

Course Overview:

The basic conception of risk-based security assessment for power system is presented, and we think that the method of risk-based security assessment has important significance for the security and stability operation of power system. By comparing risk-based security assessment with the traditional deterministic security assessment and reliability-based security assessment, it is demonstrated that risk-based security assessment is more effective for the actual operating status of power system and is the development direction of the stability operation and control of power system.

Course Objective:

Upon completion of the course, participant will get acquainted with a good understanding of the dynamic security assessment in power system. Get a deep knowledge of the concepts of the transient stability, voltage stability and analytical methods for evaluating them. The aim is to generate a basic although comprehensive knowledge of security assessment and control problems for potential attendees.

Course Outline:

- Introduction To Electrical Power Systems
- Substation Commissioning
- Substation Installations
- Substation Protection
- Economic Operation Of Electric Power Systems
- Stability Consideration
- Power System State Estimation
- Power System Security
- Security And Contingency Analysis
- Power System Voltage Stability Problem
- Understanding Power Quality
- Distributed Generation

Who Should Attend:

Engineers, Supervisors, Managers and Technical Management involved in designing, expansion planning and operating transmission systems in electric utilities.

Training Language:

EN / AR

Training Methodology:

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