May 27, 2015

Mr. Ken Bruno.
Acting Program Manager
Gas Safety and Reliability Branch
Safety and Enforcement Division
California Public Utilities Commission
455 Golden Gate Avenue, 7/F
San Francisco, CA 94102

Dear Mr. Bruno:

The staff of the Safety and Enforcement Division (SED) conducted a General Order (GO) 112-E compliance inspection of Southern California Gas Company’s (SoCalGas) West Area Transmission facilities on May 28-31, and June 3-7, 2013. The audit included a review of records for Brea, Goleta, Olympic/Pico, Saticoy, Ventura/Oxnard, Taft and Valencia districts for the period of May 2011 through May 2013 and field inspections of various gas transmission pipeline facilities. SED also reviewed SoCalGas’ Operator Qualification records and conducted field observation of randomly selected SoCalGas employees performing inspection and covered tasks.

SED staff identified potential violations of G.O. 112-E Reference Title 49 Code of Federal Regulations and issues of concern, making recommendations associated with these issues. Attached is SoCalGas’ written response and corrective actions.

Please feel free to contact me at (213) 305-8660, if you have any questions or need additional information.

Sincerely,

W. Jeff Koskie
Pipeline Safety and Compliance Manager
Attachments

Cc: Elizaveta Malashenko, Deputy Director, SED
    Joel Tran, CPUC-Sacramento
Attachment 1
Response to Audit Observations


This employee's Operator Qualification for the aforementioned covered tasks expired in October 2011. SCG did not re-evaluate the employee until January 18, 2013. This employee performed some of the aforementioned covered tasks during the period when the employee's Operator Qualification was expired. SCG did not provide an adequate justification explaining why it was not necessary to re-evaluate and requalify employee #50264 prior to the expiration of the employee's Operator Qualification. Therefore, SCG is in violation of G.O. 112-E, Reference Title 49 CFR Part 192, §192. 805(b) and §192.805(e)

SCG did not re-evaluate and requalify Employee #61574 Operator Qualifications, which expired on August 1, 2011 until September 14, 2012. SCG indicated that this employee changed job position from Pipeline Technician to Station Technician in July 2011. The employee began a new job, Station Technician, with Operator Qualification training for covered tasks required for that job position. However, the employee later returned to the former position of Pipeline Technician, with expired qualifications for some of the original Covered Tasks for that position. Although these positions share the same training and qualification requirements, they also have their unique syllabus in other Covered Tasks. For example, Station Technicians are trained and qualified for Starting-up Compressor Stations, which is not a required covered task for Pipeline Technicians. SCG did not provide an adequate justification explaining why it was not necessary to re-evaluate and requalify employee #61574 prior to the expiration date or immediately after the employee's return to duty as a Pipeline Technician. Therefore, SCG is in violation of G.O. 112-E, Reference Title 49 CFR Part 192, §192. 805(b) and §192.805(e).

Response To Item A

Employee# 50264

The Operator Qualification procedure for SoCalGas’ Transmission group uses the SAP database which keeps track of the employee’s tasks when they are initiated and when they are due to expire. Each job classification within Gas Transmission has a code number associated with each job which is what the SAP system uses to keep track of required tasks for each classification. The automatic notification reports from the SAP system did not track the tasks for the Senior Cathodic Protection Specialist position because this new job classification had not been identified in SAP with required tasks. This eliminated the employee’s tasks from review and did not trigger any notifications that his tasks were overdue. As a result, the automatic 30-day, 60-day, or expired reports were not generated. A review of employee’s knowledge and ability to
Perform involved tasks indicates employee knowledge and ability to perform covered tasks continued to be proficient and able to perform all tasks in the interim period of 10/18/2011 and 1/18/2013.

Employee# 61754

This employee was on disability for several months and during this time the employee’s qualifications had expired. Once the expiration was noticed, the employee had started in Station Tech school at Pico Rivera training. During this time, the employee received all the elements needed to perform as a Station Tech at the Storage facility. The employee chose to return to the employee’s former job after being trained at the Storage Tech school. This was not conveyed to be able to be entered into SAP. A review of employee’s knowledge and ability to perform involved tasks indicates employee knowledge and ability to perform covered tasks continued to be proficient and able to perform all tasks in the interim period of 8/1/2011 and 9/14/2012.

After a review of the completed work by both of the aforementioned employees, SoCalGas has determined that the safety of the SoCalGas pipeline system was not compromised in any way.

**Action Item for Response A**

Establish responsibility for new job classifications to be posted in SAP, and the Op Qual – Compliance group will be notified as well. Once a new job classification is created, the reviewer of the tasks will identify what tasks are required or optional before placing them in a task matrix and will notify Gas Transmission Technical Service Compliance Team (Compliance Team) of the new job classification. Supervisors will receive 30 and 60 day Op Qual status reports to assist with keeping track of their direct reports’ Op Qual status. The Compliance Team will also develop process to notify the Op Qual department when an employee changes their job classification, so that the Compliance Team and the Op Qual department can check that the elements are all there and valid.
Attachment 2
Response to Areas of Concern

A. Areas of Concern Identified at Wheeler Ridge Compressor Station

SED observed hydraulic fluid leaks on many Critical Valves at the Wheeler Ridge Compressor Station. SCG explained that its employees exercise all of its Critical Valves as required and most of these Critical Valves have other operational modes other than the hydraulic such as electronic and pneumatic modes. SED believes that the hydraulic mode is still an essential component of those Critical Valves and may be used if the other modes become non-operational during emergency. Therefore, the hydraulic system requires routine maintenance. SED recommends that SCG determine and mitigate the cause of the hydraulic fluid leaks on its Critical Valves and maintain all its equipment in good working condition. In addition, SED observed that the piping configuration at Wheeler Ridge Compressor Station made it difficult to identify any specific pipeline and its function. This creates an environment for potential threat of "Incorrect Operation" or "Human Error". SED recommends that SCG implement a program for identifying and clearly labeling the functions for all of its pipelines and appurtenances in the Compressor Station and other stations with network of pipelines and appurtenances. In addition, SCG should establish a quality assurance/ quality control (QA/QC) program to ensure that it implements its program accurately with SCG official station drawings and inventory.

