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Effective Date: 6/1/97

Review Date: 6/1/99

Issuing Department: GAS SYSTEM TECHNICAL SUPPORT Gas Supply Officer: V.P. - Gas Services & Operations

SUBJECT:

OPERATION AND MAINTENANCE INSTRUCTIONS REQUIREMENTS FOR MAJOR GAS **FACILITIES**

OBJECTIVE

To ensure the safe and reliable operation of Gas Supply facilities.

SCOPE

This Gas Supply Standard covers the requirement for preparation and updating of Operation and Maintenance Instructions (O&MI) necessary for performing the inspection, operation, and maintenance of Gas Supply's major gas facilities.

RESCISSION

This Standard along with GS Standard 4430, "Gas Supply Gas Facilities Requirements", replaces Interim Standard IS 464-1, "Major Control Facilities; Inspections, Operations and Maintenance".

ORIGINATOR

GS Standard Technical Committee 21 on Station Equipment.

BUSINESS RISKS

Improper inspection, operation, and maintenance of any Gas Supply major gas facility could jeopardize the safe and efficient operation of that facility or result in non-compliance with Federal or State regulations. Non-compliance with applicable Federal and State regulations may subject PG&E to fines and negative publicity. Furthermore, major gas facilities without O&MIs may be taken out of service until the O&MIs are issued.

DEFINITION

Major Gas Facilities: Facilities that modulate gas pressure and flow, or process the gas, within the Transmission System. These facilities may be unmanned, manned part or fulltime, or remotely operated. Facilities shall include:

- System control points, such as Terminals and Gas Load Centers.
- Compressor stations.
- Pipeline pressure limiting stations.
- Gas processing facilities.
- Line rupture control valves (LRCVs).
- Gas metering and regulating facilities serving PG&E electric generating plants.
- Underground gas storage field facilities.

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 Other facilities handling large volumes of gas and containing one or more of the following equipment: controller-operated equipment, 10-inch or larger control valves, or ultrasonic metering.

REQUIREMENTS

An O&MI containing or referencing other existing written procedures for conducting operation and maintenance activities, and for emergency response to all pipeline facility incidents as required by CPUC General Order 112 (latest version) shall be prepared and followed

All major gas facilities shall have Operation & Maintenance Instructions **prior** to being placed in operation.

Note: For stations not considered major gas facilities, inspections, operation, and maintenance shall comply with CES Standard C-T&CS-S0351, "District Regulator Station Maintenance".

O&MIs shall include, as a minimum, the information contained in GS Recommended Practice RP-4431.1, "Guide for the Preparation of Operation and Maintenance Instructions".

Each O&MI shall be reviewed and updated at intervals not exceeding 15 months, but at least once each calendar year, or when a major station modification is placed in operation.

Copies of the O&MIs shall be readily available to any person responsible for inspecting, maintaining, and operating any major control facilities.

All original O&MIs shall be stored in the GSTS Records Section file room.

RESPONSIBILITY

The person assigned the overall project responsibility for installing a new major gas facility is responsible for preparing an O&MI for the station.

The person assigned the overall project responsibility for modifying a major gas facility is responsible for updating the existing O&MI to incorporate the modifications.

The Foreman/Operating Supervisor responsible for the maintenance and operations of the station shall approve new or revised O&MI.

The Foreman/Operating Supervisor responsible for the maintenance and operation of a major gas facility shall be responsible for the annual review and updating of the O&MI for that facility. The Maintenance Management System shall be used to schedule and track the annual review of the O&MIs.

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OPERATION AND MAINTENANCE INSTRUCTIONS REQUIREMENTS FOR MAJOR GAS FACILITIES

The Foreman/Operating Supervisor shall be responsible for filling out and initialing the Review/Change Log of the facility O&MI when the annual review of the document is complete. See Supplement A for the Review/Change Log form.

The Operations Specialist shall be responsible for auditing compliance with the annual updating requirements by utilizing the Maintenance Management System records and Review/Change Log forms.

The Review/Change Log shall be retained in the copy of the O&MI kept at the District/Division office assigned responsibility for maintaining the facility.

The Records Section of GSTS shall maintain the storage of an electronic file containing the latest version of each O&MI which must be accessible to all operating and maintenance departments.

Copies of new or revised O&MI for major gas facility shall be distributed by the Records Section of GSTS to:

The GSM Facility or Pipeline Engineer responsible for the facility.

The CES Operating Supervisor or GSM District Foreman delegated to perform the M&O function at the facility. (Two copies - One copy with the review log must be kept at the District/Division office and another copy must be kept at the major gas facility.)

SUPPLEMENT

Supplement A - Review/Change Log

REFERENCES

CES Standard C-T&CS-S0351, "District Regulator Station Maintenance"

GS Recommend Practice RP-4431.1, "Guide for the Preparation of Operation and Maintenance Instructions"

GS Standard S-4430, "Gas Supply Control Facilities Requirements"

CPUC General Order 112-E, "Rules Governing Design, Construction, Testing, Maintenance and Operation of Utility Gas Gathering, Transmission and Distribution Piping"

ENSURING COMPLIANCE WITH STANDARD

The Manager of Gas System Maintenance shall ensure compliance with this Standard.

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CONTACT FOR FURTHER INFORMATION

Senior Gas Engineer

System Standards Management, Gas System Technical Support

Outside

Co. 8-223-3279

APPROVALS AND AUTHORIZATIONS



Manager - Gas System Technical Support

Manager - Gas System Maintenance

WILLIAM R. MAZOTTI

Vice President - Gas Services & Operations

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REVIEW/CHANGE LOG

OPERATION & MAINTENANCE INSTRUCTIONS

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Requirements: (Refer to GS Standard S 4431) The Foreman/Operating Supervisor shall be responsible for filling out and initialing this Review Log when the annual review of the document is complete.

This Review/Change log shall be retained in the District/Division's office copy of the Operation and Maintenance Instructions (O&MI).

STATION.

The O&MI shall be review and updated at intervals not exceeding 15 months, but at least once each calendar year.

| Review Number | Date of review | Reviewer's initials | Comments (No Change / Update Description) |
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