Electrical Power Substations Safety & Fire Protection

TG136

Course Overview:

This program focuses on the basic safety principles and practices applicable to substations and switchyard maintenance work. The program describes electrical, chemical, and personal hazards that may be encountered in substations and switchyards. General procedures for responding to imminent dangers and accidents are also presented.

Course Objective:

-Identify Hazards in Electrical Power Substations.
-Explain why safety practices are important.
-Recognize hazards and unsafe practices on the job.
-Describe how to respond to imminent dangers and accidents.
-Have an early warning fire detection system
-Have an effective fire extinguishing system
-To detect and extinguish the fire

Course Outline:

Substations Engineering

-Types of Power Substations
-Determination and Planning Process
-Traditional and Innovative Power Substation Design
-Design, Construction, and Commissioning Process

Power Substation Safety

-Reasons for Substation Grounding System
-Accidental Ground Circuit: Importance of High-Speed Fault Clearing,
-Touch and Step Voltages, Soil Resistivity, Grid Resistance, Substation Fence grounding.
-Lightning Stroke Protection

Power Substation Fire Protection

-Fire Protection Objectives
-Fire Hazards
-Fire Mitigation Measures
-Fire Incident Management and Preparedness
-Control Building Fire Protection Assessment
-Switchyard Fire Protection Assessment Checklist

Who Should Attend:

-Electric utilities
-Electricians
-Apprentices
-Training & safety coordinators

Training Language:

Eng

Training Methodology:

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