

# **Compliance Risk Management Plan**

## **Backbone Gas Transmission Maintenance**

**Gas System Maintenance and Technical Support  
California Gas Transmission  
Pacific Gas and Electric**

**Revised July 19, 2005**

**Compliance Risk Management Plan  
PG&E – Utility Operations – California Gas Transmission  
Backbone Gas Transmission Maintenance**

**1. Risk Assessment (Assessment of Compliance Requirements)**

Pacific Gas and Electric Company (PG&E) delivers natural gas to customers through its gas system infrastructure. The gas system infrastructure is made up of high and low pressure pipelines. The portion of the gas system infrastructure operating at 60 pounds (psig) or greater, is defined as the backbone gas transmission system. This system is jurisdictionally maintained by PG&E's California Gas Transmission (CGT), Gas System Maintenance and Technical Support (GSM&TS) department. The backbone gas transmission system, which primarily delivers gas from the California borders, gas producers, and storage fields to the Bay Area distribution centers, as well as to off-system via other interconnecting pipelines, is maintained by the GSM&TS districts. By a memorandum of understanding, local transmission lines, operated at less than 60 psig (including distribution feeder mains), are maintained by the local divisions. These are supplied off of the backbone system and feed the distribution mains. PG&E performs preventative maintenance on the gas transmission system at regularly scheduled intervals, to ensure compliance with all applicable codes and regulations, and to ensure a safe and reliable gas transmission system.

The Compliance Risk Management Plan (CRMP) documents PG&E's gas backbone transmission preventative maintenance program and evaluates its state of compliance with regulatory and company requirements. This plan does not address local transmission since this is covered under the various Gas Distribution Preventative Maintenance Plans. This plan does not cover the portion of the gas distribution infrastructure that operates less than 60 psig (gas distribution facilities). This CRMP does not include service valves, service regulators, metering or customer owned gas facilities, which is being independently evaluated by Utility Operations' Gas Distribution Department.

**IDENTIFICATION OF SPECIFIC LAWS, REGULATIONS, OR POLICIES THAT ARE OF CONCERN:** The primary gas safety regulations that govern gas transmission maintenance include, but are not limited to, the following.

- Department of Transportation, Research and Special Programs Administration (DOT RSPA) – Title 49 of the Code of Federal Regulations (49 CFR) part 192 – “Transportation of Natural and other Gas by Pipeline: Minimum Federal Safety Standards”. This Federal regulation covers the minimum requirements for the design, construction, testing, operations, and maintenance of gas transmission and distribution lines. Subpart M, Maintenance, prescribes the minimum maintenance requirements of pipeline facilities.
- Public Utilities Commission of the State of California: General Order 112E – “Rules Governing Design, Construction, Testing, Operation, and Maintenance of Gas Gathering, Transmission and Distribution Piping Systems”. The General Order incorporates the requirements of 49 CFR part 192 as well as additional reporting and maintenance requirements.

**KEY REQUIREMENTS:** The aforementioned regulations are enforced by the Department of Transportation (DOT) and the California Public Utilities Commission (CPUC). The key requirements are appended in “Attachment A – CGT Transmission Maintenance Roadmap.” The Roadmap provides a description of each of the requirements, and the documentation associated with the requirements. CGT's

GSM&TS department has responsibility for implementing the requirements on a daily basis.

**2. Responsibility and Oversight**

- A. The Vice President of California Gas Transmission (CGT-VP) is responsible for ensuring that the overall management and performance of gas transmission maintenance and operations complies with all federal, state, and local regulations.
  - 1. The CGT-VP will monitor implementation of the backbone gas transmission maintenance program in two ways:
    - a. Weekly Leadership Team meetings – The Director of GSM&TS reports on his area of responsibility, including gas transmission maintenance.
    - b. Utility Operations Compliance Dashboard – Reflects the backbone gas transmission maintenance compliance, year-to-date metrics.
  - 2. The Vice President – CGT delegates overall responsibility to coordinate gas transmission maintenance to the GSM&TS Director.
- B. The GSM&TS Director, with his direct report Managers, administers controls to ensure gas transmission maintenance is performed, monitored and properly documented to fully comply with applicable laws, regulations, and company standards and policies.

