

## Critical Electrical Operations

Understanding the operation, maintenance, troubleshooting, and application of facility electrical systems is instrumental in ensuring a safe and reliable operation. This class covers the safe operation of a facility electric plant to include recognition of specific hazards and safe switching. System design and layout are reviewed to gain a clear understanding of the system as a whole. UPS distribution and large frame circuit breaker operation and maintenance are reviewed in detail. Anyone responsible for the operation or maintenance of the electric plant should attend. Those needing to ensure a proper response to a substation emergency should also attend.

Course Duration: 16 hours

### **INTRODUCTION**

#### **SAFETY**

Hazards  
Protection

### **UPS SYSTEM DESIGN**

Configuration  
Equipment Overview

### **OPERATION**

By Pass UPS  
COD Board Operations  
Review Failure Scenarios  
Reset of RPP following loss

- Input Breaker Fails
- Output Breaker Fails
- PDU Fails

Review Existing MOPS  
Review paralleling generators,  
switchgear, and  
applicable Kirk key operation

### **SWITCHING**

Safety  
Procedures  
Equipment  
Emergencies

### **SYSTEM WALKTHROUGHS**

Course includes 8 hours of in plant  
walk-throughs

### **CONCLUSION**