Revising Setpoints of Overpressure Protection Devices

## Summary

This procedure covers requirements for revising the setpoints of overpressure protection devices protecting gas transmission pipeline facilities.

These requirements apply to setpoints of all devices used in providing overpressure protection of gas transmission lines.

This procedure does not apply to overpressure protection of auxiliary systems (e.g., lube oil, air, and hydraulic systems, natural gas operated control systems, etc.), or to gas field collection relief valves that act as the primary automatic pressure control into a gathering/transmission line.

Level of Use: Information Use:

### Target Audience

Gas maintenance and construction (M&C) mechanics, gas transmission mechanics, and gas engineer.

### Safety

Improper overpressure protection changes can lead to unsafe operation of a pipeline system, jeopardize employee and/or public safety, and destabilize system reliability.

Non-compliance with applicable federal and state regulations may subject PG&E to fines.

Perform all work in compliance with <u>Utility Standard Practice (USP) 22.</u> "Satety and Health Program." and the <u>Code of Safe Practices.</u>

#### Before You Start

Employees must know the gas systems involved in the setpoint revisions, the gas system operations, and the federal codes governing maximum allowable operating pressures (MAOP) and overpressure protection (OPP) requirements.

**Employee qualifications:** Employees performing inspections or maintenance in accordance with this procedure must first receive proper training and qualification under the applicable operator qualification (OQ) tasks:

- 14-02.00 Inspect/Test Pressure Regulation and Limiting Devices.
- 16-01 00 Test/Maintain Relief Devices.

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# **Procedure Steps**

# 1 Revising Setpoints

- 1.1 Whenever an OPP device setpoint requires revision to a value higher or lower than that shown on <u>Orawice No. 183018</u>. "<u>Overpressure Protection Device Maximum Settlegs</u>" the superintendent, supervisor, or designee must submit <u>Form TD-4128P-66-901</u>. "<u>Request to Revise Settlegs</u> on <u>Overcressure Protection Device for Gas Transmission Lines.</u>" to the responsible gas engineer.
- 1.2 The responsible gas engineer must review the request and forward a recommendation to the appropriate manager for approval. The manager must evaluate and then either approve or disapprove the request.
- 1.3 Upon approval of the request form, the manager approving the form must forward the document to system integrity personnel for distribution. System integrity personnel must send copies of the completed forms to gas control, the appropriate gas engineering managers, and to the requester.
- 1.4 If approval is granted, the gas engineer must reference <u>Numbered Document H-70</u>.

  <u>Pressure Relief Devices</u> for additional actions.
- 1.5 A temporary change to the OPP setpoint due to maintenance or construction activities does not require Form TD-4125P-06-F01. However, each OPP device must be set to ensure that in the event of a pressure control failure, the pressure in a transmission system will not exceed the lower of the following pressures:
  - The maximum allowable operating pressure plus 10%.
  - The pressure that produces a hoop stress of 75% of specified minimum yield stress (SMYS) under any possible operating condition.
- 1.6 For temporary changes, use <u>1989 Procedure VvP4:00-10</u>, "Gas Clearance Procedures for Escisios Operating Over 50 PSIS"

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## 2 Annual Verification/Test

The setpoints of the OPP device must receive field verification and annual tests as required by Utility Procedure 10-45009-02, 1Gas Transmission Stations Inspection, Testing, and Maintenance Procedures

## 3 Records

All completed forms requesting OPP device setpoint revision (<u>Form TD-41259-06-F01</u>) must remain on file for the life of the facilities at the Walnut Creek Records Section. These forms must be kept in the appropriate station files.

**END** of Instructions

Revising Setpoints of Overpressure Protection Devices Definitions NA **Implementation** Transmission and distribution (T&D) engineering and gas M&C implement the Responsibilities requirements of this work procedure. Governing Utility Standard TD-41255. (Maximum Allowable Operating Pressure Requirements for Oas Distribution Systems and Transmission and Gathering Document Lines. Compliance OFR Title 49, §182, 195, "Protection Against Applicated Overpressuring." Requirement/ CER Title 49, § 192,199, "Requirements for Design of Pressure Relief and Regulatory Commitment Umiting Devices." QSR Title 49, § 192,201, 'Required Capacity of Pressure Relieving and Limiting. Stations." Reference Developmental References: **Documents** Code of Safe Precticas. PGM: Drawing No. 18.8(18, "Overpressure Projection Device Maximum" Settings." Numbered Document H-70 "Pressure Relief Devices." Utility Procedure TD 4430P-02, "Gas Transmission Stations Inspection, Testing, and Maintenance Procedures." Utility Procedure WP4100-10 TGas Clearance Procedures for Escilibes Operation Over 80 PBIG 1 Oblity Standard Practice (USP) 22, "Safety and Health Program." Supplemental References: OFR Title 49, 6 192,196, "Protection Against Accidental Overpressuring."

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# Revising Setpoints of Overpressure Protection Devices

CFR Title 49, \$ 197,199, "Requirements for Design of Pressure Relief and Limiting Devices."

CFR Title 49, \$ 190,201, "Required Capacity of Pressure Releving and Limiting Stations."

Utility Standard TD-41250, "Nextmum Allowable Operating Pressure Requirements for Gas Distribution Systems and Transmission and Gathering Lines."

Utility Procedure TO 4125P-07, "Establishing Setpoints on Overpressure Prorecitor Devices."

Opiny Procedure WP+640P-01 (Orstrict Requisitor Station Maintenance)

Utility Procedure T0-45-60P-04, "Fitot-Operated Regulator Station Maintenance (Outlet Pressures > 50 psks)."

Utility Standard S4431. "Operation and Maintenance Instructions Requirements for Major Gas Facilities."

Utility Standard S4433, "Gas Pressure Relief Devices - Responsibility for Across Inspection and Verification of Capacity."

Appendices	<b>N</b> A
Attachments	Attechment 1 Form YD-4125P-08-F01, "Request to Revise Setocini on Gverpressure Protection Device for Gas Transmission Lines."
Document Recision	Document supersedes Utility Standard S4125.1 Rev 1, "Setpoint, Overpressure Protection Devices" issued November 1998.
Approved By	
	Manager

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<b>Document Owners</b>	
	Senior Gas Engineer
Document	
Contact	Senior Gas Engineer
Revision Notes	

Where?	What Changed?
NA	This is a new document.

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