

# NESC Clearances & Grounding for Power & Communications Utilities

DA1



Featuring new discussions, new handouts  
& new joint-use clearance exercises

April 12-15  
November 8-11, 2010  
Myrtle Beach, SC

Instructors: Allen L. Clapp, PE, and  
John B. Dagenhart, PE

Revised for  
2010

**3.5 Days — \$1495**

## Day 1

- ◆ Introduction
- ◆ Organization of the NESC
- ◆ Utility responsibilities
- ◆ **NEW:** How and when to use NESC "Grandfather Clause"
- ◆ Definitions and references
- ◆ Inspections
- ◆ Development of overhead clearances
- ◆ Structure location
- ◆ Vertical clearances above railroads, roadways, parking lots, driveways, farm areas, pedestrian areas, and water areas

## Day 2

- ◆ Conductor crossing clearances
- ◆ Clearances to other line structures
- ◆ Clearances to buildings, signs, tanks and other installations
- ◆ Bridge clearances
- ◆ Swimming pool clearances
- ◆ Clearances to grain bins, coal silos, etc.
- ◆ Conductor to conductor clearances
- ◆ Climbing space clearances
- ◆ Working space clearances
- ◆ Clearances of vertical and lateral conductors and cables

## Day 3

- ◆ Joint-use clearances
- ◆ **NEW:** How to determine correct joint-use cable position in the field to meet NESC design condition clearances
- ◆ **NEW:** Joint-use clearance exercises
- ◆ NESC and ANSI Z535 Safety Sign Requirements
- ◆ Guy insulation rules
- ◆ Supply stations clearances
- ◆ Overhead General
- ◆ Communication protection
- ◆ Underground installation clearances

## Day 4

- ◆ **NEW:** Redesigning pole top assemblies to increase both safety and efficiency
- ◆ Grounding requirements of Parts 1, 2, & 3

## About the seminar

The NESC® is the basis for your power and communication line construction standards and work procedures. Safe installations improve community relations and system reliability, while decreasing long-term costs. Your personnel need to understand how to correctly apply the National Electrical Safety Code in both usual and unusual situations, particularly on joint-use pole lines.

Attendees will work practical exercises in teams. Written answers are given for each question, including rule references. Additional exercises and answers are provided for later use by attendees.

## Who should attend

- ◆ design engineers
- ◆ staking technicians
- ◆ make-ready technicians
- ◆ inspectors
- ◆ standards developers
- ◆ line workers
- ◆ contractors
- ◆ claims investigators
- ◆ training personnel
- ◆ attorneys

## Important topics

- ◆ How to apply the NESC to power, telephone, CATV and railroad utility systems in practical situations
- ◆ How to properly use the NESC to develop clearances, grounding, and strength standards for new construction or check compliance of existing construction
- ◆ Responsibilities for meeting NESC requirements
- ◆ Rationale behind NESC requirements
- ◆ How to treat a situation not directly addressed by the NESC
- ◆ How to correctly determine clearances between power and communication facilities

## In addition, you receive

- ◆ 2007 National Electrical Safety Code
- ◆ NESC Handbook, 6th Edition
- ◆ Bound Student Workbook
- ◆ Excerpts from Practical Utility Safety
- ◆ Exercise/Answer sets
- ◆ CEUs and NC PDHs awarded upon successful completion of workshop
- ◆ Plus continental breakfasts, lunches, & refreshments

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Note: Adjourn @ 11:00am; plan flights for 1:30pm or later.

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