

# Human Error Prevention

Instructor-Led Training

Human Error Prevention is designed to help you learn to proactively anticipate and avoid human errors while developing a culture of reliability excellence.

In analysis of Bulk Power System events, NERC often identifies human error as one of the top five reasons events occur. During this class, students examine several NERC lessons learned involving human error to determine how to mitigate errors and develop a system to manage human behavior.

NERC promotes self-critical review and operation analysis to identify elements behind unwanted events. In this class, students learn insights into how to review and analyze elements in employees and systems to prevent errors, leading to a more reliable system.



**Human Error Prevention** class will teach you how to mitigate mistakes and develop a system for recognizing and managing human behavior

This class is divided into five segments to most effectively instruct attendees.

## SEGMENT 1 –

### Human Performance and Behavior

- Identify and discuss what human performance and behavior are and the differences between them
- Discuss the principles of human performance
- Look at factors that can impact human performance

## SEGMENT 2 –

### Human Error

- Discuss the definition of human error
- Investigate types of human errors and error precursors
- Review the Swiss Cheese Model and Anatomy of an Event models to understand how and why errors occur

## SEGMENT 3 –

### Human Error Terms and Definitions/Team Errors

- Consider the definitions of common terms associated with human error
- Weigh the potential dangers of increased dependency on equipment
- Identify potential errors that can occur while working as a team
- Create awareness of situations in which people are most susceptible to making errors

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## SEGMENT 4 –

### Common Traps and Mental Biases that Influence System Operators

- Discuss common traps of human nature that System Operators should know, to avoid making errors
- Investigate the different types of attention humans use as well as the limits on attention

### Simulation

- Use the PowerSimulator to analyze common traps of human nature as well as the mental biases and shortcuts that System Operators may be susceptible to during “System Restoration” scenarios

## SEGMENT 5 –

### The Environment and System

- Examine human error from a system-wide perspective
- Review the Domino Model which suggests that there is always a sequence of events that is important to note
- Consider the meaning and implications of both the Sharp End and Blunt End views and how the view used by your organization can impact System Operators
- Learn about the importance of helping to create a Just Culture within your organization to improve human performance

