

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



April 25, 2014

EA2013-018

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

SUBJECT: Audit of PG&E's De Anza Division

Dear Mr. Singh:

On behalf of the Electric Safety and Reliability Branch (ESRB) of the California Public Utilities Commission, Jamie Lau, Raymond Cho and Ryan Yamamoto of my staff conducted an electric audit of PG&E's De Anza Division from October 28 to November 1, 2013. The audit included a review of PG&E's records and field inspections of PG&E's facilities.

During the audit, my staff 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 June 6, 2014 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, Jamie Lau at (415) 703-2233 or jamie.lau@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: Ryan Yamamoto, Senior Utilities Engineer, CPUC
Jamie Lau, Utilities Engineer, CPUC
Raymond Cho, Utilities Engineer, CPUC
Elizaveta Malashenko, Deputy Director, Safety and Enforcement Division

AUDIT SUMMARY

Company: PG&E – De Anza Division
Electric Audit
Date: October 28 to November 1, 2013

Violations

A.	Location:	1093 Reed Ave, Sunnyvale
	Transformer No.:	T-3763
	Previous Visit by Utility:	Notification # 107082769 (Late Tag) and Notification # 107162301 by PG&E's Local Electric Department Completed 9/27/2013
	Date Visited by CPUC:	10/30/13
Explanation of Violation(s):		
<p>Summary of Findings: At this location, an emergency notification was incomplete and past due eleven weeks. Furthermore, the notification was marked as "completed" when not. Lastly, the utility neglected multiple customer complaints on the incomplete work.</p> <p><u>Inadequate Maintenance</u></p> <p>GO 128, Rule 12.2, Maintenance, states in part:</p> <p style="padding-left: 40px;"><i>"Systems shall be maintained in such condition as to secure safety to workmen and the public in general. Systems and portions thereof constructed, reconstructed, or replaced on or after the effective date of these rules shall be kept in conformity with the requirement of these rules."</i></p> <p>PG&E, Electric Distribution Preventative Maintenance Manual, Documenting and Prioritizing Conditions, states in part:</p> <p style="padding-left: 40px;"><i>"Priority A – Safety / Emergency Immediate Response An emergency is defined as any activity in response to an outage to customer(s) or an unsafe condition requiring immediate response/standby to protect the public."</i></p> <p>PG&E EC Notification #107082769 dated 8/14/2013 indicated an underground transformer had exposed cables and elbows. The work order was assigned a "Priority A" with next-day completion but was only partially completed on 9/26/2013. The work was completed on 10/30/2013.</p>		

PG&E failed to comply with its own guideline by not providing immediate corrective action to this condition as required by its own procedures.

Incomplete Construction

GO 128, Rule 17.1, Design, Construction and Maintenance, states in part:

“All work performed on public streets and highways shall be done in such a manner that the operations of other utilities and the convenience of the public will be interfered with as little as possible and no conditions unusually dangerous to workmen, pedestrians or others shall be established at any time.”

At the same location, EC Notification #107162301 indicates the enclosure replacement work was "completed" on 9/27/2013 and the work package was closed out on 10/22/2013. On 10/30/2013, the replaced enclosure was not properly backfilled, leaving the sides of the enclosure exposed and was loosely protected by wooden piles, which could be easily lifted up. Furthermore, an abandoned 17"x 30" concrete enclosure frame placed adjacent to the wooden piles. The incomplete construction work poses a safety hazard and inconvenience to public. The location was posted with a few orange traffic cones and delineated with a red "danger" tape as a safety warning; it does not provide adequate protection from public encroachment. Furthermore, PG&E's records indicate that children frequent the location, as EC Notification #107082769 noted "children toys around enclosure".

Improper Closing EC Notification

GO 128, Rule 17.1, Design, Construction and Maintenance, states in part:

“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 [the] communication or supply lines and equipment.”

PG&E, Electric Distribution Preventative Maintenance Manual, Closing EC Notifications, states in part:

“No EC Notification can be closed until all the identified maintenance conditions on the notification have been addressed and/or the facilities are in a safe and reliable condition that will not require action before the next inspection.”

