

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



December 21, 2022

GI-2022-06-SCG-63-02ABC

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

Dear Mr. Schwecke:

The Safety and Enforcement Division (SED) of the California Public Utilities Commission (CPUC) reviewed Southern California Gas Company's (SoCalGas) response letter, dated November 17, 2022, that addressed one (1) out of two (2) probable violations and two (2) out of three (3) areas of concern identified during the **General Order (G.O.) 112-F Comprehensive Operation and Maintenance Inspection of Southern California Gas Company (SoCalGas)'s SE Inland South Distribution Area** (Inspection Unit) conducted on June 13 through June 17, 2022. SED had closed the other one (1) probable violation and (1) area of concern in the inspection letter, dated October 18, 2022, based on SoCalGas' responses reviewed by SED at the time.

Attached is a summary of all SED's inspection findings, SoCalGas' responses to SED's findings, and SED's evaluation of SoCalGas' responses to the findings.

This letter serves as an official closure of the 2022 Comprehensive Inspections of SoCalGas' Inland South Distribution Area. Any matters that are being considered for enforcement will be processed through the Commission's Citation Program or a formal proceeding.

Thank you for your cooperation in this inspection. If you have any questions, please contact Gordon Huang, Utilities Engineer, at (213) 503-5083 or by email at ghg@cpuc.ca.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read "Mahmoud Intably".

Mahmoud (Steve) Intably, P.E.
Program and Project Supervisor
Gas Safety and Reliability Branch
Safety and Enforcement Division

cc: Alex Hughes, SoCalGas
Neena Master, SoCalGas
Terence Eng, SED/GSRB
Gordon Huang, SED/GSRB
Kan-Wai Tong, SED/GSRB
Claudia Almengor, SED/GSRB

Post-Inspection Written Preliminary Findings

Dates of Inspection: 6/13/2022 – 6/17/2022

Operator: SOUTHERN CALIFORNIA GAS CO

Operator ID: 18484 (primary)

Inspection Systems: Murrieta, Ramona Distribution Districts

Assets (Unit IDs) with results in this report: Southeast - Inland South (87046)

System Type: GD

Inspection Name: SoCalGas SE Distribution - Inland South

Lead Inspector: Gordon Huang

Operator Representative: Edwin Baires

Unsatisfactory Results

Design and Construction : Meters, Service Regulators, and Service Lines (DC.METERREGSVC)

Question Title, ID Customer Meters and Regulator Location,
DC.METERREGSVC.CUSTOMETERREGLOC.O

Question 1. Are meters and service regulators being located consistent with the requirements of 192.353?

References 192.351 (192.353(a), 192.353(b), 192.353(c), 192.353(d))

Assets Covered Southeast - Inland South (87046 (63))

Issue Summary On June 15, 2022, SED was checking an ACOR location at the location of 28983 Cattleman Circle Menifee. At this location it was noted that there lack of vehicular protection at the addresses of [REDACTED] Menifee.

On June 16, 2022, SED was observing a leak survey on the Map RCO4134 and observed a meter at the location of [REDACTED] Perris, which was lacking in meter protection. This location is observed in google maps to have not had vehicular protection within the past 4 years.

Code 192.353 (a) states:

(a) Each meter and service regulator, whether inside or outside a building, must be installed in a readily accessible location and be protected from corrosion and other damage, including, if installed outside a building, vehicular damage that may be anticipated.

SCG did not add vehicular protection to the location of [REDACTED] despite it being exposed to vehicular traffic for several years. Therefore, SCG is in probable violation of G.O. 112-F, Reference Title 49 CFR, Part 192, Section 192.353 (a).

Update 1: On June 28, 2022, SoCalGas responded stating that bollards and meter guards were installed at [REDACTED] Menifee and [REDACTED] Perris, respectively. Pictures and a supporting document were provided as evidence of SoCalGas' remediation efforts.

SED's Conclusion:

SED has reviewed SoCalGas' response and accepts the corrective action that it has articulated and proposed. SED has opted not to impose a fine or penalty at this time. However, SED may check the effectiveness of SoCalGas' corrective actions during future inspections.

Time-Dependent Threats : External Corrosion - CP Monitoring (TD.CPMONITOR)

Question Title, ID Cathodic Protection Monitoring, TD.CPMONITOR.TEST.R

Question 4. Do records adequately document cathodic protection monitoring tests have occurred as required?

