PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3298

October 23, 2014

GA2014-05

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

SUBJECT: General Order 112-E Gas Audit of PG&E's Fresno Division

Dear Mr. Singh:

The Safety and Enforcement Division (SED) of the California Public Utilities Commission conducted a General Order 112-E audit of Pacific Gas & Electric Company's (PG&E) Fresno Division (Division) on May 5-9, 2014. The audit included a review of the Division's records for the period of 2012 through 2013, as well as a representative field sample of the Division's facilities in the cities of Fresno, Selma, Raisin City, San Joaquin, Three Rocks, and Clovis. SED staff also reviewed the Division's operator qualification records, which included field observation of randomly selected individuals performing covered tasks.

SED's findings are noted in the Summary of Inspection Findings (Summary) which is enclosed with this letter. The Summary reflects only those particular records and pipeline facilities that SED inspected during the audit.

Within 30 days of your receipt of this letter, please provide a written response indicating the measures taken by PG&E to address the violations and observations noted in the Summary. Pursuant to Commission Resolution ALJ-274, SED staff has the authority to issue citations for each violation found during the audit. SED will notify PG&E of the enforcement action it plans to take after it reviews PG&E's audit response.

If you have any questions, please contact Quang Pham at (415) 703-4763 or by email at quang.pham@cpuc.ca.gov.

Sincerely,

Kuneth A. Br

Kenneth Bruno Program Manager Gas Safety and Reliability Branch Safety and Enforcement Division

Enclosure: Summary of Inspection Findings

cc: Larry Berg, PG&E Gas Regulatory Support Larry Deniston, PG&E Gas Regulatory Support

SUMMARY OF INSPECTION FINDINGS

A. PG&E's Internal Audit Findings

Prior to the start of the audit, PG&E provided SED its findings from the internal review it conducted of Fresno Division (Division). Some of PG&E's internal review findings are violations of PG&E's operations and maintenance standards, and are therefore violations of Title 49 Code of Federal Regulations (CFR), §192.13(c). SED is aware that PG&E corrected all of its findings prior to SED's audit. Table 1 lists all of the violations that PG&E noted.

Code	# of Non- Compliance	Finding	Corrective Actions Remediat Date	
	1		Map was completed 5 months	
			late. Leak survey work has	
		Leak survey was	been migrated to SAP, map	
192.723(a)		performed late	scheduled by date.	02/14/2013
		Missing USA when		
	1	required on	Tailboard to discuss importance	
		excavation of leak	of calling USA, safety of public,	
192.13(c)		repair	personnel and property.	03/31/2014
			All leaks have been repaired	
	4		and one leak was rechecked.	
		Leaks with late	Automated system for	
192.13(c)		repair/recheck action	scheduling of leak repair.	01/01/2014
		Action plans All areas have been restored to		
	9	creation/review	reation/review compliance. Actions plan have	
		exceeded 30 days	been added to SAP and work is	
192.13(c)		criteria	scheduled through SAP.	04/03/2014
		Cathodic protection	Both CP areas have been	
	2	area not resurveyed	resurveyed. CP resurveys are	
192.13(c)		within 6-year interval	scheduled through SAP.	04/03/2014

Table 1 . Fi	indings from	PG&E's	Internal	Review
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B. Probable Violations

1. <u>Title 49 CFR §192.605(a) states in part:</u>

"Each operator shall prepare and follow for each pipeline, a manual of written procedures for conducting operations and maintenance activities and for emergency response."

1.1 Work Procedure WP4430-04, Section C. Power-Actuated Valves, states: "Power-actuated isolation and block valves must be inspected, serviced, lubricated, and operated twice each calendar year (at approximate 6-month intervals)."

Valve A-35/V-8.91 is identified as a remote operated valve which is required to be inspected at least twice a year. However, the Division has performed inspection on this valve annually.

SED has been made aware that Division has since performed a Quality Control review on all remotely controlled power-actuated valve and confirmed that all valves in the Fresno Division are properly scheduled for the semi-annual maintenance as required.

1.2 Work Procedure WP4430-04, Section B. Manually Operated Valves, states: "If a valve requiring lubrication (all plug valves and ball valves if a positive shutoff cannot otherwise be obtained. Gate valves do not require lubrication.) is not lubricated regularly, it may become inoperable, not shut off adequately when necessary, or develop external valve stem leakage."

