

## PUBLIC UTILITIES COMMISSION

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May 19, 2017

Mr. Stephen Wassell ([swassell@southernco.com](mailto:swassell@southernco.com))

GI-2017-02-CVS-39-01C

VP Storage Peaking & Ops  
Southern Company  
10 Peachtree Place NE, Suite 1000  
Atlanta, GA 20209

SUBJECT: 2017 General Order 112 Gas Inspection of Central Valley Gas Storage

Dear Mr. Wassell:

The Safety and Enforcement Division (SED) of the California Public Utilities Commission conducted a General Order 112 inspection of Central Valley Gas Storage (CVGS) from February 6-10, 2017.<sup>1</sup> The inspection included a review of the Control Room Management Procedures, Patrolling and Leak Survey, Public Awareness Program and Operator Qualification records for the period of 2013 through 2016.

SED's findings are noted in the Summary of Inspection Findings (Summary) which is enclosed with this letter. The Summary reflects only those records and pipeline facilities that SED inspected during the inspection.

Within 30 days of your receipt of this letter, please provide a written response indicating the measures taken by PG&E to address the violations noted in the Summary.

If you have any questions, please contact Nathan Sarina at (415) 703-1555 or by email at [Nathan.Sarina@cpuc.ca.gov](mailto:Nathan.Sarina@cpuc.ca.gov).

Sincerely,

A handwritten signature in blue ink that reads "Kenneth A. Bruno".

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

Enclosure: Summary of Inspection Findings

cc: John Boehme, Manager Regulatory Affairs ([jboehme@southernco.com](mailto:jboehme@southernco.com))  
Mark Stephens, Manager-Storage Operations Department ([mastephe@southernco.com](mailto:mastephe@southernco.com))

<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

### I. Probable Violations

1. Title 49 CFR §192.631(b)(1) states in part: “Roles and responsibilities. Each operator must define the roles and responsibilities of a controller during normal, abnormal and emergency operating conditions...A controller’s authority and responsibility to make decisions and take actions during normal operations.”

During SED’s review of the Control Room Management Plan, Section 300 – Roles and Responsibilities – CVGS does not explicitly define the responsibilities for each controller when both controllers are present at the station. According to CVGS’s schedule this scenario occurs primarily on Wednesdays.

2. Title 49 CFR §192.631(b)(3) states in part: “Roles and responsibilities. Each operator must define the roles and responsibilities of a controller during normal, abnormal and emergency operating conditions...A controller’s role during an emergency, even if the controller is not the first to detect the emergency, including the controller’s responsibility to take specific actions and to communicate with others:”

During SED’s discussion with facility personnel it was mentioned that the controller has the authority to call 911 or other local emergency personnel. However, the current version of the written plan does not incorporate that language under Section 300 Roles and Responsibilities, or into a procedure contained within the Control Room Management Plan. CVGS needs to clearly state in its written plan the controller’s authority to call 911 or other local emergency personnel.

3. Title 49 CFR §192.631(b)(4) states in part: “Roles and responsibilities. Each operator must define the roles and responsibilities of a controller during normal, abnormal and emergency operating conditions...A method of recording controller shift-changes and any hand-over of responsibility between controllers.”

The Control Room Management Plan Section 406 describes the used of the shift hand-off process for normal shift changes and unforeseen circumstances. However, the CRM does not explicitly describe the process used for alternate shift hand-overs and the controller’s responsibilities during unplanned circumstances, such as short breaks, taking fatigue mitigation measures, or when the controller perform routine duties around the facility.

4. Title 49 CFR §192.631(c)(2) states in part: “Provide adequate information. Each operator must provide its controllers with the information, tools, processes and procedures necessary for the controllers to carry out the roles and responsibilities the operator has defined by performing each of the following: ...Conduct a point-to-point verification between SCADA displays and related field equipment when field equipment is added or moved and when other changes that affect pipeline safety are made to field equipment or SCADA displays;”

- a. The Control Room Management Plan does not define safety related points as they pertain to Central Valley Gas Storage’s SCADA system. Additionally the “Point-to-

Point Verification Procedure” document refers to the Alarm Management Plan for the definition of a safety related point, but the Alarm Management Plan does not contain the definition.

