies on SCE's information, inspections, and consistent maintenance of its facilities to prevent destructive wildfires. Lastly, the severity of a major wildfire with fatalities demands more of a sense of urgency from SCE to coordinate and communicate timely with SED on the investigation.

If SED becomes aware of additional information that could modify SED's findings in this report, SED may re-open the investigation. SED may modify this report and take further actions as appropriate.

Incident Investigation Report
Supporting Documents
SED Incident E20220905-03 FAIRVIEW FIRE
(Fairview Fire)



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INCIDENTS

PREPARE

OUR IMPACT

WHAT WE DO

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Search incidents and safety information

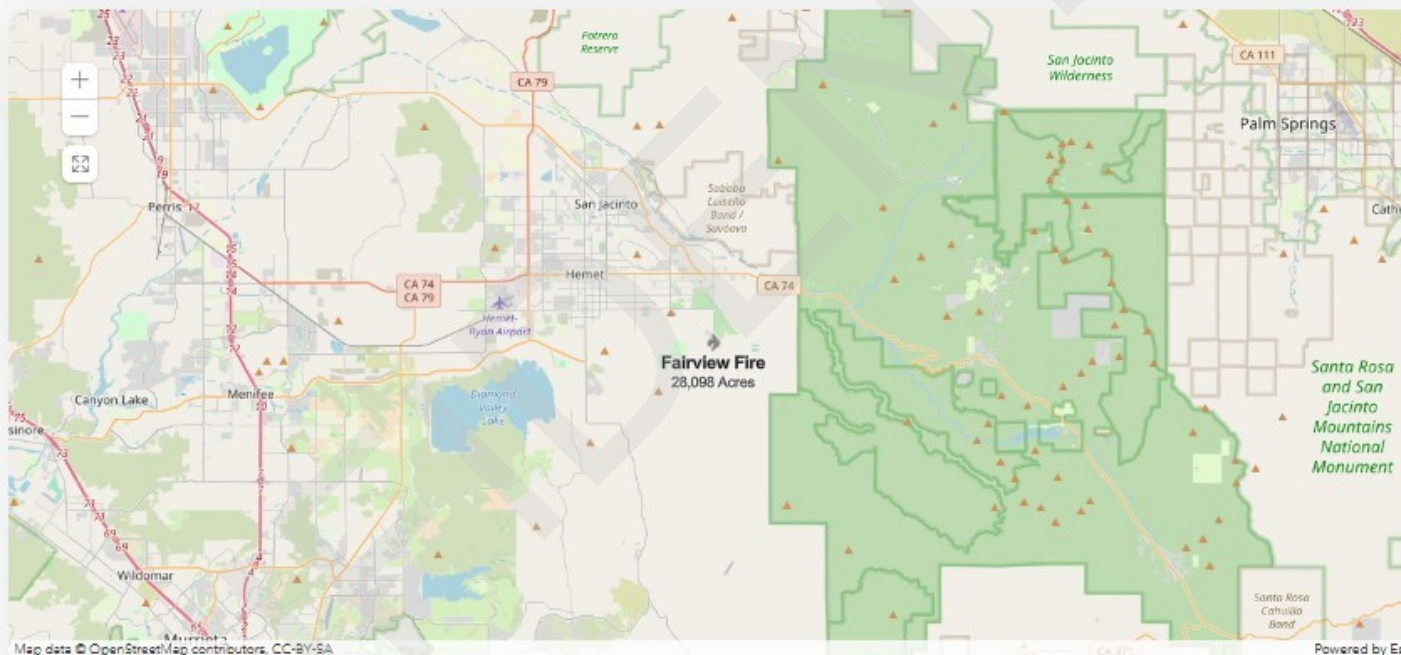
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Fairview Fire



100% Contained 28,098 Acres 1 County: Riverside



Last Updated 06/14/2023 8:58 AM	Date Started 09/05/2022 4:00 PM	Location Information Fairview Avenue and Bautista Canyon Road, near Hemet
Latitude / Longitude [33.717062,-116.893227]	Admin Unit Lead Agency: USFS - San Bernardino National Forest	Cause Under Investigation
External Incident Link https://inciweb.nwcg.gov/incident-information/cabdf-fairview	Reports Prior status reports	

October 3, 2022

202209870

VIA EMAIL ONLY

PUBLIC UTILITIES COMMISSION
STATE OF CALIFORNIA
ATTN: WILL DUNDON – WILDFIRE SAFETY AND ENFORCEMENT BRANCH
320 W FOURTH STREET SUITE 500
LOS ANGELES CA 90013

Re: Fairview Fire
Date of Incident: September 5, 2022
Location of Incident: South of the intersection of Fairview Avenue and
Bautista Road, Hemet, California

Dear Mr. Dundon:

In accordance with the reporting requirements set forth in Resolution E-4184, this letter supplements the notice Southern California Edison Company (SCE) provided to the Commission via the web-based reporting system on Monday, September 5, 2022 at 8:13 p.m., regarding the above-referenced incident. SCE is required to submit this information pursuant to Commission instructions, resolutions and the Public Utilities Code, and submits this report under Public Utilities Code Section 315.

On September 5, 2022, at approximately 3:37 p.m., a wildland fire named the “Fairview Fire” was reported in the vicinity of Fairview Avenue and Bautista Road, Hemet, Riverside County, California. California Department of Forestry and Fire Protection (Cal Fire), the agency leading the investigation, reported the Fairview Fire burned approximately 28,307 acres and resulted in the following damage to structures: single residences: 22 destroyed and 5 damaged; other minor structures: 14 destroyed and 3 damaged. Additionally, Cal Fire reported 2 fatalities and 1 injury to civilians, as well as 2 injuries to responding fire personnel. Suppression costs are estimated at \$38,850,000.

While the investigation remains ongoing, our information reflects that on September 5, 2022 at 3:29 p.m., the Sprague 12 kV Circuit out of Mayberry Substation relayed to a lock-out at Remote Automatic Recloser (RAR) 0139. The SCE first responder observed a fuse operated on BF08085 which is supported by Pole No. 4905500E.

Cal Fire investigators identified two areas of interest, one of which involved the location near a pole line associated with overhead utility facilities owned by SCE and Frontier Communications (Frontier). Cal Fire also identified a separate area of interest approximately 500 feet west of the pole line, which was cordoned off with yellow and red tape.

The subject pole line was supported by Pole Nos. 220029S and 220028S. There were no downed conductors in the subject area. As part of its investigation, Cal Fire personnel requested removal of the overhead electrical and telecommunication facilities within the subject span. SCE cooperated with this request and on Monday, September 12, 2022, SCE personnel removed both No. 2 Aluminum Conductor Steel Reinforced (ACSR) overhead primary conductors, which were uncovered, 4 insulators, 2 crossarms, and a down guy wire from the subject span. Frontier also removed the telecommunication facilities and its down guy wire from the subject span the same day. All of the items removed at the request of Cal Fire were retained by Cal Fire.

The cause of the operations on RAR 0139 and BF08085 on September 5 has not been determined and may not be definitively understood until additional information is available, including information which can only be obtained through examination and testing of the material retained by Cal Fire investigators. Additionally, during the removal of materials, an SCE conductor and Frontier messenger exhibited what appeared to be signs of marks or damage. However, it is not known when this condition occurred or if these materials were impacted by the circuit activity that occurred on September 5, 2022, or whether they contributed to the ignition of the Fairview Fire.

While the damage to SCE facilities has not yet been tabulated, SCE identified 26 poles that required replacement.

Sincerely,



Bernice Cordero

[Word Document](#) [PDF Document](#)**PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA**

ENERGY DIVISION RESOLUTION E-4184

CONSUMER PROTECTION AND SAFETY DIVISION AUGUST 21, 2008

CONSUMER SERVICE AND INFORMATION DIVISION

RESOLUTION**RESOLUTION E-4184. ADOPTION OF WEB-BASED EMERGENCY
REPORTING SYSTEM FOR UTILITIES AND GENERATION ASSET
OWNERS****Summary**

This resolution provides for reporting of electric and gas emergencies to Commission staff through the Commission's web site, as well as by telephone and revises gas and electric reporting requirements for consistency.

Background

For the purposes of this resolution, "emergencies" is defined to include incidents, accidents, and electric service interruptions that meet the reporting criteria below. General Order No. 112 E requires gas utilities to report incidents that meet specified criteria to the Commission staff by telephone and facsimile. General Order No. 166 requires electric utilities to notify the Commission staff of major outages, and its Standard 6 states that from time to time the Commission staff may issue instructions or guidelines regarding reporting. General Order No. 167 requires Generating Asset Owners (GAO) to report accidents that meet specified criteria and occur at their power plants. Appendix B to Decision No. 06-04-055 requires electric utilities to report incidents meeting specified criteria. Staff members are required to monitor these reports both during and outside of normal work hours. The reporting criteria specified in GO 112-E and Appendix B differ without good reason.

Discussion

As a result of utility feedback noting that reporting requirements were too complex and confusing, staff representatives from the CPSD and ED met to consider improvements to the reporting requirements and adopted five objectives:

1. Make the Commission's requirements for reporting emergencies clearer and more consistent.
2. Make it easier to change the details of how and when reports are to be submitted.
3. Combine all of the Commission's reporting requirements for emergencies in one place.
4. Eliminate the need for an on-call engineer to monitor voice mail.
5. Make emergency reports available, on demand, to all Commission staff that need them.

To accomplish these objectives, the staff recommends creating a web page that would summarize reporting requirements for all emergencies and would include forms for reporting each type. It could be arranged so that the electronic filing of a report would automatically generate a text message to the cell phone or pager of staff that need to be notified. The question of to whom to report would become moot. The utility or GAO would fulfill its obligation by reporting to the Commission's web page. Staff needing to receive reports would make their own arrangements for text messaging or would access the website.

The reporting language in General Order 166 is sufficiently flexible to enable use of a web-based report without further

Commission action. However, the language in General Orders 112-E, 167, and Appendix B to D.06-04-055 specifically requires the use of methods other than the Internet. Those documents have been revised in appendices A and B to allow use of the web page.

While incorporating these amendments, we will take advantage of this opportunity to make the requirements for reporting gas and electric incidents more consistent. The time allowed for reporting electric incidents will be made the same as in GO112-E; two hours during business hours and four hours outside of business hours. It is confusing to persons responsible for reporting to the Commission to have two different time periods and there is no justification for the difference. If it is reasonable to give gas utilities four hours outside of business hours to report an incident, it is reasonable to do the same for electric utilities. The \$20,000 threshold for electric utilities to report property damage was set many years ago and has survived through tradition. The \$50,000 threshold for gas utilities is a national standard. We will adopt the same \$50,000 threshold for electric utilities. Since the damages are only an estimate, the time to report incidents involving property damage will be made the same for electric as for gas.

In the event a reporting utility does not have internet access at the time it must report, a backup reporting system using telephones would be used. The instructions for using the backup system would be posted on the web page to be downloaded and kept for future reference by the utilities and GAOs.

Reports submitted through the web page would receive the same confidentiality privileges as reports submitted under the present system.

Notice: An early draft of this resolution was discussed informally at a workshop on April 29, 2008. Comments received at that workshop have been incorporated. In addition Public Utilities Code section 311(g)(1) provides that this resolution must be served on all parties and subject to at least 30 days public review and comment prior to a vote of the Commission. Section 311(g)(2) provides that this 30-day period may be reduced or waived upon the stipulation of all parties in the proceeding.

The 30-day comment period for the draft of this resolution was neither waived nor reduced. Accordingly, this draft resolution was mailed to parties for comments. Comments timely received are addressed below in this final draft which has been -placed on the Commission's agenda for action no earlier than 30 days from first mailing.

COMMENTS

Southwest Gas Corporation

Comment 1. Southwest believes that each data entry field that is to be employed in the incident reporting website should be included in the General Order (GO) 112-E and can not support the Resolution's proposed deletion of the text currently found in Rule 122.2(b)(3). Southwest believes the above-referenced text provides needed clarity.

Response 1. The detail removed from Rule 122.2 is as follows: time of incident, time of call, location of the incident, a detailed description of the incident, and the name and telephone number of a utility company contact that a CPUC inspector can reach immediately at any time. These seem like common sense items that anyone reporting an incident would include. It is difficult to understand what clarity is added to the requirement to report an incident by these details. Specifying every data field in the database would require a change in the general order every time there is a change in the format of the reporting form. It has taken more than two years to achieve consensus on the currently proposed changes. Web reporting is a new process and there are certain to be improvements in the process suggested as soon as it comes into use. It would be unwise not to provide sufficient flexibility to achieve these improvements in a timely manner.

Comment 2. Southwest believes that all substantive changes to an operator's reporting obligations should be made pursuant to the CPUC's rulemaking procedures. However, Southwest believes the Resolution does not achieve those procedural goals and may instead contain an unintended delegation of its rulemaking authority to one or more Divisions of the CPUC. While Southwest appreciates the CPUC's desire to make it easier to change the details of how and when reports are to be submitted, Southwest believes that the act of changing these details constitutes a rulemaking which must be preceded by minimal notice and hearing requirements. For example, Southwest notes that the current version of the incident reporting website requires the operator to provide substantially more information in the initial report than is currently required by Rule 122, but there is no evidence that has been presented to support a finding that any expansion of this initial reporting requirement is warranted.

Response 2. The report form prepared for the website is based on the database record in the gas incident database. The on-call engineer tries to fill in as many of the blanks as possible but is rarely able to do so completely on the initial report. Most of the blanks in the web reporting form are optional. If the information is not available, the utility is not required to fill it

in. When the on-call engineer receives the text message generated by filing of the report form, he/she will call the utility if additional information is needed.

Comment 3. Southwest believes that the Resolution should provide that the proposed Rule 122.2 will list all necessary reporting contact information including the incident reporting email address, the emergency phone number, the incident reporting facsimile number, and the incident reporting website address.

Response 3. Rule 122.2 does not now list phone numbers. It is not necessary to put the Commission's URL in the general order. If the utility does not know it, it can easily be found through use of any web browser. Backup phone numbers are listed on the web page and utilities already have these numbers on file in case of loss of web access.

Comment 4. Southwest believes that the Resolution should provide that the incident reporting website contain an ability to allow an operator to rescind an initial report. For instance, if an operator was prohibited from entering a scene of a significant media covered event where natural gas is suspected to be involved, the operator is required under Rule 122.2(a)(2) to make an initial report to the CPUC. If a later investigation shows no release of gas occurred from the operator's facilities, the operator should be able to rescind the initial report from the incident reporting website. Operators currently rescind initial reports with the Pipeline and Hazardous Materials Safety Administration (PHMSA) under similar circumstances. No further updating of information for that event should be necessary if the event does not meet the criteria of a CPUC or PHMSA reportable incident. The inclusion of checkbox on the incident reporting website to "Rescind," accompanied by an explanation, should be added.

Response 4. This is why flexibility in modifying the web page is advisable. There is a list of improvements that we would like to attempt once the system is in use. Many of the suggestions were put on hold because of security concerns. The utility still has the option of rescinding a report via email, telephone, or letter to USRB.

Comment 5. Southwest believes that the Resolution should be amended so that Rule 122.2 clarifies that operators are not required to update their initial incident report made through the incident reporting website. Since the proposed regulation provides that operators are required to provide this additional information by the end of the next working day on a form entitled, "Report of Gas Leak or Interruption," CPUC File No. 420, Southwest believes that the failure to make this clarification could result in an unnecessary duplication of work.

Response 5. It may be that the follow up report can be dispensed with if the web reporting proves successful, however, this is not something that was agreed to in the workshops and USRB still prefers that the form 420 be submitted to provide additional information not available at the time of the initial report.

Comment 6. Southwest requests the Resolution be amended to provide that the incident reporting website shall permit an operator to print a draft of their input before submission. This will enable the operators to perform an internal review for quality and accuracy of information before submission.

Comment 7. Southwest notes that on the current version of the incident reporting website, the date icon to assist with selecting the "Incident Date" does not produce a date in the same format as required. (mm/dd/yyyy).

Responses 6. and 7. We will forward these comments to the Commission's Webmaster for correction.

Comment 8. Southwest notes that the current version of the incident reporting website requires operators to identify the names of injured and deceased persons. However, operators may be prohibited from releasing to the CPUC the names of injured or deceased operator employees due to the operation of the federal Health Insurance Portability and Accountability Act (HIPAA). Providing the names of persons dead or injured is not a DOT forms F7100.1 or F7100.2 reporting criteria nor is it a CPUC file form, 420 criteria. Southwest urges the removal of this data field from the incident reporting website.

Response 8. This is an optional field in the web report form. Utilities are not required to fill it out. However, it is a field in the incident database and the assigned engineer will ask for this information during his/her investigation. If the utility elects to supply the information on the web form, it will speed the assigned engineer's investigation.

Comment 9. Southwest notes that the proposed amendments to Rule 122.2 provide that a telephonic incident reporting method is retained as a back-up reporting method in case of inability to access the internet. Southwest believes the proposed Rule should retain the instructions and the list of information currently required for telephonic reporting so that the operator is aware of the scope and substance of its reporting obligations when the reporting is made telephonically.

Response 9. The instructions in Rule 122.2 provided little detail. They consist of "common sense" instructions to refer to a list of phone numbers which is not included and leave a message if no one answers. Telephone reporting instructions have been included on the new web page.

Sempre

Comment 1. The general orders should be amended to clarify the process for noticing the utilities when changes occur to the emergency reporting website

Response 1. Language providing for notice to utilities of changes in website reporting requirements will be included in the general order.

[Proposed Language: The Commission staff will maintain a list of utility contacts for incident reporting. These contacts will be notified of any proposed changes in the reporting requirements contained on the Commissions incident reporting web page and given an opportunity to comment.]

Comment 2. The general orders should be amended to clarify the time for reporting for generation.

Response 2. General Order 167, Rule Number 10.4 clearly states that any safety-related incidents involving a Generating Asset shall be reported to the Commission within 24 hours of its occurrence. General Order 122-E applies to gas operators (as defined by the United States Department of Transportation), not Generation Asset Owners (GAO).

GAO Coalition

Comments The GAO Coalition's comments concern only the proposed revisions to Rule 10.4 of General Order 167, which would establish web-based reporting as the preferred means of reporting safety-related incidents and, more broadly, the need for secure websites for receipt of information related to the operations of power plants and safety-related incidents. In general, the GAO Coalition welcomes the addition of web-based reporting of safety-related incidents, as long as a backup phone-in option remains available.

However, the proposed changes shown in the body of Draft Resolution E-4184

differ from the text shown in Appendix B to the Draft Resolution. Specifically, the version shown in the body of Draft Resolution E-4184 includes the words "or by any method chosen by the executive director," but those words are omitted in Appendix B.

