PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3298



February 12, 2016

Melvin Stark Manager, Maintenance & Inspection Southern California Edison 3 Innovation Way Pomona, CA 91768 EA2015-013

SUBJECT: Audit of SCE's South Bay District

Dear Mr. Stark:

On behalf of the Electric Safety and Reliability Branch of the California Public Utilities Commission (CPUC), Koko Tomassian and Wilson Tsai of my staff conducted an audit of Southern California Edison's (SCE) South Bay District from August 3, 2015 to August 7, 2015. The audit included a review of SCE's records and field inspections of SCE's facilities.

During the audit, my staff identified violations of one or more General Orders (GOs). A copy of the audit findings itemizing the violations is enclosed. Please advise me no later than March 18, 2016, by electronic or hard copy, of all corrective measures taken by SCE to remedy and prevent such violations.

If you have any questions, you can contact Koko Tomassian at (213) 576-7099 or koko.tomassian@cpuc.ca.gov.

Sincerely,

Fadi Daye, P.E.

Program and Project Supervisor Electric Safety and Reliability Branch Safety and Enforcement Division California Public Utilities Commission

Enclosure: Audit Findings

Cc: Elizaveta Malashenko, Director, Safety and Enforcement Division, CPUC Charlotte TerKeurst, Program Manager, Electric Safety and Reliability Branch, CPUC

AUDIT FINDINGS

I. Records Review

During the audit, my staff reviewed the following records:

- Patrol and detailed inspection records from 2012 to 2014 for overhead and underground facilities.
- Construction records and pole load calculations for 10 poles installed from 2014 to 2015.
- Completed, pending, and late work orders from 2012 to 2015.
- Third party safety hazard notifications sent to and received from other utilities pursuant to GO 95, Rule 18-B.
- Oil testing records for switches from 2009 to 2015.

II. Records Review - Violations List

GO 165, Section II, Applicability, states in part:

The requirements of this order are in addition to the requirements imposed upon utilities under General Orders 95 and 128 to maintain a safe and reliable electric system. Nothing in this General Order relieves any utility from any requirements or obligations it has under General Orders 95 and 128.

GO 165, Section III B, Standards for Inspection, states in part:

Each utility subject to this General Order shall perform inspections of its distribution facilities, as necessary, to ensure reliable, high-quality, and safe operation, but in no case may the period for inspections (measured in years) exceed the time specified in Table 1...

Table 1 requires patrol inspections to be conducted annually (i.e. once every year) in urban areas and rural areas in Extreme and Very High Fire Threat Zones, as defined by the California Department of Forestry and Fire Protection's Fire and Resource Assessment Program Fire Threat Map.

From 2012 to 2013, SCE performed 23 late grid patrol inspections. These 23 patrol inspections were indicated as performed on time in SCE's maintenance and inspection database. GO 165, Table 1, defines the term "year" "as 12 consecutive calendar months starting the first full calendar month after an inspection is performed, plus three full calendar months, not to exceed the end of the calendar year in which the next inspection is due". The 23 late grid patrol inspections were all conducted at least 458 days after the previous patrol inspection, which exceeds the definition of one "year". Therefore, SCE is in violation of GO 165, Table 1, for not performing 23 grid patrol inspections annually.

GO 95, Rule 18-A2a(ii), states in part:

Time period for correction to be determined at the time of identification by a qualified company representative, but not to exceed: ... (2) 12 months for nonconformances that create a fire risk and are located in an Extreme or Very High Fire Threat Zone in Southern California.

GO 95, Rule 18-A3, states:

Companies that have existing General Order 165 auditable inspection and maintenance programs that are consistent with the purpose of Rule 18A shall continue to follow their General Order 165 programs.

