PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3298

March 24, 2015

Jimmie Cho, Senior Vice President Gas Operations and System Integrity Southern California Gas Company 555 West 5th Street, GT21C3 Los Angeles, CA 90013



GI2015-01-SCG49-01A

Subject: General Order (G.O.) 112-E Operation and Maintenance Inspection of Southern California Gas Company's Cathodic Protection Facilities in the North Desert Transmission Area

Dear Mr. Cho:

The Safety and Enforcement Division (SED) of the California Public Utilities Commission conducted a G.O. 112-E Operation and Maintenance Inspection of Southern California Gas Company's (SCG) Cathodic Protection (CP) Facilities in the North Desert Transmission Area (Inspection Unit) on January 12-16, 2015. The inspection included a review of the Inspection Unit's cathodic protection and odorant records for calendar years 2013 and 2014 and random field inspections of pipeline facilities in the Victorville and Needles transmission districts. SED staff also reviewed the Inspection Unit's Operator Qualification records, which included field observation of randomly selected individuals performing covered tasks.

SED staff identified one probable violation of G.O. 112-E, Reference Title 49 Code of Federal Regulations (CFR), Part 192 and issued one notice of amendment. SED also made few recommendations during the course of this inspection. The probable violations, notice of amendments and recommendations are noted in the attached "Summary of Inspection Findings".

Please provide a written response within 30 days of receipt of this letter indicating any updates or corrective actions taken by SCG. Pursuant to Commission Resolution ALJ-274, SED staff has the authority to issue citations for each violation discussed during the inspection. SED will notify SCG of the enforcement action it plans to take after it reviews SCG's inspection response.

If you have any questions, please contact Mahmoud (Steve) Intably, at (213) 576-7016.

Sincerely,

Kenneth Bruno

Program Manager

Wull B 3/24/15 Gas Safety and Reliability Branch Safety and Enforcement Division

CC: Mahmoud (Steve) Intably, SED/GSRB, Dennis Lee, SED/GSRB, Kan Wai Tong, SED/GSRB, and Jeff Koskie, Sempra Energy Utilities

Summary of Inspection Findings 2015 SCG North Desert Transmission Inspection Unit January 12-16, 2015

I. SED Identified Probable Violations

Title 49 CFR, Part §192.707 Line markers for mains and transmission lines.

- (a) "Buried pipelines. Except as provided in paragraph (b) of this section, a line marker must be placed and maintained as close as practical over each buried main and transmission line:
 - (1) At each crossing of a public road and railroad; and
 - (2) Wherever necessary to identify the location of the transmission line or main to reduce the possibility of damage or interference.
- (b) Exceptions for buried pipelines. Line markers are not required for the following pipelines:
 - (1) Mains and transmission lines located offshore, or at crossings of or under waterways and other bodies of water.
 - (2) Mains in Class 3 or Class 4 locations where a damage prevention program is in effect under \$192.614.
 - (3) Transmission lines in Class 3 or 4 locations until March 20, 1996.
 - (4) Transmission lines in Class 3 or 4 locations where placement of a line marker is impractical.
- (c) Pipelines above ground. Line markers must be placed and maintained along each section of a main and transmission line that is located above ground in an area accessible to the public.
- (d) Marker warning. The following must be written legibly on a background of sharply contrasting color on each line marker:
 - (1) The word "Warning," "Caution," or "Danger" followed by the words "Gas (or name of gas transported) Pipeline" all of which, except for markers in heavily developed urban areas, must be in letters at least 1 inch (25 millimeters) high with ¼ inch (6.4 millimeters) stroke.
 - (2) The name of the operator and telephone number (including area code) where the operator can be reached at all times."

SCG Standard 223.0075 Pipeline Markers, Section 4.1.8 requires that line markers be installed where pipeline cross the street perpendicularly or diagonally.

During the field inspection of SCG Cathodic Protection (CP) facilities, SED staff observed that SCG pipelines had missing line marker(s) at the following locations where the pipelines crossed streets or Right of Ways perpendicularly and/or diagonally. SCG had previously inspected the pipelines, L6905, L235, L335, and L1185 in August and November of 2014, and did not note any abnormal conditions on the inspection records:

- 1. Between MP6905-4.48 & (ROW crossing)
- 2. Between MP6905-5.13 & MP6905-5.36
- 3. MP235-171.74 (entering SE corner of the ROW)
- 4. MP235-173.00 (12351 Rancho Rd)
- 5. Near the intersection of Rancho Rd., and Sportsman Center, Adelanto
- 6. Intersection of Koala Rd., and Rancho Rd., Adelanto
- 7. L235 at 42nd Street East and East Ave S, Palmdale
- 8. L235 at 45th Street East and East Ave S, Palmdale
- 9. L335 at 60th Street East and East Ave S, Palmdale

- 10. L235 at 90th Street East and East Ave S near the ROW, Palmdale
- 11. L335 at 103th Street East and East Ave. S, Palmdale
- 12. L335 at 101th Street East and East Ave. S, Palmdale
- 13. L1185 at Duncan Rd. and Baldy Mesa Rd., Victorville
- 14. L1185 at Baldy Mesa Rd. and 6th Street, Victorville
- 15. L1185 at Baldy Mesa Rd. and 5th Street, Victorville

SCG failed to identify and install/replace line markers at the aforementioned locations that are near pipeline segments with missing line markers. SED found SCG in violation of G.O. 112-E, Reference Title 49 CFR Part 192, Section 192.707(a).