The following plug valves were not lubricated during annual maintenance as required: Table 2: Distribution Valves without lubrication

Line/Station Name	Valve No.	Dates of Maintenance
HWY 168	CE-06	5/13/13, 5/1/14
Fresno Distribution System	EJ-03	5/31/12, 5/13/13, 5/2/14
Fresno Distribution System	HJ-01	6/28/12, 6/7/13
Fresno Distribution System	NR-04	8/21/12, 8/8/13

Valve No.	Dates of Maintenance			
K-02	11/27/12, 11/4/13			
V.B	9/27/12, 9/6/13			
V.4	7/26/12, 7/9/13			
V.3	7/26/12, 7/9/13			
V.1	7/26/12, 7/9/13			
V.1.29	7/26/12, 7/9/13			
B.24	5/13/13			
B.23	5/13/13			
	Valve No. K-02 V.B V.4 V.3 V.1 V.1.29 B.24			

Table 3: Transmission Valves without lubrication

1.3 Procedure O-16: Corrosion Control of Gas Facilities states

1.3.1 Section 4: Impressed Current (Rectified) Cathodic Protection Systems, states:

"Rectifiers shall be monitored and maintained per Table 1 on Page 7: Distribution and Local Transmission Rectifier Monitoring – Annually"

Division did not perform inspection of rectifiers annually not to exceed 15 months as required on the following:

- Maintenance on rectifier #73 in CP Area 3932-01 was performed beyond the 15 months requirement in 2012. A date for rectifier maintenance was not recorded in 2011, however the supervisor review for maintenance in 2011 occurred on 02/25/2011. The next rectifier maintenance was performed on 06/26/2012, a period that extended beyond the 15 months requirement.
- Maintenance on rectifier #728 in CP Area 3802-02 occurred on 12/31/2012, maintenance was not performed on this rectifier in 2013.

1.3.2 Section 6: CPA Restoration states:

"If the CPA restoration work is (or is expected to be) over 30 days, the "CPA Follow-Up Action Plan" form must be used and developed within 30 calendar days from the date the CPA is found below adequate levels of protection."

The electrolysis test station (ETS) located at S/E corner of San Pedro and Calimyrna (CPA 3802-02) was found to have inadequate level of cathodic protection on 07/20/2012, 09/04/2012, and 11/01/2012. The test station was restored to adequate levels on 11/16/2012. The Division did not create a CPA follow-up action for restoration work over 30 days as required.

1.4 UO Standard S5000: Gas Distribution Emergency Shutdown Zones states:

1.4.1 "GD&TS area senior gas engineers are responsible for the following: Reviewing the Emergency Zone Curtailment binder annually. Reviews are to occur not more than 15 months apart."

Division did not perform a review of the emergency isolation zones in 2013. Furthermore, the review summary sheet within the emergency isolation zone binder needs to be changed to state that an annual review is a requirement instead of "recommended".

1.4.2 "Mapping supervisors shall be responsible for the following: Updating key maps and valve-location maps in the Emergency Zone Curtailment binder."

Valve NR-01 was shown on the emergency zone map as an isolation zone valve but upon further discussion with the Division, it was determined that valve NR-01 is not part of the emergency isolation zone. The emergency zone map needs to be updated to reflect the correct information.

1.5 Utility Work Procedure WP4430-04: Gas Valve Maintenance Requirements and Procedures - Attachment 1 states:

"Upon completion of maintenance on a valve, the maintenance supervisor must: Critically review each "Valve Maintenance Record" to ensure that it is accurate and complete. Return the "Valve Maintenance Record" to the person that performed the maintenance to correct errors and omissions."

Valve V-JN-05 was serviced on 07/03/2013. Division did not perform a supervisor review for Valve V-JN-05 after completion of maintenance performed in 2013.

1.6 Procedure M-53.3: Verifying the calibration of portable combustible gas indicators, hydrogen flame ionization units, optical methane detectors, and remote methane leak detectors states:

"Check the calibration of HFI gas detectors before the first field use in any given week. If the unit is not used and its calibration not checked for any given week, record that the particular unit was out of service for that week. Record this on the "Weekly Calibration Check of Flame Ionization Unit" form...or for RMLDs on the "Monthly Remote Methane Leak Detector Daily Self-Test and Calibration Log" form (Attachment E)."

