



**Pacific Gas and
Electric Company**

Gas Information Bulletin

Title: Set Point Limits for District Regulator Stations

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The purpose of this bulletin is to outline the settings requirement for pressure relief and pressure limiting equipment at District Regulator Stations in accordance with Utility Standard S5351, "District Regulator Station Maintenance"

- This Bulletin will remain in effect until such time when Utility Standard S5351 is updated and WP4430-03 is published

Supervisors are responsible for ensuring this Bulletin is used in conjunction with Utility Standard S5351 when performing inspection, testing, and maintenance activities at District Regulator Facilities.

Replace the contents of the entire section of "Pressure Relief Pressure Limiting Equipment" in Attachment 1 of Utility Standard S5351 with the following:

1. Each pressure relief or limiting device, or related group of such devices, must be checked for adequate overpressure capability in compliance with Section 192.201 of 49 CFR Part 192 and Table 1 below. Adequate overpressure confirmation must be made at least once each calendar year, in accordance with schedules specified in Paragraphs 3, 4, and 5 of the "Inspection Schedules" section of this attachment.

Overpressure confirmation is achieved by checking for proper operating settings of regulators, monitors, automatic shutoff devices and/or reliefs.

The maximum (OPP) and minimum (UPP) set point limits for regulator, monitor, relief valve, and automatic shut-off device (i.e. security valve), for various maximum allowable operating pressure (MAOP) are outlined in Table 1 (Setting the regulator set point at the MAOP of the system is strictly prohibited).

Table 1

Pressure Settings	LP System (MAOP = 10.5" WC)	Semi-High System (5 psig ≤ MAOP < 12 psig)	High Pressure System (12 psig < MAOP ≤ 25 psig)	High Pressure System (25 psig < MAOP ≤ 60 psig)
Maximum regulator	10.0" WC	MAOP minus 1.0 psig (see Note 2 below)	MAOP minus 2.0 psig (See Note 2 below)	MAOP less 3.0 psig (See Note 2 below)
Maximum monitor (OPP)	12.0" WC	1.25*MAOP	MAOP plus 3.0 psig	MAOP plus 2.0 psig
Maximum relief valve (OPP) (See Note 1 below)	14.0" WC	1.5*MAOP	MAOP plus 6.0 psig	MAOP plus 6.0 psig
Automatic shut-off device (security valve) maximum (OPP)	N/A	1.5*MAOP	MAOP plus 6.0 psig	MAOP plus 6.0 psig
Automatic shut-off device (security valve) minimum (UPP)	N/A	1.0 psig	2.0 psig	5.0 psig
Automatic shut-off device (Fisher EZR Slam-Shut) maximum (OPP)	16.0" WC	1.5*MAOP plus 2.0 psig	MAOP plus 8.0 psig	MAOP plus 8.0 psig
Automatic shut-off device (fisher EZR Slam-Shut) Minimum (UPP)	N/A	1.0 psig	2.0 psig	5.0 psig
Maximum system relief valve (OPP)	16.0" WC	N/A	N/A	N/A

Notes:

1. Use specified settings minus build-up pressure (i.e., the additional pressure needed above the initial relief valve cracking set point to produce a given flow).
 2. If a spring loaded type regulator (e.g., Rockwell 441) is used, the maximum regulator setting is MAOP minus 4.0 psig.
2. For systems with a regulator setting above the Maximum Regulator Setting prescribed above, a SCADA point at the station is required with the following Hi-Hi Alarm setting:

- a. Semi-High System ($5 \text{ psig} \leq \text{MAOP} < 12 \text{ psig}$) - Not to exceed MAOP minus 0.5 psig.
 - b. High Pressure System ($12 \text{ psig} \leq \text{MAOP} \leq 25 \text{ psig}$) - Not to exceed MAOP minus 1.0 psig.
 - c. High Pressure System ($25 \text{ psig} < \text{MAOP} \leq 60 \text{ psig}$) - Not to exceed MAOP minus 1.0 psig.
3. Confirm the adequacy of relief valves by either of the following means:
 - a. Physically testing for capacity to limit pressure to the required level.
 - b. Making an office review and calculation to verify that, under abnormal operating conditions, the relief valve has the proper setting and capacity to limit pressure to the required level.
 4. The set point of the relief valve must be set low enough to take into consideration of the additional pressure needed above the initial relief valve cracking set point to produce a given flow..
 5. Perform a relief valve analysis, in accordance with Numbered Document H-70, "Pressure Relief Devices", before changing any equipment if either of the following situations occurs:
 - a. A change in load or pressure conditions that alter the capacity of the regulator.
 - b. A change in the capability of the relief valve to limit pressure buildup.
 6. Relieving capacity installed in stations with parallel regulators shall be adequate for:
 - a. A simultaneous "fail open" condition of both the working and standby regulator runs for stations constructed or reconstructed after July 1972 or.
 - b. A "fail open" condition of the regulator run with the largest capacity for stations constructed before August 1972.
 7. Whenever physical tests and/or calculations indicate that relief capacity is inadequate, immediate action is required to ensure that equipment adequate to provide the necessary protection against over pressuring, is installed.

Approved by:

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Date: 12/30/08

Author: ██████████

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

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