PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3298

November 30, 2015

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

GI-2015-08-PGE05-02A

SUBJECT: General Order 112 Gas Inspection of PG&E's San Francisco Division

Dear Mr. Singh:

The Safety and Enforcement Division (SED) of the California Public Utilities Commission conducted a General Order 112 inspection of Pacific Gas & Electric Company's (PG&E) San Francisco Division (Division) on August 3-7, 2015. The inspection included a review of the Division's records for the period of 2014, as well as a representative field sample of the Division's facilities in San Francisco. 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 inspection.

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 inspection.

If you have any questions, please contact Wai Yin (Franky) Chan at (415) 703-2482 or by email at Wai-Yin.Chan@cpuc.ca.gov.

Sincerely,

Kenneth Bruno

Program Manager

Kuneth A. B.

Gas Safety and Reliability Branch

Safety and Enforcement Division

Enclosure: Summary of Inspection Findings cc: Mike Falk, PG&E Compliance

Larry Deniston, PG&E Gas Regulatory Compliance

¹ General Order 112-F was adopted by the Commission on June 25, 2015 via Decision 15-06-044.

SUMMARY OF INSPECTION FINDINGS

I. Probable Violations

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 San Francisco Division (Division). Some of PG&E's internal review findings are violations of PG&E's standards, and are therefore violations of Title 49 Code of Federal Regulations (CFR), §192.13(c) or §192.605(a). Table 1 lists all of the violations from PG&E's internal review.

Table 1: PG&E's Internal Review

Code Section	# of Non- Compliance	Finding Description	Corrective Action	Remediation Date
192.465(a)	3	Missed three 2014 Yearly/Annual Cathodic Protection test reads.	PG&E corrected the maintenance plans for the assets. Request for work changes in the asset registry are now tracked and confirmed by clerical and asset strategists to ensure new equipment is created and scheduled on maintenance plans in SAP.	2/23/2015 and 2/26/2015
	1	One Bi-monthly Cathodic Protection test read in Cathodic Protection Area (CPA) #2306 was performed 5 days late in 2014.	Request for work changes in the asset registry are now tracked and confirmed by clerical and asset strategists to ensure new equipment is created and scheduled on maintenance plans in SAP.	2/20/2015
	1	Only 4% of the total 10% ers population was read in 2014.	Starting in 2015, monthly reports are generated to ensure the total number of 10%ers is on track to meet the year end goal. Additionally, Asset Strategist working with supervisor to bring 10%ers forward to current year, to ensure the total number of required reads are completed.	7/1/2015
192.465(d)	7	Seven Cathodic Protection Areas were found to have inadequate cathodic protection for more than 17 months.	All seven Cathodic Protection Areas have been restored. Additional support is provided by corrosion specialist and corrosion engineering to explore alternative solutions for restoring Cathodic Protection Areas within 15 months.	7/29/2015

Table 2 (cont'd): PG&E's Internal Review

Code Section	# of Non- Compliance	Finding Description	Corrective Action	Remediation Date
192.605(a)	6	Six CPA Follow-Up Action Plans were missing or created late in 2014.	All five Cathodic Protection Areas have been restored. SAP currently maintains CPA Follow- Up Action Plans and it will generate automatic notifications based on the initial date of low read to ensure a two weeks and one week reminder are sent to supervisor.	7/29/2015
192.605(a)	5	Calibration records of five locate and mark instruments were not complete or properly filled out in 2014.	System wide locate and mark retraining included correct documentation of calibration activity.	12/31/2014
192.605(a)	1	No odor intensity test reads in the month of April in 2014.	The reads were taken in May 2014. PG&E is in the process of getting a field meterman and a contractor to qualify for taking the odor intensity test.	6/30/2015
192.605(a)	1	Missed annual "A" maintenance at a Low Pressure System Relief (LPSR) in 2014.	The LPSR inspection was performed on 2/19/2015 after the report of non-compliance. PG&E Asset Strategist is currently working through all requests for work to ensure completeness of maintenance records.	12/31/2015
192.605(a)	1	Missed one valve maintenance in 2014.	The valve maintenance was performed on 4/20/2015 after the report of non-compliance. Operating clerks and Asset Strategists will coordinate to ensure operations are fully captured and updated in SAP.	4/20/2015

SED is aware that some of the items may have been completed by the time of this letter. Please provide an update on the corrective status on the items that were pending as of August 7, 2015.

B. SED Findings

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 Gas Standard O-16, Section 6(A), Cathodic Protection Restoration for Distribution and Local Transmission, states in part:

"If the [Cathodic Protection Area (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..."

In reviewing the Division's corrosion records, SED discovered the Division did not develop a "CPA Follow-up Action Plan" for CPA 2324-B within 30 calendar days from 12/5/2013; when the CPA was found to have below adequate level of protection. The Division restored CPA 2324-B on 3/24/2014.

1.2 Utility Procedure TD-4133P-01, Section 2, Monitoring, Troubleshooting, and T&R Restoration, states in part:

"Monitoring, Troubleshooting, and T&R Restoration work consists of a number of steps as follows...

B.CP.6 – The operating clerk receives the completed work ticket and job package, and enters all applicable readings and comments into SAP."

