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May 10, 2023

Mr. Terence Eng, P.E.,
Program Manager, Gas Safety and Reliability Branch,
Safety and Enforcement Division,
California Public Utilities Commission,
505 Van Ness Ave, 2nd Floor
San Francisco, CA 94102

Dear Mr. Eng:

The Safety and Enforcement Division (SED) of the California Public Utilities Commission (CPUC) conducted a **General Order (G.O.) 112-F comprehensive and full review inspection of Southern California Gas Company (SoCalGas)'s Operation & Maintenance Procedures and Emergency Plan (OME Procedures Inspection)** on January 23 through 27 and January 30 through February 1, 2023. SED staff reviewed SoCalGas' written OME procedures pursuant to G.O. 112-F, Reference Title 49, Code of Federal Regulations (CFR), Parts 191 & 192, and used the Pipeline and Hazardous Materials Safety Administration's (PHMSA) Inspection Assistance (IA) as a reference guide to conduct this inspection.

SED staff did not identify any probable violations of G.O. 112-F, Reference Title 49 CFR, Parts 191& 192, but noted nine (9) areas of concern within the Transmission and Distribution Procedures. Attached are SoCalGas and SDG&E's written responses.

Please contact Alex Hughes at (949)697-2539 if you have any questions or need additional information.

Sincerely,

Alex Hughes
Pipeline Safety and Risk Mitigation Manager

CC:
Larry Andrews, SoCalGas
Mahmoud Intably, GSRB
Kan-Wai Tong, GSRB
Gordon Huang, GSRB
Claudia Almengor, GSRB

2023 SoCalGas O&M Procedures and Emergency Plan Audit Response

Concern:

Assessment and Repair : Repair Methods and Practices (AR.RMP)

Question Title, ID	Safety While Making Repairs, AR.RMP.SAFETY.P
Question	1. Does the process ensure that repairs are made in a safe manner and are made so as to prevent damage to persons and property?
References	192.605(b)(9) (192.713(b))
Assets Covered	SoCalGas' Main Office Inspection - Transmission (88388 (40A))
Issue Summary	Following review of SoCalGas Gas Standard (GS) 104.06 - Respiratory Protection Program, SED recommended to SoCalGas to incorporate considerations for ensuring personal protective equipment (PPE) is worn and checked with fit test compatibility during employee fit testing on the part of supervisors (§3.2) and employees (§3.3). This is currently incorporated into existing industry best practices (i.e. SDG&E). On January 31, 2023, SoCalGas shared with SED its proposed procedural language which would clarify and implement SED's recommendation. SED requests an update on this procedure's revision timeline.

Response:

The updated gas standard, 104.06, has been published and is available in the CPUC Gas Standard Library.

Concern:

Maintenance and Operations : Verification of Materials Properties (MO.RECONFMATV)

Question Title, ID	Material Verification - Line Pipe Program, MO.RECONFMATV.PROGRAM.P
Question	1. What is the process (or program) for determining and collecting material verification records for line pipe to meet the requirements of §§ 192.619(a)(4), 192.624, 192.607, and 192.712?
References	192.607 (192.613, 192.619, 192.624, 192.632, 192.712)
Assets Covered	SoCalGas' Main Office Inspection - Transmission (88388 (40A))

Issue Summary	SED's review of SoCalGas Gas Standards (GS) 182.0056 - Material Traceability for High-Pressure Systems prompted multiple inquiries regarding SoCalGas' Material Traceability process and program, organizational tasks and responsibilities, and other minor documentation observations. These inquiries were relayed under DR-05 sent on 1/23/2023. SoCalGas' responded to SED's inquiries on 2/3/2023 with their proposed revisions which were accepted by SED. SED requests an update on SoCalGas' progress with the procedural revisions proposed on 2/3/2023.

Response:

The updated gas standard, 182.0056, has been published and is available in the CPUC Gas Standard Library.

