



SOUTHWEST GAS CORPORATION

Jerome T. Schmitz, P.E., Vice President/Engineering

September 30, 2016

Kenneth Bruno
Program Manager
Gas Safety and Reliability Branch
Safety and Enforcement Division
California Public Utilities Commission
320 West 4th Street, Suite 500
Los Angeles, CA 90013

Subject: Southwest Gas Corporation response to Summary of Inspection Findings from GO112 Inspection of Operator Qualification Plan

Dear Mr. Bruno:

Southwest Gas Corporation respectfully submits the following response to the safety Enforcement Division's (SED) Summary of Inspection Findings dated September 4, 2016. The response and accompanying attachments address one (1) Probable Violation, and various Areas of Concern and Recommendations identified by SED during the inspection.

We appreciate SED's consideration of this matter. Please do not hesitate to contact me if there are any questions or concerns.

Sincerely,

cc: D. Lee (CPUC)
T. Eng (CPUC)
C. Mazzeo (SWG)
E. Trombley (SWG)
K. Lang (SWG)
L. Brown (SWG)
V. Ontiveroz (SWG)
P. Gustilo (SWG)



SUMMARY OF INSPECTION FINDINGS

A. SED Findings

1. Title 49 CFR §192.805 states:

“Each Operator shall have and follow a written qualification program.”

SWG’s OQ Plan Section 11.1.1.2 states in part,

“Conduct an annual effectiveness review by running the LMS report on all failed covered tasks for Company and contractor personnel, incident critiques and OQ Disqualification Reports.”

However, SWG did not provide records of an annual effectiveness review for the 2014 calendar year.

On 06/07/2016, in its post-inspection note, SWG submitted a record of the 2014 effectiveness review document dated 06/06/2016 (after the inspection) and stated;

“The report was completed last year; however, it was lost or misplaced, as such GOSS had to recreate the report with the 2014 data.”

Therefore, SWG is in violation of 192.805 for failing to follow its own procedure to conduct the annual effectiveness review on time.

Southwest Gas Response:

In early 2015, Southwest Gas conducted an annual effectiveness review for the 2014 calendar year consistent with Section 11.1.1.2 of its Operator Qualification (OQ) Plan, using data dated January 1, 2014 – December 31, 2014. The original report for the 2014 program evaluation could not be found. However, once the data has been entered, it is stored in the Company’s Learning Management System (LMS), which allows the Company to pull a report on the data any time thereafter. When the original report could not be located, Southwest Gas recreated and produced the report, using the same data that was used in the actual effectiveness review that occurred earlier in 2015. The data did not identify any trends or concerns within the training or the testing that require correction. Southwest Gas will further define its process for generating program effectiveness reports, and will develop an additional procedure to ensure these reports are archived correctly.



B. Areas of Concern / Observations / Recommendations

1. Title 49 CFR 192.803 Definitions states:

“Abnormal operating condition (AOC) means a condition identified by the operator that may indicate a malfunction of a component or deviation from normal operations that may:
(a) Indicate a condition exceeding design limits; or
(b) Result in a hazard(s) to persons, property, or the environment.”

SWG’s Operation Manual, titled “*Abnormal/ Unusual Operating Conditions Procedure*”, lists the following conditions as Unusual Operating Conditions instead of Abnormal Operating conditions, which will affect the planned remediation time.

- Inoperable Valve,
- Inadequate Support – excessive bending or loading on facilities,
- Damaged and/or lost test station/test point leads,
- Damaged and/or inadequate pipe coating,
- Corrosion occurring on pipelines operating at or above 20% SMYS and resulting in an SRC,
- Exposed main and/or service lines,
- Ground level riser buried too deep,
- Bent Riser,
- Pipe nicked during excavation,
- Missing/damaged support system,
- Atmospheric corrosion on above ground facilities,

SED believes that most of, if not all, the conditions listed above meet the definition of AOC as per 192.803, and recommends SWG to review and revise those accordingly.

Southwest Gas Response:

Southwest Gas reviewed its lists of AOCs and Unusual Operating Conditions (UOCs) (copies attached), and believes the conditions referenced by SED are appropriately defined as UOCs. Consistent with 49 CFR 192.803, Southwest Gas’ Operations Manual defines an AOC as a condition identified by the Company that may include a malfunction of a component or deviation from normal operations that may result in a hazard(s) to people, property or the environment, or a condition exceeding the design limits. Per Company procedures, AOCs must be corrected at the time of discovery. They require immediate response and continuous remedial action until the condition is corrected or the hazard no longer exists. The Company’s AOC procedure does not



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apply to non-hazardous maintenance conditions. In addition, the Company's list of AOCs is consistent with 49 CFR 192.803, as well as the guidance offered by Gas Piping Technology Committee (GPTC) and ASME B31Q.