In reviewing the Division's corrosion records, SED discovered the Division did not update its SAP database to reflect the addition of a new annual Cathodic Protection (CP) test location. The Division installed galvanic anodes to a newly isolated section of main while troubleshooting CPA 2204-A; thus creating a new annual CP read location at the intersection of Geary Street and Powell Street in San Francisco . A base read of -1496 millivolts (mV) was found on 6/6/2014 at this new test location, however the new CP test location was not entered into SAP resulting in the test location not being scheduled in the 2015 maintenance plan. The Division did not realize the work order to create the new CP test location until SED requested clarification on why the new annual CP test did not appear on the test location list for CPA 2204-4. After the discovery, the Division promptly scheduled this test location to be read before the end of the 15 months compliance window.

1.3 PG&E's GS&S A-93.1 Revision #07 states in part:

"Inserting Plastic Pipe Into a Casing, Bore Hole, or Bridge Structure

- 5. The following general requirements apply when plastic pipe is installed in any casing...
- E.(3) The installation is mapped according to the provisions in UO Standard D-S0457, which require that both the casing size and casing material be identified..."

PG&E's Bulletin Number 05-01 dated 4/10/2013 also states in part: "Gas Map Correction documents:

Any of the following documents may be used to report map corrections

- Map Correction Form
- "A" or "A1" Form

Mapping Process

2.0 The assigned mapper will:

A) Update the record(s) within 60 days of receipt of the map correction document(s)..."

SED's review of recent repair work (A-Forms) shows that the repair work of inserted plastic inside a steel casing was not reflected on the requested record printout from GD GIS as of 8/3/2015 for the following two addresses:

- 2200 46th Avenue San Francisco Repair work that inserted1.25-inch steel service with 20 feet of 0.5-inch plastic service completed on 5/29/2013
- 1515 21st Avenue San Francisco Repair work that inserted 1.5-inch steel service with 0.5-inch plastic service from the main to the gas valve box completed on 12/19/2013

The Division is in violation of 49 CFR 192.605(a) for failing to update its records to reflect the repair work completed in the above addresses within the timeframe required by PG&E Bulletin Number 05-01.

II. Areas of Concern/ Observations/ Recommendations

1. SED reviewed the 10%er corrosion records from the SAP system and conducted field inspections at the three locations listed below in Table 2. The three locations were included in the 2014 maintenance plan with pipe-to-soil readings reported as more negative than -900mV.

2.

Table 2: Locations of low Pipe-to-Soil reading

Location	Pipe-to-soil Reading (mV) in 2014	Date of Completion of Plastic Replacement
15-17 Holloway Ave, San Francisco	-963	8/20/1997
2939-41 Fillmore St, San Francisco	-994	10/14/1998
180 Turk St, San Francisco	-955	7/1/2009

However during the SED field inspection, the Division's corrosion mechanics were not able to obtain pipe-to-soil readings at these locations. A review of the Gas Service Records after SED's field inspection found that these locations were all replaced with plastic at least 5 years ago. The readings in the 10%er corrosion records do not accurately reflect the condition of the assets found during SED's field inspection.

SED cannot ascertain what was reported in the PG&E records as pipe-to-soil readings at these locations in 2014. SED recommends that the Division validate the 10%er corrosion records for accuracy and ensure that the records accurately represent the condition of its assets. Please provide SED with the result of its findings.

3. During SED's field inspection, the Division recorded the following pipe-to-soil readings that did not meet the -850mV criterion, as listed below in Table 3.

Table 3: Locations of low Pipe-to-Soil reading

Location	Type	Pipe-to-soil Reading (mV)
706 Kansas St, San Francisco	10% er	-564
3508 Clay St, San Francisco	10%er	-775
149 Ankeny Ave, San Francisco	Bi-monthly	-680

Please provide SED an update on action(s) taken by PG&E to bring the pipe-to-soil readings at these locations back into compliance.

- 4. During SED's field inspection, the Division's corrosion mechanic was not able to obtain an amperage reading from the rectifier at the intersection of Bayshore Blvd and Augusta St in San Francisco. After a brief troubleshooting session, the mechanic suspected that the anode wire was broken. Please provide SED a status update on the remediation.
- 5. During SED's field inspection, the Division's corrosion mechanic recorded a pipe-to-soil reading of -780mV from the ETS location at the intersection of Bridgeview Dr and Topeka Ave in San Francisco. After adjusting the rectifier at the intersection of Ledyard

St and Silver Ave from 2.5A/31V to 3A/36V, a reading of -980mV was obtained while the CPA was still polarizing. The Division's corrosion supervisor informed SED that the Division would still submit a work order to troubleshoot this area. Please provide SED a status update on the cathodic protection condition and the result of the troubleshooting.

- 6. During SED's field inspection, SED inspected the surface condition of exposed gas facilities and found that the coating on the exposed span at 300 Edgehill Way in San Francisco was deteriorating with noticeable atmospheric corrosion along the pipe. After reviewing the maintenance records and maps, the Division determined that the three exposed pipes could possibly be inserted with plastic. Please provide SED a status update on the atmospheric corrosion condition or a clarification on the material of the pipes.
- 7. During SED's field inspection, the Division recorded a casing-to-soil reading of -980mV for L132A at MP 48.7. Please provide SED a status update of the remediation of this contacted casing.
- 8. During field inspection, SED found an invalid emergency phone number on a pipeline warning sticker by the L101 casing at the intersection of Bayshore Blvd and Sunnydale Ave in San Francisco. Please provide SED an update on the corrective action(s) taken by PG&E to address this concern.