

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



October 4, 2013

EA2013-014

Jadwindar Singh
Manager, Distribution Compliance
Pacific Gas and Electric Company
245 Market St, #926
San Francisco, CA 94105

SUBJECT: Audit of PG&E's Stockton Division

Dear Mr. Singh:

On behalf of the Electric Safety and Reliability Branch (ESRB) of the California Public Utilities Commission, Ivan Garcia, and Raymond Cho of my staff conducted an electric audit of PG&E's Stockton Division from July 22-26, 2013. The audit included a review of PG&E's records and field inspections of PG&E's facilities.

During the audit, we identified violations of one or more General Orders. A copy of the audit summary itemizing the violations is enclosed. Please advise me no later than November 15, 2013 by electronic or hard copy, of all corrective measures taken by PG&E to remedy and prevent such violations.

If you have any questions concerning this audit please contact Ivan Garcia at (916) 928-5875 or ivan.garcia@cpuc.ca.gov.

Sincerely,

A handwritten signature in dark ink, appearing to read "Raymond Fugere".

Raymond Fugere, P.E.
Program and Project Supervisor
Electric Safety and Reliability Branch
Safety and Enforcement Division

Enclosure: Audit Summary

CC: Elizaveta Malashenko, Deputy Director, Safety and Enforcement Division
Raymond Cho, Utilities Engineer, CPUC
Ivan Garcia, Utilities Engineer, CPUC
Curtis Todd Ryan, Supervisor, PG&E Gas & Electric

AUDIT SUMMARY

Company: PG&E –Stockton Division

Electric Audit

Date: July 22 to July 26, 2013

Violations

A.	Location:	PG&E –Stockton Division
	Date Visited by CPUC:	7/22/2013-7/26/2013
	Explanation of Violation(s):	
	<u>GO 165, Section III-B, – Standards for Inspection, states:</u>	
	<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>A pre-audit data request response indicated that the following facilities in 2009 were not patrolled as required by GO 165:</p> <ul style="list-style-type: none"> • 6 facilities on the 2009 Overhead Patrol of Map H22 • 82 facilities on the 2009 Overhead Patrol of Map H23 • 41 facilities on the 2009 Overhead Patrol of Map I219 • 96 facilities on the 2009 Overhead Patrol of Map I221 • 425 facilities on the 2009 Overhead Patrol of Map I222 • 331 facilities on the 2009 Overhead Patrol of Map I223 • 187 facilities on the 2009 Overhead Patrol of Map I224 • 105 facilities on the 2009 Overhead Patrol of Map I22402 • 37 facilities on the 2009 Overhead Patrol of Map I22403 • 32 facilities on the 2009 Overhead Patrol of Map I22407 • 10 facilities on the 2009 Overhead Patrol of Map I22408 <p>The pre-audit data response Q8b indicated that the following number of maps had issues and didn't meet the requirements of GO 165.</p> <ul style="list-style-type: none"> • 25 overhead maps were noted. • 90 underground maps were noted. 	

