

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



July 1, 2019

GI-2019-01-SCG-49

Mr. Rodger Schwecke, Senior Vice President
Gas Transmission, Storage & Engineering
Southern California Gas Company
555 West 5th Street, GT21C3
Los Angeles, CA 90013

SUBJECT: SED Closure letter for General Order 112-F Comprehensive Gas Inspection of Southern California Gas Company's North Desert Transmission Area

Dear Mr. Schwecke:

The Safety and Enforcement Division (SED) of the California Public Utilities Commission conducted a G.O. 112-F Comprehensive Operation and Maintenance Inspection of Southern California Gas Company's (SCG) North Desert Transmission Area (Inspection Unit) on January 28 thru February 08, 2019 for calendar years 2015 thru 2018. SED used the Pipeline and Hazardous Materials Safety Administration (PHMSA), Office of Pipeline Safety's "Inspection Assistant Form" as a reference guide to conduct the inspection. SED conducted field inspections of pipeline facilities in the Needles and Victorville Transmission districts within the Inspection Unit. SED's staff also reviewed the Operator Qualification program, which included field observation of randomly selected individuals performing covered tasks.

A summary of the inspection findings documented by the SED, SCG's response to the findings, and SED's evaluation of SCG's response to all findings are outlined in the attached "Post-Inspection Written Preliminary Findings".

This letter serves as the official closure of the 2019 Comprehensive O&M Inspection of SCG's North Desert Transmission Area 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 inspection. If you have questions, please contact Durga Shrestha, at (213) 576-5763 or by e-mail at ds3@cpuc.ca.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Matthewson Epuna".

Matthewson Epuna
Program and Project Supervisor
Gas Safety and Reliability Branch
Safety and Enforcement Division

cc: Troy Bauer, Sempra Energy Utilities
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Post-Inspection Written Preliminary Findings

Date of Transmittal: 03/14/2019

Dates of Inspection: January 28 through Feb 08, 2019

Operator: SOUTHERN CALIFORNIA GAS CO

Operator ID: 18484

Inspection Systems: SCG North Desert Transmission Area

Assets (Unit IDs): T: North Desert (87057)

System Type: GT

Inspection Name: 2019 SCG North Desert Transmission

Lead Inspector: Durga Shrestha

Operator Representative: Khoa Le, Pipeline Safety and Compliance Advisor

Unsatisfactory Results

Maintenance and Operations: Gas Pipeline Overpressure Protection (MO.GMOPP)

- 1. Question** Do records indicate testing or review of the capacity of each pressure relief device at each pressure limiting station and pressure regulating station as required?

References 192.709(c) (192.743(a), 192.743(b), 192.743(c))

Assets Covered T: North Desert (87057 (49)

Issue Summary During the review of records for annual inspection of relief valves KJ-NG-01, KJ-NG-02, and KJ-NG-03; the work order was found with check mark on "Review Cap.". When asked what review was performed before marking "Review Cap." was done, SoCalGas responded that nothing was changed from the previous year, hence the capacity was unchanged. SED staff followed up this issue as follows:

SCG Gas Standard 223.0345 states,

6.9. If review and calculations are used to determine if a device has sufficient capacity, the calculated capacity must be compared with the rated or experimentally determined relieving capacity of the device for the conditions under which it operates. After the initial calculations, subsequent calculations need not be made if the annual review documents that parameters have not changed to cause the rated or experimentally determined relieving capacity to be insufficient.

SED staff requested list of parameters mentioned in the standard (underlined above).

SoCalGas provided the following response from 2018 inspection:

This issue was reviewed last year during the South Desert 2018 audit. SCG and SDGE do not list the parameters which would trigger a Gas Engineering review because the range of possibilities is numerous. The field technicians are trained, Op Qualified, and have years of field experience and can identify when conditions exist on the pipeline or system which would warrant Gas Engineering review. Some of these reviews are triggered during O&M activities, or on capital projects. This subject was discussed last year, and it was agreed that our practice was acceptable and in compliance with DOT regulations.

SCG did not list the parameters which would trigger a Gas Engineering review to comply with its procedure 223.0345 and 49 CFR 192, Section 192.743 (a) and (b). Hence, SoCalGas is in violation of 49 CFR 192, Section 192.743 (a) and (b).

SCG's Response:

Neither 49 CFR 192.743(a) nor 192.743(b) requires that parameters be explicitly listed and therefore SoCalGas disagrees that a violation occurred.