Concern:

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

Question Title, ID	Cathodic Protection Criteria, TD.CPMONITOR.MONITORCRITERIA.P
Question	1. Does the process require CP monitoring criteria to be used that is acceptable?
References	192.605(b)(2) (192.463(a), 192.463(c))
Assets Covered	SoCalGas' Main Office Inspection - Transmission (88388 (40A))
Issue Summary	SED's review of SoCalGas Gas Standards (GS) 186.0036 - 100mV Polarization Criteria found minor instances where its written procedure did not align with its intended work processes: 1) In §5.5.3.7, the procedure discusses taking measurements of the depolarized read to confirm the 100 mV criteria and requires that this be “repeated yearly”. 2) In §§5.3.6.1 and 5.6.1, the procedure states close interval survey (CIS) may be performed on Transmission Lines, Distribution Supply Lines, and Storage Lines while establishing a 100mV polarization criteria. However, in §5.6.2, the procedure then requires a CIS to be performed for these pipeline facilities. SoCalGas clarified in DR-15 (received 1/26/2023) the process incongruities and proposed its revised procedural language. SED requests that the revised procedures be submitted for review after SoCalGas has completed its revisions.

Response:

The updated gas standard will be published by the end of the month and will be made available in the CPUC Gas Standard library by June 1st, 2023.

Concern:

Generic Question, GENERIC.GENERIC.GENPROCEDURE.P

Question Title, ID	Generic Question, GENERIC.GENERIC.GENPROCEDURE.P
Question	1. Generic question - please provide context in result notes.
References	N/A
Assets Covered	SoCalGas' Main Office Inspection - Transmission (88388 (40A))
Issue Summary	1) For 49 CFR §192.313 - Bends and Elbows, §192.313(a)(1) states "a bend must not impair the serviceability of the pipe". SoCalGas Gas Standard (GS) 182.0070 §1.5.1 mentions verifying that pipeline serviceability shall not be impacted during roping operations. This Code requirement includes field bends produced by roping, but is also broader in scope beyond roping. SoCalGas acknowledged SED's finding (2/1/2023) and, per DR-22, proposes to revise the procedural language to better align with §192.313(a)(1). SED requests that the revised procedures be submitted for review after SoCalGas has completed its revisions. 2) Please consider incorporating the following references to the SoCalGas GSs: i) 49 CFR §192.453 for §2 of GS 186.0035 ii) SoCalGas GS 186.0170 in §6 of the GS 186.0035 (similarly to SoCalGas GS 186.0002) iii) 49 CFR §192.233 in both GS 184.0120 and 182.0070 in Section 4.9.2.2 and 4.4.1, respectively

Response:

For item 1), The updated gas standard, 182.0070, has been published and is available in the CPUC Gas Standard Library.

For items 2) i-ii), The updated gas standard will be published by the end of the month and will be made available in the CPUC Gas Standard library by June 1st, 2023.

For item 2) iii), The updated gas standard, 184.0120, has been published and is available in the CPUC Gas Standard Library. Since GS 182.0070 section 4.4.1 references GS 184.0120, which satisfies CFR 192.233, no further updates will be made to the GS 182.0070.

Concern:

Assessment and Repair : Repair Methods and Practices (AR.RMP)

Question Title, ID	Safety While Making Repairs, AR.RMP.SAFETY.P
Question	1. Does the process ensure that repairs are made in a safe manner and are made so as to prevent damage to persons and property?
References	192.605(b)(9) (192.713(b))
Assets Covered	SoCalGas' Main Office Inspection - Distribution (88391 (40B))
Issue Summary	Following review of SoCalGas Gas Standard (GS) 104.06 - Respiratory Protection Program, SED recommended to SoCalGas to incorporate considerations for ensuring personal protective equipment (PPE) is worn and checked with fit test compatibility during employee fit testing on the part of supervisors (§3.2) and employees (§3.3). This is currently incorporated into existing industry best practices (i.e. SDG&E). On January 31, 2023, SoCalGas shared with SED its proposed procedural language which would clarify and implement SED's recommendation. SED requests an update on this procedure's revision timeline.