B.	Location:	PG&E –Stockton Division																												
	Date Visited by CPUC:	7/22/2013-7/26/2013																												
	Explanation of Violation(s):																													
	<u>GO 165, Section III-B, – Standards for Inspection, states:</u>																													
	<p><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>We found several missing and/or late patrol and inspection maps to PG&E's Overhead and Underground Master Patrols and Inspections (P&I) List. The following GO 165 violations are listed in the tables below.</p>																													
	<table border="1"> <thead> <tr> <th colspan="2" data-bbox="235 787 1425 850">Overhead Patrols</th> </tr> <tr> <th data-bbox="235 850 803 892">Map</th> <th data-bbox="803 850 1425 892">Finding</th> </tr> </thead> <tbody> <tr><td data-bbox="235 892 803 934">P21805</td><td data-bbox="803 892 1425 934">Missing 2011 Patrol</td></tr> <tr><td data-bbox="235 934 803 976">S1016</td><td data-bbox="803 934 1425 976">Missing 2010 Patrol</td></tr> <tr><td data-bbox="235 976 803 1018">S22</td><td data-bbox="803 976 1425 1018">Missing 2011 Patrol</td></tr> <tr><td data-bbox="235 1018 803 1060">U0809</td><td data-bbox="803 1018 1425 1060">Missing 2010 Patrol</td></tr> <tr><td data-bbox="235 1060 803 1102">U0810</td><td data-bbox="803 1060 1425 1102">Missing 2010 Patrol</td></tr> <tr><td data-bbox="235 1102 803 1144">U2505</td><td data-bbox="803 1102 1425 1144">Missing 2011 Patrol</td></tr> <tr><td data-bbox="235 1144 803 1186">V1123</td><td data-bbox="803 1144 1425 1186">Missing 2009 Patrol</td></tr> <tr><td data-bbox="235 1186 803 1228">V1223</td><td data-bbox="803 1186 1425 1228">Missing 2009 Patrol</td></tr> <tr><td data-bbox="235 1228 803 1270">V1225</td><td data-bbox="803 1228 1425 1270">Missing 2009 Patrol</td></tr> <tr><td data-bbox="235 1270 803 1312">V28</td><td data-bbox="803 1270 1425 1312">Missing 2010 Patrol</td></tr> <tr><td data-bbox="235 1312 803 1354">Y1423</td><td data-bbox="803 1312 1425 1354">Missing 2007 Patrol</td></tr> <tr><td data-bbox="235 1354 803 1396">Q1320</td><td data-bbox="803 1354 1425 1396">Missing 2007 Patrol</td></tr> </tbody> </table>		Overhead Patrols		Map	Finding	P21805	Missing 2011 Patrol	S1016	Missing 2010 Patrol	S22	Missing 2011 Patrol	U0809	Missing 2010 Patrol	U0810	Missing 2010 Patrol	U2505	Missing 2011 Patrol	V1123	Missing 2009 Patrol	V1223	Missing 2009 Patrol	V1225	Missing 2009 Patrol	V28	Missing 2010 Patrol	Y1423	Missing 2007 Patrol	Q1320	Missing 2007 Patrol
Overhead Patrols																														
Map	Finding																													
P21805	Missing 2011 Patrol																													
S1016	Missing 2010 Patrol																													
S22	Missing 2011 Patrol																													
U0809	Missing 2010 Patrol																													
U0810	Missing 2010 Patrol																													
U2505	Missing 2011 Patrol																													
V1123	Missing 2009 Patrol																													
V1223	Missing 2009 Patrol																													
V1225	Missing 2009 Patrol																													
V28	Missing 2010 Patrol																													
Y1423	Missing 2007 Patrol																													
Q1320	Missing 2007 Patrol																													
	<table border="1"> <thead> <tr> <th colspan="2" data-bbox="235 1396 1425 1501">Overhead Inspections</th> </tr> <tr> <th data-bbox="235 1501 803 1543">Map</th> <th data-bbox="803 1501 1425 1543">Finding</th> </tr> </thead> <tbody> <tr><td data-bbox="235 1543 803 1585">P21011</td><td data-bbox="803 1543 1425 1585">Missing 2010 Inspection</td></tr> <tr><td data-bbox="235 1585 803 1627">R1915</td><td data-bbox="803 1585 1425 1627">Missing/Late 2012 Inspection</td></tr> <tr><td data-bbox="235 1627 803 1669">R2011</td><td data-bbox="803 1627 1425 1669">Missing/Late 2012 Inspection</td></tr> <tr><td data-bbox="235 1669 803 1711">S1204</td><td data-bbox="803 1669 1425 1711">Missing 2008 Inspection</td></tr> <tr><td data-bbox="235 1711 803 1753">U0804</td><td data-bbox="803 1711 1425 1753">Missing 2009 Inspection</td></tr> <tr><td data-bbox="235 1753 803 1795">Q1320</td><td data-bbox="803 1753 1425 1795">Missing 2007 Patrol</td></tr> </tbody> </table>		Overhead Inspections		Map	Finding	P21011	Missing 2010 Inspection	R1915	Missing/Late 2012 Inspection	R2011	Missing/Late 2012 Inspection	S1204	Missing 2008 Inspection	U0804	Missing 2009 Inspection	Q1320	Missing 2007 Patrol												
Overhead Inspections																														
Map	Finding																													
P21011	Missing 2010 Inspection																													
R1915	Missing/Late 2012 Inspection																													
R2011	Missing/Late 2012 Inspection																													
S1204	Missing 2008 Inspection																													
U0804	Missing 2009 Inspection																													
Q1320	Missing 2007 Patrol																													

