

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



November 21, 2024

EA2024-1258

Blanca Veronica Zaragoza
Supervisor, Energy Business Process & Internal Controls
Imperial Irrigation District (IID)
333 E. Barioni Boulevard
Imperial, CA 92251

SUBJECT: Audit of Imperial Irrigation District (IID) El Centro District

Ms. Zaragoza:

On behalf of the Electric Safety and Reliability Branch of the California Public Utilities Commission (CPUC), Norvik Ohanian of my staff conducted an electric distribution audit of Imperial Irrigation District's (IID) El Centro District from October 21, 2024, to October 25, 2024. 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 December 23, 2024, by electronic or hard copy, of all corrective measures taken by IID to remedy and prevent such violations.

Please note that ESRB will be posting the audit report and your response to our audit on the CPUC website. If there is any information in your response that you would like us to consider as confidential, we request that in addition to your confidential response, you also provide us with a public or redacted version of your response that can be posted publicly on our website.

If you have any questions concerning this audit, please contact Norvik Ohanian at (213) 660-5528 or Norvik.Ohanian@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

Enclosures: CPUC Audit Findings

Cc: Lee Palmer, Director, Safety and Enforcement Division, CPUC
Nika Kjensli, Program Manager, Electric Safety and Reliability Branch, CPUC
Norvik Ohanian, Utilities Engineer, Electric Safety and Reliability Branch, CPU

AUDIT FINDINGS

I. Records Review

During the audit, my staff reviewed the following records:

- Overhead and Underground Detailed Inspection Records
- Patrol Inspection Records
- IID's Documented Inspection Program
- Repair Notifications
- Transformers, Switches and Intrusive Testing Records
- Pole Loading Calculation Records

II. Records Review – Violations List

My staff observed the following violations during the records review portion of the audit:

GO 165, Section III-B - Distribution Facilities, Standards for Inspection, states:

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

GO 95, Rule 31.2 - Inspection of Lines, states in part:

Lines shall be inspected frequently and thoroughly for the purpose of insuring that they are in good condition so as to conform with these rules.

IID's records indicated that from September 2019 through August 2024, IID completed 147 overhead patrol inspections past IID's scheduled due date. Additionally, as of the date of the audit, IID had 6 pending overhead patrol inspections that were past IID's scheduled due date.

IID's records indicated that from September 2019 through August 2024, IID completed 102 overhead detailed inspections past IID's scheduled due date. Additionally, as of the date of the audit, IID had 4 pending overhead detailed inspections that were past IID's scheduled due date.

GO 165, Section III-B - Distribution Facilities, Standards for Inspection, states:

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

GO 128, Rule 17.2 - Inspection, states:

Systems shall be inspected by the operator frequently and thoroughly for the purpose of insuring that they are in good condition and in conformance with all applicable requirements of these rules.

IID's records indicated that from September 2019 through August 2024, IID completed 31 underground inspections past IID's scheduled due date. Additionally, as of the date of the audit, IID had 1 pending underground inspection that were past IID's scheduled due date.

III. Field Inspection

My staff inspected the following structures during the field inspection portion of the audit:

No.	Structure ID.	Type of Structure	Location
1	1129502	Pole	El Centro
2	1129503	Pole	El Centro
3	1129504	Pole	El Centro
4	1129505	Pole	El Centro
5	1129506	Pole	El Centro
6	1129507	Pole	El Centro
7	1123601	Pole	El Centro
8	3745	Pole	El Centro
9	1129404	Pole	El Centro
10	3746	Pole	El Centro
11	3748	Pole	El Centro
12	1102586	Pole	El Centro
13	1102550	Pole	El Centro
14	1102551	Pole	El Centro
15	1102553	Pole	El Centro
16	1102549	Pole	El Centro
17	1100607	Pole	El Centro
18	1100608	Pole	El Centro
19	1103611	Pole	El Centro
20	1082445	Pole	El Centro
21	25960	Pole	El Centro
22	25961	Pole	El Centro
23	30016	Pole	El Centro
24	3777	Pole	El Centro
25	1244232	Pole	El Centro
26	1244233	Pole	El Centro
27	26105	Pole	El Centro
28	1240115	Pole	Calexico
29	4320	Pole	Calexico
30	4321	Pole	Calexico
31	1241677	Pole	Calexico
32	4323	Pole	Calexico
33	42547	Pole	Calexico
34	1217205	Pole	Calexico
35	400065	Pole	Calexico
36	T-436	Pole	Calexico
37	T-435	Pole	Calexico
38	T-434	Pole	Calexico
39	T-433	Pole	Calexico
40	T-432	Pole	Calexico
41	1049601	Pole	Calexico

