#### PUBLIC UTILITIES COMMISSION 505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3298

June 27, 2017



GI-2016-07-SDG46-02B

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

# Subject: General Order (G.O.) 112<sup>1</sup> Operation and Maintenance Inspection of San Diego Gas and Electric Company's Critical Valves and Meter and Regulation Facilities in the South Distribution Area

Dear Mr. Cho:

The Safety and Enforcement Division (SED) of the California Public Utilities Commission conducted a G.O. 112<sup>1</sup>, Operation and Maintenance Inspection of San Diego Gas and Electric Company's (SDG&E) critical valves and Meter and Regulation (M&R) systems in the South Distribution Area (Inspection Unit) on July 11-15, 2016. The inspection included a review of the Inspection Unit's M&R records for calendar years 2013 to 2015 and random field inspections of pipeline facilities in the Metro, Eastern, and Beach Cities districts. Also, SED staff reviewed the Inspection Unit's Operator Qualification records, which included field observation of randomly selected individuals performing covered tasks.

SED staff identified two probable violations of G.O. 112<sup>1</sup>, Reference Title 49 Code of Federal Regulations (CFR), Part 192 and made three recommendations during the course of this inspection. They are described in the enclosed "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 SDG&E. SED will notify SDG&E if it plans to take an enforcement action after it reviews SDG&E's inspection response.

If you have any questions, please contact Michelle Wei, at (213) 620-2780 or by email: miw@cpuc.ca.gov.

Sincerely,

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

- CC: Michelle Wei, SED/GSRB Troy Bauer, Sempra Kan Wai Tong, SED/GSRB
  - 1. General Order 112-F was adopted by the Commission on June 25, 2015 via 15-06-044

#### Summary of Inspection Findings 2016 SDG&E South Distribution Inspection July 11-15, 2016

#### I. SED Identified Probable Violations

## Title 49 Code of Federal Regulations (CFR), Part 192 Section 192.747(a) – Valve maintenance: Distribution systems

#### §192.747(a) Valve maintenance: Distribution Systems states in part:

"Each valve, the use of which may be necessary for the safe operation of a distribution system, must be checked and serviced at intervals not exceeding 15 months, but at least once each calendar year."

SED noted that the Inspection Unit did not inspect two valves as required by 192.747(a). SED staff identified the first valve during record review. The Inspection Unit had visited Valve 762 in the Eastern District on July 1, 2015 but found it to be inaccessible. There was no evidence of a follow up work order and there was a confusion about whether or not the valve had been removed from service. Thus, Valve 762 was not inspected during calendar year 2015. SED staff identified the second valve during field inspections. During record review, SED staff noticed that the status of Valve 6395 in the Metro District changed from Closed to Open and back to Closed. SED staff requested a field visit to the location and observed the inspection of the valve on July 14, 2016. While in the field, SED and the Inspection Unit personnel noted that at some point in the inspection history, a non-critical, closed valve was tagged as Valve 6395. This was the valve inspected in 2013 and 2015. However, the actual Valve 6395 was located around the corner of the same intersection and is not a normally closed valve. The Inspection Unit found the correct valve, operated it successfully, and updated its records to reflect the correct location of the valve. Thus, the Inspection Unit did not inspect Valve 6395 in 2013 or 2015 because the crews inspected a different valve at the same intersection. SDG&E did not inspect these two valves within the required time frame. Therefore, SDG&E is in violation of General Order 112-F, Reference Title 49 CFR, Part 192 §192.747(a).

#### II. SDG&E Identified Probable Violation

#### Title 49 CFR, Part 192 Section 192.747(b) – Valve maintenance: Distribution systems

#### §192.747(b) Valve maintenance: Distribution systems states in part:

"Each operator must take prompt remedial action to correct any valve found inoperable, unless the operator designates an alternative valve."

SDG&E discovered and notified SED that they did not take prompt action to correct 24 inoperable valves as required by 192.747(b). The valves were initially found to be inoperable from September 2015 to April 2016. SDG&E became aware of this issue on May 6, 2016 and conducted field visits of the inoperable valves on May 9 and 10, 2016. At that point, eight of the valves were able to be moved after flushing and lubricating and their status became "hard to

operate." These were placed on a quarterly inspection schedule. One of the valves was found satisfactory. It had mistakenly been designated as inoperable due to an earlier clerical error. This has since been corrected. Of the remaining 15 valves, SDG&E engineering determined that seven were able to be removed from the critical valve program and created alternative control plans for the other eight. See Attachment 1 for the full list of valves.

