Temporary Protective Grounding for Utilities

8-Hour Course

OVERVIEW This 8-hour course provides a thorough knowledge of the regulations and standards with respect to grounding at utilities. Attendees gain an understanding of OSHA requirements as well as guiding principles from IEEE and ASTM. Electrical workers and safety professionals learn key practical information: best work practices in electrical safety and how to apply them in real-world situations.

REFERENCES *OSHA Regulations (as applicable), IEEE 1048, IEEE 1246, ASTM F855, ASTM F2249.*

MATERIALS *Temporary Protective Grounding Workbook (required), calculator or computer (recommended for calculations)*

1. OSHA Regulations – 1926.961 & 1910.269

- The de-energized condition
- Equipotential Zone (EPZ)
- Requirements of Grounding Equipment
- Electrical Current Limits on Human Body
- What "demonstrate" means
- How to perform calculations to "demonstrate" protection
- When calculations are not required

2. IEEE Guidance – 1048 & 1246

- Establishing Temporary Protective Grounding (TPG) Program
- Shock Hazards
- TPG Installation and Removal
- Testing Protective Grounds

3. **ASTM F855**

- Protective Grounds and Grade Ratings
- Determining System Requirements

4. ASTM F2249

- Routine testing and inspection of TPG Components

5. Electrically Safe Work Condition

- Grounding Rules
- Electrical Hazards
- Field Testing Requirements

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