



## MODULE 4

### MODELING AND DYNAMIC SIMULATION OF GRID-SCALE SOLAR PV AND BESS PLANTS IN PSS®E

#### Training Objectives:

Understanding the real-time dynamic behavior of the Solar and BESS plants is important to address the technical challenges such as grid interconnections, protections, stability, and power quality issues. The course is designed to expose the participants to the dynamic behavior of the inverters, their associated controls in PSSE, and as well as its applications. The focus shall be on executing a simulation model using generic PSSE dynamic model representation for an inverter & power plant controller in an equivalent transmission level connected Solar/ BESS plant.

#### Who Will Benefit?

- Employees of Central and State utilities
- Professionals working in the modeling, analysis, and system studies domain of the power & energy industry
- Graduate/Post-graduate students in Electrical/Electrical and Electronics Engineering willing to join the power system industry

#### Course Content:

- Introduction to PSSE dynamics
- Building a generic PSSE model representation
  - Modeling of generators
  - Modeling of the power plant controller
  - Modeling of load
- Dynamic Simulations for various disturbances
- Analysis and interpretation of dynamic behavior of the inverters
- Hands-on exercises on each sub-module

**Pre-Requisite:** Basics of Power Systems Module 0, 2

**Software:** Siemens PTI PSS®E

**Delivery Mode:** In-person-Physical classroom setting

**Certification:** Yes

**Course Duration:** 24 Hrs

**Course Fee:** INR 30,000 (For professionals)  
INR 15,000 (for students)



scan QR code

For more information visit  
<https://enerzinx.com/>

FOLLOW US



ENERZINX

*Analytics To Inform And Inspire*