The GAO Coalition prefers the version reflected in Appendix B because it provides more certainty than the version stated in the body of the Draft Resolution. The version shown in the body of the Draft Resolution leaves several key questions unanswered:

By what process will the Executive Director choose a reporting method?

How will the Executive Director's choice be communicated to the affected GAOs?

Will GAOs be allowed to comment on the Executive Director's choice?

By contrast, the version in Appendix B is clear: web-based reporting is preferred,

but telephone reporting may be used if internet access is unavailable.

In addition, the GAO Coalition is concerned that the Draft Resolution makes no

mention of establishing secure websites, encryption protocols, or other measures to protect the security of information related to the operation of power plants or safety-related information that is transmitted through the websites referred to in the Draft Resolution. Submissions from power plant operators may include information that the Federal Energy Regulatory Commission classifies as Critical Energy Infrastructure Information, and reports of safety-related incidents could include information protected under various privacy statutes.

The Draft Resolution should be revised to expressly state that before any information is received through these websites, the Commission will take whatever steps are necessary to ensure that the information can be viewed and retrieved only by authorized personnel and is maintained in a secure manner.

For these reasons, the GAO Coalition respectfully urges the Commission to adopt

the version of the revisions to General Order 167 shown in Appendix B of Draft Resolution E-41 84, and to conform the

text stated in the body of the Draft Resolution to the text of Appendix B.

In addition, the Commission should revise the Draft Resolution to expressly state that before any information is received through the websites referred to in the Draft Resolution, the Commission will ensure that the information can be viewed and retrieved only by authorized personnel and is maintained in a secure manner.

Response. For General Order 167, Rule Number 10.4, we agree that the text in Appendix B contains more certainty in the reporting method than the text in the body of the Draft Resolution. The Commission should adopt the Appendix B version.

Also, the Draft Resolution states that "reports submitted through the web page would receive the same confidentiality privileges as reports submitted under the present system." Therefore, the GAO request for additional text to "ensure that the information can be viewed and retrieved only by authorized personnel and is maintained in a secure manner" is redundant and unnecessary.

Findings:

1. Three general orders and one decision contain confusing requirements for reporting various types of gas and electric emergencies.
2. The requirements for reporting emergencies should be consolidated in a web-based reporting system.
3. Utilities and GAOs should be directed to report emergencies through a web page on the Commission's website.
4. Reports submitted through the Commission's web page should receive the same confidentiality privileges as reports submitted under the current system.
5. When the reporting entity cannot get internet access to make a report, a backup telephone system should be used for reporting
6. General Order 112-E and Appendix B to D. 06-04-055 should be amended to make incident reporting requirements consistent between gas and electric incidents.
7. General Orders 112-E, 167, and Appendix B to D. 06-04-055 should be amended to provide for incidents to be reported through the Commission's web site.

THEREFORE, IT IS ORDERED that:

1. The preferred method for reporting accidents, interruptions of service, and incidents that are required to be reported by General Orders 112-E, 166, 167, and Appendix B to D. 06-04-055 shall be through the Commission's web site. A backup telephone reporting system will be retained in case internet access is not available.
2. Accidents and incidents reported through the Commission's web site shall receive the same confidentiality privileges as granted under the present reporting system.
3. The specifications of reportable emergencies, time limits for reporting and information required in reports shall be posted on the Commission's web site.
4. General Orders 112-E, 167, and Appendix B to D. 06-04-055 are amended as shown in appendices A and B.

This resolution is effective today.

I certify that the foregoing resolution was duly introduced, passed, and adopted by the Commission at its regularly scheduled meeting on August 21, 2008. The following Commissioners voted favorably thereon:

/s/ Paul Clanon

Paul Clanon

Executive Director

MICHAEL R. PEEVEY

PRESIDENT

DIAN M. GRUENEICH

JOHN A. BOHN

RACHELLE B. CHONG

TIMOTHY ALAN SIMON

Commissioners

APPENDIX A

PROPOSED CHANGES

GO112-E, Rule 122 GAS INCIDENT REPORTS

122.1 Each operator shall comply with the requirements of 49 CFR Part 191, for the reporting of incidents to the United States Department of Transportation (DOT). The operator shall submit such reports directly to the DOT, with a copy to the California Public Utilities Commission (CPUC).

122.2 Requirements for reporting to the CPUC.

(a) Each operator shall report ~~by telephone~~ incidents to the CPUC ~~as follows that meet the following criteria:~~

1. Incidents which require DOT notification.

i. An event that involves a release of gas from a pipeline or of liquefied natural gas (LNG) or gas from an LNG facility and

· A death, or personal injury necessitating in-patient hospitalization; or

· Estimated property damage, including cost of gas lost, of the operator or others, or both, of \$50,000 or more.

ii. An event that results in an emergency shutdown of an LNG facility.

2. Incidents which have either attracted public attention or have been given significant news media coverage, that are suspected to involve natural gas, which occur in the vicinity of the operator's facilities; regardless of whether or not the operator's facilities are involved.

(b) In Each operator shall execute the following procedures for notifying the CPUC Safety Branch Staff in the event of an incident listed in 122.2(a) above: an operator shall go to the Commission's website, select the link to the page for reporting emergencies and follow the instructions thereon. If internet access is unavailable, the operator may report using the backup telephone system.

1. If the utility is notified of the incident during its normal working hours, the ~~telephonic~~ report should be made as soon as practicable but no longer than 2 hours after the utility is aware of the incident and its personnel are on the scene.

2. If the utility is notified of the incident outside of its normal working hours, the ~~telephonic~~ report should be made as soon as practicable but no longer than 4 hours after the utility is aware of the incident and its personnel are on the scene.

3. The report is to be made to one of the inspectors listed in the CPUC reporting list, either at their office number during normal office hours, or their home numbers outside of normal office hours. If a CPUC inspector cannot be reached personally, leave a message on the office recorder stating the time of incident, time of call, location of the incident, a detailed description of the incident, and the name and telephone number of a utility company contact that a CPUC inspector can reach immediately at any time. Also, if calling outside of normal office hours, and a CPUC inspector cannot be reached immediately, leave a message on at least one home recorder of a CPUC inspector briefly describing the incident and a telephone number and name of the utility person to be called for more information.

4. All telephonic reports required by this section shall be followed by the end of the next working day by an email or telefacsimile (fax) of the standard reporting form, "Report of Gas Leak or Interruption," CPUC File No. 420 (see attachment).

(c) Written Incident Reports .

1. The operator shall submit to the CPUC on DOT Form RSPA-PHMSA F7100.1 (<http://ops.dot.gov/library/forms/forms.htm#7100.1>) for distribution systems and on DOT Form RSPA-PHMSA F7100.2 (<http://ops.dot.gov/library/forms/forms.htm#7100.2>) for transmission and gathering systems a report describing any incident that required notice by telephone under Items 122.2(a)(1) or (2).

2. Together with the form required by d-c(1) above, the operator shall furnish a letter of explanation giving a more detailed account of the incident unless such letter is deemed not necessary by the CPUC staff. The operator may confirm the necessity of a letter of explanation while making the telephonic report by telephone. If, subsequent to the initial report or letter, the operator discovers significant additional information related to the incident, the operator shall furnish a supplemental report to the CPUC as soon as practicable, with a clear reference by date and subject to the original report. These letters, forms, and reports shall be held confidential under the provisions of Paragraph 2, Exclusions, of General Order 66-C and Public Utilities Code Section 315.

3. The operator of a distribution system serving less than 100,000 customers need not submit the DOT forms required by paragraph (1) above; however, such operator must submit the letter of explanation required by (2) above, subsequent to any telephonic initial report to the CPUC, unless such letter is deemed unnecessary by the CPUC staff.

(d) Quarterly Summary Reports. Each operator shall submit to the CPUC quarterly, not later than the end of the month following the quarter, a summary of all CPUC reportable and non-reportable gas leak related incidents which occurred in the preceding quarter as follows:

1. Incidents that were reported through the Commission's Emergency Reporting website.

2. Incidents for which either a telephonic report, a letter of explanation, or a DOT Form RSPA-PHMSA F7100.1 or F7100.2 were submitted.

3. Incidents which involved escaping gas from the operator's facilities and property damage including loss of gas in excess of \$1,000.

4. Incidents which included property damage between \$0 and \$1,000, and involved fire, explosion, or underground dig-ins.

General Order 167

Rule No.10.4 Safety-related Incidents. Within 24 hours of its occurrence, a Generating Asset Owner shall report to the Commission's emergency reporting web site or by any method chosen by the executive director CPUC Director or designee, either verbally or in writing, any safety-related incident involving a Generating Asset. If internet access is unavailable, the Generating Asset Owner may report using the backup telephone system. Such reporting shall include any incident that has resulted in death to a person; an injury or illness to a person requiring overnight hospitalization; a report to Cal/OSHA, OSHA, or other regulatory agency; or damage to the property of the Generating Asset Owner or another person of more than \$50,000. The Generating Asset Owner shall also report any other incident involving a Generating Asset that has resulted in significant negative media coverage (resulting in a news story or editorial from one media outlet with a circulation or audience of 50,000 or more persons) when the Generating Asset Owner has actual knowledge of the

media coverage. If not initially provided, a written report also will be submitted within five business days of the incident. The report will include copies of any reports concerning the incident that have been submitted to other governmental agencies.

DECISION NO. 06-04-055 APPENDIX B

ACCIDENT REPORTING REQUIREMENTS

Within 2 hours of a reportable incident during normal working hours or within 4 hours of a reportable incident outside of normal working hours, the utility shall provide notice to designated CPUC staff of the general nature of the incident, its cause and estimated damage. The notice shall identify the time and date of the incident, the time and date of notice to the Commission, the location of the incident, casualties that resulted from the incident, identification of casualties and property damage, and the name and telephone number of a utility contact person. This notice may be by (a) using to the Commission's Emergency Reporting Web Page, (ab) calling an established CPUC Incident Reporting Telephone Number designated by the Commission's Consumer Protection and Safety Division (CPSD) or its successor (bc) sending a message to an electronic mail address designated by the Commission's CPSD or its successor or (ed) sending a message to the Commission's facsimile equipment using a form approved by the Commission's CPSD or its successor and at numbers CPSD may designate for use during normal business hours. Telephone notices provided at times other than normal business hours shall be followed by a facsimile or email report by the end of the next working day.

1. Within twenty business days of a reportable incident, the utility shall provide to designated CPUC staff a written account of the incident which includes a detailed description of the nature of the incident, its cause and estimated damage. The report shall identify the time and date of the incident, the time and date of the notice to the Commission, the location of the incident, casualties which resulted from the incident, identification of casualties and property damage. The report shall include a description of the utility's response to the incident and the measures the utility took to repair facilities and/or remedy any related problems on the system which may have contributed to the incident.

32. Reportable incidents are those which: (a) result in fatality or personal injury rising to the level of in-patient hospitalization and attributable or allegedly attributable to utility owned facilities; ~~or~~ (b) are the subject of significant public attention or media coverage and are attributable or allegedly attributable to utility facilities; or (c) involve damage to property of the utility or others estimated to exceed \$50,000.

4. Incidents involving damage to property of the utility or others estimated to exceed \$20,000 that are attributable or allegedly attributable to utility owned facilities ~~shall be reported within 60 days of their occurrence to designated staff of the CPUC. The report shall be structured in a form acceptable to the designated staff~~

APPENDIX B

NEW VERSIONS

GO112-E, Rule 122 GAS INCIDENT REPORTS

122.1 Each operator shall comply with the requirements of 49 CFR Part 191, for the reporting of incidents to the United States Department of Transportation (DOT). The operator shall submit such reports directly to the DOT, with a copy to the California Public Utilities Commission (CPUC).

122.2 Requirements for reporting to the CPUC.

(a) Each operator shall report incidents to the CPUC that meet the following criteria:

1. Incidents which require DOT notification.

i. An event that involves a release of gas from a pipeline or of liquefied natural gas (LNG) or gas from an LNG facility and

· A death, or personal injury necessitating in-patient hospitalization; or

· Estimated property damage, including cost of gas lost, of the operator or others, or both, of \$50,000 or more.

ii. An event that results in an emergency shutdown of an LNG facility.

2. Incidents which have either attracted public attention or have been given significant news media coverage, that are suspected to involve natural gas, which occur in the vicinity of the operator's facilities; regardless of whether or not the operator's facilities are involved.

(b) In the event of an incident listed in 122.2(a) above, an operator shall go to the Commission's website, select the link to the page for reporting emergencies and follow the instructions thereon. If internet access is unavailable, the Operator may report using the backup telephone system.

1. If the utility is notified of the incident during its normal working hours, the report should be made as soon as practicable but no longer than 2 hours after the utility is aware of the incident and its personnel are on the scene.
2. If the utility is notified of the incident outside of its normal working hours, the report should be made as soon as practicable but no longer than 4 hours after the utility is aware of the incident and its personnel are on the scene.
3. All reports required by this section shall be followed by the end of the next working day by an email or telefacsimile (fax) of the standard reporting form, "Report of Gas Leak or Interruption," CPUC File No. 420 (see attachment).

(c) Written Incident Reports .

1. The operator shall submit to the CPUC on DOT Form PHMSA_F7100.1 (<http://ops.dot.gov/library/forms/forms.htm#7100.1>) for distribution systems and on DOT Form PHMSA F7100.2 (<http://ops.dot.gov/library/forms/forms.htm#7100.2>) for transmission and gathering systems a report describing any incident that required notice under Items 122.2(a)(1) or (2).
2. Together with the form required by (c)(1) above, the operator shall furnish a letter of explanation giving a more detailed account of the incident unless such letter is deemed not necessary by the CPUC staff. The operator may confirm the necessity of a letter of explanation by telephone. If, subsequent to the initial report or letter, the operator discovers significant additional information related to the incident, the operator shall furnish a supplemental report to the CPUC as soon as practicable, with a clear reference by date and subject to the original report. These letters, forms, and reports shall be held confidential under the provisions of Paragraph 2, Exclusions, of General Order 66-C and Public Utilities Code Section 315.
3. The operator of a distribution system serving less than 100,000 customers need not submit the DOT forms required by paragraph (1) above; however, such operator must submit the letter of explanation required by (2) above, subsequent to any initial report to the CPUC, unless such letter is deemed unnecessary by the CPUC staff.

(d) Quarterly Summary Reports. Each operator shall submit to the CPUC quarterly, not later than the end of the month following the quarter, a summary of all CPUC reportable and non-reportable gas leak related incidents which occurred in the preceding quarter as follows:

1. Incidents that were reported through the Commission's Emergency Reporting website.
2. Incidents for which either a DOT Form PHMSA F7100.1 or F7100.2 was submitted.
3. Incidents which involved escaping gas from the operator's facilities and property damage including loss of gas in excess of \$1,000.
4. Incidents which included property damage between \$0 and \$1,000, and involved fire, explosion, or underground dig-ins.

Rule No.10.4 Safety-related Incidents. Within 24 hours of its occurrence, a Generating Asset Owner shall report to the Commission's emergency reporting web site any safety-related incident involving a Generating Asset. If internet access is unavailable, the Generating Asset Owner may report using the backup telephone system. Such reporting shall include any incident that has resulted in death to a person; an injury or illness to a person requiring overnight hospitalization; a report to Cal/OSHA, OSHA, or other regulatory agency; or damage to the property of the Generating Asset Owner or another person of more than \$50,000. The Generating Asset Owner shall also report any other incident involving a Generating Asset that has resulted in significant negative media coverage (resulting in a news story or editorial from one media outlet with a circulation or audience of 50,000 or more persons) when the Generating Asset Owner has actual knowledge of the media coverage. If not initially provided, a written report also will be submitted within five business days of the incident. The report will include copies of any reports concerning the incident that have been submitted to other governmental agencies.

DECISION NO. 06-04-055 APPENDIX B

ACCIDENT REPORTING REQUIREMENTS

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2. Within twenty business days of a reportable incident, the utility shall provide to designated CPUC staff a written account of the incident which includes a detailed description of the nature of the incident, its cause and estimated damage. The report shall identify the time and date of the incident, the time and date of the notice to the Commission, the location of the incident, casualties which resulted from the incident, identification of casualties and property damage. The report shall include a description of the utility's response to the incident and the measures the utility took to repair facilities and/or remedy any related problems on the system which may have contributed to the incident.

2. Reportable incidents are those which: (a) result in fatality or personal injury rising to the level of in-patient hospitalization and attributable or allegedly attributable to utility owned facilities; (b) are the subject of significant public attention or media coverage and are attributable or allegedly attributable to utility facilities; or (c) involve damage to property of the utility or others estimated to exceed \$50,000.

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FAIRVIEW

September 5, 2022

CF222480003

2 - SUMMARY:

On Monday, September 5, 2022, at approximately 3:35 PM, the California Department of Forestry and Fire Protection (CAL FIRE) / Riverside County Fire Department (RCoFD) responded to a wildland fire located near Fairview Avenue and Bautista Canyon Road in the unincorporated area of Hemet, County of Riverside. The wildland fire, later known as the Fairview Fire, originated on the property of [REDACTED] Hemet, CA, 92544.

The fire originated under a powerline owned and operated by Sothern California Edison (SCE). The powerline ran up a north facing slope on the property at [REDACTED]. The SCE poles had two energized overhead electrical lines on a cross arm and a communication line underneath in the center of the pole. The east electrical line sagged substantially lower than the west electrical line. The sag or slack in the east electrical line caused the energized electrical line to contact the Frontier communication line causing an electrical arch and a shower of sparks to fall, igniting the vegetation below. The Fairview Fire was reported at approximately 3:37 PM to the RCoFD Emergency Command Center. Law Enforcement Officer Ken MIENKE and I responded to the location of the wildland fire, arriving at approximately 4:33 PM.

On Wednesday, September 7, 2022, at 8:00 AM, Law Enforcement Officer Kory MCGRANAHAN was assigned to the lead on the origin and cause investigation team assisted by Law Enforcement Officers Ken MEINKE, Moe BURKHART, Jace CHAPIN and Tim CABRAL. It was determined the SCE energized overhead electrical line contacted a Frontier communication line that was suspended underneath the electrical lines. This caused a shower of sparks, which caused the fire. A violation of General Order 95, 31.1; Design, Construction, and Maintenance.

The fire ultimately consumed 28,098 acres of land, damaged or destroyed 42 structures killed [REDACTED]. The fire caused great bodily injury to [REDACTED].

Southern California Edison
NDDR Non-Docketed Data Request

DATA REQUEST SET S E D - F a i r v i e w - 0 0 2

To: SED

Prepared by: Bernice Cordero

Title: Claims Investig, Sr Mgr

Dated: 7/10/2023

Question 20:

State the total dollar amounts that SCE has paid and/or estimates that it will pay for the following categories of property damage due to the Fairview fire. If this information is not yet available, indicate approximately when it will be available, and provide it when it becomes available.

- a. Damages to SCE property, and
- b. Third-party claims for property damage.

