



2024 TECHNICAL UPDATE

Distribution Operations Guidebook

2024 Edition

ABSTRACT

In 2015 the distribution planning project set (P200B) initiated a EPRI Reference Book (color book) on the subject of distribution planning capturing the state of the art in both conventional and advanced distribution planning techniques. Since the first edition of this guidebook, which was published in 2015, one or more chapters on current and emerging topics of interest have been added and/or updated each year. It has become apparent that there is the need for a similar reference guidebook on the topic of distribution operations covering the breadth of Operations topics that EPRI's program 200C has researched over the last number of years. This technical update contains the inaugural 2024 edition of the Distribution Operation Guidebook with chapters on current and emerging topics of interest:

- Distribution Management System: Requirements Reference
- Human Machine Interface Designs
- Distribution System Dashboards and Displays for Situational Awareness
- Distribution Control Center Alarm Management Philosophy Guide
- Benefit Cost Analysis for Smart Distribution Applications
- Understanding DERMS
- Volt Var Optimization
- How to Run a Distribution Automation Program
- Optimal Placement of Distribution Automation Switches
- Distribution Automation / FLISR automated Measurement and Verification
- Reclosing and Fuse Saving
- Distribution Control Center: Guide to Holding a Cyber Security Response and Recovery Drill

These chapters will provide timely reference material on key topics of current and emerging interest. The material is expected to be particularly useful to EPRI member utilities currently dealing with issues related to the modern Integrated Grid such as electrification, renewable distributed energy resources (DER), and reliability and resilience.

Keywords

Distribution management system
Distribution automation
Volt var optimization
Distribution control center
Alarm management
Human machine interface

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