PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

July 23, 2019

Mr. Rodger Schwecke, Senior Vice President
Gas Operations and Construction
Southern California Gas Company
555 West 5th Street, GT21C3
Los Angeles, CA 90013

GI-2019-04-SCG-55

SUBJECT: **General Order 112-F Operation and Maintenance Comprehensive Gas Inspection of Southern California Gas Company's Harbor Corridor Distribution Area**

Dear Mr. Schwecke:

The Safety and Enforcement Division (SED) of the California Public Utilities Commission conducted a General Order 112-F Comprehensive Operation and Maintenance Inspection of Southern California Gas Company's (SCG) Harbor Corridor Distribution Area (Inspection Unit) on April 29 – May 3 and May 6 - May 10, 2019. The inspection included a review of SCG's records for the period of 2015 through 2018, as well as a representative field sample of the Harbor Corridor Distribution Area's facilities. SED staff also reviewed the Harbor Corridor Distribution Area's operator qualification records, which included field observation of randomly selected individuals performing covered tasks.

SED's staff has identified two probable violations of G.O. 112-F, Reference Title 49 Code of Federal Regulations (CFR), Part 192, and noted eight areas of concerns which are described in the attached "Post-Inspection Written Preliminary Findings".

Please provide a written response within 30 days of receipt of this letter indicating any updates or corrective actions taken by SCG to address the probable violations and concerns noted in the "Post-Inspection Written Preliminary Findings"

If you have any questions, please contact Shuai (James) Zhang at (415) 603-1310 or by email at JZ3@cpuc.ca.gov.

Sincerely,

Dennis Lee

Dennis Lee, P.E.
Program and Project Supervisor
Gas Safety and Reliability Branch
Safety and Enforcement Division

cc: Troy Bauer, Sempra Energy Utilities
Claudia Almengor, SED
Kan-Wai Tong, SED
Aimee Cauguiran, SED

Post-Inspection Written Preliminary Findings

Dates of Inspection: 4/29/19 – 5/3/19 and 5/6/19 – 5/10/19

Operator: SOUTHERN CALIFORNIA GAS CO

Operator ID: 18484 (primary)

Inspection Systems: Compton, Huntington Park, 182nd (Redondo), and San Pedro

Assets (Unit IDs): Northwest - Harbor Corridor (87038)

System Type: GD

Inspection Name: SoCalGas Harbor Corridor Distribution

Lead Inspector: James Zhang

Operator Representative: Khoa Le

Unsatisfactory Results

Records : Corrosion Control (PRR.CORROSION)

1.Question Text	Do records adequately document actions taken to correct any identified deficiencies in corrosion control?
References	192.491(c) (192.465(d))
Assets Covered	Northwest - Harbor Corridor (Harbor Corridor - 87038 (55))
Issue Summary	Title 49 CFR §192.465(d) – External Corrosion Control: Monitoring “Each operator shall take prompt remedial action to correct any deficiencies indicated by the [external corrosion control] monitoring.” The May 19, 1989, Federal Pipeline and Hazardous Materials Safety Administration’s (PHMSA) Inspection Guideline and Interpretation #PI-89-006 for 192.465(d) states that, as a rule of thumb, PHMSA interprets “prompt” as having the “correction completed by the time of the next scheduled monitoring”. SED found numerous Cathodic Protection (CP) packages to be deficient for intervals exceeding SCG’s routine monitoring frequency defined in Gas Standard 186.0135, and as required in 49 CFR §192.465(d). Since 2016, SCG has been implementing changes to address the long-term CP Down Areas while developing a proactive

approach to the CP areas. SCG provided "Cathodic Protection (CP) status update to SED" since 3rd Quarter of 2016 through 1st Quarter of 2019. It reported a total of 231 areas that were out of tolerance at system wide for various reasons for a period of longer than a year in September 2015, and then 78 areas in March 2019 (a 66% reduction). During this inspection, SCG provided additional information of 28 Cathodic Protection Areas in Harbor Corridor where CP were down greater than one year. SED recognizes that in some instances, factors outside of SCG's control may be the cause of delay for restoring deficient CP packages (i.e. environmental, permitting, moratoriums, etc.). However, SCG should continue to diligently follow up and monitor these areas and maintain documentation of actions taken.

2.Question Text Do records adequately document that exposed buried piping was examined for corrosion and deteriorated coating?

References 192.491(c) (192.465(e))

Assets Covered Northwest - Harbor Corridor (Harbor Corridor - 87038 (55))

Issue Summary Title 49 CFR part 192.455(a) (2) states:

(a) (2) Except as provided in paragraphs (b), (c), and (f) of this section, each buried or submerged pipeline installed after July 31, 1971, must be protected against external corrosion, including the following: it must have a cathodic protection system designed to protect the pipeline in accordance with this subpart, installed and placed in operation within 1 year after completion of construction…

(f) This section does not apply to electrically isolated, metal alloy fittings in plastic pipelines, if:

(1) For the size of the fitting to be used, an operator can show by test, investigation, or experience in the area of application that adequate corrosion control is provided by the alloy composition; and

(2) The fitting is designed to prevent leakage caused by localized corrosion pitting.

