Introduction to power system dynamics

OBJECTIVE

Participants will acquire an understanding of power systems dynamics starting from basic stability concepts to modeling of power system equipment and running power system dynamics simulations. Considerations associated with modeling synchronous generators, excitation systems, prime-movers, loads, FACTS (SVCs and Statcoms) and Battery Energy Storage Systems will be discussed. This course will also provide the background for attendees to appreciate and understand how to run basic power system stability studies.

AUDIENCE

Electrical engineers who work at electric utilities and transmission system operating companies who are involved in the planning and/or operation of power transmission systems. Familiarity or experience with power flow analysis will be useful but not required.

CONTENT

- Introductory Stability Concepts
- The Transient Stability Problem
- The Damping Problem
- Performing Power System Stability Studies
- Synchronous Generator Modeling
- Excitation System Modeling
- Prime Mover System Modeling
- Load Modeling
- Modeling of SVCs, Statcoms and Battery Energy Storage Systems

LIVE ONLINE TRAINING
Duration: 20 hours
Dates:
April 24th – 28th or May 22th – 26th 2023
Price: 720 €
More information and registration here:
https://bit.ly/HitachiGridAcademy

Hitachi Energy