505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3298

TA2023-1157

December 20, 2023

PUBLIC UTILITIES COMMISSION

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 Table Mountain Headquarters (HQ)

Mr. Tanguay:

On behalf of the Electric Safety and Reliability Branch (ESRB) of the California Public Utilities Commission (CPUC), Brandon Vazquez and Joseph Murphy of ESRB staff conducted an electric transmission audit of PG&E Table Mountain HQ from August 14, 2023 through August 18, 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 January 22, 2024, 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. 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 provide us with a public version (a redacted version of your confidential response) to be posted on our website.

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

Sincerely,

~ without

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 Table Mountain HQ

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

Nika Kjensli, Program Manager, ESRB, SED, CPUC Fadi Daye, Program and Project Supervisor, 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 Anne Beech, Director of EO Compliance, PG&E Tripti Uprety, Manager of EO Compliance, PG&E Sean Mackay, Director of Investigations, PG&E Leah Hughes, Manager of Investigations, PG&E Jerrod Meier, Director of Governance and Reporting, PG&E Meredith Allen, VP of Regulatory Affairs, PG&E Spencer Olinek, Chief Regulatory Liaison, PG&E Electric Data Requests (ElectricDataRequests@pge.com)

PG&E TABLE MOUNTAIN HQ ELECTRIC TRANSMISSION AUDIT FINDINGS August 14-18, 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 Table Mountain 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 June 2018 to June 2023.
- Third Party Safety Hazard notifications sent and received from June 2018 to June 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 June 2018 to June 2023.
- PG&E's policies and procedures related to transmission right-of-way maintenance, and associated performance records from June 2019 to June 2023.
- PG&E's policies and procedures for insulator washing, and associated performance records from June 2019 to June 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 June 2019 to June 2023.
- A list of non-routine patrols for electric transmission facilities from June 2018 to June 2023.
- PG&E's policies and procedures for assigning priority levels to transmission deficiencies from June 2019 to June 2023.
- A list of all open, closed, and canceled notifications from June 2019 to June 2023.
- Pole loading and safety factor calculations completed from June 2022 to June 2023.
- New construction projects completed from June 2022 to June 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 June 2018 to June 2023.
- A list of PG&E inspector training courses from June 2018 to June 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. PG&E Electric Transmission Line Guidance for Setting Priority Codes, Utility Procedure: TD-8123P-103, Effective Date: 1/3/2023, defines priority codes and associated due dates in Table 3 below.

Priority Code	Priority Code Priority Description				
А	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.				
В	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.					
 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 1: PG&E ETPM Rev 4, Published on 11/20/2018, Priority Codes

Table 2: PG&E ETPM Rev 5	, Published on	n 8/31/2020,	Priority Codes
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Priority Code ¹	Priority Description
A ²	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 ³	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 MONTHS</i> ⁴ .

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 MONTHS</i> ⁵ .

- 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.

Table 3: PG&E Electric Transmission Line Guidance for Setting Priority Codes, EffectiveDate: 1/3/2023, Rev: 0

Priority Code	G.O. 95, Rule 18 Level	Priority Description – Time Frame ¹				
А	1	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 is 30 days				
		- to allow time for post-construction processes and				
		notification close-out.				
В	-	Not used for maintenance corrective action priority.				
E	2	Corrective action is required, as follows:				
		Within 6 months for HFTD Tier 3 2				
		Within 12 months for HFTD Tier 2/HFRA/Zone 1 2				
		Within 12 months for potential violations that compromise				
		worker safety				
		Within 36 months for all other potential violations				
F	3	Corrective action is required within 60 months.				

¹ Time frames listed are "Not to Exceed" and QCR/CIRT may define time frames according to site-specific conditions. ² IF the condition in the HFTD Tier 3 OR Tier 2/HFRA/Zone 1 does not create a fire risk (non-threatening), THEN the corrective action is required **within 36 months**.

a. ESRB's review of PG&E's Line Corrective (LC) notifications from "DRU11998_Q15_Atch01_Master List of Notifications" found a total of 9,312 late LC notifications. Table 4 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.

Priority	Late Closed	Late Open	Late Canceled	Total Late
Code*	Notifications	Notifications	Notifications	Notifications
Α	2	-	5	7
В	449	285	38	772
Ε	3,310	3,068	842	7,220
F	165	644	504	1,313
Total	3,926	3,997	1,389	9,312

Table 4: Number of Late Notifications by Priority and Type*

*Late notifications calculated using PG&E's "Required End Date."

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

Table 5 below lists the most overdue notification for each priority.

Priority Codes*	Notification #	tification # Status Completion Date		Required End Date	Days Overdue**
Α	117792619	Closed	10/3/2019	9/13/2019	20
В	119221120	Open	-	9/24/2020	1,001
E	118190333	Open	-	7/11/2020	1,076
F	117558329	Open	-	7/2/2020	1,085

 Table 5: Most Overdue Open or Closed Notifications

*Current Priority Codes taking into account reassessed notifications with new priority codes **As of June 22, 2023 for open notifications

b. Additionally, ESRB found a total of 2,046 miscategorized open LC notifications. The 2,046 miscategorized open notifications are Priority E and F notifications with assigned completion dates ("Required End Dates") ranging from 2025 to 2028 that exceed the Priority E and Priority F completion intervals required by PG&E's ETPM Manual Rev 5. The 2,046 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 (Effective Date: 1/3/2023). Table 6 below shows examples of miscategorized notifications.