SED reviewed records of unprotected steel pipe systems and found the following post-1971 pipeline repairs and/or replacements without cathodic protection installed:

The table below lists work orders that included portions of steel systems which were replaced with plastic pipe. However, anodes were not installed on the steel fittings:

WO#	WORK TYPE	ASSETREGISTRYID	DATE OF OPERATION	MATERIAL	NOMINAL SIZE
2000140217	REPL	GD.PAC.HTP.MP.DOW0031	8/22/2017	Steel	2
2000140217	REPL	GD.PAC.HTP.MP.DOW0031	8/22/2017	Steel	2
2040788862	REPL	GD.PAC.HTP.MP.WAT0034	10/2/2017	Steel	6

Concerns

Records: Operations And Maintenance (PRR.OM)

1.Question Text	Do records indicate distribution leakage surveys were conducted as required?
References	192.603(b) (192.723(a), 192.723(b))
Assets Covered	Northwest - Harbor Corridor (Harbor Corridor - 87038 (55))
Issue Summary	SED reviewed Work Order # 520001602784 (Leak ID 1704382) Code 3 leak repair at 1104 Eubank Ave. Wilmington. Records show that the leak was detected on 2/28/17, and repaired using “clamp” on 1/12/18. Leak repair record indicates that the Code 3 leak was on the service, but repair comments notes that leak was at the bottom of steel main. The record also identified the material as “Steel-Coated w/CP”. Review of SCG GIS showed that the 3-inch steel main was unprotected, contrary to the information provided in the leak repair record. During the audit, SCG personnel stated that leak repair personnel are not qualified to take P/S reads, which could have caused the personnel to assume that the main was protected. Leak repair records are essential data source used to identify threats as part of the distribution integrity management program. As such, SCG should ensure that information gathered in the field are accurate and complete.

Pipeline Field Inspection: Pipeline Inspection (Field) (FR.FIELDPIPE)

2.Question Text	Are meters and service regulators being installed consistent with the requirements of 192.357?
References	192.351 (192.357(a), 192.357(b), 192.357(c), 192.357(d))
Assets Covered	Northwest - Harbor Corridor (Harbor Corridor - 87038 (55))
Issue Summary	On 5/9/2019, during a leak survey on Pope Ave in Lynwood, SCG and SED observed many meters which were found to be slanted, along with many manifolds found to be not attached to the wall of the houses. According to §192.357, meters should be installed to minimize anticipated stresses upon the connecting piping and the meter. Please provide a status update on the corrective action and completion of work order.

3.Question Text	Are methods used for taking CP monitoring readings that allow for the application of appropriate CP monitoring criteria?
References	192.465(a) (192.463(b), 192.463(c))
Assets Covered	Northwest - Harbor Corridor (Harbor Corridor - 87038 (55))
Issue Summary	SCG and SED observed the following cathodic potential readings during its field inspection: a. LA1515-1-1: mag anode area (-850mv criteria)

i. 131 N Harbor Ave (Point C), -800 mV
ii. ETS, Harbor View & Santa Cruz St (Point E), -816 mV
iii. 1459 Summerland Avenue, meter (Point D), -810 mV

b. 10%er TLA1359-1-1 (-850mV criteria)

i. Eubank Ave & Denni St, casing cover paved over, -626mV
ii. 575 Hamilton, -444mV

c. SL 37-21B mag anode area (-850mV criteria), interference bond along Pacific Coast Hwy,

i. Bimonthly read location (Point F), -426mV
ii. Diode location (randomly selected), -449mV

d. TTOR17-15 (10%er, -850mV criteria)

i. 1907 Plaza Del Amo, -774mV

e. TOR 11-4 (-850mV criteria)

i. 2941 El Dorado (Point A), -791mV
ii. 2934 Opal St (Point F), -813mV

f. C0593W-8 (Point G) bonded together with Chevron, 0.67 mV -> 0.67 mA, 0.9 mA was initial, (-850mv criteria)

i. Point F, -534mV

g. C0593W-6 interference bond (Point H), (-850mV criteria)

i. South wire, -677mV

ii. North wire, -478mV

iii. Point D, -682mV

h. MB05-11 (-850mV criteria)

i. 1506 21St (Point A), -470 mV

Please provide SED an update on any corrective action(s) taken by SCG and include documentation of the corrective action(s).

4.Question Text Are measures performed to ensure electrical isolation of each buried or submerged pipeline from other metallic structures unless they electrically interconnect and cathodically protect the pipeline and the other structures as a single unit?