EC Notification #107082769 indicates the work package was "completed" and closed out on 10/22/2013, but the required civil work was not finished on

10/30/2013. The utility failed to address all issues before closing an EC notification as required by its own practice guideline.

Negligent to Customer's Complaint Related to Public Safety and Convenience

Public Utilities Code 451, states in part:

“Every public utility shall furnish and maintain such adequate, efficient, just, and reasonable service, instrumentalities, equipment, and facilities, including telephone facilities, as defined in Section 54.1 of the Civil Code, as are necessary to promote the safety, health, comfort, and convenience of its patrons, employees, and the public.”

A customer named Bill Fitzpatrick, during the field visit stated he and another customer contacted PG&E in the past five weeks concerning this location and never received a follow-up response. PG&E did not take any action in response to the customers' complaints.

PG&E is in violation of General Order 128 Rules 12.2 and 17.1 and Public Utilities Code Section 451 for the actions and inactions taken at this location.

B.	Location:	10683 N. Stelling Rd., Cupertino
	Pole No:	5381
	Previous Visit by Utility:	Open EC Notification #107050089 Last Visited 7/27/2013
	Date Visited by CPUC:	11/1/2013
Explanation of Violation(s):		
<p data-bbox="250 663 1260 697"><u>Burned Riser at a High-Voltage Circuit with Open Past Due Work Order</u></p> <p data-bbox="250 739 906 772">GO 95, Rule 31.1, Maintenance, states in part:</p> <p data-bbox="344 814 1308 991"><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="250 1033 1130 1100">PG&E, Electric Distribution Preventative Maintenance Manual, Documenting and Prioritizing Conditions, states in part:</p> <p data-bbox="344 1142 1302 1285"><i>“Priority A – Safety / Emergency Immediate Response An emergency is defined as any activity in response to an outage to customer(s) or an unsafe condition requiring immediate response/standby to protect the public.”</i></p> <p data-bbox="250 1327 1390 1537">At this location, PG&E has an open EC notification for an emergency burned pothead repair. The work order was assigned Priority A with required end date of 8/2/2013. The emergency priority work was approximately 17 weeks overdue. A damaged riser termination may cause overhead failure and eventually an outage to the public. PG&E did not comply with its own maintenance guideline on responding to an emergency work order.</p>		

C.	Location:	PG&E – De Anza Division
	Date Visited by CPUC:	10/28/2013-11/1/2013
	Explanation of Violation(s):	
	<p data-bbox="250 472 578 506"><u>Incomplete Inspections</u></p> <p data-bbox="250 543 1055 577">GO 165, Section III-B, – Standards for Inspection, states:</p> <p data-bbox="367 617 1273 798"><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="250 837 1406 909">The pre-audit data request response Q8a indicated that two underground facilities were not inspected in 2012 as required by GO 165.</p> <p data-bbox="250 949 1373 1020">The pre-audit data request response Q8b indicated that the following number of maps had issues and didn’t meet the requirements of GO 165:</p> <ul data-bbox="300 1060 857 1134" style="list-style-type: none"> <li data-bbox="300 1060 781 1094">• One overhead map was noted. <li data-bbox="300 1098 857 1134">• Five underground maps were noted. 	

D.	Location:	PG&E – De Anza Division
	Date Visited by CPUC:	10/28/2013-11/1/2013
	Explanation of Violation(s):	
	<p data-bbox="250 531 574 562"><u>Past-Due Work Orders</u></p> <p data-bbox="250 604 1036 636">GO 165, Section III-C, – Record Keeping, states in part:</p> <p data-bbox="347 678 1305 825"><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="250 867 1398 972">4350 work orders, from January 2008 to September 16, 2013, were completed past their scheduled date of corrective action. Furthermore, 1055 work orders are currently open past their scheduled date of corrective action.</p>	

