

## PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE  
SAN FRANCISCO, CA 94102-3298



November 10, 2022

EA2022-1000

Jeff Berkheimer  
Electric Utility Director  
Lodi Electric Utility  
1331 S Ham Ln  
Lodi, CA 95242

**SUBJECT:** Electric Distribution Audit of Lodi Electric Utility (Lodi)

Dear Mr. Berkheimer:

On behalf of the Electric Safety and Reliability Branch (ESRB) of the California Public Utilities Commission (CPUC), Brandon Vazquez and Emiliano Solorio of ESRB staff conducted an electric distribution audit of Lodi from September 26, 2022 through September 30, 2022. During the audit, ESRB staff conducted field inspections of Lodi's distribution facilities and equipment and reviewed pertinent documents and records.

As a result of the audit, ESRB staff identified violations of one or more General Orders (GOs). A copy of the audit findings itemizing the violations is enclosed. Please provide a response no later than December 8, 2022, by electronic copy of all corrective actions and preventive measures taken by Lodi to correct the identified violations and prevent the recurrence of such violations.

The response should indicate the date each remedial action and preventive measure was completed. For any outstanding items not addressed, please provide the projected completion dates of all corrective actions for the violations outlined in Section IV of the enclosed Audit Report. Please also provide records of the third-party notifications for the field observations listed in Section V of the enclosed Audit Report.

If you have any questions concerning this audit, please contact Brandon Vazquez at (415) 703-1076 or [brandon.vazquez@cpuc.ca.gov](mailto:brandon.vazquez@cpuc.ca.gov).

Sincerely,

A handwritten signature in blue ink, appearing to read "Banu Acimis".

Banu Acimis, P.E.  
Program and Project Supervisor  
Electric Safety and Reliability Branch  
Safety and Enforcement Division  
California Public Utilities Commission

Enclosure: CPUC Electric Distribution Audit Report for Lodi

Cc: Lee Palmer, Director, Safety and Enforcement Division, CPUC

Nika Kjensli, Program Manager, ESRB, SED, CPUC  
Nathan Sarina, Senior Utilities Engineer (Supervisor), ESRB, SED, CPUC  
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Brandon Vazquez, Utilities Engineer, ESRB, SED, CPUC  
Emiliano Solorio, Utilities Engineer, ESRB, SED, CPUC

**LODI ELECTRIC UTILITY (LODI)**  
**ELECTRIC DISTRIBUTION AUDIT FINDINGS**  
**September 26-30, 2022**

**I. Records Review**

During the audit, ESRB staff reviewed the following records:

- Lodi’s inspection and maintenance procedures.
- Overhead and underground facilities statistics.
- Completed work orders with notifications from August 2021 – August 2022, canceled work orders with notifications from August 2021 – August 2022, and open work orders from August 2017 – August 2022.
- Patrol and detailed inspection records from August 2017 – August 2022.
- Reliability metrics and sustained outages from August 2017 – August 2022.
- Service area map.
- New Construction projects (both overhead and underground) from August 2021 – August 2022.
- Pole loading and safety factor calculations completed from August 2021 – August 2022.
- Third Party Safety Hazard notifications sent and received from August 2017 – August 2022.
- Inspector list from August 2017 – August 2022 and inspector qualifications.
- Equipment test records from August 2019 – August 2022.
- Intrusive inspection records from August 2019 – August 2022.

**II. Records Violations**

**1. General Order (GO) 95, Rule 18-A(1), Resolution of Potential Violations of General Order 95 and Safety Hazards states:**

*“Each company (including electric utilities and communications companies) is responsible for taking appropriate corrective action to remedy potential violations of GO 95 and Safety Hazards posed by its facilities.*

*Upon completion of the corrective action, the company’s records shall show, with sufficient detail, the nature of the work, the date, and the identity of persons performing the work. These records shall be preserved by the company for at least ten (10) years.”*

Per GO 95, Rule 18-A(1), utilities are required to preserve work order records for at least 10 years (effective as of January 2015). Lodi was unable to produce sufficient work order records from 2017 to 2019. In late 2019, Lodi changed leadership and new leadership identified that existing recordkeeping was inadequate. Lodi has since improved its recordkeeping and implemented electronic tracking of work orders.

