Electrical Inspection
This five-day course covers the codes and standards of high-voltage electrical theory, rotating machinery, transformer testing and inspections, circuit breakers and relays, batteries, cable raceway inspections, and cable pulling and terminations.

I. Electrical Theory H.V.

II. Rotating Machinery
   · DC Motors
   · AC Motors
   · AC Controllers
   · DC Controllers
   · Motor Inspections
   · Motor Control Centers
   · Generators
   · DC Generators
   · AC Generators
   · Generator Cooling
   · Insulation Testing of Rotating Machinery

III. Transformer Testing and Inspection
   · Fundamentals
   · Connections and Polarity
   · Construction
   · Classification
   · Tap Changers
   · Accessories
   · Data
   · Testing and Inspection
   · Maintenance

IV. Circuit Breakers and Relays
   · Circuit Breakers
   · Maintenance Fundamentals

V. Batteries
   · Characteristics and Types
   · Components
   · Specific Gravity
   · Discharging and Charging
   · Chargers
   · Safety and Handling
   · Checklist

VI. Miscellaneous Electrical Equipment
   · Switches
   · Temperature Measurement
   · Valve Operators
   · Motor Operators
   · Setting MOV Limit Switches
   · MOV Torque Switches
   · Inspections for Limit and Torque Switches
   · Valve Stroke
   · MOVATS
   · Valve Controller
   · Indicating Devices
   · Recording Devices
VII. Cable Raceway Inspection
· Definitions
· Procedures and Standards
· Tray Types
· Construction Specifications
· Separation Criteria
· Inspection Checks for Trays
· Tray Cover Inspection
· Conduit Types and Materials
· Inspection Checks for Conduit
· Raceway Supports
· Inspection for Anchor Bolts

VIII. Cable Pulling and Termination
· Cable Pulling Standards
· Cable Definitions and Standards
· Tray and Conduit Fill
· Cable Reels and Cable Marking System
· Bend Radius, and Temperature
· Pulling Devices and Cable Attachments
· Conduit Types and Materials
· Pulling Aids and Personnel Positioning
· Installation Procedure and Calculation Factors
· Inspection Points During the Pull
· Inspection Points after the Pull
· Testing and Documenting
· Types of Terminations
· Pre-Terminating and Splicing
· Inspection Points
· Steps in the Termination Process
· Splices
· Tests

IX. Quality Assurance Programs
· QA Regulation and Standards
· 10 CFR 50, Appendix b
· ANSI/ASME Standards

Section X will be incorporated into each of the previous sections as applicable.

X. Electrical Equipment Installation
· State Requirements
· Codes Standards and Organizations
· Inspection Criteria
· Equipment Identification and Handling
· Grounding Requirements
· Equipment Installation Checks