EXTreme

ENERZINX Training in Renewable Energy Modeling & Engineering

MODULE 6

DC INJECTION, VOLTAGE FLICKER, AND HARMONIC ANALYSIS FOR RENEWABLE ENERGY PLANTS

Training Objectives:

Renewable energy sources such as PV and Wind are evolving as a reliable sources of green energy and their contribution to the global energy supply is increasing exponentially. However, the integration of renewable energy sources into the grid poses power quality challenges due to the intermittent nature of these sources and the extensive use of power electronic converters. The course is designed to expose the participants to power quality requirements for the integration of Solar and Wind plants into the grid. The applicable standards pertaining to DC injection, voltage flicker, and harmonics shall be introduced. The assessment of DC injection, voltage flicker, and harmonics at the point of interconnection using a test system would be performed in PSCAD, PSSE and ETAP software.

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 power quality
- Power quality requirements for Solar and Wind plants as per IEC/IEEE standards
  - DC injection
  - Voltage flicker (IEC 61000)
  - Harmonics (IEEE 519)
- Assessment of DC injection from Solar and Wind plant in PSCAD
- Assessment of Voltage Flicker from Solar and Wind plant in PSCAD
- Assessment of Harmonics from Solar and Wind plant in PSCAD, PSSE, and ETAP
- Hands-on exercises on each sub-module

Pre-Requisite:

- Basics of Power Systems and Power Quality
- Familiarity with PSCAD and ETAP software environment Module 2

Software: PSCAD, PSSE and ETAP

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