

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



August 19, 2014

Mr. Sumeet Singh, Vice President
Pacific Gas and Electric Company
Gas Asset and Risk Management
6111 Bollinger Canyon Road, Room 4590-D
San Ramon, CA 94583

GA2012-13

Re: SED closure letter for the General Order 112-E Comprehensive Operation and Maintenance Audit of Pacific Gas and Electric's East Bay Division facilities

Dear Mr. Singh:

The Safety and Enforcement (SED) of the California Public Utilities Commission reviewed Pacific Gas and Electric's (PG&E) response letter dated August 19, 2013 for the findings identified during the General Order (GO) 112-E Comprehensive Operation and Maintenance Audit. This audit of PG&E's East Bay Division (Division) was conducted from September 17-21, 2012.

A summary of the audit findings documented by the SED, PG&E's response to our findings, and SED's evaluation of PG&E's response taken for each finding are outlined for each identified Violation and Area of Concern.

This letter serves as the official closure of the 2012 GO112-E Audit and any matters that are being recommended for enforcement will be processed through the Commission's Citation Program or a formal proceeding.

Thank you for your cooperation in this Audit. Please contact Aimee Cauguiran at (415) 703-2055 or by email at aimee.cauguiran@cpuc.ca.gov if you have any questions.

Sincerely,

A handwritten signature in black ink that reads "Kenneth Bruno".

Kenneth Bruno
Acting Program Manager
Gas Safety and Reliability Branch
Safety and Enforcement Division
California Public Utilities Commission

cc: Redacted

Probable Violations

1. **Probable Violation #1(a)(i) - 49 CFR §192.13(c):** SED identified a bimonthly location at 2345 Thackeray Drive in Oakland (CPA C7-229) missing records of post-restoration rectifier measurements on 6/5/2011 and 10/24/2011 which is a violation of PG&E's Gas Standard and Specifications (GS&S) O-16 requiring post-restoration pipe-to-soil and rectifier measurements after a CPA has been restored and repolarized.

PG&E's Response: "PG&E agrees with the finding...PG&E has since visited 2345 Thackeray Drive, Oakland, and has verified adequate cathodic protection...To prevent recurrence, PG&E conducted a tailboard with the Local Corrosion Group on CPA Restoration requirements on August 23, 2013...The Corrosion Supervisor will conduct monthly record reviews to ensure requirements are met, including obtaining post-restoration rectifier output readings."

SED's Conclusion:

SED recommends that no fine or penalty be imposed since the violation did not create any hazardous conditions for the public or utility employees.

2. **Probable Violation #1(a)(ii) - 49 CFR §192.13(c):** SED found that the CPA resurvey record for CPA C7-10A conducted in September of 2010 incorrectly stated that the historical pipe-to-soil reads for the CPA met the -850 mV criterion. Additionally, the CPA resurvey record did not record the date when the pipe-to-soil reads noted on the CPA map were taken. The Division is in violation of 192.13(c) for failing to comply with PG&E Work Procedure 4133-02.

PG&E's Response: "PG&E agrees with the finding. PG&E corrected the Initial Assessment Worksheet...by revising the "OK" with a "No", including the date of the change and the divisions personnel's Lan ID. PG&E updated the Final CPA Map...to include color coding, a legend, the division personnel's Lan ID, and resurvey date according to the requirements in PG&E WP4133-02...The Final CPA Map also shows all reads are in compliance and meet the -850mV requirement...PG&E conducted a tailboard with the Local Corrosion Group on CPA Assessment and Resurvey requirements on August 23, 2013 to prevent recurrence...The Corrosion Supervisor will conduct monthly record reviews to ensure requirements are met including initial CPA Assessment and CPA Map documentation."

SED's Conclusion:

SED recommends that no fine or penalty be imposed since the violation did not create any hazardous conditions for the public or utility employees.

3. **Probable Violation #1(a)(iii) - 49 CFR §192.13(c):** SED found that the service line for 2231 Lincoln (East Building) in Alameda did not have a yearly pipe-to-soil read as required by PG&E GS&S O-16.