2. **GO 165, Section III-C, Record Keeping** states:

*“The utility shall maintain records for (1) at least ten (10) years of patrol and detailed inspection activities, and (2) the life of the pole for intrusive inspection activities. Such records shall be made available to parties or pursuant to Commission rules upon 30 days notice. Commission staff shall be permitted to inspect such records consistent with Public Utilities Code Section 314 (a).*

*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.”*

Per GO 165, Section III-C, utilities are required to maintain records of patrol and detailed inspections for at least 10 years (effective as of 2012). Lodi was unable to produce overhead and underground patrol and detailed inspection records from 2017 to 2019. In late 2019, Lodi changed leadership and new leadership identified that existing recordkeeping was inadequate. Lodi has since improved its recordkeeping and implemented electronic tracking of patrols and detailed inspections.

### III. Field Inspection

During the field inspection, ESRB staff inspected the following facilities in Lodi:

Location #	Structure #	Structure Type	Structure Location/Address
1	39-72	Padmount Transformer	2050 Tienda Dr
2	39-54	Deadfront Switch	2050 Tienda Dr
3	380080	60/12 kV Pole	1224 S Lower Sacramento Rd
4	380070	60/12 kV Pole	1212 S Lower Sacramento Rd
5	380071	60/12 kV Pole	1 Pole north of Location 4
6	37-1	Junction Box	1055 S Lower Sacramento Rd
7	30-49	Padmount Transformer	2407 W. Vine St
8	30-48	Junction Box	2407 W. Vine St
9	320510	Pole	830 S Ham Ln
10	320500	Pole	800 S Ham Ln
11	320520	Pole	830 S Ham Ln
12	320530	Pole	830 S Ham Ln
13		Underground Vault	1421 S Ham Ln
14	47-20	Deadfront Switch	1421 S Ham Ln
15		Pole	Rear of 550 York St
16		Pole	Rear of 550 York St
17		Pole	Rear off 600 York St
18	400840	Pole	921 S Hutchins St
19	400850	Pole	921 S Hutchins St
20	400860	Pole	931 S Hutchins St
21	400870	Pole	1001 S Hutchins St
22	56-69	Padmount Transformer	2115 Scarborough Dr
23	490160	Pole	1513 S School St
24	490260	Pole	1431 S School St
25	490938	Secondary Pole	1797 S Stockton St
26	490782	Secondary Pole	1797 S Stockton St
27	490788	Pole	1803 S Stockton St
28		Pole	1803 S Stockton St
29	231390	Pole	131 S Ham Ln
30	231400	Pole	131 S Ham Ln
31	230160	Pole	1406 W Locust St
32	152510	Pole	1401 W Locust St
33	152530	Pole	Rear off Lakewood Plaza
34	10228	Comms Pole	Rear off Lakewood Plaza
35	161540	Pole	725 Costa Dr
36	161530	Pole	719 Costa Dr
37	160030	Pole	Rear off 890 Bel Air Ct
38	161220	Pole	620 N Ham Ln
39	161230	Secondary Pole	620 N Ham Ln

