



GS Interim Standard

Issuing Department: GAS SYSTEM TECHNICAL SUPPORT

Effective Date: 9/17/90

Gas Supply Officer: W. R. MAZOTTI

SUBJECT:

MAXIMUM OPERATING PRESSURES OF PIPELINES AND MAINS
OPERATING AT OR OVER 20% OF SMYS

GENERAL NOTE:

This Gas Supply Interim Standard replaces existing PG&E Standard Practice 463-8. Minor editing has been done to reflect organizational changes, but the requirements of the original Standard Practice have not been changed. The interim standard will be reviewed and revised in the near future. Comments on or suggested revisions to this interim standard should be sent to the Director, System Standards Management (SYC3), in the Gas System Technical Support Department.

PURPOSE AND POLICY

1. To establish a uniform procedure for identifying, reviewing and revising Design Pressure (DP), Future Design Pressure (FDP), Maximum Allowable Operating Pressures (MAOP), and Maximum Operating Pressure (MOP) (PG&E) for all pipelines, mains and holders operating at or above 20% of specified minimum yield strength (SMYS) of the pipe material.

RECISSIONS

2. All previous instructions, oral or written, that may be contrary to this Standard.

RESPONSIBILITY

3. Division Managers and the Manager, Gas System Maintenance Department, shall be responsible for the performance required by this Standard Practice for the pipeline facilities in their respective areas of responsibility. Performance will include establishing, revising, and confirming the MOP, MAOP, FDP, and DP for the pipeline facilities, and for updating the records required by the referenced Standard, whenever an MOP, MAOP, FDP, or DP is revised.

REFERENCES

4. a. G.O. 112-E
b. DOT, 49CFR Part 192, "Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards"
c. PG&E Drawing 086868 "Pipeline - Data Sheet, MAOP of Lines Operating At or Over 20% SMYS"



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DEFINITIONS

5. System is that portion of a pipeline which, as a unit, is protected by overpressure protective devices (e.g., regulator and monitor), complying with the requirements of 49CFR Part 192, in a manner that will prevent the lowest maximum allowable operating pressure of any component of the system from being exceeded.
6. Maximum Allowable Operating Pressure (MAOP) is the maximum pressure at which a pipeline, pipeline segment, or component is qualified to operate in accordance with the requirements of 49CFR Part 192 based on pressure tests, operating and maintenance history, and design.
7. Maximum Operating Pressure (MOP) is the maximum pressure at which a gas pipeline system may be operated, as specified by the responsible line organization. The MOP of a gas system may not be higher than the lowest MAOP of any of the pipeline segments or components within the system.
8. Design Pressure (DP) is the maximum pressure for which the weakest element in the pipeline segment could be qualified for the material and class location under the design sections of 49CFR Part 192.
9. Future Design Pressure (FDP) is the pressure of a system to which future additions or changes to the existing facilities are to be designed and tested.
10. Specified Minimum Yield Strength (SMYS) is the minimum yield strength in psi prescribed by the specification under which pipe is purchased from the manufacturer or as specified in 49CFR Part 192.

APPLICATION

11. Procedural details are found on Page 4 of this Standard.

RECORDS

12. Pressure Recording Charts and Operating Sheets (record of hourly data) which document the MAOP and/or MOP (PG&E) of pipelines and mains operating at or above 20% of SMYS shall be kept current by the Division or the Gas System Maintenance Department District assigned the responsibility for maintenance and operation of the facility.



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APPROVED BY

W. R. Mazotti

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PROCEDURAL DETAILS

13. Where the MAOP is less than the FDP, it is anticipated that the MAOP may be increased at some future time, in accordance with Subpart K (Uprating) of 49CFR Part 192. For this reason, all new additions to an existing system, where the additions are expected to remain in service after the system is uprated, shall have a design pressure at least equal to the future design pressure listed in Drawing 086868. Some sections of an existing system may not qualify for the established design pressure and would require reconstruction, testing, or replacement prior to increasing the MAOP.
14. New or replacement sections of line should be tested and qualified for the ultimate MAOP of the system, even though the MOP (PG&E) of the system is limited by the MAOP of other facilities connected to it.
15. G.O. 112E, Section 126 requires the Company to notify the CPUC 30 days prior to increasing the MAOP of any system operating, or to be operated, at 20 percent or more of SMYS. All such changes shall be reported to the Gas Distribution Department, as required by Gas Standard A-34.1.
16. The MOP (PG&E), MAOP, FDP and DP of all newly installed pipelines and mains operating at or above 20% of SMYS, along with those in Drawing 086868 shall be confirmed annually by letter on or before February 1, by the Manager of the line organization responsible for the pipeline or main to the Manager of the Gas System Technical Support Department, for each facility within the scope of this Standard.
17. The Manager of the Gas System Technical Support Department will issue and distribute an updated copy of Drawing 086868 annually.