



New Gas Product Approval

Summary This utility procedure describes how to identify and evaluate the following new gas products:

- Qualifying new gas products (or significant modifications to existing products) for use in gas transmission and distribution (T&D) systems.
- New gas products used to conduct required gas construction, maintenance, and operations activities.

Pacific Gas and Electric Company (Company) employees can identify the need for new products or product modifications as part of the Company's strategic initiatives. Suppliers can also identify new products or modifications that may benefit the Company.

Target Audience All employees who propose new products, tools, or technologies for use in the gas T&D system.

All gas technical teams that review and approve new products, tools, or technologies.

Safety Implementing this procedure is part of the Company's method to ensure that only safe, reliable, and effective products, tools, and technologies are used in the gas T&D system. Employees and technical teams are encouraged to use a conservative, inquiring bias to critically review the safety aspects of any proposed product.

**Before Starting
this Procedure**

Personal protective equipment (PPE): None required.

Training: Individuals performing this procedure must consult with employees who facilitate new gas product approval projects.

Forms: Attachment 2, "Gas T&D New Product Approval Checklist."

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- Procedural Steps**
- 1.1 Identifying New Product / Product Modification**
- 1.1.1 Obtain new product or modification information from the supplier.
- 1.1.2 Determine whether the new product or modification is subject to this procedure by reviewing the following criteria:
- a) Does the product **not** affect the integrity of the gas T&D system?
 - b) Is the product part of a customized design job approved by a professional engineer?
 - c) Is the product reviewed and approved by other Company departments or teams (e.g., PPE or environmental cleanup products)?
- If the answer to any of the above three questions is yes,**
- Then,** discontinue this procedure, and obtain approval to review the product with the appropriate technical team.
- If the answer to all of the above three questions is no,**
- Then,** review The following criteria for applicability:
- a) Is the product a standardized product that can bear gas pressure?
 - b) Does the product affect the Company's cathodic protection systems?
 - c) Does the product affect the coatings or wraps of the gas system?
 - d) Does the product affect the measurement or pressure regulation of the gas system?
 - e) Is the product an instrument used to verify code-required construction, maintenance, or operations activities?
- If the answer to all of the above five questions is no,**
- Then,** discontinue this procedure, and obtain approval to review the product with the appropriate technical team.
- If the answer to any of the above five questions is yes,**
- Then,** continue to the next step.
- 1.1.3 Complete Section 1 of the "Gas T&D New Product Approval Checklist" (Attachment 2).

- 1.1.4 Submit the checklist to the appropriate gas technical team for review and to make a decision whether to proceed with the product evaluation.
- 1.1.5 Record the team decision.
- 1.1.6 Communicate the decision to the affected supplier, as needed.

2.1**Product Evaluation / Modification**

- 2.1.1 Obtain detailed technical product specifications, including the following information:
 - Material and technical specifications.
 - Lab tests or certifications.
 - Maintenance and operating instructions.
 - Installation instructions.
 - Samples.
 - Product demonstrations.
- 2.1.2 Compare the product features with comparable and existing products.
- 2.1.3 Interview three product users and record the results of the interview.
- 2.1.4 Perform any needed shop tests to verify technical features.
- 2.1.5 Record the shop test results.
- 2.1.6 Perform any needed field tests to validate the usability of the product.
- 2.1.7 Record the field test results.
- 2.1.8 Prepare and submit a recommendation to the gas technical team whether to implement the product or modification.

3.1 Product Approval / Modification

The gas technical team reviews the product or modification as follows:

- 3.1.1 Review and discuss the evaluation report recommendation.
- 3.1.2 Vote on whether to approve the product, using the procedures governing gas technical team operations.
- 3.1.3 Record the decision on the issues log, and store the report on the team SharePoint site.

If the vote is **no**,

Then, inform the evaluator and initiator of the vote and the reasons for the vote.

If the vote is **yes**,

Then, continue to the following Sections 4.1, "Communication," and 5.1, "Training."

4.1 Communication

4.1.1 Prepare changes to affected Company documents and develop new documents to cover the proposed changes, following the steps in Utility Work Procedure WF 4000-01, "Gas Document Development and Update Process."

4.1.2 Prepare an announcement (e.g., bulletin) and communication plan (conference calls, road shows, etc.) to cover the initial communication of the new product deployment.

4.1.3 Ensure that all necessary deployment prerequisites are completed before announcing the new product, including the following activities:

a) Training and operator qualified (OQ) programs are updated.

b) Strategic sourcing activities are completed (material codes are established, vendor's initial expected demand is met, etc.).

c) Required estimating programs (e.g., Fast Flow Estimating [FFE]) reflect the change.

d) Other computer programs (e.g., Integrated Gas Information System [IGIS]) potentially affected by the change are ready for the new product.

4.1.4 Obtain approval for the timing of the announcement from the technical team.

4.1.5 Announce the changes and deploy the communication plan.

5.1 Training

5.1.1 Facilitate the development of training programs and job aids for the new product.

5.1.2 Determine the changes to the OQ plan with the personnel charged with OQ plan duties.

5.1.3 Determine training needs outside the OQ program with the Company's training personnel.

Implementation Responsibilities

All employees (including technical teams) involved in reviewing and/or approving new gas products or modifications to gas products must follow this procedure.

Governing Authority

This document is governed by Utility Standard S4000, "Gas Standards Documentation Requirements."

Reference Documents

Engineering Material Specification (EMS) 5500, "Procedure For Evaluating And Approving Gas Meters And Metering Devices"

Utility Work Procedure WP4000-01, "Gas Document Development and Update Process"

Attachments

Attachment 1, "Gas T&D New Product Approval Flowchart"

Attachment 2, "Gas T&D New Product Approval Checklist"

Document Revision

This document cancels and supersedes Engineering Material Specification (EMS) 4000, "Process for Introducing, Evaluating, Approving and Retiring Products," dated June 30, 2008.

Definitions

FFE: Fast Flow Estimating.

IGIS: Integrated Gas Information System.

PPE: Personal protective equipment.

Approved By



Document Owner