The Division did not calibrate or record the unit was out of service on a weekly basis for the following hydrogen flame ionization (HFI) units:

Туре	Serial #	Year	Months
HFI	7003	2012	Feb, Jun to Dec
HFI	1500850005	2012	May to Dec
HFI	1500850005	2013	May, July to Dec
HFI	1500847010	2012	Feb, Jul to Dec

The Division did not calibrate or record the unit was out of service on a daily basis for the following Remote Methane Leak Detector (RMLD) units:

Туре	Serial #	Year	Months
RMLD	8000543009	2012	Apr to Nov
			Apr, May, Jul to Sep,
RMLD	8000550013	2012	Nov

1.7 Utility Work Procedure WP4540-01: District Regulator Station Maintenance states: "Operating Tests for Regulator Runs: Check the regulator for proper set point and control. Establish the set point of the regulator under flowing conditions using the long/short line technique shown in Attachment 5, "Establishing Pressure Set Points and Checking for Lock-Up for Regulators and Monitors Using the Long/Short Line Technique."

The Division failed to record the monitor set points during maintenance in 2013 for district regulator station GS-03 – Fresno Gas Load Center. Thus, SED cannot determine that the regulator station was maintained as required by the work procedure

2. <u>Title 49 CFR §192.467(c) states:</u>

"Except for unprotected copper inserted in a ferrous pipe, each pipeline must be electrically isolated from metallic casings that are a part of the underground system. However, if isolation is not achieved because it is impractical, other measures must be taken to minimize corrosion of the pipeline inside the casing."

SED requested pipe-to-soil and casing-to-soil readings including various follow-up action records for all casing monitoring performed in 2011 and 2012. According to the Division, the SAP system had a printing error and the Division was not able to provide complete 2012 records for review. The Division also has not provided SED with all requested follow-up action records. Since the Division was not able to provide SED with complete records, SED was unable to determine the Division's compliance with this subpart. In the response letter, please provide all casing monitoring records for 2012 and all follow-up action records as requested during the audit.

C. Field Review

1. During the field verification of pipe-to-soil readings, SED noted the following locations to be outside the -850mV requirement:

Location	Туре	P/S reading
4245 N Blackstone, Fresno	Bi-Monthly	-822mV
1351 N Wishon, Fresno	10%er	-753mV
749 N Blackstone, Fresno	Annual	-730mV
L-118 on Weber n/o RR tracks, Fresno	Carrier Pipe	-766mV
3751 N Feland, Fresno	Bi-Monthly	-508mV

- 2. During the field verification of district regulator station B-03 Cherry Station, the monitor regulator did not take control and required corrective action. The Division has provided SED with the corrective work order; repairs were completed the same day on 05/07/2014.
- 3. During the field verification of emergency valves, SED noted that an exposed span near transmission valve V-28 in Raisin City Fields had atmospheric corrosion. In the response letter, please confirm if this span is part of the exposed span inspection program and being monitored as required.
- 4. During the field verification of emergency valves, SED noted transmission valve V-3.79 was hard to turn and required 2 people to operate the valve.
- 5. During the field verification of exposed spans, SED noted the span at Millbrook and Fountain Way was missing pipeline markers and the paint was in fair condition.
- 6. During the field verification of customer's meter set, SED observed two locations that required protection from vehicle damage:
 - 3135 North Weber Ave, Fresno
 - 2604 Oak St, Selma
- 7. During the field verification of customer's meter set, SED noted the meter set assembly at 717 E Carmen in Fresno had a vent located near the crawl space of the house. The vent needs to be relocated to a difference location to avoid possible accumulation of gas should the vent relieve gas.
- 8. During the field verification of customer's meter set, SED observed atmospheric corrosion on the meter set assembly at 718 North Arthur Ave in Fresno.

D. Recommendations, Observations and Concerns

As part of the records review, Division provided SED with printed electronic records from the SAP system for various maintenance activities. In some instances, SED found the electronic records to be incomplete or containing incorrect information. Division explained that some of the errors were transcription error during data entry. Fortunately, during this audit, Division also had hand written paper records as evidence to substantiate the correct information. PG&E must ensure that when using electronic records as the official records for future audits, the data is validated to ensure completeness and accuracy.