Class Description

The Bulk Electric System (BES) is an extremely large, interconnected system comprised of multiple, expensive elements. Protecting this large system from failure is a complex task. This class is aimed at helping the System Operators gain an understanding of what goes into designing system protection, which relays are used, in what applications, and what actions may be required when a BES element fails.

Students will be challenged with hands-on simulation exercises for the operator to troubleshoot and determine the cause of a relay action utilizing realistic target information that the operator may receive from the field.

Class Topics

1. Basic theory of protection
2. Types of relays common to the BES
3. Application of the most common relays found on the BES
4. Simulation exercises will simulate various types of relation operations on transmission lines, transformers, busses, generators

Who Should Attend  This class is designed specifically for System Operators.

Skill Level  Intermediate-Advanced

Prerequisite  None

Instructor  Lynn Rasmussen  Grid Training Solutions

NERC CEH Credits

<table>
<thead>
<tr>
<th>Category</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operations</td>
<td>24</td>
</tr>
<tr>
<td>Standards</td>
<td>16</td>
</tr>
<tr>
<td>Simulation</td>
<td>16</td>
</tr>
<tr>
<td>Emergency Operations</td>
<td>16</td>
</tr>
</tbody>
</table>
Class Duration  3 days - Tuesday 8:00 a.m. - Thursday 5:00 p.m.

Manual  Participant Guide will be provided upon class check-in

Register Here  February 23-25, 2016
               October 18-20, 2016