PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

January 3, 2023 EA2022-983

Timothy Bass, P.E.
Utilities Engineering Manager
Vernon Public Utilities
4305 Santa Fe Avenue
Vernon, CA 90058

SUBJECT: Audit of Vernon Public Utilities

Mr. Bass:

On behalf of the Electric Safety and Reliability Branch (ESRB) of the California Public Utilities Commission (CPUC), Calvin Choi and Bryan Pena of my staff conducted an electric distribution audit of Vernon Public Utilities from October 10, 2022 to October 14, 2022. The audit included a review of its inspection and maintenance records and a field inspection of electric 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 February 3, 2023, by electronic or hard copy, of all corrective measures taken by Vernon Public Utilities to remedy and prevent such violations.

If you have any questions concerning this audit, you can contact Calvin at (213) 266-4730 or calvin.choi@cpuc.ca.gov.

Sincerely,

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: Lee Palmer, Director, Safety and Enforcement Division, CPUC
Nika Kjensli, Program Manager, ESRB, CPUC
Calvin Choi, Utilities Engineer, ESRB

AUDIT FINDINGS

I. Records Review

During the audit, my staff reviewed the following records:

- Overhead and underground detailed inspection records.
- Completed and pending corrective action work orders.
- Pole loading calculations.
- Intrusive test records.
- Vernon Public Utilities' visual inspection program.

I. Field Inspection

My staff inspected the following facilities during the field inspection:

No.	Structure ID	Type of Structure
1	2398VP	Pole
2	2397VP	Pole
3	4288VP	Pole
4	9537EV	Pole
5	1960VP	Pole
6	9536EV	Pole
7	2810VP	Pole
8	4230VP	Pole
9	3563VP	Pole
10	2917VP	Pole
11	2750VP	Pole
12	2433VP	Pole
13	9031EV	Pole
14	2749VP	Pole
15	2752VP	Pole
16	2751VP	Pole
17	7633EV	Pole
18	1844VP	Pole
19	1838VP	Pole
20	2240VP	Pole
21	7638EV	Pole
22	2857VP	Pole
23	10782EV	Pole
24	7636EV	Pole
25	2606VP	Pole
26	3420VP	Pole
27	2688VP	Pole
28	2687VP	Pole
29	2686VP	Pole
30	2685VP	Pole
31	2684VP	Pole
32	3553VP	Pole
33	10648EV	Pole
34	3218VP	Pole
35	3558VP	Pole
36	3440VP	Pole
37	16796EV	Pole
38	3122VP	Pole
39	1043VP	Pole

40	4525VP	Pole
41	2356VP	Pole
42	2138VP	Pole
43	7619EV	Pole
44	7618EV	Pole
45	2139VP	Pole
46	7235EV	Pole
47	2636VP	Pole
48	7242EV	Pole
49	3041VP	Pole
50	7240EV	Pole
51	7239EV	Pole
52	7238EV	Pole
53	10580EV	Pole
54	2721VP	Pole
55	3380VP	Pole
56	8113EV	Pole
57	1438040E	Pole
58	2171VP	Pole
59	5259EV	Pole
60	1071VP	Pole
61	3022VP	Pole
62	3905VP	Pole
63	1261VP	Pole
64	3935VP	Pole
65	3936VP	Pole
66	2342VP	Pole
67	2341VP	Pole
68	1133VP	Pole
69	1972VP	Pole
70	10460EV	Pole
71	672331EEVV	Pole
72	10798EV	Pole
73	2215VP	Pole
74	1016102H	Pole
75	10578EV	Pole
76	2055VP	Pole
77	672329V	Pole
78	10608EV	Pole
79	672328V	Pole
80	672327V	Pole
81	3778VP	Pole
82	672325EV	Pole
83	2776VP	Pole
84	2778VP	Pole

85	10527EV	Pole
86	3830VP	Pole
87	10633EV	Pole
88	3762VP	Pole
89	3761VP	Pole
90	6944EV	Pole
91	3430VP	Pole
92	6942EV	Pole
93	1904VP	Pole
94	1823VP	Pole
95	743329H	Pole
96	743328H	Pole
97	4294VP	Pole
98	4293VP	Pole
99	9499EV	Pole
100	2493VP	Pole
101	2578VP	Pole
102	8862EV	Pole
103	2316VP	Pole
104	7447EV	Pole
105	3436VP	Pole
106	7444EV	Pole
107	3435VP	Pole
108	3434VP	Pole
109	8723EV	Pole
110	8724EV	Pole
111	Pole at 4133 Bandini Blvd, next pole from 3434VP	Pole
112	2371VP	Pole
113	7225EV	Pole
114	3504VP	Pole
115	3505VP	Pole
116	3506VP	Pole
117	3507VP	Pole
118	3508VP	Pole
119	4208VP	Pole
120	2106VP	Pole
121	7260EV	Pole
122	2771VP	Pole
123	1557VP	Pole
124	2447VP	Pole
125	3077VP	Pole
126	2446VP	Pole
127	8378EV	Pole
128	10365EV	Pole
129	2321VP	Pole

