

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



January 29, 2013

EA2012-031

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

SUBJECT: Audit of PG&E's Peninsula Division

Dear Mr. Singh:

On behalf of the Electric Safety and Reliability Branch (ESRB) of the California Public Utilities Commission, Alok Kumar, Ivan Garcia, Jamie Lau and Ryan Yamamoto of my staff conducted an electric audit of PG&E's Peninsula Division from October 15 to October 19, 2012. 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 March 8, 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, Ryan Yamamoto at (415) 703-2192 or ryan.yamamoto@cpuc.ca.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "R-Step", with a long horizontal flourish extending to the right.

Raffy Stepanian, P.E.
Program Manager
Electric Safety and Reliability Branch
Safety and Enforcement Division

Enclosure: Audit Summary

CC: Ryan Yamamoto, Utilities Engineer, CPUC
Ivan Garcia, Utilities Engineer, CPUC
Jamie Lau, Utilities Engineer, CPUC
Alok Kumar, Senior Utilities Engineer (Supervisor), CPUC
Raymond Fugere, Program and Project Supervisor, CPUC
Curtis Todd Ryan, Supervisor, PG&E Gas & Electric System Support

AUDIT SUMMARY

Company: PG&E – Peninsula Division
 Electric Audit
 Date: October 15-19, 2012

Violations

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| A. | Location: | PG&E – Peninsula Division |
| | Date Visited by CPUC: | 10/15 - 19/2012 |
| | 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, from 2008 to 2011, were not inspected as required by GO 165:</p> <ul style="list-style-type: none"> • One facility on the 2008 Underground Inspection of Map D0208 • One facility on the 2009 Underground Inspection of Map E0301 • Two facilities on the 2010 Underground Inspection of Map D0902 • One facility on the 2010 Underground Inspection of Map E0805 <p>The below violations are in addition to the 5 violations noted above:</p> <ul style="list-style-type: none"> • PG&E did not conduct an underground patrol for map Colma E0818 in 2005. • PG&E Inspectors are inaccurately tallying the facilities inspected/patrolled. The tallying errors are most likely due to simple addition errors. However, these errors lead to changing facility counts year to year as the new count will supersede the prior, correct count. The tallying errors also create uncertainty when determining the number of facilities that were GO 165 inspected/patrolled, as the tally will not match the number of actual facilities on the map.¹ An example of this is PG&E’s 2003-2011 patrol and inspection records for overhead map Colma E0406 contained inconsistencies regarding highlighting, tallying, and mapping of PG&E owned streetlights poles and customer owned poles. 2012 records showed 210 units; other years showed between 244 and 321 units. | |

¹ This issue was noted in our 2009 audit report of PG&E’s Peninsula Division dated September 4, 2009.

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| B. | Location: | PG&E – San Jose Division |
| | Date Visited by CPUC: | 09/10 - 14/2012 |
| | Explanation of Violation(s): | |
| | <p data-bbox="264 468 1027 499"><u>GO 165, Section III-C, – Record Keeping, states in part:</u></p> <p data-bbox="358 537 1256 678"><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="264 722 1430 821">10075 work orders, from January 2008 to September 20, 2012, were completed past their scheduled date of corrective action. Furthermore, 3417 work orders are currently open past their scheduled date of corrective action.</p> <p data-bbox="264 867 1414 936">Furthermore, an additional 36 work orders were found to be late that were not noted in the pre-audit data request response.</p> | |

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| C. | Location: | PG&E – San Jose Division |
| | Date Visited by CPUC: | 09/10 - 14/2012 |
| | Explanation of Violation(s): | |
| | <p data-bbox="264 1255 1027 1287"><u>GO 165, Section III-C, – Record Keeping, states in part:</u></p> <p data-bbox="358 1325 1256 1465"><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="264 1509 1398 1650">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> | |

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| D. | Location: | PG&E – San Jose Division |
| | Date Visited by CPUC: | 09/10 - 14/2012 |
| | Explanation of Violation(s): | |
| | <p><u>GO 95, Rule 31.1 – Design, Construction and Maintenance, states in part:</u></p> <p><i>“For all particulars not specified in General Order 95, a supply or communications company is in compliance with this rule if it designs, constructs and maintains a facility in accordance with accepted good practice for the intended use and known local conditions.”</i></p> <p>PG&E’s EDPM manual requires inspectors to complete a Map Correction Form when they find discrepancies on their inspection maps. ESRB considers noting map errors in accordance with the EDPM manual an “accepted good practice”. Map discrepancies that are not noted by inspectors are not compliant with PG&E’s EDPM manual and are therefore violations of GO 95 Rule 31.1. For example, San Carlos Underground Map C0802, contained mapping errors that were not noted by PG&E inspector during the inspection.</p> | |

