

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



July 28, 2023

TA2023-1067

Vincent Tanguay, Senior Director
Electric Compliance, Electric Engineering
Pacific Gas & Electric Company (PG&E)
300 Lakeside Dr., Oakland, CA 94612

SUBJECT: Electric Transmission Audit of PG&E Midway Headquarters (HQ)

Dear Mr. Tanguay:

On behalf of the Electric Safety and Reliability Branch (ESRB) of the California Public Utilities Commission (CPUC), Brandon Vazquez, Joseph Murphy, and Mathew Yunge of ESRB staff conducted an electric transmission audit of PG&E Midway HQ from May 22, 2023 through May 26, 2023. During the audit, ESRB staff conducted field inspections of PG&E's transmission 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 August 25, 2023, by electronic copy of all corrective actions and preventive measures taken by PG&E 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 in the enclosed Audit Report.

If you have any questions concerning this audit, please contact Brandon Vazquez at (628) 249-2867 or brandon.vazquez@cpuc.ca.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read "Rickey Tse".

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

Enclosure: CPUC Electric Transmission Audit Report for PG&E Midway HQ

Cc: Lee Palmer, Director, Safety and Enforcement Division (SED), CPUC

Nika Kjensli, Program Manager, ESRB, SED, CPUC
Nathan Sarina, Senior Utilities Engineer (Supervisor), ESRB, SED, CPUC
Brandon Vazquez, Utilities Engineer, ESRB, SED, CPUC
Joseph Murphy, Utilities Engineer, ESRB, SED, CPUC
Matthew Yunge, Senior Utilities Engineer (Specialist), ESRB, SED, CPUC

**PACIFIC GAS AND ELECTRIC COMPANY (PG&E) MIDWAY HQ
ELECTRIC TRANSMISSION AUDIT FINDINGS
MAY 22-26, 2023**

I. Records Review

During the audit, ESRB staff reviewed the following records:

- PG&E's Electric Transmission Preventive Maintenance (ETPM) Manual, TD-1001M, Revisions 3-5.
- PG&E's utility procedures, standards, guidelines, and job aids for electric transmission facility inspections.
- Overhead transmission facilities statistics.
- PG&E Midway HQ Service Territory Map and list of all transmission facilities owned or jointly owned by PG&E.
- Patrol, detailed, aerial, climbing, infrared, drone, and helicopter inspection records from March 2018 to March 2023.
- Third Party Safety Hazard notifications sent and received from March 2018 to March 2023.
- PG&E's utility procedures, standards, guidelines, and job aids for electric transmission vegetation management.
- A list of vegetation management inspection records and tree work orders for transmission circuits from March 2018 to March 2023.
- PG&E's policies and procedures related to transmission right-of-way maintenance, and associated performance records from March 2019 to March 2023.
- PG&E's policies and procedures for insulator washing, and associated performance records from March 2019 to March 2023.
- PG&E's policies and procedures for pole intrusive tests, foundation tests, and all other tests related to transmissions structure safety, and associated performance records from March 2019 to March 2023.
- A list of non-routine patrols for electric transmission facilities from March 2018 to March 2023.
- PG&E's policies and procedures for assigning priority levels to transmission deficiencies from March 2019 to March 2023.
- A list of all open, closed, and canceled notifications from March 2019 to March 2023.
- Pole loading and safety factor calculations completed from March 2022 to March 2023.
- New construction projects completed from March 2022 to March 2023.
- PG&E's utility standard and procedures for transmission work verification and vegetation management quality control (QC) and quality assurance (QA).
- The results of all internal quality management audits from March 2018 to March 2023.
- A list of PG&E inspector training courses from March 2018 to March 2023.

II. Records Violations

ESRB staff found the following violations during the records review portion of the audit:

PG&E's last two versions of its ETPM, Revision 4, effective November 20, 2018, and Revision 5, effective August 31, 2020, define the priority codes and associated due dates for the corrective actions shown in Tables 1 and 2:

Table 1: PG&E ETPM Rev 4, Published on 11/20/2018, Priority Codes

Priority Code	Priority Code Priority Description
A	The condition is urgent and requires immediate response and continued action until the condition is repaired or no longer presents a potential hazard. SAP due date will be 30 days to allow time for post-construction processes and notification close-out.
B	Corrective action is required within 3 months from the date the condition is identified. The condition must be reported to the transmission line supervisor as soon as practical.
E	Corrective action is required within 12 months from the date the condition is identified.
F	Corrective action is recommended within 24 months from the date the condition is identified, (due beyond 12 months, not to exceed 24 months). Requires Director approval.
	1. QCRs must report immediately any “Priority Code A” abnormal condition to the transmission line supervisor and GCC.
	2. In addition, QCRs must report any “Priority Code B” condition to the transmission line supervisor as soon as practical, to ensure that correction occurs within the appropriate time.

