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## Gas Standards Documentation Requirements

### Summary

This standard establishes Pacific Gas and Electric Company (Company) requirements for developing and maintaining gas standards. These requirements ensure that employees responsible for documentation perform the following duties:

- Create effective, integrated documentation processes.
- Create, update, and issue gas standards in a timely manner.
- Produce documents that clearly define how to properly design, construct, maintain, and operate gas transmission, distribution, and measurement facilities.
- Produce documents that clearly explain how to perform work safely, reliably, efficiently, and in compliance with all applicable gas utility and government laws and regulations.

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### Target Audience

All employees engaged in or supervising gas transmission and distribution (T&D) standards work.

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### Safety

All work on gas facilities shall be performed safely and in accordance with applicable safety rules, the [Code of Safe Practices](#), and [Utility Standard Practice \(USP\) 22, "Safety and Health Program."](#)

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### Requirements

#### 1. Code Compliance

The Company shall follow all applicable federal and state government gas utility safety codes, including the requirements specified in the following two sections of [California Public Utilities Commission \(CPUC\) General Order \(G.O.\) 112-E](#):

"There shall be no deviation from this General Order except after authorization by the Commission. If hardship results from application of any rule herein prescribed because of special circumstances, application may be made to the Commission to waive compliance with such rule in accordance with Section 3(e) of the Natural Gas Pipeline Safety Act of 1968. Each request for such waiver shall be accompanied by a full and complete justification." ([G.O. 112-E](#), Section 101.3)

"Each operator shall comply with the requirements of 49 CFR, Part 192, 'Transportation of Natural and Other Gas by Pipeline: Minimum

Federal Safety Standards.’ This section of the General Order addresses specific construction, testing, and safety standards in addition to those included in 49 CFR, Part 192. These rules do not supercede the Federal Pipeline Safety Regulations, but are supplements to them.” ([G.O. 112-E](#), Section 141.1)

**2. General Requirements**

- 1) The Company’s gas documents shall be published as a set of manuals organized by subject matter.
- 2) These gas manuals shall contain all pertinent design, construction, maintenance, operations, and emergency response documents.
- 3) Gas manual revision and distribution procedures shall ensure effective, verifiable communication to targeted audiences.
- 4) Gas technical teams, composed of appropriate representatives with expertise in their subject matter, shall develop, review, and update the gas manuals.
- 5) Table 1 summarizes some major, but not all, documentation requirements delineated in documents that oversee gas document development and distribution.

**Table 1. General Requirements for Specific Documentation Processes**

Document	Major Requirements Specified in Document
Gas Document Development and Update Process ( <a href="#">TD-4001P-01</a> )	Gas technical teams shall ensure that the processes for gas standard development and revision integrate the Company’s training, qualification, and material procurement processes.
Procedures for Reviewing and Updating Gas Manuals ( <a href="#">TD-4001P-02</a> )	<p>Gas technical teams shall develop and maintain a set of gas manuals organized by subject matter.</p> <p>To ensure compliance with the timely document review and updating requirements of <a href="#">49 CFR 192.605</a>, the gas manual sections that cover the following Company activities shall be reviewed at least once each calendar year, not to exceed 15 months, to the date, and updated as necessary:</p> <ul style="list-style-type: none"> <li>• Gas T&amp;D maintenance.</li> <li>• Normal operations.</li> <li>• Emergency response.</li> <li>• Abnormal operations for transmission lines.</li> </ul>
Gas Technical Team Procedures ( <a href="#">TD-4001P-03</a> )	<p>One gas technical team shall cover each subject matter manual, composed of the following members, as applicable:</p> <ul style="list-style-type: none"> <li>• Sponsoring manager/superintendent.</li> <li>• Gas standards facilitator.</li> <li>• Engineering representative.</li> <li>• Methods and procedures (M&amp;P) and/or gas specialist.</li> </ul>

