Revising the MAOP, MOP, and FDP of Pipelines Operating at Greater Than 60 PSIG

Summary

This work procedure establishes steps for revising the Company's maximum allowable operating pressures (MAOP), maximum operating pressures (MOP) and future design pressures (FDP) on its gas transmission pipelines.

This procedure also establishes steps for uprating distribution pipelines to MAOP greater than 60 pounds per square inch gauge (psig).

Level of Use: Information Use

Target Audience

All gas engineering and operating personnel.

Safety

This work procedure ensures that all changes to the MAOP, MOP, and FDP are conducted and recorded uniformly to comply with applicable gas safety regulations, as well as maintain employee and public safety.

Employees must follow all applicable precautions and requirements listed in Utility Standard Practice (USP) 22, "Safety and Health Program," and the *Code of Safe Practices*.

Before You Start

NA

[redacted]

Table of Contents for Procedure Steps

Procedure Steps

1 Code Requirements

1.1 Increasing the MAOP of a distribution system or transmission pipeline must meet the requirements of CFR Title 49, Part 192, Subpart K—"Uprating" as appropriate. This subpart requires the following general requirements that apply to both distribution systems and transmission pipelines:

1. Preparation of a written plan.
2. Increase of pressure in increments. Further actions include:
   a. Checking for leaks at each pressure increase.
   b. Repairing a hazardous leak before proceeding to the next pressure increment.
3. Limitation on the increase in maximum allowable operating pressure.
4. Records must remain active for the life of the facility that was uprated.

1.2 Pipelines operating under 30% specified minimum yield strength (SMYS), and at or over 30% SMYS have additional requirements.

1.3 The additional requirements for pipelines under 30% SMYS apply to PG&E distributions systems.

1.4 PG&E's transmission pipelines operating at pressures greater than 60 psig must meet both the requirements for pipelines operating under 30% SMYS, and the requirements for pipelines at or over 30% SMYS.

2 Increasing the MAOP or MOP (Uprating)

1. If any transmission or gathering line requires an MAOP/MOP greater than the established MAOP/MOP, it must uprate in accordance with the requirements of, CFR Title 49, Part 192, Subpart K---"Uprating" and the following attachments:

   a. Attachment 1, "Uprate Written Plan Requirements."

   b. Attachment 2, "Records Research Procedure."

   c. Attachment 3, "Pipeline Features List Template."

   d. Attachment 4, "Station Equipment List Template."

   e. Attachment 5, "Form TD-4125P-04-F01 Approval to Revise MAOP."

   f. Attachment 6, "Form TD-4125P-04-F02 Typical Uprate Pressure Increase Report."

   g. Attachment 7, "Form TD-4125P-04-F03 Engineering Review Check List."

   h. Attachment 8, "Form TD- 4125P-04-F04 Post-MAOP Revision Documentation Check List."

2. Any increase of the MAOP/MOP of existing transmission or gathering lines must pass review and approval by the managers responsible for gas engineering, transmission system planning, system gas control, and system integrity activities. Required actions include the following tasks:

   a. Use Form TD-4125P-04-F01, "Approval to Revise MAOP" (Attachment 5) to request and document this review and approval. Electronic routing and authorization through a formal, company-approved system is acceptable (such as Electronic Document Routing System (EDRS)).

   b. Attach the completed Form TD-4125P-04-F01, "Approval to Revise MAOP" (Attachment 5), Parts I, II, and III to the job order if increasing the MAOP requires work on the pipeline, strength testing, or leak testing.

   c. Submit as-built documentation with Form TD-4125P-04-F01, "Approval to Revise MAOP" (Attachment 5), Part IV to document changing the MAOP to the actual established MAOP/MOP.

3 Notifications

3.1 Notification for Revisions to the MAOP or MOP

1. The CPUC must receive notice of a proposed increase in the MAOP in accordance with the requirements of Numbered Document A-34.1, "General Requirements Work Reportable to the California Public Utilities Commission" and Subpart B-Reports, Paragraph 129.1 of "General Order No. 112-E - Rules Governing Design, Construction, Testing, Maintenance and Operation of Utility Gas Gathering, Transmission and Distribution Piping Systems."

2. System gas control personnel must receive notice for temporary revisions of the MOP, known as temporary reduced operating pressure (TROP), made to accommodate pipeline maintenance or repair activities. Form TD-4125P-04-F01 (Attachment 5) is not required to document temporary revisions.

3. Any permanent change (increase or decrease) to the MAOP/MOP of existing transmission or gathering lines must receive a review from gas engineering, system gas control, transmission system planning, and integrity management personnel prior to the change.

