Inspecting, Testing, and Maintaining Wood Poles

SUMMARY

There are millions of wood poles in PG&E’s electric distribution and transmission systems. These very important assets must be used safely and maintained properly to provide the longest in-service life possible.

This standard establishes the following requirements:

- Inspecting and testing the structural integrity of wood poles.
- Reinforcing and reusing wood poles.
- Testing wood poles before climbing or changing the strain.

TARGET AUDIENCE

This utility standard targets all employees who climb, maintain, or inspect wood distribution or transmission poles.

REQUIREMENTS

1 Safety Requirements

WARNING

If there is any evidence or reasonable doubt that the pole is not safe to climb, or if it is not possible to test a pole, it must be adequately supported before climbing or changing the strain.

To avoid personal injury, perform all work as described in the following utility procedures:

- TD-2325P-01, “Testing, Reinforcing, and Reusing Wood Poles”
- TD-2325P-02, “Testing Wood Poles Before Climbing”
- TD-2325P-04, “Inspection of Customer/Contractor-Provided Poles”
Inspecting, Testing, and Maintaining Wood Poles

2 General Requirements

2.1 Inspect, test, and evaluate wood poles for serviceability and structural integrity on a case-by-case basis as described in Utility Procedure TD-2325P-01.

2.2 Distribution and transmission wood pole inspection programs meeting the intrusive inspection requirements of California Public Utilities Commission (CPUC) General Order (G.O.) 165, “Inspection Requirements for Electric Distribution and Transmission Facilities,” must be carried out on a systemwide basis. These inspection programs detect poles with damage or decay from the groundline to the pole top.

2.3 All wood poles being inspected or tested must have an associated Form TD-2325P-01-F01, “Pole Inspection/Test Report,” or equivalent documentation supplied by the pole test and treat contractor. Records for intrusive inspection activities must be maintained for the life of the pole.

2.4 The techniques described in Utility Procedure TD-2325P-01 must be used to reinforce and reuse wood poles.

2.5 Wood poles must be tested before climbing or changing the strain as described in Utility Procedure TD-2325P-02.

2.6 Customer-owned wood poles must be inspected before installation as described in Utility Procedure TD-2325P-04.

END of Requirements

DEFINITIONS

NA

IMPLEMENTATION RESPONSIBILITIES

Electric distribution and transmission standards personnel have the following responsibilities:

- Creating, routing for approval, and distributing this standard and its associated work procedures.
- Providing technical consultation to ensure compliance with the requirements of this standard.
IMPLEMENTATION RESPONSIBILITIES (continued)

Maintenance and construction personnel have the following responsibilities:

- Ensuring that maintenance and construction employees are aware of and comply with the requirements of this standard.
- Ensuring that maintenance and construction employees assigned to perform wood pole inspections and testing, and subsequent maintenance tasks, are qualified to perform the tasks necessary to comply with this standard.
- Ensuring that wood pole inspections, testing, and maintenance work is performed safely, efficiently, and in a timely manner.
- Ensuring that any identified corrective action is documented properly, completed promptly, and installed correctly. Use work verification to monitor results.
- Verifying the accuracy and completeness of the records and documentation and ensuring that auditable records and documentation are current and readily accessible.
- Ensuring that distribution wood pole testing and replacement work is tracked and reported correctly.

Electric maintenance personnel have the following responsibilities:

- Developing a systemwide annual plan for wood pole testing and treating.
- Developing performance measures and establishing schedules for reporting the progress of the systemwide annual plan.
- Hiring pole test and treat contractors to perform pole testing and treating and to reinforce poles.
- Implementing an effective quality assurance program to assess compliance with this standard’s requirements for wood pole testing and treating.
- Submitting the systemwide plans and periodic reports to the CPUC.
- Verifying the accuracy and completeness of the records and documentation and ensuring that auditable records and documentation are current and readily accessible.
Inspecting, Testing, and Maintaining Wood Poles

IMPLEMENTATION RESPONSIBILITIES (continued)

Employees assigned wood pole testing and treating tasks have the following responsibilities:

- Effectively and efficiently performing their assignments.
- Performing only tasks for which they are trained, knowledgeable, and qualified.
- Notifying their supervisors of any additional training, equipment, or resources needed to effectively and efficiently perform their assigned tasks.

GOVERNING DOCUMENT

NA

COMPLIANCE REQUIREMENT / REGULATORY COMMITMENT

G.O. 95, “Rules for Overhead Electric Line Construction:"

- Rule 31.1 requires personnel to maintain electric supply overhead systems in a condition that enables them to provide safe, proper, and adequate service.
- Rule 31.2 requires personnel to inspect lines frequently and thoroughly to ensure that they are in good condition.
- Rule 44.3 requires personnel to replace or reinforce poles before safety factors are reduced to less than two-thirds of the original numbers due to deterioration or changes in construction.

G.O. 165 requires personnel to patrol and inspect the electric distribution systems on a specifically defined minimum basis.

REFERENCE DOCUMENTS

Developmental References:

- G.O. 95, “Rules for Overhead Electric Line Construction”
- G.O. 165, “Inspection Requirements for Electric Distribution and Transmission Facilities”

Supplemental References:

- Code of Safe Practices (dropdown on left side of page under “Toolkit”
- Utility Standard SAFE-1001S, “PG&E Injury & Illness Prevention Plan (IIPP)”
Inspecting, Testing, and Maintaining Wood Poles

APPENDICES

NA

ATTACHMENTS

- Utility Procedure TD-2325P-01, “Testing, Reinforcing, and Reusing Wood Poles”
- Utility Procedure TD-2325P-02, “Testing Wood Poles Before Climbing”
- Utility Procedure TD-2325P-04, “Inspection of Customer/Contractor-Provided Poles”

DOCUMENT REVISION


DOCUMENT APPROVER

Senior Director

DOCUMENT OWNER

Senior Manager

Senior Manager

DOCUMENT CONTACT

Electric Distribution Engineer, Senior

REVISION NOTES

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<tr>
<th>Where?</th>
<th>What Changed?</th>
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<tr>
<td>Entire document</td>
<td>- The document format was updated to comply with the latest Guidance Document Management (GDM) rules.</td>
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<tr>
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<td>- The links and titles to all Company documents referenced in this standard were updated.</td>
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<td></td>
<td>- The links and titles to G.O. 95 and G.O. 165 were updated.</td>
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<td>- The names and titles of the standard’s Document Owner, Document Approver, and Document Contact were updated.</td>
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