Table 2: PG&E ETPM Rev 5, Published on 8/31/2020, Priority Codes

Priority Code ¹	Priority Description
A²	The condition is urgent and requires immediate response and continued action until the condition is repaired or no longer presents a potential hazard. SAP due date will be 30 days to allow time for post-construction processes and notification close-out.
B³	Corrective action is required within 3 months from the date the condition is identified. The condition must be reported to the transmission line supervisor as soon as practical.
E	Corrective action is required within 12 months from the date the condition is identified. <i>EXCEPT FOR ITEMS WITHIN HFTD TIER 3 ARE REQUIRED WITHIN 6 MONTHS⁴.</i>

F	Corrective action is recommended within 24 months from the date the condition is identified, (due beyond 12 months, not to exceed 24 months). <i>EXCEPT FOR ITEMS WITHIN HFTD TIER 3 ARE REQUIRED WITHIN 6 MONTHS AND WITHIN HFTD TIER 2 ARE REQUIRED WITHIN 12 MONTHS⁵.</i>
	1) Refer to 2.3.5.2, “Priority Code Due Dates for High Fire Risk Conditions within HFTDs” and 2.3.5.3, “Priority Code Due Dates for Non-Fire Risk Conditions within HFTDs.”
	2) QCRs must report immediately any “Priority Code A” abnormal condition to the transmission line supervisor, and the transmission supervisor or QCR contacts GCC.
	3) In addition, QCRs must report any “Priority Code B” condition to the transmission line supervisor as soon as practical, to ensure that correction occurs within the appropriate time.
	4) If the condition in the HFTD Tier 3 does NOT create a fire risk (non-threatening) the corrective action is required within 12 months.
	5) If the condition in the HFTD Tier 3 OR Tier 2 does NOT create a fire risk (non-threatening) the corrective action is required within 24 months.

- a. ESRB’s review of PG&E’s Line Corrective (LC) notifications from “DR-16_Atch_01_Master List of Notifications” found a total of 3,092 late LC notifications. Table 3 below breaks down the late notifications by priority and type (late-closed, late-open, and late-canceled). Late-closed notifications are notifications that were completed past their assigned due date based on their priority code. Late-open notifications are incomplete notifications that were not completed by their assigned due date based on their priority code. Late-canceled notifications are notifications that were canceled after their assigned due date based on their priority code.

Table 3: Number of Late Notifications by Priority and Type

Priority Code*	Late Closed Notifications	Late Open Notifications	Late Canceled Notifications	Total Late Notifications
A	-	-	1	1
B	115	-	27	142
E	621	1,438	276	2,335
F	40	505	69	614
Total	776	1,943	373	3,092

*Current Priority Codes taking into account reassessed notifications with new priority codes

Table 4 below lists the most overdue notification for each priority.

Table 4: Most Overdue Open or Closed Notifications

Priority Codes*	Notification #	Status	Completion Date	Required End Date	Days Overdue**
B	118256763	Closed	12/2/2022	12/9/2020	723
E	117439457	Open	-	5/28/2020	1,036
F	117750480	Closed	11/18/2022	8/13/2020	827

*Current Priority Codes taking into account reassessed notifications with new priority codes

**As of March 30, 2023 for open notifications

- b. Additionally, ESRB found a total of 359 miscategorized open LC notifications. The 359 miscategorized open notifications are Priority E and F notifications with assigned completion dates (“Required End Dates”) ranging from 2026 to 2028 that exceed the Priority E and Priority F completion intervals required by PG&E’s ETPM Manual Rev 5. The 359 notifications do not include notifications created on or after January 3, 2023 that are subject to PG&E’s updated priority codes and due dates per PG&E’s Electric Transmission Line Guidance for Setting Priority Codes Procedure (Utility Procedure: TD-8123P-103, Effective Date: 1/3/2023, Rev: 0). Table 5 below shows examples of miscategorized notifications.

