Energy Consulting

Engineering Courses

Power System Dynamics

Training objectives:

Participants gain an understanding of fundamental practical concepts associated with power system dynamics. The knowledge acquired in this course provides the basis for analyzing the dynamic performance of power systems during transient events. This course increases the participants' understanding of a) power system dynamic phenomena associated with transient stability analyses b) the effect of different system components and interactions in power system dynamics; and c) power system representation for transient analyses. Participants have the opportunity to apply the concepts discussed in the lectures while working on several hands-on examples. The examples are designed to underline pertinent topics. For this purpose, GE's transient stability program, PSLF is used in class.

The course is intended for:

Engineers in the power industry involved in projects that require the assessment of power system dynamics and/or transient stability simulations.

Main features:

- Classification of power system stability
- Power system structure
- Power system components and their dynamic characteristics in transient stability simulations
- Generators, excitation systems, power system stabilizer
- Static and dynamic load models
- Wind turbine generators
- Illustrative examples are provided to highlight key concepts

Recommended prior knowledge:

Fundamentals of power system engineering.

Note: The course is held in English. Class subject to change. Class times are 8-4.

For more information visit: **www.geenergyconsulting.com**

Power Systems & Energy Course | PSEC