40	150610	Pole	1301 N Ham Ln
41	151670	Pole	1500 Lake St
42	151680	Pole	603 Cross St
43	151730	Pole	575 Cross St
44	140120	Pole	405 N Mills Ave
45		Pole	411 N Mills Ave
46	151170	Pole	1924 Robert St
47	14-66	Padmount Transformer	244 Palomar Dr
48	14-67	Junction Box	238 Palomar Dr
49	220300	Pole	2149 Jerry Ln
50		Pole	Rear off 1912 Santa Ynez Dr
51	220710	Pole	131 S Mills Ave
52	220770	Pole	121 S Mills Ave
53	220960	Pole	141 S Mills Ave
54	220970	Pole	221 S Mills Ave
55		Conductor Midspan	Jackson St and S Mills Ave
56	320701	Pole	Bon Appetit
57	320700	Pole	Bon Appetit
58	320705	Pole	Bon Appetit
59	24-10	Padmount Transformer	Hutchins Street Square Box Office
60	24-9	Padmount Transformer	Hutchins Street Square Box Office
61	190041	Streetlight Pole	501 N Cherokee Ln
62	190045	Secondary Pole	501 N Cherokee Ln
63	A7-118	60/12 kV Lodi/PG&E Pole	639 E Lockeford St
64	272080	Pole	652 E Lockeford St
65	272070	Pole	646 E Lockeford St
66	272050	Pole	634 E Lockeford St
67	280680	Pole	1400 E Victor Rd
68	271086	Pole	Rear off 705 E Lodi Ave
69	271083	Pole	Rear off 705 E Lodi Ave
70	420240	Pole	300 Watson St
71	510200	Pole	4802 E Kettleman Ln
72	510210	Pole	2nd Pole south of Beckman Rd and E Kettleman Ln
73	510220	Pole	3rd Pole south of Beckman Rd and E Kettleman Ln
74	510225	Pole	4th Pole south of Beckman Rd and E Kettleman Ln
75	510230	Pole	5th Pole south of Beckman Rd and E Kettleman Ln
76	510310	Pole	38.1106002, -121.2562747
77	510400	Pole	1 Pole west of Location 76
78	510320	Pole	2 Poles west of Location 76
79	510410	Pole	38.1104185, -121.2562703

80	400100	Pole	999 S Fairmont Ave
81	400120	Pole	999 S Fairmont Ave
82	400110	Pole	999 S Fairmont Ave
83	400130	Pole	999 S Fairmont Ave
84	400131	Pole	1115 S Fairmont Ave
85	330370	Pole	11 Chestnut St
86	330390	Pole	15 Chestnut St
87	330300	Pole	15 Chestnut St
88	330395	Secondary Pole	15 Chestnut St
89	330380	Secondary Pole	310 S School St
90	330391	Secondary Pole	7 Chestnut St

#### IV. Field Inspection Violations

ESRB staff observed the following violations during the field inspection:

**1. 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.”*

- 1.1. The pole at 1224 S Lower Sacramento Rd (Location 3) needs to be replaced due to a failed intrusive test.
- 1.2. The pole at 830 S Ham Ln (Location 9) has a loose high-visibility strip.
- 1.3. The pole located across from 1401 W Locust St (Location 32) is missing high-visibility strips.
- 1.4. The pole at 620 N Ham Ln (Location 39) is missing high-visibility strips.
- 1.5. The pole at 1301 N Ham Ln (Location 40) has faded high-visibility strips.
- 1.6. The pole outside of Bon Appetit (Location 57) has faded high-visibility strips.
- 1.7. The 2<sup>nd</sup> pole south of Beckman Rd and E Kettleman Ln (Location 72) has faded high-visibility strips.

**2. GO 95, Rule 54.6-B, Vertical and Lateral Conductors, Ground Wires** states in part:

*“That portion of the ground wire 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).”*

- 2.1. The pole at 1212 S Lower Sacramento Rd (Location 4) has an exposed ground wire and damaged ground molding.
- 2.2. The pole at 1803 S Stockton St (Location 27) has an exposed ground wire and damaged ground molding.
- 2.3. The pole at 1803 S Stockton St (Location 28) has an exposed ground wire.
- 2.4. The pole at the rear of 890 Bel Air Ct (Location 37) has an exposed ground wire and damaged ground molding.

