Safe operation and maintenance of switchgear (11 KV) Z ELC-08

Duration

Five days 30 Hours

Who should attend?

Apprentices electricians, journeyman electricians, Maintenance technicians, Plant engineers, supervisors and inspectors.

Language

Arabic , English

Overview

The main objective of this course focusing on the operation and maintenance of medium voltage panel's compartment (theory of operation, types, selection, protection, etc...) and focusing on the circuit breaker of medium voltage , how to test The Medium Voltage Training is an advanced level electrical course designed for individuals who are involved with medium voltage (11 KV) electrical distribution, substation, and utilization equipment found in industry. Electrical system protection is covered in detail including: fuse selection,protective relay applications for medium voltage

motors and radial feeders, protective relay, and system coordination considerations. The course is idea for individuals who are installing new, programmable electronic protective relays. There is also a strong emphasis on safety, electrical preventive maintenance testing, and preventive maintenance procedures that will reduce costly plant downtime

Topics

- Fuses (types-construction-operation- curves)
- Building distribution
- Single line diagram for medium voltage panels
- Medium voltage cubicle
- Function of Distribution panels
- Current transformers
- Types
- Tests
- Accuracy classes
- Technical data of C.T
- Potential transformers
- Accuracy classes
- Technical data of P.T

- Electrical arc
- Arc extinguishing methods
- Medium voltage circuit breakers
- Introduction
- Types (SF6-air – vacuum-oil)
- Basic parts of a circuit breakers
- Function of C.B
- Protective relays
- Fault indicator
- Fault sensing unit
- Fault display unit
- Installation recommended
- Theory of operation (American , Egyptian types)
- Experimental tests
- BUS bar and Insulator
- Cross section of B.B
- Types of B.B
- Insulation testing
- Earthing switches
- Methods of maintenance

Prerequisites :

Electrical Fundamentals Course or Equivalent Experience