E.	Location:	PG&E – De Anza Division																																										
	Date Visited by CPUC:	10/28/13-11/1/13																																										
	Explanation of Violation(s):																																											
	<p data-bbox="250 413 1078 447"><u>Inconsistent Scheduled End Dates with Assigned Priorities</u></p> <p data-bbox="250 455 1276 489">GO 95, Rule 31.1, Design, Construction and Maintenance, states in part:</p> <p data-bbox="370 539 1273 737"><i>“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.</i></p> <p data-bbox="370 791 1252 1031"><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="250 1085 1398 1161">A list of overdue pending and completed late Critical Operating Equipment (COE) work orders we found during our programmatic audit:</p> <table border="1" data-bbox="399 1207 1273 1673"> <thead> <tr> <th data-bbox="399 1207 688 1241">Work Order #</th> <th data-bbox="688 1207 980 1241">Required End Date</th> <th data-bbox="980 1207 1273 1241">Completion Date</th> </tr> </thead> <tbody> <tr><td data-bbox="399 1241 688 1274">106089493</td><td data-bbox="688 1241 980 1274">7/17/2012</td><td data-bbox="980 1241 1273 1274">5/19/2013</td></tr> <tr><td data-bbox="399 1274 688 1308">106152576</td><td data-bbox="688 1274 980 1308">4/30/2013</td><td data-bbox="980 1274 1273 1308">5/22/2013</td></tr> <tr><td data-bbox="399 1308 688 1341">106148051</td><td data-bbox="688 1308 980 1341">4/30/2013</td><td data-bbox="980 1308 1273 1341">5/9/2013</td></tr> <tr><td data-bbox="399 1341 688 1375">107114905</td><td data-bbox="688 1341 980 1375">12/2/2013</td><td data-bbox="980 1341 1273 1375">Not Completed</td></tr> <tr><td data-bbox="399 1375 688 1409">105289745</td><td data-bbox="688 1375 980 1409">1/8/2011</td><td data-bbox="980 1375 1273 1409">Not Completed</td></tr> <tr><td data-bbox="399 1409 688 1442">106068374</td><td data-bbox="688 1409 980 1442">8/1/2012</td><td data-bbox="980 1409 1273 1442">Not Completed</td></tr> <tr><td data-bbox="399 1442 688 1476">105308104</td><td data-bbox="688 1442 980 1476">9/12/2011</td><td data-bbox="980 1442 1273 1476">1/24/2013</td></tr> <tr><td data-bbox="399 1476 688 1509">105308105</td><td data-bbox="688 1476 980 1509">9/12/2011</td><td data-bbox="980 1476 1273 1509">1/30/2013</td></tr> <tr><td data-bbox="399 1509 688 1543">105290086</td><td data-bbox="688 1509 980 1543">5/28/2011</td><td data-bbox="980 1509 1273 1543">2/5/2013</td></tr> <tr><td data-bbox="399 1543 688 1577">105289716</td><td data-bbox="688 1543 980 1577">10/7/2010</td><td data-bbox="980 1543 1273 1577">8/14/2012</td></tr> <tr><td data-bbox="399 1577 688 1610">105422101</td><td data-bbox="688 1577 980 1610">12/6/2011</td><td data-bbox="980 1577 1273 1610">12/4/2012</td></tr> <tr><td data-bbox="399 1610 688 1644">105489926</td><td data-bbox="688 1610 980 1644">1/31/2012</td><td data-bbox="980 1610 1273 1644">2/16/2012</td></tr> <tr><td data-bbox="399 1644 688 1677">105914282</td><td data-bbox="688 1644 980 1677">5/5/2012</td><td data-bbox="980 1644 1273 1677">6/13/2012</td></tr> </tbody> </table> <p data-bbox="250 1682 1417 1871">We also found 13 overdue pending or completed late COE work orders. Out of the 13 tags, 9 of them were given scheduled end-dates that are not consistent with the required end-dates of the assigned priorities. For instance, COE tag #105914282 was assigned priority “B” with 30 days completion, but the test was scheduled to be completed in 90 days.</p>		Work Order #	Required End Date	Completion Date	106089493	7/17/2012	5/19/2013	106152576	4/30/2013	5/22/2013	106148051	4/30/2013	5/9/2013	107114905	12/2/2013	Not Completed	105289745	1/8/2011	Not Completed	106068374	8/1/2012	Not Completed	105308104	9/12/2011	1/24/2013	105308105	9/12/2011	1/30/2013	105290086	5/28/2011	2/5/2013	105289716	10/7/2010	8/14/2012	105422101	12/6/2011	12/4/2012	105489926	1/31/2012	2/16/2012	105914282	5/5/2012	6/13/2012
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Violations Related to GO 165

