

Marne and Associates, Inc. Experts in Electrical Code

# NESC Rules for Joint Use Construction (2-Day)

(Presented In-House at your Utility/Association or Presented as a Live Web Seminar)



- Provides an overview of the joint use (power and communication) rules in each part of the NESC<sup>®</sup> (Day 2 exercises focus on looking up rules in the NESC<sup>®</sup> Codebook, so a copy of the Codebook is required.)
- Designed for:
  - Engineers
  - Staking Technicians
  - Power Lineworkers
  - Communication Lineworkers
  - Safety Personnel
  - Inspectors
  - Rich in graphics and practical applications

Conforms to the 2023 National Electrical Safety Code® (NESC®)

Marne and Associates, Inc. • Experts in Electrical Code 1465 Ryun Sun Way Bozeman, MT 59718 • (406) 544-8997 • www.marneassociates.com

# **NESC Rules for Joint Use Construction (2-Day)**

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### About the Seminar

**NESC Rules for Joint Use Construction** is a 2-day class focusing on the National Electrical Safety Code (NESC) rules that apply to joint use construction (power and communication). This class provides a general overview of each part of the NESC and applying the Code to day-to-day work will be stressed by focusing on practical NESC examples and applications. During this 2-day class you will learn:

- Scope and Purpose of the Code
- ♦ Joint Use Overhead Line Rules
- Joint Use Underground Line Rules
- ♦ Joint Use Work Rules

### Who Should Attend

- ♦ Engineers
- Staking Technicians
- Power Lineworkers
- Communication Lineworkers
- Safety Personnel
- ♦ Inspectors

Prior working knowledge of the NESC is not required

### Benefits of Marne and Associates In-House Training

- Save on travel time and out-ofoffice expenses.
- Entire departments can be trained together.
- The presentation can be designed to meet the needs of your organization.
- Training schedule can be modified to meet your needs.

### Trademarks

National Electrical Safety Code<sup>®</sup> and NESC<sup>®</sup> are registered trademarks of the Institute of Electrical and Electronics Engineers (IEEE). OSHA (Occupational Safety & Health Administration) is a branch of the U.S. Department of Labor.

### **Course Objectives**

Upon successful completion of this course the learner will be able to:

- 1. Understand the organization, scope, purpose, and general application of the National Electrical Safety Code.
- 2. Apply the Code to common situations found on overhead and underground lines with joint use (power and communication) construction.
- 3. Recognize how the Code is integrated into design and construction standards and operating practices.
- Identify and take action to correct Code violations and safety hazards related to joint use construction.
- 5. Design and build facilities that comply with Code requirements.
- 6. Understand the actions needed to work safely.
- During the 2nd Day, interact with class attendees and understand how to independently find rules in the Codebook.
- During the 2nd Day, participate in code discussions and apply the rules in the Codebook to actual field construction situations.

### **Class Format/ Learning Methods**

- Presented in person or live via the web
- Lecture format
- Real time Q & A
- Presentation slides rich in graphics and practical applications
- Ample time for questions and class discussion
- Exercises consisting of looking up Code Rules and applying the Rules to field construction

### **Continuing Education Units**

This course provides 1.2 Continuing Education Units (CEUs) or 12 Professional Development Hours (PDHs). This class has not been registered with any State Licensing or Education Board.

### **About the Instructor**

**David J. Marne, P.E.**, is a registered professional electrical engineer. Mr. Marne is the author of *McGraw-Hill's National Electrical Safety Code*<sup>®</sup> (*NESC*<sup>®</sup>) 2023 Handbook and is a nationally recognized speaker on the NESC.

He serves on NESC Subcommittee 4 Overhead Lines Clearances, Subcommittee 7 Underground Lines, and the Interpretations Subcommittee. He is company president and senior electrical engineer for Marne and Associates, Inc. in Missoula, MT where he specializes in National Electrical Safety Code (NESC) training, OSHA training for power and communication workers, engineering design training, and expert witness services related to the NESC, the OSHA Standards for Power and Communication workers, and California's General Orders GO95, GO128, and GO165.

Mr. Marne has over 35 years of experience in the utility industry engineering and managing transmission and distribution line projects, substation projects, electrical system planning studies, joint use (power and communication) projects, and providing training and expert witness services.



David J. Marne, P.E.

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### **Class Schedule - Day 1**

8:00 a.m. Registration begins 8:30 a.m. Welcome 8:45 a.m. General Overview of NESC Joint

Use Construction

- Identifying power and communications lines and equipment
- Common power and communication terms
- Introduction to the NESC
- Definitions and references
- ♦ Ground methods

### 10:15 a.m. Break

### 10:30 a.m.

## NESC Joint Use Overhead Clearance Rules

- Introduction to clearances
- Joint use overhead clearances
  - Clearance of structures
  - Clearance above ground

### 12 Noon Lunch

### 1:00 p.m.

### NESC Joint Use Overhead Clearance Rules

- Joint use overhead clearances
  - Clearance of power to communication at attachment and at midspan

#### NESC Joint Use Overhead Strength Rules

- Pole strength issues
- ♦ Joint use strength requirements
- 2:30 p.m. Break

### 2:45 p.m.

### **NESC** Joint Use Underground Rules

- Joint use underground requirements
  - Conduit systems
  - Direct buried systems

### 2:45 p.m.

### NESC Joint Use Work Rules

- General overview of work rules
- Power and communications employee work rules
- Communications employee work rules on joint use poles

### Wrap Up

Questions4:15 p.m. Adjourn

### Class Schedule - Day 2

8:30 a.m. Welcome
8:45 a.m.
Q&A and Practical Applications
Joint Use Overhead Lines
10:15 a.m. Break
10:30 a.m.

**Q&A and Practical Applications** 

♦ Joint Use Overhead Lines
 12 Noon Lunch

1:00 p.m.

Q&A Practical Applications

♦ Joint Use Overhead Lines

### 2:30 p.m. Break

2:45 p.m.

- Q&A Applications
  - ♦ Joint Use Underground Lines
- ♦ Joint Use Work Rules
- 4:15 p.m. Adjourn
- **OPTION:** This class can be presented as six 90-Minute Live Web Seminars (1.5-Day) or eight 90-Minute Live Web Seminars (2-Day).

### Enrollment/Pricing/ Cancellation

- Please contact us for a quote to have this class presented as a live web seminar or in person at your utility or association.
- Our live **Webinar** is typically economical on a per person basis when there are approximately 10 or more individuals to train.
- ♦ Our In-House presentations are typically economical on a per person basis when the utility or association has 15 or more individuals to train. For inhouse training, the utility or association provides the conference room and any desired meals and beverages for the attendees.
- Class cancellations can be made by contacting Marne and Associates, Inc. at any time prior to the presentation date. No payment is due until the class is completed.



## **Class Materials**

- Attendees will receive a hard copy or pdf copy of the class presentation slides. The presentation materials are copyrighted by Marne and Associates, Inc. with permissions from the McGraw-Hill companies, Inc. Class materials are reserved for class attendees only and may not be duplicated.
- For Day 1, attendees are encouraged (but not required) to bring a copy of the NESC Codebook and McGraw-Hill's NESC Handbook.
- For Day 2 of the class, attendees are required to have a copy of the 2023 NESC Codebook for class exercises.
- Books are available for purchase on <u>www.marneassociates.com.</u>



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