#### PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3298



May 26, 2016

TA2016-002

Matthew MacDonald Manager, Distribution Services and Maintenance Operations, Imperial Irrigation District 333 E. Barioni Blvd. Imperial, CA 92251

Subject: Audit of Imperial Irrigation District El Centro Region

Dear Mr. MacDonald:

On behalf of the Electric Safety and Reliability Branch of the California Public Utilities Commission (CPUC), Richard Kyo of my staff conducted a transmission audit of Imperial Irrigation District's (IID) El Centro Region from March 14, 2016 to March 18, 2016. The audit included a review of IID's records and field inspections of IID'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 1, 2016, by electronic or hard copy, of all corrective measures taken by IID 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:

- Inspection and maintenance practices.
- Routine inspections records.
- Completed and pending corrective action work orders.
- Intrusive test records.
- Safety hazard notifications.

#### II. Records Review – Violations List

GO 95, Rule 18-A2a, Resolution of Safety Hazards and General Order 95 Nonconformances, states in part:

All companies must include a timeline for corrective actions to be taken following the identification of a Safety Hazard or nonconformances with General Order 95 on the company's facilities.

GO 95, Rule 18-A2aii, describes the "Level 2" priority level:

- Variable (non-immediate high to low) safety and/or reliability risk.
- Take action to correct within specified time period (fully repair, or by temporarily repairing and reclassifying the condition to a lower priority). Time period for correction to be determined at the time of identification by a qualified company representative, but not to exceed: (1) 12 months for nonconformances that compromise worker safety, (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, and (3) 59 months for all other Level 2 nonconformances.

IID does not have a priority level that is consistent with priority Level 2 as specified in GO 95, Rule 18-A2aii.

# **III.Field Inspections**

My staff inspected the following facilities during the field inspections:

Structure Number	Type of Structure	Location
T21894	Pole	El Centro
T21698	Pole	El Centro
PW-0204	Pole	El Centro
PW-0205	Pole	El Centro
PW-0206	Pole	El Centro
PW-0207	Pole	El Centro
PW-0208	Pole	El Centro
PW-0209	Pole	El Centro
PW-0210	Pole	El Centro
PW-0211	Pole	El Centro
PW-0212	Pole	El Centro
PW-0213	Pole	El Centro
PW-0214	Pole	El Centro
PW-0215	Pole	El Centro
PW-0132	Pole	El Centro
PW-0131	Pole	El Centro
PW-0130	Pole	El Centro
PW-0129	Pole	El Centro
PW-0128	Pole	El Centro
PW-0127	Pole	El Centro
PW-0126	Pole	El Centro
T-5266	Pole	El Centro
T-20618	Pole	El Centro
T-20084	Pole	El Centro
T-20616	Pole	El Centro
T-20614	Pole	El Centro
T-20613	Pole	El Centro
T-20610	Pole	El Centro
T-20609	Pole	El Centro
T-20605	Pole	El Centro
T-20602	Pole	El Centro
T-20601	Pole	El Centro
T-20557	Pole	El Centro
T-20597	Pole	El Centro
T-20596	Pole	El Centro
T-1078813	Pole	Imperial
T-1078812	Pole	Imperial
T-1078811	Pole	Imperial
T-1078810	Pole	Imperial

T-1078809	Pole	Imperial
T-1078808	Pole	Imperial
T-1078807	Pole	Imperial
T-1078806	Pole	Imperial
T-1078805	Pole	Imperial
T-1078804	Pole	Imperial
T-1078803	Pole	Imperial
T-1078802	Pole	Imperial
T-1078801	Pole	Imperial
T-1078799	Pole	Imperial
T-1078798	Pole	Imperial
T-1078797	Pole	Imperial
T-1078796	Pole	Imperial
T-1078795	Pole	Imperial
T-1078794	Pole	Imperial
T-1078793	Pole	Imperial
T-1078791	Pole	Imperial
T-5702	Pole	Imperial
3147	Pole	Imperial
3148	Pole	Imperial
T-1078790	Pole	Imperial
T-1078789	Pole	Imperial
T-1078788	Pole	Imperial
T-1078787	Pole	Imperial
T-1078786	Pole	Imperial
T-1078785	Pole	Imperial
T-1078784	Pole	Imperial
T-1078783	Pole	Imperial
T-1078782	Pole	Imperial
T-1078781	Pole	Imperial
T-1078780	Pole	Imperial
P10116	Pole	El Centro
80853	Pole	El Centro
P10118	Pole	El Centro
1210064	Pole	El Centro
1210065	Pole	El Centro
P-0214	Pole	El Centro
P-0214 A	Pole	El Centro
P-0215	Pole	El Centro
P-0216	Pole	El Centro
P-0217	Pole	El Centro
P-0218	Pole	El Centro
P-0219	Pole	El Centro
P-0301	Pole	El Centro