The following violations were discovered by ESRB engineers 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:	461 King Ct., Campbell
	Pole No.:	N/A
	Previous Visit by Utility:	Overhead Inspection Map H1514 Last Visited 9/25/2013
	Date Visited by CPUC:	10/31/13
Explanation of Violation(s):		
<p><u>Tree Contact Above Insulator On Anchor Guy</u> GO 95, Rule 56.7-B, Location of Sectionalizing Insulators, states in part:</p> <p style="padding-left: 40px;"><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> <p>GO 95, Rule 31.1, Maintenance, states in part:</p> <p style="padding-left: 40px;"><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>PG&E, Electric Distribution Preventative Maintenance Manual 2008, Documenting and Prioritizing Conditions, states in part:</p> <p style="padding-left: 40px;"><i>“The allowable time period for:</i></p> <ul style="list-style-type: none"> • <i>Overhead facility repairs will be between 0–36 months.”</i> <p>PG&E, Electric Distribution Preventative Maintenance Manual 2008, Closing EC Notifications, states in part:</p> <p style="padding-left: 40px;"><i>“No EC notification can be closed until all the identified maintenance conditions on the notification have been addressed and/or the facilities are in a safe and reliable condition that will not require action before the next inspection.”</i></p>		

In 2008, PG&E's Compliance staff noticed a tree contact above the guy insulator at this location. The staff documented the condition and issued a work order for corrective action (EC Notification #10325046). The work order was forwarded to the Vegetation department. However, the work order was improperly closed by the Vegetation, without conducting the work.

The condition was again noted by the Compliance staff in 2013.

According to PG&E's 2008 maintenance guideline, no EC notification can be cancelled or closed until all maintenance conditions have been resolved.

We found the utility failed to address all issues before closing an EC notification as required by its own practice guideline. This is a violation of GO 128's requirement for utility to follow its accepted good practice.

G.	Location:	290 Llewellyn Ave., Campbell
	Pole No:	N/A
	Previous Visit by Utility:	Overhead Inspection Map H1514 Completed 9/26/13
	Date Visited by CPUC:	10/31/13
Explanation of Violation(s):		
<p><u>Damaged V-Strips</u></p> <p>GO 95, Rule 31.1, Design, Construction and Maintenance, states in part:</p> <p><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>PG&E, Electric Distribution Preventative Maintenance Manual, Closing EC Notifications, states in part:</p> <p><i>“... The crew should also repair minor/incidental maintenance conditions (that may not have been recorded on the notification) at the jobsite. Examples of these conditions include the following:</i></p> <ul style="list-style-type: none"> <i>- Missing or illegible high voltage signs</i> <i>- Missing or damaged visibility strips...”</i> <p>At this location, PG&E’s pole exhibited a damaged visibility strip. This condition was not documented in the inspection completed on 9/26/13.</p> <p><u>Impeded Climbing Space</u></p> <p>GO 95, Rule 54.7-A1, Climbing and Working Space, states in part:</p> <p><i>Climbing space shall be maintained from the ground level. Climbing space, measured from center line of pole, shall be provided on one side or in one quadrant of all poles or structures ...</i></p> <p>At this location, PG&E’s pole exhibited a high bush surrounding the entire surface of the pole. This condition was not documented in the inspection completed on 9/26/13.</p>		