Response to Question 20:

SCE objects to this request on the grounds it seeks information protected from disclosure by the attorney-client privilege and attorney work product doctrine. Subject to, and without waiving the foregoing objections, SCE responds as follows:

- a. To date, the damages to SCE property due to the Fairview Fire are \$1,206,644.37. The work order is still open so additional charges may be incurred; however, SCE does not currently have an approximation as to when the final total costs will be available. As such, SCE reserves the right to supplement this response if necessary.
- b. No court or agency has awarded or assessed damages although SCE has an internal estimate, that estimate is privileged. The Fairview Fire is presently in litigation and the investigation remains ongoing. As such, SCE reserves the right to supplement this response if necessary.

Southern California Edison
NDDR Non-Docketed Data Request

DATA REQUEST SET SED - Fairview - 001

To: SED

Prepared by: Thomas Jacobus

Title: Bus Resiliency, Prin Mgr

Dated: 3/30/2023

Question 037:

Describe the ambient weather conditions at the time of the incident at the incident location (e.g., wind speed, dry-bulb temperature, relative humidity, etc.) as recorded by SCE's nearest weather station at the time of the incident. Please provide a map of all utility weather stations located in the fire area and state the distance from the closest weather station to the incident location. If SCE does not have any weather stations located in the fire area, provide a map of all non-utility weather stations used to obtain the information requested herein.

Response to Question 037:

SCE objects to this data request on the grounds that it is vague, ambiguous, and overbroad. SCE further objects to this data request to the extent that it seeks information protected by the attorney-client privilege and/or the attorney work product doctrine. Subject to and without waiving its objections, SCE responds as follows: SCE interprets "time of the incident" to refer to the reported time of ignition of the subject fire, and interprets "incident location" as referring to the ignition location of the subject fire. The map below provides a summary of the weather stations (public and SCE owned stations) in the vicinity of the incident location.



The weather conditions reported by SCE Chia Trail for the time indicated on September 5, 2022 are provided below.

Time	Temperature (F)	Relative Humidity (%)	Wind Speed (mph)	Gust Speed (mph)
16:00	100.8	17.54	10.55	20.60

Southern California Edison
NDDR Non-Docketed Data Request

DATA REQUEST SET S E D - F a i r v i e w - 0 0 2

To: SED

Prepared by: Thomas Jacobus

Title: Bus Resiliency, Prin Mgr

Dated: 7/10/2023

Question 10:

In response to DR-01 Question 37, SCE provided information recorded by weather station Chia Trail at the time of the Fairview Fire incident.

- a. Provide information recorded by SCE's Bautista Creek weather station on September 5, 2022, at 1600.
- b. Provide the distance and elevation of SCE's Bautista Creek weather station in relation to the Fire Ignition Area.

Response to Question 10:

SCE objects to this data request on the grounds it is vague, ambiguous, and overbroad. SCE further objects to the extent that it seeks information protected from disclosure by the attorney-client privilege and/or attorney work product doctrine. Subject to, and without waiving its objections, SCE responds as follows: SCE interprets "Fire Ignition Area," to refer to the general ignition location of the Fairview Fire.

- a. See attachment, *SCE Bautista Creek – 090522 1600*.
- b. The elevation of Bautista Creek weather station is 2152 feet and it is located approximately 2.15 – 2.2 miles away from the general ignition location of the Fairview Fire.

Date/Time PDT	air_temp_s Fahrenheit	relative_hu %	wind_speed mph	wind_gust mph	wind_dirac Degrees	dew_point Fahrenheit	wind_cardi code	heat_index Fahrenheit
9/5/22 16:00	102.9	15.82	8.93	16.06	67.52	48.26	ENE	99.45

CONFIDENTIAL

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CONFIDENTIAL

Southern California Edison
NDDR Non-Docketed Data Request

DATA REQUEST SET S E D - F a i r v i e w - 0 0 1

To: SED

Prepared by: Thomas Jacobus

Title: Bus Resiliency, Prin Mgr

Dated: 3/30/2023

Question 036:

Did the weather on September 5, 2022 meet any of the criteria for SCE to proactively de-energize any circuits for a Public Safety Power Shutoff (PSPS) event?

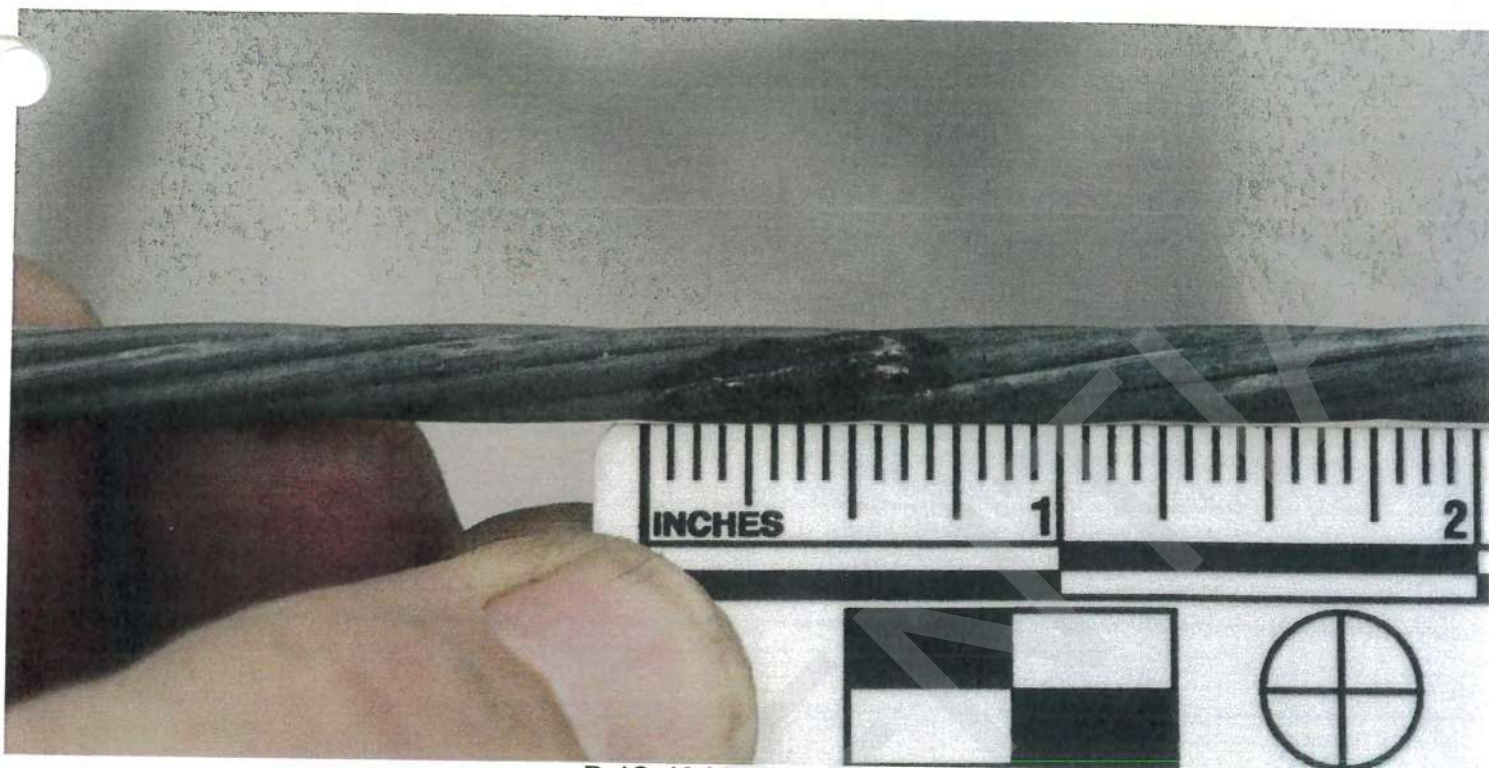
- a. If the weather on September 5, 2022 met any of the criteria for activation of a PSPS event, please indicate what criteria were met.
- b. Please describe the process SCE followed on the above date for making the determination whether or not to activate a PSPS event on the Subject Circuit. Provide a copy of the utility procedures in effect on date of the incident for determining when to activate a PSPS event on a circuit.

Response to Question 036:

SCE objects to this data request as vague, ambiguous, and overbroad. Subject to and without waiving its objections, SCE responds as follows:

- a. The weather on September 5, 2022 did not meet PSPS criteria for activation.
- b. Please see attachment titled *PSPS-06-BR-01, Fire Weather Threat Decision Making v1 pre summer 2022.docx* for SCE's procedures in effect at the time of the subject Fire.

Please note that employee names listed in the attachment are considered confidential and should be treated as such. Such information also should not be released to the public regardless of the pendency of SED's investigation.



P-JG-49 Messenger Line



P-JG-50 Messenger Line

*Please note that the names of SCE employees and employees of its contractors are considered confidential and should be treated as such.

**Please note that customer information is considered confidential and should be treated as such.



Detail 1:
See Sheet 5 for Expanded Profile View
See Sheet 6 for Expanded Plan View

West Electrical
Conductor

East Electrical
Conductor

Communication
Cable - Strand
(Support Wire)

Communication
Cable

Upper Powerline Profile
Looking Westerly



Surveyed September 9, 2020 by David B. Karoly, PLS,
California Land Surveyor license number LS7849 with the
assistance of Nicholas Hancock & Shane Daniel.
Map drafting by David B. Karoly.

DATE: SEP 2022
PAGE: 2 OF 8

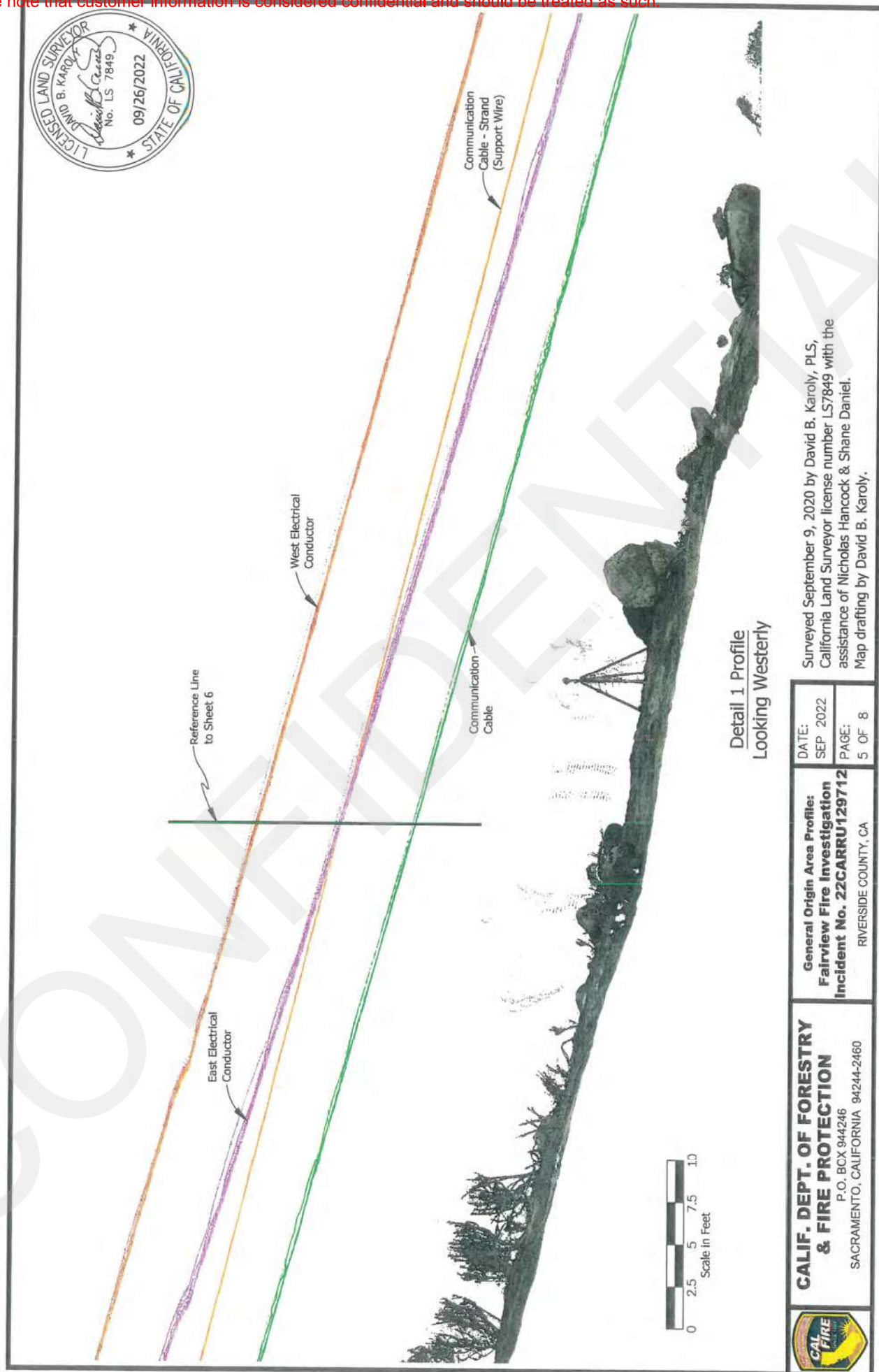
General Origin Area Profile:
Fairview Fire Investigation
Incident No. 22CARRU129712
RIVERSIDE COUNTY, CA

**CALIF. DEPT. OF FORESTRY
& FIRE PROTECTION**
P.O. BOX 944246
SACRAMENTO, CALIFORNIA 94244-2460



*Please note that the names of SCE employees and employees of its contractors are considered confidential and should be treated as such.

**Please note that customer information is considered confidential and should be treated as such.



Surveyed September 9, 2020 by David B. Karoly, PLS,
California Land Surveyor license number LS7849 with the
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Map drafting by David B. Karoly.

DATE: SEP 2022
PAGE: 5 OF 8

General Origin Area Profile:
Fairview Fire Investigation
Incident No. 22CARRU129712
RIVERSIDE COUNTY, CA

**CALIF. DEPT. OF FORESTRY
& FIRE PROTECTION**
P.O. BOX 944246
SACRAMENTO, CALIFORNIA 94244-2460



Southern California Edison
NDDR Non-Docketed Data Request

DATA REQUEST SET SED - Fairview - 001

To: SED

Prepared by: Thomas Jacobus

Title: Bus Resiliency, Prin Mgr

Dated: 3/23/2023

Question 01:

Provide a timeline of the actions SCE took which were directly related to the location of the Fairview Fire. The timeline should begin 24 hours prior to the start of the fire to after California Department of Forestry and Fire Protection (CAL FIRE) obtained utility facilities for evidence, CAL FIRE released the incident scene, or all repairs were completed, whichever event occurred last.

Response to Question 01:

SCE objects to this data request on the grounds that it is premature, vague, ambiguous, and overbroad. The Fairview Fire is still under investigation and all facts are not known at this time. CAL FIRE continues to investigate the Fire and has not produced findings of its investigation nor has it shared key facts and evidence with SCE about the Fairview Fire. In light of pending litigation, SCE is also performing its own investigation of the Fire at the direction of its Law Department, which is subject to the attorney-client privilege and/or the attorney work product doctrine and, accordingly, SCE objects to the production of information called for by this request that is protected from disclosure.

Subject to and without waiving its objections, SCE provides the following timeline for the Fairview Fire. Among other things, this timeline focuses on SCE's efforts to prepare for the upcoming weather event and also includes SCE's efforts to coordinate with CAL FIRE investigators and to discharge its notice obligations to the Commission. This general timeline is not a comprehensive accounting of every action that SCE took regarding the Fire, and SCE reserves the right to update this timeline (without obligating itself to do so) based on additional information learned during its investigation of the Fairview Fire.

09/04/2022 (24-hours prior to ignition)

- The California Independent System Operator (CAISO) issued a Grid Restricted Maintenance Operations notice for Sunday (9/04) from 1200 hours through 2200 hours, due to anticipated high loads and temperatures across the CAISO Grid.
- The California Independent System Operator (CAISO) issued a statewide Flex Alert for Sunday (9/04) from 1600 hours through 2100 hours.
- Electrical Services Incident Management Team 3 (ESIMT 3), the Electric Emergency Action Plan (EEAP) Task Force, and the Pool Teams, were activated and managing the heat incident.
- An SCE-issued Fire Weather Threat (FWT) was in effect for portions of Kern and Los Angeles counties through 0800 hours on Monday (9/05), based on weather forecasts. SOB 322 operating requirements and restrictions were in effect.

09/05/2022

- The California Independent System Operator (CAISO) issued a Grid Restricted Maintenance Operations notice for Monday (9/05) from 1200 hours through 2200 hours, due to anticipated high loads and temperatures across the CAISO Grid.
- The California Independent System Operator (CAISO) issued a statewide Flex Alert for Monday (9/05) from 1600 hours through 2200 hours.
- Electrical Services Incident Management Team 3 (ESIMT 3), the Electric Emergency Action Plan (EEAP) Task Force, and the Pool Teams, were previously activated and managing the heat incident.
- The SCE-issued Fire Weather Threat (FWT) was declared for portions of Kern and Los Angeles counties based on weather forecasts. SOB 322 operating requirements and restrictions were in effect and expired at 0800 hours on Monday (9/05).
- At 3:29 p.m. a portion of the Sprague 12kV Circuit out of Mayberry Substation relayed to lockout.
- According to SCE Fire Management, the Fairview Fire is reported to have started at 3:27 p.m. near the area of Fairview Avenue and Bautista Canyon Road in Hemet.
- At 6:30 p.m. SCE dispatched its Demand Response Events for commercial and residential customers through 8:12 p.m.
- The Sprague 12kV Circuit out of Mayberry Substation locked out at 3:29 p.m. due to direct fire impact and was under imminent threat, partial load was restored at 8:20 p.m. The Corsair 12kV Circuit out of Stetson Substation was under imminent threat and was manually de-energized by a troubleman at 5:53 p.m. due to direct fire impact.

09/06/2022

- The California Independent System Operator (CAISO) issued a Grid Restricted Maintenance Operations notice for Tuesday (9/06) from 1200 hours through 2200 hours, due to anticipated high loads and temperatures across the CAISO Grid.
- The California Independent System Operator (CAISO) issued a statewide Flex Alert for Tuesday (9/06) from 1600 hours through 2100 hours.
- Electrical Services Incident Management Team 4 (ESIMT 4), the Electric Emergency Action Plan (EEAP) Task Force, and the Pool Teams were activated and managing the heat incident.
- At 9:28 a.m., according to SCE Fire Management, the Fairview fire remained at 5% containment.
- SCE Fire Management facilitated access into the fire area for troublemen and line crews to clear hazards for firefighters.
- At 5:00 p.m. SCE dispatched its Demand Response Events for commercial and residential customers through 9:00 p.m.