Table 5: Miscategorized Open Notifications

Notification No	Identification No	Original Priority	Current Priority	Notification Description	Functional Location	Notification Date	Created On Date	Required End Date	Reassessment Date	Reason for Reassessment
121331478	002/051	E	F	TO DI TEJON-LEBEC 002/051 RPR GYWW	ETL.9250	4/22/2021	5/14/2021	4/22/2026		
122558545	004/027	E	E	KERN-MAGUNDEN 4/27 BENT STEEL	ETL.8880	1/6/2022	1/6/2022	1/6/2025		
123111206	004/070	E	E	TO KERN-KERN FRONT 004/070 RPL INSW	ETL.1930	2/2/2022	3/16/2022	2/2/2025	3/31/2023	Time Dependent
122966723	000/014A	E	E	TO KERN-KERN FRONT 000/014A RPL POLE	ETL.1930	2/10/2022	2/10/2022	2/10/2025		
122966740	000/014C	E	E	TO KERN-KERN FRONT 000/014C RPL POLE	ETL.1930	2/10/2022	2/10/2022	2/10/2025		
123033943	041/169	E	E	TO DI MIDWAY-WHIRLWIND 41/169 RPR FOND	ETL.6030	2/23/2022	2/28/2022	2/23/2025	3/22/2023	Time Dependent
123033525	042/171	E	E	TO DI MIDWAY-WHIRLWIND 42/171 RPR INSS	ETL.6030	2/23/2022	2/28/2022	2/23/2025	3/15/2023	Time Dependent
123032040	050/202	E	E	T2NT DI MIDWY-WHIRLWIND 50/202 RPR GYWS	ETL.6030	2/23/2022	2/28/2022	2/23/2025	4/14/2023	Time Dependent
122920451	003/024	E	F	TO WV WESTPARK-COLUMBUS 003/024 RPR FOND	ETL.4130	2/3/2022	2/3/2022	2/3/2027		
122950696	003/051	E	F	TO EI SEMITROPIC-WASCO 3/51 RPR GYWW	ETL.9170	2/9/2022	2/9/2022	2/9/2027	12/29/2022	Non-Time Dependent
123009024	000/006	E	F	TO WV KERN OIL-MT POSO 0/6 RMV IDLE	ETL.1212	2/23/2022	2/23/2022	2/23/2027	8/24/2022	Non-Time Dependent
123034023	041/169	E	F	TO DI MIDWAY-WHIRLWIND 41/169 RPR INSS	ETL.6030	2/23/2022	2/28/2022	2/23/2027	3/28/2023	Time Dependent
123018456	037/152	E	F	TO DI MIDWAY-WHIRLWIND 37/152 RPR FOND	ETL.6030	2/24/2022	2/24/2022	2/24/2027	3/17/2023	Time Dependent
123032247	038/157	E	F	TO DI MDWY-WHIRLWIND 38/157 RPR FOND	ETL.6030	2/24/2022	2/28/2022	2/24/2027	3/22/2023	Time Dependent

- c. Of the 359 miscategorized open notifications, 234 notifications created from 2021 to 2022 do not have completed Field Safety Reassessments.¹

¹ PG&E conducts Field Safety Reassessments of notifications that will not be completed on time and of late-open notifications to verify if the condition has worsened or stayed the same in order to prioritize work by highest risk to lowest risk.

III. Field Inspection

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

Location #	Structure #	Structure Type	Transmission Line(s)	Latitude and Longitude
1	6/110	Wood Pole	Maricopa-Copus 70kV	35.09656743,-119.29882411
2	6/109	Wood Pole	Maricopa-Copus 70kV	35.09398667,-119.2965165
3	6/108	Wood Pole	Maricopa-Copus 70kV	35.09397335,-119.29746325
4	6/107	Wood Pole	Maricopa-Copus 70kV	35.09397218,-119.29864656
5	27/123	Tower	Midway-Wheeler Ridge #2 230kV Midway-Wheeler Ridge #1 230kV	35.09402567,-119.2964091
6	7/130	Wood Pole	Wheeler Ridge-Lakeview 70kV	35.09461761,-119.10068794
7	A19/317	Wood Pole	Copus-Old River 70kV	35.0947521,-119.10125431
8	A19/318	Wood Pole	Copus-Old River 70kV	35.09471872,-119.10135153
9	A19/319	Steel Pole	Copus-Old River 70kV	35.09451499,-119.10125007
10	Substation	Steel Pole	Copus-Old River 70kV	35.09451499,-119.10125007
11	7/131A	Wood Pole	Wheeler Ridge-Lakeview 70kV	35.09452746,-119.10084515
12	7/131	Wood Pole	Wheeler Ridge-Lakeview 70kV	35.09452141,-119.10081355
13	7/132	Wood Pole	Wheeler Ridge-Lakeview 70kV	35.09442248,-119.10069315
14	0/Term 2 SS	Wood Pole	Wheeler Ridge-Lakeview 70kV	35.09407706,-119.10079248
15	4/79	Wood Pole	Wheeler Ridge-Lakeview 70kV	35.09507106,-119.04795673
16	4/78A	Wood Pole	Wheeler Ridge-Lakeview 70kV	35.09510951,-119.0470442
17	4/78	Wood Pole	Wheeler Ridge-Lakeview 70kV	35.09530042,-119.0455366
18	4/77	Wood Pole	Wheeler Ridge-Lakeview 70kV	35.09514949,-119.04507022
19	41/167	Tower	Midway-Whirlwind 500kV	35.12538709,-118.87679375
20	40/166	Tower	Midway-Whirlwind 500kV	35.12531523,-118.87872351
21	8/146	Wood Pole	Weedpatch-San Bernard 70kV	35.09808885,-118.87794781

