

## **Power System Blackouts Preventive Measures**

### **DAY 1**

#### **Blackouts, Instability, and Inrush**

- Introduction to Power System Blackouts
- Blackout concerns
- Causes of Blackout
- Instability and transient issues
- Inrush/Cold inrush concerns
- Voltage control and stability
- Inductive loads and reactive power issues

### **DAY 2**

#### **Power Analysis, Blackout Preventative Measures and Voltage Stability**

- Power system analysis
- Blackout preventative measures
- Blackout prevention - analysis of standards and compliance
- VAR Compensation
- Voltage stability

### **DAY 3**

#### **Power Restoration, Asset Concerns and Power Restoration Analysis**

- Power restoration
- Analysis of restoration techniques
- Power system protection issues – Protection relays
- Transformer issues – cold load
- issues with power restoration
- Different approaches to power system restoration

### **DAY 4**

#### **Power Restoration Techniques, Local Disturbances and Ongoing Blackout Training**

- Modern techniques in power restoration
- System requirements
- Decisions for restoration after a local power disturbance
- Training techniques to prepare for Blackouts
- Evaluating lessons learnt from Blackout simulations, modelling and training

## **DAY 5**

### **Power Restoration Techniques, Local Disturbances and Ongoing Blackout Training**

- Restoration of power policies
- Planning for power outages in large urban and urban locations
- Deployment of power Blackout planning
- Computers, automation and DCS control of power systems
- Local, specific and generic power system restoration techniques
- Support tools and interactive controls