09/07/2022

- The California Independent System Operator (CAISO) issued a Grid Restricted Maintenance Operations notice for Wednesday (9/07) from 1200 hours through 2200 hours, due to anticipated high loads and temperatures across the CAISO Grid.
- The California Independent System Operator (CAISO) issued a statewide Flex Alert Energy Emergency Alert (EEA) Watch for Wednesday (9/07) from 1600 hours through 2100 hours.

- Electrical Services Incident Management Team 4 (ESIMT 4), the Electric Emergency Action Plan (EEAP) Task Force, and the Pool Teams, were activated and managed the heat incident.
- The Public Safety Power Shutoff Dedicated Incident Management Team was activated.
- An SCE-issued Fire Weather Threat (FWT) was declared for portions of Mono County from 1300 hours through 2000 hours on Wednesday (9/07), based on weather forecasts. SOB 322 operating requirements and restrictions were in effect.
- At 8:38 a.m. according to SCE Fire Management – the Fairview Fire remained at 5% containment
- At 4:00 p.m. SCE dispatched its Demand Response Events for commercial and residential customers through 9:00 p.m.
- At 6:19 p.m. SCE Fire Management revised the start time for the Fairview Fire to 3:37 p.m. per CAL FIRE update. The fire was at approximately 9,846 acres with 5% containment.
- At 6:20 p.m. a portion of the Sprague 12kV Circuit out of Mayberry Substation was manually de-energized due to direct fire impact.

09/08/2022

- The California Independent System Operator (CAISO) issued a Grid Restricted Maintenance Operations notice for Thursday (9/08) from 1200 hours through 2200 hours, due to anticipated high loads and temperatures across the CAISO Grid.
- The California Independent System Operator (CAISO) issued a statewide Flex Alert Energy Emergency Alert (EEA) Watch for Thursday (9/08) from 1500 hours through 2200 hours.
- Electrical Services Incident Management Team 4 (ESIMT 4), the Electric Emergency Action Plan (EEAP) Task Force, and the Pool Teams, were activated and managing the heat incident.
- The Public Safety Power Shutoff Dedicated Incident Management Team previously activated was managing the PSPS Incident.
- An SCE-issued Fire Weather Threat (FWT) was declared for portions of Kern, Los Angeles, Orange, Riverside, San Bernardino, Santa Barbara, and Ventura counties from 0700 hours on Thursday (9/08) through 2300 hours on Friday (9/09), based on weather forecasts. SOB 322 operating requirements and restrictions were in effect.
- At 4:00 p.m. SCE dispatched its Demand Response Events for commercial and residential customers through 9:00 p.m.
- At 4:48 p.m. a portion of the Corsair 12kV Circuit out of Stetson substation was re-energized.
- At 9:22 p.m. the Resort 33kV Circuit out of Nelson substation was re-energized.

09/09/2022

- The California Independent System Operator (CAISO) issued a Grid Restricted Maintenance Operations notice for Friday (9/09) from 1200 hours through 2200 hours, due to anticipated high loads and temperatures across the CAISO Grid.
- The California Independent System Operator (CAISO) issued a statewide Flex Alert Energy Emergency Alert (EEA) Watch for Friday (9/09) from 1600 hours through 2100 hours.
- Electrical Services Incident Management Team 4 (ESIMT 4), the Electric Emergency Action Plan (EEAP) Task Force, and the Pool Teams, were activated and managing the heat incident.
- The Public Safety Power Shutoff Dedicated Incident Management Team were activated and managing the PSPS Incident.

- An Incident Support Team was activated to provide support to the Incident Management Teams.
- An SCE-issued Fire Weather Threat (FWT) was declared for portions of Kern, Los Angeles, Orange, Riverside, San Bernardino, Santa Barbara, and Ventura through 2000 hours on Friday (9/09), based on weather forecasts. SOB 322 operating requirements and restrictions were in effect.
- At 6:15 p.m. the Corsair 12kV Circuit out of Stetson substation was re-energized.
- At 8:00 p.m. PSPS conditions had abated, and no circuits remained in scope. The PSPS Dedicated Incident Management Team, was demobilized. No public safety power shutoffs took place during this incident and no restoration activities were needed.

09/10/2022

- Electrical Services Incident Management Team 4 (ESIMT 4), the Electric Emergency Action Plan (EEAP) Task Force, and the Pool Teams were activated and managing the heat incident.
- An Incident Support Team was activated to provide support to the IMTs.
- At 12:00 p.m. the Electrical Services Incident Management Team 4 (ESIMT 4), the Electric Emergency Action Plan (EEAP) Task Force, the Incident Support Team, and the Pool Teams were demobilized.

09/11/2022

- At 9:49 a.m., according SCE Fire Management, the Fairview Fire was at 45% containment. The fire showed minimal activity and fire crews made good progress. No threat to SCE facilities.

09/12/2022

- At the request of CAL FIRE, SCE personnel removed both overhead primary conductors, 4 insulators, 2 crossarms, and a down guy wire from pole nos. 220029S and 220028S. All items removed were retained by CAL FIRE. There were no repairs to the subject span and no need for SCE to re-conductor since there was no load to service.
- CAL FIRE released the incident scene.

Southern California Edison
NDDR Non-Docketed Data Request

DATA REQUEST SET SED - Fairview - 001

To: SED

Prepared by: Al Watson

Title: Op Mid, Sr Mgr

Dated: 1/30/2023

Question 016:

Did any (momentary or sustained) outages occur on the Subject Circuit from 24 hours before the start of the fire to 24 hours after the fire started? If yes, provide the following:

- a. Documents detailing the cause of the outage
- b. Measures taken by SCE to restore power
- c. Any work orders generated due to the outage

Response to Question 016:

SCE objects to this data request as vague, ambiguous, and overbroad. Subject to and without waiving its objections, SCE responds as follows:

SCE produces the attached information in the same format as previously provided to SED in the wildfire context.

- a. The attached pdf titled *SPRAGUE Interruption Log Sheet 09052022.pdf*, provides details for the cause of the outage that occurred on the Subject Circuit during the time referenced.
- b. The measures taken to restore power are provided in attached pdf titled *SPRAGUE Interruption Log Sheet 09052022.pdf*
- c. There are no work orders that were generated due to the outage of the Subject Circuit.

Please note that employee names contained within the attachments are considered confidential and should be treated as such. Such information also should not be released to the public regardless of the pendency of SED's investigation.

Southern California Edison
NDDR Non-Docketed Data Request

DATA REQUEST SET SED - Fairview - 002

To: SED

Prepared by: Matthew Wageman

Title: Sr Engineer 1

Dated: 7/10/2023

Question 04:

In response to DR-01 Question 16, submitted on 01/30/2023, SCE provided the Sprague Interruption Log sheet that stated, “1529, RAR 0139 trip open with a phase to ground target see ILS.”

- a. Explain the meaning of ILS in the description and provide a copy of the ILS notification.
- b. Explain how recloser 0139 detected a phase to ground fault.
- c. Explain if the phase to ground fault recorded by recloser 0139 is indicative of a conductor phase touching or contacting a communication cable.

Response to Question 04:

SCE objects to this data request on the grounds it is vague, ambiguous, and overbroad. SCE further objects to the extent it seeks information protected by the attorney-client privilege and/or attorney work product doctrine and prematurely seeks expert opinion. The Fairview Fire is still under investigation and all facts are not known at this time. CAL FIRE continues to investigate the Fire and has not produced findings of its investigation, nor has it shared key facts or evidence with SCE about the Fairview Fire. In light of pending litigation, SCE is also performing its own investigation of the Fire at the direction of its Law Department which is subject to the attorney-client privilege and/or attorney work product doctrine, and, accordingly, SCE objects to the production of information called for by this Request that is protected from disclosure. Subject to, and without waiving its objections, SCE responds as follows:

- a. ILS is the Interruption Log Sheet. The Interruption Log Sheet was provided in DR-01 Question 16.
- b. RAR 0139 has a Ground Overcurrent Element set at 5.8 Primary Amps with a #142 Relay curve. The A Phase relay input recorded an overcurrent of 641 amps triggering the Ground overcurrent element in RAR 0139.
- c. The Phase to Ground fault recorded by RAR 0139 does not provide indications of the cause of the overcurrent, however, if a communications cable was grounded and contacted the faulted phase, it may result in a Phase to Ground fault.

Southern California Edison
NDDR Non-Docketed Data Request

DATA REQUEST SET SED - Fairview - 002

To: SED

Prepared by: Bernice Cordero

Title: Claims Investig, Sr Mgr

Dated: 7/10/2023

Question 16:

In response to DR-01 Question 39, submitted on 04/28/2023, SCE provided photos taken on 09/12/2022. Reference Figure 4 below and:

- a. Identify if the conductor shown in Figure 4 is A Phase (1A)
- b. Identify the location where the picture in Figure 4 was taken.
- c. Confirm if the encircled area in Figure 4 is consistent with damage from electrical arcing.

Figure 4: Conductor Phase (source: SCE-CPUC-IMG_3590)



Response to Question 16:

SCE objects to this data request to the extent it seeks information protected by the attorney-client privilege and/or attorney work product doctrine. SCE also objects to this data request as seeking premature expert opinion. The Fairview Fire is still under investigation and all facts are not known at this time. CAL FIRE continues to investigate the Fire and has not produced findings of its investigation, nor has it shared key facts and evidence with SCE about the Fairview Fire. In light of pending litigation, SCE is also performing its own investigation of the Fire at the direction of its Law Department which is subject to the attorney-client privilege and/or attorney work product doctrine, and, accordingly, SCE objects to the production of information called for by this Request

that is protected from disclosure. Subject to, and without waiving its objections, SCE responds as follows:

- a. On information and belief, it is to be noted that the B-Phase conductor between Pole Nos. 220029S and 220028S was wired to the A-Phase input of RAR 0139. Accordingly, the referenced photo depicts B-Phase between Pole Nos. 220029S and 220028S.
- b. The referenced photo was taken at the incident location, Fairview Avenue and Bautista Road in Hemet, CA.
- c. Based on the referenced photograph alone, there appears to be damage on the conductor which could be consistent with electrical arcing, however, a physical examination and expert analysis would be necessary to reach a final conclusion.

Southern California Edison
NDDR Non-Docketed Data Request

DATA REQUEST SET SED - Fairview - 002

To: SED

Prepared by: Matthew Wageman

Title: Sr Engineer 1

Dated: 7/10/2023

Question 06:

Run a simulation of a phase to ground fault located at or near the pole closest to the Fire Ignition Area, for the worst-case scenario involving a conductor line and a communication line. Provide a summary report that includes the results.

Response to Question 06:

It was reported that BF08085 and RAR 0139 both operated and an area of investigation was the span between Pole Nos. 220029S and 220028S. Therefore, I took a bolted Single Line to Ground (SLG) fault at Pole No. 220029S and a SLG fault with 4 ohms of fault impedance.

The bolted SLG fault (zero fault impedance) produced 958 amps of current.
The SLG fault with 4 ohms of fault impedance produced 646 amps of current.

A fault with 641 amps of current, the amount of Ground current recorded by RAR 0139, would clear in 0.082 seconds by the 25A fuse protecting the branch line. Although RAR 0139 would have detected the fault in 0.028 seconds and operated and opened at 0.092 seconds, the fuse would have already cleared the fault in 0.082 seconds. This fits with what was reported that RAR 0139 relayed and fuse BF08085 operated.

Attached is a plot of the associated Time Coordination Curves. See *Sprague_12kV_TCC.pdf*

Southern California Edison
NDDR Non-Docketed Data Request

DATA REQUEST SET SED - Fairview - 002

To: SED

Prepared by: Matthew Wageman

Title: Sr Engineer 1

Dated: 7/10/2023

Question 05:

In response to DR-01 Question 19, part “c,” submitted on 03/24/2023, SCE provided recloser 0139 data collected on 09/05/2022 at 1529, as seen in Figure 1 below.

- a. Describe the fault current experienced by A Phase (IA).
- b. State the conductor rating of A Phase (IA).
- c. Describe the circumstances where a phase to ground fault can occur.

Figure 1: Recloser 0139 data (Source: SCE DR-01 response to Question 19)

RAR 0139 operated on 09/05/2022 at 3:29PM with phase to ground targets.
See PDF titled *SPRAGUE Interruption Log Sheet 09052022.pdf*, attached to response to Data Request No. 16.

Below is a table of fault currents from that the fault on 09/05/2022 at 3:29PM:

A Phase (IA)	B Phase (IB)	C Phase (IC)	Ground (IG)
652 Amps	25 Amps	22 Amps	641 Amps

Response to Question 05:

SCE objects to this data request on the grounds it is vague, ambiguous and overbroad. Subject to, and without waiving its objections, SCE responds as follows:

- a. The current recorded by the recloser controller ground element was 641 amps caused by an overcurrent on the A-phase input to the device.
- b. SCE is interpreting this question as seeking the rating of the conductor in the subject span rather than the conductor at the physical recloser, RAR 0139. It is to be noted that, on information and belief, the B-phase conductor of the subject span was wired to the RAR A-phase input. Accordingly, to the extent SED is seeking the rating of the span conductor which experienced the fault current, it would be B-Phase with the below rating:
Normal Load Rating = 210 amps
Emergency Load Limit = 284 amps
Damage Curve = 1500 amps for 10 seconds to 15000 amps for 0.10 seconds
- c. A Phase to Ground fault can occur anytime a grounded object makes contact with an energized conductor.

Table 2: Basic Minimum Allowable Clearance of Wires from Other Wires at Crossings, in Midspans and at Supports and at Supports (Letter References Denote Modifications of Minimum Clearances as Referred to in Notes Following This Table) All Clearances are in Inches

Other Wire, Cable or Conductor Concerned												
Case No.	Nature of Clearance and Class and Voltage of Wire, Cable or Conductor Concerned	Supply Conductors (Including Supply Cables)										
		A Span Wires, Guys and Messengers	B Trolley Contact Conductors 0 – 750 Volts	C Communication Conductors (Including Open Wire, Cables and Service Drops)	D 0 – 750 Volts (Including Service Drops) and Trolley Feeders (a)	E 750 - 7,500 Volts	F 7,500 - 20,000 Volts	G 20,000 - 35,000 Volts	H 35,000 - 75,000 Volts	I 75,000 - 150,000 Volts	J 150,000 - 300,000 Volts	K (kk) 300,000 - 550,000 Volts
	Clearance between wires, cables and conductors not supported on the same poles, vertically at crossings in spans and radially where colinear or approaching crossings											
1	Span wires, guys and messengers (b)	18 (c)	48 (d, e)	24 (e)	24 (e)	36 (f)	36	72	72	78	78 (gg)	138 (hh)
2	Trolley contact conductors, 0 - 750 volts	48 (d, e)	-	48 (d)	48 (d, h)	48	72	96	96	96	96 (gg)	156 (hh)
3	Communication conductors	24 (e)	48 (d)	24	48 (i)	48 (dd)	72	96	96	96	96 (gg)	156 (hh)
4	Supply conductors, service drops and trolley feeders, 0 - 750 volts (qq)	24 (e)	48 (d, h)	48 (i)	24	48	48	96 (oo)	96	96	96(gg)	156 (hh)
5	Supply conductors, 750 - 7,500 volts (qq)	36 (f)	48	48 (dd)	48	48 (h)	72	96 (oo)	96	96	96(gg)	156 (hh)
6	Supply conductors, 7,500 - 20,000 volts (qq)	36	72	72	48	72	72	96 (oo)	96	96	96 (gg)	156 (hh)
7	Supply conductors, more than 20,000 volts (qq)	72 (g)	96 (g)	96 (g)	96 (g, oo)	96 (g, oo)	96 (g, oo)	96 (g, oo)	96 (g)	96	96 (gg)	156 (hh)
	Vertical separation between conductors and/or cables, on separate crossarms or other supports at different levels (excepting on related line and buck arms) on the same pole and in adjoining midspans											
8	Communication Conductors and Service Drops	-	-	12 (j, rr)	48 (k, l, m, n, pp)	48 (k)	72 (m n)	72 (m)	72	78	87 (gg)	147 (hh)
9	Supply Conductors Service Drops and Trolley Feeders, 0 - 750 Volts	-	-	48 (k, l, m, n, pp)	24 (h, k, m, o)	48 (k, m, p)	48 (k, m, p)	72 (m, nn)	72	78	87 (gg)	147 (hh)

Southern California Edison
NDDR Non-Docketed Data Request

DATA REQUEST SET SED - Fairview - 003

To: SED

Prepared by: Jeff Lawrence

Title: Bus Ops Anlys, Sr Mgr

Dated: 8/25/2023

Question 04:

In the response to DR-02 Q3, subpart b, SCE provided an updated diagram with the sag measurements for Wire 1 (A-Phase) as 10.5 ft and Wire 2 (B-Phase) as 11.1 ft captured on a LiDAR scan on 06/02/2020.

- a. Provide the minimum distance between Wire 1 and the Frontier Messenger cable supported by Poles 220029S and 220028S taken from the LiDAR scan on 06/02/2020.
- b. Provide the minimum distance between Wire 2 and the Frontier Messenger cable supported by Poles 220029S and 220028S taken on 06/02/2020.

Response to Question 04:

- a. The minimum distance from Wire 1 and the Frontier Messenger cable as measured in the LiDAR scan obtained on 06/02/2020, was 6.6 ft.
- b. The minimum distance from Wire 2 and the Frontier Messenger cable as measured in the LiDAR scan obtained on 06/02/2020, was 6.68 ft.

Southern California Edison
NDDR Non-Docketed Data Request

DATA REQUEST SET SED - Fairview - 003

To: SED

Prepared by: Bernice Cordero

Title: Claims Investig, Sr Mgr

Dated: 8/25/2023

Question 05:

In the response to DR-02 Q3, subpart c, SCE stated that Wire 1 and Wire 2 had 10.5 ft of sag and 11.1 ft of sag, respectfully, from the LiDAR scan taken on June 02, 2020.

- a. Provide the sag measurements for Wire 1 and Wire 2 taken by SCE's consultant after the Incident on 07/08/2022.
- b. Provide the minimum distance between Wire 1 and the Frontier Messenger cable taken by SCE's consultant after the Incident on 07/08/2022.
- c. Provide the minimum distance between Wire 2 and the Frontier Messenger cable taken by SCE's consultant after the Incident on 07/08/2022.

