PUBLIC UTILITIES COMMISSION 505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3298



April 11, 2022

CPUCID: E20180118-01

Melvin Stark Principal Manager, T&D Compliance Integration Southern California Edison (SCE) 1 Innovation Way Pomona, CA 91768

SUBJECT: Notice of Violation

Mr. Stark:

On behalf of the Electric Safety and Reliability Branch (ESRB) of the California Public Utilities Commission (CPUC), James Miller of my staff investigated an incident that occurred on January 18, 2018, involving SCE's facilities and Herman Weissker, Inc. (HWI), an SCE contractor, that occurred near the intersection of Highways 58 and 395, north of Kramer Junction in San Bernardino County, California.

Mr. was in the process of transferring a de-energized 115 kV overhead conductor from a lattice transmission tower to a new steel pole when the accident occurred. An energized 220 kV circuit built parallel to the conductor induced a current on the 115 kV de-energized conductor and lead to Mr. frame 's injuries. The de-energized conductor was grounded at an H-frame to the east of the worksite, and was also intermittently grounded with a breakaway bond connected to the elevated work platform. A grounding device was also present to the west of the worksite, but it had been disconnected prior to the incident to facilitate the relocation of the conductor.

Our investigation revealed that the grounding technique used by HWI staff to ground the 115 kV conductor complied with HWI's standards, but not SCE's. SCE's Grounding Manual, as well as good industry standards, requires grounding devices to be in place on both sides of the worker or workspace when an induction hazard is present, whereas HWI's standard requires only a single grounding device on one side of the worksite.

SCE stated in a December 16, 2021 letter that grounding on both sides of the worksite is safer that grounding only one side. SCE explained that the additional grounding device provides redundancy and also better protects the worker from either side of the conductor becoming inadvertently energized. SCE also stated in the same letter that work would not be allowed to proceed on a project if SCE was aware that the contractor's grounding standards did not meet or exceed SCE's.

Based on the CPUC Decision 17-06-028, SCE created a contractor safety program to ensure that its contractors are qualified to perform required work in a safe manner.

SCE's Contractor Safety Management Standard (CSMS) Version 6 contains instructions for contractor field monitoring and other practices to ensure that SCE's contractors perform their work safely.

SCE's Contractor Safety Management Standard, Version 6, Section 3.2, Contractor Orientation for Tier 1 Contractors, states in part:

Within 15 Calendar days after receipt of notice to proceed or in advance of the Tier 1 Contractor's start of work (whichever is sooner), the Edison Representative or delegate shall ensure a Contractor Orientation is performed in collaboration with the Contractor by ensuring the development/review of the following:

a. The Hazard Assessment (Appendix D)

b. The Project/Site-Specific EHS [Environmental Health and Safety] Plan

c. The Handbook for Contractors Checklist (Contained in the EHS Handbook for Contractors)

These documents shall be reviewed with the Contractor Representative, signed by the Edison Representative and Contractor Representative prior to the start of work, and archived in project records using Appendix E: Contractor Orientation Review.

The CSMS requires that an SCE representative perform a contractor orientation by reviewing three documents prepared by the contractor. These documents are The Hazard Assessment, The Project/Site-Specific EHS Plan, and The Handbook for Contractors Checklist. Once the contractor has completed the documents and submitted them to SCE's representative, he or she must review the documents and archive them along with the Contractor Orientation Review.

General Order (GO) 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.

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.

GO 95, Rule 31.1 requires utility companies to conduct construction activities in accordance with accepted good practice and to do so in a way that is not unusually dangerous to workmen. The CSMS and its requirements, being official SCE policy, is one such accepted good practice.