Underground Patrols	
Map	Finding
A2	Missing 2009 Patrol
E4	Missing 2009 Patrol
G2	Missing 2009 Patrol
G3	Missing 2009/2010 Patrol
G4	Missing 2009/2010 Patrol
H3	Missing 2009/2010 Patrol
I2	Missing 2009 Patrol
J227	Missing 2011 Patrol
K220	Missing 2011 Patrol
S1114	Missing 2010 Patrol
U0804	Missing 2008 Patrol
U2520	Missing 2011 Patrol
V1123	Missing 2009 Patrol
V1321	Missing 2010 Patrol
V2711	Missing 2010 Patrol
Y02	Missing 2011 Patrol
Y04	Missing 2011 Patrol
Y1323	Missing 2010 Patrol
Z0701	Missing 2008 Patrol
Z0702	Missing 2008 Patrol
Z0703	Missing 2008 Patrol
Z0704	Missing 2008 Patrol
Z0705	Missing 2008 Patrol
Z0706	Missing 2008 Patrol
Z0707	Missing 2008 Patrol
Z0708	Missing 2008 Patrol
Z0709	Missing 2008 Patrol
Z0710	Missing 2008 Patrol
Z0806	Missing 2011 Patrol
S0824	Missing 2008 Patrol
C02	Missing 2010 Patrol
Q21	Missing 2008 Patrol
R1122	Missing 2008 Patrol

Underground Inspections	
Map	Finding
AA0609	Missing 2008 Inspection
D2	Missing 2008 Inspection
D3	Missing 2008 Inspection
E3	Missing 2008 Inspection
F1	Missing 2008 Inspection
F2	Missing 2008 Inspection
F3	Missing 2008 Inspection
F4	Missing 2008 Inspection
F5	Missing 2008 Inspection
F6	Missing 2008 Inspection
G1	Missing 2008 Inspection
G3	Late 2010 Inspection
G4	Late 2010 Inspection
G6	Missing 2008 Inspection
H1	Missing 2008 Inspection
H2	Missing 2008 Inspection
H4	Missing 2008 Inspection
H5	Missing 2008 Inspection
H6	Missing 2008 Inspection
I3	Missing 2008 Inspection
J337	Late/Missing 2006 Inspection
L1	Missing 2008 Inspection
P31520	Late/Missing 2007 Inspection
S1024	Missing 2009 Inspection
S1025	Missing 2009 Inspection
T12	Missing 2011 Inspection
U14	Missing 2008 Inspection
Y1113	Missing 2009 Inspection
Y1220	Late 2008 Inspection
Y1224	Missing/Late 2006 Inspection
Y1225	Missing/Late 2006 Inspection
Y1305	Missing/Late 2008 Inspection
Z0714	Missing/Late 2006 Inspection
Z0806	Missing/Late 2008 Inspection
Z1507	Missing/Late 2008 Inspection

C.	Location:	PG&E – Stockton Division
	Date Visited by CPUC:	7/22/2013-7/26/2013
	Explanation of Violation(s):	
	<p><u>GO 165, Section III-C, – Record Keeping, states in part:</u></p> <p><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>12,021 work orders, from January 2008 to July 17, 2013, were completed past their scheduled date of corrective action. Furthermore, 798 work orders are currently open past their scheduled date of corrective action.</p>	

D.	Location:	PG&E – Stockton Division
	Date Visited by CPUC:	7/22/2013-7/26/2013
	Explanation of Violation(s):	
	<p data-bbox="250 464 1081 499"><u>GO 165, Section III-C, – Record Keeping, states in part:</u></p> <p data-bbox="347 535 1305 680"><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 data-bbox="250 718 1409 863">PG&E does not document all items requiring corrective action during an inspection. Specifically, PG&E staff does not document minor work. PG&E staff only marks a tally mark indicating minor work, and does not specify the equipment identified for corrective action in the tally marks.</p>	

