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IEEE Guide for Collecting and Managing Transmission Line Inspection and Maintenance Data

IEEE Power & Energy Society

Sponsored by the
Transmission and Distribution Committee

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IEEE Guide for Collecting and Managing Transmission Line Inspection and Maintenance Data

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IEEE Power & Energy Society

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Abstract: Reference information to assist electric utilities and their contractors with the development of computer-based means for collecting and managing transmission line inspection and maintenance data and associated asset information is provided. The guide provides a high-level overview of key principles and considerations learned through experience that will help ensure common pitfalls are avoided and enhance the usability of systems. It is not intended to provide an exhaustive discussion of the many details and specifics that must be accounted for when designing and developing a system for an individual utility's application and needs.
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Introduction

This introduction is not part of IEEE Std 1808-2011, IEEE Guide for Collecting and Managing Transmission Line Inspection and Maintenance Data.

The Management of Existing Overhead Transmission Lines Working Group decided to organize a task force to develop this guide for the following reasons:

- Regulations regarding inspection and maintenance are on the rise.
- Demonstrable evidence of maintenance effectiveness is needed to justify budgets.
- Asset management business models require meaningful information to succeed.
- Automated data management systems facilitate increased knowledge transfer among personnel.
- The industry could benefit from a basic document to use as a guideline when developing or reviewing their automated transmission line inspection and maintenance data systems.

The PAR to develop this guide was submitted and approved in September of 2009. The Task Force met roughly every six months during the Towers, Poles, and Conductors Subcommittee meetings. Individuals from the Task Force were asked to prepare the initial drafts of clauses, which were then reviewed and edited by the group during the meetings. The first draft was completed and submitted for balloting in June of 2010, and the final draft was submitted for RevCom approval in December of 2010.

The purpose of the guide is to provide easy-to-use reference information that will serve as a framework and roadmap for designing efficient and effective systems that will facilitate and/or enhance the following:

- Data collection
- Field and office usability
- Data integrity
- Compatibility with geographic information systems (GIS) and enterprise solutions
- Data exchange with other systems and users
- System expansion and modification
- Transferability of data (from one system to another, i.e., due to system upgrade or implementation of a new system)
- Data analysis
- Reporting
- Security
- Flexibility to adapt to system and regulatory changes

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IEEE Guide for Collecting and Managing Transmission Line Inspection and Maintenance Data

1. Overview

1.1 Scope

This guide provides reference information to assist electric utilities and their contractors with the development of computer-based means for collecting and managing transmission line inspection and maintenance data and associated asset information including transmission line inventory data. It provides a high-level overview of key principles and considerations learned through experience that will help ensure common pitfalls are avoided and enhance the usability of systems. It is not intended to provide an exhaustive discussion of the many details and specifics that must be accounted for when designing and developing a system for an individual utility's application and needs.

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