Table 6: Miscategorized	Open Notifications
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Notification No	Identification number	Original Priority	Current Priority	Notification Description	Functional Location	Notification Date	Created On Date	Required End Date	Reassessment Date	Reason for Reassessment
123109066	003/073	E	E	T0 GLENN #3 003/073 RPL STRW	ETL.6940	2/2/2022	3/16/2022	2/2/2025		
123008761	059/534	E	E	T2NT DI RND MTN-CTWD #3 59/534 BNT STEEL	ETL.5650	2/8/2022	2/23/2022	2/8/2025	2/24/2023	Time Dependent
123485178	000/009	E	E	TO EI PLUMAS SIERRA TAP 000/009 RPL POLE	ETL.6291	5/3/2022	5/3/2022	5/3/2025		
124384444	006/129	E	E	T0 PALERMO-OROVILLE #1 006/129 RPL ANCW	ETL.7730	8/28/2022	8/28/2022	8/28/2025		
120678506	006/049	F	F	DI TBL MNTAIN-BTTE #2 006/049 RPR FOND	ETL.3920	3/17/2021	3/23/2021	3/17/2026		
120663275	010/078	F	F	DI TBL MOUNTAIN-BUTTE #2 10/78 RPR FOND	ETL.3920	3/17/2021	3/19/2021	3/17/2026	2/6/2023	Non-Time Dependent
120742610	063/412	F	E	TO EI POE-RIO OSO-RIO OSO 63/412 RPR INS	ETL.5540	4/5/2021	4/5/2021	4/5/2026	4/11/2022	Time Dependent
121319614	027/235A	F	E	EI CASCADE-COTNWOD 27/235B RPL HRDW	ETL.1240	5/12/2021	5/12/2021	5/12/2026	12/2/2022	Time Dependent
121428578	003/087	F	E	T0 DI COTTONWOOD-BENTON #1 3/87 RPR STRW	ETL.6640	5/24/2021	5/28/2021	5/24/2026	2/1/2022	Time Dependent
121845549	003/046	F	E	T0 DI TABLE MOUNTAIN-BUTTE #1 3/46 RPL P	ETL.3910	8/3/2021	8/4/2021	8/3/2026	3/7/2022	Time Dependent
123006785	032/130	F	E	T0 DI TABLE MTN-VACA 32/130 RPR FOND	ETL.6090	2/18/2022	2/23/2022	2/18/2027	3/13/2023	Time Dependent
123037161	036/145	F	E	TO DI TABLE MTN-VACA 36/145 RPR GYWS	ETL.6090	3/1/2022	3/1/2022	3/1/2027	3/15/2023	Time Dependent
123834287	001/045	F	E	T2 DI HMLTN BEACH-CHSTR 1/45 RPR POLE	ETL.7000	5/31/2022	6/13/2022	5/31/2027	7/2/2023	Time Dependent
123922415	002/049	F	E	T2 EI VOLTA-SOUTH 002/049 RPR POLE	ETL.8300	6/25/2022	6/25/2022	6/25/2027		
124376230	001/014	F	E	TO DI PALRMO-WYNDOTTE 1/014 RPL HRDT	ETL.4315	8/12/2022	8/26/2022	8/12/2028	7/5/2023	Time Dependent

- c. Of the 2,046 miscategorized open notifications, 1,297 notifications created from 2020 to 2022 do not have completed Field Safety Reassessments (FSR).³
- d. Additionally, ESRB found that LC notification 121636179 is listed as having an FSR conducted on 3/8/2023 per excel file "DRU11998_Q15_Atch01_Master List of Notifications" (See Table 7); however, upon review of the printed LC notification, the long text of the notification lists 3/8/2023 as the date the Funded Repair Date was removed, not an FSR date. Therefore, PG&E extended the Required End Date of the notification without conducting an FSR.

Table 7: LC Notification 12	636179
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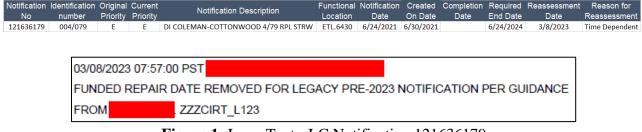


Figure 1: Long Text - LC Notification 121636179

2. PG&E Transmission Patrols and Enhanced Inspection Frequency Guidelines, Utility Procedure: TD-8123P-100, Effective Date: 03/12/2022, Rev 0, Section 2.5.1 Due Dates and Exemptions states the following:

Detailed ground, climbing, and aerial inspections are due by July 31st in HFTDs and HFRAs, and by December 31st in non-HFTD areas.