E.	Location:	PG&E – Stockton Division
	Date Visited by CPUC:	7/22/2013-7/26/2013
	Explanation of Violation(s):	
	<p data-bbox="250 428 1284 495"><u>GO 95, Rule 31.1, – Design, Construction and Maintenance, states in part:</u></p> <p data-bbox="347 533 1312 716"><i>“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.”</i></p> <p data-bbox="258 753 1292 932">PG&E UO Standard S2303 describes equipment testing intervals for capacitor banks, SCADA equipment, and reclosers. This equipment must be tested on a yearly interval. The following equipment were tested late according to PG&E UO Standard S2303 and thus in violation of GO 95, Rule 31.1.</p> <ul data-bbox="298 978 1227 1205" style="list-style-type: none"> • Capacitor Bank, C1222 was missing a 2011 equipment test • SCADA equipment, R123 was missing a 2011 equipment test • Capacitor Bank, C1391 was missing a 2012 equipment test • Capacitor Bank, C1393 was missing a 2012 equipment test • SCADA equipment, 82644 was missing a 2012 equipment test • Recloser, 6122 was missing a 2012 equipment test 	

The following are violations that SED engineers discovered during the field audit and were not documented and addressed by PG&E during its last detailed inspection as required by General Order 165:

F.	Location:	1774 Huerto Place, Manteca
	Transformer No.:	T16410
	Previous Visit by Utility:	Underground Patrol Map Y1317 Completed 5/17/13
	Date Visited by CPUC:	7/24/13
Explanation of Violation(s):		
<p><u>Underground Vault Enclosure Mislabeled</u></p> <p>GO 128, Rule 17.8, Identification of Manholes, Handholes, Subsurface and Self-contained Surface-mounted Equipment Enclosures, states:</p> <p style="text-align: center;"><i>“Manholes, handholes, subsurface and self-contained surface-mounted equipment enclosures shall be marked as to ownership to facilitate identification by persons authorized to work therein and by other persons performing work in their vicinity.”</i></p> <p>At this location, PG&E had the incorrect transformer identification number labeled on the underground vault enclosure. The number “T16410” was found on the field and the number “T16416” was what PG&E identified the transformer on the map Y1317.</p>		

G.	Location:	7894 Zilli Dr., Tracy
	Equipment No:	T16445
	Previous Visit by Utility:	Underground Inspection Map AA0720 Completed 3/8/2013
	Date Visited by CPUC:	7/24/2013
Explanation of Violation(s):		
<p data-bbox="250 590 786 625"><u>Padmount Transformer Not Inspected</u></p> <p data-bbox="250 663 1057 699">GO 165, Section III-B, – Standards for Inspection, states:</p> <p data-bbox="367 737 1273 915"><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 data-bbox="250 955 1325 1060">At this location, PG&E Padmount Transformer T16445 was not found on the Underground Inspection Map AA0720 and was not inspected during the underground inspection on 3/8/2013.</p>		

H.	Location:	3rd pole north corner of State Route 120 and Austin Rd., Manteca
	Pole No:	#1217967
	Previous Visit by Utility:	Overhead Inspection Map Y1308 Completed 3/4/2013
	Date Visited by CPUC:	7/25/2013
Explanation of Violation(s):		
<p data-bbox="250 663 565 697"><u>Exposed Ground Wire</u></p> <p data-bbox="344 739 1026 772">GO95, Rule 54.6B, Ground Wires, states in part:</p> <p data-bbox="344 814 1221 882"><i>“Ground Wires of supply circuits must be protected by suitable covering and be in good repair throughout their length.”</i></p> <p data-bbox="250 924 1399 991">At this location, the ground wire was exposed at approximately 3 ft. from the base of the pole.</p>		

I.	Location:	17785 Austin Rd., Manteca
	Pole No:	N/A
	Previous Visit by Utility:	Overhead Inspection Map Y1308 Completed 3/4/2013
	Date Visited by CPUC:	7/25/2013
	Explanation of Violation(s):	
	<p data-bbox="250 663 565 697"><u>Exposed Ground Wire</u></p> <p data-bbox="344 739 1026 772">GO95, Rule 54.6B, Ground Wires, states in part:</p> <p data-bbox="344 814 1221 882"><i>“Ground Wires of supply circuits must be protected by suitable covering and be in good repair throughout their length.”</i></p> <p data-bbox="250 924 1416 991">At this location, the ground wire was exposed at approximately 20 ft. from the base of the pole.</p>	

