



✓ **What is Arc Flash**

- ◆ Definition
- ◆ Reasons and overview of changes to NFPA 70E-2004
- ◆ Methods of reducing Arc Flash Potential

✓ **Flash Protection Boundary and Limits of Approach**

- ◆ Electric Shock Potential
 - Unintended Contact w/Electricity
 - Electric Shock and effects on the Human Body
 - Current Limit Tolerances
- ◆ Definition of Boundaries and Spaces
 - Flash Protection Boundary
 - Limited Space Boundary
 - Restricted Space Boundary
 - Prohibited Space Boundary
- ◆ Applying Boundaries and Spaces to Electrical Tasks
- ◆ OSHA/NEC distinctions between Qualified and Unqualified Persons
 - Applying the Approach Limits for Unqualified Persons
 - Applying the Approach Limits for Qualified Persons
- ◆ Energized Work Permits
 - Work Conditions Requiring Energized Work Permits
 - Exceptions to Required Energized Work Permits



John Waggoner



This workshop series will be conducted by **John H. Waggoner**, Director of Technical Training for TEGG Corporation. Mr. Waggoner has a broad experience in electrical preventive maintenance and power quality assurance.

He is skilled in the use of both Energized and De-energized test equipment. He is certified in numerous testing disciplines as well as energized safe work practices. He has maintained and installed solid state and rotary UPS systems. He has instructed electricians/technicians in preventive maintenance techniques, thermography, voltage disturbance testing, power conditioning, power and grounding, and in the conduct/analysis of harmonics interaction surveys. Mr. Waggoner has written about and lectured widely in these fields.



✓ **Personal Protection Equipment (PPE)**

- ◆ Protective Clothing
 - Rating Systems of Clothing
 - Burn Characteristics of Clothing
 - Flame Resistant vs. Flame Retardant
 - Clothing Care and Wear Characteristics
- ◆ Arc Flash Protection
 - Single Layer vs. Multi Layer
 - Protective Systems
 - Eye/Ear Protection
 - Gloves and Footwear

✓ **NFPA Methods of Selecting PPE**

- ◆ Hazard Classifications
- ◆ Simplified, 2 Category Response
- ◆ Arc Flash Hazards of Electrical Work Procedures
- ◆ Selection of PPE based upon Arc Flash Hazard Analysis

REDUCE YOUR LIABILITY