

Course Overview:

Voltage stability has become a well-known concern in power system planning and operation. However, the fundamental mechanism of voltage collapse and its relationship to the power transfer capability of a network may not be quite clear to many utility engineers.

Course Objective:

The goal of this course is to enable attendees to gain a solid understanding of voltage stability. This knowledge will help them to make informed decisions for power system planning and operation.

Course Outline:

- Constraints to power transmission/distribution
- Basic modes of power transfer
- Constraints for power transfer
- Review on angular (generator) stability
- The concept of impedance matching
- Fundamentals of voltage stability
- Single-load to infinite-bus systems
- Effects of series and shunt compensation
- Impact of generator reactive limits
- Comparison of voltage and angular stabilities
- Voltage stability assessment
- Voltage stability margin and criteria
- System reinforcement process

Who Should Attend:

Utility technicians and engineers; technicians and engineers working in the areas of planning and operation.

Training Language:

Eng/Ar

Training Methodology:

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