PG&E's Response: "PG&E agrees with this finding. PG&E corrected the records by establishing the West Building service as an annual monitoring point and the East Building service as a yearly monitoring point...PG&E conducted a tailboard to Corrosion Dept. personnel on yearly monitoring requirements to prevent recurrence...The Corrosion Supervisor will conduct monthly record reviews to ensure requirements are met including monitoring point requirements and their schedule."

SED's Conclusion:

SED recommends that no fine or penalty be imposed since the violation did not create any hazardous conditions for the public or utility employees.

4. **Probable Violation #1(b) - 49 CFR §192.13(c):** SED found that the Division's Emergency Zone Curtailment binder did not have a review/change log indicating compliance with the annual review requirement under PG&E UO Standard S5000.

PG&E's Response: "PG&E respectfully disagrees with the finding, and has continued to maintain a change log form in the Emergency Zone Curtailment Binders. PG&E acknowledges that there should be more detail and clarification when documenting the annual review and will be conducting a tailboard for adequately documenting the annual review of emergency zone curtailment binders."

SED's Conclusion:

SED recommends that no fine or penalty be imposed since the violation did not create any hazardous conditions for the public or utility employees.

5. **Probable Violation #2(a) – 49 CFR §192.747(b):** The Division completed a Priority A (immediate) corrective work form for valve K-35 on 11/2/2011. However, there was no record of action corrective action taken or an alternative valve designated for the inoperable valve.

PG&E's Response: "PG&E respectfully disagrees that this finding is a violation of 192.747(b). Valve K-35 was placed on an expedited repair schedule and per the maintenance records, was operational during this entire time. Valve K-35 was replaced with a straight pipe on October 8, 2012..."

SED's Conclusion:

SED recommends that no fine or penalty be imposed since the violation did not create any hazardous conditions for the public or utility employees.

6. **Probable Violation #2(b) – 49 CFR §192.747(b):** SED found that the inoperable emergency valves B-31, B-33, B-37, and B-38 had designated alternative valves which were also inoperable.

PG&E's Response: "PG&E agrees with this finding. Valves B-31 and B-33 are now operable..., and PG&E has updated the AMC's for B-37 and B-38... Additionally, PG&E will conduct a tailboard meeting between planning and engineering to ensure all AMC valves are operable prior to designating."

SED's Conclusion:

SED recommends that no fine or penalty be imposed since the violation did not create any hazardous conditions for the public or utility employees.

7. **Probable Violation #3 – 49 CFR §192.743(c):** SED found that the relief capacity calculation at regulating station R-E09 showed that the relief valve has insufficient capacity since 2005. However there was no record showing any corrective work or interim measure taken by Division to ensure overpressure protection of the pipe pending plans for replacement of the regulating station.

PG&E's Response: "PG&E agrees with the finding. The regulator station is scheduled for replacement and will be constructed by the second quarter of 2014. As an interim measure to have adequate relief capacity, PG&E is planning to install a limiting capacity component to the working regulator so that its capacity will be less than the capacity of the relief valve. PG&E will ensure the relief valve is of adequate capacity by November 30, 2013. To prevent recurrence, East Bay Division Gas T&R and local engineering personnel will initiate corrective orders to prompt for remedial actions whenever inadequate relief valve capacity has been determined."

SED's Conclusion:

In a follow-up email to SED (Data Request Index# 4517), PG&E stated that the regulator was replaced on 11/22/2013. SED recommends that no fine or penalty be imposed since the violation did not create any hazardous conditions for the public or utility employees.

Observations, Areas of Concern / Recommendations

1. **Field Observation #1:** SED observed that the service regulator vent at Redacted in Oakland was too close to a house air vent and utility enclosure. SED recommend putting an extension stem to relocate the vent to avoid natural gas accumulation should the regulator vent release gas.

PG&E's Response: "PG&E has remediated this condition, and installed a regulator vent extension to avoid natural gas accumulation into the building opening. The work was completed on September 26, 2012..."