22	8/147	Wood Pole	Weedpatch-San Bernard 70kV	35.0973466,-118.87789059
23	8/148	Wood Pole	Weedpatch-San Bernard 70kV	35.09649117,-118.87788819
24	8/149	Wood Pole	Weedpatch-San Bernard 70kV	35.09560617,-118.87789824
25	38/157	Tower	Midway-Whirlwind 500kV	35.12576074,-118.91655596
26	38/156	Tower	Midway-Whirlwind 500kV	35.12562887,-118.92104764
27	27/111	Tower	Midway-Whirlwind 500kV	35.20854895,-119.07828436
28	27/112	Tower	Midway-Whirlwind 500kV	35.20547019,-119.07457524
29	8/107	Wood Pole	Wheeler Ridge-Weedpatch 70kV	35.20766337,-118.9766597
30	8/107	Wood Pole	Adobe Switch Station #1 Tap 115kV	35.2074999,-118.97666099
31	8/106	Wood Pole	Wheeler Ridge-Weedpatch 70kV	35.20642213,-118.97725269
32	8/106	Wood Pole	Adobe Switch Station #1 Tap 115kV	35.20624983,-118.97663796
33	8/105	Wood Pole	Wheeler Ridge-Weedpatch 70kV	35.20524935,-118.97666424
34	8/105	Wood Pole	Adobe Switch Station #1 Tap 115kV	35.20511801,-118.97667226
35	8/104	Wood Pole	Wheeler Ridge-Weedpatch 70kV	35.20409814,-118.97662824
36	8/104	Wood Pole	Adobe Switch Station #1 Tap 115kV	35.20400571,-118.97670019
37	8/103	Wood Pole	Wheeler Ridge-Weedpatch 70kV	35.2032097,-118.97701444
38	8/103	Wood Pole	Adobe Switch Station #1 Tap 115kV	35.20293796,-118.97665296
39	7/102	Wood Pole	Wheeler Ridge-Weedpatch 70kV	35.2019215,-118.97668577
40	7/102	Wood Pole	Adobe Switch Station #1 Tap 115kV	35.20182406,-118.97667975
41	7/101	Wood Pole	Wheeler Ridge-Weedpatch 70kV	35.20093761,-118.97670729
42	7/101	Wood Pole	Adobe Switch Station #1 Tap 115kV	35.20075754,-118.97667278
43	A12/155	Wood Pole	Wheeler Ridge-Weedpatch 70kV	35.26335515,-118.97634143
44	12/155	Wood Pole	Adobe Switch Station #1 Tap 115kV	35.26321308,-118.97632723
45	A12/156	Wood Pole	Wheeler Ridge-Weedpatch 70kV	35.2642063,-118.9764892

46	12/156	Wood Pole	Adobe Switch Station #1 Tap 115kV	35.26441364,-118.97634715
47	12/157	Wood Pole	Adobe Switch Station #1 Tap 115kV	35.26548049,-118.97631046
48	A12/157	Wood Pole	Wheeler Ridge-Weedpatch 70kV	35.26558791,-118.97631921
49	A12/158	Wood Pole	Wheeler Ridge-Weedpatch 70kV	35.26701556,-118.97641664
50	12/158	Wood Pole	Adobe Switch Station #1 Tap 115kV	35.29614944,-118.97649309
51	A14/182	Wood Pole	Wheeler Ridge-Weedpatch 70kV	35.29613451,-118.9764652
52	14/182	Wood Pole	Adobe Switch Station #1 Tap 115kV	35.29612877,-118.97647506
53	A12/168	Wood Pole	Kern-Old River #2 70kV	35.3024221,-119.00290718
54	A11/146	Wood Pole	Kern-Old River #2 70kV	35.32127949,-119.00284816
55	A11/145	Wood Pole	Kern-Old River #2 70kV	35.32180246,-119.00284544
56	0/9	Wood Pole	Eisen Tap 70kV	35.35407438,-118.99747907
57	0/10	Wood Pole	Eisen Tap 70kV	35.35409352,-118.99708385
58	A13/100	Wood Pole	Kern-Stockdale-Lamont #1 115kV	35.35233058,-118.95868092
59	A13/99	Wood Pole	Kern-Stockdale-Lamont #1 115kV	35.35165217,-118.95884291
60	12/169	Wood Pole	Kern-Magunden 70kV	35.37649631,-118.92319557
61	173/797	Tower	Arco-Midway 230kV Gates-Midway 230 kV	35.73164406,-119.72413753
62	117/484	Tower	Los Banos-Midway #2	35.73101249,-119.72373964
63	36/146	Tower	Gates-Midway 500kV	35.73039256,-119.72394397
64	8/127	Wood Pole	Chevron (Lost Hills) Tap 70kV	35.64467758,-119.76265947
65	8/128	Wood Pole	Chevron (Lost Hills) Tap 70kV	35.6446814,-119.76200237
66	8/129	Wood Pole	Chevron (Lost Hills) Tap 70kV	35.64240625,-119.76016445
67	198/913	Tower	Arco-Midway 230kV Gates-Midway 230kV	35.4394004,-119.48322759
68	141/581	Tower	Los Banos-Midway #2 500kV	35.439358,-119.48300844
69	61/244	Tower	Gates-Midway 500kV	35.43867647,-119.48347633
70	0/1D	Steel Pole	Midway-Kern #4 230kV	35.40465947,-119.44864669
71	0/6	Tower	Midway-Kern #1 230kV	35.40476798,-119.44869867