ESRB's review of PG&E's inspection records found 5 late 2022 enhanced inspections and 5 late 2022 aerial inspections. Table 8 and 9 below list the late inspections.

³ 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.

Table 8: Late 2022 Enhanced Ground Inspections

Inspection Type	Structure Number	Functional Location	Functional Location Description	OH vs UG	Inspection Due Date	Inspection Completion Date	Days Late
Enhanced Ground	;005/013A	ETL.6280	T3: CARIBOU #2	OH	7/31/2022	11/2/2022	94
Enhanced Ground	000/005-GUY	ETL.8300	T3: VOLTA-SOUTH	OH	7/31/2022	10/21/2022	82
Enhanced Ground	005/114-GUY	ETL.7300	T3: KILARC-DESCHUTES	OH	7/31/2022	10/11/2022	72
Enhanced Ground	;004/006-GUY	ETL.6280	T3: CARIBOU #2	OH	7/31/2022	10/5/2022	66
Enhanced Ground	004/096-GUY	ETL.6310	T2: CASCADE-BENTON-DESCHUTES	OH	7/31/2022	9/29/2022	60

Table 9: Late 2022 Air Inspections

Inspection Type	Structure Number	Functional Location	Functional Location Description	OH vs UG	Inspection Due Date	Inspection Completion Date 🔽	Days Late	Previous Inspection Date (of the same type)	Transmission Deficiency Found
Air+	;005/013A	ETL.6280	AIRT3:CARIBOU #2	OH	7/31/2022	11/3/2022	95	First year of this inspection type	N/A
Air+	000/005-GUY	ETL.8300	AIRT3:VOLTA-SOUTH	OH	7/31/2022	11/3/2022	95	First year of this inspection type	N/A
Air+	012/233-GUY	ETL.6500	AIRT2:COLGATE-PALERMO	OH	7/31/2022	10/14/2022	75	First year of this inspection type	N/A
Air+	004/096-GUY	ETL.6310	AIRT2:CASCADE-BENTON-DESCHUTES	OH	7/31/2022	10/6/2022	67	First year of this inspection type	N/A
Air+	012/247-GUY	ETL.6500	AIRT2:COLGATE-PALERMO	OH	7/31/2022	10/6/2022	67	First year of this inspection type	N/A
Air+	005/114-GUY	ETL.7300	AIRT3:KILARC-DESCHUTES	OH	7/31/2022	10/6/2022	67	First year of this inspection type	N/A
Air+	016/131	ETL.4316	AIRT3:PARADISE-TABLE MTN	OH	7/31/2022	9/28/2022	59	6/15/2021	N/A
Air+	;004/006-GUY	ETL.6280	AIRT3:CARIBOU #2	OH	7/31/2022	9/26/2022	57	First year of this inspection type	N/A
Air+	015/124	ETL.4590	AIRT3:CRESTA-RIO OSO	OH	7/31/2022	8/14/2022	14	5/3/2021	N/A
Air+	015/125	ETL.4590	AIRT3:CRESTA-RIO OSO	OH	7/31/2022	8/14/2022	14	6/7/2021	N/A
Air+	013/096	ETL.5630	AIRT3:ROCK CREEK-POE	OH	7/31/2022	8/14/2022	14	5/12/2021	N/A

III. Field Inspection

Location	Structure				
#	Туре	Transmission Line(s)	Structure #	Latitude	Longitude
1	Steel Pole	Coleman-Red Bluff 60kV	014/255	40.19864	-122.13533
2	Steel Pole	Coleman-Red Bluff 60kV	014/254	40.19954	-122.13548
3	Steel Pole	Coleman-Red Bluff 60kV	014/253	40.20031	-122.13578
4	Wood Pole	Coleman-Red Bluff 60kV	A014/233	40.21705	-122.20919
5	Wood Pole	Cottonwood #1 60 kV	A024/215	40.16656	-122.25679
6	Wood Pole	Cottonwood #1 60 kV	A024/214	40.16584	-122.25684
7	Wood Pole	Cottonwood #1 60 kV	A024/213	40.16512	-122.2569
8	Steel Pole	Volta-DeSchutes 60kV	017/384	40.54275	-122.18343
9	Wood Pole	Volta-DeSchutes 60kV	017/385	40.5429	-122.18412
10	Wood Pole	Volta-DeSchutes 60kV	017/386	40.54451	-122.18453
11	Wood Pole	Cascade-Benton-DeSchutes 60kV	A006/134	40.57808	-122.27818
12	Steel Pole	Cascade-Benton-DeSchutes 60kV	A006/135	40.57753	-122.27734
13	Wood Pole	Cascade-Benton-DeSchutes 60kV	A006/136	40.57692	-122.27656
14	Wood Pole	Cascade-Benton-DeSchutes 60kV	009/213	40.56393	-122.36959
15	Wood Pole	Cascade-Benton-DeSchutes 60kV	009/215	40.56324	-122.37126
16	Wood Pole	Cascade-Benton-DeSchutes 60kV	009/214	40.56336	-122.36974
17	Steel Pole	Cottonwood-Panorama 115kV	002/031	40.42643	-122.26495
18	Wood Pole	Cottonwood-Panorama 115kV	002/032	40.42731	-122.26594
19	Steel Pole	Cottonwood-Panorama 115kV	002/033	40.42799	-122.26714
20	Wood H- frame	Bridgeville-Cottonwood 115kV	000/010	40.39938	-122.28332
21	Tower	Bridgeville-Cottonwood 115kV	000/011	40.39934	-122.28467
22	Steel H- frame	Bridgeville-Cottonwood 115kV	000/012	40.39888	-122.28696
23	Wood H- frame	Bridgeville-Cottonwood 115kV	006/064	40.38917	-122.39496
24	Wood Pole	Distribution 12kV	121156357 121261393	40.3888	-122.39501
25	Wood Pole	Coleman-Cottonwood 60kV	004/078	40.41813	-122.19549
26	Wood Pole	Coleman-Cottonwood 60kV	004/079	40.41715	-122.19639
27	3 Wood Pole	Coleman-Cottonwood 60kV	003/077	40.41751	-122.19522
28	Wood Pole	Glenn #5 60kV	005/115	39.7401	-122.19746
29	Wood Pole	Glenn #5 60kV	005/116	39.73959	-122.19729
30	Wood Pole	Glenn #5 60kV	005/117	39.74738	-122.1972
31	Wood Pole	Glenn #5 60kV	005/118	39.73855	-122.19715
32	Wood Pole	Glenn #5 60kV	005/119	39.73793	-122.19726
33	Wood Pole	Glenn #5 60kV	006/147	39.72557	-122.18857
34	Wood Pole	Glenn #5 60kV	006/148	39.7256	-122.18769
35	Wood Pole	Glenn #5 60kV	006/149	39.7256	-122.18653