Response To Item A

SoCalGas maintains manual and automated hydraulic operation of critical valves at the Wheeler Ridge Compressor Station. Some of the valves which utilize hydraulic pumps for operation had the appearance of leaking and or fluid present outside of the pump. These pumps are exercised during inspections to assure proper operation and fluid levels are properly maintained. In some cases, fluid could be discharging on a limited basis. However, operation has not been compromised in any way. SoCalGas will continue to visually check these facilities during compliance inspections and take corrective action as needed.

Regarding labeling of pipeline facilities at Wheeler Ridge Compressor Station, SoCalGas has been reviewing the system and identifying opportunities to further enhance piping identification as necessary. Enhancements will likely include additional stenciling on pipelines in the station and valves.

B. Areas of Concern Identified Company wide

Alternating Current Influence and Interference on Pipelines. Title 49, Code of Federal Regulations (CFR) Part 192, §192.473(a) and §192.613(a).
§ 192.4 73 External corrosion control: Interference currents states: 
"(a) Each operator whose pipeline system is subjected to stray currents shall have in effect a continuing program to minimize the detrimental effects of such currents."

§192.613 Continuing surveillance. States:

"(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."

SED reviewed SCG Gas Standard, procedure 186.0190, "Induced High Voltage Alternating Current (HVAC) on Pipelines" and noted that the Gas Standard, procedure 186.0190, adequately addressed SCG's safety policy and practice to protect the general public and its personnel or employees engaged in construction or operation and maintenance work on new or permanently installed facilities (above or below ground) in HVAC influenced areas. However, SCG Gas Standard, procedure 186.0190 does not provide adequate consideration to protection of its gas pipelines from fault or stray currents induced by high voltage alternating current (AC) power transmission systems (high voltage transmission lines 69-KV and above) and AC electrified railway systems. SED is concerned that the existing procedure did not require active testing and monitoring of AC interference or Stray AC influence in areas in which AC interference or influence are suspected such as the high voltage overhead transmission power lines in the vicinity of SCG’s gas pipeline facilities. SED recommends that SCG enhance its Gas Standard procedure to include implementation of a continuing surveillance program to identify unusual operating and maintenance conditions such as Induced HVAC on its pipelines. SCG should also monitor and mitigate the alternating current influence on its pipeline. In addition, SCG should engage its subject matter experts in this field to establish adequate procedures and guidelines for design, construction, operation, and maintenance of its gas pipeline facilities that may be subject to fault or stray alternating currents from high voltage overhead AC power transmission systems, AC electrified railway systems or Lightning. Even though the regulations do not specifically address stray AC mitigation, SED recommends that SCG's pipeline Corrosion and AC Influence subject matter expert review and incorporate, where appropriate, research studies endorsed by industry organizations such as National Association of Corrosion Engineers (NACE).

**Response To Item B**

Gas Standard 186.02 “Cathodic Protection- Inspection of Exposed Pipe” has been modified on March 5, 2014 to add the following section 4.1.1.4-
Section 4.1.1.4 - If leakage or excessive metal loss is suspected to result from induced AC voltage (“AC Corrosion”); then contact Pipeline Integrity, Integrity Assessment and Remediation. Also refer to Induced High Voltage Alternating Current (HVAC) on Pipelines, GS 186.0190.

SoCalGas will add additional materials to Gas Standard 186.02 to address identification of potential AC induced corrosion from high voltage (69 kV and above) overhead AC transmission lines, AC electrified railway systems and lightning. Additionally, current SoCalGas operating procedures require technicians to address any corrosion found on exposed piping. If the technician cannot adequately address the corrosion, the technician has been instructed to consult with and seek assistance from the appropriate SME.

C. Areas of Concern Identified Company wide

Title 49, Code of Federal Regulations (CFR) Part 192, §192.476(a) Internal corrosion control for design and construction of transmission line §192.476 Internal corrosion control: Design and construction of transmission line states:

"(a) Design and construction. Except as provided in paragraph (b) of this section, each new transmission line and each replacement of line pipe, valve, fitting, or other line component in a transmission line must have features incorporated into its design and construction to reduce the risk of internal corrosion. At a minimum, unless it is impracticable or unnecessary to do so, each new transmission line or replacement of line pipe, valve, fitting, or other line component in a transmission line must:

(1) Be configured to reduce the risk that liquids will collect in the line;
(2) Have effective liquid removal features whenever the configuration would allow liquids to collect; and
(3) Allow use of devices for monitoring internal corrosion at locations with significant potential for internal corrosion.

SCG Gas Transmission Integrity Management Program Plan addresses the requirement of this section but its Gas Standards do not address it. It will be appropriate to include the Internal corrosion control design and construction of transmission line in its Gas Standards since the Gas Standards addressed all transmission pipelines including the integrity management program non covered transmission pipeline segments. SED recommends that SCG incorporate Internal Corrosion Control Design and Construction of Transmission Line into its Gas Standards as discussed with Integrity Management Program Group.
Response To Item C

Gas Standard 167.0230 “Internal Corrosion Design and Construction” specifically addresses this recommendation. This Gas Standard is part of SoCalGas’ Operations and Maintenance plan and Transmission Integrity Management Plan (TIMP).