72	0/2	Tower	Westpark-Columbus 115kV	35.37500358,-119.04367435
73	3/23	Tower	Kern-Westpark #1 115kV Kern-Westpark #2 115kV	35.37493805,-119.0437208
74	4/27	Tower	Kern-Magunden 70kV Westpark-Columbus 115kV	35.38197077,-119.03894933
75	3/25	Tower	Kern-Magunden- Witco 115kV	35.38190821,-119.03871254
76	6/44	Tower	Kern-Kern Oil- Famoso 115kV	35.45755206,-119.07440779
77	F0/1	Wood Pole	Lerdo-Kern Oil-7th Std 115kV	35.45742864,-119.07445295
78	23/5	Tower	Lerdo-Kern Oil-7th Std 115kV	35.4574038,-119.07445036
79	6/51	Wood Pole	Kern-Kern Oil- Famoso 115kV	35.45747043,-119.07428651
80	F0/10	Wood Pole	Lerdo-Kern Oil-7th Std 115kV	35.46772563,-119.07444415
81	F0/9	Wood Pole	Lerdo-Kern Oil-7th Std 115kV	35.46705583,-119.07445137

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.

For all particulars not specified in these rules, design, construction, and maintenance should be done in accordance with accepted good practice for the given local conditions known at the time by those responsible for the design, construction, or maintenance of communication or supply lines and equipment.”

- 1.1. Wood Pole #6/110 located at GPS coordinates 35.09656743, -119.29882411 (Location 1) is damaged/deteriorated. PG&E had a preexisting LC notification (#125570498) to replace the pole.
- 1.2. Wood Pole #6/109 located at GPS coordinates 35.09398667, -119.2965165 (Location 2) has a damaged insulator that is missing a ring.
- 1.3. Wood Pole #6/107 located at GPS coordinates 35.09397218, -119.29864656 (Location 4) has a damaged switch. PG&E has a preexisting LC notification (#122942435) to replace the switch.
- 1.4. Tower #27/123 located at GPS coordinates 35.09402567, -119.2964091 (Location 5) has a bent steel member. PG&E created LC notification #126207125 to replace the steel member.
- 1.5. Wood Pole #7/130 located at GPS coordinates 35.09461761, -119.10068794 (Location 6) is damaged and has a broken distribution insulator. PG&E has a preexisting LC notification (#121592942) to replace the pole.
- 1.6. Wood Pole #A19/317 located at GPS coordinates 35.0947521, -119.10125431 (Location 7) is damaged/deteriorated. PG&E has a preexisting LC notification (#125642384) to replace the pole.
- 1.7. Steel Pole #A19/319 located at GPS coordinates 35.09451499, -119.10125007 (Location 9) has a bird nest near an insulator and conductor. PG&E created LC notification #126207290 to remove the bird nest.
- 1.8. A Steel Pole located inside the Lakeview Substation (Location 10) has a damaged insulator.
- 1.9. Wood Pole #7/131 located at GPS coordinates 35.09452141, -119.10081355 (Location 12) has a corona damaged insulator. PG&E has a preexisting LC notification (#122308350) to replace the insulator.
- 1.10. Wood Pole #4/78A located at GPS coordinates 35.09510951, -119.0470442 (Location 16) is damaged/deteriorated. PG&E has a preexisting LC notification (#121678768) to replace the pole.
- 1.11. Wood Pole #4/78 located at GPS coordinates 35.09530042, -119.0455366 (Location 17) will require an insulator reframe after adjacent Wood Pole #4/78A is replaced.

- PG&E has a preexisting LC notification (#121667325) for the reframe.
- 1.12. Wood Pole #4/77 located at GPS coordinates 35.09514949, -119.04507022 (Location 18) is damaged/deteriorated. PG&E has a preexisting LC notification (#121670170) to replace the pole.
 - 1.13. Tower #41/167 located at GPS coordinates 35.12538709, -118.87679375 (Location 19):
 - a. Requires foundation repair. PG&E has a preexisting LC notification (#125650579) to repair the foundation.
 - b. Requires complete insulator replacement. PG&E has a preexisting LC notification (#125702811) to replace the insulators.
 - 1.14. Tower #40/166 located at GPS coordinates 35.12531523, -118.87872351 (Location 20):
 - a. Requires shield wire repair. PG&E has a preexisting LC notification (#125686534) to repair the shield wire.
 - b. Requires complete insulator replacement. PG&E has a preexisting LC notification (#125765933) to replace the insulators.
 - 1.15. Wood Pole #8/146 located at GPS coordinates 35.09808885, -118.87794781 (Location 21) is damaged/deteriorated. PG&E has a preexisting LC notification (#125538145) to replace the pole.
 - 1.16. Tower #38/157 located at GPS coordinates 35.12576074, -118.91655596 (Location 25):
 - a. Requires foundation repair. PG&E has a preexisting LC notification (#123032247) to repair the foundation.
 - b. Requires anchor guy foundation repair. PG&E has a preexisting LC notification (#123095506) to repair the foundation.
 - 1.17. Tower #27/111 located at GPS coordinates 35.20854895, -119.07828436 (Location 27):
 - a. Has a bent steel member. PG&E has a preexisting LC notification (#123152024) to replace the steel member.
 - b. Requires complete insulator replacement. PG&E has a preexisting LC notification (#123152023) to replace the insulators.
 - c. Requires zena guard replacement. PG&E has a preexisting LC notification (#125655827) to replace the zena guard.
 - 1.18. Tower #27/112 located at GPS coordinates 35.20547019, -119.07457524 (Location 28):
 - a. Requires complete insulator replacement. PG&E has a preexisting LC notification (#123151663) to replace the insulators.
 - b. Has a bird nest with a loose string (approximately 12 feet long) that is hanging near the middle conductor.
 - 1.19. Wood Pole #8/107 located at GPS coordinates 35.20766337, -118.9766597 (Location 29) is damaged/deteriorated. PG&E has a preexisting LC notification (#119222709) to replace the pole.
 - 1.20. Wood Pole #8/107 located at GPS coordinates 35.2074999, -118.97666099 (Location 30) has a bird nest near an insulator. PG&E has a preexisting LC notification (#119222835) to remove the bird nest.
 - 1.21. Wood Pole #8/105 located at GPS coordinates 35.20524935, -118.97666424