**3. 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 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.”*

- 3.1. The pole at 830 S Ham Ln (Location 9) is missing a high voltage sign.
- 3.2. The pole at 800 S Ham Ln (Location 10) is missing a voltage sign.
- 3.3. The pole at 931 S Hutchins St (Location 20) is missing a high voltage sign.
- 3.4. The pole at 1431 S School St (Location 24) is missing a high voltage sign.
- 3.5. The pole at 1803 S Stockton St (Location 27) has a faded/missing high voltage sign.
- 3.6. The pole at 1924 Robert St (Location 46) is missing high voltage signs.
- 3.7. The pole at 1400 E Victor Rd (Location 67) has a loose voltage sign.
- 3.8. The 5<sup>th</sup> pole south of Beckman Rd and E Kettleman Ln (Location 75) is missing a high sign.
- 3.9. The pole at GPS coordinates 38.1106002, -121.2562747 (Location 76) is missing high voltage signs.
- 3.10. The pole at 1115 S Fairmont Ave (Location 84) has a damaged voltage sign.
- 3.11. The pole at 15 Chestnut St (Location 86) has a damaged/partially missing high voltage sign.
- 3.12. The pole at 15 Chestnut St (Location 87) is missing a high voltage sign.

**4. 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.”*

- 4.1. The junction box at 1055 S Lower Sacramento Rd (Location 6) has a damaged warning sign that is peeling off.
- 4.2. The padmount transformer at Hutchins Street Square Box Office (Location 60) has a faded warning sign.

**5. GO 95, Rule 56.2, Overhead Guys, Anchor Guys and Span Wires, 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 pole at 1803 S Stockton St (Location 27) has a damaged anchor guy.

**6. GO 95, Rule 56.9, Guy Marker (Guy Guard)** states:

*“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.”*

- 6.1. The anchor guy marker on the pole at the rear off Lakewood Plaza (Location 33) is loose, damaged, and missing high-visibility strips.
- 6.2. The anchor guy marker on the pole at 620 N Ham Ln (Location 39) is loose, damaged, and missing high-visibility strips.
- 6.3. The anchor guy marker on the pole at 1500 Lake St (Location 41) is missing high-visibility strips.
- 6.4. The anchor guy marker on the pole at 646 E Lockeford St (Location 65) is missing high-visibility strips.
- 6.5. The anchor guy marker on the pole at 300 Watson St (Location 70) is damaged and missing high-visibility strips.
- 6.6. The anchor guy marker on the pole at 4802 E Kettleman Ln (Location 71) is missing high-visibility strips.
- 6.7. The anchor guy marker on the pole at GPS coordinates 38.1106002, -121.2562747 (Location 76) is loose and missing high-visibility strips.
- 6.8. The anchor guy marker on the pole located 2 poles west of Location 76 (Location 78) is missing high-visibility strips.

**7. GO 95, Rule 31.6, Abandoned Lines** states:

*“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.”*

- 7.1. There is an abandoned Lodi service line on the pole at 646 E Lockeford St (Location 65).
- 7.2. There is an abandoned Lodi service line at the rear of 705 E Lodi Ave (Location 69).

**8. GO 95, Rule 56.6-A, Guys in Proximity to Supply Conductors of Less than 35,500 Volts** states in part:

*“All portions of guys within both a vertical distance of 8 feet from the level of supply conductors of less than 35,500 volts and a radial distance of 6 feet from the surface of wood poles or structures shall not be grounded, through anchors or otherwise. Where necessary to avoid the grounding of such portions, guys shall be sectionalized by means of insulators installed at locations as specified in Rule 56.7.”*

The pole at 300 Watson St (Location 70) has vegetation contact at/above the anchor guy insulator which is providing a path to ground.

**9. GO 95, Rule 35, Vegetation Management, Table 1 Case 13 Column E** states:

*“Where overhead conductors traverse trees and vegetation, safety and reliability of*

*service demand that certain vegetation management activities be performed in order to establish necessary and reasonable clearances, the minimum clearances set forth in Table 1, Cases 13 and 14, measured between line conductors and vegetation under normal conditions shall be maintained. (Also see Appendix E for tree trimming guidelines.) These requirements apply to all overhead electrical supply and communication facilities that are covered by this General Order, including facilities on lands owned and maintained by California state and local agencies.*

*The minimum allowable radial clearance of vegetation from 750 – 22,500 V conductors not in a High Fire-Threat District (HFTD) is 18 inches.”*

There is a tree branch located at 999 S Fairmont Ave (Location 83) that is less than 18 inches from primary 12 kV conductors.