References 192.491(c) (192.465(a))

Assets Covered Southeast - Inland South (87046 (63))

Issue Summary Several CP10 readings were not conducted within the 10 year compliance interval per 192.465(a). These CP10 assets include: (i) GD.INL.RMN.SH.00280425, (ii) GD.INL.RMN.SH.00280426, (iii) GD.INL.RMN.SH.00094115, (iv) GD.INL.RMN.SH.00094127. For these services, (i)(ii) were read in 2005 and had migrated to a different Atlas sheet, leading to a lapse until 2018; (iii)(iv) were never read prior to 2021. For (iii)(iv), SoCalGas filed a NCIF self-report in December 2021. Services (i)(ii) and (iv) are currently abandoned. However, SoCalGas failed to conduct cathodic protection readings in a timely manner such that the entire system is tested in each 10-year period. Therefore, SED finds SoCalGas to be in violation of §192.465(a).

Update 1: Per its 6/17/22 and 7/15/22 response, SoCalGas has explained that (ii) was changed to the XXX8 read cycle due to SAP asset migration. As a result, the service was read (-1.19 V) in 3/13/2018 and also abandoned on 4/17/2018 per WO 54-213190. (i) encountered a similar issue and was read (-1.25 V) in 2018 as a result. This service was also abandoned on

10/8/2020. Services (iii) and (iv) were included into SoCalGas' 7/15/2022 self-reported violations for not conducting previous CP monitoring readings.

SoCalGas' Response and Remedial Action:

SoCalGas acknowledges that it did not complete inspection of the four services per 192.465(a).

To address these specific assets, SoCalGas has abandoned three of the four services, and the remaining service is now on an inspection cycle.

To address inspection cycle integrity for monitoring isolated steel services, SoCalGas is prioritizing an SAP Service History enhancement that will provide a validation step when updating a map grid (historically known as atlas sheet) is performed. The validation will warn users that the proposed change will affect the inspection cycle of an affected isolated steel service and updates to the inspection schedule is required. SAP Service History enhancement is in progress.

Several reports are used to monitor the integrity of service history data. As noted during the audit, a clerk was investigating irregularities reported by the integrity reports and found the two services documented as GD.INL.RMN.SH.00094115 and GD.INL.RMN.SH.00094127. Once discovered he initiated corrective actions which ultimately resulted in abandonment of the services. The missed inspection of the isolated services was relayed to SED during the Mountain Pass audit and were being readied at the time for notification as part of the exception reporting process.

SoCalGas utilizes these quality reports to alert the Company of changes in the system that might affect the CP status. SoCalGas will continue to monitor for irregularities in service history data to avoid similar instances.

SED's Conclusion:

SED has reviewed SoCalGas' response and accepts the corrective action that it has articulated and proposed. SED has opted not to impose a fine or penalty at this time. However, SED will continue to monitor the implementation and effectiveness of SoCalGas' corrective actions during future inspections.

Concerns

Maintenance and Operations : Gas Pipeline Maintenance (MO.GM)

Question Title, ID Maintenance of Equipment Used in Joining of Plastic Pipe by Heat Fusion, MO.GM.EQUIPPLASTICJOINT.R

Question 16. Do records indicate equipment used in joining plastic pipe by heat fusion was maintained in accordance with the manufacturer's recommended

practices or with written procedures that have been proven by test and experience to produce acceptable joints?

References 192.603(b) (192.756)

Assets Covered Southeast - Inland South (87046 (63))

Issue Summary SoCalGas was unable to provide specific calibration records for equipment used in joining plastic pipe by heat fusion for Work Order #2041732202. While it is assumed that any plastic pipe joining would have been used calibrated equipment to produce acceptable joints, SoCalGas was unable to provide traceable records for equipment used on that specific project.