SDG&E informed SED that they were looking into using valve operator handles that provide more leverage and also re-evaluating current valve maintenance practices. SED instructed SDG&E to provide SED with an update on progress made in this area since the inspection. SDG&E failed to promptly address the inoperable valves. Therefore, SDG&E is in violation of General Order 112-F, Reference Title 49 CFR, Part 192 §192.747(b).

#### **III.SED Recommendations**

- 1. SED noted that SDG&E has no specific guidance in its procedure on what makes a valve hard to operate and what kind of mitigation would take place in case a valve were found hard to operate. When this issue was discussed in the field with employees from this Inspection Unit they indicated that their usual process would be to lube or flush a valve and then come back to work on it again in a few days to see if it's condition was now satisfactory. However, it was not clear whether this process was one followed by all SDG&E employees or not. Therefore, SED recommends that SDG&E expand their procedure to define hard to operate valves and explain what the mitigation process would be so that all SDG&E employees can use the same approach.
- 2. SED noted that SDG&E has many normally closed valves in their system which they inspect as "critical" valves. In an inspection report to Southern California Gas Company earlier this year, SED recommended that any valve listed as critical should be operated as part of its inspection process. Please reference the San Fernando Valley Distribution Inspection Unit Inspection Report (GI2016-06-SCG66-02B), Recommendation #1. Therefore, SED recommends that SDG&E review its valve list and their functions and update its critical valve list as soon as possible.
- 3. SED noted during record review that the Inspection Unit had many valves that were listed with "unsatisfactory" conditions. However, upon further investigation, SED discovered that they were not listed as such because of the valve condition itself, but the condition of the valve cans. The Inspection Unit explained to SED that because of a high ground water table in the area, the valve cans have a tendency to deteriorate more quickly and often need to be replaced. However, the current SDG&E valve records do not articulate the reason for the unsatisfactory condition, which may hinder proper prioritization of resource allocation. Therefore, SED recommends that SDG&E somehow make a distinction in their records between valves that may be in an unsatisfactory condition because of the operation of the valve or due to the valve's cans to ensure that any unsatisfactory valve will be remediated promptly.

### Attachment 1

		Equipment	Date Found	
District	Valve #	#	Inoperable	Action Taken
<b>Beach Cities</b>	6605	600613557	10/1/2015	Alternative control plan created
Beach Cities	6615	600613567	10/13/2015	Alternative control plan created
Beach Cities	6618	600613570	10/2/2015	Removed from annual maintenance schedule
Construction				
Metro	1175	600612107	11/11/2015	Hard to operate
Construction				
Metro	1097	600612064	11/18/2015	Removed from annual maintenance schedule
Construction				
Metro	6197	600613175	11/16/2015	Removed from annual maintenance schedule
Construction	<b>C</b> 222	600612201	10/21/2015	Democrad from enough meintenense schedule
Metro Construction	6322	600613291	10/21/2015	Removed from annual maintenance schedule
Metro	6323	600613292	10/21/2015	Removed from annual maintenance schedule
Construction	0323	000013232	10/21/2013	
Metro	6334	600613303	11/18/2015	Removed from annual maintenance schedule
Construction				
Metro	6371	600613337	9/9/2015	Alternative control plan created
Construction				· · · · · · · · · · · · · · · · · · ·
Metro	6396	600613356	11/13/2015	Alternative control plan created
Construction				
Metro	6518	600613471	10/26/2015	Alternative control plan created
Construction				
Metro	731	600614155	11/18/2015	Alternative control plan created
Construction	700	600644457	10/15/2015	
Metro	733	600614157	10/15/2015	Alternative control plan created
North Coast	2743	600612505	4/11/2016	Alternative control plan created
North Coast	6851	600613797	3/22/2016	Hard to operate
North Coast	6879	600613824	3/15/2016	Hard to operate
North East	6097	600613075	4/12/2016	Removed from annual maintenance schedule
North East	2319	600612366	3/15/2016	Found satisfactory
North East	6986	600613934	2/23/2016	Hard to operate
North East	6987	600613935	2/23/2016	Hard to operate
North East	6988	600613936	2/23/2016	Hard to operate
North East	7037	600613987	1/28/2016	Hard to operate
North East	7099	600614050	1/25/2016	Hard to operate