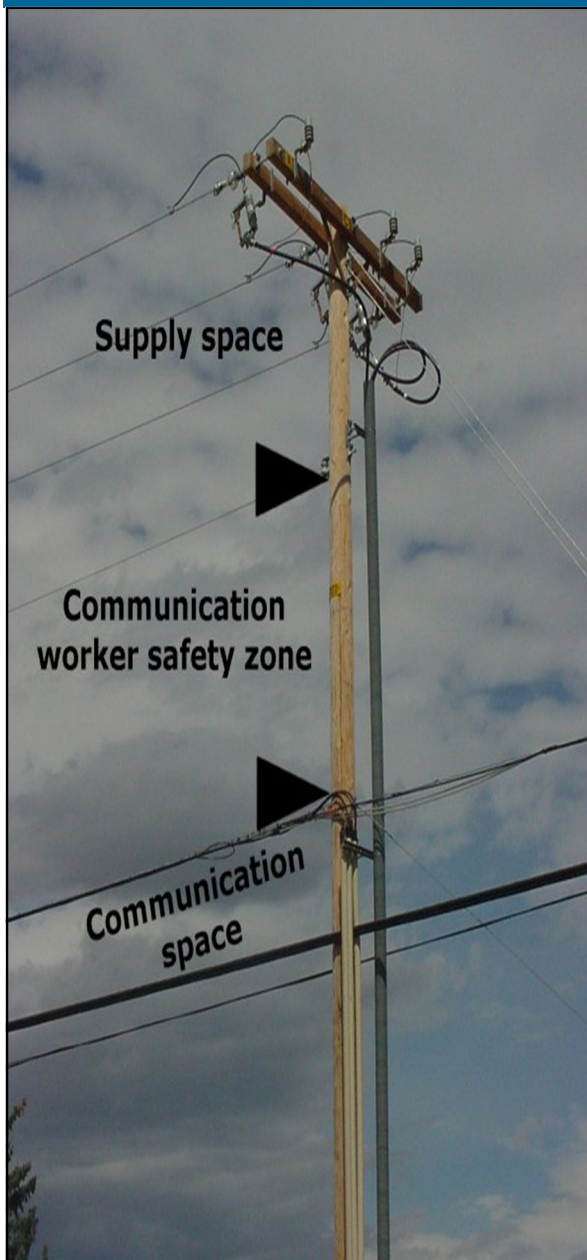




Marne and Associates, Inc.
Experts in Electrical Code

NESC Rules for Joint Use Construction (2-Day)

(Presented In-House at your Utility/Association)



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

Conforms to the
2017 National Electrical Safety Code® (NESC®)

NESC Rules for Joint Use Construction (2-Day)

(Presented In-House at your Utility/Association)

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 Linemen
- ◆ Communications Linemen
- ◆ Safety Personnel
- ◆ Inspectors
- ◆ Prior working knowledge of the NESC is not required

Benefits of a Marne and Associates in-house training

- ◆ Save on travel time and out-of-office 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® and NESC® 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.
4. 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.
7. During the 2nd Day, interact with class attendees and understand how to independently find rules in the Codebook.
8. 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 live
- ◆ 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). Please note that the CEU/PDH for this class have been approved by New York State* and the State of Alaska.

*For any course where multiple versions of the course are taken within the same three-year license registration period, NYS will recognize only one course.

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® (NESC®) 2017 Handbook* and is a nationally recognized speaker on the NESC.

He serves on NESC Subcommittee 4 Overhead Lines Clearances, Subcommittee 7 Underground Lines, Subcommittee 3 Electric Supply Stations, 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 30 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.

NESC Rules for Joint Use Construction (2-Day)

(Presented In-House at your Utility/Association)

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 mid-span

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

- ◆ Questions

4:15 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

Enrollment/Pricing/Cancellation

- ◆ Please contact us for a quote to have this class presented at your utility or association.
- ◆ 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 in-house 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.

Comments by Past Participants...

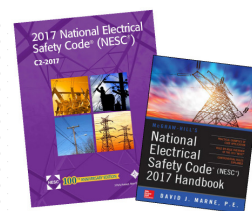
“Good for people new to the NESC.”

“Great seminar! Learned a ton of new information.”

“Dave is a very good presenter. He took the time to address the things we deal with regularly.”

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 2017 NESC Codebook for class exercises.
- ◆ Books are available for purchase on www.codehandbook.com.



Marne and Associates, Inc. · Experts in Electrical Code

619 S.W. Higgins Ave, Suite C Missoula, MT 59803 · (406) 544-8997 · www.marneassociates.com