SoCalGas' Response and Remedial Action:

SoCalGas appreciates the opportunity to discuss this recommendation related to Title 49 CFR, Part 192.756 which states: "Each operator must maintain equipment used in joining plastic pipe in accordance with the manufacturer's recommended practices or with written procedures that have been proven by test and experience to produce acceptable joints." SoCalGas requires qualified employees to inspect equipment used for joining plastic pipe per the company procedures specified for each plastic pipe joining method. SoCalGas' written procedure, GS 184.0130, Polyethylene Heater - Temperature Measurement and Adjustment documents how it complies with Title 49 CFR, Part 192.756 along with the Company's other fusion procedures. Infrared thermometers are tagged with a capital tool number and inspection date. Qualified Company employees and contractors are required to verify IR thermometers were calibrated within the last year (no longer than 14 months). Calibration of other instruments (such as pressure gauges on Butt fusion machines) are not required by the equipment manufacturer. Instead, manufacturers require inspection of equipment condition before use as the practice that has been proven by experience to produce acceptable joints, which are integrated into the written GS procedures.

Also, for consideration when 192.756 was promulgated into regulation during the Plastic Pipe Rule in 2018, PHMSA provided operators guidance that it did not expect retention of records on daily calibration. The Analysis of Comments and Proposed PHMSA Response of the Plastic Pipe Rule section (8)(a)(b)(c), PHMSA stated, In consideration of the comments and the recommendations of the GPAC, PHMSA has removed the additional calibration and recordkeeping requirements in paragraphs (b) through (d). Therefore, the retention of records of daily equipment calibrations and adjustments suggested by Lael has not been implemented. Commenters suggested that the proposed requirements were overly prescriptive and burdensome. PHMSA may revisit this issue if problems are identified in the future. The final rule retains the requirement that operators must maintain joining equipment in accordance with the manufacturer's recommended practices or with written procedures that have been proven by test and experience to produce acceptable joints.

SoCalGas considers that imposing further calibration record requirements are not necessary and would be overly prescriptive and burdensome. It

should be noted that temperature measurement is not a highly critical variable, this conclusion is supported by industry studies, such as the 2015 study conducted by GTI for PHMSA titled, Effects of Hydrocarbon Permeation on Plastic Pipe Strength and Fusion Performance.*

* See K. Wiley, E. Lever, PHMSA, U.S. Department of Transportation Contract DTPH56-14-H-00001 Project 554. This study demonstrated that heater plate temperature was an insignificant variable (see Table 10 which presents the results of an ANOVA analysis on the relative power of fusion parameters). It demonstrates that heat saturation is the most significant variable, followed by interfacial pressure, material etc. The size of the F Value represents the relative power of each factor. This is supported by a probabilistic analysis of 198 fusion joints where the heater plate temperature was varied from 375°F to 525°F and there was no change in the fusion joint quality across the range of temperatures.

Link to report: <https://primis.phmsa.dot.gov/matrix/FilGet.rdm?fil=10327>

SED's Conclusion:

SED has reviewed SoCalGas' response on this concern item. SoCalGas' written procedure Gas Standard (GS) 184.0130 Polyethylene Heater - Temperature Measurement and Adjustment (published on 1/1/22) describes the plan on how to comply with Title 49 Code of Federal Regulations (CFR), Part 192, §192.756. GS 184.0130, Section 4.2.1.12 states:

“Infrared thermometers must be calibrated by comparison with another infrared thermometer which has been calibrated by comparison to a reference standard, such as National Institute of Standards & Technology (NIST) Standard Reference Material (SRM) once per year.”

GS 184.0130, Section 4.14 – Maintenance/Inspection, subsection 4.14.2 & 4.14.3 states:

4.14.2 – *“Fusers verify each day that the IR thermometer inspection tags are within the required 12 to 14 months of the inspection date. IR thermometers that are getting closer to the inspection date tag on the tool are sent to F&TRS for inspections. Fusers are responsible for checking out an IR thermometer from storerooms prior to returning thermometers for inspection and performing any fusion work.”*

4.14.3 – *“Inspection dates tagged on IR thermometers are valid for 12 to 14 months from the tag date.”*

G.O. 12-F, Reference Title 49 CFR, Part 192.603(b) states:

“Each operator shall keep records necessary to administer the procedures established under § 192.605.”

Per SoCalGas' GS 184.0130, SoCalGas believes the temperature of the joining surfaces is critical in joining plastic materials. As such, SoCalGas has developed a procedure to ensure its employees verify the proper temperature is reached while performing heat fusion on Polyethylene (PE) plastic pipe. However, SoCalGas has failed to demonstrate where and how it would keep its infrared thermometers annual inspection/calibration records, so that SED can review the results and verify/ensure SoCalGas' compliance of G.O.112-F, Reference Title 49 CFR, §§192.603(b) and 192.756. Therefore, SoCalGas must clarify and/or provide more details

in its procedure to describe its recordkeeping process. SED will continue to monitor SoCalGas' improvement in this area during future inspections.

