

## **TAMCO High Voltage Switchgears**

### **DAY 1**

#### **The Role and Importance of the Medium & High Voltage Air Insulated and Gas Insulated Switchgears in Power Systems**

- Circuit Breakers, Ring Mains Unit and Earth Switches
- Switchgear Symbols on Single-line Diagrams
- Switchgear Selection
- Substation Switchgear Layouts
- Substation Arrangements
- Auto-reclosers
- Air Insulated Switchgear vs. Gas Insulated Switchgears
- Live Tank and Dead Tank HV Circuit Breakers

### **DAY 2**

#### **Sulphur HexaFlouride (SF<sub>6</sub>), Green Gas for Grid and Vacuum Circuit Breakers**

- Compression Principles
- SF<sub>6</sub> Hazards and Test Equipments
- Dead and Live Tank HV Circuit Breakers
- Operation Mechanisms of HV Circuit Breakers
- Vacuum Interrupters Operation and Maintenance
- Types of Vacuum Circuit Breaker Characteristics
- Other Applications and Installations of Vacuum Interrupters
- Vacuum Contactors

### **DAY 3**

#### **TAMCO High Voltage Switchgears Blueprint, Components, Operation and Maintenance**

- Air Insulated Switchgear
- Gas Insulated Switchgear
- Single and Double Busbar Switchgear
- TAMCO Switchgear Special Features
- Interpreting TAMCO Blueprint

- Ring Mains Unit
- Neutral Earth Resistors
- Container Sub-station

## **DAY 4**

### **Maintenance and Testing of TAMCO High Voltage Switchgears**

- Importance of Maintenance and Testing
- Maintenance Strategies
- Preventive and Condition-based Maintenance Services including Thermography
- TAMCO material lists and layout diagrams
- Documentation Requirements
- Maintenance Post-commissioning
- Typical Switchgear Temperature Alarms

## **DAY 5**

### **Protection and Types of Relay of High Voltage Installation Incorporating TAMCO Switchgears**

- Characteristics of Switching Devices
- Fault Currents
- Short Circuit Current Situation
- Protective Relay Types and Characteristics
- Busbar Arrangement Protection Schemes
- Numerical and Solid State Relays
- Differential Relays
- Wrap-up Session with Q&A