

# STANDBY GENERATORS

Date	Venues	(\$)Fees	Book your seat
18 Feb -22 Feb 2024	Cairo	2900	Register Now

### Course Overview

The course is intended to provide electric engineers with collective and recent knowledge about Standby Generators including: operation, maintenance, testing and protection. The information includes both theoretical and practical aspects and will be enhanced with computer software in appropriate sections.

## Course Objective

The course is intended to provide electric engineers with collective and recent knowledge about Standby Generators including: operation, maintenance, testing and protection. The information includes both theoretical and practical aspects and will be enhanced with computer software in appropriate sections.

### Who Should Attend?

Electric utility engineers in various departments deal with interconnected generators testing, protection, operation, stability and control. The course is also suitable for all engineers deal with emergency generators and local generation.

### Course Outline

- 1. GENERATORS AND PRIME MOVERS
- · Overview: Generator Purpose, Operation and Control
- · Types of Prime Movers
- Generator Basic Electrical Fundamentals
- Grounding Types and Construction
- · UPS System Fundamentals
- 2. PROTECTION AND TRANSFER OF ELECTRICAL POWER
- · Circuit Breakers
- Switchgear
- · Transfer Switches
- · Parallel Operation
- 3. GENERATORS AND ENGINE CONTROLS
- Governors
- · Voltage Regulators
- · Engine Protection
- Onsite Generator Controls including PLC's and SCADA Systems
- 4. AUXILIARY SYSTEMS
- Fuel Systems
- Cooling Systems
- · Exhaust Systems
- · Vibration Attenuation
- · Sound Attenuation
- · Engine Starting Systems
- · Load Banks

- · Emissions Control
- 5. GENERATOR APPLICATIONS GENERATOR APPLICATIONS
- Cogeneration
- Emergency Power Systems
- · Legally Required Standby Systems
- · Optional Standby Systems
- · Applicable Codes and Standards
- 6. TROUBLESHOOTING AND MAINTENANCE OF ONSITE POWER GENERATION SYSTEMS
- · Developing a Logical Systematic Approach to Troubleshooting
- · Common Generator Problems
- · Recommended Generator Maintenance Practices

# **Training Methodology**

- Presentation & Slides
- Audio Visual Aids
- Interactive Discussion
- · Participatory Exercise
- Action Learning
- Class Activities
- Case Studies
- Workshops
- Simulation