P-0302	Pole	El Centro
P-0303	Pole	El Centro
P-0304	Pole	El Centro
1212298	Pole	El Centro
P-0306	Pole	El Centro
P-0307	Pole	El Centro
P-0308	Pole	El Centro
P-0309	Pole	El Centro
P-0310	Pole	El Centro
1200152	Pole	Winterhaven
1200151	Pole	Winterhaven
1200150	Pole	Winterhaven
1187627	Pole	Winterhaven
1200149	Pole	Winterhaven
1200148	Pole	Winterhaven
1200147	Pole	Winterhaven
T-51467	Pole	Winterhaven
T-51466	Pole	Winterhaven
T-51468	Pole	Winterhaven
T-51469	Pole	Winterhaven
T-51470	Pole	Winterhaven
T-51471	Pole	Winterhaven
T-51472	Pole	Winterhaven
1187630	Pole	Winterhaven
1187631	Pole	Winterhaven
1187629	Pole	Winterhaven
1187628	Pole	Winterhaven
1187626	Pole	Winterhaven
1187625	Pole	Winterhaven
1187624	Pole	Winterhaven
1190445	Pole	Winterhaven
1187623	Pole	Winterhaven
1187622	Pole	Winterhaven
1187621	Pole	Winterhaven
1187620	Pole	Winterhaven
1187619	Pole	Winterhaven
1187618	Pole	Winterhaven
1187617	Pole	Winterhaven
1187616	Pole	Winterhaven
1187615	Pole	Winterhaven
1187614	Pole	Winterhaven
11873204	Pole	Winterhaven
1189914	Pole	Heber
N/A	Pole	Heber

1039202	1211579	Pole	Heber
HL1-1215			
HL1-1214			
1219431			
HL1-1212			
HL1-1211			
HL1-1210 Pole Heber   HL1-1209 Pole Heber   HL1-1208 Pole Heber   HL1-1207 Pole Heber   HL1-1208 Pole Heber   HL1-1207 Pole Heber   1057363 Pole Brawley   1057362 Pole Brawley   1057361 Pole Brawley   1057360 Pole Brawley   1057359 Pole Brawley   1057358 Pole Brawley   1057357 Pole Brawley   1057356 Pole Brawley   1057355 Pole Brawley   1057354 Pole Brawley   1057353 Pole Brawley   1057351 Pole Brawley   1057350 Pole Brawley   1057349 Pole Brawley   1057348 Pole Brawley			
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	1057347	Pole	Brawley

## 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 IID 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.

A Section of the ground wire or ground moulding on the following poles was missing:

- T-1078788 (EO Line) in Imperial
- T-1078786 (EO Line) in Imperial
- T-1078785 (EO Line) in Imperial
- T-1078784 (EO Line) in Imperial
- T-1078783 (EO Line) in Imperial
- T-1078781 (EO Line) in Imperial

## GO 95, Rule 31.6, Abandoned Lines, states in part:

Lines or portions of lines permanently abandoned shall be removed by their owners so that such lines shall not become a public nuisance or a hazard to life or property. For the purposes of this rule, lines that are permanently abandoned shall be defined as those lines that are determined by their owner to have no foreseeable future use.

Pole number T-20616 (LE Line) in El Centro had three abandoned insulators.

### 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"

The following poles supported a damaged high voltage sign or were missing a high voltage sign:

- T-20610 (TE Line) in El Centro
- T-1078785 (EO Line) in Imperial
- T-1078784 (EO Line) in Imperial
- T-1078783 (EO Line) in Imperial
- T-1078782 (EO Line) in Imperial
- T-1078781 (EO Line) in Imperial
- T-1078780 (EO Line) in Imperial
- P10116 (P Line) in El Centro

- 80853 (P Line) in El Centro
- P10118 (P Line) in El Centro
- P-0214 (P Line) in El Centro
- P-0214A (P Line) in El Centro
- P-0215 (P Line) in El Centro
- P-0216 (P Line) in El Centro
- P-0217 (P Line) in El Centro
- P-0218 (P Line) in El Centro
- P-0219 (P Line) in El Centro
- P-0301 (P Line) in El Centro
- P-0302 (P Line) in El Centro
- P-0303 (P Line) in El Centro
- P-0304 (P Line) in El Centro
- P-0306 (P Line) in El Centro
- P-0307 (P Line) in El Centro
- P-0308 (P Line) in El Centro
- P-0309 (P Line) in El Centro
- P-0310 (P Line) in El Centro
- 1187631 (C Line) in Winterhaven
- 1187619 (C Line) in Winterhaven

## 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 poles supported ground wires with damaged or missing ground molding:

- 3148 (EO Line) in Imperial
- T-1078788 (EO Line) in Imperial
- T-1078786 (EO Line) in Imperial
- T-1078785 (EO Line) in Imperial
- T-1078784 (EO Line) in Imperial
- T-1078783 (EO Line) in Imperial
- T-1078781 (EO Line) in Imperial
- HL1-1209 (HL1 Line) in Herber
- 1057355 (MR Line) Brawley

# GO 95, Rule 56.9, Guy Marker (Guy Guard), states in part:

A substantial marker of suitable material, including but not limited to metal or plastic, not less than 8 feet in length, shall be securely attached to all anchor guys. Where more than one guy is attached to an anchor rod, only the outermost guy is required to have a marker.

The following poles supported a down guy wire that did not have a guy guard:

- T-20084 (LC Line) in El Centro
- 1210064 (P Line) in El Centro

## V. Field Inspection – Documented Violations List

My staff observed the following violations during the field inspection that were documented and/or addressed by IID 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.

Pole T-51467 (AM Line) in Winterhaven supported a down guy wire that was not taut.