P751

Submitter Email: jlhavel@bpa.gov
Type of Project: Modify Existing Approved PAR
PAR Request Date: 21-Jan-2016
PAR Approval Date: 03-Mar-2016
PAR Expiration Date: 31-Dec-2017
Status: Modification to a Previously Approved PAR
Root PAR: P751 Approved on: 08-Dec-2010

1.1 Project Number: P751
1.2 Type of Document: Guide
1.3 Life Cycle: Full Use

2.1 Title: Guide for Wood Structures Used for Overhead Electric Transmission Lines
Changes in title: Guide for Design of Wood Structures Used for Overhead Electric Transmission Lines

3.1 Working Group: Overhead Line Structural and Materials & Hardware Working Group (PE/T&D/TPC-15.11.08-10)
Contact Information for Working Group Chair
Name: Jennifer Havel
Email Address: jlhavel@bpa.gov
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Contact Information for Working Group Vice-Chair
None

3.2 Sponsoring Society and Committee: IEEE Power and Energy Society/Transmission and Distribution (PE/T&D)
Contact Information for Sponsor Chair
Name: John McDaniel
Email Address: john.mcdaniel@nationalgrid.com
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4.1 Type of Ballot: Individual
4.2 Expected Date of submission of draft to the IEEE-SA for Initial Sponsor Ballot: 03/2017
4.3 Projected Completion Date for Submittal to RevCom: 10/2017

5.1 Approximate number of people expected to be actively involved in the development of this project: 6

5.2 Scope: The purpose of this guide is to provide a design overview of wood structures used for overhead electric transmission lines. This guide consolidates useful information, methods, and reference materials that define the state of the art in the design of wood pole transmission structures, commonly in the 69 kV through 345 kV range, into one document. This guide addresses application of wood in transmission structures, characteristics of wood, methods of analysis, loadings, connections, non-wood members, erection and framing, quality assurance, electrical considerations, testing and maintenance.
Changes in scope: The design purpose of this guide covers the design of wood pole laminated transmission member structures, providing an overview of wood structures used for overhead electric transmission lines. This includes the consolidation of useful information, methods, and reference materials that define the state of the art in the design of wood pole laminated transmission member structures, commonly in the 69 kV through 345 kV range, into one document. This guide addresses application of laminated wood in transmission structures, characteristics of wood, members, methods of analysis, loadings, connections, non-wood members, erection, framing, and testing and maintenance.

5.3 Is the completion of this standard dependent upon the completion of another standard: No

5.4 Purpose: To provide Transmission Line Designers with a design overview of wood structures used for overhead electric transmission lines.
Changes in purpose: To provide Transmission Line Designers with a standard guide in the design overview of wood structures used for overhead electric transmission lines.
5.5 Need for the Project: Currently Industry does not have a universally available guide to guide engineers in the design of wood transmission structures.

5.6 Stakeholders for the Standard: utility electrical, structural, and civil engineers, wood structure manufacturers, and suppliers

Intellectual Property

6.1.a. Is the Sponsor aware of any copyright permissions needed for this project?: No
6.1.b. Is the Sponsor aware of possible registration activity related to this project?: No

7.1 Are there other standards or projects with a similar scope?: No
7.2 Joint Development

Is it the intent to develop this document jointly with another organization?: No

8.1 Additional Explanatory Notes (Item Number and Explanation):

Section 2.1 Title:
Changes reflect that this document is not strictly a structural design guide as originally indicated, but a design overview and application guide.

Section 5.2 Scope:
The scope of the document has been reworked to avoid duplication with the new ASCE Wood Pole Structure Design Guide (under development). P751 is to focus less on the structural aspects of wood structure design (avoiding overlap with ASCE) and more on the electrical and mechanical coordination aspects and the application of wood poles.

This guide will act as a central resource for line designers providing an overview of design, guidance in applications, references to other existing documents, and when documents do not exist, providing more in depth information as needed. Many of the documents available to line designers today addressing the considerations and application of wood poles as transmission structures are old and/or hard to find. As such, a guide that informs the designer as well as directs them to additional resources is sorely needed.

Section 5.4 Purpose:
Changes reflect that this document is not strictly a structural design guide as originally indicated, thought but a design overview and application guide.