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

36	Tower	Cottonwood-Glenn Glenn-Delevan 230kV	G005/023	39.79401	-122.1693
37	Tower	Cottonwood-Glenn Glenn-Delevan 230kV	G004/022	39.79532	-122.17358
38	Wood Pole	Glenn #1 60kV	026/569	39.43136	-122.18321
39	Wood Pole	Glenn #1 60kV	026/568	39.43219	-122.1832
40	Wood Pole	Glenn #1 60kV	026/567	39.43291	-122.18314
41	Steel Pole	Glenn #1 60kV	026/566	39.43366	-122.18318
42	Steel Pole	Glenn #1 60kV	026/565	39.43439	-122.18314
43	Wood Pole	Glenn #1 60kV	026/564	39.43509	-122.18316
44	Wood Pole	Glenn #2 60kV	030/564	39.47246	-122.01901
45	Wood Pole	Glenn #2 60kV	030/563	39.47321	-122.01894
46	Wood Pole	Glenn #2 60kV	030/562	39.47405	-122.01905
47	Wood Pole	Glenn #2 60kV	030/561	39.47464	-122.01884
48	Wood Pole	Glenn #2 60kV	022/413	39.57688	-122.01026
49	Wood Pole	Glenn #2 60kV	022/412	39.57841	-122.01021
50	Wood Pole	Glenn #2 60kV	022/411	39.57865	-122.01028
51	Wood Pole	Glenn #2 60kV	022/410	39.58028	-122.01105
52	Steel Pole	Glenn #2 60kV	022/409	39.58105	-122.01024
53	Wood Pole	Glenn #3 60kV	015/273	39.79458	-121.9193
54	Steel Pole	Glenn #3 60kV	015/274	39.7953	-121.91922
55	Wood Pole	Glenn #3 60kV	015/275	39.796	-121.91937
56	Wood Pole	Glenn #3 60kV	016/276	39.79676	-121.9193
57	Wood Pole	Glenn #3 60kV	016/277	39.79693	-121.91935
58	Wood Pole	Butte-Sycamore Creek 115kV	013/280	39.77509	-121.8773
59	Wood Pole	Butte-Sycamore Creek 115kV	013/281	39.77556	-121.8765
60	Wood Pole	Butte-Sycamore Creek 115kV	013/282	39.77588	-121.87595
61	Wood Pole	Butte-Esquon 60kV	002/050	39.68289	-121.79503
62	Wood Pole	Butte-Esquon 60kV	002/051	39.68255	-121.79397
63	Wood Pole	Butte-Esquon 60kV	002/052	39.6823	-121.79273
64	Wood Pole	Butte-Esquon 60kV	002/049	39.68302	-121.79535
65	Wood Pole	e Butte-Esquon 60kV	002/048	39.6833	-121.79651
			002/048-		
			Guy		
66	Wood Pole	Butte-Esquon 60kV	002/047	39.68342	-121.79681
67	Steel Pole	Paradise-Butte 115kV Paradise-Table Mtn 115kV	004/045	39.7272	-121.65587
68	Wood Pole	Centerville-Table Mtn-Oroville 60kV	004/090	39.72731	-121.65578
69	Wood Pole	Centerville-Table Mtn-Oroville 60kV	004/089	39.72788	-121.65615
70	Wood Pole	Centerville-Table Mtn-Oroville 60kV	004/088	39.72863	-121.65643
71	Wood Pole	Centerville-Table Mtn-Oroville 60kV	004/087	39.72907	-121.65673

