# Lessons Learned Series 1

## Background

This series of modules is used to help System Operators learn from the errors, mistakes and miscommunications that may transpire during the day-to-day operations.  These Lessons were reported by companies to help identify and correct problems that may be identified in all aspects of system operations. The contents of this module were derived from the North American Electric Reliability Corporations Event Analysis Reports.

The Lessons Learned that are reported or submitted to NERC are broken down into the following categories.

- Training and Personnel
- Transmission Facilities
- Relaying and Protection Systems
- Generation Facilities
- Communications
- Bulk-Power System Operations
- Procedural Controls
- Facilities, Design, Commission, and Maintenance

Each lesson learned module includes the following elements associated with the system event:

- Identifies the applicable NERC Functions
- Describes the Event
- Corrective Actions Taken
- Lessons Learned
- Thinking for the Future

## Course Level

Not Applicable

## Target Audience

The course is intended for System Operators and any personnel who wish to learn from the errors, mistakes and miscommunications that may transpire during the day-to-day operations within the bulk electric system. This course can also be utilized by individuals preparing to obtain a NERC System Operator Certification Credential, as well as, those seeking recertification.

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As of 4/2018

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## 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

## Course Content

The Lessons Learned Series 1 module covers the following lessons learned events:

- Backup Control Center Operation and Training
- Failover Configuration Leads to Loss of EMS
- Human Error Leads to Evacuation of Primary Control Room
- Severe Flooding Damages Transformer Substations
- Tie Line Relay Coordination

## 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, as applicable to the awarding of NERC CEHs.
- 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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