Smart Protection, Measuring & Control Devices

TE275

Course Overview:

The continuity of Electrical Power Supply is very important to the consumers specially, for industrial sector where the curtail of electrical power supply is costly.It is important to take the necessary action to prevent the faults, and If they do occur, to minimize possible damage or possible power disruption. A smart protection system continuously monitors the power system to ensure maximum of electrical supply with minimum damage to life, equipment and property.

Course Objective:

-Knowing the fault reasons in electrical networks and Its effect on the electrical quantities.
-Reviewing the Grounding System of generation, Transmission and Distribution Networks and how it affects the electrical quantities, short circuit level and protection system.
-Understanding main concepts of protection equipment and its necessity in electrical System.
-How to make relay coordination for main and back-up protection relays on Ike network.
-How to protect the power system due to up normal operational conditions.

Course Outline:

-INTRODUCTION TO POWER SYSTEM RELAYING
-IMPORTANCE OF SMART PROTECTION
-POWER SYSTEM COMPONENTS
-MEASURING TRANSFORMERS
-PROTECTIVE RELAYS
-RELAY COORDINATION
-DIFFERENTIAL RELAYS
-IMPEDANCE RELAYS
-UNDER FREQUENCY PROTECTION
-OVER VOLTAGE PROTECTION

Who Should Attend:

This course is intended for Electrical Engineers &Supervisors, who work in operation, maintenance, protection, control and analysis of Utilities & Industries Electrical Networks.

Training Language:

EN / AR

Training Methodology:

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