

PSLF Training

PSLF Fundamentals and Mechanics of Steady-State Analysis

(5 day Class – 25 Training Hours)

Training objectives:

Students will create a small power system case from scratch and will run a mini-study on this sample study system using the GE PSLF Program while learning the basics of the program.

The course is intended for:

This class is intended for engineers.

Main features:

Setting Up PSLF

- Overview of the PSLF Program
- PSLF Directories and Organization
- PSLF Initialization
- PSLF Interface
- PSLF Parameters
- Location and availability of manuals
- Loading and saving a power flow case
- PSLF Support

Managing the Database

- Using Case information
- Accessing Data Tables (Grids)
- Filtering, Sorting Data
- Addition and Deletion of Records
- Editing Records via Table and Record editors
- The Autoscan feature and its uses
- Introduction to Draw

Getting Started with PSLF

- Review of the per unit system
- Modeling a bus
- Modeling a load including ZIP load modeling
- Modeling a generator, including regulation factors
- Modeling a transmission line
- Modeling a transformer
- Build and solve a case

Advanced Equipment Modeling

- Jumper connections
- Voltage control devices
 - LTC
 - Fixed and switched shunt
 - SVD
- Power plant reactive capability
- Power plant control modeling
- Node breaker model
- Renewable plant modeling

For more information visit: www.geenergyconsulting.com



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One Line Graphics

- Develop a drawing
 - Drag and Drop
 - Auto addition
- Other available features

Interpreting the Power Flow Solution

- Importance of power flow analysis
- Time frame of interest
- Import/export cases
- Identification /correction of convergence issues
- Base case data correction

Reports and Utilities

- Tabulated results
- How to generate reports
- Case differences
- Incremental difference tool
- Scaling load/generation
- Network equivalence
- Introduction to short circuit
- Introduction to dynamics

Recommended prior knowledge:

Background in power systems analysis, Bachelor's degree in electrical engineering or equivalent experience, Knowledge of a text editor such as Textpad, Familiarity with Microsoft®; Windows®.

Note: The course is held in English. Class subject to change. Class times are 9 am - 2 pm, Pacific time.

Program Automation with Scripts

- In built Editor or External
- EPCL -- a brief introduction
- Development of an EPCL Program
- Accessing and changing case data
- Python -- a very brief introduction

Contingency Analysis using SSTools/ProvisoHD

- Thermal analysis
- Voltage analysis
- Static voltage stability analysis
- Transfer limit analysis
- Using ProvisoHD

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