**3. Discretionary Authority**

The CGT-VP has delegated responsibility for implementation of the Compliance Risk Management Plan – Backbone Gas Transmission Maintenance to the GSM&TS Director. The Director has demonstrated a commitment to consistently conduct company activities in a highly ethical manner and in full compliance with laws, regulations, and policies.

- A. GSM&TS Director – The GSM&TS Director manages resources and holds respective managers and superintendents accountable to ensure gas transmission maintenance is properly performed, monitored and documented in order to meet all applicable regulatory and company requirements. This includes completing all requirements within the prescribed time requirements. Proactive detection, prevention and correction of non-compliance are incorporated in the respective managers and superintendents job duties.
- B. GSM&TS Managers – The GSM&TS Managers set, communicate and document compliance requirements in job expectations. They ensure work is performed in compliance with all applicable laws and company standards. They ensure required training is conducted, as specified in various standard practices, apprenticeship programs, and as necessary for employees to gain the skills required to effectively perform their job functions.
- C. GSM&TS Area Superintendents – The GSM&TS Area Superintendents are the principle asset managers in CGT. They are functionally and directly responsible for asset compliance with all applicable regulatory and company requirements. They hold the District Superintendents accountable to ensure gas transmission maintenance is properly performed, monitored and documented in order to meet all applicable regulatory and company requirements, all within prescribed time requirements. Proactive detection, prevention and correction of non-compliance is incorporated in the District Superintendents job duties.
- D. GSM&TS Manager of Systems Integrity – The GSM&TS Manager of Systems Integrity is directly responsible for developing, maintaining, and revising all company

standards to ensure gas transmission maintenance is performed in full compliance with all regulations and company policies.

- E. All – All employees are expected to perform their duties in a manner that ensures compliance with established standards, work practices and procedures.

#### **4.0 Standards, Procedures, and Policies**

Please refer to Attachment A, *CGT Transmission Maintenance Roadmap*, which contains a comprehensive cross-reference of applicable code regulations with company policies, standards and procedures. The purpose of the Roadmap is to ensure that all applicable pipeline maintenance regulations are clearly understood, and to identify the company standards/policies required to ensure 100% compliance. The Roadmap is updated as the reference standards and/or the code requirements change.

- A. CGT Standards – Gas transmission maintenance requirements are specified in and directed by UO Standards and Guidelines contained in the CGT Standards Book. These standards are also contained on a website that is now linked to the Utility Operations Standards website. The Systems Integrity group within GSM&TS is directly responsible for developing, issuing, and revising these standards to ensure 100% compliance with all applicable codes and regulations. The individual standards are updated whenever changes occur in codes/regulations, or when additional clarifications/corrections are needed. The maximum interval for complete review of the UO Standards and Guidelines is 5 years from the issue date of the individual standards. Hardcopy updates to the CGT Standards Book are issued annually.
- B. PG&E Gas Standards and Specifications (GS&S) – Gas transmission maintenance requirements are also specified and directed in part by standards contained in the PG&E GS&S book. This book is maintained by the Technical Document Management group in the Gas Distribution & Technical Services section of the Utility Operations' Transmission and Distribution Engineering & Planning department. Engineers within both GSM&TS and E&P Gas Distribution are responsible for updates to specific standards contained within the GS&S book. The standards contained in the book are updated when changes occur in codes/regulations, or when additional clarifications/corrections are needed. There is no timeline when each gas standard is required for review. Hardcopy updates to the GS&S book is issued semi-annually.

#### **5.0 Training and Communication Plan**

Employees who perform gas transmission maintenance receive formal training through various sources, including PG&E gas department's apprenticeship and GSM&TS' skill block program training typically conducted by the Technical Learning Services, and targeted training sponsored by GSM&TS. For example, in 2001 the technical training service group for DOT (TSI from Oklahoma City, Ok) provided a week long, in depth training course on 49 CFR code requirements to all GSM&TS District Superintendents and other selected personnel. Additional on the job training is provided by first line supervisors, or engineering support personnel from various support groups such as the Systems Integrity or Work Management groups.