- (Location 33) is damaged/deteriorated. PG&E has a preexisting LC notification (#122116029) to replace the pole.
- 1.22. Wood Pole #8/104 located at GPS coordinates 35.20409814, -118.97662824 (Location 35):
 - a. Is damaged/deteriorated. PG&E has a preexisting LC notification (#121662828) to replace the pole.
 - b. Has damaged insulators.
 - 1.23. Wood Pole #8/104 located at GPS coordinates 35.20400571, -118.97670019 (Location 36) has a chipped insulator on the bottom ring.
 - 1.24. Wood Pole #8/103 located at GPS coordinates 35.2032097, -118.97701444 (Location 37) is damaged/deteriorated. PG&E has a preexisting LC notification (#122117114) to replace the pole.
 - 1.25. Wood Pole #7/101 located at GPS coordinates 35.20093761, -118.97670729 (Location 41) is damaged/deteriorated. PG&E has a preexisting LC notification (#122039249) to replace the pole.
 - 1.26. Wood Pole #A12/155 located at GPS coordinates 35.26335515, -118.97634143 (Location 43):
 - a. Is damaged/deteriorated. PG&E has a preexisting LC notification (#121679269) to replace the pole.
 - b. Has a damaged insulator.
 - 1.27. Wood Pole #12/155 located at GPS coordinates 35.26321308, -118.97632723 (Location 44) requires complete insulator replacement. PG&E has a preexisting LC notification (#124771938) to replace the insulators.
 - 1.28. Wood Pole #12/156 located at GPS coordinates 35.26441364, -118.97634715 (Location 46) requires complete insulator replacement. PG&E has a preexisting LC notification (#124771972) to replace the insulators.
 - 1.29. Wood Pole #A12/157 located at GPS coordinates 35.26558791, -118.97631921 (Location 48) is damaged/deteriorated. PG&E has a preexisting LC notification (#122060298) to replace the pole.
 - 1.30. Wood Pole #A12/158 located at GPS coordinates 35.26701556, -118.97641664 (Location 49) is damaged/deteriorated. PG&E has a preexisting LC notification (#121685400) to replace the pole.
 - 1.31. Wood Pole #A14/182 located at GPS coordinates 35.29613451, -118.9764652 (Location 51) is damaged/deteriorated. PG&E has a preexisting LC notification (#121663987) to replace the pole.
 - 1.32. Wood Pole #A12/168 located at GPS coordinates 35.3024221, -119.00290718 (Location 53) is damaged/deteriorated. PG&E has a preexisting LC notification (#125501448) to replace the pole.
 - 1.33. Wood Pole #A11/146 located at GPS coordinates 35.32127949, -119.00284816 (Location 54) is damaged/deteriorated. PG&E has a preexisting LC notification (#124987297) to replace the pole.
 - 1.34. Wood Pole #A11/145 located at GPS coordinates 35.32180246, -119.00284544 (Location 55) has a horizontal insulator with an incorrect bracket. PG&E has a preexisting LC notification (#122993191) to install the correct bracket.

