Fax (626) 569-2573



December 16, 2021

201800645

PUBLIC UTILITIES COMMISSION STATE OF CALIFORNIA ATTENTION: JAMES MILLER 320 WEST 4<sup>TH</sup> STREET, SUITE 500 LOS ANGELES, CA 90013

Re: Date of Incident: January 18, 2018

Location of Incident: Near Highway 395 and Highway 58, California

Dear Mr. Miller,

This letter is a follow-up to your information request relative to the above-captioned incident and received via e-mail on November 17, 2021. SCE is providing this response to the Commission pursuant to General Order ("G.O.") 95, Rule 19 and California Public Utilities Code ("PUC") Section 316. SCE is not withholding any information and/or documents on privilege grounds unless specifically noted in the response.

Request No. 1: SCE provided a quote from HWI in an October 12, 2020 letter in which

HWI indicated that the conductor that electrocuted Mr. was grounded both at the H-frame to the east and structure TW33689 to the west. Does SCE possess any photographs of the grounding device at TW33689 or other evidence that the circuit was grounded there? If so,

please provide me with that evidence.

Response No. 1: Find enclosed three photographs depicting what appears to be temporary

grounds with yellow insulation attached to a conductor(s) at TW33689 taken after the incident occurred during SCE's investigation. It should be noted that HWI reported to SCE that temporary grounds initially installed on conductors at TW33689 were removed by the HWI crew to facilitate the transfer of the conductor from the toward to adjacent TSP No.

the transfer of the conductor from the tower to adjacent TSP No. 4896009E. The temporary ground was reinstalled to the conductor at TSP

No. 4896009E once the conductor was in position.

Request No. 2: SCE's Overhead Grounding Manual requires a circuit to be grounded on

both sides of workers when an induction hazard is present, along with a temporary breakaway bond. HWI's grounding procedures, provided by SCE on April 12, 2018, only prescribe a grounding device on one side of

the workers.

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- a. Would SCE allow work to proceed on a project if SCE had knowledge that the contractor performing the work would only be using one set of grounds and a breakaway bond when an induction hazard is present?
  - i. Does SCE allow its contractors to use such grounding practices while performing similar work?
  - ii. If SCE was aware that HWI' grounding procedures differed from SCE's in this way, would SCE have allowed the work to proceed?
- b. Does SCE require its contractors to use the same grounding procedures as those required by SCE's Overhead Grounding Manual?
- c. Does SCE consider grounding a circuit on only one side of the workers, along with a breakaway bond, an accepted good practice, or industry standard, when an induction hazard is present?
- d. Why does SCE's Overhead Grounding Manual require the conductors to be grounded on both sides of workers when an induction hazard is present?
- e. Compared to grounding a circuit on only one side of workers when an induction hazard is present, is it safer to also ground the circuit on the other side of the workers? Why or why not?

## Response No. 2:

- a. SCE requires that all transmission/sub-transmission contractors to meet or exceed the provisions of SCE's grounding manual. In the event a contract crew is identified as not meeting SCE's minimum grounding standards, all work requiring grounding would be stopped until appropriate grounding has safely been established.
  - i. No. SCE contractors are required to meet or exceed SCE grounding standards.
  - ii No. If improper grounding practices are identified by SCE, all work requiring grounding would be stopped until appropriate grounding has safely been established.
- b. Yes. SCE contractors are required to meet or exceed SCE grounding standards.
- c. SCE's minimum grounding standards while working directly on any idle or de-energized sub-transmission conductor is a set of "master grounds" between the worker and all sources, and an appropriate Equal Potential Zone (EPZ) for the worker. An EPZ zone can be created by attaching a

bond/ground from the structure the employee is on to the phase being worked or from the manlift the employee is on to the phase being worked. When using a manlift, a break-away bond/ground is preferred. If a break-away bond/ground is not available, a nonbreak-away bond/ground may be used.

- d. According to SCE's Overhead Grounding Manual, Section 3.6.14 Approved Overhead Grounding Methods, bracket grounds with EPZ is required for working on idle or de-energized Transmission and Sub-Transmission circuits. The grounding on both sides of the worker helps ensure that a ground is between any source of energization and the worker. During a fault, voltage is higher on the source side of the ground than the opposite side, so grounds on both sides help ensure one ground is always on the source side. Also, it can provide redundancy in the event any grounding hardware fails during an inadvertent energization.
- e. Yes. Generally speaking, bracket grounding and creating an EPZ better protects a worker from all sources of energization.

Sincerely,

Eric K. Coolidge

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