H.	Location:	400 Llewellyn Ave., Campbell
	Pole No:	N/A
	Previous Visit by Utility:	Overhead Inspection Map H1514 Completed 9/26/2013
	Date Visited by CPUC:	10/31/2013
Explanation of Violation(s):		
<p data-bbox="250 663 623 699"><u>Missing High Voltage Sign</u></p> <p data-bbox="250 737 1187 772">GO 95, Rule 51.6-A, High Voltage Marking of Poles, states in part:</p> <p data-bbox="344 810 1297 884"><i>Poles which support line conductors of more than 750 volts shall be marked with high voltage signs.</i></p> <p data-bbox="250 921 1414 995">At this location, high voltage sign was missing on PG&E's pole. The condition was not documented in the inspection completed on 9/26/13.</p>		

I.	Location:	440 Llewellyn Ave., Campbell (approx. location)
	Pole No:	22773
	Previous Visit by Utility:	Overhead Inspection Map H1514 Completed 9/26/13
	Date Visited by CPUC:	10/31/13
Explanation of Violation(s):		
<p data-bbox="250 695 532 730"><u>Foreign Attachment</u></p> <p data-bbox="250 768 993 804">GO 95, Rule 34, Foreign Attachments, states in part:</p> <p data-bbox="344 842 1393 1020"><i>“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.”</i></p> <p data-bbox="250 1062 1357 1134">At this location, a third party sign was attached to PG&E’s pole. This condition was not documented in the inspection completed on 9/26/13.</p> <p data-bbox="250 1209 609 1245"><u>Impeded Climbing Space</u></p> <p data-bbox="250 1283 1187 1318">GO 95, Rule 54.7-A1, Climbing and Working Space, states in part:</p> <p data-bbox="344 1356 1409 1463"><i>“Climbing space shall be maintained from the ground level. Climbing space, measured from center line of pole, shall be provided on one side or in one quadrant of all poles or structures...”</i></p> <p data-bbox="250 1501 1333 1608">At this location, climbing space was impeded by vegetation on PG&E’s pole. Evidence of a tree surrounding the pole was present. This condition was not documented in the inspection completed on 9/26/13.</p>		

Area of Concerns

A. Used Pencil on an Inspection Map

PG&E, Electric Distribution Preventative Maintenance Manual, Compliance Inspector Tasks, states in part:

“Sign and date the log and map each day using non-erasable ink only and indicate the number of units patrolled.”

During the programmatic audit, we found there was use of pencil by the PG&E staff on the 2008 overhead inspection map H1406. This did not meet the utility’s own guideline on requiring non-erasable ink for patrol and inspection logs.

B. Incorrect Facility Location

GO 165, Section III-C, Record-keeping, states in part:

“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.”

For COE #107114905, the work order indicates an incorrect address for the facility. The crossed streets provided on the work order were “Judy and Stevens Creek.” The correct location was 10038 Bret Ave., which is near the corner of Bret Ave. and Stevens Creek Blvd in Santa Clara.

For EC Notification # 107082769, the work order indicates an incorrect address and unidentified facility number. The address provided on the work order was 1108 Reed Ave., Sunnyvale. The correct location was 1093 Reed Ave., which is across the street inside the apartment complex. The lack of facility identification also contributed to the difficult locating.

Both incorrectly located work orders made difficult for us and the PG&E staff to locate the facilities during our visit. This can also be a problem for the PG&E staff to correctly locate the facilities for any follow-up maintenance. I recommend the PG&E maintenance staff to properly identify the facility location and number for all work orders.

C. Debris Not Removed For Underground Detailed Inspection

GO 128, Rule 17.2, Inspection, states in part:

“Systems shall be inspected by the operator frequently and thoroughly for the purpose of insuring that they are in good condition and in conformance with all applicable requirements of these rules.”

We found a PG&E underground enclosure “T-9084” at 156 Crescent Ave., Sunnyvale was partially filled with debris covering half the transformer. Without removing the debris, PG&E staff would not be able to thoroughly inspect the condition of the transformer during the detailed inspection in July 2013. The debris condition was documented in the inspection (Map G1305) completed on 7/25/13 but given a priority F without a specific timeframe. I recommend PG&E to clear the debris in the enclosure and perform a proper detailed inspection for the facility. In the future, clear any underground enclosures with debris encroachment before performing detailed inspection.