The CSMS requires a Tier 1 contractor to submit The Hazard Assessment and The Project/Site-Specific EHS Plan to SCE prior to the start of work. HWI completed and submitted to SCE The Hazard Assessment form, but did not develop or submit The Project/Site-Specific EHS Plan. The

CSMS does not require The Project/Site-Specific EHS plan to include detailed grounding plans, but it does require it to address the hazards identified in The Hazard Assessment, such as the hazard of inadvertent energization. By including such hazard mitigation measures in the EHS plan, and based on SCE's policy that requires contactors to follow its own grounding practices, SCE's representative may have discussed with the contractor the proper grounding practice to use in this specific project. Implementing the proper grounding procedure may have prevented or reduced the extent of Mr. Implementing The Project/Site-Specific EHS Plan from HWI and thereby failing to ensure that the construction and maintenance of its facilities were performed safely and in accordance with the accepted good practices of SCE's Contractor Safety Management Standard.

The CSMS also requires the contractor to complete and submit to SCE The Handbook for Contractors Checklist. The Handbook for Contractors Checklist, found in SCE's EHS Handbook for Contractors, is a checklist of the items covered by the handbook. The purpose of the checklist is to provide an outline of requirements contained in the handbook that the SCE representative is to review with the contractor representative prior to the start of work. By signing this document, the contractor representative affirms that he or she understands the items contained in the checklist and will ensure compliance with the requirements contained in the handbook. Among other requirements, the EHS Handbook for Contractors states that the contractor must abide by SCE's safety standards, and that the contractor's procedures must not conflict with SCE's. The checklist must be signed and dated by both the contractor's and SCE's representatives.

In order to complete the checklist properly, HWI would have to review and confirm that its grounding procedures comply with those of SCE. Our investigation revealed that HWI did not complete or submit the checklist to SCE. By failing to complete the checklist, HWI did not become aware that it needed to modify its grounding procedures in order to comply with those of SCE. SCE is in violation of GO 95, Rule 31.1, for allowing work to proceed without completion of The Handbook for Contractors Checklist and thereby failing to ensure that construction and maintenance of its facilities were performed safely and in accordance with the accepted good practices of SCE's Contractor Safety Management Standard.

SCE's CSMS further requires that representatives from both companies sign The Contractor Orientation Review after The Hazard Assessment, The Site-Specific EHS Plan, and The Handbook for Contractors Checklist have been received. The Contractor Orientation Review, found in Appendix E of the CSMS, must be filled out and signed after The Hazard Assessment, The Project/Site-Specific EHS Plan, and The Handbook for Contractors Checklist have been completed by the contractor and received by SCE's representative. The purpose of the Contractor Orientation Review is to provide a checklist that binds the documents reviewed during the contractor orientation and to ensure mutual understanding between SCE and the Contractor regarding what is required to safely perform work at SCE.

HWI completed The Hazard Assessment form prior to the start of work but did not complete or submit to SCE The Project/Site-Specific EHS Plan or The Handbook for Contractors Checklist. Nonetheless, SCE allowed work to proceed without completion of The Contractor Orientation Review. Completion of the review would have revealed that The Site-Specific EHS Plan and The

Handbook for Contractors Checklist had not been completed, and SCE could have prevented HWI from commencing with the project until those documents were completed by HWI and reviewed by SCE, which could have made SCE and HWI aware that HWI's grounding procedure should be modified to comply with SCE's grounding procedure. Modifying HWI's procedure to comply with SCE's procedure is required in order for SCE to comply with its own policy. SCE is in violation of GO 95, Rule 31.1, for failing to complete The Contractor Orientation Review and thereby failing to ensure that construction and maintenance of its facilities were performed safely and in accordance with the accepted good practices of SCE's Contractor Safety Management Standard.

Please advise me by May 11, 2022, of corrective measures taken by your company to remedy and prevent the recurrence of such violations in the future. If you have any questions, you can contact James Miller at (213) 660-8898 or email at James.Miller@CPUC.CA.gov.

Sincerely,

Fadi Donge

Fadi Daye, P.E. Program and Project Supervisor Electric Safety and Reliability Branch Safety and Enforcement Division California Public Utilities Commission

Cc: Lee Palmer, Director, Safety and Enforcement Division, CPUC
Nika Kjensli, Program Manager, ESRB, SED, CPUC
Majed Ibrahim, Senior Utilities Engineer Supervisor, ESRB, SED, CPUC
James Miller, Utilities Engineer, ESRB, SED, CPUC