Response:

The updated gas standard, 104.06, has been published and is available in the CPUC Gas Standard Library.

Concern:

Design and Construction : Construction Welding Procedures (DC.WELDPROCEDURE)

Question Title, ID	Miter joints, DC.WELDPROCEDURE.MITERJOINT.P
Question	4. Does the process prohibit the use of certain miter joints as required by 192.233?
References	192.303 (192.233(a), 192.233(b), 192.233(c))
Assets Covered	SoCalGas' Main Office Inspection - Distribution (88391 (40B))
Issue Summary	SoCalGas Gas Standard (GS) 182.0070 - Angles and Bends in Steel Piping §§1.11, 1.2, 4.1.2.1, 4.1.4, 4.2.1.1-2, 4.4, 6, and 7 were updated. The GS disallows use of miters except as indicated on SCG GS 184.0120 -Service Risers for Polyethylene (PE) Installations.

	SoCalGas GS 184.0120 §4.9.2.2 allows transition fittings to be mitered 45 degrees to fit field conditions as a last resort. The Figure 7 appears to depict a 90 degree joint, but it is unclear whether the 45 degree miter requirement for the transition fitting also applied to the mating pipe. As a result, the verbiage does not explicitly prohibit the miter joint to deflect the pipe more than 90 degrees per §192.233. SoCalGas clarified the process in DR-26 (received 1/31/2023) and proposed its revised procedural language. SED requests that the revised procedures be submitted for review after SoCalGas has completed its revisions.

Response:

The updated gas standard, 184.0120, has been published and is available in the CPUC Gas Standard Library.

Concern:

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.P
Question	15. Does the process require maintaining equipment used in joining of plastic pipe using heat fusion 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	192.605(b)(1) (192.756)
Assets Covered	SoCalGas' Main Office Inspection - Distribution (88391 (40B))
Issue Summary	As mentioned in previous Comprehensive Operations & Maintenance Distribution Inspections conducted by SED in 2022 for SoCalGas' various Distribution Districts, SED acknowledges that SoCalGas conducts its thermometer calibration process for its equipment as implemented in SoCalGas' GS 184.0130 and as required by §192.756. However, as in previous inspections, SED raises the relationship between §192.603(b) and §192.605. §192.603(b) states "Each operator shall keep records necessary to administer the procedures established under § 192.605." §192.605(b)(1) states: "(b) Maintenance and normal operations. The manual required by paragraph (a) of this section must include procedures for the following, if applicable, to provide safety during maintenance and operations. (1) Operating, maintaining, and repairing the pipeline in accordance with each of the requirements of this subpart and subpart M of this part."

	Based on the above, SoCalGas does adhere to the requirement under §192.605(b)(1) by having established a procedure, SoCalGas GS 184.0130, to address §192.756. However, SoCalGas GS 184.0130 §6, which concerns recordkeeping, is silent on records relating to its thermometer calibration process. SoCalGas has previously shared PHMSA's operator guidance on the Plastic Pipe Rule of 2018 wherein PHMSA stated it did not expect retention of records on daily equipment calibrations. PHMSA stated it removed additional calibration and recordkeeping requirements per previously planned subsections (b) through (d) for §192.756. This however, does not preclude general provisions under §192.603(b). Upon procedural review, SED notes from SoCalGas GS 184.0130 §§ 2.3, 4.2.1.12, and 4.14.2-4 that SoCalGas' Fabrication and Tool Repair Shop inspects SoCalGas' IR thermometers. To keep track of IR thermometers used by SoCalGas, IR thermometers are assigned Capital Tool (CT) numbers and tagged with inspection dates. Additionally, SoCalGas GS 184.0130 §4.14.5.1 states that SoCalGas maintains the right to audit contractors' IR thermometer inspection program or accuracy. Given that SoCalGas currently performs inspections of IR thermometers, identifies each IR thermometer with a unique CT number, and has a defined process which defines various stakeholders' responsibilities, SED recommends that SoCalGas consider defining its recordkeeping practices associated with their process or to document any such existing practices in its procedure (i.e., SoCalGas GS 184.0130)

