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June 23, 2023

Ms. Devla Singh
Program & Project Supervisor, ESRB
Wildfire Safety and Enforcement Branch
Safety and Enforcement Division
California Public Utilities Commission

Reference: CPUC-ID: E20210825-01
Notice of Violation: General Order (GO) 95, Rule 19, Rule 18.B.1.a.ii, and Rule 31.1.

Dear Ms. Singh:

This letter is in response to the above referenced Notice of Violation (NOV) dated May 23, 2023 (NOV Letter), regarding the Safety and Enforcement Division's (SED) investigation of an August 25, 2021, fire in Redding, CA (the Mule Fire), that burned approximately 10 acres and one structure (a garage), totaling at least $49,780 dollars in third party property damage.

The NOV cites eight violations of General Order (GO) 95: one violation of GO 95, Rule 19; two violations of GO 95, Rule 18.B.1.a.ii; and five violations of GO 95, Rule 31.1.

The cited GO rules for each of the violations are as follows:

> **GO 95, Rule 19, Cooperation with Commission Staff; Preservation of Evidence Related to Incidents Applicability of Rules,** which states in part:
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> *"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. Once the scene of the incident has been made safe and service has been restored, each utility shall provide Commission staff upon request immediate access to:*
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> *- Any factual or physical evidence under the utility or utility agent's physical control, custody, or possession related to the incident;"*
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> **GO 95, Rule 18.B. – Maintenance Programs,** which states in part:
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> *"(1) Companies shall undertake corrective actions within the time periods stated for each of the priority levels set forth below…*

(a) The maximum time periods for corrective actions associated with potential violation of GO 95 or a Safety Hazard are based on the following priority levels…

(ii) Level 2 -- Any other risk of at least moderate potential impact to safety or reliability: Take corrective action within specified time period (either by fully repair or by temporarily repairing and reclassifying to Level 3 priority). Time period for corrective action to be determined at the time of identification by a qualified company representative, but not to exceed: (1) six months for potential violations that create a fire risk located in Tier 3 of the High Fire-Threat District; (2) 12 months for potential violations that create a fire risk located in Tier 2 of the High Fire-Threat District; (3) 12 months for potential violations that compromise worker safety; and (4) 36 months for all other Level 2 potential violations."

GO 95, Rule 31.1 – Design, Construction and Maintenance, which states in part:

"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."

SED's investigation found that PG&E was in violation of GO 95, Rule 19, because PG&E failed to retain the transformer fuses from the Incident Location as part of the evidence collected from the Mule Fire.

SED determined that PG&E was in violation of GO 95, Rule 18.B.1.a.ii., because PG&E failed to complete multiple Level 2 priority Electrical Corrective (EC) Tags by the due dates required by GO 95 Rule 18.B.1.a.ii, creating a fire risk; and for incorrectly assigning a due date 12 months after identification for another EC Tag, instead of the six months required by PG&E's Utility Standard: TD-8123S and GO 95 Rule 18.

SED determined that PG&E violated GO 95, Rule 31.1, 5 times because:

(1) PG&E performed a Field Safety Reassessment (FSRs) on four tags after their initial corrective action deadline and assigned new deadlines of one year which is longer than the initial deadline for corrective action of 6 months mandated by GO 95, Rule 18. Because PG&E did not demonstrate that reasonable circumstances existed to warrant extension of the corrective actions this constituted a failure to maintain utility equipment in accordance with accepted good practice and is a violation of GO 95, Rule 31.1.
(2) PG&E's journeyman lineman incorrectly held a wire cutter (holding the tool in his right hand while resting the other handle on his shoulder) in violation of Utility Standard: TD-1464S, Section 2.7.3, and Section 2.05 of the Red Book, while using this impermissible technique the tool slipped out of his grasp and contacted the neutral and energized conductors, causing the Mule Fire;
(3) PG&E's internal procedure, Utility Standard, TD-1464S Revision 5, Section 2.7.4, does not meet the minimum requirements of Public Resources Code Section 4427 because PG&E's

procedures only require clearing the ground of flammable material when performing work at ground level and not when the work is performed at the top of a pole;

(4) PG&E's contractors parked the water buffalo 292 feet away from where work was being performed, while it only had 200 feet of hose, in violation of PG&E's procedures; Consequently, the water buffalo could not be used to fight any potential ignitions resulting from where the work was being performed; and,

(5) PG&E failed to train all employees and contractors working on "any forest, brush or grass-covered lands" on SAFE-1503BWT as required by Procedure TD-1464S and this constitutes a failure to follow accepted good practice for known local conditions which constitutes a violation of GO 95, Rule 31.1.

