FOR IMMEDIATE RELEASE

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Date: 06/30/10

Pacific Gas and Electric Company

Gas Information Bulletin

Title: Checking Lock-Up at Regulator Stations Whose Outlet Valves are Not Rated for the Upstream MAOP

Check all appropriate boxes

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INTRODUCTION

Some regulator stations have outlet valves that are not rated for the MAOP upstream of the station. Thus, during lock-up testing, the outlet valves can be exposed to pressure higher than the valves' rating.

BACKGROUND

Whenever regulator stations are checked for lock-up using the long/short line technique, the pressure immediately upstream of the station outlet valves (which are closed during lock-up testing) can increase to the pressure upstream of the station if: (1) either the regulators fail to lock-up, (2) the regulators are tuned to close slowly, or (3) the station outlet valves are not closed slowly. This is not a problem for stations designed in accordance with Gas Standard H-14, *Gas Regulator Stations*, which requires that all regulator station components up to and including the station outlet valves be designed for the upstream MAOP.

PURPOSE

This bulletin replaces the long/short line lock-up testing procedure when checking for lock-up at regulator stations whose outlet valves are not rated for the MAOP upstream of the station.

The following documents are affected:

- Work Procedure WP4540-01, *District Regulator Station Maintenance*, Attachment 5, *Establishing Pressure Set Points and Checking for Lock-Up for Regulators and Monitors Using the Long/Short Line Technique*
- Work Procedure TD-4540P-04, *Pilot-Operated Regulator Station Maintenance (Outlet Pressures > 60 psig)*, Attachment 3, *Checking for Lock-Up for Regulators and Monitors Using the Long/Short Line Technique*

This bulletin will remain in effect until all under-rated regulator station outlet valves are replaced with valves rated for the upstream MAOP or until the work procedures above are updated to include the requirement of this bulletin.

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REQUIREMENTS

Superintendents and supervisors are responsible for ensuring that employees are properly trained to comply with this bulletin.

ACTION

In regulator stations where the outlet valves (or the piping immediately upstream of the valves) is not rated for the MAOP upstream of the station, the short/long line technique described in WP 4540-01 Attachment 5 and TD-4540-04 Attachment 3 has been modified to prevent introducing pressure to the outlet valve (and piping) higher than the maximum overpressure limits specified in 49CFR192, Section 192.201:

(1) If the MAOP of the outlet valve is 60 psig or more, the pressure may not exceed the MAOP plus 10%, or the pressure that produces a hoop stress of 75% of SMYS, whichever is lower.

(2) If the MAOP of the outlet valve is 12 psig or more, but less than 60 psig, the pressure may not exceed the MAOP plus 6 psig.

(3) If the MAOP of the outlet valve is less than 12 psig, the pressure may not exceed the MAOP plus 50%.

The revised long/short line technique is on page 3 of this bulletin.

Approved by:

[redacted]

Date: (06/30/10)

Author: [redacted]

If you have any questions about this bulletin, please call the employee listed below:

Contact: [redacted]
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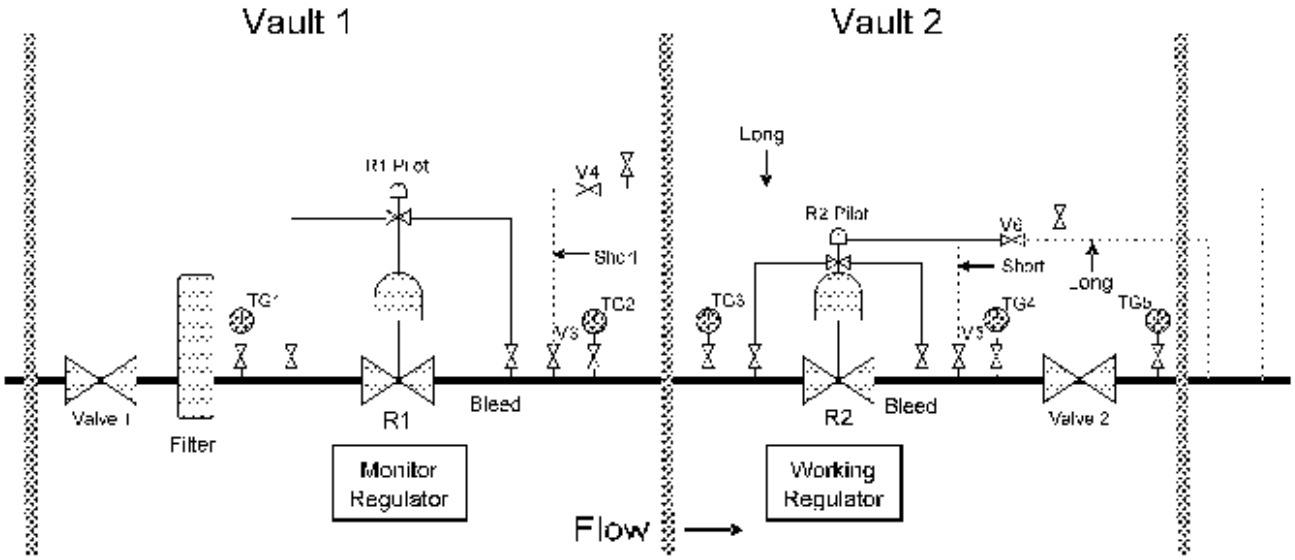
Procedure for Establishing Pressure Set Points and Checking for Lock-Up for Regulators and Monitors Using the Long/Short Line Technique When the Downstream Valve (or Piping) is Not Rated for the Station Inlet MAOP



1. Install test gauges (TG1 – TG5).
2. Record as-found working regulator set point as observed on TG5.
3. Move working regulator sense line to short line:
   a. Open V5.
   b. Close V6.
4. Close Valve 1, the inlet valve.
5. Observe the pressure in the line downstream of Valve 1 on TG1 and allow it to drop to the same pressure observed on TG5.
6. Close Valve 2, the downstream valve.
7. Slowly open Valve 1 while monitoring the pressure on TG4. Record the results of the working regulator lock-up test (yes/no).

   CAUTION

   If the pressure between R2 and Valve 2 approaches the maximum overpressure limit of Valve 2 before R2 locks-up, close V1, to make sure the pressure does not exceed the overpressure limit of Valve 2. Make any needed repairs to R2 to enable lock-up to be achieved and repeat step 7.
8. Open Valve 2 to restore flow.
9. Move monitor regulator sense line to short line.
   a. Open V3
   b. Close V4.
10. Record as-found monitor regulator set point as observed on TG2.
11. Slowly close Valve 2, the downstream valve.
12. Observing TG2. record results of monitor regulator lockup test. (yes/no).
13. Open Valve 2 to restore flow.
14. If necessary, set the monitor regulator pilot (R1 Pilot) to the desired set point.
15. Back out the working regulator pilot (R2 Pilot). (optional)
16. Return monitor regulator sense line to long line.
    a. Open V4.
    b. Close V3.
17. If necessary, reset the working regulator pilot (R2 Pilot) to station set point.
18. Return working regulator sense line to long line.
    a. Open V6.
    b. Close V5.
19. Check to ensure that all valves are in the normal operating position. Remove the test gauges.

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