Response:

Gas Standard 184.0130 has been reviewed by Field Technologies, RD&D and Fabrication & Tool Repair groups. Revisions will be made to GS 184.0130 to define the recordkeeping and retention practices for calibration records for both company employees and contractors. Revisions to standard will be submitted for June NOP and Publication in July of 2023.

Concern:

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

Question Title, ID	Cathodic Protection Monitoring Criteria, TD.CPMONITOR.MONITORCRITERIA.P
Question	1. Does the process require CP monitoring criteria to be used that is acceptable?
References	192.605(b)(2) (192.463(a), 192.463(c))
Assets Covered	SoCalGas' Main Office Inspection - Distribution (88391 (40B))

Issue Summary	SED's review of SoCalGas Gas Standards (GS) 186.0036 - 100mV Polarization Criteria found minor instances where its written procedure did not align with its intended work processes: 1) In §5.5.3.7, the procedure discusses taking measurements of the depolarized read to confirm the 100 mV criteria and requires that this be "repeated yearly". 2) In §§5.3.6.1 and 5.6.1, the procedure state close interval survey (CIS) may be performed on Transmission Lines, Distribution Supply Lines, and Storage Lines while establishing a 100mV polarization criteria. However, in §5.6.2, the procedure then requires a CIS to be performed for these pipeline facilities. SoCalGas clarified in DR-15 (received 1/26/2023) the process incongruities and proposed its revised procedural language. SED requests that the revised procedures be submitted for review after SoCalGas has completed its revisions.

Response:

The updated gas standard will be published by the end of the month and will be made available in the CPUC Gas Standard library by June 1st, 2023.

Concern:

Generic Question, GENERIC.GENERIC.GENPROCEDURE.P

Question Title, ID	Generic Question, GENERIC.GENERIC.GENPROCEDURE.P
Question	2. Generic question - please provide context in result notes.
References	N/A
Assets Covered	SoCalGas' Main Office Inspection - Distribution (88391 (40B))
Issue Summary	1) For 49 CFR §192.313 - Bends and Elbows, §192.313(a)(1) states "a bend must not impair the serviceability of the pipe". SoCalGas Gas Standard (GS) 182.0070 §1.5.1 mentions verifying that pipeline serviceability shall not be impacted during roping operations. This Code requirement includes field bends produced by roping, but is also broader in scope beyond roping. SoCalGas acknowledged SED's finding (2/1/2023) and, per DR-22, proposes to revise the procedural language to better align with §192.313(a)(1). SED requests that the revised procedures be submitted for review after SoCalGas has completed its revisions. 2) Please consider incorporating the following references to the SoCalGas GSs: i) 49 CFR §192.453 for §2 of GS 186.0035

	ii) SoCalGas GS 186.0170 in §6 of the GS 186.0035 (similarly to SoCalGas GS 186.0002) iii) 49 CFR §192.233 in both GS 184.0120 and 182.0070 in Section 4.9.2.2 and 4.4.1, respectively

Response & Actions:

For item 1), The updated gas standard, 182.0070, has been published and is available in the CPUC Gas Standard Library.

For items 2) i-ii), The updated gas standard will be published by the end of the month and will be made available in the CPUC Gas Standard library by June 1st, 2023.

For item 2) iii), The updated gas standard, 184.0120, has been published and is available in the CPUC Gas Standard Library. Since GS 182.0070 section 4.4.1 references GS 184.0120, which satisfies CFR 192.233, no further updates will be made to the GS 182.0070.