

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



October 31, 2023

GI-2023-09-SWG-30-08

Jerry Schmitz
Vice President, Engineering
Southwest Gas Corporation
8360 South Durango Road, LVD-580
Las Vegas, NV 89113

Dear Mr. Schmitz:

The Safety and Enforcement Division (SED) of the California Public Utilities Commission conducted a **General Order (G.O.) 112-F, Transmission Integrity Management Program – Procedures Updates (TIMP-PU) inspection of Southwest Gas Corporation’s (SWG) Needles Natural Gas Transmission District (Inspection Unit)**, on September 6 through September 8 of 2023 for calendar years 2019 through 2022. The prior TIMP-PU Inspection Unit inspection was conducted in 2018. SED reviewed records and conducted field inspections of SWG pipeline facilities affected by updates in the Needles transmission district within the Inspection Unit. SED’s staff used the Pipeline and Hazardous Materials Safety Administration’s (PHMSA) Inspection Assistance (IA) as a reference guide to conduct this inspection.

SED’s staff identified zero (0) violations of G.O. 112-F, Reference Title 49 Code of Federal Regulations (CFR), Part 192, and identified two (2) areas of concern 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 SoCalGas to address the concerns noted in the “Post-Inspection Written Preliminary Findings”.

Thank you for your cooperation in this inspection. If you have any questions, please contact Randy Holter, Senior Utilities Engineer-Specialist, at (213) 821-4309 or by email at randy.holter@cpuc.ca.gov.

Sincerely,

A handwritten signature in blue ink that reads "Terence Eng".

Terence Eng, P.E.
Program Manager
Gas Safety and Reliability Branch
Safety and Enforcement Division

Attachments: see Post-Inspection Written Preliminary Findings
cc: see next page.

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Post-Inspection Written Preliminary Findings

Date of Transmittal: 10/26/2023

Dates of Inspection: 9/06/23 – 9/08/23

Operator: SOUTHWEST GAS CORPORATION

Operator ID: 18536 (primary)

Inspection Systems: Needles Transmission District – Updated and Related Procedures

Assets (Unit IDs) with results in this report: Needles District (87484)

System Type: GT

Inspection Name: Southwest Gas - TIMP Updates 2023

Lead Inspector: Randy Holter

Operator Representative: Laurie Brown

Concerns

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

1. Question	Welding Procedures - Welder Qualification,
Title, ID	DC.WELDPROCEDURE.WELDERQUAL.P
Question	4. Do the written specifications require welders to be qualified in accordance with applicable sections of API Standard 1104 or ASME BPVC, Section IX and cover the limitations in §192.229?
References	192.227 (192.225, 192.229)
Assets Covered	SWG - Transmission (88674 (98))
Issue Summary	SED reviewed SWG Operations Manual, Steel Welding Procedure, Part 1 General, Section 1.1 Welding Requirements - General, and found that Section 1.1.3 states: <i>" Only qualified welders may do welding on carrier pipe and fittings"</i> , Title 49 CFR, Title 49 CFR, Part 192, §192.225(a) states in part: <i>"Welding must be performed by a qualified welder or welding operator..."</i> , Title 49 CFR, Title 49 CFR, Part 192, §192.227(a) states in part:

"...each welder or welding operator must be qualified in accordance with section 6, section 12, Appendix A or Appendix B of API [Standard] 1104..., or section IX of the ASME Boiler and Pressure Vessel Code (ASME BPVC)."

Title 49 CFR, Title 49 CFR, Part 192, §192.229 Limitations on welders and welding operators, states:

- (a) No welder or welding operator whose qualification is based on nondestructive testing may weld compressor station pipe and components.*
- (b) A welder or welding operator may not weld with a particular welding process unless, within the preceding 6 calendar months, the welder or welding operator was engaged in welding with that process. Alternatively, welders or welding operators may demonstrate they have engaged in a specific welding process if they have performed a weld with that process that was tested and found acceptable under section 6, 9, 12, or Appendix A of API Std 1104 (incorporated by reference, see § 192.7) within the preceding 7 1/2 months.*
- (c) A welder or welding operator qualified under § 192.227(a) -
 - (1) May not weld on pipe to be operated at a pressure that produces a hoop stress of 20 percent or more of SMYS unless within the preceding 6 calendar months the welder or welding operator has had one weld tested and found acceptable under either section 6, section 9, section 12, or Appendix A of API Std 1104 (incorporated by reference, see § 192.7). Alternatively, welders or welding operators may maintain an ongoing qualification status by performing welds tested and found acceptable under the above acceptance criteria at least twice each calendar year, but at intervals not exceeding 7 1/2 months. A welder or welding operator qualified under an earlier edition of a standard listed in § 192.7 of this part may weld, but may not re-qualify under that earlier edition; and,*
 - (2) May not weld on pipe to be operated at a pressure that produces a hoop stress of less than 20 percent of SMYS unless the welder or welding operator is tested in accordance with paragraph (c)(1) of this section or re-qualifies under paragraph (d)(1) or (d)(2) of this section.**
- (d) A welder or welding operator qualified under § 192.227(b) may not weld unless -
 - (1) Within the preceding 15 calendar months, but at least once each calendar year, the welder or welding operator has re-qualified under § 192.227(b); or*
 - (2) Within the preceding 7 1/2 calendar months, but at least twice each calendar year, the welder or welding operator has had -
 - (i) A production weld cut out, tested, and found acceptable in accordance with the qualifying test; or***

(ii) *For a welder who works only on service lines 2 inches (51 millimeters) or smaller in diameter, the welder has had two sample welds tested and found acceptable in accordance with the test in section III of Appendix C of this part.*

SED recommends that SWG revise its Operations Manual, Steel Welding Procedure, to address the requirements for:

- Welders to be qualified in accordance with applicable sections of API Standard 1104 or ASME BPVC, Section IX, per Title 49 CFR, Title 49 CFR, Part 192, §192.227.
- Limitations on welders and welding operators, per Title 49 CFR, Title 49 CFR, Part 192, §192.229.

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

2. Question Title, ID	Transmission Lines Testing of Repairs, AR.RMP.WELDTEST.P
Question	23. Is the process adequate for the testing of replacement pipe and repairs made by welding on transmission lines?
References	192.605(b) (192.719(a), 192.719(b))
Assets Covered	SWG - Transmission (88674 (98))
Issue Summary	SED reviewed SWG Operations Manual, Steel Welding Procedure, Part 4 Repairs, Section 4.7.1 which states:

“Weld defects shall be remediated by one of the following methods:

- *Cut out as a cylindrical section,*
- *Full encirclement canopy or rigid steel sleeve,*
- *Repair the weld defect per API 1104.”*

Title 49 CFR, Part 192, §192.719(a) states:

“Testing of replacement pipe. If a segment of transmission line is repaired by cutting out the damaged portion of the pipe as a cylinder, the replacement pipe must be tested to the pressure required for a new line installed in the same location. This test may be made on the pipe before it is installed.”

SWG Operations Manual, Steel Welding Procedure, Part 4 Repairs, Section 4.7.1 failed to address that the newly installed cylindrical section must be tested to the pressure required for a new line installed in the same location. Therefore, SED recommends that SWG revise its Operations Manual, Steel Welding Procedure to ensure compliance with Title 49 CFR, Part 192, §192.719(a).