SED's Conclusion:

SED has reviewed your response and the corrective actions taken by PG&E sufficiently address the field observation.

2. **Field Observation #2:** SED found a L-105A casing Electrolysis Test Station (ETS) with no labels or wires. The Division needs to clearly indicate, either by putting labels on the lead wires or providing accurate ETS diagrams, which lead wire is connected to the pipe or casing to provide better guidance to the Division Corrosion Mechanics performing the pipe-to-soil and casing-to-soil potential measurements.

PG&E's Response: "PG&E agrees with this observation, and will be installing labels at the two locations by September 30, 2013. PG&E is also creating a new standard, O-10, "Electrolysis Test Station Connection to Main," which will require permanent tags to be installed on wires for new installations and added to the existing casing and pipe leads."

SED's Conclusion:

SED has reviewed your response and feels the proposed corrective actions articulated by PG&E sufficiently address the field observation.

3. **Area of Concern/Recommendation #1:** SED recommends that PG&E specify a timeframe to designate an Alternate Means of Control (AMC) to eliminate possible confusion and misinterpretation of PG&E Gas Information Bulletin Number TD-4430B-001.

PG&E's Response: "PG&E agrees with this observation and is specifying the timeframe to create an AMC in the upcoming revision to Work Procedure TD-4430P-04."

SED's Conclusion:

SED has reviewed your response and feels the proposed corrective actions articulated by PG&E sufficiently address the AOC if implemented as indicated in your response. SED may opt to test this stated corrective action at a future date.

4. **Area of Concern/Recommendation #2(a) and (b):** SED found that the emergency valve maintenance records for Valve D-96 (Emergency Zone S23-C), and Valves J-22, K-42, and ZV-5 of Emergency zones EB-N01-C-a and EB-N01-C-b did not show when the valves were first discovered as inoperable. Thus, SED was unable to assess the promptness of the actions taken after the discovery of the inoperable valves.

PG&E's Response: "PG&E agrees with this area of concern, and D-96 should have been removed from the emergency zone map since it was deactivated. The emergency zone map is currently redline and is being updated. PG&E will be conducting a tailboard to address this concern with Engineering and Mapping...The AMC for K-42 was created but there were no Valve Maintenance Cards written for

Valves J-22, K-42, and ZV-5. Therefore, no records were available to determine when all three valves were inoperable. These 3 valves are operable and valve maintenance cards have been created."

SED's Conclusion:

SED has reviewed your response and feels the proposed corrective actions articulated by PG&E sufficiently address the AOC if implemented as indicated in your response. SED may opt to test this stated corrective action at a future date.

5. **Area of Concern/Recommendation #3:** SED asked whether the Division had some distribution pipelines (operating at or below 60 psig) that are patrolled under the requirements of 49 CFR §192.721(b). According to the Division representative, outside of the landslide patrols, there are no regular distribution pipeline patrols conducted. Has PG&E identified any distribution pipeline throughout its system that are subject to the distribution patrolling requirements under 49 CFR §192.721(b)? If so, GSRB requested a list of PG&E divisions where these pipelines are located, and a description of the process used for identifying these areas.

PG&E's Response: "PG&E agrees with this area of concern and is working to develop a new GIS which will incorporate geohazard shapefiles to identify areas of ground movement that would require additional patrolling. This shapefile will include ground movement data from USGS as well as areas identified through historic patrol records as being susceptible to ground movement such as landslides and erosion. PG&E also utilizes the DASH reporting tool, which incorporates pipeline locations and their proximity to seismic activity and identified areas for additional monitoring. Additionally, PG&E monitors heavy rainfall and incorporates soil conditions to determine areas of elevated risk that require additional monitoring, such as patrols. PG&E patrols 960 miles of distribution feeder main system-wide, monthly, on a voluntary basis."

SED's Conclusion:

SED has reviewed your response and feels the proposed corrective actions articulated by PG&E sufficiently address the AOC if implemented as indicated in your response. SED may opt to verify this stated corrective action at a future date.