Background

On Wednesday, August 25, 2021, we dispatched a contract crew of linemen in Redding, California, to install a new service clearance pole, eliminate a tree connect on the service between the transformer pole and the residence, and replace the customer's secondary conductors. The job site was in Fire Index Area (FIA) 245 with fire index rating of 4 for the day. The crew had a 500-gallon "water buffalo" water tank trailer with a 200-foot hose positioned near the entrance of the job site, approximately 292 feet from the transformer pole where the work was to be performed. The crew placed a shovel and chemical fire extinguisher at the base of the transformer pole, but it did not uncoil the water buffalo's hose towards the job site or charge it with water prior to starting the work. Due to the transformer having liquid-filled fuses, the crew decided not to disconnect the fuses and instead to perform the work while the equipment was energized.[1] Because the crew was working at the top of the pole, they did not believe they were required to clear the ground of flammable material when performing the work.

At approximately 1400 hours, while cutting an energized conductor, the cutting tool contacted the uninsulated neutral conductor causing an arc flash. The arc melted the metal cutting jaw, showering molten metal in a 15-foot radius around the base of the pole. This resulted in an ignition and the crew immediately began utilizing all available nearby firefighting equipment to extinguish the fire. The fire grew while the crew moved the water buffalo closer to the fire and uncoil the hose. Once in position, the crew utilized the water buffalo until it was empty. At this point the foreman instructed the crew to evacuate.

A few minutes after the fire started, a CAL FIRE S2 air tanker was passing overhead. The CAL FIRE personnel noticed the smoke, and performed two fire retardant air drops, which extinguished most of the fire. Soon after that, CAL FIRE crews arrived and extinguished the remaining fire. The fire was fully extinguished by 1621 hours having burned approximately 9.2 acres. CAL FIRE named the fire the "Mule Fire."

Two contractors received minor burns from their efforts to control, and extinguish, the fire. The fire damaged one building (a detached garage) and destroyed one of the contractor's pickup trucks, the water buffalo, and two PG&E poles. Six customers were impacted by the incident, however, an additional 379

[1] TD-2908P-01-JA243, "Operating Liquid-Filled and Current Limiting Bushing Mounted Cutouts," provides guidance for working with bushing mounted liquid fuses, which are known to be a potential hazard. Following this guidance, it was decided not to disconnect the fuses, but instead to leave the transformer energized, remove the customer's meter to prevent back feed, and cut the energized secondary conductors at the transformer.

customers were temporarily disconnected between 0855 hours and 0944 hours to complete repairs. All impacted customers had their service restored by at least 0951 hours the next morning.

After the incident, we retained a transformer, two poles, three conductor wires, a steel arm, two insulators (attached together), two dead-end insulators, and two moldings as evidence. The liquid-filled fuses were not retained as evidence.

Our Response

We agree in part and disagree in part with SED's alleged violations listed in the May 23, 2023, NOV. We agree with both allegations of violations of GO 95, Rule 18.B.1.a.ii. We disagree that we violated GO 95, Rule 19, and we disagree with the five alleged violations of GO 95, Rule 31.1.

GO 95, Rule 18.b.1.a.ii

We agree with SED's two cited violations of GO 95, Rule 18.B.1.a.ii.[2] Inspections of our overhead facilities are designed and performed for the specific purpose of ensuring the facilities are in good condition or, conversely, any observable defect/deterioration to the equipment is identified and appropriately corrected in accordance with our procedures and by the due dates required by GO 95 Rule 18.B.1.a.ii. In this case, we failed to complete multiple Level 2 priority EC Tags by the due dates required by GO 95 Rule18.B.1.a.ii. and also improperly assigned an EC Tag a due date 12 months after identification, instead of the six months required by our Utility Standard (TD-8123S) and GO 95 Rule 18. We would like to note, while the EC Tags were not completed by their required due dates, they were being actively managed under our Field Safety Reassessment (FSR) process and they did not cause, nor contribute to, the incident.

GO 95, Rule 19

We disagree with SED's alleged violation of GO 95, Rule 19, [3] because we fully cooperated with SED during their investigation. While it is our practice to retain failed equipment to assist in investigating the cause of an electrical incident, it is not our practice to retain all failed equipment. Regarding the transformer fuses from the Incident Location, we did not retain the fuses as evidence as we did not believe, or suspect, that they caused or contributed to the incident. As the cause of the fire is known—arcing caused when the linemen's tool inadvertently contacted the neutral conductor—we had no reason to believe the transformer fuses would be needed as part of SED's investigation.[4] Thus, we did not violate Rule 19 of GO 95 because: (1) CAL FIRE's investigation did not find the transformer fuses to be relevant to the cause of the fire; (2) our investigation did not find the transformer fuses to be relevant to the cause of the fire, and (3) SED never requested that we retain the transformer fuses before they were discarded as part of PG&E's normal practices.

GO 95, Rule 31.1

[2] Violations Nos. 2 & 4 in the NOV Letter.
[3] Violation No. 1 in the NOV Letter.
[4] Moreover, CAL FIRE has priority to all equipment/evidence after an incident to assist in their investigation. CAL FIRE did not retain the transformer fuses as part of its investigation, either.

