

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



October 12, 2012

EA2012-018

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

SUBJECT: Audit of PG&E's San Jose Division

Dear Mr. Singh:

On behalf of the Electric Safety and Reliability Branch (ESRB) of the California Public Utilities Commission, Ivan Garcia, Jamie Lau and Ryan Yamamoto of my staff conducted an electric audit of PG&E's San Jose Division from September 10 to September 14, 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 November 16, 2012, 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. Stepanian".

Raffy Stepanian, P.E.
Program Manager
Electric Safety and Reliability Branch
Consumer Protection and Safety 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 – San Jose Division
Electric Audit
Date: September 10-14, 2012

Violations

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| A. | Location: | PG&E – San Jose Division |
| | Date Visited by CPUC: | 09/10 - 14/2012 |
| 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>According to a pre-audit data request response, PG&E did not inspect 570 facilities, from 2010 and 2011, in violation of GO 165.</p> <p>The below violations are in addition to the 570 violations noted above:</p> <ul style="list-style-type: none"> • PG&E could not provide documentation that it conducted an underground inspection of its facilities on map I-1825 in 2009. The previous inspection of this map prior to 2009 was completed on 10/24/06 and the last inspection completed was done on 5/18/2011. • PG&E did not conduct an overhead patrol of three poles on map F-1625 in 2011. • 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 2004-2011 patrol and inspection records for overhead map G1907 contained inconsistencies regarding highlighting, tallying, and mapping of PG&E owned streetlights poles and customer owned poles. 2009 and 2011 records showed 329 units; other years showed between 262 and 265 units. • PG&E has not conduct an underground inspection of padmounted transformer number C-2236 on map I-1823 since 2006. The transformer has a missing handle on the casing and PG&E was not been able to be opened the transformer to conduct an inspection. | | |

¹ This issue was noted in our 2009 audit report of PG&E’s San Jose Division dated September 21, 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><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>4842 work orders, from January 2008 to August 10, 2012, were completed past their scheduled date of corrective action. Furthermore, 1415 work orders are currently open past their scheduled date of corrective action.</p> <p>Also, an additional 78 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><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>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): | | |
| <u>GO 95, Rule 31.1 – Design, Construction and Maintenance, states in part:</u> | | |
| <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, Map E1512, contained mapping errors that were not noted by PG&E inspector during the inspection.</p> | | |

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| E. | Location: | 675 West Dunne Avenue, Morgan Hill |
| | Pole No.: | N/A |
| | Previous Visit by Utility: | Work Verification Tag Map L-2311 Completed 08/10/2012 |
| | Date Visited by CPUC: | 09/13/2012 |
| Explanation of Violation(s): | | |
| <u>Missing High Voltage Sign</u> | | |
| <p>GO 95, Rule 51.6-A, High Voltage Marking of Poles, states in part:</p> <p><i>Poles which support line conductors of more than 750 volts shall be marked with high voltage signs.</i></p> <p>At this location, PG&E’s pole had a high voltage sign missing. This violation was not documented by PG&E staff when the pole was inspected.</p> | | |

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| F. | Location: | Brewster Lane, Morgan Hill (End of Pole Line) |
| | Pole No: | N/A (First Location on 9/14/2012) |
| | Previous Visit by Utility: | Overhead Re-Inspection Map L-2321 Completed 08/07/2012 |
| | Date Visited by CPUC: | 09/14/2012 |
| Explanation of Violation(s): | | |
| <p data-bbox="261 646 857 680"><u>Tree Contact Above Insulator On Anchor Guy</u></p> <p data-bbox="261 720 1195 753">GO 95, Rule 56.7-B, Location of Sectionalizing Insulators, states in part:</p> <p data-bbox="354 793 1354 936"><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 data-bbox="261 976 1325 1045">At this location, PG&E's anchor guy had tree contact above the guy insulator. This violation was not documented by PG&E staff when the pole was inspected.</p> | | |

