[Systems Inspections Quality Control]

SUMMARY

[This utility procedure establishes PG&E conditions for developing and maintaining Electric Quality Control (QC) Programs to assess electric transmission, substation, and distribution assets and work conducted by PG&E System Inspections (SI). QC programs verify the accuracy and completeness of inspections and recordkeeping methods. This procedure summarizes PG&E QC Assessment Programs.
Level of Use: Informational Use]

TARGET AUDIENCE

The following SI personnel are the key target audience for this procedure.

- QC Specialist
- QC Business Analyst
- QC Program Manager
- Quality Manager
- Compliance Supervisors and Inspectors
- Compliance Execution Leadership

SAFETY

This procedure describes administrative tasks that do not expose personnel to any significant hazards.

BEFORE YOU START

N/A

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PROCEDURE STEPS

1 General Requirements

1.1 QC Procedures drive continual improvement in alignment with PG&E Electric Standards and procedures and PG&E's vision of becoming the safest and most reliable electric company in the United States.

1.2 QC personnel CHECK that inspections comply with the guidance in the Electric Distribution Preventive Maintenance Manual (TD-2305M), Electric Transmission Preventive Maintenance Manual (TD-1001M), and Utility Procedure TD-8123P-103, "Electric Transmission Line Guidance for Setting Priority Codes."

1.3 QC personnel CREATE an annual sampling plan based on the previous years' work for each key inspections program area.

1. The annual plan is reviewed each year to determine the frequency of QC activities.

1.4 QC specialists CONDUCT assessments to support process owners involved with process control development and process improvement.

1. Assessments may be performed alongside an employee executing a task (real time side-by-side) after the work has been performed (post-work) via a field or desktop review.

2 QC Assessment Triggers

2.1 CONDUCT QC activities as part of routine inspection quality assessments.

1. IF QC personnel OBSERVE ad hoc quality performance issues (in addition to issues observed while performing routine inspections)

   THEN QC personnel may INITIATE additional QC activities.
2. The following Table 1 lists the three methods for selecting assets to assess

Table 1. QC Assessment Selection Methods

Selection Method	Description
Random Selection	Identifies assets to evaluate using a simple random process. The identified assets determine the inspector(s) to assess. **Methodology Goal:** Assess each inspector once a year.
Targeted	Dictated by special circumstances, such as confirmed “outlier” inspectors for review, based on the following criteria: • Quality Key Performance Indicators (KPIs) tracking data. • Areas of poor performance. • Leadership request. • Standardized assessment cadence.
Probable Cause	A vendor’s or inspector’s performance does not meet minimum quality standards or is found unsatisfactory through other SI processes or channels. In these cases, conduct additional QC inspections to verify work quality.

3 Sampling

3.1 QC personnel SELECT the work and asset location to perform QC assessments, using representative sampling.

1. DRAW a representative sample from a population of interest. Demographics and characteristics of the sample should match those of the population of interest in as many ways as possible.

2. Sample selection may be random or targeted. SEE Table 1 above for sampling types.

3.2 Due to the large volume of detailed inspections conducted, QC personnel must, at a minimum, REVIEW a sample from the overall completed inspection population.

1. ESTABLSH statistically valid sampling plans (using key system risk information available during the inspection period) to select appropriate confidence level and compliance error rates.

3.3 Assigned personnel GENERATE AND MAINTAIN all sampling files in the SI Quality Control Teams site.

3.4 QC personnel ARE RESPONSIBLE for overall electric operations QC in key inspections program areas, including:

1. Distribution overhead

2. Transmission overhead

3. Pole test and treat

3.5 ADD, REMOVE, OR COMBINE programs based on electric operations business objectives.

3.6 QC personnel MANAGE internal business processes that detail specific processes for performing QC on each key program area listed in Items 1–3 above.