- 1.35. Wood Pole #0/9 located at GPS coordinates 35.35407438, -118.99747907 (Location 56) is damaged/deteriorated. PG&E has a preexisting LC notification (#124693040) to replace the pole.
- 1.36. Wood Pole #0/10 located at GPS coordinates 35.35409352, -118.99708385 (Location 57) is damaged/deteriorated. PG&E has a preexisting LC notification (#124691106) to replace the pole.
- 1.37. Wood Pole #12/169 located at GPS coordinates 35.37649631, -118.92319557 (Location 60) is damaged/deteriorated. PG&E has a preexisting LC notification (#124691916) to replace the pole.
- 1.38. Tower #173/797 located at GPS coordinates 35.73164406, -119.72413753 (Location 61) requires complete insulator replacement. PG&E has a preexisting LC notification (#122245422) to replace the insulators.
- 1.39. Tower #117/484 located at GPS coordinates 35.73101249, -119.72373964 (Location 62):
 - a. Has a damaged shield wire. PG&E has a preexisting LC notification (#123537640) to repair the shield wire.
 - b. Has rusted huck rivet fasteners.
- 1.40. Wood Pole #8/127 located at GPS coordinates 35.64467758, -119.76265947 (Location 64) has a damaged anchor. PG&E has a preexisting LC notification (#124755030) to replace the anchor.
- 1.41. Tower #198/913 located at GPS coordinates 35.4394004, -119.48322759 (Location 67):
 - a. Has a bent steel member. PG&E has a preexisting LC notification (#122216798) to replace the steel member.
 - b. Has a bent insulator plate. PG&E has a preexisting LC notification (#122216798) to replace the insulator plate.
 - c. Requires complete insulator replacement. PG&E has a preexisting LC notification (#122216798) to replace the insulators.
 - d. Has a damaged foundation. PG&E has a preexisting LC notification (#123683604) to repair the foundation.
- 1.42. Tower #141/581 located at GPS coordinates 35.439358, -119.48300844 (Location 68) has insulators with damaged cotter pins. PG&E has a preexisting LC notification (#122313909) to replace the cotter pins.
- 1.43. Steel Pole #0/1D located at GPS coordinates 35.40465947, -119.44864669 (Location 70) requires dampers on the conductors. PG&E has a preexisting LC notification (#123033686) to install dampers.
- 1.44. Tower #0/2 located at GPS coordinates 35.37500358, -119.04367435 (Location 72):
 - a. Requires repainting due to rust. PG&E has a preexisting LC notification (#119988428) to repaint the tower.
 - b. Has a loose and bent angle iron at the X brace.
- 1.45. Tower #3/23 located at GPS coordinates 35.37493805, -119.0437208 (Location 73) requires repainting due to rust. PG&E created LC notification #126227632 to repaint the tower.
- 1.46. Tower #4/27 located at GPS coordinates 35.38197077, -119.03894933 (Location 74) has a bent steel member. PG&E has a preexisting LC notification (#122558545) to replace the steel member.

- 1.47. Wood Pole #F0/1 located at GPS coordinates 35.45742864, -119.07445295 (Location 77) requires dampers on the conductors. PG&E has a preexisting LC notification (#124703817) to install dampers.
- 1.48. Wood Pole #F0/10 located at GPS coordinates 35.46772563, -119.07444415 (Location 80) needs to be relocated due to new construction. PG&E has a preexisting LC notification (#124922164) to assess and relocate the pole.

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).”

Wood Pole #6/109 located at GPS coordinates 35.09398667, -119.2965165 (Location 2) has an exposed and broken distribution ground wire.

3. 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.”

- 3.1. Wood Pole #A19/318 located at GPS coordinates 35.09471872, -119.10135153 (Location 8) has a damaged anchor guy. PG&E has a preexisting LC notification (#125732304) to replace the anchor guy.
- 3.2. Wood Pole #7/131A located at GPS coordinates 35.09452746, -119.10084515 (Location 11) has an anchor guy requiring repair. PG&E has a preexisting LC notification (#122251261) to repair the anchor guy.
- 3.3. Tower #41/167 located at GPS coordinates 35.12538709, -118.87679375 (Location 19) has an anchor guy requiring repair. PG&E has a preexisting LC notification (#125853653) to repair the anchor guy.
- 3.4. Tower #40/166 located at GPS coordinates 35.12531523, -118.87872351 (Location 20) has an anchor guy requiring repair. PG&E has a preexisting LC notification (#125815613) to repair the anchor guy.
- 3.5. Tower #38/156 located at GPS coordinates 35.12562887, -118.92104764 (Location 26) has an anchor guy requiring repair. PG&E has a preexisting LC notification (#125861108) to repair the anchor guy.
- 3.6. Tower #27/111 located at GPS coordinates 35.20854895, -119.07828436 (Location 27) has a slacked anchor guy. PG&E has a preexisting LC notification (#123152022) to adjust the anchor guy.
- 3.7. Tower #27/112 located at GPS coordinates 35.20547019, -119.07457524 (Location 28) has an anchor guy requiring repair. PG&E has a preexisting LC notification (#123151662) to repair the anchor guy.
- 3.8. Wood Pole #8/107 located at GPS coordinates 35.2074999, -118.97666099 (Location 30) has an overhead guy requiring repair. PG&E has a preexisting LC notification (#119222836) to repair the guy.

- 3.9. Wood Pole #6/51 located at GPS coordinates 35.45747043, -119.07428651 (Location 79) has an anchor guy requiring repair. PG&E has a preexisting LC notification (#121451959) to repair the anchor guy.

4. GO 95, Rule 38, Minimum Clearances of Wires from Other Wires, Table 2 Case 12F states:

“The basic minimum allowable vertical separation between supply conductors, 35,000-75,000 V, and supply conductors, 7,500-20,000 V, on separate crossarms or other supports at different levels on the same pole is 48 inches.”