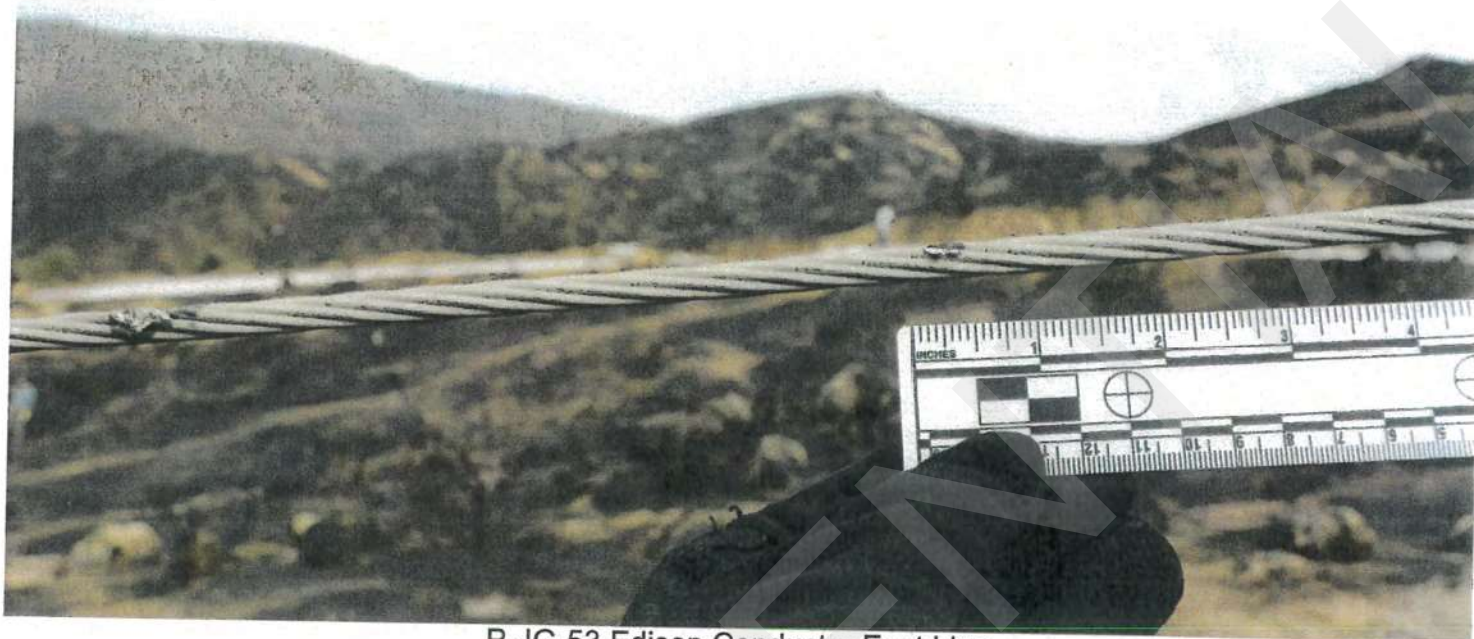
Response to Question 05:

SCE objects to this Request as vague and ambiguous as to date insofar as SCE's consultant did not take measurements on 07/08/2022. SCE further objects on the grounds the Request may seek information protected from disclosure by the attorney-client privilege and/or attorney work product doctrine. Subject to, and without waiving its objections, SCE responds as follows:

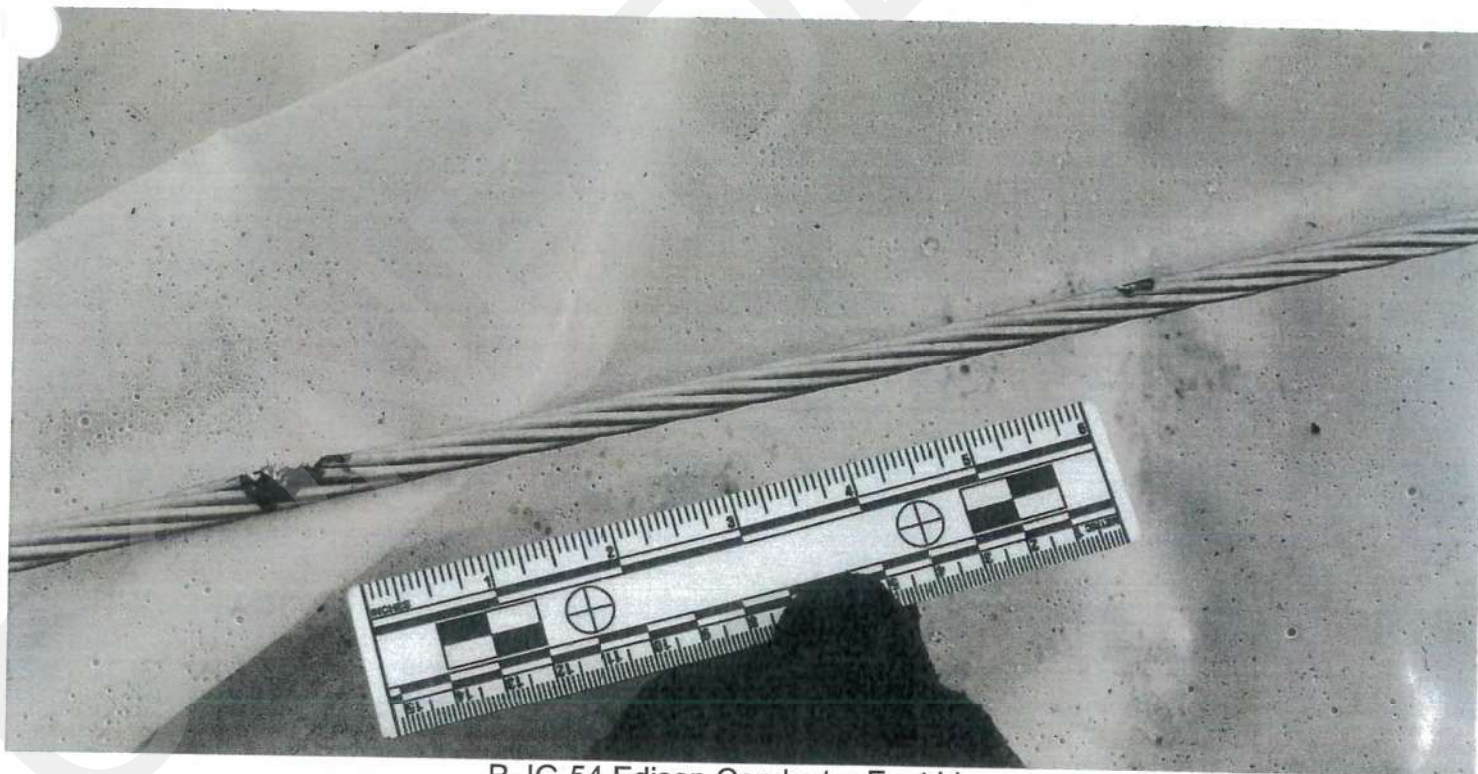
SCE assumes that the date of 07/08/2022 in the Request was a typo and that the Request meant to ask for measurements obtained by SCE's consultant after the incident on 09/08/2022. As indicated in prior responses, SCE objects to providing its consultant's LiDAR obtained on 09/08/2022 as protected from disclosure by the attorney work product doctrine, however, SCE will provide the requested measurements.

- a. Wire 1 sag measurement as reflected in LiDAR conducted by SCE's consultant on 09/08/2022 was 11.9 ft. and Wire 2 sag measurement was 18.3 ft.
- b. The minimum distance between Wire 1 and the Frontier Messenger cable as reflected in LiDAR conducted by SCE's consultant on 09/08/2022 was 5.0 ft.
- c. The minimum distance between Wire 2 and the Frontier Messenger cable as reflected in LiDAR conducted by SCE's consultant on 09/08/2022 was 4.8 ft.





P-JG-53 Edison Conductor East Line



P-JG-54 Edison Conductor East Line



*Please note that the names of SCE employees and employees of its contractors are considered confidential and should be treated as such.

**Please note that customer information is considered confidential and should be treated as such.

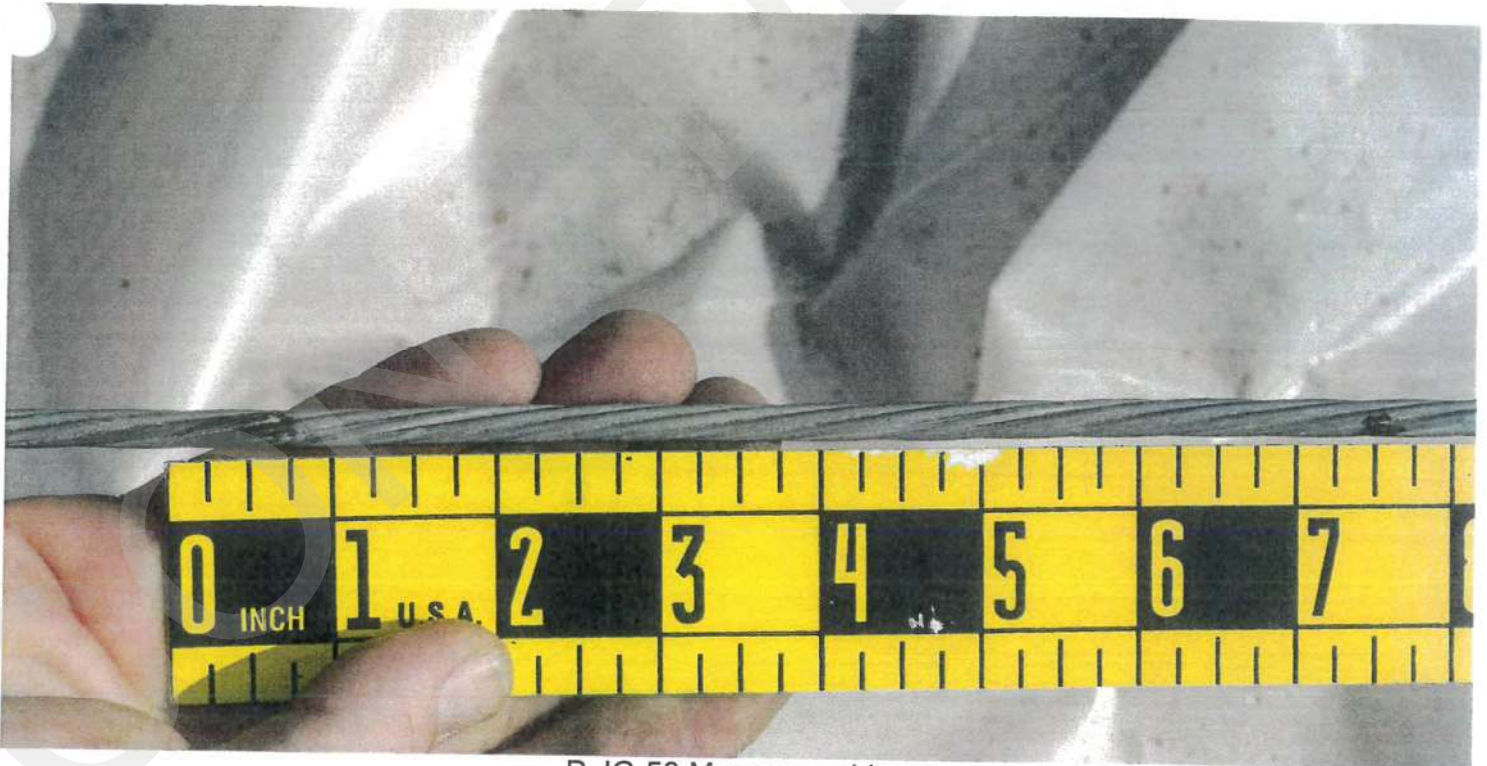
FAIRVIEW

September 5, 2022

22CARRU129712



P-JG-57 Messenger Line



P-JG-58 Messenger Line

Southern California Edison
NDDR Non-Docketed Data Request

DATA REQUEST SET SED - Fairview - 003

To: SED

Prepared by: Lisett Sotres

Title: Eng, Mgr

Dated: 8/25/2023

Question 03:

In the response to DR-02 Q3, subpart a, SCE provided the Overhead Construction Standard-Conductor and Splices Manual (SCE's Construction Manual) and indicated that the table on page 42-43/83, shown in Figure 1: Table CO 168-41, lists the maximum sag for #2 ACSR conductors.

- a. State if the loading on Pole 220029S and Pole 220028S was light or heavy at the Incident Date and Time.
- b. Confirm that the maximum sag limit of 8ft shown in Table CO 168-41 of SCE's Construction Manual is applicable to the 487ft span of #2 ACSR conductors supported by Pole 220028S and Pole 220029S.
- c. If the 8 ft final sag limit seen in Figure 1 is not applicable to Pole 220028S and Pole 220029S, state the maximum sag limit per SCE's Construction Manual's standard. Identify the page number and location of the sag limit in the SCE Construction Manual.

Figure 1 Table CO 168-41

Scope CO 168.19 Sag Chart for New and Existing Reduced Tension Guyed #4 — 653 ACSR for Heavy-Loading Areas

Table CO 168-41: Sag Chart for New and Existing Reduced Tension Guyed #4 — 653 ACSR for Heavy-Loading Areas

Conductor Type	Span (ft)	Initial Sag	Final Sag
		50–110°F	130°F
#4 ACSR ^{a/}	60	1'-3"	1'-6"
	80	2'-2"	2'-6"
	100	3'-6"	3'-7"
	120	4'-10"	5'-2"
	140	6'-10"	7'-0"
	160	8'-9"	9'-0"
#2 ACSR ^{a/}	60	1'-3"	1'-6"
	80	2'-0"	2'-4"
	100	3'-0"	3'-4"
	120	4'-5"	4'-7"
	140	5'-10"	6'-2"
	160	7'-8"	8'-0"
	60	1'-0"	1'-1"

Response to Question 03:

- a. Pole 220029S and Pole 220028S are below 3,000 ft elevation. Therefore, per GO95, they were pole loaded with a GO95 Light Load case. The poles are also located in an SCE high wind area of 18 psf; therefore, the poles were also pole loaded to an 18 psf load case.
- b. No, Table CO168-41 of SCE's Distribution Overhead Construction Standards is not applicable to the 487 ft span of #2 ACSR conductors supported by Pole 22028S and Pole 220029S.
- c. The applicable sag table for Pole 220028S and Pole 220029S is Table CO 140-1 on page 215 of SCE's Distribution Overhead Construction Standards. The maximum sag per Table CO 140-1 is 9'10" at a conductor temperature of 130°F.

Southern California Edison
NDDR Non-Docketed Data Request

DATA REQUEST SET SED - Fairview - 004

To: SED

Prepared by: Raymond Fugere

Title: Dir Wildfire Safety

Dated: 10/11/2023

Question 01:

In response to Data Request (DR) Question (Q) 3(c), SCE stated that the maximum allowable sag between Pole 220028S and Pole 220029S was 9 feet (ft) and 10 inches. SCE stated that the maximum allowable sag, according to Table CO 140-1 of SCE's Distribution Overhead Construction Standard, is 9'10" at a conductor temperature of 130F.

- a. Explain why the Wire 1 sag, measured by SCE on the 06/02/2020 LiDAR scan (10.5ft for Wire 1 or A phase), was greater than the confirmed maximum allowable sag applicable to the span between Pole 220028S and Pole 220029S.
- b. Explain why the Wire 2 sag, measured by SCE on the 06/02/2020 LiDAR scan (11.1ft for Wire 2 or B Phase), was greater than the confirmed maximum allowable sag applicable to the span between Pole 220028S and Pole 220029S.
- c. Explain why the annual grid patrols performed on 05/11/2021 and 05/11/2022 did not identify the excessive sag on the span between Pole 220028S and Pole 220029S.

Response to Question 01:

SCE objects to this Request to the extent it seeks information protected by the attorney-client privilege and/or attorney work product doctrine. SCE also objects as calling for speculation and seeking premature expert opinion. The Fairview Fire is still under investigation and all facts are not known at this time. In light of pending litigation, SCE is performing its own investigation at the direction of its Law Department which is subject to the attorney-client privilege and attorney work product doctrine. Accordingly, SCE objects to the production of information called for by this Request that is protected from disclosure. Subject to its objections, SCE responds as follows:

- a. SCE's investigation into the Fairview Fire is still ongoing and there are a number of factors that might contribute to conductor sag. Some examples include twisted/canted crossarm, leaning pole, and conductor movement in the insulator. At this time, however, SCE has not identified a specific cause of the sag between Pole 220028S and Pole 220029S for Wire 1.
- b. SCE's investigation into the Fairview Fire is still ongoing and there are a number of factors that might contribute to conductor sag. Some examples include twisted/canted crossarm, leaning pole, and conductor movement in the insulator. At this time, however, SCE has not identified a specific cause of the sag between Pole 220028S and Pole 220029S for Wire 2.
- c. SCE objects to the phrase, "excessive sag," as vague, ambiguous, and assumes facts not in evidence. Subject to its objections, SCE responds as follows: SCE's investigation into the Fairview Fire is still ongoing, including, but not limited to, what may have affected an inspector's ability to note an issue with sag in this span if it existed at the time of the inspection. SCE's Annual grid patrol, or patrol inspection, is defined as a "simple visual inspection" in GO 165, intended to identify "obvious structural problems and hazards." While SCE does not know the extent of the sag

conditions at the time of the referenced patrol inspections, assuming, hypothetically, the sag was the same during those inspections as reflected in the 06/02/2020 LiDAR scan, the comparative elevation of the poles, topography, length of span, available line-of-sight, would all impact whether or not the inspectors would be able to visually observe a slight variance from the maximum sag as provided in Table CO 140-1.

23.3 Sag includes either Normal or Apparent, as defined in the following:

- A. Normal Sag** means the difference in elevation between the highest point of support of a span and the lowest point of the conductor in the span at 60° F. and no wind loading (see App. G, Figure 4).
- B. Apparent Sag** means the maximum departure, measured vertically, of a wire in a given span from a straight line between the two points of support of the span at 60° F. and no wind loading. Where the two supports are at same level, this will be the normal sag (see Appendix G, Figure 5).

23.4 Service Drop means that portion of a circuit located between a pole line and a building, a structure or a service and meter pole.

Note: Revised July 26, 1966 by Decision No. 71009 and November 6, 1992 by Resolution No. SU-15.

23.5 Span Wire means a wire or cable used as an auxiliary support for wires, cables, or other equipment. As applied to trolley construction it means a wire or cable used to support laterally, or which is attached to wires which support laterally, trolley contact conductors and appurtenances in electrical contact therewith, including wires commonly referred to as cross span wires, bracket span wires, pull-offs, trolley strain guys, dead ends, etc.

- A. Lift Span** means a wire, cable or rod used to share the load of span wires or brackets.

23.6 Swimming Pool means that portion of any natural or artificially contained body of water which is 24 inches or more in depth at any point below the highest water level, which is intended for use for swimming, bathing or other similar recreational purposes, and which has a surface area exceeding 100 square feet.

Note: Added January 2, 1962 by Resolution No. E-1109.

23.7 Tension means either Maximum Allowable or Working as defined in the following definitions:

- A. Maximum Allowable Tension** for a supply conductor means one-half the ultimate tensile strength of the conductor.
- B. Maximum Working Tension** is that conductor tension resulting under the construction arrangement with the maximum loading conditions specified in Rule 43.