References 192.467(a) (192.467(b), 192.467(c), 192.467(d), 192.467(e))

Assets Covered Northwest - Harbor Corridor (Harbor Corridor - 87038 (55))

Issue Summary During field inspection on 5/09/2019, SCG and SED discovered a

disconnection of the interference bond at Point C of the Cathodic Protection Area C0658E-1 in Compton district. SCG representatives stated that it will come back to fix it with the correct tools. Please provide SED a status update on the corrective action(s) taken by SCG and completion of work order.

5.Question Text Is pipe that is exposed to atmospheric corrosion protected?

References 192.481(b) (192.481(c), 192.479(a), 192.479(b), 192.479(c))

Assets Covered Northwest - Harbor Corridor (Harbor Corridor - 87038 (55))

Issue Summary a. On May 2, 2019, SED inspected the pipe under one end of Redondo Beach Pier and found the pipe to be held with metal straps. However, these straps were observed to not have insulation separating it from touching the pipe compared to the other end of the pier where the pipe was painted green, indicating epoxy coating, and had insulation between the pipe and its metal supports. This span was also under the pier, over a body of water.

b. On May 9, 2019, SED inspected the bridge and span at Slauson Ave Bridge in Maywood. SED noticed missing insulation at one of the supports, and missing pipe wrap where the pipe touched the concrete.

SED believes that both situations can lead to atmospheric corrosion if not remediated. Please provide SED a status update on the corrective action(s) taken by SCG and completion of work order.

Generic Questions: Generic Questions (GENERIC.GENERIC)

6.Question Text Generic question – Field Observations

References N/A

Assets Covered Northwest - Harbor Corridor (Harbor Corridor - 87038 (55))

Issue Summary a. On 5/8/2019, SED observed SCG field crew conducting maintenance of Regulator Station 2042 in Compton district. During the maintenance, regulator 0100 did not lock up. SCG crew repaired and replaced parts to reach lock up. SED reviewed the record of this maintenance work order after its field inspection and noticed that the record did not reflect the “as-found” condition of the 0100 regulator to state “51 – NO LOCK UP”. SED believes that maintenance records are essential data sources for the distribution integrity management program. Thus, SCG should accurately record the “as found” conditions to reflect actual field conditions observed.

b. On 5/9/2019, SED was observing SCG perform a leak survey along Pope Ave starting from Martin Luther King Jr. Blvd and came across an address where a code 3 leak was previously identified. During the leak survey, the leak was found to have migrated into the residence and was categorized as a code 1 leak. Please provide SED with records of prior odor calls/complaint (if any), and leak repair records

associated with the leak.

7.Question Text	Generic question – Leak survey, repair and recordkeeping
References	N/A
Assets Covered	Northwest - Harbor Corridor (Harbor Corridor - 87038 (55))
Issue Summary	The current SCG's gas leak survey classification procedure, Gas Standard 223.0125, section 1.3, states "Although a repair of a classified leak may be expedited for a variety of reasons, the original classification of the leak shall not be changed." SED believes that this restriction does not reveal the actual condition of the gas leaks during the subsequent reevaluations, and none of the current SCG's work management system can track the escalated levels of the leak condition and corresponding repair activities. Even though the Gas Standard allows the crew to expedite the repairs, there is currently no auditable process to verify that the repairs were completed within the timeframes corresponding to the latest Code levels (i.e. Code 3 to Code 2). Therefore, SCG should revise its Gas Standard to require documenting field observations during subsequent reevaluations, including recording any changes (i.e. code levels) identified that may expedite the need for remedial actions.

8.Question Text	Generic question – Operator qualification
References	N/A
Assets Covered	Northwest - Harbor Corridor (Harbor Corridor - 87038 (55))
Issue Summary	CPA C0597-W Z9 had been under a 100mV shift criterion set established in 2004 at the time remediation activities took place between 2015 and 2017. During this time, SCG personnel conducted CP monitoring and surveillance by taking monthly reads while attempting to restore the CP levels in the area. At some point in 2016, the reads began producing satisfactory values. However, the SCG personnel failed to recognize the area was no longer deficient under the 100-mV shift criterion. CP remediation log comments indicate the SCG personnel believed the area was under the -850mV shift and continued remediation activities. Eventually, this led to the establishment of another 100 mV shift criterion in 2017 and SCG reconsidering the area as within compliance under the 2017 criterion set. After relating this information to SCG, SCG representatives agreed with SED's assessment that the employee failed to recognize the criterion utilized in the CPA. SCG representatives stated they would address this issue with their CP staff to prevent a reoccurrence in the future. SCG representatives later provided SED with OQs for the SPS and LSPS personnel involved. Upon review, the Operator Qualifications were found to be active and valid between 2015 to 2017.