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| E. | Location: | PG&E – San Jose Division |
| | Date Visited by CPUC: | 09/10 - 14/2012 |
| | Explanation of Violation(s): | |
| | <p><u>GO 128, Rule 17.2 – Scope Of Rules, states in part:</u></p> <p><i>“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 these rules. (See Rule 12.3)”These rules are not intended as complete construction specifications, but embody only the requirements which are most important from the standpoint of safety and service. Construction shall be according to accepted good practice for the given local conditions in all particulars not specified in the rules.”</i></p> <p>PG&E’s EDPM manual requires all underground equipment, conductors, splices, and elbows within primary enclosures be inspected. ESRB considers inspecting primary conductors in primary pull boxes in accordance with the EDPM manual as how PG&E inspects its system “frequently and thoroughly”. Failing to inspect conductors in primary pull boxes is a violation of GO 128, Rule 17.2. PG&E did not inspect the conductors in one (1) primary pull box on Colma E0317 in 2009. PG&E did not inspect the conductors in one (1) primary pull box on Colma E0316 in 2009.</p> | |

The following violations that ESRB 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:

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| F. | Location: | Toulouse Court, Half Moon Bay |
| | Transformer No.: | T-1039 |
| | Previous Visit by Utility: | Inspection Map San Carlos D0304 Completed 09/14/2012 |
| | Date Visited by CPUC: | 10/18/2012 |
| Explanation of Violation(s): | | |
| <p><u>Corner of Underground Wood Enclosure Case Has A Hole</u></p> <p>GO 128, Rule 35.2-B, Guarding Live Parts, states in part:</p> <p style="text-align: center;"><i>“In locations accessible only to qualified electrical workers, exposed conductive parts energized above 750 volts shall be located or enclosed so as to prevent accidental contact by persons or objects.”</i></p> <p>At this location, PG&E’s underground enclosure case had a hole on the corner exposing the transformer. This violation was not documented by PG&E staff when the transformer was inspected.</p> | | |

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| G. | Location: | Francisco Street and Santa Maria Avenue, El Granada |
| | Pole No: | N/A |
| | Previous Visit by Utility: | Overhead Inspection Map San Carlos C0316 Completed 8/29/2012 |
| | Date Visited by CPUC: | 10/18/2012 |
| Explanation of Violation(s): | | |
| <p data-bbox="272 646 516 678"><u>Slack Anchor Guy</u></p> <p data-bbox="272 720 743 751">GO 95 Rule 56.2, Use, states in part:</p> <p data-bbox="362 793 1369 898"><i>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.</i></p> <p data-bbox="272 940 1369 1003">At this location PG&E's down guy was slack. This violation was not documented by PG&E staff when the pole was inspected.</p> | | |

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| H. | Location: | 280 Kanoff Street, Montara |
| | Pole No: | N/A |
| | Previous Visit by Utility: | Pole Loading Calculation |
| | Date Visited by CPUC: | 10/18/2012 |
| Explanation of Violation(s): | | |
| <u>Pole Loading Calculations Issue</u> GO 95 Rule 44.1 outlines the minimum safety factor requirements for poles. To ensure that the safety factors are met, PG&E must perform accurate safety factor calculations on its poles that take into account all in field attachments. At this location we compared the pole calculations with the pole in the field and found PG&E did not list all attached facilities on the pole. | | |

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| I. | Location: | Davit Lane and Anchor Circle, Redwood City |
| | Transformer No.: | E0839 |
| | Previous Visit by Utility: | Underground Inspection Map San Carlos C0804 Completed 8/30/2012 |
| | Date Visited by CPUC: | 10/19/2012 |
| Explanation of Violation(s): | | |
| <u>Gap at The Bottom of Padmounted Transformer Case Allows a Wire to Pass Through</u> GO 128, Rule 34.3-B, Guarding Live Parts, states in part: <i>Compartments and enclosures which will, during normal operation, contain exposed live parts shall be designed and installed to prevent a person from passing a wire or other conducting material into such compartment from the outside when it is closed.</i> At this location, PG&E's padmounted transformer had a gap at the bottom of the padmounted transformer case which could allow a wire to pass through. This violation was not documented by PG&E staff when the transformer was inspected. | | |

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| J. | Location: | 551 Geneva Avenue, Redwood City |
| | Pole No.: | N/A |
| | Previous Visit by Utility: | Cancelled Tag, EC Notification # 105309226 Completed 3/6/2012 |
| | Date Visited by CPUC: | 10/19/2012 |
| Explanation of Violation(s): | | |
| <p data-bbox="272 625 529 657"><u>No Climbing Space</u></p> <p data-bbox="272 695 800 726">GO 95, Rule 93, Climbing Space, States:</p> <p data-bbox="354 768 1336 982"><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 data-bbox="272 1024 1419 1094">At this location PG&E's pole had no climbing space. This violation was not documented by PG&E staff when the pole was inspected.</p> | | |