

Introduction to Wind Power Analysis

Objective:

The objective of the course is provide users of Powerfactory with the relevant knowledge to effectively analyse wind power generation integration into the electrical network. The course does NOT cover detailed modelling aspects of wind generators and their associated controllers.

Pre-requisites:

- **MUST have attended the Basic Version 14 course**
- A good working knowledge of the basic techniques used in PowerFactory.
- Own Laptop (NOTE: laptops can be supplied at an additional charge)

Software used: *PowerFactory* V14.0

No of participants: Minimum: 6; Maximum: 12.

Cost: see www.digsilent.co.za for latest course fees, which includes a set of course notes, lunch and refreshments. PowerFactory licences, pens and notepads are also supplied. Please note the booking clauses on the registration form.

Duration: 2 days

Topics to be covered:

- Theoretical background : History of wind power until now
- Loadflow analysis: wind farm impact studies
- Reactive power compensation
- Short Circuit analysis
- Power quality aspects
- Generation analysis and losses
- Overview of different generator technologies