**TITLE: Procedure for Revising Application Software for Microprocessor-Based Controls**

**Purpose**

This UO guideline establishes procedures to ensure that all revisions made to application software or application programs are performed in a uniform manner and are properly documented and filed.

**Recision**

This guideline cancels and supersedes Recommended Practice (RP) 4281, "Procedure for Revising, Documenting, and Filing Application Software for Microprocessor-Based Controls Equipment," effective January 1998.

**Safety**

Perform all work in compliance with Pacific Gas and Electric Company's (the Company's) *Code of Safe Practices* and Utility Standard Practice (USP) 22, "Safety and Health Program."

Failing to comply with this UO guideline may result in station equipment malfunctions, causing safety and/or gas reliability issues, and may delay resolving any control difficulty in a timely manner.

**Implementation Responsibilities**

The director of Gas Engineering is responsible for approving, revising, and distributing this guideline within the organization.

**Compliance**

Implementation and effectiveness are measured by the responsible managers and supervisors. In addition, periodic internal audits may be conducted by Company representatives.

**General**

These procedures apply to application software or application programs for any microprocessor-based control device that is programmed, owned, operated, and maintained by Gas Transmission and Distribution (GT&D). Such devices include the following equipment:

- Programmable logic controllers (PLC).
- Flow computers used for control or interface with control systems.
- Human-machine interfaces (HMI).
- Operator interface terminals (OIT).
- Single- and multi-loop controllers, etc.

These procedures **do not apply** to the following equipment:

- Devices which only can be programmed by the original equipment manufacturer (OEM) due to warranty or manufacturer restrictions.
- Equipment having programs that cannot be downloaded to an electronic storage device (e.g., older model Cutler-Hammer Panelmate OIT).
- Stand-alone flow computers (e.g., TotalFlow flow computers used for wellhead calculations).
- Application software relating to Supervisory Control and Data Acquisition (SCADA).
- Other microprocessor-based devices that are programmed and maintained by other departments (e.g., Gas System Operations [GSO]).

**Definition of Terms**

**Application software or application programs**: Refers to the code developed for (or supplied with) any microprocessor-based device. This includes logic, configuration, field parameters, alarm limits, etc.

**Date Issued/Updated**

*Effective:* May 2006
*Review Date:* May 2011

Signed,

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**Attachments**

Attachment 1, "Responsibilities, Procedures, and Software Distribution"