Records appropriately indicate that all three subject relief valves were tested in place within the required 15-month window per 192.743 (a). During the inspection, the "Review Cap" box was checked, documenting that a field review was performed per 192.743(b). Parameters that were reviewed during this field inspection are covered in the job plan and in operator training and included verification of RV tag information, piping configuration, system MAOP or vessel MAWP, RV setpoint setting, and RV size and capacity. These parameters did not change, and therefore a subsequent engineering capacity analysis was not required as a result of the inspection. The subject relief valves are fully operational and adequately protecting their corresponding vessels from over-pressurization. Since the safety and operating requirements are met, SoCalGas does not agree that a violation of 49 CFR 192, Section 192.743 (a) and (b) has occurred.

Recommended Actions:

While currently operating within compliance, SoCalGas recognizes that its RV capacity verification processes can be strengthened by incorporating guidance check-list(s) for employees to consider as they evaluate whether changes have been implemented which may affect RV sizing. SoCalGas will implement the following enhancements to support future audit and process standardization:

- 1) An update will be made to Gas Standard 223.0345 to include a general list of parameters potentially affecting capacity to be reviewed during an inspection.

- 2) Updates will be made to MAXIMO job plans to include specific additional parameters, beyond the scope added under (1), where unique site conditions warrant such additions.

Enhancement (1) to be completed by September 1st, 2019. On-going job plan enhancements under (2) to be completed system-wide over the next 18 months in advance of individual RV annual capacity verification activities.

SED's Conclusion:

SED has reviewed SCG's response and accepts the corrective actions that it has articulated and implemented. However, SED may review the records of the corrective action during future inspections.

Concerns

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

1. Question	Are field inspection and partial operation of transmission line valves adequate?
References	192.745(a) (192.745(b))
Assets Covered	T: North Desert (87057 (49))
Issue Summary	During the field inspection, SED observed that SCG's transmission line main valves' hydraulic unit was leaking fluid:

1. L3000 MP 50.1 Hydraulic unit leaking fluid
2. L235 MPV # 20 MP 204.63-1 Hydraulic unit leaking fluid

SCG's procedure 223.0215 Valve inspection & maintenance-Transmission, Section 4.9 "Substantial conditions that were not repaired during the inspection shall be reported on an appropriate form (e.g., Compliance Corrective Work Order in MAXIMO".

SED recommends that SCG take remedial action to address the leaking fluid.

SCG's Response:

SoCalGas has taken remedial action to address the leaking fluid.

SED's Conclusion:

SED has reviewed SCG's response and accepts the corrective actions that it has articulated and implemented. However, SED may review the records of the corrective action during future inspections.

Maintenance and Operations: ROW Markers, Patrols, Leakage Survey and Monitoring (MO.RW)

2. Question	Are line markers placed and maintained as required?
References	192.707(a) (192.707(b), 192.707(c), 192.707(d))
Assets Covered	T: North Desert (87057 (49))

Issue Summary During the field inspection, SED observed that aboveground regulator station at L335 MP 0.2 did not have line markers posted on the outside fence of the regulating station.

SED recommends that SCG place and maintain line marker on each section of the fence to identify its facility in accordance with 192.707 (c).

SCG's Response:

192.707(c) states "*Pipelines aboveground*. Line markers must be placed and maintained along each section of a main and transmission line that is located aboveground in an area accessible to the public."

Interpretation: PI-91-022 Date: 07-16-1991 states in part "Two factors to consider are whether the area is adequately fenced and locked or guarded, and if not fenced, the remoteness of a facility from areas frequented by the public." This regulating station is securely confined within locked fencing and not accessible to the public. While SoCalGas disagrees with SED's interpretation of the regulations, SoCalGas followed SED's recommendation and installed signage on the regulating station fencing.

SED's Conclusion:

SED has reviewed SCG's response and accepts the corrective actions that it has articulated and implemented. However, SED may review the records of the corrective action during future inspections.

Public Awareness and Damage Prevention: ROW Markers, Patrols, Monitoring (PD.RW)

3. Question Are line markers placed and maintained as required?

References 192.707(a) (192.707(b), 192.707(c), 192.707(d))

Assets Covered T: North Desert (87057 (49))

Issue Summary During the field inspection, SED observed that aboveground regulator station at L335 MP 0.2 did not have line markers posted on the outside fence of the regulating station.

SED recommends that SCG place and maintain line marker on each section of the fence to identify its facility in accordance with 192.707 (c).