3.7 Each electric QC program verifies the following:

1. Consistency of co-worker work methods and PG&E Standards and Procedures
2. Accuracy and completeness of the original inspection
3. All attributes identified on the QC checklist

3.8 TRACK assessment results each quarter in the Corrective Action Program (CAP) to provide trending analyses.

1. INCLUDE nonconformance Critical, High, Medium, and Low risk attributes.
2. SEND missed critical-risk attributes found during an assessment directly to the process owner for resolution.

3.9 QC personnel performing work tasks must COMPLETE all training required by the associated governing document.

1. REFER to requirements and procedures associated with a specific guidance document (such as a standard or procedure) for training requirements.

4 Roles and Responsibilities

4.1 QC leadership IS RESPONSIBLE for the following tasks:

1. COORDINATE AND DEVELOP metrics and reports to continually support procedures and process improvement.
2. MANAGE business process documents.

4.2 QC supervisors and subject matter experts (SMEs) ARE RESPONSIBLE for the following tasks:

1. REVIEW the annual sampling plan.
2. REVIEW assessments prepared by assessors and specialists.
3. NOTIFY functional area (FA) personnel of high-level priority tasks that were missed during an assessment.
4. ENSURE all process owners and leaders are aware of and address high-level priority tasks missed during an assessment.

4.3 QC specialists PERFORM QC assessments AND COORDINATE investigations.

4.4 Leadership for field organizations being assessed ARE RESPONSIBLE for the following tasks:

1. PROVIDE timely responses and resources during assessments.
2. IMPLEMENT corrective actions initiated and required by the assessment results.
3. SUPPLY QC specialists with necessary documents, as requested.
4. ENSURE QC personnel have inspection work plans.

4.5 Asset strategy and standard personnel ARE RESPONSIBLE for the following tasks:

1. COMMUNICATE changes to the inspection plan, as well as changes to any procedure or asset-related inspection criteria and methods, to the Quality Control Team.
2. PROVIDE priority rankings for critical attributes.
3. REFER QC personnel to the Compliance Inspection and Maintenance Program.

5 QC Program Elements

5.1 Each QC program includes the following elements:

1. Scope
2. Objective
3. Approach
4. Compliance requirements or regulatory commitments
5. Reference documents that must be reviewed before the assessment
6. Statistical methodology that QC personnel employ as QC statistical process controls (SPCs)
7. Methods for selecting assessment samples
8. Key QC control points that must be measured during the assessment
9. Specific tasks that must be performed before and during the assessment
10. Predefined findings deemed critical nonconformances based on risk
11. Equipment required to perform the assessment

12. QC assessment checklist specifically designed for the process or product being assessed

13. Required documentation

6 Corrective Actions and Scheduled QC Follow-Up/Closeout

6.1 To address discrepancies from QC assessments, QC personnel CREATE new findings (i.e., S5s and S9s) AND UPDATE existing findings (i.e., Field Safety Reassessments [FSRs]) via SAP corrective notifications.

1. The Centralized Inspection Review Team (CIRT) REVIEWS all corrective notifications created by QC personnel.

6.2 The QC program description specifies the conditions under which a corrective action must be developed for the product being assessed.

1. Regardless of the reason for a correction, COMMUNICATE the following information to leadership:

   a. Immediate corrective actions taken/to take

   b. Safety issues and emergency conditions

   c. A-Tags/L1 Priority

   d. Any follow up with the SI supervisor/leader

   e. Email communicating discrepancies to FA leaders

2. Reinspection(s):

   a. Email communicating discrepancies to FA leaders

6.3 QC personnel TRACK critical attribute findings in PowerBI.

1. Findings may include additional information, such as immediate corrective action taken.

6.4 QC personnel TRACK CAP notifications of high-priority tasks to verify they are executed within the agreed timelines.

6.5 On a quarterly basis (for close-out), QC analysts/specialists SUBMIT a CAP with the following information:

1. Prioritization by priority ranking (Critical, High, Med, Low).

2. Overall and critical pass rates for the program(s) and assessments.

3. Number of overall assessments performed.

4. Requirements for FA leaders/stakeholders to document tasks, strategies, and corrective actions taken to address trending summaries/findings.

