PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3298



February 10, 2016

EA2015-015

Melvin Stark Manager, Maintenance & Inspection Southern California Edison Company (SCE) 3 Innovation Way Pomona, CA 91786

Subject: Audit of SCE's Menifee District

Dear Mr. Stark:

On behalf of the Electric Safety and Reliability Branch of the California Public Utilities Commission (CPUC), Richard Kyo of my staff conducted an audit of SCE's Menifee District from November 30, 2015 to December 4, 2015. The audit included a review of SCE's records and field inspections of SCE's facilities.

During 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 14, 2016, by electronic or hard copy, of all corrective measures taken by SCE to remedy and prevent such violations.

If you have any questions concerning this audit, please contact Richard Kyo at (213) 576-7081 or richard.kyo@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

Enclosures: CPUC 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:

- Current and previous overhead and underground detailed inspections records.
- Completed and pending corrective action work orders.
- Pole loading calculations.
- Diagnostic testing records for oil insulated equipment.

II. Records Review – Violations List

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.

General Order 165, Section III-C, Standards for Inspection, states:

For all inspections records shall specify the circuit, area, facility or equipment inspected, the inspector, the date of the inspection, and any problems (or items requiring corrective action) identified during each inspection, as well as the scheduled date of corrective action.

SCE's records indicated that from 2012 to 2015, seven work orders were completed past their scheduled date of corrective action.

III.Field Inspections

My staff inspected the following facilities during the field inspections:

Structure Number	Type of Structure	Location
4799603E	Pole	Moreno Valley
4799604E	Pole	Moreno Valley
4799605E	Pole	Moreno Valley
4799606E	Pole	Moreno Valley
4799607E	Pole	Moreno Valley
4799608E	Pole	Moreno Valley
4799609E	Pole	Moreno Valley
4058255E	Pole	Moreno Valley
4799610E	Pole	Moreno Valley
4799611E	Pole	Moreno Valley
4799612E	Pole	Moreno Valley
4799613E	Pole	Moreno Valley
4799614E	Pole	Moreno Valley
4799615E	Pole	Moreno Valley
4799616E	Pole	Moreno Valley
4799617E	Pole	Moreno Valley
4113255E	Pole	Menifee
4113256E	Pole	Menifee
4299351E	Pole	Menifee
4207186E	Pole	Menifee
220373S	Pole	Menifee
2308784E	Pole	Menifee
220374S	Pole	Menifee
2160694E	Pole	Menifee
1622408E	Pole	Menifee
220376S	Pole	Menifee
221142S	Pole	Menifee
221143S	Pole	Menifee
1622408E	Pole	Menifee
3006215E	Pole	Menifee
4799302E	Pole	Menifee
2204638E	Pole	Menifee
GT 9079	Pole	Menifee
2184535	Pole	Menifee
GT 9080	Pole	Menifee
2184545	Pole	Menifee
1834166E	Pole	Menifee
1834167E	Pole	Menifee
1834268E	Pole	Menifee

1570168E	Pole	Menifee
1587732E	Pole	Menifee
1587682E	Pole	Menifee
218456	Pole	Menifee
2105594E	Pole	Menifee
1622408E	Pole	Menifee
220376	Pole	Menifee
221142	Pole	Menifee
221143	Pole	Menifee
3000215E	Pole	Menifee
4799302E	Pole	Menifee
2204683E	Pole	Menifee
GT 9079	Pole	Menifee
2184535	Pole	Menifee
GT 9080	Pole	Menifee
2184545	Pole	Menifee
1834166E	Pole	Menifee
1834167E	Pole	Menifee
1834268E	Pole	Menifee
1570168E	Pole	Menifee
1587732E	Pole	Menifee
1587682E	Pole	Menifee
218456	Pole	Menifee
2105593E	Pole	Menifee
2105594E	Pole	Menifee
4623962E	Pole	Menifee
2105471E	Pole	Menifee
2105595E	Pole	Menifee
2184585	Pole	Menifee
1668101E	Pole	Nuevo
1668102E	Pole	Nuevo
2074963E	Pole	Nuevo
429921E	Pole	Nuevo
1668103E	Pole	Nuevo
1668104E	Pole	Nuevo
14536S	Pole	Nuevo
1668105E	Pole	Nuevo
3000163E	Pole	Winchester
4547012E	Pole	Winchester
264169S	Pole	Moreno Valley
2041093 2178214E	Pole	Winchester
4231364E	Pole	Winchester
1935448E	Pole	Hemet
220579S		
4203798	Pole	Hemet

2066494E	Pole	Hemet
2066495E	Pole	Hemet
1570305E	Pole	Hemet
1570168E	Pole	Hemet
4001971E	Pole	Winchester
1588036E	Pole	Hemet
2295753E	Pole	Mead Valley
1796889E	Pole	Perris
2075724E	Pole	Perris
P5553444	Padmount Transformer	Sun City
P5583021	Padmount Transformer	Menifee
P5522857	Padmount Transformer	Menifee
P5467285	Padmount Transformer	Menifee
P5620496	Padmount Transformer	Menifee
P5531132	Padmount Transformer	Menifee
5356952	BURD Structure	Hemet
5185153	BURD Structure	Hemet
V5390347	Vault	Hemet
5343131	BURD Structure	Hemet
V5425881	Vault	Hemet
V5544303	Vault	Hemet

IV. Field Inspection – 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 last inspections.

GO 95, Rule 31.1, Design, Construction, and Maintenance, 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.

SCE pole number 4529921E supported a loose crossarm brace.

GO 95, Rule 51.6-A, Marking and Guarding, states in part:

Poles which support line conductors of more than 750 volts shall be marked with high voltage signs. This marking shall consist of a single sign showing the words "HIGH VOLTAGE", or pair of signs showing the words "HIGH" and "VOLTAGE"

SCE pole number 4113255E supported a high voltage sign that was damaged.

V. Field Inspection – Documented Violations List

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

GO 95, Rule 56.2, Use, states in part:

Guys shall be attached to structures, as nearly as practicable, at the center of load. They shall be maintained taut and of such strength as to meet the safety factors of Rule 44.

SCE pole number 4799606E supported a guy wire that was not taut.

GO 95, Rule 31.1, Design, Construction, and Maintenance, 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.

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 igh voltage signs. This marking shall consist of a single sign showing the words "HIGH VOLTAGE", or pair of signs showing the words "HIGH" and "VOLTAGE", not more than six (6) inches in height with letters not less than 3 inches in height. Such signs shall be of weather and corrosion—resisting material, solid or with letters cut out therefrom and clearly legible.

The following SCE poles were missing High Voltage signs:

- 4299351E
- 2105471E
- 2184585

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

- 4113256E
- 4299351E
- 2105593E
- 2105594E
- 1668103E
- 1668104E
- 14536S

GO 95, Rule 31.1, Design, Construction, and Maintenance, 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.

GO 95, Rule 54.6-B, 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 (see Rule 22.8).

The following SCE poles supported ground wires with damaged ground molding:

- 4113255E
- 4299351E
- 220373S
- 2160694E
- 2105471E
- 2184585
- 1668103E
- 14536S