

## PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE  
SAN FRANCISCO, CA 94102-3298



August 14, 2015

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

GI-2015-04-  
SCG55-02A

**Subject: General Order (G.O.) 112 Operation and Maintenance Inspection of Southern California Gas Company's Cathodic Protection Facilities in the Harbor Corridor District<sup>1</sup>**

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 Harbor Corridor (Inspection Unit) on April 6-10, 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 182<sup>nd</sup> Street, Compton, Huntington Park, and San Pedro 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, Reference Title 49 Code of Federal Regulations (CFR), Part 192 during the course of this inspection. SED also made one recommendation and several observations during the course of this inspection. These are described in the "Summary of Inspection Findings", which is enclosed with this letter.

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 Willard Lam, at (415) 703-1327.

Sincerely,

Kenneth Bruno  
Program Manager  
Gas Safety and Reliability Branch  
Safety and Enforcement Division

*Kenneth B* 8/14/15

CC: Willard Lam, SED/GSRB  
Jeff Koskie, Sempra  
Kan Wai Tong, SED/GSRB  
Matthewson Epuna, SED/GSRB

<sup>1</sup> General Order 112-F was adopted by the Commission on June 25, 2015 via Decision 15-06-044.

**Summary of Inspection Findings  
2015 SCG Harbor Corridor Inspection  
April 6-10, 2015**

**I. SED Identified Probable Violations**

**Title 49 CFR §192.465(d) – External Corrosion Control: Monitoring**

*“Each operator shall take prompt remedial action to correct any deficiencies indicated by the [external corrosion control] monitoring.”*

The May 19, 1989, Federal Pipeline and Hazardous Materials Safety Administration’s (PHMSA) Inspection Guideline and Interpretation #PI-89-006 for 192.465(d) states that, as a rule of thumb, PHMSA interprets “prompt” as having the “correction completed by the time of the next scheduled monitoring”.

SED found numerous Cathodic Protection (CP) packages to be deficient for intervals exceeding SCG’s routine monitoring frequency defined in SCG Gas Standard 186.0135, and as required in 49 CFR §192.465(d). SED identified CP packages that have been deficient for more than 15 months as listed in Attachment A. SED lists the following CP packages in Table 1 that continue to be deficient for more than 3 years:

**Table 1. Deficient CP Packages in excess of 3 years.**

District	Area	Date Deficiency Identified	Date noted CP Package submitted to SCG planning department	# of Days Deficient
182ND STREET	TOR09-3	5/9/2012	3/6/2013	1045
182ND STREET	C0567W-5	1/13/2012	Still Troubleshooting	1162
182ND STREET	C0590W-2	10/31/2011	10/23/2012	1236
182ND STREET	C0599W-2	10/31/2011	6/12/2013	1236
182ND STREET	C1051W-3	10/31/2011	11/6/2013	1236
182ND STREET	LA3218-5	8/24/2011	9/17/2011	1304
182ND STREET	C0421W-3	5/16/2011	10/29/2012	1404
COMPTON	C0600E-7	6/9/2012	11/17/2014	1014
COMPTON	C0184E-2	5/11/2012	4/26/2013	1043
COMPTON	C0184E-3	4/25/2012	4/26/2013	1059
COMPTON	LYN005-2	4/20/2012	10/3/2012	1064
COMPTON	C0642E-2	11/21/2011	2/20/2015	1215
COMPTON	C0642E-1	8/5/2011	3/20/2013	1323
SAN PEDRO	LA1666-2-1	10/24/2011	7/21/2014	1243

SED recognizes that in some instances, factors outside of SCG’s control may be the cause of delay for restoring deficient CP packages (i.e. environmental, permitting, moratoriums, etc.). However, SED observed the cause of delays for the locations in Table 1 to be within the control of SCG. For example, CP technicians would list “not enough time to troubleshoot package” for action taken or “area needs new anodes”, yet the lengthy installation of new anodes does not restore the CP package. SED believes the delays in restoring CP deficiencies were manageable by SCG and therefore violations of 49 CFR §192.465(d). Please provide SED with a status update on the remediation of the CP packages listed in Attachment A and Table 1 above.

## II. Concerns, Recommendations, and Observations Summary

1. During field visits on 4/8/2015 to isolated sections of steel lines (CP10) locations, SED observed the following locations in Table 2 that did not meet the negative -850 millivolt (mV) criteria since the last pipe-to-soil readings taken in 2013.