We disagree with SED's first cited violation[5] of GO 95, Rule 31.1 identified in the NOV Letter as it appears to merely restate the GO 95, Rule 18 violations. Given that this alleged violation is duplicative of the two cited violations of Rule 18, and the fact that the asset tags in question neither caused nor contributed to the fire, we do not believe that the cited facts relating to the asset tags demonstrate that the electrical system exhibited a failure of design, construction, or maintenance of its intended use.

We disagree generally with the other violations[6] of GO 95, Rule 31.1 identified in the NOV Letter as GO 95, Rule 31.1, governs the design, construction, and maintenance, of electrical facilities, not work practices generally or training. Work practices—such as the appropriate tool or technique to use for a particular task, required fire prevention and mitigation practices, or training—are important controls, often legally mandated, which are utilized to ensure the safety of our employees and the public, prevent or mitigate harms like fires, while working on energized equipment to maintain reliability for customers. However, like OSHA regulations, these work practices are not governed under GO 95, Rule 31.1, as work practices are not a part of electrical facilities or electrical supply systems.

Nevertheless, we do have procedures that govern the work practices ensuring compliance with all applicable state and federal regulations. As part of our review of this incident, we identified some improvements to our procedures to help prevent further recurrence.

Regarding the NOV Letter's second GO 95, 31.1 violation,[7] we are unclear where our Apparent Cause Evaluation (ACE) Report states the method used by the journeyman lineman to cut the conductor constituted a violation of Utility Standard: TD-1464S, Section 2.7.3. The ACE Report did identify several actions or techniques that could have prevented the tool being used from inappropriately contacting the neutral conductor. These included creating more space between the two lines, using insulating covers to protect the other conductors, or utilizing a different tool allowing for conductor to be cut with a single hand. These were all findings of the ACE Report to help prevent recurrence, but these work practices do not constitute electrical facilities or electrical supply systems under GO 95, Rule 31.1.

We did not violate Public Resource Code section 4427 (PRC-4427) as alleged in the third GO 95, 31.1 violation.[8] PRC-4427 states that, "no person shall use or operate any motor, engine, boiler, stationary equipment, welding equipment, cutting torches, tarpots, or grinding devices from which a spark, fire, or flame may originate," without clearing away flammable material. No such device, or equipment, was used and therefore PRC-4427 is not applicable in this situation. However, we take our responsibility to prevent ignitions seriously and one of the findings of our ACE Report was to remove any ambiguity to Utility Manual TD-1464S regarding if flammable material must be removed when working above the ground. Utility Manual TD-1464S now requires that flammable material be removed if working in the air with energized lines. While this goes beyond what PRC-4427 requires, it is consistent with our responsibility to prevent ignitions.

We also complied with our Procedure TD-1464S by having at least 120 gallons of water with 200 feet of hose at the jobsite. While the fourth alleged violation[9] of GO 95, 31.1 states that because "the water

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[5] Violation No. 3 in the NOV Letter
[6] Violations Nos. 5 through 8 in the NOV Letter.
[7] Violation No. 5 in the NOV Letter.
[8] Violations No. 6 in the NOV Letter.
[9] Violations No. 7 in the NOV Letter.

buffalo could not have been used to fight any potential ignitions . . . where it was parked" and this constituted both a "failure to follow [our] own procedures, and "a failure to follow accepted good practice," TD-1464S only required that the water buffalo be on the jobsite, which it clearly was. It should also be noted that PRC-4427, nor any other requirement, mandate that a water buffalo be onsite.[10] We require that these precautions be taken consistent with our commitment in preventing ignitions and not only does this adhere to accepted good practice we believe it establishes the best utility practice. Nevertheless, it was unfortunate this fire was able to spread while the water tank and hose were repositioned. Once again, one of the corrective actions from the ACE Report was to remove ambiguity from TD-1464S to now require that the water buffalo be "positioned within 200-feet of the work location, pre-tested, primed, and started with 40 psi at the nozzle to ensure it is ready for immediate use if a fire were to ignite."[11]

Investigative and Corrective Efforts

Immediately after the incident, we pursued investigative and corrective efforts, culminating in our ACE Report which was shared with SED on November 5, 2021. All corrective actions identified, and previously reported to SED, in our ACE Report have been completed.

Please do not hesitate to contact the undersigned at [redacted] should you have any questions or concerns regarding this response.

Sincerely,

[redacted]
Senior Director – Electric Compliance, Electric Engineering

Cc: Lee Palmer, Director, Safety and Enforcement Division (SED), CPUC
Anthony Noll, Program Manager, Wildfire Safety and Enforcement Branch (WSEB)
Will Dundon, Senior Utilities Engineer, WSEB

[10] PRC-4427 requires only that "one serviceable round point shovel," and "one backpack pump water-type fire extinguisher," be onsite.
[11] ACE Report, at p. 56, provided to SED on November 5, 2021.