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72	Steel Pole	Paradise-Butte 115kV Paradise-Table Mtn 115kV	004/044	39.72905	-121.65669
73	Wood Pole	Centerville-Table Mtn-Oroville 60kV	003/081	39.73471	-121.65922
74	Steel Pole	Centerville-Table Mtn-Oroville 60kV	003/082	39.73439	-121.65905
75	Steel Pole	Paradise-Butte 115kV Paradise-Table Mtn 115kV	003/042	39.73428	-121.65923
76	Wood Pole	Centerville-Table Mtn-Oroville 60kV	003/080	39.73531	-121.65946
77	Steel Pole	Centerville-Table Mtn-Oroville 60kV	003/079A	39.73587	-121.65975
78	Steel Pole	Paradise-Butte 115kV Paradise-Table Mtn 115kV	003/041	39.73575	-121.65988
79	Steel Pole	Centerville-Table Mtn-Oroville 60kV	003/059	39.7465	-121.66583
80	Steel Pole	Centerville-Table Mtn-Oroville 60kV	003/060	39.74631	-121.66568
81	Steel Pole	Centerville-Table Mtn-Oroville 60kV	003/061	39.74598	-121.66537
82	Wood Pole	Centerville-Table Mtn-Oroville 60kV	003/062	39.74567	-121.66522
83	Tower	Round Mtn-Table Mtn #1 500kV	073/302	39.75324	-121.75505
84	Tower	Round Mtn-Table Mtn #2 500kV	073/302	39.75338	-121.75469
85	Wood Pole	Centerville-Table Mtn-Oroville 60kV	021/428	39.50647	-121.57423
86	Wood Pole	Centerville-Table Mtn-Oroville 60kV	021/429	39.50619	-121.57414
87	Wood Pole	Centerville-Table Mtn-Oroville 60kV	021/427	39.50704	-121.5743
88	Wood Pole	Centerville-Table Mtn-Oroville 60kV	021/426	39.50753	-121.57446
89	Wood Pole	Centerville-Table Mtn-Oroville 60kV	021/436	39.50151	-121.57409
90	Wood Pole	Centerville-Table Mtn-Oroville 60kV	021/437	39.50071	-121.57412
91	Wood Pole	Centerville-Table Mtn-Oroville 60kV	021/435	39.50317	-121.5732
92	Wood Pole	Palermo-Oroville #2 60kV	A007/085	39.52309	-121.50228
93	Tower	Table Mtn-Palermo 230kV Table Mtn-Rio Oso 230kV	009/043	39.52313	-121.50243
94	Wood Pole	Palermo-Oroville #2 60kV	A007/084	39.52214	-121.50628

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. Steel Pole #014/255 located at GPS coordinates 40.19864167, -122.1353306 (Location 1) has a damaged conductor. PG&E had a preexisting LC notification (#125971397) to repair the conductor.
- 1.2. Steel Pole #014/253 located at GPS coordinates 40.20031389, -122.1357806 (Location 3) requires regrading/backfilling with dirt. PG&E had a preexisting LC notification (#125972683) to regrade/backfill.
- 1.3. Wood Pole #A024/213 located at GPS coordinates 40.16512222, -122.2568972 (Location 7) has faded distribution guy guard high vis-strips.
- 1.4. Wood Pole #017/385 located at GPS coordinates 40.5429, -122.1841194 (Location 9) had a loose high vis-strip. PG&E fixed this issue during the audit.
- 1.5. Wood Pole #A006/134 located at GPS coordinates 40.57808333, -122.2781833 (Location 11) is missing high vis-strips. PG&E has a preexisting LC notification (#119189283) to install vis-strips.
- 1.6. Wood Pole #009/213 located at GPS coordinates 40.56393333, -122.3695917 (Location 14):
 - a. Requires fishing rods (insulators) on the anchor guys. PG&E has a preexisting LC notification (#121348875) to install the fishing rods.
 - b. Has a splice within 10 feet of the insulator. PG&E has a preexisting LC notification (#121348871) to move the splice.
- 1.7. Wood H-Frame #000/010 located at GPS coordinates 40.39938, -122.283323 (Location 20) is missing an ADSS tag. PG&E has a preexisting LC notification (#125867069) to install the tag.
- 1.8. Tower #000/011 located at GPS coordinates 40.39934167, -122.2846667 (Location 21) is missing an ADSS tag. PG&E has a preexisting LC notification (#125872220) to install the tag.
- 1.9. Wood H-Frame #006/064 located at GPS coordinates 40.38916667, -122.3949583 (Location 23) is missing an ADSS tag.
- 1.10. Wood Pole #006/148 located at GPS coordinates 39.72559722, -122.1876917 (Location 34) has loose crossarm bracket bolts.
- 1.11. Tower #G005/023 located at GPS coordinates 39.79401389, -122.1693028

(Location 36) requires mastic on the foundation. PG&E has a preexisting LC notification (#120664320) to apply mastic.