Therefore, SED maintains its previously presented inspection findings.

Time-Dependent Threats : Atmospheric Corrosion (TD.ATM)

Question Title, ID Atmospheric Corrosion Monitoring, TD.ATM.ATMCORRODEINSP.R

Question 3. Do records document inspection of aboveground pipe for atmospheric corrosion?

References 192.491(c) (192.481(a), 192.481(b), 192.481(c))

Assets Covered Southeast - Inland South (87046 (63))

Issue Summary

SED requests SoCalGas to provide follow up maintenance records (e.g., OMOs, GSOs, etc.) for the following MSA ACOR inspections:

District	WO	Location	GNN
MUR	0281492914	[REDACTED] LAKE ELSINORE	674236200
MUR	0168189998	[REDACTED] LAKE ELSINORE CA 92530	1241237400
RAM	1568861504	[REDACTED] MENIFEE CA 92585	1092577500
RAM	0658022514	[REDACTED] HEMET CA 92543	1542257600

Update 1: On 6/28/22 and 7/29/22, SoCalGas responded to SED's DR-016 and provided DART and As-Built Smart Form records for the requested MSAs. SED received and reviewed the requested documents; this inspection item is closed.

Question Title, ID Atmospheric Corrosion Monitoring, TD.ATM.ATMCORRODEINSP.O

Question 4. Do field observations indicate that pipe exposed to atmospheric corrosion is properly coated?

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

Assets Covered Southeast - Inland South (87046 (63))

Issue Summary 1) During the inspection of Span S205 in the Murrieta district on 6/15/22, SED and SoCalGas ETD Sergio Flores observed tape wrap damage on the S/E end of the span. SED requests SoCalGas to follow up on the observed condition and provide (i) remediation records (e.g., OMO, MMO, etc.) and (ii) pictures of the remediated condition.

Update 1: Per 6/28/22, SoCalGas rewrapped the damaged tape wrap on 6/22/22 per WO 520003080238.

2) SED was unable to field confirm the Ramona-Hemet and both Murrieta MSAs due to access/logistical issues. Please provide photographs of those

MSA locations and the MSA in relation to the nearest driveway/roadway for review.

Update 1: Per 6/28/22, 7/29/22, 8/18/22, and 8/29/22, SoCalGas investigated the specified MSAs with the following results:

- A bollard was installed at [REDACTED] Menifee on 6/20/22.
- A meter guard was installed at [REDACTED] Hemet on 7/20/22 per WO 540000510961.
- Residential Meter Protection Program (RMPP) determined on 6/20/22 that the MSA at [REDACTED] Lake Elsinore is not located near a driveway/roadway.
- RMPP determined on 8/29/22 that the MSA at [REDACTED] Lake Elsinore did not require a meter guard based on (i) customer refusal and (ii) driveway usage for storage purposes only.

3) During ACOR inspections on 6/15/22 at [REDACTED] Menifee, SED and SoCalGas observed the wax pad was missing and ACOR had developed on the meter riser. SED requests SoCalGas to follow up on the observed condition and provide (i) remediation records (e.g., OMO, GSO, SAP WO, etc.) and (ii) pictures of the remediated condition.

Update 1: Per 6/28/22, SoCalGas investigated [REDACTED] Menifee on 6/20/22 and applied wax coating and repainted the MSA per WO 1167822720.

4) During leak survey inspections on 6/16/22 of RCO 2469 in the Ramona district, uncoated and rusting pipe were observed on some meter sets. SED requests SoCalGas to demonstrate by test, investigation, or experience appropriate to the environment of the pipeline that the corrosion observed on the meter sets is within compliance of §192.479 and SCG GS 185.0228 and 185.0305.

Update 1: Per 7/12/22, SoCalGas confirmed follow up remediation was conducted on 6/16/22 for GNN 11013506 ([REDACTED]), 11025949 ([REDACTED]), and 10563148 ([REDACTED]) per WO# 1577381621, 1420475824, and 206061258.

SED's Conclusion:

SED has reviewed SoCalGas' response and accepts the corrective action that it has articulated and implemented. However, SED may verify the corrective actions during future inspections.