There is insufficient midspan 70kV transmission to 12kV distribution conductor clearance near Wood Pole #4/79 located at GPS coordinates 35.09507106, -119.04795673 (Location 15). PG&E has a preexisting LC notification (#124901787) to increase conductor clearance.

5. 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.

The top of such sign(s) shall be located between the level of the lowest line conductor, energized in excess of 750 volts, on the pole to no more than 40 inches below that conductor level (see Figure 51-1).”

- 5.1. Wood Pole #4/78 located at GPS coordinates 35.09530042, -119.0455366 (Location 17) has a damaged high voltage sign.
- 5.2. Wood Pole #8/147 located at GPS coordinates 35.0973466, -118.87789059 (Location 22) is missing a voltage sign.
- 5.3. Wood Pole #8/148 located at GPS coordinates 35.09649117, -118.87788819 (Location 23) is missing a high voltage sign.
- 5.4. Wood Pole #8/149 located at GPS coordinates 35.09560617, -118.87789824 (Location 24) is missing a high voltage sign.
- 5.5. Wood Pole #8/103 located at GPS coordinates 35.20293796, -118.97665296 (Location 38) is missing a high voltage sign. PG&E has a preexisting LC notification (#122036560) to install a high voltage sign.
- 5.6. Wood Pole #7/101 located at GPS coordinates 35.20075754, -118.97667278 (Location 42) is missing a high voltage sign. PG&E created LC notification #126217666 to install a high voltage sign.
- 5.7. Wood Pole #A12/156 located at GPS coordinates 35.2642063, -118.9764892 (Location 45) is missing a high voltage sign. PG&E has a preexisting LC notification (#121678855) to install a high voltage sign.

- 5.8. Wood Pole #12/157 located at GPS coordinates 35.26548049, -118.97631046 (Location 47) is missing a high voltage sign. PG&E created LC notification #126217653 to install a high voltage sign.
- 5.9. Wood Pole #12/158 located at GPS coordinates 35.29614944, -118.97649309 (Location 50) is missing a high voltage sign. PG&E created LC notification #126217656 to install a high voltage sign.
- 5.10. Wood Pole #14/182 located at GPS coordinates 35.29612877, -118.97647506 (Location 52) has a high voltage sign that is located above the lowest 115kV conductor. PG&E has a preexisting LC notification #122099097 to move the high voltage sign below the lowest 115kV conductor.
- 5.11. Wood Pole #A13/99 located at GPS coordinates 35.35165217, -118.95884291 (Location 59) is missing a high voltage sign. PG&E has a preexisting LC notification (#119805614) to install a high voltage sign.
- 5.12. Wood Pole #8/129 located at GPS coordinates 35.64240625, -119.76016445 (Location 66) is missing a high voltage sign.
- 5.13. Tower #23/5 located at GPS coordinates 35.4574038, -119.07445036 (Location 78) is missing a high voltage danger sign on one side. PG&E has a preexisting LC notification (#119975217) to install the danger sign.
- 5.14. Wood Pole #F0/9 located at GPS coordinates 35.46705583, -119.07445137 (Location 81) is missing a high voltage sign. PG&E created LC notification #126228785 to install a high voltage sign.

6. GO 95, Rule 51.6-B, Guarding states in part:

“Where the pole or structure is of latticed metal or of similar construction and supports supply conductors in excess of 750 volts and is located in urban districts, or in rural areas adjacent to schools, dwellings, permanent or seasonal camps, or in orchards, or near roads, or trails which are frequently traveled, a barrier shall be so located on the pole or structure as to prevent easy climbing. If the bottom of the barrier is within 12 feet of the ground line, the top shall not be less than 15 feet above the ground line, but in no event shall the barrier be less than 8 feet in length. If the bottom of the barrier is more than 12 feet above the ground line, it shall not be less than 6 feet in length.”

- 6.1. Tower #0/2 located at GPS coordinates 35.37500358, -119.04367435 (Location 72) requires anti-climb guards. PG&E has a preexisting LC notification (#122271551) to install anti-climb guards.
- 6.2. Tower #3/23 located at GPS coordinates 35.37493805, -119.0437208 (Location 73) requires anti-climb guards. PG&E created LC notification #126227724 to install anti-climb guards.
- 6.3. Tower #6/44 located at GPS coordinates 35.45755206, -119.07440779 (Location 76) has climbing guards that are too short at approximately 4-5 feet in length.
- 6.4. Tower #23/5 located at GPS coordinates 35.4574038, -119.07445036 (Location 78) requires anti-climb guards.

7. GO 95, Rule 61.7, Stepping states in part:

“All towers which are required to be climbed by workmen shall be provided with steps or ladders. Steps or ladders shall start at not less than 7 feet 6 inches from the ground line or from any easily climbed foreign structure, within 6 feet of a tower, from which one could reach or step, including tower footings. The spacing between steps on the same side of the tower legs shall not exceed 36 inches.”

Tower #3/23 located at GPS coordinates 35.37493805, -119.0437208 (Location 73) has a low step. PG&E created LC notification #126227637 to remove the low pole step.