PG&E's Operator Qualification Program meets new federal code requirements to evaluate whether individuals are qualified to perform assigned covered tasks and can recognize and react to abnormal operation conditions. A Utility Operations Standard S4450, *Operator Qualification Program*, governs this program, and the entire program has been reviewed with the CPUC. All employees responsible for performing required maintenance of 49 CFR Part 192 have been qualified in the Operator Qualification

Program for the specific maintenance task. Furthermore, the employees are required to be subsequently re-evaluated to determine their competency to perform the covered task. A website documenting this program is currently active, and provides for more detail on this program (See: [http://www/gsm/Library/learn\\_svcs.htm](http://www/gsm/Library/learn_svcs.htm)).

As new regulatory or company requirements change, internal standards, policies and training curriculum are updated and communicated electronically and as well as at tailboards. If significant changes occur, local training sessions are conducted to ensure code requirements, policies, and guidelines are presented. Local management enforce adherence to current requirements. Managers, Area Superintendents, and District Superintendents ensure that all required training is conducted as specified.

#### **6.0 Auditing, Monitoring, and Internal Reporting**

- A. District Superintendents – Quality Assurance of gas transmission maintenance and its associated records is managed and enforced by District Superintendents. They are also responsible to address, prevent and correct any non-compliance in a timely manner.
- B. Work Management Group – The Work Management Group directly assists the Districts in planning, scheduling, and monitoring the performance of gas transmission maintenance. A set of performance indicators has been established by this group and is published monthly. The performance indicator tracks whether the code-mandated maintenance has been completed on time. This indicator report is sent to all District Superintendents, Area Superintendents, the GSM&TS Director and Managers, as well as the CGT-VP. See Attachment B for an example of this report, the Monthly Maintenance Indicator Report.
- C. Systems Integrity Group Internal Auditing – The Systems Integrity group performs both general and specific audits of each District's gas transmission maintenance work to assess the level of compliance being attained. The audit process is fully documented in the GSM&TS Maintenance and Operations Audit Manual. Each audit results in a "score" for each major area of compliance, and the score ranges in scale from an "unsatisfactory level" to an "excellent" level of performance. The audit also results in an action plan for the District for any deficiencies found during internal audit. It is the responsibility of the Area Superintendent and the local District Superintendent to fully address any areas of non-compliance or unsatisfactory performance, and subsequently complete the action plan. System Integrity Group Internal Audits are conducted annually. The findings of an internal audit may result in an update to a standards.
- D. External Auditing – The CPUC conducts regularly scheduled audits of office records and field activities of PG&E's gas transmission maintenance program. The CPUC audits of each district/division are conducted on a two-year cycle. If the results of a CPUC audit are unfavorable for a particular district/division, then the CPUC has the option to conduct an annual audit for that particular district. The CPUC utilizes a protocol checklist and formally communicates non-compliance findings. The Area Superintendents, with assistance from the Systems Integrity Group, coordinates a review of these findings and, as needed, addresses, corrects, and prevents future non-compliance in the reported areas. The company formally responds to the CPUC with documentation of closure activities. The findings of an external audit may result in an update to a standards.

#### **7.0 Accountability**

~~The Utility Operations Business Unit Compliance Board sets systematic compliance performance goals to which all affected employees must fully adhere. Accountability to~~

~~meet compliance goals is clearly outlined and included in job descriptions and performance measures, including individual PMP and scorecard documents.~~

Members of GSM&TS who are responsible for performing, monitoring, auditing, supporting, enforcing and managing gas transmission maintenance, have regulatory and company compliance goals embedded in individual job expectations and performance incentives, including PMPs and scorecards. Goals are reviewed and updated as needed to reflect current regulatory and company requirements. In cases of violations, disciplinary action is taken as appropriate.

The CGT-VP, GSM&TS Director, Managers, Superintendents, and individual contributors are accountable to fully comply with all code and company requirements.

Employees have the freedom and responsibility to identify and communicate (anonymously or otherwise) any non-compliance to their supervisor or to the PG&E Compliance and Ethics Helpline, without fear of reprisal. Non-compliance items may also be reported to the designated expert for technical consultation. Material issues or failures are documented on Material Failure Reports.