**Table 1, Continued**

Document	Major Requirements Specified in Document
	<ul style="list-style-type: none"> <li>• Construction (first line supervisor).</li> <li>• Maintenance and operations (M&amp;O) representative (first line supervisor).</li> <li>• Company Learning Academy representative.</li> <li>• Engineers and Scientists of California (ESC) representative.</li> <li>• International Brotherhood of Electrical Workers (IBEW) representative.</li> </ul> <p>Gas technical teams shall perform the following functions:</p> <ul style="list-style-type: none"> <li>• Meet or convene by conference call in the first quarter of each calendar year to review the team's workload (e.g., manual revisions, issues, new product approvals) and schedule meetings to address the workload.</li> <li>• Provide updates as needed within required timeframes.</li> <li>• Certify that documents that do not require updates are approved for continued use without change.</li> <li>• Delegation of authority by class:             <ul style="list-style-type: none"> <li>○ Class 1 Issues – Technical teams</li> <li>○ Class 2 Issues – Director-level steering team</li> <li>○ Class 3 Issues – Officer-level governance board</li> </ul> </li> <li>• Technical teams are policy-making teams within authority Class 1. For Class 2 issues, the teams recommend policy or changes and forward them to the director-level standards steering team for a decision. The teams forward Class 3 issues to the officer-level standards governance board for a decision.</li> <li>• Whenever technical team members cannot come to a required decision, the sponsoring manager/superintendent shall be responsible for ensuring that a decision is made.</li> <li>• M&amp;P personnel have the lead responsibility and authority for technical procedures in their area of expertise.</li> <li>• Gas engineering personnel have the lead responsibility and authority for administrative procedures in their area of expertise.</li> </ul>

**Table 1, Continued**

Document	Major Requirements Specified in Document
New Gas Product Approval ( <a href="#">TD-4001P-04</a> )	Gas technical teams shall review and approve all new qualified gas products, tools, and technologies.

**Implementation Responsibilities**

The senior director in charge of gas T&D engineering is responsible for issuing and updating this standard.

The gas department employees assigned gas standard duties shall facilitate the implementation of this standard and its associated utility procedures and material specifications.

Each utility procedure associated with this standard shall contain the implementation responsibilities for that particular procedure.

**Governing Authority**

This standard is governed by the following documents:

- Code of Federal Regulations (CFR) Title 49, "Transportation of Natural and Other Gas By Pipeline: Minimum Federal Safety Standards":
  - [49 CFR 192.13\(c\), "What general requirements apply to pipelines regulated under this part?"](#), which states: "Each operator shall maintain, modify as appropriate, and follow the plans, procedures, and programs that it is required to establish under this part."
  - [49 CFR 192.603, "General provisions"](#)
  - [49 CFR 192.605, "Procedural manual for operations, maintenance, and emergencies"](#)
- [California Public Utilities Commission \(CPUC\) General Order \(G.O.\) 112-E, "State of California Rules Governing Design, Construction, Testing, Operation, and Maintenance of Gas Gathering, Transmission, and Distribution Piping Systems"](#)
- [Utility Standard S0500, "Processes for Authorized Documents"](#)

**Implementing Procedures**

Utility Procedures:

- [TD-4001P-01, "Gas Document Development and Update Process"](#)
- [TD-4001P-02, "Procedures for Reviewing and Updating Gas Manuals"](#)
- [TD-4001P-03, "Gas Technical Team Procedures"](#)
- [TD-4001P-04, "New Gas Product Approval"](#)

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Reference Documents

[CPUC G.O.112-E, "State of California Rules Governing Design, Construction, Testing, Operation, and Maintenance of Gas Gathering, Transmission, and Distribution Piping Systems"](#)

[Utility Standard Practice \(USP\) 22, "Safety and Health Program"](#)

[Code of Safe Practices](#)

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Document Recision

This document supersedes Utility Standard TD-4001S, "Gas Standards Documentation Requirements," dated January 2010.

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Definitions

**Administrative procedure:** A controlled document that specifies actions and processes necessary to implement a program.

**Class levels:** For this document, decisions, changes or issues are categorized by class to determine the Company level of authority required to approve changes.

- **Class 1:** Represents issues that have:
  - No business productivity impact,
  - Systemwide impacts of \$100,000 or less in installed costs or M&O costs, and
  - Minimum required training curriculum changes.
- **Class 2:** Represents issues that have:
  - Systemwide impacts of \$1,000,000 or less in installed costs or M&O costs, and/or
  - Business productivity impact,
  - Minimum required training curriculum changes.
- **Class 3:** Represents issues that have:
  - Systemwide impacts of greater than \$1,000,000 or less in installed costs or M&O costs, and/or
  - The need for new training curriculum to be prioritized/developed.

**ESC:** Engineers and Scientists of California. One union representing employees.

**Gas document:** A formal document that provides instructions to Company personnel for designing, building, maintaining, and/or operating gas facilities or tools. Examples include the following documents:

- Gas numbered documents (design and construction standards).
- Gas utility standards (for maintenance and operation activities).
- Gas utility procedures.

- Engineering material specifications.
- Training materials.
- Gas manuals.
- Job aids.

**IBEW:** International Brotherhood of Electrical Workers. One union representing employees.

**Technical procedure:** A controlled document that outlines a series of steps for the operation, maintenance, or testing of a system, structure, or component.

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**Approved By** Glen Carter  
Senior Director

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**Document Owner** 