- 1.12. Tower #G004/022 located at GPS coordinates 39.79532, -122.173582 (Location 37):
 - a. Has damaged insulators due to lightning. PG&E has a preexisting LC notification (#126235022) to replace the insulators.
 - b. Requires mastic on the foundation. PG&E has a preexisting LC notification (#121325608) to apply mastic.
- 1.13. Wood Pole #030/564 located at GPS coordinates 39.47246111, -122.0190111 (Location 44) has a damaged conductor. PG&E has a preexisting LC notification (#125937824) to replace the conductor.
- 1.14. Wood Pole #022/412 located at GPS coordinates 39.57840833, -122.0102083 (Location 49) has a damper requiring repair. PG&E has a preexisting LC notification (#125943656) to repair the damper.
- 1.15. Wood Pole #022/410 located at GPS coordinates 39.58027778, -122.01105 (Location 51):
 - a. Has a taut distribution jumper.
 - b. Has a buried distribution anchor.
- 1.16. Steel Pole #022/409 located at GPS coordinates 39.58105, -122.0102389 (Location 52) has a switch requiring repair. PG&E has a preexisting LC notification (#126099270) to repair the switch.
- 1.17. Wood Pole #002/050 located at GPS coordinates 39.68289167, -121.7950278 (Location 61):
 - a. Requires insulator reframing. PG&E has a preexisting LC notification (#124032682) to reframe.
 - b. Has a splice within 10 feet of the insulator. PG&E has a preexisting LC notification (#124032687) to move the splice.
- 1.18. Wood Pole #002/052 located at GPS coordinates 39.68229722, -121.7927333 (Location 63) has a loose anti-split bolt. PG&E has a preexisting LC notification (#124488581) to replace the bolt.
- 1.19. Wood Pole #002/048 located at GPS coordinates 39.6833, -121.79651 (Location 65) has a damaged insulator. PG&E has a preexisting LC notification (#121847180) to repair the insulator.
- 1.20. Steel Pole #004/045 located at GPS coordinates 39.72720278, -121.6558694 (Location 67):
 - a. Has a cracked foundation. PG&E has a preexisting LC notification (#125584473) to repair the foundation.
 - b. Has a fence within the right-of-way (ROW). PG&E has a preexisting LC notification (#126179420) to move the fence.
- 1.21. Wood Pole #004/089 located at GPS coordinates 39.72787778, -121.65615 (Location 69) has woodpecker holes. PG&E has a preexisting LC notification (#125706758) to repair the woodpecker holes.
- 1.22. Steel Pole #003/042 located at GPS coordinates 39.734283, -121.659226 (Location 75):
 - a. Has loose shoe hardware (bolts) on the host circuit. PG&E has a preexisting LC notification (#125577339) to tighten the hardware.
 - b. Requires insulator repair on the guest circuit. PG&E has a preexisting LC

notification (#125577350) to repair the insulators.

- 1.23. Steel Pole #003/061 located at GPS coordinates 39.74598333, -121.6653667 (Location 81) is missing high-vis strips. PG&E has a preexisting LC notification (#121523420) to add vis strips.
- 1.24. Tower #073/302 located at GPS coordinates 39.75324167, -121.7550528 (Location 83) has a bent support member.
- 1.25. Wood Pole #021/429 located at GPS coordinates 39.50619167, -121.5741361 (Location 86) has a damaged insulator cotter key. PG&E has a preexisting LC notification (#125641861) to repair the cotter key.
- 1.26. Wood Pole #021/436 located at GPS coordinates 39.50151111, -121.5740889 (Location 89) has loose hardware. PG&E has a preexisting LC notification (#125770880) to tighten/replace the hardware.
- 1.27. Wood Pole #021/437 located at GPS coordinates 39.50070556, -121.5741194 (Location 90):
 - a. Has a splice within 10 feet of the insulator. PG&E has a preexisting LC notification (#125770062) to move the splice.
 - b. Has loose guy hardware. PG&E has a preexisting LC notification (#125770019) to tighten the hardware.
- 1.28. Wood Pole #021/435 located at GPS coordinates 39.50316944, -121.5731972 (Location 91) has woodpecker holes. PG&E has a preexisting LC notification (#125770519) to repair the woodpecker holes.

2. 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."

- 2.1. Steel Pole #014/253 located at GPS coordinates 40.20031389, -122.1357806 (Location 3) had a low pole step. PG&E removed the pole step during the audit.
- 2.2. Steel Pole #022/409 located at GPS coordinates 39.58105, -122.0102389 (Location 52) has 4 low pole steps.
- 2.3. Wood Pole #002/049 located at GPS coordinates 39.68302222, -121.79535 (Location 64) has a low pole step. PG&E has a preexisting LC notification (#124028870) to remove the pole step.

3. GO 95, Rule 44.3, Replacement states in part:

"Lines or parts thereof shall be replaced or reinforced before safety factors have been reduced (due to factors such as deterioration and/or installation of additional facilities) in Grades "A" and "B" construction to less than two-thirds of the safety factors specified in Rule 44.1."

