

System Fire Hardening QC Audit Procedure

SUMMARY

This document outlines the Quality Control (QC) process for auditing System Hardening (SH) work on PG&E’s system. It details the purpose, when to use, and how to properly complete the audits.

Level of Use: Informational Use

TARGET AUDIENCE

[Individuals who implement, follow, and report Project and Construction Management Quality Control audits include:

- P&CM Supervisors
- QC Auditors
- Operational Inspectors
- Construction Crews

TABLE OF CONTENTS

SUBSECTION	TITLE	PAGE
1	Safety.....	1
2	Before You Start	2
3	SH Standard Pre-Audit	2
4	Tree Wire/UG Cable Installation Audit.....	2
5	Wire Hardening QA Inspection (Final Audit).....	3
6	Tracking And Documentation	3
7	Roles and Responsibilities.....	4

REQUIREMENTS

1 Safety

1.1 Specific hazards

1. Specific hazards impacting this work include the following:
 - Construction activities
 - Unrestrained animals at customer premises

System Fire Hardening QC Audit Procedure

- Tripping and slipping hazards
- Inadequate barriers from vehicular traffic
- Vegetation, including poison oak

Failure to conduct a thorough site assessment of PG&E facilities and surrounding terrain, and failure to evaluate present activities such as construction, pose a risk to PG&E personnel and the public.

2 Before You Start

Before starting field audit work, determine if work will be performed in the roadway. If so, consider these controls for roadway safety:

1. Face traffic whenever possible to maintain situational awareness
2. Use tools and equipment as appropriate to reduce exposure to traffic (e.g., cones, signs)
3. Use traffic control or additional personnel to ensure visibility and personal safety
4. Ensure that the appropriate traffic-rated PPE is worn for high visibility

3 SH Standard Pre-Audit

- 3.1 This audit documents field non-conformities identified during initial construction. It is shared with the foreman to ensure corrective action is taken prior to Overhead (OH) tree wire being installed or Underground (UG) cable being energized.

NOTE

These calls do not count as a “Go-back” toward the crew. This is a documented conversation that gives the crew a chance to make corrections prior to it negatively affecting them.

- 3.2 SH Standard pre-audits are completed during visits to jobsites when OH wire is not being pulled in or UG cable being energized.
- 3.3 Non-conformities identified must have photo evidence provided to the audit upon correction. These photos must be added to the “Corrected Go Back” section of the audit.
- 3.4 This audit requires a minimum of one photo per location. The location must be added in a text box.

4 Tree Wire/UG Cable Installation Audit

- 4.1 This audit is used when OH tree wire is tied-in and UG SH jobs are being energized. This is used to document spans that meet the SH Standard and can be verified as “fire safe.”

System Fire Hardening QC Audit Procedure

- 4.2 All spans deemed fire safe (threat of ignition is mitigated) must be documented in Question Number 1.
- 4.3 Spans that are 100% complete but not fire safe (exposed conductor) should be documented in Question Number 2.
- 4.4 New submissions should be duplicated to carry over the previous documented spans.
- 4.5 Photos of all completed locations should be added to Question Number 3. For UG locations one photo must be provided showing equipment opened, and one photo showing equipment closed/locked and secured.
- 4.6 Photos will be verified and signed-off in the Safety Culture software program by QC Analyst prior to being passed in the Distribution Operational Toolset (DOT).

5 Wire Hardening QA Inspection (Final Audit)

- 5.1 The QC Team Leads process final audit when job is complete/as-built is submitted. Locations are re-audited to ensure non-conformances identified in prior audits have been addressed.
- 5.2 If non-conformances are identified, audit is sent to the vendor for corrective action.
- 5.3 If no non-conformities are identified, the audit is sent to the appropriate party to continue the PM Number.

6 Tracking And Documentation

- 6.1 The QC team monitors the DOT, a collaboratively shared database for SH project tracking. DOT is shared by multiple groups.
- 6.2 The SH PM Numbers are identified for audit scheduling in the DOT by 08W job work readiness statuses in SAP.
- 6.3 The SH Program Manager prepares a list of PM Numbers that have the following statuses: ESTS, ADER, PEND, UNSC or CONS.
- 6.4 Jobs that are CONS will have span sheets created by the SH Program Analyst and entered in DOT.
- 6.5 The QC Analyst inputs the span sheets into Safety Culture. Maps are uploaded into Teams and circuits added to the tracker. Maps also are uploaded to the IA (internal audit) SharePoint by the QC Analyst.
- 6.6 The SH Program Manager coordinates the QC entry into the DOT tracker and tracks each PM Number through completion.
- 6.7 The QC Hardening Leads are in close contact with GC and Contractors performing the work to schedule upcoming wire pulls. GC Field Engineers update the GC Hardening Tracker with upcoming wire pull information.

System Fire Hardening QC Audit Procedure

1. The local SH Leads are responsible for checking the GC tracker and ensuring agreement with the QC hardening tracker. The Leads schedule an auditor to be onsite during the wire pull .
- 6.8 Contractors who schedule SH wire pulls complete the Wire Pull Schedule sheet and send to hardeningwirepullscheduling@pge.com. The Leads add the job to the QC tracker, assign an auditor, and update the forecasted footage.

