



## Background

This online course is delivered through [Spark! By OES-NA](#). The course is intended to address aspects related to restoration of the Bulk Electric System. It is intended to provide students with the basics of restoring the system following an event that caused a full or partial shutdown of the system. Topics covered in this course include: history of blackouts and their impacts on society, various types of blackouts, causes of blackout events, key elements for performing an assessment following a blackout, and possible issues encountered during a system restoration with regards to load and transmission restoration, in addition to frequency control. 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

This course is intended for: all Operating Personnel who are expected to participate in a restoration effort that includes Generation, Transmission, Distribution, and Support Roles, in addition to those individuals trying to understand restoration as part of NERC Certification Preparation.

## NERC Continuing Education Hours

**TOTAL:** 3.5 CEHs  
**Standards:** 0.0 CEHs  
**Ops Topics:** 3.5 CEHs  
**Sim:** 0.0 CEHs

## NERC Emergency Training Requirement

3.5 hours of Emergency Training

*Educating System Operators in the New Millennium!*



## Course Content

The course steps through lessons related to various aspects of restoration of the Bulk Electric System. Each lesson identifies and explains the various aspects related the following content:

- History of blackouts and their impacts on society
- Types of blackouts
- Causes of blackout events
- Key elements for assessing the system following a blackout
- Issues relating to system restoration with regards to load and transmission restoration and frequency control

## 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)

*Educating System Operators in the New Millennium!*