

Course Overview:

Medium Voltage system will cover the maintenance and testing requirements for common substation devices, including power transformers, oil, air and vacuum circuit breakers, switchgear, ground grid systems, batteries, chargers and insulating liquids. This seminar focuses on what to do, when to do it and how to interpret the results from testing and maintenance.

Course Objective:

- Understand diagnostic testing and inspection, advanced fault detection techniques, critical components, and common failure modes
- Study selection criteria, commissioning requirements, predictive and preventive maintenance, reliability, testing and cost
- Discover the maintenance required to minimize their operating cost and maximize their efficiency, reliability and longevity

Course Outline:

- Power Generation. Off-site power generation.On-site power generation.
- Power Distribution.
- Transformers. Transformer operation.Transformer components.Operator responsibilities.
- Circuit Breakers. Circuit breaker operation.Resetting a tripped breaker.Racking out a breaker.
- Switches. Pushbutton switches.Rotatory switches.Safety with Electrical Equipment.
- Motor Fundamentals.
- AC Motor Fundamentals.
- AC Motor Parts and Functions. External parts.Internal parts.
- AC Motor Controllers. Motor controllers and motor control centers.Parts of a typical motor controller.Motor controller operation.
- AC Motor Startup and Operating Checks. General startup procedure.Operating checks.Shutdown.
- DC Motors and Motor Controllers. DC motors.DC motor controllers.

Who Should Attend:

- Electrical Engineers.
- Senior technicians
- Technicians who would like to who expand their knowledge of maintenance and operation

Training Language:

EN / AR

Training Methodology:

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