5. Title 49 CFR §192.631(c)(3) states in part: “Provide adequate information. Each operator must provide its controllers with the information, tools, processes and procedures necessary for the controllers to carry out the roles and responsibilities the operator has defined by performing each of the following: ... Test and verify an internal communication plan to provide adequate means for manual operation of the pipeline safety, at least once each calendar year, but at intervals not to exceed 15 months.”
  - a. The internal communication plan does not address scenarios under which the control room must be evacuated.
  - b. The internal communication plan does not provide information describing the failure state of SCADA controlled facilities if there is event such as a power loss, etc. Additionally, there is no test procedure that verifies the state or mode of remote facilities during a SCADA failure.
6. Title 49 CFR §192.631(d)(4) states in part: “Fatigue mitigation. Each operator must implement the following methods to reduce the risk associated with the controller fatigue that could inhibit a controller’s ability to carry out the roles and responsibilities the operator has defined...Establish a maximum limit on controller HOS, which may provide for an emergency deviation from the maximum limit if necessary for the safe operation of a pipeline facility.”

CVGS’s Control Room Management Plan Section 501 lists a minimum time off of 34 hours, if the maximum hours of service (HOS) limit is reached. This needs to be corrected to reflect a minimum time off of at least 35 hours, unless AGL can provide technical justification for reducing the 35-hour minimum time off as prescribed in PHMSA FAQ D07.

7. Title 49 CFR §192.631(e) states in part: “Alarm management. Each operator using a SCADA system must have a written alarm management plan to provide for effective controller response to alarms.

Central Valley Gas Storage uses the Honeywell system as one of the tools used to track alarm content and volume. With the Honeywell system non-operative, it limits Central Valley Gas Storage’s ability to perform analysis on the content and volume of the alarms controllers are receiving over the course of the year. Since the Honeywell system is an integral part of managing Central Valley Gas Storage’s SCADA system under its Alarm Management Plan, its loss affects the quantity of data that Central Valley Gas Storage can examine, limiting their ability to analyze the effectiveness of its plan to provide for effective controller response to alarms.

8. Title 49 CFR §192.631(e)(3) states in part: “Alarm management. Each operator using a SCADA system must have a written alarm management plan to provide for effective controller response to alarms. An operator’s plan must include provisions to: ... (3) Verify the correct safety-related alarm set-point values and alarm descriptions at least once each calendar year, but at intervals not to exceed 15 months.”
  - a. During SED’s interview of the field technician, it was stated that point-to-point verification is done simultaneously with JISH; however this is not documented in the written plan. Central Valley Gas Storage’s Control Room Management Plan did not

- have a procedure or process that explicitly describes how a point to point verification is performed.
- b. SED's review records found that only the hi-hi settings are recorded during point to point verification. All alarm settings used to inform the controller for effective response must be documented during a point to point verification.
9. Title 49 CFR §192.631(e)(5) states in part: "Alarm management. Each operator using a SCADA system must have a written alarm management plan to provide for effective controller response to alarms. An operator's plan must include provisions to: ...Address deficiencies identified through the implementation of paragraphs (e)(1) through (e)(5)."

During SED's review of the Alarm Management Plan, there is no procedure in place that clearly describes how Central Valley Gas Storage addresses and prioritizes any deficiencies identified in their alarm management.

## **II. Areas of Concern/Observations/Recommendations**

1. CVGS's Control Room Management Plan does not explicitly require for the procedures to be reviewed and updated at intervals not exceeding 15 months, but at least once each calendar year. This language is not incorporated into the Control Room Management Plan, although SED's review of records showed that reviews are being done annually.
2. In examining the Paradyne emergency responder events for 2015 and 2016, SED observed that there were no attendees from the counties within Central Valley Gas' geographical boundaries. Central Valley Gas appeared to have better attendance when events are conducted in closer proximity to their facilities. SED recommends that Central Valley Gas Storage review the effectiveness of Paradyne's emergency responder events.
3. Under Section 502 of AGL's Control Room Management Procedure it states, "Each controller/plant operator shall complete at least one training session per calendar year..." SED recommends that the refresher for fatigue education should require at least one training session per calendar year, but not to exceed 15 months.