J.	Location:	136 N. Acacia Ave., Ripon
	Pole No:	N/A
	Previous Visit by Utility:	Overhead Inspection Map Z1420 Completed 3/11/2013
	Date Visited by CPUC:	7/25/2013
	Explanation of Violation(s):	
	<p data-bbox="250 680 565 716"><u>Exposed Ground Wire</u></p> <p data-bbox="344 753 1026 789">GO95, Rule 54.6B, Ground Wires, states in part:</p> <p data-bbox="344 827 1224 898"><i>“Ground Wires of supply circuits must be protected by suitable covering and be in good repair throughout their length.”</i></p> <p data-bbox="250 936 1224 972">At this location, the ground wire was exposed at the base of the pole.</p>	
	<p data-bbox="250 1050 613 1085"><u>High Voltage Sign Broken</u></p> <p data-bbox="344 1123 1260 1159">GO95, Rule 51.6A, High Voltage Marking of Poles, states in part:</p> <p data-bbox="344 1197 1308 1344"><i>“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”, not more than six (6) inches in height with letters not less than 3 inches in height.”</i></p> <p data-bbox="250 1381 1010 1417">At this pole, the “Voltage” part of the sign was broken.</p>	

K.	Location:	323 Pine St., Ripon
	Pole No:	N/A
	Previous Visit by Utility:	Overhead Inspection Map Z1420 Completed 3/11/2013
	Date Visited by CPUC:	7/25/2013
Explanation of Violation(s):		
<p data-bbox="250 611 565 642"><u>Exposed Ground Wire</u></p> <p data-bbox="345 682 1027 714">GO95, Rule 54.6B, Ground Wires, states in part:</p> <p data-bbox="345 753 1224 827"><i>“Ground Wires of supply circuits must be protected by suitable covering and be in good repair throughout their length.”</i></p> <p data-bbox="250 867 1382 972">At this pole, the ground wire was exposed at two locations. One location at approximately 15 inches from the base of the pole. The second location was at approximately 7 feet from the base of the pole.</p>		

L.	Location:	22808 S. Highland Ave., Ripon
	Pole No:	N/A
	Previous Visit by Utility:	EC Notification 106853901 Completed 6/19/2013
	Date Visited by CPUC:	7/25/2013
	Explanation of Violation(s):	
	<p data-bbox="250 625 565 659"><u>Exposed Ground Wire</u></p> <p data-bbox="344 701 1026 735">GO95, Rule 54.6B, Ground Wires, states in part:</p> <p data-bbox="344 772 1221 844"><i>“Ground Wires of supply circuits must be protected by suitable covering and be in good repair throughout their length.”</i></p> <p data-bbox="250 886 1399 957">At this location, the ground wire was exposed at approximately 2 ft. from the base of the pole.</p>	

M.	Location:	14856 W. Grant Line, Tracy
	Pole No:	N/A
	Previous Visit by Utility:	Overhead Inspection Map Z05 Completed 2/22/2013
	Date Visited by CPUC:	7/25/2013
Explanation of Violation(s):		
<p><u>Primary Conductor Guy Grounded By Tree Branch</u></p> <p>GO 95, Rule 56.6, Requirements for Sectionalizing With Insulators, states:</p> <p><i>All portions of guys within both a vertical distance of 8 feet from the level of supply conductors of less than 35,500 volts and a radial distance of 6 feet from the surface of wood poles or structures shall not be grounded, through anchors or otherwise. Where necessary to avoid the grounding of such portions, guys shall be sectionalized by means of insulators installed at locations as specified in Rule 56.7.</i></p> <p>At this pole, the tree branch was in contact with the down guy above the insulator bob.</p>		

N.	Location:	6 th pole across 15550 W. Grant Line Road, Tracy
	Pole No:	N/A
	Previous Visit by Utility:	Overhead Inspection Map Z05 Completed 2/22/2013
	Date Visited by CPUC:	7/25/2013
Explanation of Violation(s):		
<p data-bbox="250 590 618 625"><u>High Voltage Sign Broken</u></p> <p data-bbox="344 663 1263 699">GO95, Rule 51.6A, High Voltage Marking of Poles, states in part:</p> <p data-bbox="344 737 1312 884"><i>“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”, not more than six (6) inches in height with letters not less than 3 inches in height.”</i></p> <p data-bbox="250 921 1295 989">At this pole, the words “HIGH VOLTAGE” were missing on one side of the crossarm.</p>		