Hands-On

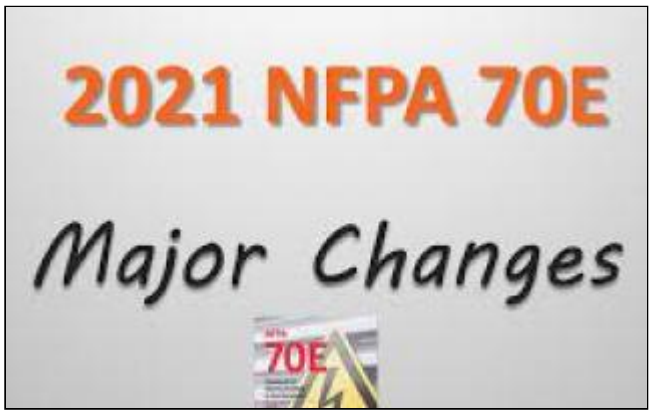
High Voltage Qualified Based on the NFPA 70E Standard

Course Description

Working on or above 600V to 69 kV industrial high voltage distribution systems requires qualification. In this training, attendees learn what it means to be HV qualified and what electrical tasks may only be performed by a qualified person.

Based on the 2018 / 2021 NFPA 70E, this course helps you and your employees stay compliant with OSHA regulations, and provides updates from the 2018 NFPA 70E to the 2021 version.

This course is current with the NFPA 70E Standard and OSHA Regulations (as applicable)



Students Will Learn

- **Regulations related to being HV Qualified and working safely, including OSHA 1910.269**
- **Safe practices working on or near energized equipment**
- **Live line work, tools and equipment**
- **Mobile equipment and electrical hazards**
- **De-energized testing**
- **Creating a safe work zone (tape in/tape out)**
- **Public safety (limited approach) boundaries**
- **Minimum approach distance**
- **When is it live-line work**
- **What tasks do not require a live-line permit**
- **Testing and verifying equipment is de-energized**
- **Why you must ground**
- **Field testing requirements**
- **Demonstrate your proficiency of HV skills for our engineer/linema**

Target Audience

Safety engineers, Supervisors, Electricians, Electrical and engineers

Prerequisites

Yes. Low Voltage Qualified Course (required), see our Low Voltage Qualified course Outline.

Course Outline

1. Regulations & Training

    Applicable Standards for Higher Voltages

2. High Voltage (HV) Hazards

    Overview

3. WorkPractices & Responsibilities

- Qualifications and Responsibilities
- Create Electrically Safe Work Environment
- Barricading Considerations
- Site-Specific Considerations
- Signage Requirements
- Considerations for Substations, Switchgear Facilities, etc.

4. HV Safety Equipment & Use

- - PPE
  - Live-Line Tools

- Insulating Equipment
- Testing for Absence of Nominal Voltage
- Protective Grounding

5. Rules & Policies for HV Safety

Definition: Working On, Working Near Energized Electrical Work Permit

Boundaries

Switching Order/LO/TO

HV Auxiliary Equipment

6. Mobile EquipmentHV Hazards

General Considerations

HV Hazards for Maintenance (OSHA 1910, Subpart S)

HV Hazards for Construction (OSHA 1926) Qualified HV Operations

7. Putting It All TogetherHV Exercises

Develop Work Plan

Identify Hazards and Safe Work Zone Determine Required PPE

Identify Procedures and Tools Needed Prepare/Present Pre-Work Briefing

Notes

Where in the NFPA 70E does it say that I need retraining every 3 years?

110.2 (A)(3) Retraining. Retraining in safety-related work practices and applicable changes in this standard shall be performed at intervals not to exceed 3 years. (NFPA 70E, 2018 / 2021)

Delivery Method

Instructor-Led with numerous exercises.

Equipment Requirements

(This apply's to our hands-on courses only)

BTS always provides equipment to have a very successful Hands-On course. BTS also encourages all attendees to bring their own equipment to the course. This will provide attendees the opportunity to incorporate their own gear into the labs and gain valuable training using their specific equipment.

Course Length

1 Day