42	1049602	Pole	Calxico
43	600210	Pole	Imperial
44	600211	Pole	Imperial
45	600212	Pole	Imperial
46	600213	Pole	Imperial
47	1243210	Pole	Imperial
48	1245150	Pole	Imperial
49	1245149	Pole	Imperial
50	1245148	Pole	Imperial
51	1245147	Pole	Imperial
52	1229712	Pole	Calipatria
53	69467	Pole	Calipatria
54	66931	Pole	Calipatria
55	1201233	Pole	Calipatria
56	65489	Pole	Calipatria
57	6674	Pole	Calipatria
58	1241394	Pole	Calipatria
59	69464	Pole	Calipatria
60	66349	Pole	Calipatria
61	1209597	Pole	Calipatria
62	69478	Pole	Calipatria
63	70426	Pole	Westmorland
64	73159	Pole	Westmorland
65	73158	Pole	Westmorland
66	73157	Pole	Westmorland
67	7349	Pole	Westmorland
68	73156	Pole	Westmorland
69	700107	Pole	Westmorland
70	700106	Pole	Westmorland
71	71272	Pole	Westmorland
72	71271	Pole	Westmorland
73	71270	Pole	Westmorland
74	71269	Pole	Westmorland
75	71268	Pole	Westmorland
76	71267	Pole	Westmorland
77	10041	Pole	Brawley
78	11192	Pole	Brawley
79	826498	Pole	Brawley
80	11166	Pole	Brawley
81	10517	Pole	Brawley
82	10522	Pole	Brawley
83	11165	Pole	Brawley
84	10523	Pole	Brawley
85	11164	Pole	Brawley
86	13907	Pole	Brawley
87	10524	Pole	Brawley

88	17240	Pole	Brawley
89	17241	Pole	Brawley
90	1110619	Pole	Brawley
91	24337	Pole	El Centro
92	20361	Pole	El Centro
93	1246627	Pole	El Centro
94	20362	Pole	El Centro
95	20511	Pole	El Centro
96	1230982	Pole	El Centro
97	20363	Pole	El Centro
98	1226817	Pole	El Centro
99	21737	Pole	El Centro
100	20475	Pole	El Centro
101	1240860	Pad-mounted Transformer	Imperial
102	1240858	Pad-mounted Sector	Imperial
103	1240859	Pad-mounted Sector	Imperial
104	1240861	Pad-mounted Transformer	Imperial
105	1240856	Pad-mounted Switch	Imperial
106	1237202	Pad-mounted Transformer	Imperial
107	1132906	Pad-mounted Transformer	Imperial
108	1132908	Pad-mounted Transformer	Imperial
109	1132910	Pad-mounted Transformer	Imperial
110	UB283	Vault	Brawley
111	UB299	Pad-mounted Transformer	Brawley
112	UB300	Pad-mounted Transformer	Brawley
113	1151934	Pad-mounted Sector	Brawley
114	1151935	Pad-mounted Transformer	Brawley
115	1192273	Pad-mounted Transformer	Brawley
116	1151933	Pad-mounted Switch	Brawley

IV. Field Inspection – Violations List

We observed the following violations during the field inspection portion of the audit:

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.

IID's facilities on the following poles required maintenance:

- Pole 4320 – The transformer enclosure mounted to the pole had sign of oil seepage.
- Pole 42547 – The ground wire was severed.
- Pole 24337 – The down guy wire was cut from its anchor and left hanging from the pole.

The IID down guy anchor supporting each of the following poles was buried:

- 1129404
- 71271
- 71267

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.

