

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



October 16, 2015

EA2015-011

Debra Lloyd
Utilities Compliance Manager
City of Palo Alto Utilities
1007 Elwell Ct
Palo Alto, CA 94303

SUBJECT: Audit of the City of Palo Alto Utilities Department (CPAU)

Dear Ms. Lloyd:

On behalf of the Electric Safety and Reliability Branch (ESRB) of the California Public Utilities Commission, Raymond Cho and Wilson Tsai of my staff conducted an electric audit of CPAU from July 20 to July 23, 2015. The audit included a review of CPAU's records and field inspections of CPAU's facilities.

During the audit, my staff identified violations of one or more General Orders (GOs). A copy of the audit findings itemizing the violations is enclosed. Please advise me no later than November 19, 2015, by electronic or hard copy, of all corrective measures taken by CPAU to remedy and prevent such violations.

If you have any questions concerning this audit please contact Raymond Cho at (415) 703-2236 or raymond.cho@cpuc.ca.gov.

Sincerely,

A handwritten signature in blue ink that reads "Fadi Daye".

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

Enclosure: Audit Findings

Cc: Elizaveta Malashenko, Director, Safety and Enforcement Division
Charlotte TerKeurst, Program Manager, Safety and Enforcement Division, CPUC

AUDIT FINDINGS

Company: City of Palo Alto Utilities Department

Electric Audit

Date: July 20 - 23, 2015

A.	Location:	City of Palo Alto Utilities Department
	Date Visited by CPUC:	7/20/2015 – 7/23/2015
	Explanation of Violation(s):	
	<p><u>Missed Inspection</u></p> <p>GO 165, Section III-B, Standards for Inspection, states:</p> <p style="text-align: center;"><i>Each utility subject to this General Order shall conduct inspections of its distribution facilities, as necessary, to ensure reliable, high quality, and safe operation, but in no case may the period between inspections (measured in years) exceed the time specified in Table 1.</i></p> <p>The following CPAU facilities were not inspected as required by GO 165:</p> <ul style="list-style-type: none"> • 316 overhead poles missed a patrol cycle. • 201 overhead poles missed an inspection cycle. <p>A list of poles that are in violation is included in the Appendix.</p>	

B.	Location:	City of Palo Alto Utilities Department
	Date Visited by CPUC:	7/20/2015 – 7/23/2015
	Explanation of Violation(s):	
	<p><u>Lack of Record Keeping</u></p> <p>GO 165, Section III-C, Record Keeping, states:</p> <p style="text-align: center;"><i>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.</i></p> <p>The City of Palo Alto did not include a scheduled date of corrective action in its inspection records.</p>	

C.	Location:	City of Palo Alto Utilities Department
	Date Visited by CPUC:	7/20/2015 – 7/23/2015
	Explanation of Violation(s):	
	<p data-bbox="250 373 889 407"><u>Lack of Pole Loading Calculation Records</u></p> <p data-bbox="250 447 1162 480">GO 95, Rule 44.1, Installation and Reconstruction, states in part:</p> <p data-bbox="367 520 1273 737"><i>The entity responsible for performing the loading calculation(s) for an installation or reconstruction shall maintain records of these calculations for the service life of the pole or other structure for which the a loading calculation was made and shall provide such information to authorized joint use occupants and the Commission upon request.</i></p> <p data-bbox="250 777 1398 842">The City of Palo Alto did not have records for pole loading calculations done after the rule change effect date, February 5, 2014.</p>	

The following violations were identified during the field inspection of the audit and were not documented and/or addressed by CPAU during its last detailed inspection as required by General Order 165:

D.	Location:	970 Blair Ct.
	Equipment No.:	Pole #4282
	Previous Visit by CPAU:	7/6/15
	Date Visited by CPUC:	7/21/15
Explanation of Violation(s):		
<u>Guy Wire Contact Above Insulator</u>		
GO 95, Rule 56.7-B, Anchor Guys, states in part:		
<p style="text-align: center;"><i>In order to prevent trees, buildings, messengers, metal–sheathed cables or other similar objects from grounding portions of guys above guy insulators, it is suggested that anchor guys be sectionalized, where practicable, near the highest level permitted by this Rule.</i></p>		
Vegetation was in contact with the guy wire above the anchor guy insulator.		

E.	Location:	955 Oregon Ave.
	Equipment No.:	Pole #4288
	Previous Visit by CPAU:	7/6/15
	Date Visited by CPUC:	7/21/15
Explanation of Violation(s):		
<u>Guy Wire Contact Above Insulator</u>		
GO 95, Rule 56.7-B, Anchor Guys, states in part:		
<p style="text-align: center;"><i>In order to prevent trees, buildings, messengers, metal–sheathed cables or other similar objects from grounding portions of guys above guy insulators, it is suggested that anchor guys be sectionalized, where practicable, near the highest level permitted by this Rule.</i></p>		
Vegetation was in contact with the guy wire above the anchor guy insulator.		