130	2322VP	Pole
131	4250VP	Pole
132	4249VP	Pole
133	2445VP	Pole
134	2702VP	Pole
135	1315VP	Pole
136	8963EV	Pole
137	8964EV	Pole
138	9954EV	Pole
139	8965EV	Pole
140	9519EV	Pole
141	9520EV	Pole
142	2733VP	Pole
143	1083EV	Pole
144	2635VP	Pole
145	2643VP	Pole
146	2601VP	Pole
147	2633VP	Pole
148	6539EV	Pole
149	2473VP	Pole
150	1735VP	Pole
151	2472VP	Pole
152	2471VP	Pole
153	V5180706	Vault
154	PM2332	Pad Mounted Transformer
155	PM0719	Pad Mounted Transformer
156	PM2254	Pad Mounted Transformer
157	PM0720	Pad Mounted Transformer
158	PM0721	Pad Mounted Transformer
159	V0651	Vault
160	PM1953	Pad Mounted Transformer
161	PM1954	Pad Mounted Transformer
162	PM2275	Pad Mounted Transformer
163	PM2330	Pad Mounted Transformer
164	PM2173	Pad Mounted Transformer
165	PM2174	Pad Mounted Transformer
166	V0849	Vault
167	PM2301	Pad Mounted Transformer
168	PM2303	Pad Mounted Transformer
169	PM2304	Pad Mounted Transformer
170	PM2306	Pad Mounted Transformer
171	V0850	Vault

II. Field Inspection – Violations List

My staff observed the following violations during the field inspections portion of the audit:

GO 95, Rule 51.6-A, 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. A pair of signs may be stacked to a height of no more than 12 inches. Such signs shall be of weather and corrosion–resisting material, solid or with letters cut out therefrom and clearly legible.*

The high voltage signs on the following poles were damaged and/or missing:

- 1960VP
- 9536EV
- 2810VP
- 1844VP
- 2240VP
- 7636EV
- 2606VP
- 2356VP
- 7619EV
- 7618EV
- 2139VP
- 7235EV
- 7242EV
- 7239EV
- 7238EV
- 1438040E
- 2171VP
- 5259EV
- 1261VP
- 2342VP
- 2341VP
- 1133VP
- 1972VP
- 2215VP
- 2055VP
- 672329V
- 10608EV
- 672328V
- 672327V
- 3778VP
- 672325EV
- 2778VP
- 6944EV
- 6942EV
- 1904VP
- 1823VP
- 9499EV
- 8862EV
- 7444EV
- 8723EV
- 8724EV
- 2371VP
- 7225EV
- 2106VP
- 7280EV
- 8378EV
- 10365EV
- 2321VP
- 2322VP
- 1315VP
- 8963EV
- 8964EV
- 9954EV
- 8965EV
- 9519EV
- 9520EV
- 2635VP
- 2643VP
- 1735VP
- 2472VP
- 2471VP

GO 95, Rule 56.2, Uses (Guy Wires), 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 span and down guy wire attached to each of the following poles was not taut:

- 7633EV
- 7235EV
- 7242EV
- 3041VP
- 3380VP
- 7444EV
- 3077VP
- 1735VP

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.*

An abandoned span guy wire was still attached to Pole No. 2636VP.

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 ground moulding attached to each of the following poles was damaged and/or missing:

- 7618EV
- 1261VP
- 1133VP
- 10608EV
- 672328V
- 672327V
- 672325EV
- 10527EV
- 1904VP
- 8723EV
- 8964EV
- 9519EV
- 2633VP

GO 95, Rule 91.3 Stepping, C. Location of Steps, states in part:

> *The lowest step shall be not 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 the following poles was located at a height of less than eight feet:

- 7242EV
- 7240EV

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.*

The visibility strips on the following poles are damaged:

- 10782EV
- 10648EV
- 2341VP
- 2776VP
- 2106VP
- 1557VP
- 8378EV
- 10365EV
- 1315VP

The following facilities required maintenance:

- Pole 7444EV: the transformers on the platform may have minor leak.
- Pole outside 4133 Bandini Blvd: the pole is damaged and may need replacement.

GO 128, Rule 37, Covers, states:

> *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. (Also see Rule 17.8, and Appendix B, Figs. 9 and 17.)*
>
> *If the cover of a subsurface equipment enclosure is a grate a means shall be provided to prevent tampering with the equipment housed therein.*

The manhole cover in front of Padmounted Transformer PM2254 was not securely closed (missing bolts).