SF6 Gas Insulated Substations (GIS)

TE317

Course Overview:

For difficult applications where space requirements become a problem in using conventional arrangement and for stations along the seacoast where trouble can occur because of salt contamination of the H.V. insulators, SF6 GIS are available. The volume reduction can be as much as 1/16 of the conventional type. A GIS results in the lower overall project cost GIS is the more economical solution.
GIS has all live parts contained in SF6 gas-light enclosures. The bus bars are physically arranged in trefoil formation largely to cancel out the resultant stray magnetic field and any associated enclosure eddy current losses.

Course Objective:

The proposed short course provides excellent practice for the engineers and technicians involved in the substation operation and maintenance. The course will also provide the engineers and technicians with best knowledge for the G.I.S. substation and its components, and will improve their skills.

Course Outline:

-Introduction to Sulfur Hexafluoride Gas (SF6)
-SF6 Substation Construction and Service Life
-SF6 Substation Components
-Circuit Breaker, Current Transformers, Voltage Transformers
-Disconnect Switches, Ground Switches, Interconnecting Bus
-Power Cable Connections
-Direct Transformer Connections
-Surge Arrester
-Control System
-SF6 Gas Monitor System
-SF6 Gas Compartments and Zones
-Electrical and Physical Arrangement
-Grounding
-Testing and Installation
-Operation and Interlocks
-Maintenance
-Economics of GIS

Who Should Attend:

All engineers and technicians involved in the power stations and substation operation and maintenance, and also in the factories, and enterprises.

Training Language:

Eng

Training Methodology:

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