F.	Location:	3377 Ross Rd.
	Equipment No.:	Pole #3415
	Previous Visit by CPAU:	4/15/15
	Date Visited by CPUC:	7/23/15
Explanation of Violation(s):		
<p data-bbox="250 554 633 588"><u>Inadequate Safety Factor</u></p> <p data-bbox="250 625 914 659">GO 95, Rule 44.3, Replacement, states in part:</p> <p data-bbox="297 697 1347 911"><i>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 and in Grade "C" construction to less than one-half of the safety factors specified in Rule 44.1.</i></p> <p data-bbox="250 953 1338 1060">GO 95, Rule 44.3 requires poles of Grade A construction to maintain a safety factor of 2.67 or higher. CPAU's pole loading calculation for the existing pole resulted in a safety factor of 0.69.</p>		

G.	Location:	2303 Louis Rd
	Equipment No.:	Pole #4301
	Previous Visit by CPAU:	6/30/15
	Date Visited by CPUC:	7/21/15
Explanation of Violation(s):		
<p><u>Climbing Space Obstruction</u></p> <p>GO 95, Rule 18-B, Notification of Safety Hazards, states in part:</p> <p><i>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 company and/or facility owner of such safety hazard(s) no later than 10 business days after the discovery. To the extent the inspecting company cannot determine the facility owner/operator, it shall contact the pole owner(s), who shall be responsible for promptly notifying the company owning/operating the facility with the safety hazard(s), normally not to exceed five business days after being notified of the safety hazard. The notification shall be documented and such documentation must be preserved by all parties for at least ten years.</i></p> <p>GO 95, Rule 93, Climbing Space, states in part:</p> <p><i>Climbing space shall be provided on all jointly used poles which support conductors and the provisions of Rules 54.7 and 84.7 are directly applicable to such poles. Climbing space on jointly used poles shall be so correlated between conductor levels that its position in relation to the pole is not changed by more than 90 degrees in a vertical distance of less than 8 feet. Climbing space shall be maintained from the ground level.</i></p> <p>The climbing space for Pole #4301 was infringed upon by a communication company. A third-party notification was not sent to the company for correction.</p>		

APPENDIX

Poles that missed Patrols								
0461	0853	0890	1012	1162	4515	5790	6433	7008
0630	0854	0891	1013	1163	4540	5791	6434	7021
0631	0855	0892	1014	1164	4541	5792	6435	7060
0632	0856	0893	1015	1165	4542	5798	6436	7063
0633	0857	0894	1016	1166	4543	5801	6437	7404
0634	0858	0895	1017	1168	5033	5812	6438	7405
0635	0859	0896	1023	1169	5058	5813	6439	7406
0636	0861	0897	1024	1170	5059	5827	6440	7407
0637	0862	0898	1025	1171	5099	5828	6441	7408
0826	0863	0899	1026	1178	5167	5830	6447	7414
0827	0864	0900	1034	1189	5252	5831	6449	7485
0828	0865	0901	1035	1190	5315	5832	6450	7494
0829	0866	0902	1036	1191	5316	5837	6451	7624
0830	0867	0903	1037	1192	5317	5838	6452	
0831	0868	0904	1038	1193	5586	5894	6453	
0832	0869	0905	1046	1195	5591	5904	6454	
0833	0870	0906	1047	1628	5592	5956	6456	
0834	0871	0907	1048	2063	5593	5957	6457	
0835	0872	0908	1049	2064	5686	5964	6458	
0836	0873	0909	1126	2065	5688	5965	6459	
0837	0874	0910	1134	2066	5689	5981	6460	
0838	0875	0911	1135	2067	5690	5982	6461	
0839	0876	0912	1136	2823	5691	5983	6462	
0840	0877	0913	1137	3347	5692	5990	6480	
0841	0878	0914	1138	3674	5693	5991	6481	
0842	0879	0915	1139	3783	5694	5992	6482	
0843	0880	0926	1152	4415	5695	5993	6483	
0844	0881	1002	1153	4424	5697	5994	6485	
0845	0882	1003	1154	4425	5700	5995	6487	
0846	0883	1004	1155	4434	5708	5996	6490	
0847	0884	1005	1156	4495	5709	6036	6498	
0848	0885	1006	1157	4496	5710	6417	6880	
0849	0886	1008	1158	4504	5786	6419	6885	
0850	0887	1009	1159	4505	5787	6420	6910	
0851	0888	1010	1160	4513	5788	6431	6952	
0852	0889	1011	1161	4514	5789	6432	6989	

Poles that missed Inspections					
0280	2434	2509	3179	3226	3340
1515	2435	2518	3180	3227	3343
1623	2436	2520	3181	3228	3344
1624	2437	2596	3182	3233	3345
1625	2438	2635	3183	3234	3346
1626	2439	2667	3184	3235	3348
1627	2440	2682	3185	3236	3349
1629	2441	2683	3186	3237	3350
1631	2442	2684	3187	3238	3351
1632	2443	2685	3188	3239	3352
1633	2444	2686	3189	3240	3433
1634	2445	2687	3190	3241	3794
1663	2446	2688	3192	3242	3828
1764	2447	2689	3193	3243	3842
1768	2448	2865	3194	3244	3843
1926	2453	2885	3195	3245	3844
1944	2454	3145	3196	3279	3869
2073	2455	3146	3197	3280	3870
2219	2457	3147	3198	3281	3898
2411	2458	3148	3199	3282	3902
2412	2459	3149	3200	3283	3910
2413	2460	3150	3201	3297	3926
2415	2461	3151	3209	3298	3949
2416	2462	3152	3210	3299	3996
2420	2463	3156	3211	3314	4894
2421	2464	3164	3212	3325	6697
2422	2465	3165	3214	3327	
2423	2466	3166	3215	3328	
2424	2467	3167	3216	3329	
2425	2468	3168	3217	3330	
2426	2469	3169	3218	3331	
2427	2470	3170	3219	3332	
2428	2471	3171	3220	3333	
2429	2472	3174	3221	3334	
2430	2493	3175	3222	3335	
2431	2494	3176	3223	3336	
2432	2495	3177	3224	3337	
2433	2496	3178	3225	3339	