   - Use Form TD-4125P-04-F01 (Attachment 5) for requesting and documenting this review.

4. Any revisions (uprates or downrates) on pipelines must receive a review by risk management personnel, during the engineering stage, to evaluate for potential manufacturing threats (per CFR Title 49, § 192.917, (e)(4) "ERW Pipe") and for potential high consequence area (HCA) identified sites (per the HCA identification process in RMP-06).

5. Any revision to the MAOP/MOP that directly affects delivery pressures to a gas distribution system, or that changes the pressure designation for a non-core, end-use customer (as specified in the Rates section of Gas Rate Schedule G-NT), must receive a review from the appropriate distribution gas engineer. Transmission system planning personnel must coordinate this review.

   a. The responsible distribution gas engineer must document the review on Form TD-4125P-04-F01 (Attachment 5).

   b. The responsible distribution gas engineer must notify account services and tariffs and compliance personnel when necessary to evaluate and address any non-core, end-user customer impacts.

4 Documentation and Records

4.1 Documentation of Revisions to MAOP or MOP

1. The responsible pipeline engineer and project manager must ensure that affected company documents are updated to show the revised MAOP/MOP. Form TD-4125-P04-F04 (Attachment 8) lists company documents that potentially require revision.

   - Complete Form TD-4125-P04-F04 (Attachment 8) to identify documents that need revision.

2. The responsible pipeline engineer and project manager must ensure that overpressure protection device settings and capacities are reviewed and if necessary, setpoints are revised and documented (see Numbered Document 11-70, "Pressure Relief Devices" and Utility Procedure TD-4125P-06, "Revising Setpoints of Overpressure Protection Devices" for other affected documents).

4.2 Record Retention

1. All records that document the revised MAOP and MOP of pipelines and mains must remain on file for the life of the pipeline, main, or pipeline facility. The project file must hold the permanent records for substantiating revised MAOPs.

2. The MAOP List (Drawing 988698) must receive updates to reflect revised MAOP or MOP for pipelines included in the list, along with substantiating information to facilitate locating original records (for example, an email with reference job number and Form TD-4125P-04-F-01 (Attachment 9)).

   - See TD-4125P-02, "Establishing MAOP and Maintaining Documentation for Systems Greater Than 60 psig" for additional information regarding MAOP list requirements.

END of Instructions

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Definitions	NA
Implementation Responsibilities	GT&D pipeline engineering personnel implement the requirements of this work procedure.
Governing Document	Utility Standard TD-4125S, "Maximum Allowable Operating Pressure Requirements for Gas Distribution Systems and Transmission and Gathering Lines."
Compliance Requirement/ Regulatory Commitment	CFR Title 49, Part 192, Subpart K—Uprating. CFR Title 49, Part 192, Subpart L—Operations.
Reference Documents	**Developmental References:** CFR Title 49, § 192.917 (e)(4) "EBW Pipe." *Code of Safe Practices* General Order No. 112-E, "Rules Governing Design, Construction, Testing, Maintenance and Operation of Utility Gas Gathering, Transmission and Distribution Piping Systems, Subpart B-Reports, Paragraph 122.1." Utility Standard Practice (USP) 22, "Safety and Health Program." **Supplemental References:** Drawing 088665, "MAOP List." Numbered Document A-34.1, "General Requirements Work Reponsible to the California Public Utilities Commission." Numbered Document H-70, "Pressure Relief Devices." Utility Procedure TD-4125P-02, "Establishing MAOP and Maintaining Documentation for Systems Greater Than 60 psig."

Utility Procedure TD-4125P-06, "Revising Setpoints on Overpressure Protection Devices."

Utility Standard TD-4125S, "Maximum Allowable Operating Pressure Requirements for Gas Distribution Systems and Transmission and Gathering Lines."

Appendices NA

Attachments

Attachment 1, "Uprate Written Plan Requirements."

Attachment 2, "Records Research Procedure."

Attachment 3, "Pipeline Features List Template."

Attachment 4, "Station Equipment List Template."

Attachment 5, "Form TD-4125P-04-F01 Approval to Revise MAOP/MOP Transmission and Gathering Lines."

Attachment 6, "Form TD-4125P-04-F02 Typical Uprate Pressure Increase Report."

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Document Recision NA

Approved By [redacted]

Manager

[redacted]

Document Owners [redacted]

Engineer

Document Contact [redacted]

Revision Notes

Where?	What Changed?
NA	NA

[redacted]