3.1. Wood Pole #A014/233 located at GPS coordinates 40.21705, -122.2091917

(Location 4) has woodpecker holes and rot. PG&E has a preexisting LC notification (#125494463) to replace the pole.

- 3.2. Wood Pole #A024/215 located at GPS coordinates 40.16655833, -122.2567889 (Location 5) requires replacement. PG&E has a preexisting LC notification (#126162330) to replace the pole.
- 3.3. Wood Pole #A024/214 located at GPS coordinates 40.16584444, -122.2568361 (Location 6) has a rotted distribution crossarm.
- 3.4. Wood Pole #009/213 located at GPS coordinates 40.56393333, -122.3695917 (Location 14) is deteriorated and leaning. PG&E has a preexisting LC notification (#121348867) to replace the pole.
- 3.5. Wood Pole #009/215 located at GPS coordinates 40.56323889, -122.3712611 (Location 15) is damaged and leaning. PG&E has a preexisting LC notification (#121348877) to replace the pole.
- 3.6. Wood Pole #009/214 located at GPS coordinates 40.56335833, -122.3697361 (Location 16) is damaged/deteriorated. PG&E has a preexisting LC notification (#121348862) to replace the pole.
- 3.7. Distribution Wood Pole #121156357/#121261393 located at GPS coordinates 40.38880278, -122.3950056 (Location 24) is fire damaged/deteriorated and has significant large cracks.
- 3.8. Wood Pole #004/079 located at GPS coordinates (Location 26) is damaged/deteriorated. PG&E has a preexisting LC notification 40.41714722, -122.1963861 (#121636179) to replace the pole.
- 3.9. Wood Pole #005/115 located at GPS coordinates 39.7401, -122.1974639 (Location 28) is damaged/deteriorated. PG&E has a preexisting LC notification (#125714315) to replace the pole.
- 3.10. Wood Pole #005/116 located at GPS coordinates 39.73959444, -122.1972889 (Location 29) is damaged/deteriorated. PG&E has a preexisting LC notification (#126097265) to replace the pole.
- 3.11. Wood Pole #026/569 at GPS coordinates 39.43135833, -122.1832056 (Location 38) is damaged/deteriorated. PG&E has a preexisting LC notification (#125484820) to replace the pole.
- 3.12. Wood Pole #015/273 located at GPS coordinates 39.79457778, -121.9192972 (Location 53) is damaged/deteriorated. PG&E has a preexisting LC notification (#126254043) to replace the pole.
- 3.13. Wood Pole #013/280 located at GPS coordinates 39.77508889, -121.8772972 (Location 58) is damaged/deteriorated. PG&E has a preexisting LC notification (#126253277) to replace the pole.
- 3.14. Wood Pole #002/047 located at GPS coordinates 39.683424, -121.796809 (Location 66) is damaged/deteriorated. PG&E has a preexisting LC notification (#122257904) to replace the pole.
- 3.15. Wood Pole #004/088 located at GPS coordinates 39.72863333, -121.656425 (Location 70) is damaged/deteriorated. PG&E has a preexisting LC notification (#125711605) to replace the pole.
- 3.16. Wood Pole #003/081 located at GPS coordinates 39.73471389, -121.6592167 (Location 73) is damaged/deteriorated. PG&E has a preexisting LC notification (#125612591) to replace the pole.

- 3.17. Wood Pole #021/428 located at GPS coordinates 39.50646944, -121.5742333 (Location 85) is damaged/deteriorated. PG&E has a preexisting LC notification (#125772120) to replace the pole.
- 3.18. Wood Pole #021/427 located at GPS coordinates 39.50704167, -121.5743028 (Location 87) is damaged/deteriorated. PG&E has a preexisting LC notification (#124191970) to replace the pole.
- 3.19. Wood Pole #021/426 located at GPS coordinates 39.50753333, -121.5744639 (Location 88) is damaged/deteriorated. PG&E has a preexisting LC notification (#125706297) to replace the pole.

4. 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)."

- 4.1. Wood Pole #A006/134 located at GPS coordinates 40.57808333, -122.2781833 (Location 11) has a damaged high voltage sign. PG&E has a preexisting LC notification (#119189283) to install a new high voltage sign.
- 4.2. Steel H-Frame #000/012 located at GPS coordinates 40.39888333, -122.2869556 (Location 22) is missing a high voltage sign on one pole. PG&E has a preexisting LC notification (#125866557) to install a high voltage sign.
- 4.3. Tower #G005/023 located at GPS coordinates 39.79401389, -122.1693028 (Location 36) is missing a high voltage danger sign. PG&E has a preexisting LC notification (#120664276) to install a danger sign.
- 4.4. Tower #G004/022 located at GPS coordinates 39.79532, -122.173582 (Location 37) is missing a high voltage danger sign. PG&E has a preexisting LC notification (#121325608) to install a danger sign.
- 4.5. Wood Pole #022/410 located at GPS coordinates 39.58027778, -122.01105 (Location 51) is missing a high voltage sign on the distribution crossarm.
- 4.6. Wood Pole #013/281 located at GPS coordinates 39.77555556, -121.8765028 (Location 59) has a damaged high voltage sign. PG&E has a preexisting LC notification (#120097112) to install a new high voltage sign.
- 4.7. Steel Pole #004/044 located at GPS coordinates 39.72905278, -121.6566861 (Location 72) is missing a high voltage sign. PG&E has a preexisting LC notification (#125633208) to install a high voltage sign.
- 4.8. Steel Pole #003/042 located at GPS coordinates 39.734283, -121.659226 (Location 75) has a faded high voltage sign. PG&E has a preexisting LC notification (#125577339) to install a new high voltage sign.