## **V. Observations**

1. ESRB observed tree branches nearly within 18 inches of primary 12 kV conductors located at Jackson St and S Mills Ave (Location 55).
2. ESRB staff observed the following third-party potential safety concerns during the field inspection:

**GO 95, Rule 18, Reporting and Resolution of Safety Hazards Discovered by Utilities** states in part:

*“For purposes of this rule, “Safety Hazard” means a condition that poses a significant threat to human life or property...”*

**GO 95, Rule 18-A, Resolution of Potential Violations of General Order 95 and Safety Hazards** states in part:

*“(3) If a company, while performing inspections of its facilities, discovers a Safety Hazard(s) on or near a communications facility or electric facility involving another company, the inspecting company shall notify the other entity of such Safety Hazard(s) no later than ten (10) business days after the discovery.*

*(4) To the extent a company that has a notification requirement under (2) or (3) above cannot determine the facility owner/operator, it shall contact the pole owner(s) within ten (10) business days if the subject of the notification is a Safety Hazard, or otherwise within a reasonable amount of time not to exceed 180 days after discovery. The notified pole owner(s) shall be responsible for promptly (normally not to exceed five business days) notifying the company owning/operating the facility if the subject of the notification is a Safety Hazard, or otherwise within a reasonable amount of time not to exceed 180 days, after being notified of the potential violation of GO 95.*

*Note: Each pole owner must be able to determine all other pole owners on poles it owns. Each pole owner must be able to determine all authorized entities that attach equipment on its portion of a pole.”*

- 2.1. The communication ground wire and ground molding on the pole at 830 S Ham Ln (Location 9) are broken.
- 2.2. The communication ground wire on the pole at 1001 S Hutchins St (Location 21) is exposed.
- 2.3. A communication service line near the pole at the rear of Lakewood Plaza (Location 33) is low.
- 2.4. Two communication service lines on the pole at the rear of Lakewood Plaza (Location 34) are low.
- 2.5. An AT&T line at 620 N Ham Ln (Location 38) is contacting a rail crossing signal and has a broken lashing wire.
- 2.6. The pole at 603 Cross St (Location 42) has an exposed communication ground wire and broken ground molding.
- 2.7. The communication equipment box at 244 Palomar Dr (Location 47) is damaged.
- 2.8. An AT&T splice box is open and service line is low at the rear of 1912 Santa Ynez Dr (Location 50).
- 2.9. An AT&T riser cable on the pole outside of Bon Appetit (Location 57) is not covered and not properly secured.
- 2.10. There is an abandoned broken cable tv messenger wire hanging off the pole at 652 E Lockeford St (Location 64).
- 2.11. The communication ground wire on the pole at the rear of 705 E Lodi Ave (Location 68) is exposed.
- 2.12. The pole at 300 Watson St (Location 70) has an exposed Comcast ground wire and damaged ground molding.
- 2.13. A communication riser cable on the pole at 4802 E Kettleman Ln (Location 71) is not covered.
- 2.14. The 2<sup>nd</sup> pole south of Beckman Rd and E Kettleman Ln (Location 72) has an exposed communication ground wire and is missing ground molding above 8 feet.
- 2.15. The pole at GPS coordinates 38.1106002, -121.2562747 (Location 76) has 2 slacked communication anchor guys and an abandoned communication ground wire that is cut and exposed.
- 2.16. The pole at 1115 S Fairmont Ave (Location 84) has an exposed AT&T ground wire and section of ground molding missing.
- 2.17. There are abandoned communication lines on the ground and a communication buddy pole at 15 Chestnut St (Location 86).