

CEATI | Distribution Equipment and Planning

The distribution system of the past will not serve the needs of the customers of the future. It is imperative for electric utilities to ensure that they are getting the most out of their existing assets and that they are making prudent investments in their future assets that will deliver maximum value to their customers and shareholders.

The objective of the Distribution Equipment and Planning is to provide guidance to utilities to assist with making informed asset management decisions through collaboration with other members and the pooling of resources to facilitate initiatives in areas beyond participants' current knowledge.

The mission of this group is to share current practices and processes regarding the management of distribution assets including the planning, purchasing, installing, commissioning, operating, maintaining, and disposal of assets. The goal of the program is to realize value from distribution assets by balancing costs, opportunities, and risks against the desired performance of assets to achieve near- and long-term utility objectives.

Topics & Issues

1. Improving Reliability of Distribution Equipment and Systems
2. Distribution Design
3. Maintenance and Assessment of Distribution Assets
4. Technology and Equipment Impacting the Grid
5. Improving Safety of the Distribution System
6. Environmental Sustainability
7. Advanced Metering Infrastructure

Technical Advisor



Mr. Shawn Otal, P.Eng., MBA, SM,IEEE has over 40 years of experience working in the electrical utility industry. His experience covers a broad range including planning, design, construction, operation, maintenance, mergers and acquisitions, research and development related to Transmission and Distribution (T&D) infrastructure assets. During the last 25 years of his career in the role of a consulting engineer, he has worked extensively on policy and strategy to improve the T&D infrastructure asset management and investment planning practices

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Collaborative Projects

Improving Reliability of Distribution Equipment and Systems

- Distribution Planners' Manual
- Outage Costs
- Distributed Automation and Load Shedding Functions
- Current Practices and Future Trends in Distribution System Hardening for Extreme Weather Events
- System-Wide Reliability Forecast Model
- Detection of Unintentional Islanding on Distribution Systems

Maintenance and Assessment of Distribution Assets

- Assessment/Test Methodology of In-Service Electrical Connectors for Overhead Lines
- Distribution System Health Indices
- Distribution Inspection and Maintenance Cycle Comparison of Utility Practices
- Inspection of In-Service Concrete and Steel Power Poles
- Assessment/Test Methodology of In-Service Pole Line Anchors
- Cable Rejuvenation Practices
- Translating the Health Index into Probability of Failure of Distribution Assets
- Validation of NDE Tools for Evaluating Present Condition, Residual Strength & Remaining Life of In-Service Wood Poles

Technology and Equipment Impacting the Distribution Grid

- Utility Guide to Forensic Root Cause Analysis of Distribution Failures
- Practical Roll-Out of Feeder Automation on the Distribution System
- Life Expectancy of Smart Grid Equipment
- Distribution Roadmap (Next 10 Years, Common Infrastructure, Case for Change)
- Investigation of Smart Inverters
- The Best Poles for Distribution Systems
- Bonding of Telecommunications Sheath/Messenger to the Power Neutral
- Arc Flash Utility Systems
- Worker Protection on De-Energized Underground System & Distribution Lines
- Firefighting Guidelines near Electrical Utility Structures

Annual Activities

- 2 Face-to-Face Meetings
- Workshops/Conferences
- Regular Conference Calls
- On-Demand Information Exchange
- Collaborative Project Development

*Participation is open to Electric Distribution Utilities.

