



PSLF Training

Geomagnetic Disturbances and Analysis in PSLF

(1 Day Class – 4 Training Hours)

The course is intended for:

This class is intended for engineers.

Course Outline:

1. Introduction to GMD phenomenon

- Solar storms
- Past GMD events
- Influence of soil conductivity and geomagnetic latitude on GICs
- DC voltage induction due to uniform and non-uniform E-fields
- GMD data requirements

2. GIC calculation and GIC impact on power system & equipment

- GIC calculation
- GIC impact on Power System and equipment such as transformers, generators, shunt banks and SVCs, protective devices
- Reactive power load in GIC-saturated transformers
- Concept of effective GIC
- Converting GICs into MVar and GIC load representation in power flow

3. Brief review of NERC standards - The NERC GMD benchmark and supplemental events

4. Mechanics of running GMD analysis in GE PSLF

- Simulation of NERC benchmark storm for a medium case
- Solving Power flow with GMD loads
- Evaluation of wide area system impacts in voltage and reactive power reserves
- GMD analysis via EPCL

Recommended prior knowledge:

Basic knowledge of PSLF package is essential. Experience performing dynamic simulation in PSLF Background in power systems analysis. Familiarity with Microsoft Windows®. Knowledge of an editor such as Textpad®.

Note: The course is held in English. Class subject to change. Class times are 8-noon, Pacific.

For more information visit: www.geenergyconsulting.com

Positive Sequence Load Flow Training | PSLF

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