Utility Work Procedure WP4540-01

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Set Point Limits for District Regulator Stations

This attachment defines the setting requirements for pressure relief and pressure limiting equipment at district regulator stations.

- <u>Table 1, "Pressure Set Point Limits,"</u> specifies the set point limits for regulators, monitors, relief valves, and automatic shut-off devices (i.e., security valves) for various maximum allowable operating pressures (MAOPs).
 - **Important:** Setting the regulator set point at the MAOP of the system is strictly prohibited.
- The actual set points for any district regulator station are to be determined by the senior gas distribution engineer. The set points must be noted on <u>Form 62-6271</u>, "<u>District Regulator Data</u> Sheet" (Attachment 1).
- 3. For systems with a regulator setting above the Maximum Regulator Setting specified in Table 1, a SCADA point at the station is required with the following Hi-Hi Alarm settings:
 - a. Semi-High System (5 psig ≤ MAOP < 12 psig) Not to exceed MAOP minus 0.5 psig.
 - High Pressure System (12 psig ≤ MAOP ≤ 25 psig) Not to exceed MAOP minus 1.0 psig.
 - c. High Pressure System (25 psig ≤ MAOP ≤ 60 psig) Not to exceed MAOP minus 1.0 psig.

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Table 1. Pressure Set Point Limits

Type of Equipment	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)
Regulator maximum set point	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)
Monitor maximum set point	12.0" WC	1.25 x MAOP	MAOP plus 3.0 psig	MAOP plus 2.0 psig
Relief valve maximum set point (cracking pressure). See Note 1 below.	N/A	1.5 x MAOP	MAOP plus 6.0 psig	MAOP plus 6.0 psig
Automatic shut-off device (security valve) maximum high set point	N/A	1.5 x MAOP	MAOP plus 6.0 psig	MAOP plus 6.0 psig
Automatic shut-off device (security valve) minimum low set point	N/A	1.0 psig	2.0 psig	5.0 psig
Automatic shut-off device (Fisher EZR Slam-Shut) maximum high set point	16.0" WC	1.5 x MAOP plus 2.0 psig	MAOP plus 8.0 psig	MAOP plus 8.0 psig
Automatic shut-off device (Fisher EZR Slam-Shut) minimum low set point	N/A	1.0 psig	2.0 psig	5.0 psig
Low pressure system relief valve maximum set point	16.0" WC	N/A	N/A	N/A

Notes:

- Use specified settings minus build-up pressure (i.e., the additional pressure needed above the initial relief valve cracking pressure set point to achieve full opening of the relief valve), as determined by the senior gas distribution engineer.
- If a spring-loaded type regulator (e.g., Rockwell 441) is used, the maximum regulator setting is MAOP minus 4.0 psig.

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