

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



June 28, 2016

EA2016-009

Brandi Benson
Electric/Propane Manager
Kirkwood Meadows Public Utility District
P.O. Box 247
Kirkwood, CA 95646

SUBJECT: Audit of Kirkwood Meadows Public Utility District

Dear Ms. Benson:

On behalf of the Electric Safety and Reliability Branch (ESRB) of the California Public Utilities Commission, Wilson Tsai of my staff conducted an electric audit of Kirkwood Meadows Public Utility District (KMPUD) from June 6, 2016 to June 9, 2016. The audit included a review of KMPUD's records and field inspections of KMPUD'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 July 29, 2016, by electronic or hard copy, of all corrective measures taken by KMPUD to remedy and prevent such violations.

If you have any questions concerning this audit please contact Wilson Tsai at (415) 703-1359 or wilson.tsai@cpuc.ca.gov.

Sincerely,

A handwritten signature in blue ink that reads "Fadi Daye".

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

My staff reviewed the following records during the audit:

- a. KMPUD's GO 165 inspection program
- b. Work orders completed in 2014-2016
- c. Pad-mounted and underground facilities for the in-valley region of KMPUD
- d. Patrol and inspection records from 2010 to 2016
- e. New Construction records for the in-valley region of KMPUD

II. Records Review - Violations

GO 165, Section III-C, Record Keeping, states in part:

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.

GO 128, Rule 17.1, 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.

KMPUD's records indicated that from June 2011 to June 2016, a total of 20 work orders were not completed by their scheduled date of corrective action.

III. Field Inspection

My staff inspected the following facilities in the North Bay region:

Structure Number	Address	Structure Type
TCL7	Loop Road	Pad-mounted Transformer
TC100	Fremont Road – Lot 100	Pad-mounted Transformer
TC104	Fremont Court – Lot 104	Pad-mounted Transformer
TC106	Fremont Court – Lot 107	Pad-mounted Transformer
TC121	Yarrow Place – Lot 121	Pad-mounted Transformer
TC124	Wintergreen Way – Lot 124	Pad-mounted Transformer
TC128	Yarrow Place – Lot 128	Pad-mounted Transformer
TC129	Yarrow Place – Lot 129	Pad-mounted Transformer
TC134	Yarrow Place – Lot 134	Pad-mounted Transformer
TC140	Yarrow Place – Lot 140	Pad-mounted Transformer
TC144	Hawkweed Way – Lot 144	Pad-mounted Transformer
TC150	Hawkweed Way – Lot 150	Pad-mounted Transformer
TC152	Hawkweed Way – Lot 153	Pad-mounted Transformer
TC154	Hawkweed Way – Lot 154	Pad-mounted Transformer
TC8	Fremont Road – Lot 8	Pad-mounted Transformer
TC159	Hawkweed Way – Lot 159	Pad-mounted Transformer
TCKPUD	50 Loop Rd – WWTP	Pad-mounted Transformer
TCLM	33601 Loop Rd	Pad-mounted Transformer
TCPP	50 Loop Rd – WWTP	Pad-mounted Transformer
TCVS	Loop Rd – Vaporizer Shed	Pad-mounted Transformer
LJEKM1	Kirkwood Meadows Dr	Pad-mounted Line Junction Enclosure
LJEKM2	Kirkwood Meadows Dr	Pad-mounted Line Junction Enclosure
LJEPUD	50 Loop Rd	Pad-mounted Line Junction Enclosure
VSJR	East Kirkwood Meadows Dr	Underground Vault
VSKM	Kirkwood Meadows Dr & Merrill	Underground Vault
VSLS	33601 Loop Rd – Lower Shop	Underground Vault
TC17	Fremont Drive – Lot 17	Pad-mounted Transformer
TC808	Glove Rock Rd – Lot 808	Pad-mounted Transformer
SPLS	33601 Loop Rd	Pad-mounted Transformer
TC206	East Meadows Dr – Lot 206	Pad-mounted Transformer
TCTM	Meadows Condos	Pad-mounted Transformer
LJEC07	30 Palisades Dr	Pad-mounted Line Junction Enclosure
LJETR	Timber Ridge	Pad-mounted Line Junction Enclosure

Structure Number	Address	Structure Type
OSLD	1377 Kirkwood Meadows Dr	Pad-mounted Switch
TCWT	1511 Kirkwood Meadows Dr	Pad-mounted Transformer
LJEGR	Glove Rock Rd	Pad-mounted Line Junction Enclosure
LJEJR	Glove Rock Rd	Pad-mounted Line Junction Enclosure
TC206	E Kirkwood Meadows Dr – Lot 206	Pad-mounted Transformer
LJE205	E Kirkwood Meadows Dr – Lot 205	Pad-mounted Line Junction Enclosure
VSJR	E Kirkwood Meadows Dr	Underground Vault
LJE517	Columbine Circle – Lot 517	Pad-mounted Line Junction Enclosure
TCW2	1550 Kirkwood Meadows Dr	Pad-mounted Transformer
OSW2	1550 Kirkwood Meadows Dr	Pad-mounted Switch
LJEMS2	1200 Kirkwood Meadows Dr	Pad-mounted Line Junction Enclosure
TCTH	Sentinels West	Pad-mounted Transformer

IV. Field Inspection – Undocumented Violations List

We observed the following violations during our field inspection. None of these violations were documented and/or addressed by KMPUD during its last inspection:

GO 128, Rule 34.3-A, Strength, states in part:

The equipment case or enclosure shall be secured in place and be of sufficient strength to resist entrance or damage to the equipment by unauthorized persons.

The following pad-mounted facilities were not secured in place:

- LJEKM2
- TCLM
- TC140
- TCW2
- TCTM

GO 128, Rule 17.1, 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.

Pad-mounted transformer TCLM had significant corrosion on the top of the enclosure.

Pad-mounted transformer TC129 had vegetation overgrowth and ant infestation within the enclosure.

Pad-mounted transformer TC159 had vegetation overgrowth within the enclosure.

GO 128, Rule 35.3, Warning Signs, states in part:

Such warning signs shall also be installed on an exterior surface of all such pad mounted transformer compartments and other above ground enclosures. Such signs shall be clearly visible to a person in position to open any such access door, other opening, or barrier.

Pad-mounted line junction enclosure LJEJR had a faded danger sign on the enclosure exterior.

V. Field Inspection – Documented Violations List

We observed the following violations during our field inspection. These violations were documented and/or addressed by KMPUD during its last inspection:

GO 128, Rule 32.7, Covers, states in part:

Manholes, handholes, and subsurface equipment enclosures while not being worked in, shall be securely closed by covers of sufficient strength to sustain such loads as may reasonably be imposed upon them and arrangements shall be such that a tool or appliance shall be required for their opening and cover removal.

Pad-mounted line junction enclosure LJEC07 had a damaged enclosure lid.