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# PDEC 563

## Understanding System Losses for Utility Management

Siemens Power Academy TD - NA • [usa.siemens.com/pti-education](https://usa.siemens.com/pti-education)

### At a glance

The rapid and continual increase in the cost of both energy and capital, as well as the difficulty utilities are experiencing in interconnecting new generation, is causing utility management to assess the effects of system losses in both the operation and planning of electric systems. While most utilities are aware of the increasing significance of the value of the losses, pressure from regulating commissions has created an increased interest for them to both measure and reduce these losses.

In **PDEC 563 Understanding System Losses for Utility Management** participants will:

- Understand the nature of electric system losses and how these losses impact power system operation
- Learn how electric losses have a financial impact on consumers, network users and power companies

- Explore the concept of active and reactive power and how they relate to system frequency, voltage and losses
- Recognize the typical data required for loss calculations
- Understand methodology of loss calculations
- Determine losses in transmission, transformer, primary and secondary distribution losses and electric meters

Upon completion of this course, transmission and distribution planning engineers and rate design engineers from utilities and regulatory commissions will have a better understanding of the nature and characteristics of electric system losses.

### Prerequisites

The course presumes a general understanding of distribution system and cost analysis. It is beneficial to engineers or individuals involved in system planning, line design, equip-

ment specification, electric utilities financial/rate departments, and members of engineering, operations and construction departments.

### Course structure

This is a three-day 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 PDEC 563 Course Schedule on the web:

[https://siemens.coursewebs.com/cart/pageCourseInfo.aspx?Course\\_ID=PDEC\\_563](https://siemens.coursewebs.com/cart/pageCourseInfo.aspx?Course_ID=PDEC_563)

## 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.

## 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

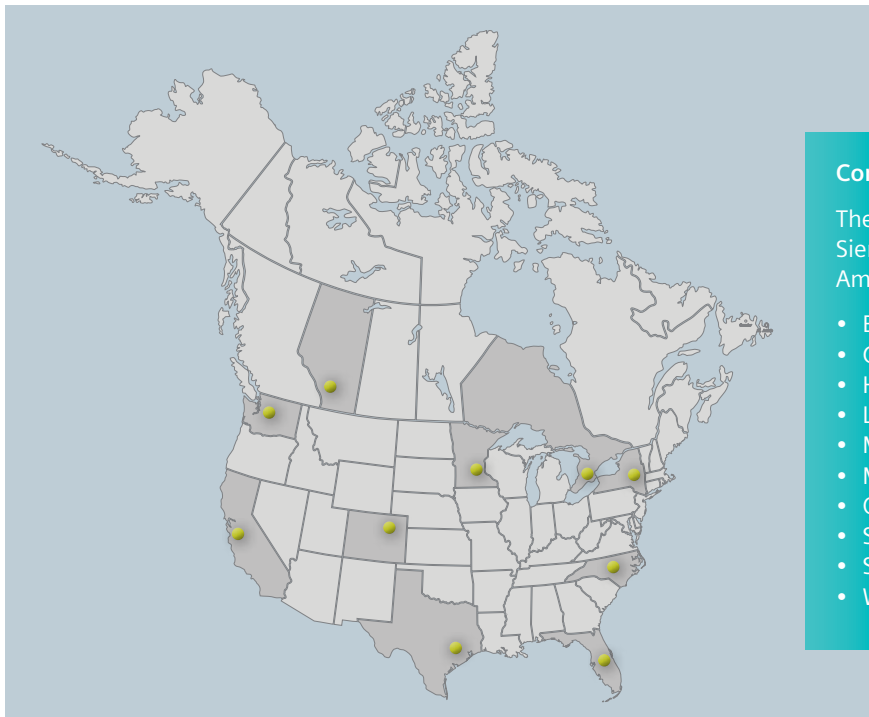
Power Academy meet the requirements for CEUs and PDHs.

- 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.



## 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

## Contact us

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