**Table 2.** CP10 Field Visit Locations

Location	Last Read Year	Last Read (mV)	4/8/2015 Read (mV)
25844 Pennsylvania Avenue, Lomita	2013	-490	-497
26836 Westvale Road, Palos Verde Peninsula	2013	-440	-473
26707 Eastvale Road, Palos Verde Peninsula	2013	-800	-695
1538 W 120 <sup>th</sup> Street, Los Angeles	2013	-780	-836
2550 Pacific Coast Highway, Torrance	2003	-880	-606

Please provide records that show SCG's work orders or corrective actions performed between the last monitoring read in 2013 and SED's field visit on 4/8/2015 for the locations in Table 2. Additionally, please provide SED with an update for any remediation work performed following the 4/8/2015 field visits for the locations in Table 2.

2. During a 4/7/2015 field visit to 320 S. Poinsettia Avenue in Compton, SED discovered an existing enclosure built around the meter assembly. The meter assembly appeared to be recently replaced, however the service regulator did not vent to outside in the new meter configuration. The service regulator vented inside of the meter enclosure, which leads directly to the crawl space of the residence. SCG must modify the service regulator vent so that it extends outside of the meter enclosure to minimize any risk of gas accumulation in the event of a regulator failure. Please provide SCG's plan of action at this meter location.
3. During a field visit to a commercial customer at 2760 Cabrillo Avenue in Torrance, SED discovered a heavily corroded pipe fitting on the customer side of the service meter that required immediate attention. The business manager was notified and 48-hour notice was given to repair the corroded pipe fitting or have service interrupted. Please provide SED with an update on the follow up actions SCG performed at this location.
4. During a field visit to CP Location LA2897-1, SED observed a below adequate pipe-to-soil reading (-425 mV) at 5544 119<sup>th</sup> Street, Los Angeles. An inspection of the LA2871-1 Rectifier discovered a blown fuse. The SCG employee did not have the correct fuse on hand to replace the blown unit so a follow-up visit was to be scheduled. Please provide SED with a status update on CP Location LA2897-1.

5. During field visits to odorant intensity test locations in Harbor City and Compton, SED observed the following:

**Table 3. Odorant Testing Observations**

Odorant Test City	Observation
Harbor City	A SCG technician (tech) did not recognize an abnormal operating condition during the odorant intensity test. The sample gas pressure spiked to 30 psig <sup>1</sup> , above recommended 5 psig <sup>1</sup> or less working pressure of the Odorometer instrument. The pressure remained at 30 psig for the duration of the odorant intensity test. The tech did not recognize the pressure spike until SED brought it to the employee's attention following the completion of the test.
Harbor City	A SCG employee did not check for any gas leaks (Ex. soap test or equivalent) on the tubing leading to the Odorometer instrument
Carson	A SCG employee did not check for any gas leaks (Ex. soap test or equivalent) on the tubing leading to the Odorometer instrument

<sup>1</sup>-pounds per square inch (psig)

SED recognizes that SCG employees may be subjected to increased levels of distraction while being scrutinized during an inspection, which may have contributed to the SCG employee not noticing the spike in sample gas pressure. However, SED has observed multiple instances of different SCG employees failing to leak check the tubing carrying the sample gas to the Odorometer instrument. A gas leak in close proximity to the Odorometer carries the greatest influence in potentially affecting the test results. Please provide SED with an update on how SCG plans to minimize reoccurrence in the future.

## Attachment A

CP packages that have been deficient for more than 15 months

Area	Initial Down Date	Last Read Date	Number of Days Out Of Tolerance	Protection Type
C0564W-4	06/27/2012	03/17/2015	996	Magnesium
WAT119-5	07/09/2012	02/25/2015	984	Magnesium
TOR11-2	07/25/2012	03/09/2015	968	Magnesium
LA0269-2	07/31/2012	03/04/2015	962	Magnesium
C0885E-1	08/16/2012	03/04/2015	946	Magnesium
COM013-8	08/21/2012	03/11/2015	941	Magnesium
WAT044-1	08/24/2012	02/23/2015	938	Magnesium
C0583W-2	09/14/2012	03/11/2015	917	Rectifier
C0175W-1	09/18/2012	03/09/2015	913	Magnesium
C0401W-1	09/18/2012	03/11/2015	913	Magnesium
C0603E-1	10/11/2012	03/02/2015	890	Magnesium
C0576W-1	10/25/2012	03/02/2015	876	Magnesium
WAT093-5	10/25/2012	03/18/2015	876	Magnesium
LA1655-3-1	10/31/2012	03/12/2015	870	Magnesium
COM005-1	11/27/2012	03/06/2015	843	Magnesium
C0670E-1	12/22/2012	03/10/2015	818	Magnesium
WAT086-6	01/10/2013	03/16/2015	799	Magnesium
WAT094-2	01/10/2013	03/13/2015	799	Magnesium
C0888E-4	02/28/2013	03/12/2015	750	Magnesium
LA1376-4-1	04/12/2013	03/17/2015	707	Magnesium
LYN006-1	04/22/2013	03/05/2015	697	Rectifier
C0183E-2	05/14/2013	03/04/2015	675	Magnesium
SL 37-49	06/12/2013	03/18/2015	646	Rectifier
WAT103-3	06/20/2013	03/02/2015	638	Magnesium