SCG's Response:

192.707(c) states "*Pipelines aboveground*. Line markers must be placed and maintained along each section of a main and transmission line that is located aboveground in an area accessible to the public."

Interpretation: PI-91-022 Date: 07-16-1991 states in part "Two factors to consider are whether the area is adequately fenced and locked or guarded, and if not fenced, the remoteness of a facility from areas frequented by the public." This regulating station is securely confined within locked fencing and not accessible to the public. While SoCalGas disagrees with SED's interpretation of

the regulations, SoCalGas followed SED's recommendation and installed signage on the regulating station fencing.

SED's Conclusion:

SED has reviewed SCG's response and accepts the corrective actions that it has articulated and implemented. However, SED may review the records of the corrective action during future inspections.

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

4. Question 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	T: North Desert (87057 (49))
Issue Summary	During the field inspection, SED observed that SCG's aboveground pipelines had damaged (dis-bonded) coatings at soil-to-air interfaces for the following aboveground pipelines:

1. L3000 MP6.82 - pipe to soil coating damage
2. L3000 MP4.58- pipe to soil coating damage
3. L3000 MP3.89- pipe to soil coating damage
4. L3000 MP3.28- pipe to soil coating damage
5. L3000 MP1.28- pipe to soil coating damage
6. L3000 MP 59.19- pipe to soil coating damage
7. L3000 MP 59.16- pipe to soil coating damage
8. L3000 MP 58.53- pipe to soil coating damage
9. L4002 MP 65.06- pipe to soil coating damage

SCG's procedure 184.12 B/S inspection Section 4.1.4

"Deterioration of protective coatings:

- *If the pipe is wrapped, are there any cracks or voids?*
- *If the pipe is painted, are there any chips, cracks, and/or flaking?"*

SED recommends that SCG gives a particular attention at soil-to-air interfaces and take remedial action whenever necessary to maintain protection against atmospheric corrosion.

SCG's Response:

SoCalGas has remediated the soil-to-air interface concerns at the 9 locations identified in this audit letter.

SED's Conclusion:

SED has reviewed SCG's response and accepts the corrective actions that it has articulated and implemented. However, SED may review the records of the corrective action during future inspections.

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

5. Question Are methods used for taking CP monitoring readings that allow for the application of appropriate CP monitoring criteria?

References 192.465(a)

Assets Covered T: North Desert (87057 (49))

Issue Summary During the field inspection, SED observed that Line 6916 at MP 1.31, Line 235 at MP215.22, and Line 235 at MP 58.79 had CP reads that were higher than the acceptable level (-2.0 V).

SCG's procedure 186.0035 Criteria for Cathodic Protection, Section 4.3.3 requires instant-off not to exceed -1.2 volts and pipe to soil read not to exceed -2.0 volts.

SED recommends that SCG takes remedial action to address the high reads.

SCG's Response:

SoCalGas investigated the pipe to soil potentials exceeding -2.0 V by interrupting the applicable Cathodic Protection current sources. In conformance with 186.0035, Criteria for Cathodic Protection, adequate polarization was verified, and the relevant current sources were adjusted for all locations identified.

SED's Conclusion:

SED has reviewed SCG's response and accepts the corrective actions that it has articulated and implemented. However, SED may review the records of the corrective action during future inspections.

6. Question Do records adequately document actions taken to correct any identified deficiencies in corrosion control?

References 192.491(c) (192.465(d))

Assets Covered T: North Desert (87057 (49))

Issue Summary During the maintenance work follow up, an employee discovered that an annual read point within the range of the out-of-tolerance points on a work order was recorded out of tolerance but not referenced on the work order. The point was at M.P. 126.84 on Line 235 and P/S read in 2015 during annual inspection was -0.646 V with -0.667 V as minimum required. This point was not read again until the next annual inspection in 2016 when it was recorded "back in tolerance" with P/S read -0.739 V. This point was not monitored after the SCG crew identified CP deficiencies. However, all the actions performed on the work order for other out-of-tolerance points applied to this point as this point was within the range.

SED recommends SCG to make sure that this event does not occur in future.

SCG's Response:

During our future work order reviews, SoCalGas will verify that out of tolerance CP reads have associated follow up work orders adequately documented.

SED's Conclusion:

SED has reviewed SCG's response and accepts the corrective actions that it has articulated and implemented. However, SED may review the records of the corrective action during future inspections.