7 Roles and Responsibilities

7.1 Role of the QA Hardening Analyst:

- Input spans into Safety Culture
- Record audits in the DOT
- Verify all locations have proper photo evidence of completion
- Maintain Hardening Tracker, updating completed spans
- Provide DOT data to QC Manager and for inclusion in the Hardening DOR
- Provide completed audits with maps to Internal Auditing for review
- Update completed dates in DOT
- Work with internal auditing to correct any discrepancies between field audits and mapping issues

7.2 Role of the SH Leads:

- Maintain Wire Pull schedule in Hardening Tracker
- Assign auditor to schedule wire pull in QC Tracker
- Review completed audits and submit to QC Analyst to record in DOT
- During the System Hardening Auditor onboarding process each auditor will be required to attest that they have read, understand , and will implement this procedure.

END of Requirements

System Fire Hardening QC Audit Procedure

DEFINITIONS

Distribution Operational Toolset (DOT): A collaboratively shared database used for System Hardening project tracking to track each PM Number through completion. The graphic below shows the DOT used by the System Hardening team.

DOT - Distribution Operations Toolset
 User: [redacted] Refresh: 3/30/24 7:32 AM
 3) Double click on a menu item to execute its function

Links: [WTA](#)
[Create a Link to this Menu](#)
[Save this Menu to Desktop](#)

About Us: Read about the team behind this platform
[View Training](#) Watch training videos on using this platform
[Get Help](#) Locate process owners to email about issues

Take a Tour Show Less

1) Click to select a Tracker (highlighted means selected)

Abbreviation	Available	Items (or Trackers)
PFT	ET&S Portfolio Tracker	
SVT	Substation Work Tracker	
TLM	T-Line Maintenance Tracker	
DOT	Distribution Operations Toolset	
DPM	Distribution Portfolio Management	
PLC	Planning & Compliance Tracker	
ADA	Automated Data Analyst	

2) Click to select a menu page in the above tracker

Page	Description
Landing	Sub-menu for landing and recurring use
PM_PCA	Sub-menu for PM/PCA
UG_PM_PCA	Sub-menu for UG PM/PCA
Programs	Reporting for Program Management
Programs 2	Reporting for Program Management
Core Programs	Sub-menu for Core Programs
Rule 20A	Sub-menu for Rule 20A
P&C Scorecard	Sub-menu for P&C Scorecards
UG Scorecard	Sub-menu for UG Scorecards
Veg & Insp	Sub-menu for Veg Team Reporting
Fire Rebuild	Reporting for Fire Response
Admin	Sub-menu for Administrator

Select a Menu Item by Usage within: DOT - Distribution Operations Toolset
 Plk: Top Frequently Used by All Users Note: Click on a bar below to navigate to the Menu Item.

540 Tags Tracker	[Bar]
504 Tags POC Tracker	[Bar]
Civil Log	[Bar]
WSHP Project Log (All)	[Bar]
WSHP Project Log (User)	[Bar]

Phrase: Set, Access Note: Wildcards * can be used. Commas "," mean OR

Where Found	Service	Found Description
ADA	Add User Helpers	Edit who's on CC for email requests for help or edit access
ADA	Adjust Access	Adjust existing access for datasets you own
ADA	Approve Access	Review pending requests to edit datasets you own
DOT	Core Programs Targets	Core Programs Unit Targets set by MPP PMO
TLM	ETL Assets	View T-Line Assets Table
DPM	Manage Pay Apps	Assign ADEs, Edit Controls, Reset Approvals (Admin)
DOT	P&C Targets	Set Targets for Forecast and Completions
ADA	Roles Access Guide	View a guide to menu item roles and related responsibilities
ADA	Set All Access	Edit all user roles granting access to all menu items
ADA	Set Dropdowns	Edit dropdown choices for all columns in all trackers
ADA	Set Jump Targets	Edit the values governing what user actions do in reports
ADA	Set Menu	Edit the menu items appearing on all trackers

IMPLEMENTATION RESPONSIBILITIES

QC Lead

Schedule tailboards with crews to ensure understanding and compliance with Overhead Fire Area and System Hardening Design Guidance TD-9001M (Chapter 15)

Auditors

During the System Hardening Auditor onboarding process each auditor will be required to attest that they have read, understand, and will implement this procedure.

GOVERNING DOCUMENT

[N/A]

COMPLIANCE REQUIREMENT/REGULATORY COMMITMENT

Records and Information Management:

PG&E records are company assets that must be managed with integrity to ensure authenticity and reliability. Each Line of Business (LOB) must manage Records and Information in accordance with the Enterprise Records and Information (ERIM) Policy, Standards and Enterprise Records Retention Schedule (ERRS). Each Line of Business (LOB) is also responsible for ensuring records are complete, accurate, verifiable and can be retrieved upon request. Refer to [GOV-7101S, "Enterprise Records and Information Management Standard"](#) for further records management guidance or contact ERIM at Enterprise_RIM@pge.com.

System Fire Hardening QC Audit Procedure

REFERENCE DOCUMENTS

Developmental References:

[TD-9001M – Fire area Design Guidance](#)

Electric Overhead Construction Manual (TD-2501M)

Electric Underground Construction Manual, Vol. (TD-2502M)

Supplemental References:

N/A

APPENDICES

N/A

ATTACHMENTS

Att .1-Overhead Fire Hardening QC Audit Process

Att. 2 Underground Fire Hardening QC Audit Process

DOCUMENT RECISSION

N/A

DOCUMENT APPROVER

██████████, Director, Underground Quality Control

DOCUMENT OWNER

██████████, Supervisor, Electric Quality Control, Fire Hardening Lead

DOCUMENT CONTACT

██████████, Manager, Electric Quality Control

REVISION NOTES

Where?	What Changed?
Whole document	New Document.