Southwest Gas defines a UOC as a condition that has been evaluated, and where the Company has determined that the condition may become an AOC if not corrected. While many UOCs are corrected at the time of discovery, Southwest Gas' procedures require that when a UOC is not corrected at the time of discovery, remedial action/tracking must be undertaken until the UOC is resolved, and that the UOC must be corrected within the established resolution timeframe. Southwest Gas' UOC procedure was developed in accordance with 49 CFR 192.613, which states:

§192.613 Continuing Surveillance

*(a) Each operator shall have a procedure for continuing surveillance of its facilities to determine and take appropriate action concerning changes in class location, failures, leakage history, corrosion, substantial changes in cathodic protection requirements, and other **unusual operating and maintenance conditions** (emphasis added).*

(b) If a segment of pipeline is determined to be in unsatisfactory condition but no immediate hazard exists, the operator shall initiate a program to recondition or phase out the segment involved, or, if the segment cannot be reconditioned or phased out, reduce the maximum allowable operating pressure in accordance with §192.619 (a) and (b).

Certain UOC conditions may constitute an AOC when accompanied by a natural gas leak – a distinction that is reflected in the Company's UOC and AOC lists. For example, a bent riser without an accompanying gas leak is included on the UOC list, whereas a bent riser that is leaking is included on the AOC list.

Based on the above, Southwest Gas believes the UOC conditions referenced by SED do not, in and of themselves, meet the AOC criteria and that they are therefore correctly defined.

2. Title 49 CFR §192.807 Record keeping states:

“Each operator shall maintain records that demonstrate compliance with this subpart.

(a) Qualification records shall include:

- (1) Identification of qualified individual(s);*
- (2) Identification of the covered tasks the individual is qualified to perform;*
- (3) Date(s) of current qualification; and*
- (4) Qualification method(s).*

*(b) **Records supporting an individual's current qualification (emphasis added)** shall be maintained while the individual is performing the covered task”*



SWG retains test results of qualifications to show a “pass” or “fail”, but does not keep records of the actual test or numerical results of each individual’s written tests. SED believes SWG’s record keeping practice could improve upon the 192.807(b) requirements if SWG also retained these records.

Southwest Gas Response:

Southwest Gas’ practice of retaining “pass/fail” information, but not the actual written tests or numerical results for individual employees and contractors, is consistent with 49 CFR 192.807(b). The Company’s practice is supported by recent PHMSA Enforcement Guidance information concerning 192.807(b) record keeping which states, “[r]ecords must include evaluation material and that the individual was evaluated successfully. Producing the actual test that the individual took is not required.”¹ Southwest Gas does maintain an archive of revisions to its testing and evaluation materials. However, at this time, the Company does not believe it is necessary to maintain the actual tests or numerical results of each individual’s written tests.

3. Title 49 CFR §192.805 (g) states:

“Identify those covered tasks and the intervals at which evaluation of the individual’s qualifications is needed”

3.1.

SWG OQ plan section 5.10 states, “5.10 Requalification of employees may include refresher training for specific covered tasks and must be completed by the methods listed in the covered task list.”

The ASME B31Q project team, which is assigned to develop a consensus code on pipeline personnel qualification, advises in its standard:

“9.5 Subsequent Qualification Interval

9.5.2 Methods. The subsequent qualification interval may be established by one of the following methods:

- (a) SME consensus in accordance with para. 9.5.3*
- (b) difficulty and importance or difficulty, importance, and frequency analysis in accordance with para. 9.5.4*
- (c) adoption of Nonmandatory Appendix 5A subsequent qualification interval(s) in accordance with para. 9.5.5*
- (d) any other process that provides a rational and verifiable basis for the interval*

¹ <http://www.phmsa.dot.gov/pipeline/enforcement>.



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SWG's covered task list covers the requalification interval including methods of qualification; however, it does not state the basis how those intervals were established.

On 06/07/2016, SWG responded in its post-inspection note stating:

"As discussed, Southwest Gas has voluntarily adopted certain elements of B31Q in its Operator Qualification Plan and agrees with Staff's recommendation to review the re-evaluation intervals for covered tasks. Upon completion of this activity, any changes to the intervals will be incorporated into the Operator Qualification Plan and Staff will receive a copy through the regular manual update process."

SED recommends SWG to consider establishing the requalification interval as per the method recommended under ASME B31Q Section 9.5.2.

Southwest Gas Response:

Southwest Gas appreciates SED's recommendation and will consider adopting a written process within its OQ manual to establish the requalification frequency of covered tasks.

As noted in SED's Inspection Summary Letter, several other recommendations were previously addressed and no further response from Southwest Gas is required.