

## PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE  
SAN FRANCISCO, CA 94102-3298



October 25, 2010

Ms. Eleanor Joyce Pefferman  
EO SR&S Sustainable Reliability  
Pacific Gas and Electric Company  
245 Market St, N14  
San Francisco, CA 94105

CPUC File No.: EA2010-25

Subject: PG&E Mission Division Electric Audit (Revised)

Dear Ms. Pefferman:

On behalf of the Utilities Safety and Reliability Branch (USRB) of the California Public Utilities Commission, Paul Penney and I conducted an electric audit of PG&E's Mission Division from September 13-17, 2010. The audit included a review of the division's records for the period January 2007 through September 2010.

During the audit, we identified violations of one or more General Orders. I have enclosed a copy of our audit summary itemizing those violations. By November 25, 2010, PG&E must send me a response to this letter detailing its plans to address those violations and when PG&E expects to complete them. You may email an electronic copy of the response to [kh2@cpuc.ca.gov](mailto:kh2@cpuc.ca.gov) or send a hard copy to:

Attn: Kenneth How  
California Public Utilities Commission  
505 Van Ness Avenue  
San Francisco, CA 94102-3298

Should you have any questions concerning this letter I can be reached at by phone at (415) 703-2875 or by email at [kh2@cpuc.ca.gov](mailto:kh2@cpuc.ca.gov).

Sincerely,

A handwritten signature in blue ink that reads "Kenneth How".

Kenneth K. How  
Utilities Safety and Reliability Branch  
Consumer Protection and Safety Division  
California Public Utilities Commission

Enclosures: Audit Summary

CC: Paul Penney, Utilities Engineer, CPUC  
Raymond Fugere, Program and Project Supervisor, CPUC  
Curtis Todd Ryan, Supervisor, PG&E

# AUDIT SUMMARY

## I. Record Violations

This section summarizes the General Order (GO) violations found during the review of PG&E Mission Division maintenance records.

### A. Late Inspections

GO 165 Section IV: Standards for Inspection, Record-keeping, and Reporting states in part:

*Each utility subject to this General Order shall conduct inspections of its distribution facilities, as necessary, to assure reliable, high-quality, and safe operation, but in no case may the period between inspections (measured in years) exceed the time specified in the attached table.*

PG&E must inspect their facilities per the timeframes outlined in GO 165. PG&E tracks these inspections by highlighting inspected facilities on inspection maps. A facility that is not highlighted on an inspection map indicates that PG&E has not inspected that facility. A facility highlighted during one inspection but not highlighted again by the end of another GO 165 inspection period indicates a late PG&E inspection of that facility.

The following records contained a facility or facilities that were not inspected as required by GO 165:

Record	Explanation of Violation
Overhead Inspection Map K0919 Completed 8/22/09	PG&E did not highlight a pole in Tara Ct during its 2009 inspection of this map. PG&E last highlighted the pole in 2004.
Underground Inspection Map J0909 Completed 4/8/10	In 2007, the PG&E inspector that inspected this map manually drew in and highlighted an enclosure near switch 4471 (on Corsair north of Sabre). That enclosure does not show up on, and is not highlighted in the subsequent 2010 inspection map.  If this enclosure does exist in the field, and if PG&E completes an inspection of the enclosure before the end of the 2010 calendar year, this item is not a GO 165 violation.

**B. Missing Inspection Records**

GO 165 Section IV: Standards for Inspection, Record-keeping, and Reporting states in part:

*The company shall maintain records of inspection activities which shall be made available to parties or pursuant to Commission rules upon 30 days notice.*

Under GO 165 Section IV, PG&E must keep and be able to produce records of its inspection activities. The following table lists inspection records that PG&E could not produce during the audit.

<b>Record</b>	<b>Explanation of Violation</b>
Underground Inspection Map M1224 Completed 6/28/07	PG&E is missing an inspection log that corresponds to a section of highlighted facilities on this map.

**C. Late Corrective Actions**

GO 95 Rule 31.1 Design, Construction and Maintenance [of overhead lines] and GO 128 Rule 17.1 Design, Construction and Maintenance [of underground systems] state in part:

*Electrical supply and communication systems shall be designed, constructed, and maintained for their intended use.*

PG&E’s 2006, 2008 and 2009 Electric Distribution Preventive Maintenance (EDPM) Manuals outline PG&E’s methodology for prioritizing (with end dates) corrective actions for the problems it finds on its electric system. The EDPM manual is part of PG&E’s GO 95 Rule 31.1 and GO 128 Rule 17.1 compliance program. Thus, past due corrective actions that violate the guidelines in that manual are also violations of GOs 95 and 128.

PG&E’s Mission Division completed 386 problems late in 2008 and 2009. Additionally, 928 late problems are still pending.

## II. Field Violations

This section lists the GO 95 and 128 violations that were identified during the field portion of the audit. The locations that were audited were recently inspected by PG&E. The following violations should have either been identified or corrected by PG&E staff during their inspections.