Secondary crossarm, service connections and associated insulators on pole 73158 were permanently abandoned and not removed.

GO 95, Rule 34 - Foreign Attachments, states in part:

Nothing in these rules shall be construed as permitting the unauthorized attachment, to supply, street light or communication poles or structures, of antennas, signs, posters, banners, decorations, wires, lighting fixtures, guys, ropes and any other such equipment foreign to the purposes of overhead electric line construction.

We observed unauthorized foreign attachment on each of the following poles:

- 25960 – “WARNING - NEIGHBORHOOD WATCH” sign
- T-435 – “NO TRUCK PARKING” sign
- T-434 – “NOW HIRING” advertisement sign
- T-433 – “NO TRUCK PARKING” sign
- T-432 – “NO TRUCK PARKING” sign

GO 95, Rule 38 - Minimum Clearances of Wires from Other Wires, Table 2, Column C, Case 19, requires the minimum radial separation between communication conductors and guys supported on the same poles to be 3 inches.

The IID down guy wire attached to pole 30016 was in contact with a third-party communications conductor on the same pole.

GO 95, Rule 44.1 - Installation and Reconstruction, states in part:

Lines and elements of lines, upon installation or reconstruction, shall provide as a minimum the safety factors specified in Table 4. The design shall consider all supply and communication facilities planned to occupy the structure. For purposes of this rule, the term “planned” applies to the facilities intended to occupy the structure that are actually known to the constructing company at the time of design.

The pole loading calculations supplied by IID for the following poles contained incorrect information:

- 600210 – The pole loading data included a third-party communication down guy wire supported at 20 feet high, which was missing at the time of the field inspection.
- 20361 – The pole loading data did not include two third-party communication conductors at approximately 20 feet high, which were present at the time of the field inspection. Also, the pole number recorded on pole loading data (1216303) did not match the tag on the pole (20361).

GO 95, Rule 51.6A - Marking and Guarding, High Voltage Marking of Poles, 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”, 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 high voltage warning sign attached to each of the following poles was either missing or damaged:

- 1129505
- 4320
- 42547
- 600211
- 600212
- 69467
- 66931
- 65489
- 6674
- 69464
- 1209597
- 70426
- 73159
- 73158
- 17241
- 20475

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 (see Rule 22.8).

About 2-feet of OMNI switch ground wire attached to the surface of pole 1244233 was not covered.

The ground wire moulding attached to each of the following poles was damaged:

- 1049601
- 69467
- 21737

GO 95, Rule 54.8 – Service Drops, 0-750 Volts, Table 10, requires the minimum vertical clearance of insulated service drops of 0-750 volts above the roof of the house being served to be 0.5 inches.

A service drop attached to pole 20475 was touching the roof of the house being served.

GO 95, Rule 56.2 - Overhead Guys, Anchor Guys and Span Wire 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.

The IID down guy wire supporting the pole 4321 was loose and not taut.

GO 95, Rule 91.3C - Stepping, states in part:

Where installed, the lowest step shall not be less than 8 feet from the ground line, or any easily climbable foreign structure from which one could reach or step. Above this point steps shall be placed, with spacing between steps on the same side of the pole not exceeding 36 inches, at least to that conductor level above which only circuits operated and maintained by one party remain. Steps or fixtures for temporary steps shall be installed as part of a pole restoration process. Steps shall be so placed that runs or risers do not interfere with the free use of the steps.

The lowest pole step on pole 42547 was located at a height of less than eight feet.

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.

The following IID's facilities required maintenance:

- Pad-mounted transformer 1132908 – The transformer enclosure was rusted at the base of it and had signs of oil seepage.
- Pad-mounted transformer 1132910 – The transformer enclosure was extensively rusted.

GO 128, Rule 35.3, Warning Signs, states:

Warning signs indicating high voltage shall be installed on an interior surface, or barrier if present, inside the entrance of vaults, manholes, handholes, pad mounted transformer compartments, and other above ground enclosures containing exposed live parts above 750 volts. 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.

The high voltage warning sign attached to each of the following IID's facilities was either missing or damaged:

- Pad-mounted transformer 1132908
- Vault UB283