Southern California Edison
NDDR Non-Docketed Data Request

DATA REQUEST SET SED - Fairview - 001

To: SED

Prepared by: Jeff Lawrence

Title: Bus Ops Anlys, Sr Mgr

Dated: [tResponseDate]

Question 014:

Provide copies of the five most recent LiDAR inspections conducted on the portion of the Subject Circuit spanning five structures upstream of the dead-end of the branch line at Pole 220029S from September 5, 2012 through September 5, 2022. Include all findings, any notifications resulting from the inspections, and any work orders generated by findings from the inspections.

Response to Question 014:

SCE objects to this data request on the grounds that it is vague and ambiguous. SCE also objects to this data request to the extent that it calls for information protected by the attorney-client privilege and/or attorney work product doctrine. Subject to and without waiving these objections, SCE responds as follows: SCE currently does not have a LiDAR inspection programs per se. Instead, LiDAR surveys may be conducted for various purposes such as reviewing for vegetation encroachments, SCE's Long Span Initiative (LSI), and HD Imaging Accuracy. SCE thus interprets this data request as seeking available LiDAR data from the poles referenced during the time-period listed.

After a diligent search and reasonable inquiry, SCE located LiDAR data for the following structures:

220029S
220028S
220027S (replaced by 4943353E in 2022)
220026S
220025S
220024S (replaced by 4943356E in 2022)

The LiDAR was collected in 2019 for 220024S and 220026S, with the remaining structures being collected in 2020. We do not have records of any other LiDAR collections for these structures. No notifications or work orders were generated from the LiDAR collected.

SCE's data from the 2019 and 2020 collections are attached hereto and titled:

- *LiDAR Data for Fairview Fire Data Request.xlsx*
- *LAZ*
- *LiDAR*
- *Offending Vegetation .pdf and .shp*
- *Tree Fall Risk*

Southern California Edison
NDDR Non-Docketed Data Request

DATA REQUEST SET SED - Fairview - 002

To: SED

Prepared by: Jeff Lawrence

Title: Bus Ops Anlys, Sr Mgr

Dated: 7/10/2023

Question 03:

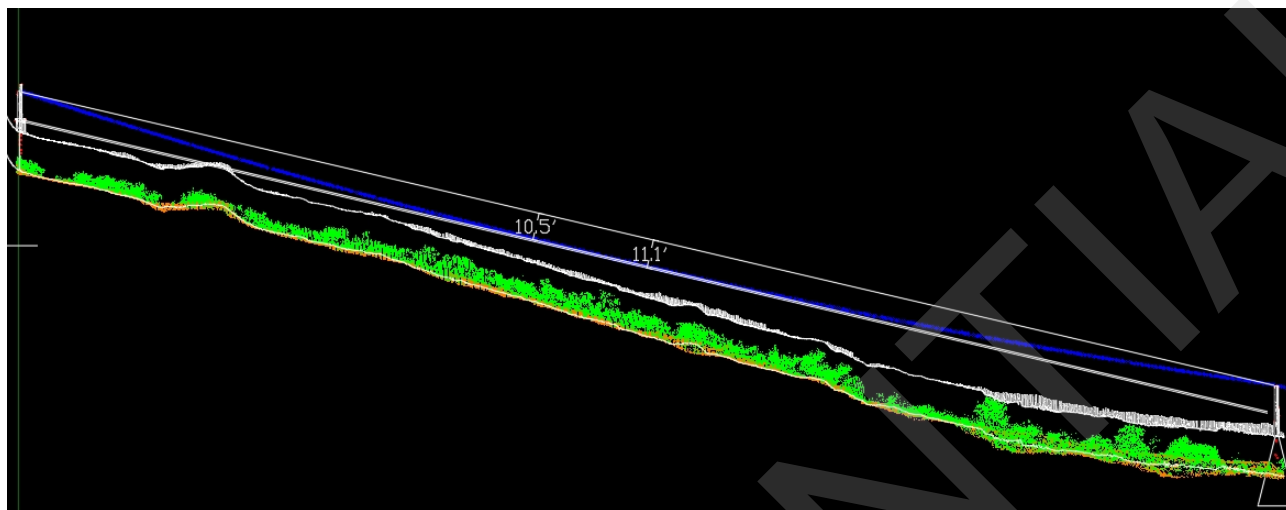
In response to DR-01 Question 8, submitted on 05/05/2023, SCE provided sag dimensions between Poles 220029S & 220028S.

- a. Provide SCE's internal procedure manual for the maximum allowable sag limit on conductors, such as the ones on the Subject Circuit, and identify the location, section, and page number in SCE's procedure or installation manual where sag maximum limits on conductors are specified.
- b. Identify Wire 1 and Wire 2 on SCE's diagram 8.21 in relation to Phase 1A and/or Phase 1B.
- c. SCE provided 10.5 feet of sag in Diagram 8.2.
 - i. Confirm if 10.5 feet of sag is the distance for Wire 1 and confirm the date of the LiDAR scan.
 - ii. Provide the same dimensions and diagram for Wire 2 and confirm the date of the LiDAR scan.
- d. SCE stated that before the Fairview Fire, the minimum distances to ground, "K," for Wire 1 and Wire 2 were 18.1' and 19.4' respectively.² Provide the same distance, "K," taken by SCE investigators after the Fairview Fire.

Response to Question 03:

SCE objects to this request on the grounds it seeks information which may be protected by the attorney-client privilege and/or attorney work product doctrine. Subject to, and without waiving its objections, SCE responds as follows:

- a. The allowable sag for various conductor sizes for distribution is outlined in Distribution Overhead Construction Standards – Conductors and Splices (CO) section. The applicable table is located on CO 168, Sheet 42-43/of 83. Please note #2 ACSR is no longer used for new installations and the sag calculations are not current since we no longer purchase or install it.
- b. See attached file – *Updated_dia_8_21.xlsx*.
- c.
 - i. Yes, 10.5 feet of sag is the distance for Wire 1 (Phase 1A). This information was captured on June 2, 2020. Although SCE had previously indicated the dates of the LiDAR scan were in October and December, 2020, after further review, and on information and belief, those dates were dates the information may have been uploaded to the system, not the capture date, which believed to be 6/2/20.
 - ii. See below diagram. Dimensions for Wire 2 (Phase 1B) is 11.1 feet of sag. This information was captured on June 2, 2020.



- d. After the Fairview Fire, SCE investigators did not measure the distance to ground of Wire 1 and Wire 2. SCE had a LiDAR scan performed by its retained consultant, said LiDAR protected from disclosure by the attorney work product doctrine. As to the requested measurements, SCE will provide those distances, however, will have to do so in a supplemental response as the LiDAR is in the possession of its retained consultant who, SCE has been informed, is on vacation and will be returning after July 17, 2023.

Southern California Edison
NDDR Non-Docketed Data Request

DATA REQUEST SET SED - Fairview - 003

To: SED

Prepared by: Bernice Cordero

Title: Claims Investig, Sr Mgr

Dated: 8/25/2023

Question 05:

In the response to DR-02 Q3, subpart c, SCE stated that Wire 1 and Wire 2 had 10.5 ft of sag and 11.1 ft of sag, respectfully, from the LiDAR scan taken on June 02, 2020.

- a. Provide the sag measurements for Wire 1 and Wire 2 taken by SCE's consultant after the Incident on 07/08/2022.
- b. Provide the minimum distance between Wire 1 and the Frontier Messenger cable taken by SCE's consultant after the Incident on 07/08/2022.
- c. Provide the minimum distance between Wire 2 and the Frontier Messenger cable taken by SCE's consultant after the Incident on 07/08/2022.

Response to Question 05:

SCE objects to this Request as vague and ambiguous as to date insofar as SCE's consultant did not take measurements on 07/08/2022. SCE further objects on the grounds the Request may seek information protected from disclosure by the attorney-client privilege and/or attorney work product doctrine. Subject to, and without waiving its objections, SCE responds as follows:

SCE assumes that the date of 07/08/2022 in the Request was a typo and that the Request meant to ask for measurements obtained by SCE's consultant after the incident on 09/08/2022. As indicated in prior responses, SCE objects to providing its consultant's LiDAR obtained on 09/08/2022 as protected from disclosure by the attorney work product doctrine, however, SCE will provide the requested measurements.

- a. Wire 1 sag measurement as reflected in LiDAR conducted by SCE's consultant on 09/08/2022 was 11.9 ft. and Wire 2 sag measurement was 18.3 ft.
- b. The minimum distance between Wire 1 and the Frontier Messenger cable as reflected in LiDAR conducted by SCE's consultant on 09/08/2022 was 5.0 ft.
- c. The minimum distance between Wire 2 and the Frontier Messenger cable as reflected in LiDAR conducted by SCE's consultant on 09/08/2022 was 4.8 ft.

CO 140 Sag Chart #4—336 ACSR
Scope CO 140.1 Sag — Temperature Stringing Table #4 — 336 ACSR for Light-Loading Areas
Table CO 140–1: Sag — Temperature Stringing Table #4 — 336 ACSR for Light-Loading Areas

Span (ft)	Sag					
	Initial Stringing Sag				Final Sag	
	50°F	70°F	90°F	110°F	70°F	130°F
100	0'-2"	0'-4"	0'-5"	0'-7"	0'-5"	1'-5"
120	0'-4"	0'-5"	0'-6"	0'-10"	0'-7"	1'-8"
140	0'-5"	0'-6"	0'-8"	1'-0"	0'-10"	2'-0"
160	0'-6"	0'-7"	0'-11"	1'-4"	1'-0"	2'-4"
180	0'-7"	0'-10"	1'-1"	1'-6"	1'-2"	2'-8"
200	0'-8"	1'-0"	1'-4"	1'-10"	1'-5"	3'-1"
220	0'-11"	1'-2"	1'-7"	2'-1"	1'-8"	3'-5"
240	1'-1"	1'-5"	1'-10"	2'-5"	2'-0"	3'-10"
260	1'-4"	1'-7"	2'-1"	2'-10"	2'-4"	4'-2"
280	1'-6"	1'-11"	2'-6"	3'-1"	2'-7"	4'-8"
300	1'-8"	2'-2"	2'-10"	3'-6"	3'-0"	5'-1"
320	1'-11"	2'-6"	3'-1"	3'-11"	3'-4"	5'-7"
340	2'-2"	2'-10"	3'-6"	4'-4"	3'-8"	6'-1"
360	2'-6"	3'-1"	3'-11"	4'-8"	4'-1"	6'-6"
380	2'-10"	3'-6"	4'-4"	5'-2"	4'-6"	7'-1"
400	3'-2"	3'-11"	4'-8"	5'-0"	5'-0"	7'-7"
420	3'-6"	4'-4"	5'-2"	6'-1"	5'-5"	8'-1"
440	3'-11"	4'-8"	5'-8"	6'-7"	5'-11"	8'-8"
460	4'-4"	5'-2"	6'-2"	7'-1"	6'-5"	9'-2"
480	4'-10"	5'-8"	6'-8"	7'-8"	7'-0"	9'-10"
500	5'-5"	6'-4"	7'-4"	8'-2"	7'-8"	10'-5"

1.0 Guying


Conductor tensions for guying #4 is 604 lb.

Conductor tensions for guying 1/0 is 1,415 lb.

Conductor tensions for guying 336.4 is 2,846 lb.

2.0 Ground Clearance

Use 130°F sags when calculating conductor-to-ground clearances.

Approved by: 	Sag Chart #4—336 ACSR	CO 140
Effective Date: 04-30-2021	What's Changed?	Sheet 1 of 9 DOH





Section III

Requirements for All Lines

Rule 31.1

31 Application

The following rules apply to all classes of overhead lines under all conditions.

31.1 Design, Construction and Maintenance

Electrical supply and communication systems shall be designed, constructed, and maintained for their intended use, regard being given to the conditions under which they are to be operated, to enable the furnishing of safe, proper, and adequate service.

For all particulars not specified in these rules, design, construction, and maintenance should be done in accordance with accepted good practice for the given local conditions known at the time by those responsible for the design, construction, or maintenance of communication or supply lines and equipment.

A supply or communications company is in compliance with this rule if it designs, constructs, and maintains a facility in accordance with the particulars specified in General Order 95, except that if an intended use or known local conditions require a higher standard than the particulars specified in General Order 95 to enable the furnishing of safe, proper, and adequate service, the company shall follow the higher standard.

For all particulars not specified in General Order 95, a supply or communications company is in compliance with this rule if it designs, constructs and maintains a facility in accordance with accepted good practice for the intended use and known local conditions.

All work performed on public streets and highways shall be done in such a manner that the operations of other utilities and the convenience of the public will be interfered with as little as possible and no conditions unusually dangerous to workmen, pedestrians or others shall be established at any time.

Note: The standard of accepted good practice should be applied on a case by case basis. For example, the application of "accepted good practice" may be aided by reference to any of the practices, methods, and acts engaged in or approved by a significant portion of the relevant industry, or which may be expected to accomplish the desired result with regard to safety and reliability at a reasonable cost.

Note: Revised January 13, 2005 by Decision No. 0501030 and January 12, 2012 by Decision No. 1201032.

***Please note that the names of employees and employees of contractors are considered confidential and should be treated as such.**

[illegible]

*Please note that the names of employees and employees of contractors are considered confidential and should be treated as such.

Structure ID	Equipment ID	Meas. Doc Number	Meas. Doc Work Order	TDBU Work Order	Inspection Date	Inspection Code	Inspection Completed by (User ID)	Notification s Created	Notification Priority	Notification Description
OH-20678S	000000000200796195	30043738168	000902032245	000902032245	5/16/2017	ODI Complete				
OH-20678S	000000000200796195	30071238174	000903054919	000903054919	7/31/2020	ODI Complete				
OH-20678S	000000000200796195	30077182932	000903276200	000903276200	3/16/2021	ODI Complete		411498225	3	REMV IDLE PUBLIC POLE
OH-20678S	000000000200796195	30082944586	000903615374	000903615374	2/10/2022	ODI Complete				
OH-220026S	000000000200807494	30043738148	000902032245	000902032245	5/16/2017	ODI Complete				
OH-220026S	000000000200807494	30071237949	000903054919	000903054919	7/31/2020	ODI Complete				
OH-220026S	000000000200807494	30077182909	000903276200	000903276200	3/16/2021	ODI Complete		411498218	Repair By Insp.	INSTALL MISSING PUBLIC PLTAG POLE
OH-220026S	000000000200807494	30077182909	000903276200	000903276200	3/16/2021	ODI Complete		411498217	2	REPLC DAMAGE PUBLIC POLE
OH-220026S	000000000200807494	30077182909	000903276200	000903276200	3/16/2021	ODI Complete		412132959	3	INSTALL MISSING PUBLIC VSTRPS POLE
OH-220026S	000000000208259946	30082944581	000903615374	000903615374	2/10/2022	ODI Complete				
OH-220028S	000000000200807496	30043738149	000902032245	000902032245	5/16/2017	ODI Complete				
OH-220028S	000000000200807496	30071238052	000903054919	000903054919	7/31/2020	ODI Complete				
OH-220028S	000000000200807496	30077182933	000903276200	000903276200	3/16/2021	ODI Complete				

***Please note that the names of employees and employees of contractors are considered confidential and should be treated as such.**

OH-220028S	000000000200807496	30082944585	000903615374	000903615374	2/10/2022 ODI Complete				
OH-220029S	000000000200807497	30043738290	000902032245	000902032245	5/16/2017 ODI Complete				
OH-220029S	000000000200807497	30071237969	000903054919	000903054919	7/31/2020 ODI Limited Inspection – Access				
OH-220029S	000000000200807497	30077182934	000903276200	000903276200	3/16/2021 ODI Limited Inspection – Access				
OH-220025S	000000000201632827	30043737250	000902032245	000902032245	5/16/2017 ODI Complete				
OH-220025S	000000000201632827	30071238213	000903054919	000903054919	7/31/2020 ODI Complete				
OH-220025S	000000000201632827	30077182921	000903276200	000903276200	3/16/2021 ODI Complete		411498220	Repair By Insp.	INSTALL MISSING PUBLIC PLTAG POLE
OH-220025S	000000000201632827	30077182921	000903276200	000903276200	3/16/2021 ODI Complete		411498219	2	REPAIR CLEARNC PRI GUY POLE

***Please note that the names of employees and employees of contractors are considered confidential and should be treated as such.**

Request Number	Request Type	Request Status	Request Date	Request Description	Request Location	Request Status	Request Description
OH-220025S	000000000201632827	30082944587	000903615374	000903615374	2/10/2022	ODI Complete	REPAIR CLEARNC PUBLIC ANCHOR POLE
OH-220025S	000000000201632827	30082944587	000903615374	000903615374	2/10/2022	ODI Complete	INSTALL MISSING PUBLIC VSTRPS POLE

*Please note that the names of employees and employees of contractors are considered confidential and should be treated as such.

						[REDACTED]		
OH-220025S	000000000201632827	30082944587	000903615374	000903615374	2/10/2022 ODI Complete	412132958	3	REPLC MISSING PUBLIC GUYGUARD POLE

*Please note that the names of employees and employees of contractors are considered confidential and should be treated as such.

Notification Long Text	Notification Created Date	Notification Due Date	Notification Status	Notification Completed Date	Order	Order Status	Order Type
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* 03/17/2021 05:44:07 PST CMSPIWSUSER (CMSPIWSUSER) * [REDACTED] * 03/16/2021 14:39 * 20678S POLE AND SECONDARY CONDUCTOR ATTACHED TO THE POLE ARE IDLE * Switching Center: Switching Center / Substation:Walnut * ----- ----- * 02/10/2022 17:18:35 PST (ESAPOWSUSER) * [REDACTED] * 02/10/2022 08:04 * WO 903615374 * ODI confirmed condition still exists	3/16/2021	3/15/2026	Pending				
* 03/17/2021 05:43:40 PST CMSPIWSUSER (CMSPIWSUSER) * Switching Center: Switching Center / Substation:Mira Loma	3/16/2021	3/16/2021	Completed	3/16/2021			
* 03/17/2021 05:43:34 PST CMSPIWSUSER (CMSPIWSUSER) * [REDACTED] * 03/16/2021 13:45 * 220026S TOP OF POLE LOOKS BAD AND IS NOT LETTING THE PRIMARY CROSS ARM TO SIT FLUSH AGAINST * THE POLE * Switching Center: Switching Center / Substation:Walnut * 03/18/2021 08:00:16 PST [REDACTED] . [REDACTED]) Phone [REDACTED] * Setting DMSR flag to expedite work to be done on OCI 2NE budget. ODI RISK INSP * 08/09/2021 09:55:52 PST [REDACTED]) * [REDACTED] (PAR) COMPLETED ON 8/6/21	3/16/2021	9/16/2021	Completed	8/6/2021	TD1838404	Closed	EDSR
* 02/10/2022 17:18:39 PST (ESAPOWSUSER) * [REDACTED] * 02/10/2022 16:56 * 220026S Vis strips needed * * Switching Center: Switching Center / Substation: Mayberry	2/10/2022	2/10/2027	Pending				

*Please note that the names of employees and employees of contractors are considered confidential and should be treated as such.

