SIEMENS

Siemens Power Academy TD

PSS®E – GIC Introduction and Workshop

PSSC 800 / 810

At a glance

PSS®E Versions 32.2 and 33.3 introduced a GIC module to analyze the effects of Geomagnetic Disturbances (GMDs) that occur when solar energetic particles from the sun migrate to the earth and cause short-term variations in the earth's magnetic field. These variations can eventually lead to Geomagnetically Induced Currents (GICs) and a potential increase in VAR losses and harmonic distortion that may lead to voltage stability problems.

The objective of the **PSSC 800** course is to provide participants with an introduction to the GIC module, the theory of GIC, how to operate and configure the module to run studies. **PSSC 810** is a hands-on workshop where the instructor will review and discuss the participants' actual models.

PSS®E GIC Introduction (Day 1) participants will:

- Understand the theory of GIC phenomena, characteristics, calculations and model
- Explore the PSS®E GIC data file
- Learn how to set up GIC data and configure settings in PSS®E
- Learn how to run a GIC simulation in PSS®E
- Understand how to access and interpret results and plots in PSS®E
- Review a sample study and the results obtained.

PSS®E GIC Workshop (Day 2) the instructor will:

- Review the participant's GIC data model
- Review the results obtained from the model
- Resolve any data errors
- Lead a question and answer session.

Upon completion of these courses, participants will have a fundamental understanding of GIC theory and be able to perform GIC studies on their own system to prepare for the next solar flare.

Prerequisites

Participants must be employees of a company that is a current lessee of PSS®E. Be an experienced PSS®E user with advanced knowledge of power systems. Participants must complete the **PSS®E GIC Introduction** course before taking the **PSS®E GIC Workshop**.

Course structure

PSSC 800 and **PSSC 810** can be taken sequentially or individually, i.e., the participant has a GIC model developed, attending the two days sequentially might be beneficial. However, if the participant requires time to develop their GIC model, taking the **PSS®E GIC Introduction** course first then taking the **PSS®E GIC Workshop** course at a later date, would extract the most value from the course.

Material is presented in both morning and afternoon sessions for a total of six hours of daily instruction. Standard course hours are 9:00 a.m. to 4:00 p.m. each day.

To view the PSSC 800 and PSSC 810 Course Schedule on the web:

https://siemens.coursewebs.com/siemens/pageCourseInfo.aspx?Course_ID=PSSC_800
https://siemens.coursewebs.com/siemens/pageCourseInfo.aspx?Course_ID=PSSC_810

usa.siemens.com/pti-education

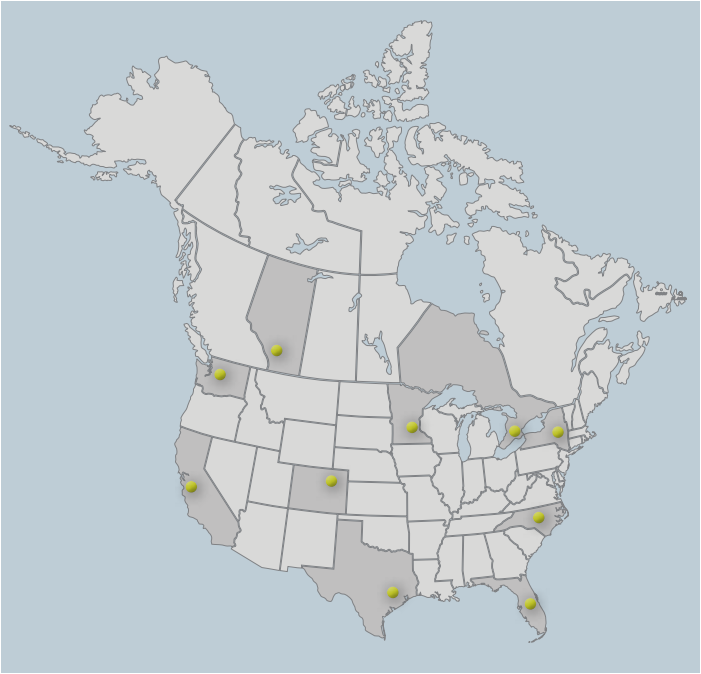
Instructors

All courses offered through Siemens Power Academy are developed and taught by leading industry engineers. In addition to their proven instructional ability, our engineers have advanced degrees complemented by first-hand knowledge and experience solving power system problems throughout the world.

Convenient training locations

The course is scheduled on a regular basis at Siemens offices located throughout North America, including:

- Burlington, Ontario, Canada
- Calgary, Alberta, Canada
- Houston, Texas, USA
- Littleton, Colorado, USA
- Minnetonka, Minnesota, USA
- Mountain View, California, USA
- Orlando, Florida, USA
- Schenectady, New York, USA
- Seattle, Washington, USA
- Wendell, North Carolina, USA



Continuing Education Units (CEUs), Professional Development Hours (PDHs):

Licensed engineers, on a voluntary or mandated basis, attend continuing professional education for licensure renewal to ensure competency. All courses offered through Siemens Power Academy meet the requirements for CEUs and PDHs.

- Continuing Education Units (CEUs) are the nationally recognized units for recording participation in professional development and noncredit educational programs. Participants completing this course will be awarded CEUs based on the instructional hours of the course: one CEU is awarded for 10 classroom hours of instruction.

- Professional Development Hours (PDHs) – Continuing education training for the Professional Engineer (PE) – that needs to earn annual Professional Development Hours (PDHs). Through our instructor-led training, participants earn one PDH for each one hour of instruction. The participant is responsible for maintaining records of courses taken in support of licensure.

Client site and custom training

All courses are available for presentation at any client's location by special arrangement. At client sites, it is recommended that sufficient computer terminals be available to enable a fully interactive and productive class, if applicable. Client site courses can also be tailored to address specific topics of local importance.

Contact us

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