<b>A.</b>	<b>Location:</b>	Service Drop to 913 St Bede, Hayward
	<b>Pole No.:</b>	N/A
	<b>Previous Inspection Details:</b>	Overhead Inspection Map J0920 Completed 6/23/10
	<b>Date of CPUC Inspection:</b>	9/16/10
<b>Explanation of Violation(s):</b>		
<p><u>Low Vertical Clearance of Power Drop at Curb</u></p> <p>GO 95 Rule 54.8 B1:</p> <p style="text-align: center;"><i>Service drop conductors [0-750 Volts] shall have ... a clearance of not less than 16 feet at the curb line.</i></p> <p>The vertical clearance of PG&amp;E's service drop to this location at the curb was low at 13'6".</p>		
<p><u>Low Radial Clearance Between Guy and Comm. Conductor</u></p> <p>GO 95 Table 2 Case 19 C requires a 3" radial clearance between communication conductors and guy wires supported on the same pole.</p> <p>A PG&amp;E primary overhead guy was touching a communication conductor at this location.</p>		

<b>B.</b>	<b>Location:</b>	Pole at 832 St Bede, Hayward
	<b>Pole No.:</b>	110207026
	<b>Previous Inspection Details:</b>	Overhead Inspection Map J0920 Completed 6/23/10
	<b>Date of CPUC Inspection:</b>	9/16/10
<b>Explanation of Violation(s):</b>		
<p data-bbox="250 638 987 667"><u>Low Radial Clearance Between Power and Comm. Drops</u></p> <p data-bbox="250 709 522 739">GO 95 Rule 54.8 C4:</p> <p data-bbox="331 785 1338 995"><i>The radial clearance between supply service drop conductors and communication service drop conductors may be less than 48 inches as specified in Table 2, Column C, Cases 4 and 9; Column D, Cases 3 and 8 , but shall be not less than 24 inches. Where within 15 feet of the point of attachment of either service drop on a building, this clearance may be further reduced but shall be not less than 12 inches.</i></p> <p data-bbox="250 1041 1377 1146">PG&amp;E's service to 816 St Bede from this pole is touching a phone service drop. PG&amp;E should note all violations that affect PG&amp;E's facilities in order to be compliant with GO 165. See Section III A for an explanation.</p>		

<b>C.</b>	<b>Location:</b>	Pole at 816 St Bede, Hayward
	<b>Pole No.:</b>	110207027
	<b>Previous Inspection Details:</b>	Overhead Inspection Map J0920 Completed 6/23/10
	<b>Date of CPUC Inspection:</b>	9/16/10
	<b>Explanation of Violation(s):</b>	
	<p data-bbox="250 642 938 674"><u>Low Radial Clearance Between Guy and Power Drop</u></p> <p data-bbox="250 716 1419 785">GO 95 Table 2 Case 19 C requires a 3'' radial clearance between 0-750V service drops and guy wires supported on the same pole.</p> <p data-bbox="250 827 1419 896">The service drop from this location to 801 St Bede was less than 3'' from an overhead span guy. There was no mechanical protection between the two cables.</p>	

<b>D.</b>	<b>Location:</b>	Pole at 27090 St. Francis, Hayward
	<b>Pole No.:</b>	110207030
	<b>Previous Inspection Details:</b>	Overhead Inspection Map J0920 Completed 6/23/10
	<b>Date of CPUC Inspection:</b>	9/16/10
<b>Explanation of Violation(s):</b>		
<p data-bbox="250 642 602 674"><u>Missing High Voltage Sign</u></p> <p data-bbox="250 716 526 747">GO 95 Rule 51.6 A3:</p> <p data-bbox="331 789 1300 894"><i>Crossarms where present may be marked in lieu of marking the pole. Such signs shall be placed on the face and back of each crossarm supporting line conductors</i></p> <p data-bbox="250 936 1114 968">A high voltage sign was missing from the top crossarm of this pole.</p>		

<b>E.</b>	<b>Location:</b>	Pole on Carlos Bee, Hayward
	<b>Pole No.:</b>	110118245
	<b>Previous Inspection Details:</b>	Overhead Inspection Map J1007 Completed 8/16/10
	<b>Date of CPUC Inspection:</b>	9/16/10
<b>Explanation of Violation(s):</b>		
<p data-bbox="250 653 586 684"><u>Broken Ground Moulding</u></p> <p data-bbox="250 726 526 758">GO 95 Rule 51.6 A3:</p> <p data-bbox="331 800 1321 905"><i>That portion of the ground wires 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</i></p> <p data-bbox="250 947 894 978">There was a broken ground mould at this location.</p>		



### **III. Programmatic Violations**

This section discusses GO violations stemming from issues raised during the review of PG&E's maintenance procedures and from observation of PG&E's implementation of those procedures. These violations may be systemic in nature and might not be specific to the Mission Division.

#### **A. PG&E does not always note low clearances between power and communication service drops.**

GO 95 Rule 54.8 C4 States:

*The radial clearance between supply service drop conductors and communication service drop conductors may be less than 48 inches as specified in Table 2, Column C, Cases 4 and 9; Column D, Cases 3 and 8, but shall be not less than 24 inches. Where within 15 feet of the point of attachment of either service drop on a building, this clearance may be further reduced but shall be not less than 12 inches.*

At one of the field locations audited, a PG&E service drop was touching a phone service drop, a violation of GO 95. According to PG&E staff, because these conditions are likely caused by a communication infrastructure provider (CIP), PG&E staff does not document these violations during its inspections.

The response to this violation is inadequate. These contacts are violations on PG&E's facilities and, as such, they should be documented during inspections by PG&E inspectors. If PG&E feels that the CIP is responsible for the repair, PG&E should notify the CIP of the infraction.