* 03/17/2021 05:43:48 PST CMSPIWSUSER
(CMSPIWSUSER) * Switching Center: Switching
Center / Substation:Lighthipe 3/16/2021 3/16/2021 Completed 3/16/2021

* 03/17/2021 05:43:44 PST CMSPIWSUSER
(CMSPIWSUSER) * [REDACTED]
03/16/2021 14:02 * 220025S PRIMARY DOWN
GUY IS MAKING CONTACT WITH THE PRIMARY
CROSS ARM * Switching Center: Switching Center
/ Substation:Stewart * -----

--- * 04/26/2021 05:59:07 PST [REDACTED]
[REDACTED] * Grouped under Task Order:
903431655 * ----- *
07/29/2021 13:30:14 PST P06CLNT100
(P06CLNT100) * Notificiaton Completed By on
SUS: [REDACTED] * Notification Completion Submitted
By on SUS: [REDACTED] * Notification Closing Info: 3/16/2021 9/16/2021 Completed 7/20/2021 000903469580 Pending EDMA

*Please note that the names of employees and employees of contractors are considered confidential and should be treated as such.

* 02/10/2022 17:18:32 PST (ESAPOWSUSER) *

[REDACTED] * 02/10/2022 16:56 * 220025S

Buried anchor * * Switching Center: Switching
Center / Substation: Mayberry * -----

----- * 03/01/2022 08:29:00 PST

([REDACTED]) Phone [REDACTED] * Grouped

under Task Order: 903687423 * -----

----- * 05/25/2022 07:37:37 PST

(P06CLNT100) * Notificiaton Completed By on

SUS: [REDACTED] * Notification Completion Submitted

By on SUS: [REDACTED] * Notification Closing Info: *

01/02/2023 23:06:28 PST ([REDACTED]) Phone

9092743568 63568 * GO 95, R 18(B)(1)(a)(ii)(4):

An engineering review was performed and

deemed this notification not to be an elevated

fire risk. The analysis was reviewed and

approved by key stakeholders. This Anchor Guy

notification has been reviewed and deemed

invalid because it was mistakenly created as

anchor guy head is not buried. At the time of

analysis, this notification was status as

COMPLETED, and therefore will not have its due

date changed or extended.

NonElevatedFireRiskNotification.

2/10/2022 8/10/2022 Completed 5/13/2022 000903738619 Closed EDMA

* 02/10/2022 17:18:32 PST (ESAPOWSUSER) *

[REDACTED] * 02/10/2022 16:55 * 220025S

Vis strips needed * * Switching Center: Switching
Center / Substation: Mayberry * -----

----- * 03/01/2022 08:29:00 PST

([REDACTED]) Phone [REDACTED] * Grouped

under Task Order: 903687423 * -----

----- * 05/25/2022 07:37:36 PST

(P06CLNT100) * Notificiaton Completed By on

SUS: [REDACTED] * Notification Completion Submitted

By on SUS: [REDACTED] * Notification Closing Info:

2/10/2022 2/10/2027 Completed 5/13/2022 000903738619 Closed EDMA

***Please note that the names of employees and employees of contractors are considered confidential and should be treated as such.**

* 02/10/2022 17:18:36 PST (ESAPOWSUSER) *

[REDACTED] * 02/10/2022 16:55 * 220025S

Guy guard missing * * Switching Center: Switching
Center / Substation: Mayberry * -----

----- * 03/01/2022 08:29:00 PST

[REDACTED]) Phone [REDACTED] * Grouped

under Task Order: 903687423 * -----

----- * 05/25/2022 07:37:38 PST

(P06CLNT100) * Notificiaton Completed By on

SUS: [REDACTED] * Notification Completion Submitted

By on SUS: [REDACTED] * Notification Closing Info: 2/10/2022 2/10/2027 Completed 5/13/2022 000903738619 Closed EDMA

*Please note that the names of employees and employees of contractors are considered confidential and should be treated as such.

Structure ID	Equipment ID	Meas Doc Number	Inspection Date	Inspection Code	Inspection Completed by (User ID)	Notifications Created	Notification Priority	Notification Description	Notification Long Text	Notification Created Date	Notification Due Date	Notification Status
OH-20678S	200796195	30074686755	4/29/2019	Dist OCI Complete								
OH-20678S	200796195	30073335858	11/4/2019	Aerial Dist Complete								
OH-220025S	201632827	30073721259	4/29/2019	Dist OCI Complete								
OH-220025S	201632827	30075580494	11/4/2019	Aerial Dist Complete								
OH-220025S	201632827	30076046635	7/8/2020	Aerial Dist Complete								
OH-220025S	201632827	30078477999	5/8/2021	Aerial Dist Complete								
OH-220025S	201632827	30083110769	2/23/2022	Aerial Dist Complete								
OH-220026S	200807494	30073993620	4/29/2019	Dist OCI Complete								
OH-220026S	200807494	30075494456	11/4/2019	Aerial Dist Complete								
OH-220026S	200807494	30076095437	7/8/2020	Aerial Dist Complete								
OH-220026S	200807494	30078478000	5/8/2021	Aerial Dist Complete								
OH-220026S	208259946	30083110836	2/23/2022	Aerial Dist Complete								
OH-220028S	200807496	30074045473	4/29/2019	Dist OCI Complete								
									08/17/2020 22:58:50 PST CMSPIWSUSER (CMSPIWSUSER) [REDACTED] * 08/17/2020 22:57 * 2020 Distribution Aerial Risk Informed Insp. Date Flown 06/02/2020. Inspected 07/08/2020 by [REDACTED], HOT LINE CONSTRUCTION INC.-HOTLINE. Reviewed 08/17/2020 by [REDACTED], [REDACTED]. Primary crossarm deteriorating. Needs to be replaced. ----- 11/03/2020 07:39:05 PST [REDACTED] [REDACTED] [REDACTED] Grouped under Task Order: 903226387 ----- 01/06/2021 14:48:55 PST P06CLNT100 (P06CLNT100) Notification Completed By on SUS: [REDACTED] Notification Completion Submitted By on SUS: [REDACTED] Notification Closing Info:			
OH-220028S	200807496	30076363535	7/8/2020	Aerial Dist Complete		411104945	2	REPLC DAMAGE PRI XARM POLE		7/8/2020	1/6/2021	Completed
OH-220028S	200807496	30078478002	5/8/2021	Aerial Dist Complete								
OH-220028S	200807496	30083111049	2/23/2022	Aerial Dist Complete								

***Please note that the names of employees and employees of contractors are considered confidential and should be treated as such.**

			[REDACTED]				04/20/2010 01:49:40 LSMWR3COMMON (LSMWR3COMMON) GROUND MOULDING BROKEN DS ARRS 00153435 220029S - POLE Data Mopup: Priority Changed FROM 5 TO 3	
			[REDACTED]				----- 01/31/2022 10:34:27 PST [REDACTED]) Phone [REDACTED] Grouped under Task Order: 903653482 11/6/2022	
4	4/29/2019	Dist OCI Complete	[REDACTED]	400635523	3	REPLC DAMAGE SEC MOLDNG POLE		
5	11/4/2019	Aerial Dist Complete	[REDACTED]					
6	7/8/2020	Aerial Dist Complete	[REDACTED]					
3	5/8/2021	Aerial Dist Complete	[REDACTED]					
7	2/23/2022	Aerial Dist Complete	[REDACTED]					

***Please note that the names of employees and employees of contractors are considered confidential and should be treated as such.**

Notificati on Complete d Date	Order	Order Status	Order Type
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1/4/2021 000903293552 Closed EDMA

*Please note that the names of employees and employees of contractors are considered confidential and should be treated as such.

4/1/2022 000903653482 Pending EZTO

Functional Location	Date	Description	Inspection Type
OH-220028S	12/15/2001	Intrusive Pole Inspection Action	Partial Dig (Intrusive)
OH-220028S	3/11/2011	Intrusive Pole Inspection Action	Partial Dig (Intrusive)
OH-220029S	3/11/2011	Intrusive Pole Inspection Action	Partial Dig (Intrusive)
OH-220028S	6/16/2022	Intrusive Pole Inspection Action	Partial Dig (Intrusive)
OH-220029S	6/16/2022	Intrusive Pole Inspection Action	Partial Dig (Intrusive)

Inspection Result and Recommendation Action	Created By	Reading Taken By
Pass-Intrusive Pole Inspection	LSMWR3COMMON	R3_CONV_PROG
Pass-Intrusive Pole Inspection		GWT-JC
Pass-Intrusive Pole Inspection		GWT-JC
Pass-Intrusive Pole Inspection		DTS-GX
Pass-Intrusive Pole Inspection		DTS-GX

CONFIDENTIAL

Southern California Edison
NDDR Non-Docketed Data Request

DATA REQUEST SET SED - Fairview - 005

To: SED

Prepared by: Raymond Fugere

Title: Dir Wildfire Safety

Dated: 1/26/2024

Question 001:

In response to Data Request SED-004 Question 2(a) (DR-02(a)), SCE stated that the utility is investigating the possibility that work performed by an SCE contractor on January 4, 2021 and July 11, 2022, could have caused or contributed to a reduction in the minimum distance to ground of the Phase 1B conductor.

- a. Provide the results of SCE's investigation into the January 4, 2021 and July 11, 2022, contractor work.
- b. Confirm that the crossarm on Pole 220028S was replaced by SCE's contractor on January 4, 2021, and provide photos and/or any other Related documentation.
- c. Provide the final design approved for construction of the crossarm replacement on Pole 220028S performed on January 4, 2021.
- d. Provide documentation showing how the tension on the Phase 1A and Phase 1B conductors was set after the crossarm was replaced on Pole 220028S on January 4, 2021. State the initial sag measurement of Phase 1A and Phase 1B conductors.
- e. Summarize and explain the contractor work performed on July 11, 2022. Include the work order and state what was inspected and or replaced.

#	SCE Incident Reference Number:	Fire Name	Circuit	kV
1	220905-15265	Fairview Fire	Sprague	12

Response to Question 001:

SCE objects to this Request to the extent it seeks information protected from disclosure by the attorney-client privilege and/or attorney work product doctrine. Subject to its objections, SCE responds as follows:

- a) To date, SCE has not discovered evidence that work performed by its contractor caused or contributed to a reduction in the minimum distance to ground of the Phase 1B conductor.
- b) SCE confirms that the crossarm on pole #220028S was replaced on notification 411104945. See attachment titled Response_SED-05-01_part_b_Photos.pdf. The image titled "Original Notification Photo" shows the crossarm when the notification was created. The image titled "Inspection Photo Dated 4/15/2021" shows the new crossarm that was observed during a 2021 inspection.
- c) The crossarm was replaced on maintenance order 903293552. Crossarm replacements are considered O&M repairs and are not required to have a designed work order package. No

design work order package was found for this replacement.

- d) Documentation of location-specific line tension and sag is not captured during the course of maintenance repairs and replacements. SCE and its contractors do, however, assess the line sag to help ensure that they meet the guidelines as outlined in the Distribution Overhead Construction Standards. See attachment titled *Response_SED-05-01_part_d_DOH 2020 4Q_CO.pdf* for an excerpt from SCE's construction standards manual at the time the crossarm replacement was completed.
- e) Upon further analysis, based upon the Job Information Sheet (please see attachment titled *Response_SED-05-01_part_e_Job_Information_Sheet.pdf*) the contractor indicated that pole 220027S was replaced on 5/8/22, not 7/11/22, as originally noted, as part of a larger covered conductor project on work order TD1685311. The work involved removal of pole 220027S and an associated 15kVA transformer and installing pole 4943353E and a 25kVA transformer in the same location. Please see attached file *Response_SED-05-01_part_e_TD1685311 Excerpt.pdf*, for the page of the work order that contains the pole in question and please see attached file *Response_SED-05-01_part_e_TD1685311.pdf* for the complete work order map.

Please note that attachments contain the names of employees, and/or employees of contractors that are considered confidential and should be treated as such. Such information also should not be released to the public regardless of the pendency of SED's investigation.

Southern California Edison
NDDR Non-Docketed Data Request

DATA REQUEST SET SED - Fairview - 002

To: SED

Prepared by: Raymond Fugere

Title: Dir Wildfire Safety

Dated: 7/10/2023

Question 07:

In the DR-01 Question 10 supplemental response, submitted on 05/17/23, SCE stated that inspectors conduct annual grid patrols according to SCE's Annual Inspection Program.

- a. Provide a copy of SCE's Distribution Inspection Maintenance Program, identify section IN-2, and provide the page number. Provide all versions and revisions of the Utility procedure that were effective between March 2018 and May 2022.
- b. Describe how a patrol is conducted and what forms or recordkeeping the inspectors use when conducting an inspection.
- c. As submitted by SCE in the Question 10 supplemental response, provide the following: Starting from Pole 220029S, identify and list which structures were inspected by:
 - i. OSMOSE-728ES on 05/11/2022.
 - ii. HALLV on 05/26/2020.
 - iii. MILLARMC on 04/08/2019.
 - iv. CORDOVMP on 03/15/2018.

Response to Question 07:

- a. Please see file titled *DIMP_Manuals.zip*, for a copy of the DIMP manuals effective between March 2018 and May 2022. Below is a list of files and the PDF page numbers that contain section IN-2:
 - a. DIMP 2017 4Q.pdf: pages 35 – 40
 - b. DIMP 2018 1Q.pdf: pages 31 – 36
 - c. DIMP 2018 May 31 2018.pdf: pages 31 – 36
 - d. DIMP 2018 3Q.pdf: pages 31 – 36
 - e. DIMP 2019 4Q.pdf: pages 31 – 36
 - f. DIMP 2020 2Q.pdf: pages 31 – 36
 - g. DIMP 2020 3Q.pdf: pages 31 – 36
 - h. DIMP 2020 4Q.pdf: pages 31 – 36
 - i. DIMP 2021 1Q.pdf: pages 31 – 36
 - j. DIMP 2021 3Q.pdf: pages 31 – 36
 - k. DIMP 2022 1Q.pdf: pages 39 – 44
 - l. DIMP 2022 2Q.pdf: pages 41 – 48
- b. Please see subpart 2.0 of Section IN-2 of the attached DIMP manuals for how an annual grid patrol is conducted. Inspectors utilize a digital inspection tool and record their name, date of inspection and any conditions documented during the inspection. These records are synchronized to SCE's system of record.
- c. Please see the file titled Response to Q7-C.xlsx.

Please note that SCE employee names and names of SCE contractor employees contained within

the attachments are considered confidential and should be treated as such. Such information also should not be released to the public regardless of the pendency of SED's investigation.

Attachment 1–1: Overhead Detailed Inspection Guideline

1. Condition of Equipment, Apparatus, and Hardware


- ☐ Broken, chipped, or severely contaminated insulators/Primary insulator or pin above 750 V (cracked/damaged/loose)
- ☐ Pole switch indicating need for repair
- ☐ Indication of equipment oil leak
- ☐ Bulged or discolored capacitor units
- ☐ Blown or dry fuses, blown surge arresters, broken fuseholders
- ☐ Streetlights broken or damaged
- ☐ Animals, birds, foreign material interfering with operation
- ☐ Evidence of tracking or burning
- ☐ Broken pins or squatters (primary or secondary)
- ☐ Broken, bent pole steps
- ☐ Damaged or missing ground wire molding or ground wire exposed
- ☐ Condition of transformer's Internal Fault Detector (IFD), if so equipped; see [DOM](#), TR–9.

2. Condition of Pole and Structures

- ☐ Damage/deteriorated pole
- ☐ Crossarm broken, split, or extremely canted
- ☐ Washout or excavation around pole or anchor
- ☐ Check pole setting depth marked from brand. (Brands are at 10 feet on 60-foot poles and less; at 13 feet for poles taller than 60 feet.)
- ☐ Damage down guys, guy guard missing (Install guard where required.)
- ☐ Excessive slack on down guys or span guys
- ☐ Six-foot Fiberglass Guy Strain Insulator installed (upgrade to standard 12-foot version)
- ☐ Visually check pad-mounted equipment for movement and cabinet secured or locked.
- ☐ Visually check BURD lids, vault lids, vent pipes, and handhole lids.

3. Conductors and Covered Conductors

- ☐ Inadequate primary, secondary, or service ground clearances
- ☐ Exposed conductor (covering falling off) – service drops, secondary, and primary
- ☐ Excessive slack in primary conductors in high wind areas
- ☐ Clearance from building, television or radio antenna, billboard signs, scaffolding, streetlights, communication cable or hazardous locations for primary, secondary or services
- ☐ Trees touching or above primary conductors or covered conductors (overhangs) unless special encased aerial bundled cable (18 inches required)
- ☐ Hazardous tree conditions, limbs over wire, dead or decaying trees, palm fronds
- ☐ Foreign objects in line, such as kites, Mylar balloons
- ☐ Bare conductors in rack construction
- ☐ Bare service drops
- ☐ Deflection, strain or abrasion on service drops and secondaries
- ☐ Abandoned conductors

EFFECTIVE DATE 07-30-2021	Overhead Detail Inspections	IN–1
APPROVED 	Distribution Inspection and Maintenance Program ► SCE Internal ◀	PAGE 1–5

Attachment 2–1: Grid Patrol Guideline

1. Condition of Equipment, Apparatus, and Hardware

- ☐ Broken, chipped, or severely contaminated insulators/Primary insulator or pin above 750 V (cracked/damaged/loose)
- ☐ Pole switch indicating need for repair
- ☐ Indication of equipment oil leak
- ☐ Bulged or discolored capacitor units
- ☐ Blown or dry fuses, blown surge arresters, broken fuse-holders
- ☐ Streetlights broken or damaged — public hazard
- ☐ Animals, birds, foreign material interfering with operation
- ☐ Evidence of tracking or burning
- ☐ Broken pins or squatters (primary or secondary)

2. Condition of Pole and Structures

- ☐ Damage/deteriorated pole
- ☐ Crossarm broken, split, or extremely canted
- ☐ Washout or excavation around pole or anchor
- ☐ Damage down guys, guy guard missing — public hazard
- ☐ Excessive slack on down guys or span guys — clearance problem or pole integrity issue
- ☐ Visually check pad-mounted equipment for movement and cabinet secured or locked.
- ☐ Visually check BURD lids, subsurface structure lids, vent pipes, and handhole lids.