WAT082-10	06/24/2013	03/17/2015	634	Magnesium
LA0261-3	06/25/2013	03/19/2015	633	Magnesium
LA0262-5	06/25/2013	03/19/2015	633	Magnesium
TOR22-11	06/27/2013	03/13/2015	631	Magnesium
WAT113-1	06/28/2013	03/11/2015	630	Magnesium
C0504W-9	06/28/2013	03/19/2015	630	Rectifier
LA0269-1	07/03/2013	03/16/2015	625	Magnesium
C0658E-3	07/08/2013	03/09/2015	620	Magnesium
C0540W-3	07/16/2013	03/13/2015	612	Magnesium
C0546W-2	07/22/2013	03/04/2015	606	Magnesium
C0170W-6	07/30/2013	03/18/2015	598	Magnesium
ELS02-3	07/30/2013	03/19/2015	598	Rectifier
ELS02-4	08/01/2013	03/13/2015	596	Magnesium
C0207E-1	08/02/2013	03/18/2015	595	Magnesium
C0207E-2	08/02/2013	03/09/2015	595	Magnesium
C0409W-7	08/06/2013	03/09/2015	591	Magnesium
WAT026-1	08/06/2013	03/02/2015	591	Magnesium
C0216E-6	08/07/2013	02/26/2015	590	Rectifier
C0676E-1	08/07/2013	03/04/2015	590	Magnesium
C0650E-1	08/12/2013	03/10/2015	585	Interference
C1057W-5	08/21/2013	02/23/2015	576	Rectifier
C0593W-8	09/04/2013	03/10/2015	562	Interference
LA0344-4	09/12/2013	03/09/2015	554	Magnesium
C0576W-2	09/16/2013	03/13/2015	550	Rectifier
C0634E-1	09/18/2013	03/16/2015	548	Magnesium
LA3206-3	09/19/2013	03/17/2015	547	Magnesium
LA-0268-G	09/20/2013	03/17/2015	546	Magnesium
WAT093-4	09/20/2013	03/06/2015	546	Magnesium

C0405W-8	09/23/2013	03/10/2015	543	Magnesium
COM004-2	10/11/2013	03/18/2015	525	Magnesium
COM002-1	10/16/2013	03/04/2015	520	Magnesium
C0414W-3	11/05/2013	03/13/2015	500	Magnesium
C1066W-4	11/06/2013	03/05/2015	499	Magnesium
C1066W-12	11/07/2013	02/25/2015	498	Rectifier
C0561W-1	11/12/2013	03/17/2015	493	Magnesium
C1091W-2	11/13/2013	03/03/2015	492	Magnesium
C1061W-6	11/22/2013	02/24/2015	483	Magnesium
LA1358-2-3	11/22/2013	03/16/2015	483	Magnesium
LA1518-1-1	11/22/2013	03/11/2015	483	Magnesium
C1072W-1	11/27/2013	03/17/2015	478	Rectifier
C1027W-2	12/04/2013	03/19/2015	471	Magnesium
C0582W-3	12/05/2013	03/16/2015	470	Magnesium
C0582W-5	12/05/2013	03/12/2015	470	Magnesium
C0420W-2	12/06/2013	03/12/2015	469	Rectifier
C1031E-1	12/06/2013	03/10/2015	469	Magnesium
LA0263-2	12/06/2013	03/19/2015	469	Magnesium
C0593W-5	12/09/2013	02/27/2015	466	Magnesium
LA0268-3	12/09/2013	03/03/2015	466	Magnesium
LA0344-1	12/09/2013	02/26/2015	466	Magnesium
C0585W-7	12/10/2013	03/04/2015	465	Magnesium
C1055W-2	12/10/2013	03/04/2015	465	Magnesium
LA3448-2	12/10/2013	03/02/2015	465	Magnesium
C1052W-2	12/12/2013	03/05/2015	463	Magnesium
C1056W-5	12/16/2013	03/17/2015	459	Magnesium