

# Power System Transient Stability Analysis with PowerWorld Simulator

August 19-20, 2010

Hosted by SCE&G

Presented by PowerWorld Corporation and SCE&G

## **August 19**

- 8:00 - 8:30 Model Relationships: Machine, Exciter, Governor, Stabilizer, Turbine Load Controller, Other
- 8:30 - 9:45 Input Data: Generator Models, Load Models, Model Explorer, interchange with DYD or DYR files, GENCC models
- 9:45 - 10:00 Break
- 10:00 - 11:30 Transient Stability Basics: Model Initialization, Initial Limit Violations, State Equations
- 11:30 - 12:00 Model Validation: Time Constants, Machine Parameters, Limits
- 12:00 - 1:00 Lunch
- 1:00 - 1:30 Contingency Definition
- 1:30 - 2:00 Result Storage: Results Available (Fields, Inputs, States, and Others); RAM and Disk; Result Options
- 2:00 - 2:30 Plot Definition
- 2:30 - 2:45 Break
- 2:45 - 3:30 Plot and Results Display: Plot Interaction, Max/Min Values, Time Values, Events
- 3:30 - 4:00 Transient Limit Monitors: Generic Limit Monitors, User-Defined Limit Monitors, Monitor Violations
- 4:00 - 4:30 SIMB Eigenvalues

## **August 20**

- 8:30 - 9:30 Wind Turbine Modeling
- 9:30 - 10:00 Large-Scale Simulation Examples
- 10:00 - 10:15 Break
- 10:15 - 12:00 Large-Scale Simulation Examples (continued)