SCE's records indicated that twenty-three 2012 priority level 2 work orders, and six 2013 priority level 2 work orders, in Extreme or Very High Fire Threat Zones, were completed within a period that exceeds 12 months from the date that SCE identified and documented them. Additionally, SCE's Distribution Inspection and Maintenance Program does not include language that is consistent with GO 95, Rule 18-A2a, which requires a time period for correction of "12 months for nonconformances that create a fire risk and are located in an Extreme or Very High Fire Threat Zone in Southern California." Thus, SCE must comply with GO 95, Rule 18-A2a. SCE indicated it considers the repairs to be completed on time because Decision (D.)12-01-032, which adopted the one year requirement for priority level 2 repairs in high fire-threat zones, did not explicitly state an effective date for this rule. However, the time period for correction of priority level 2 violations as defined in Rule 18-A2 is very clear. Therefore, SCE is in violation of GO 95, Rule 18-A2a for failing to correct priority level 2 repairs in high fire threat zones within the allotted 12 month period.

III. Field Inspections

The following facilities were inspected during the audit:

Structure Number	Structure Type
906794E	Pole
339326E	Pole
1836179E	Pole
2247828E	Pole
4404524E	Pole
528500H	Pole
736624E	Pole
528499H	Pole
528498H	Pole
832338H	Pole
832337H	Pole
832334H	Pole
125381E	Pole
4376531E	Pole
528857E	Pole
1319137E	Pole
1319138E	Pole
1319140E	Pole
1319141E	Pole
1319142E	Pole
1319143E	Pole
1319144E	Pole
1319146E	Pole
1393991E	Pole
1157211E	Pole
1157210E	Pole
1157209E	Pole
1157208E	Pole
1157206E	Pole
1157207E	Pole
1157205E	Pole
1157204E	Pole
1157203E	Pole
1157202E	Pole
P5148802	Pad-Mounted Transformer
P5383185	Pad-Mounted Transformer
V5055042	Vault
P5383157	Pad-Mounted Transformer
P5610701	Capacitor Bank
P5610702	Pad-Mounted Transformer

Structure Number	Structure Type
P5610700	Switch
P5060076	Pad-Mounted Transformer
SS060053	Subsurface Transformer
SS060058	Subsurface Transformer

Field Inspections - Undocumented Violations List

My staff observed the following violations during the field inspection. None of these violations were documented and/or addressed by SCE during its inspections:

GO 95, Rule 54.7, Climbing and Working Space, states in part:

... Climbing space shall be maintained from the ground level. Climbing space, measured from center line of pole, shall be provided on one side or in one quadrant of all poles or structures...

Pole number 1157209E had a tree growing around it which obstructed the climbing space in all quadrants.

GO 95, Rule 18-B, Notification of Safety Hazards, States:

If a company, while performing inspections of its facilities, discovers a safety hazard(s) on or near a communications facility or electric facility involving another company, the inspecting company shall notify the other company and/or facility owner of such safety hazard(s) no later than 10 business days after the discovery.

Pole number 1836179E supported communications facilities with a broken lashing wire. SCE did not notify the owner of this safety hazard when it last inspected the pole.

GO 128, Rule 33.6A, Accessibility, states:

Cables and conductors in manholes, handholes, permanent cable trenches, or other similar enclosures shall be reasonably accessible to workmen and working space shall be available at all times. (See Appendix B, Figure 9)

The following underground structures did not have the required working space:

- P5610702
- P5610700
- SS060053

IV. Field Inspections – Documented Violations

My staff observed the following violations during the field inspection that were documented and/or addressed by SCE during its last inspection:

GO 95, Rule 51.6-A, High Voltage Marking, states in part:

Poles which support line conductors of more than 750 volts shall be marked with high voltage signs.

The following SCE poles supported High Voltage signs that were damaged:

- 2247828E
- 1319140E
- 1319141E
- 1319142E
- 1319144E
- 1157208E
- 1157207E
- 1157203E

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

Electrical supply and communications 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...

Pole number 1319138 E had a broken and/or bent pole step which could not be used for its intended purpose.

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

Electrical supply and communications 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...

GO 95, Rule 54.6B, Ground Wires, states in part:

That portion of the ground wires attached on the face or back of wood crossarms or on the surface of wood poles and structures shall be covered by a suitable protective covering

Pole number 1319138E supported a ground wire which did not have a suitable protective covering.

GO 128, Rule 33.6A, Accessibility, states:

Cables and conductors in manholes, handholes, permanent cable trenches, or other similar enclosures shall be reasonably accessible to workmen and working space shall be available at all times. (See Appendix B, Figure 9)

Underground structure number SS06058 did not have the required working space and/or accessibility.