3. Conductors


- ☐ Inadequate primary, secondary, or service ground clearances
- ☐ Excessive slack in primary conductors in high wind areas
- ☐ Clearance from building, television or radio antenna, billboard signs, scaffolding, streetlights, communication cable or hazardous locations for primary, secondary or services
- ☐ Trees touching or above primary conductors (overhangs) unless special encased tree cable (18 inches required)
- ☐ Hazardous tree conditions, limbs over wire, dead or decaying trees, palm fronds
- ☐ Foreign objects in line, such as kites, Mylar balloons

4. Risers

- ☐ Riser straps, blocks broken, unattached — public hazard
- ☐ Opening in riser conduit coupling, damaged conductor — public hazard

5. General Conditions

- ☐ Unlocked substations, pole switches, equipment

EFFECTIVE DATE 10-30-2020	Inspection Procedures — Grid Patrols	IN–2
APPROVED 	Distribution Inspection and Maintenance Program ► SCE Internal ◀	PAGE 2–5



Attachment 1–1: Overhead Detailed Inspection Guideline

1. Condition of Equipment, Apparatus, and Hardware

- ☐ Broken, chipped, or severely contaminated insulators/Primary insulator or pin above 750 V (cracked/damaged/loose)
- ☐ Pole switch indicating need for repair
- ☐ Indication of equipment oil leak
- ☐ Bulged or discolored capacitor units
- ☐ Blown or dry fuses, blown surge arresters, broken fuseholders
- ☐ Streetlights broken or damaged including brackets, mast arms, and lights/globes – public hazard
- ☐ Damaged anchor bolts
- ☐ Insulator broken, cracked or loose, floating, squatting, chipped
- ☐ Insulator tie wire broken/missing/damaged
- ☐ Animals, birds, foreign material interfering with operation
- ☐ Evidence of tracking or burning
- ☐ Broken pins or squatters (primary or secondary)
- ☐ Broken, bent pole steps
- ☐ Damaged or missing ground wire molding or ground wire exposed
- ☐ Condition of transformer's Internal Fault Detector (IFD), if so equipped; see [DOM](#), TR–9.

2. Condition of Pole and Structures

- ☐ Damage/deteriorated pole
- ☐ Damage to pole foundation
- ☐ Crossarm broken, split, or extremely canted
- ☐ Visually check for pole leaning
- ☐ Washout or excavation around pole or anchor
- ☐ Check pole setting depth marked from brand. (Brands are at 10 feet on 60-foot poles and less; at 13 feet for poles taller than 60 feet.)
- ☐ Damage down guys, guy guard missing (Install guard where required.) – public hazard
- ☐ Excessive slack on down guys or span guys
- ☐ Six-foot Fiberglass Guy Strain Insulator installed (upgrade to standard 12-foot version)
- ☐ Visually check pad-mounted equipment for movement and cabinet secured or locked.
- ☐ Visually check Buried Underground Residential Distribution (BURD) lids, vault lids, vent pipes, and handhole lids.

3. Conductors and Covered Conductors

- ☐ Inadequate primary, secondary, or service ground clearances
- ☐ Exposed conductor (covering falling off) – service drops, secondary, and primary
- ☐ Excessive slack in primary conductors in high wind areas
- ☐ Clearance from building, television or radio antenna, billboard signs, scaffolding, streetlights, communication cable or hazardous locations for primary, secondary or services
- ☐ Trees touching or above primary conductors or covered conductors (overhangs) unless special encased aerial bundled cable (18 inches required)
- ☐ Hazardous tree conditions, limbs over wire, dead or decaying trees, palm fronds

EFFECTIVE DATE 04-29-2022	Overhead Detail Inspections	IN–1
APPROVED 	Distribution Inspection and Maintenance Program ► SCE Internal ◀	PAGE 1–7

Southern California Edison
NDDR Non-Docketed Data Request

DATA REQUEST SET SED - Fairview - 003

To: SED

Prepared by: Raymond Fugere

Title: Dir Wildfire Safety

Dated: 8/25/2023

Question 02:

In the DR-02 Q7 response, SCE provided the Distribution Inspection Maintenance Program manual (DIMP) and confirmed that Pole 220028S and Pole 220029S were inspected on 05/26/2020 and 05/11/2022.

- a. Confirm that Pole 220028S and Pole 220029S were inspected on 05/11/2021 by OSMOSE-031FB.1
- b. Confirm that the inspections performed by SCE personnel on 05/26/2020, 05/11/2021, and 05/11/2022 did not result in any notifications, work orders, or corrective actions.
- c. Describe and define “excessive slack.”² Describe how inspectors are trained to observe and record “excessive slack” between SCE facilities, such as the conductors between Pole 220028S and Pole 220029S.
- d. State if SCE considers the one square mile around Pole 220029S and Pole 220028S as a high wind area. Describe and explain what criteria are used to determine whether a location qualifies as a high wind area.

Response to Question 02:

- a. These two poles had an Annual Grid Patrol Inspection performed on 5/11/21 by OSMOSE-031FB.
- b. There were no maintenance repair notifications identified through the Annual Grid Patrols identified.
- c. SCE DIMP standards do not define excessive slack. They focus on addressing conditions and circumstances that may be caused by, or create, excessive slack. For example, a broken tie wire may cause excessive slack in one of the adjacent spans. Additionally, excessive slack can lead to clearance issues such as reduced ground clearances. Furthermore, the DIMP Section CG Attachment 2-12 Overhead Conductors and Service Drops provides additional examples including more than a 10% reduction in radial or vertical clearance, which could also be created by excessive slack. Please see attachment titled *DIMP_Attachment 2-12 (Overhead Conductors and Service Drops).pdf*. ODI inspectors are trained to clearances that need to be maintained. A copy of the training material concerning clearances is attached in the document titled *New Inspector Training (Clearances).pdf*
- d. Poles 20029S and 220028S per SCE pole loading wind study are located in an SCE high wind area and, therefore, were designed at 18-lbs per square foot, which exceeds the requirements of general order 95.

Southern California Edison
NDDR Non-Docketed Data Request

DATA REQUEST SET SED - Fairview - 001

To: SED

Prepared by: Jeff Lawrence

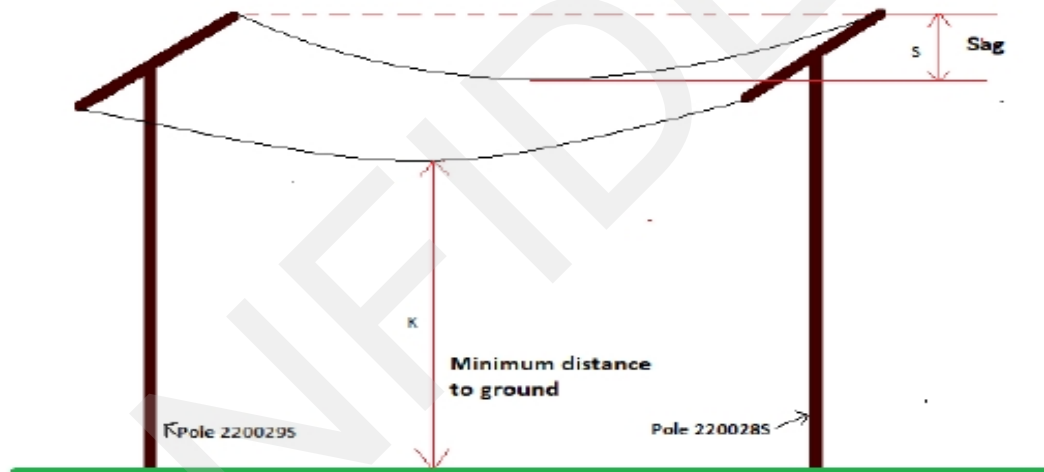
Title: Bus Ops Anlys, Sr Mgr

Dated: 5/5/2023

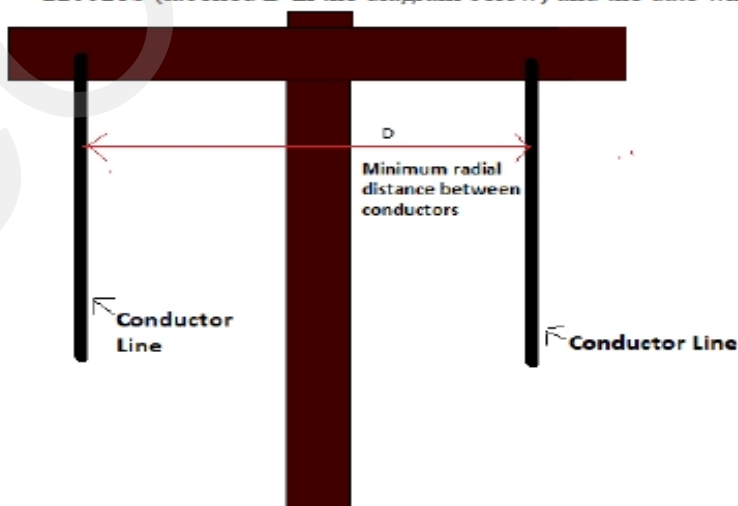
Question 08 Revised:

Provide sag calculations/dimensions for conductors supported between Poles 220029S and Pole 220028S based on the latest available LiDAR scan of the area. Indicate the elevation of each phase above the ground and the distance between each phase and the other phases compared to the elevations and distances required by SCE's internal procedures. Provide the date that this LiDAR data was acquired.

- a. Indicate the minimum distance to ground K (as shown in the diagram below) for each phase of the subject circuit between Pole 220029S and Pole 220028S and provide the date when this measurement was taken.
- b. Provide the sag dimension labeled S (as shown in the diagram below) between Poles 220029S and Pole 220028S and the date when this measurement was taken.



- c. Provide the minimum radial distance between the conductor lines on Pole 220029S and Pole 220028S (labelled D in the diagram below) and the date when this measurement was taken.



Response to Question 08 Revised:

SCE interprets this Request to call for the interpretation of the most recent pre-fire LiDAR and not to call for the interpretation of post-fire LiDAR taken by SCE's litigation experts. LiDAR for structures/spans from 220029S to 20678S and 220028S to 220029S was collected on October 13, 2020, and December, 22, 2020 respectively for responses 8.a. – 8.c.

Diagram 8.1

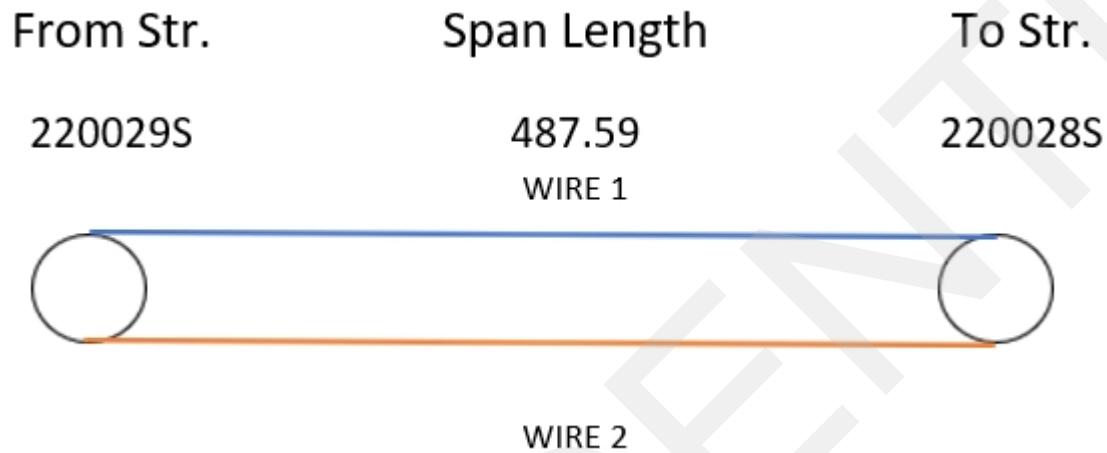
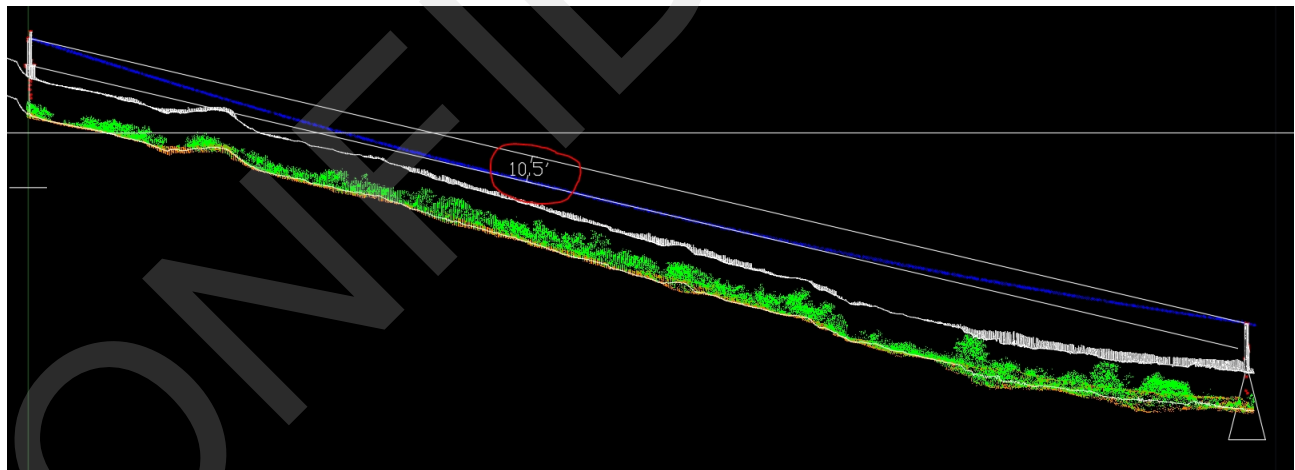


Diagram 8.2



- a. Reference Diagram 8.1 above. The approximate minimum distance to ground (K) for each phase is:
 - a. Wire 1: 18.1'
 - b. Wire 2: 19.4'
- b. Reference Diagram 8.2 above. The approximate maximum sag is 10.5'.
- c. Reference Diagram 8.1 above. The approximate minimum radial distance between phases is 8.8'.

Southern California Edison
NDDR Non-Docketed Data Request

DATA REQUEST SET S E D - F a i r v i e w - 0 0 2

To: SED

Prepared by: Bernice Cordero

Title: Claims Investig, Sr Mgr

Dated: 08/02/2023

Question 03 d. Supplemental Amended:

In response to DR-01 Question 8, submitted on 05/05/2023, SCE provided sag dimensions between Poles 220029S & 220028S.

d. SCE stated that before the Fairview Fire, the minimum distances to ground, "K," for Wire 1 and Wire 2 were 18.1' and 19.4' respectively.² Provide the same distance, "K," taken by SCE investigators after the Fairview Fire.

Response to Question 03 d. Supplemental Amended:

Original Response:

After the Fairview Fire, SCE investigators did not measure the distance to ground of Wire 1 and Wire 2. SCE had a LiDAR scan performed by its retained consultant; said LiDAR is protected from disclosure by the attorney work product doctrine. As to the requested measurements, SCE will provide those distances, however, will have to do so in a supplemental response as the LiDAR is in the possession of its retained consultant who, SCE has been informed, is on vacation and will be returning after July 17, 2023.

Supplemental Response:

SCE reasserts its objection that the LiDAR scan performed by its retained consultant is protected from disclosure by the attorney work product doctrine. Subject to, and without waiving its objections, SCE responds as follows:

The minimum distances to ground, as reflected in LiDAR conducted by SCE's retained consultant on September 8, 2022, for Wire 1 and Wire 2 were 22.5' and 18.5' respectively.

Supplemental Amended Response:

SCE reasserts its objection that the LiDAR scan performed by its retained consultant is protected from disclosure by the attorney work product doctrine. SCE further objects on the grounds that the request is vague and ambiguous. Subject to, and without waiving its objections, SCE responds as follows:

Given the terrain over which Wire 1 and Wire 2 run between Poles 220029S and 220028S – down a hillside, the minimum distance to ground of Wire 1 and Wire 2 are not at the lowest sag point or mid-point on the wires. SCE's response to DR-01 Question 8 was based upon an interpretation of the question as seeking those measurements on Wire 1 and Wire 2 where they came the closest to the ground and SCE provided those minimum distances to ground. When SCE provided its Supplemental Response to DR-02 Question 3.d., there had been a miscommunication with SCE's consultant who was providing the distance to ground from the mid-point of Wire 1 and Wire 2. Interpreting the question as seeking those measurements on Wire 1 and Wire 2 where they came the closest to the ground, SCE amends its response as follows:

The minimum distances to ground, as reflected in LiDAR conducted by SCE's retained consultant on September 8, 2022, for Wire 1 and Wire 2 were 17.6' and 12.0' respectively.

Southern California Edison
NDDR Non-Docketed Data Request

DATA REQUEST SET SED - Fairview - 004

To: SED

Prepared by: Raymond Fugere

Title: Dir Wildfire Safety

Dated: 10/11/2023

Question 03:

In SCE's DR-02 supplemental amended response to Q3(d), the utility provided the measurements of Wire 1 (A phase) and Wire 2 (B phase), which were taken by SCE's consultant in a LiDAR scan on 09/08/2022. SCE stated that on 09/08/2022, the measurements of Wire 1 (A phase) and Wire 2 (B phase) where they came the closest to the ground were 17.6ft and 12ft, respectively. However, in response to DR-01 Q8, SCE stated that according to the 06/02/2020 LiDAR scan, the minimum distance to ground of Wire 2 (B phase) was 19.4ft.

- a. Explain why the minimum distance to ground for Wire 2 (B phase) was reduced by more than 7ft between the 09/08/2022 post-fire LiDAR scan measurement compared to the 06/02/2020 LiDAR scan measurement.
- b. Explain why the distance to ground dropped below the minimum required distance per GO 95.

Response to Question 03:

SCE objects to this Request to the extent it seeks information protected by the attorney-client privilege and/or attorney work product doctrine. SCE also objects as calling for speculation and seeking premature expert opinion. The Fairview Fire is still under investigation and all facts are not known at this time. In light of pending litigation, SCE is performing its own investigation at the direction of its Law Department which is subject to the attorney-client privilege and attorney work product doctrine. Accordingly, SCE objects to the production of information called for by this Request that is protected from disclosure. Subject to its objections, SCE responds as follows:

- a. At this stage, SCE has no reason to believe that the change in the minimum distance to ground for Wire 2 measured on 6/2/2020 and 9/8/2022 occurred prior to, as opposed to as a result of, the fire. Inspections conducted on March 16, 2021 and June 16, 2022 did not identify any excessive or uneven sag on the relevant span. SCE is investigating the possibility that work performed by an SCE contractor on January 4, 2021 and July 11, 2022 could have caused or contributed to the reduction in the minimum distance to ground, as well as whether the events of the fire and post-fire activity that occurred prior to the 9/8/2022 LiDAR measurement could have caused or contributed to changes in sag. SCE reserves the right to supplement this response if necessary.
- b. See response to a.