



Transmission Equipment



Background

This online course is delivered through [Spark! By OES-NA](#). The course is intended to provide an overview to the Bulk Electric System and the transmission facilities that exists. It is intended to provide students with the basics understanding of the components of the transmission system. Topics covered in this course include: power transformers, instrument transformers, transmission lines, circuit breakers and switches, bus configurations, reactive devices, and data communication and meters. Each lesson is culminated with a review and quiz. Upon completion of the lessons, there is a final assessment that consists of 10 multiple choice questions. Individuals must attain a passing grade of 70% on the final assessment in order to be awarded the NERC CEHs.

Course Level

Not Applicable

Target Audience

The course is intended for: new operators to the system that will have the responsibility of transmission equipment; generation operators who want to expand their knowledge of transmission equipment; individuals who desire additional information related to equipment on the Bulk Electric System; and those individuals trying to understand transmission equipment as part of NERC Certification Preparation.

NERC Continuing Education Hours

TOTAL: 1.5 CEHs

Standards: 0.0 CEHs

Ops Topics: 1.5 CEHs

Sim: 0.0 CEHS

NERC Emergency Training Requirement

1.5 hours of Emergency Training

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Course Content

The course steps through lessons related to various aspects related to equipment that is utilized on the Bulk Electric System. Each lesson identifies and explains the various aspects related the following content:

- Power transformers
- Instrument transformers
- Transmission lines
- Circuit breakers and switches
- Bus configurations
- Reactive devices
- Data communication and meters

Delivery Schedule

Since the course is delivered on an individual basis via the Internet, individuals have the ability to set their own pace and schedule for completion of the course. Registered students are provided with 6 months from the time of registration to complete the course.

Student Requirements

- Students must sign-in using their individual log-in and password to access the course.
- Students are required to provide their NERC SO Certification # and other applicable contact information during the course registration process.
- Students must complete all course material prior to attempting the final assessment.
- Students must successfully earn a 70% grade on the final activity assessment.
- Students must submit a course evaluation form. (Level of completion is not measured, but full completion is desired)

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