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| G. | Location: | Murphy Avenue N/O of San Pedro Avenue, Morgan Hill |
| | Pole No.: | N/A (Location #5 on 09/14/2012) |
| | Previous Visit by Utility: | Overhead Re-Inspection Map L-2406 Completed 08/09/2012 |
| | Date Visited by CPUC: | 09/14/2012 |
| Explanation of Violation(s): | | |
| <p data-bbox="272 625 565 659"><u>Ground Wire Exposed</u></p> <p data-bbox="272 701 915 735">GO 95, Rule 54.6-B, Ground Wires, states in part:</p> <p data-bbox="367 772 1357 882"><i>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).</i></p> <p data-bbox="272 919 1432 991">At this location, PG&E's ground wire was exposed. This violation was not documented by PG&E staff when the pole was inspected.</p> <p data-bbox="272 1029 516 1062"><u>Slack Anchor Guy</u></p> <p data-bbox="272 1100 743 1134">GO 95 Rule 56.2, Use, states in part:</p> <p data-bbox="367 1171 1367 1281"><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 1318 1367 1390">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> <p data-bbox="272 1428 870 1461"><u>Tree Contact Above Insulator On Anchor Guy</u></p> <p data-bbox="272 1499 1208 1533">GO 95, Rule 56.7-B, Location of Sectionalizing Insulators, states in part:</p> <p data-bbox="367 1570 1367 1722"><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 data-bbox="272 1759 1338 1831">At this location, PG&E's anchor guy had tree contact above the guy insulator. This violation was not documented by PG&E staff when the pole was inspected.</p> | | |

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| H. | Location: | Murphy Avenue N/O of San Pedro Avenue, Morgan Hill |
| | Pole No.: | N/A (Location #7 on 09/14/2012) |
| | Previous Visit by Utility: | Overhead Re-Inspection Map L-2406 Completed 08/09/2012 |
| | Date Visited by CPUC: | 09/14/2012 |
| Explanation of Violation(s): | | |
| <p data-bbox="272 642 634 674"><u>Anchor Guy Guard Missing</u></p> <p data-bbox="272 716 943 747">GO 95 Rule 56.9, Guys Marker (Guy Guard) States:</p> <p data-bbox="367 789 1373 926"><i>A substantial marker of suitable material, including but not limited to metal or plastic, not less than 8 feet in length, shall be securely attached to all anchor guys. Where more than one guy is attached to an anchor rod, only the outermost guy is required to have a marker.</i></p> <p data-bbox="272 978 1292 1041">At this location PG&E's down guy guard was damaged. This violation was not documented by PG&E staff when the pole was inspected.</p> | | |

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| I. | Location: | San Pedro Avenue E/O Murphy Avenue, Morgan Hill |
| | Pole No.: | N/A (Location #8 on 09/14/2012) |
| | Previous Visit by Utility: | Overhead Re-Inspection Map L-2406 Completed 08/09/2012 |
| | Date Visited by CPUC: | 09/14/2012 |
| | Explanation of Violation(s): | |
| | <p data-bbox="261 642 553 674"><u>Ground Wire Exposed</u></p> <p data-bbox="261 716 906 747">GO 95, Rule 54.6-B, Ground Wires, states in part:</p> <p data-bbox="354 789 1344 894"><i>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).</i></p> <p data-bbox="261 936 1422 999">At this location, PG&E's ground wire was exposed. This violation was not documented by PG&E staff when the pole was inspected</p> | |

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| J. | Location: | 14901 Holden Way, San Jose |
| | Pole No.: | N/A |
| | Previous Visit by Utility: | Completed Work Order Map I-1614 Completed 07/20/2012 |
| | Date Visited by CPUC: | 09/14/2012 |
| | Explanation of Violation(s): | |
| | <p data-bbox="261 625 857 657"><u>Tree Contact Above Insulator On Anchor Guy</u></p> <p data-bbox="261 697 1195 728">GO 95, Rule 56.7-B, Location of Sectionalizing Insulators, states in part:</p> <p data-bbox="354 772 1352 911"><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 data-bbox="261 955 1325 1022">At this location, PG&E’s anchor guy had tree contact above the guy insulator. This violation was not documented by PG&E staff when the pole was inspected.</p> | |

AREA OF CONCERN

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

“The utility shall maintain records for (1) at least ten (10) years of the patrol and detailed inspection activities, and (2) the life of the pole for intrusive inspection activities.”

PG&E’s 2011 EDPM Manual Record Retention Matrix does not comply with the record retention requirements of GO 165. The intervals listed in the EDPM Manual Record Retention Matrix are shorter than those required of GO 165. For example, Underground Detailed Inspection records are shown to be only kept for 6 years instead of the 10 years required by GO 165.