

PUBLIC UTILITIES COMMISSION

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October 22, 2008

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**SUBJECT:** PG&E's North Bay Division Electric Audit

On behalf of the Utilities Safety and Reliability Branch (USRB) of the California Public Utilities Commission, Paul Penney and I conducted an audit of PG&E's North Bay Division of Marin and Napa counties (the Division) from July 28 to August 1, 2008. The audit included a review of your records for the period of 2005 through July 2008.

During the inspection, we identified violations of one or more General Orders. A copy of the audit summary itemizing the violations is enclosed. Within 30 days, please advise me by electronic or hard copy of all the corrective measures taken by the Division regarding the violations and the date on which they were corrected or scheduled to be corrected.

If you have any questions, please contact Steve Artus at (415) 703-2898.

Sincerely,

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Robert Turner  
Utilities Safety and Reliability Branch  
Consumer Protection and Safety Division

Enclosure: Audit Summary

CC: Ivan Garcia, CPSD

# Audit Summary

## Violations

(1) **General Order 165 – Inspection Cycles for Electric Distribution Facilities**  
**IV. Standards for Inspection, Record-keeping, and Reporting**  
**Appendix A, Electric Company System Inspection Cycles (Maximum Interval in Years)**

Section IV, states in part:

For all inspections, within a reasonable period, company records shall specify the circuit, area, or equipment inspected, the name of the inspector, the date of the inspection, and **any problems identified during each inspection**, as well as the scheduled date of corrective action. For detailed and intrusive inspections, companies shall also rate the condition of inspected equipment. Upon completion of corrective action, company records will show the nature of the work, the date, and the identity of persons performing the work. [emphasis added]

Refer Notification # 102489853: The Notification was created in 2007 and reassessed in 2008 for a rotten pole top. The center conductor affixed to the pole with two bell insulators had one badly damaged insulator; approximately one third of the insulator skirt was missing. The condition was not documented on the Notification. The Notification was not updated with the insulator condition nor was a new Notification created for the condition.

(2) **General Order 95, Rule 31.1 Design, Construction and Maintenance**

GO 95, Rule 31.1, states in part:

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.

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.

- a. Refer Notification # 102489853. The rotten crossarm was unable to securely keep the insulator pins set, allowing the pins to be completely removed from the crossarm and leaving the conductor fully supported by only a rope. The notification was inappropriately reassessed since the rope was both holding up the weight of the conductor and providing tension on the conductor because the path of the conductor changed angle at pole. The tension provided by the rope was supporting the weight and path of the conductor. A three month reassessment given after the rope had already been in place for an unknown time was excessive. The strength, condition, and durability of the rope were unknown and posed an incalculable safety factor to maintain the integrity of the facilities. Prudent repair of the crossarm should have been initiated with a high priority when PG&E tied the conductor with a rope.

- b. Refer Notification # 102488801. The Notification was created in 2007 and reassessed in 2008 for a rotten pole top. The center conductor affixed to the pole with two bell insulators had one badly damaged insulator; approximately one third of the insulator skirt was missing. In photos I took using a telephoto lens, there appears to be dark or blackened spots on the remaining portion of the insulator that may have resulted from tracking but would require a closer look for certainty. Additionally, since the Notification did not document the broken insulator, I was uncertain if the inspector was able to determine if the integrity of the entire insulator was further compromised. The reassessment was for only the pole top so there's no record of if the inspector determined that the damaged insulator will support the dead end conductor for an additional year, or if that can even be determined without removing and inspecting the entire insulator. While pole rot is regularly witnessed, assessed and monitored, I am not aware of nor was I provided when asked any standard, knowledge, or experience that can reasonably assess the integrity of a badly damaged dead end insulator.

**(3) General Order 128, Rule 32.7 Covers**

States in part:

Manholes, handholes, and subsurface equipment enclosures while not being worked in, shall be securely closed by covers of sufficient strength to sustain such loads as may reasonably be imposed upon them and arrangements shall be such that a tool or appliance shall be required for their opening and cover removal.

Refer Notification # 102866651. The vault lid was damaged by vehicles and was not securely affixed to the vault. It was located in an apartment building parking lot. The notification was inappropriately reassessed since the violation presented an immediate hazard to vehicles and persons.

## **Comment**

Refer Notification # 102504152. Across the street from this location I saw a new pole installed by a communication utility with all the communication facilities transferred over from the adjacent old pole. The old pole had a pole top extension supporting a PG&E service drop. PG&E needs to transfer the service to the new pole and remove the old pole.

## **Recommendation**

I found the PG&E 2008 EDPM manual contradictory in the explanation, application, and Notification management of Priority G. The chart in the Notification and Assessment chapter explaining Priorities on page 78 states that Priority G is for maintenance that "cannot be deferred." Yet, in the Reassessment section of that chapter, the manual states a QCR may field visit a Priority G Notification and determine "a new repair/response time frame (duration) may be established." The inconsistency of direction provided by the manual is confusing to me and can be confusing to QCR's and Compliance Supervisors. In the Notifications I sampled during the audit I found several reassessed Priority G Notifications. The EDPM manual needs to provide direction in the use and management of Priority G that is not contradictory.