II. Notice of Amendment of plans or procedures

Title 49 CFR, Part 190, §190.206 Amendment of plans or procedures

"(a) A Regional Director begins a proceeding to determine whether an operator's plans or procedures required under parts 192, 193, 195, and 199 of this subchapter are inadequate to assure safe operation of a pipeline facility by issuing a notice of amendment. The notice will specify the alleged inadequacies and the proposed revisions of the plans or procedures and provide an opportunity to respond. The notice will allow the operator 30 days following receipt of the notice to submit written comments, revised procedures, or a request for a hearing under §190.211."

Title 49 CFR, Part 192, §192.605 Procedural manual for operations, maintenance, and emergencies

"Each operator shall include the following in its operating and maintenance plan:

- (a) General. Each operator shall prepare and follow for each pipeline, a manual of written procedures for conducting operations and maintenance activities and for emergency response. For transmission lines, the manual must also include procedures for handling abnormal operations. This manual must be reviewed and updated by the operator at intervals not exceeding 15 months, but at least one each calendar year. This manual must be prepared before operations of a pipeline system commence. Appropriate parts of the manual must be kept at locations where operations and maintenance activities are conducted.
- (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.
 - (2) Controlling corrosion in accordance with the operations and maintenance requirements of Subpart I of this part."

Title 49 CFR, Part 192, §192.465 External corrosion control: Monitoring.

(d) "Each operator shall take prompt remedial action to correct any deficiencies indicated by the monitoring."

PHMSA Interpretation #PI-89-006

The definition of "prompt" will vary with the circumstances. Enforcement should be sought only when the investigator is convinced that corrective action was unreasonably delayed. Investigator must state why he determined the delay to be unreasonable. The operator should be required to have procedures (per 192.453) for responding to deficiencies found by the required monitoring. Those procedures should include as a minimum:

- 1. A time frame for evaluating data and determining a course of action.
- 2. A time frame for any new installation to be operational and Cathodic Protection to be in the adequate range.

These time frames should give consideration to the population density and environmental concerns of the area that could potentially be affected by released product. They may also consider climatic conditions, availability of material, workloads, and an estimate of a relative rate of detrimental corrosion. As a rule of thumb, the OPS would expect that, under normal conditions, the operator should have the evaluations and decisions made and action started within a few months, (proportionally less where required monitoring is less than a year or where deficiencies could result in an immediate hazard to the public), and correction completed by the time of the next scheduled monitoring. If the operator has no procedure for promptly responding and deficiencies exist, it is a violation of 192.465(d). If you can demonstrate that the operator's established time frame for action is inadequate, you may cite him for a violation or proceed with a notice of amendment or both.

During CP records review, SED observed that SCG failed to take prompt remedial action to correct deficiencies noted in its CP monitoring program. SCG recorded low pipe to soil readings at multiple CP locations and some were dated as far back as 2010. The CP reads were still below the company's established minimum tolerance. SCG Standard 186.0135 is inadequate and failed to define "prompt" remedial action, the roles and responsibility for implementing timely corrective actions. SED recommends that SCG modify its Gas Standard 186.0135 to address the "prompt" remedial action and establish timeline, roles and responsibilities for mitigating deficiencies noted in its Cathodic Protection systems. The integrity of a pipeline segment, especially a transmission pipeline with inadequate cathodic protection system for over a year may be compromised. Furthermore, SCG Gas Standard failed to prescribe the supervisor's roles, responsibilities and timeline to complete the corrective action. Attached is a list of the CP areas where the work orders are still pending.

Work order	Description	Location Description	Found	Still pending
	· · · · · · · · · · · · · · · · · · ·	 		
5308851	Low CP read at L235-128.35	L235-(128.81-136.02)-MV#14	6/25/2013	12/5/2014
5308855	Low CP read at L235-132.53	L235-(128.81-136.02)-MV#14	7/25/2013	12/5/2014
		L235-(123.81-136.02)-MV#		
5308854	Low CP read at L235-135.92	14	7/25/2013	12/5/2014
	50 Low CP reads L235-136.68-			
3931043-A	158.39	L235-(136.02-147.53)-MV#15	6/8/2010	12/5/2014
5307381	Low CP read at L4000-47.79	L4000-(36.93-49.21)-MV#13	7/25/2013	1/13/2014
4531406	Low CP read at L1185-0.070	L1185 Adelanto Station	4/16/2012	12/5/2014
5352559	Low CP read at L235-210.03-215.22	L235 Victorville District	7/25/2013	12/5/2014

SCG failed to document the roles, responsibilities and implement prompt remedial action to mitigate these CP deficiencies in a timely manner. Hence, SED recommends that SCG modify its Gas Standard 186.0135, to include the supervisor's roles, responsibilities and timeline to complete pipeline CP related deficiencies.

III. Concerns and Recommendations

- SCG Gas Standard 186.0075, Electrical Test Station & Bond Assembly, Figures 6 and 7, depicts
 the SCG's ETS wire installations standard. During the field inspection, SED staff observed that
 several ETS wire terminations were in non-conformance with SCG Gas Standard 186.0075. SED
 recommends that SCG follow its Gas Standard and ensure that its employees maintain the ETS
 wire terminations in accordance with SCG's Gas Standard 186.0075.
- During the field inspection SED observed a damaged vent stack on Line 335 at milepost 36.93 and L235 had only one vent stack.. SED recommends that SCG take the necessary steps to ensure the vent stack is in good operating condition.