- 4.9. Steel Pole #003/041 located at GPS coordinates 39.73575278, -121.659875 (Location 78) is missing a high voltage sign. PG&E has a preexisting LC notification (#123961105) to install a high voltage sign.
- 4.10. Steel Pole #003/060 located at GPS coordinates 39.74631111, -121.6656806 (Location 80) has a faded/damaged high voltage sign. PG&E has a preexisting LC notification (#119125692) to install a new high voltage sign.
- 4.11. Wood Pole #021/429 located at GPS coordinates 39.50619167, -121.5741361 (Location 86) is missing a high voltage sign. PG&E has a preexisting LC notification (#125641861) to install a high voltage sign.

5. 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."

- 5.1. Tower #000/011 located at GPS coordinates 40.39934167, -122.2846667 (Location 21) has anti-climb guards that are too short.
- 5.2. Tower #G005/023 located at GPS coordinates 39.79401389, -122.1693028 (Location 36) requires anti-climb guards. PG&E has a preexisting LC notification (#120664276) to install anti-climb guards.

6. 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."

- 6.1. Wood Pole #022/411 located at GPS coordinates 39.57865278, -122.0102833 (Location 50) has a slacked anchor guy.
- 6.2. Wood Pole #013/282 located at GPS coordinates 39.77588333, -121.8759472 (Location 60):
 - a. Has a slacked transmission anchor guy.
 - b. Has a slacked distribution anchor guy.
- 6.3. Wood Pole #002/048 located at GPS coordinates 39.6833, -121.79651 (Location 65):
 - a. Has an anchor guy requiring repair. PG&E has a preexisting LC notification (#121847089) to repair the guy.
 - b. Has a corroded anchor. PG&E has a preexisting LC notification (#124621208) to replace the anchor.

- c. Has a damaged span guy. PG&E has a preexisting LC notification (#125133497) to replace the guy.
- 6.4. Tower #073/302 located at GPS coordinates 39.75324167, -121.7550528 (Location 83) has a damaged anchor guy. PG&E has a preexisting LC notification (#125813717) to replace the anchor guy.

7. GO 95, Rule 38, Minimum Clearances of Wires from Other Wires, Table 2 Case 18C states:

"The basic minimum allowable radial separation between guys and communication conductors is 3 inches."

A distribution anchor guy is in contact with a communications cable at Wood Pole #013/281 located at GPS coordinates 39.77555556, -121.8765028 (Location 59).

8. 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."

Steel Pole #003/042 located at GPS coordinates 39.734283, -121.659226 (Location 75) has a bird box attached to it. PG&E has a preexisting LC notification (#123879153) to remove the bird box.

9. 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.

10. 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.

V. Observations

1. 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 of 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."

- 1.1. The Ponderosa underground communication cable at 3911 Woodland Rd is unsecured on the ground (Location 3).
- 1.2. The communication ground wire on the pole at Lat 36.82663 Long -119.60868 is exposed with the damaged molding (Location 9). PG&E created Third Party Notification (TPN) 124893214 during audit.
- Idle communications drips hanging off pole and midspan with exposed ground, open splice box at Rear off 317 DeWitt Ave, Clovis (Location 15). PG&E created TPN 124893749 during audit.
- 1.4. Loose communications drop hanging off crossarm at Rear off 345 DeWitt Ave, Clovis (Location 16). PG&E created TPN 124894436 created during audit.
- 1.5. Communications buddy pole needs removal, service moved to new pole at Lat

36.85019 Long -119.83776, Boy Scout Road, North Fresno (Location 80). PG&E created TPN 124912264 during audit.

- 1.6. There are loose communications riser cables on Wood Pole #A024/214 located at GPS coordinates 40.16584444, -122.2568361 (Location 6).
- 1.7. There is loose communications lashing wire near Wood Pole #005/119 located at GPS coordinates 39.73793333, -122.1972583 (Location 32).
- 1.8. There is an abandoned communications riser cable on Wood Pole #016/276 located at GPS coordinates 39.79676111, -121.9193028 (Location 56).
- 1.9. There is a damaged communications service panel on Wood Pole #013/280 located at GPS coordinates 39.77508889, -121.8772972 (Location 58).
- 1.10. Wood Pole #013/281 located at GPS coordinates 39.77555556, -121.8765028 (Location 59):
 - a. Has loose communications riser cables.
 - b. Has a low communications service drop.