5. Final review for quality closure with stakeholders.

6.6 INCLUDE a PDF report with all pertinent assessment information from each QC review completed on an Internet-based application.

NOTE

For records with a **Critical** discrepancy (including structures for re-inspection), Internet-based applications automatically send PDFs for those records to the inspector's immediate PG&E supervisor in real time (records are reviewed and completed in QC).

6.7 ARCHIVE all records in the QC Teams SharePoint.

1. The QC business analyst RUNS a weekly records report and PROVIDES a hyperlink to those records to the respective PG&E supervision teams.

   a. The report must identify records by the inspection method/division or Major Work Category (MWC), Inspector, or Equipment ID.

6.8 QC managers, supervisors, and principals INITIATE AND HOLD weekly stakeholder meetings to communicate the previous week's trends.

1. QC personnel participating in SI Daily Operating Reviews/Weekly Operating Reviews (DORs/WORs) may be included in weekly stakeholder meetings.

2. Weekly Stakeholder Meeting Goals:

   a. DISCUSS highlights from the finding trends identified by the QC specialists.

   b. REVIEW the SI QC dashboard (summarization of the QC findings for the FA).

3. Leadership in charge of field organizations being assessed ARE RESPONSIBLE for the following tasks:

   a. USE QC data to drive improvement between team members.

   b. IMPLEMENT corrective actions required by the results of assessment activities.

   c. SUPPORT QC, as required.

7 Work Verification

7.1 VERIFY work or PERFORM QC through a desktop review, field work verification, and data analysis to identify trends.

7.2 EXECUTE activities based on either sampled or entire inspected populations and/or inspection documents.

7.3 Work verification teams ARE RESPONSIBLE for the following tasks:

1. PROVIDE feedback to execution teams with specific criteria for improvements.

2. COLLECT and DISSEMINATE internal or external quality reviews to third parties.

END of Instructions

DEFINITIONS

Quality assurance (QA): Ensures compliance discrepancies resulting from completed QC and QV assessments are integrated into improvement efforts for updated standards, procedures, and training. QA is performed independent of the SI execution schedule.

Quality control (QC): Ensures completed inspections performed by system inspections (SI) meet compliance standards. Ensures adherence to PG&E standards and procedures.

Quality verification (QV): Ensures work completed by QC personnel meets compliance standards.

IMPLEMENTATION RESPONSIBILITIES

The director in charge of compliance and quality management is responsible for implementing this procedure.

GOVERNING DOCUMENT

Utility Standard TD-8123S, “Electric System (T/S/D) Patrol, Inspection, and Maintenance Program”

COMPLIANCE REQUIREMENT / REGULATORY COMMITMENT

Records and Information Management:
Information or records generated by this procedure must be managed in accordance with the Enterprise Records and Information (ERIM) program Policy, Standards and Enterprise Records Retention Schedule (ERRS). REFER GOV-7101S, “Enterprise Records and Information Management Standard” and related standards. Management of records includes, but is not limited to:

- Integrity
- Storage
- Retention and Disposition
- Classification and Protection

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REFERENCE DOCUMENTS

Developmental References:

Electric Distribution Preventive Maintenance Manual (TD-2305M)

Electric Transmission Preventive Maintenance Manual (TD-1001M)

Utility Procedure TD-8123P-103, “Electric Transmission Line Guidance for Setting Priority Codes”

Supplemental References:

Utility Standard GOV-1038S, “Inspection and Corrective Maintenance Governance”

APPENDICES

N/A

ATTACHMENTS

N/A

DOCUMENT RECISION

N/A

DOCUMENT APPROVER

[redacted], Director, System Inspections Quality Control

DOCUMENT OWNER

[redacted]), Principal, System Inspections Quality Control

DOCUMENT CONTACT

[redacted]), Principal, System Inspections Quality Control

REVISION NOTES

Where?	What Changed?
N/A	[Document moved from Technical Information Library (TIL) to Guidance Document Library (GDL) and transferred to GDL mandated template.]

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