

Course Overview:**Disturbances in Power Transmission System**

This Disturbances in Power Transmission System training seminar has been designed to provide a good understanding of power system concepts, theories, parameters, and the way such information is analyzed by means of equations, curves, diagrams, and tables.

Course Objective:

- Model a power system by means of system parameters
- Create different load flow scenarios through different switching regimes
- How to analyze and interpret the response of the power system to different scenarios
- How to modify the power system behaviour in an area by enhancing system parameters
- Create and analyze protection curves to achieve coordination between different bays

Course Outline:**Transmission System Design Considerations**

- AC Transmission
- Grid Network Features
- Transmission Security
- Building-up Impedance Models
- Complex Power Definitions
- Power Factor
- Power Factor Compensation (PFC) Techniques

Distribution System Design Considerations

- Typical Characteristics of An Industrial Distribution System
- Distribution System Types and Components
- Electrical Safety & Power Security
- Effects of major power disturbances on transmission systems and their solutions
- Distribution Configurations and Redundancy
- Analysis of system disturbances
- Distribution Expandability
- Distribution System Planning
- Electricity Demand & Future Growth

Power System Protection, Stability, and Switching**Who Should Attend:**

- Project Engineers / Managers
- Electrical Engineers / Technicians
- System Operators
- Design Engineers
- Asset Engineers / Managers
- Planning Engineers / Managers

Training Language:

Eng

Training Methodology:

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