

Agenda

Presented by John Staires

Article 90 – Use and Application of the NEC

New marking requirements for the 2017 NEC

Chapter 1: General

New and amended definitions Requirements for electrical installations
Reconditioned equipment, identification and traceability
Limited access working space requirements

Chapter 2: Wiring and Protection

Grounded conductors Branch circuit, feeder and service calculations
Dwelling GFCI protection Non-dwelling GFCI protection
AFCI protection Overcurrent protection
Service requirements

Grounding and Bonding

Grounding of services Grounding of separately-derived systems
Grounding electrodes Sizing of grounding electrode conductors

Chapter 3: Wiring Methods and Materials

Underground installations Conductors for general wiring
Single-phase dwelling services and feeders
Securing and supporting raceways and cables
Dissimilar metals

Chapter 4: Equipment for General Use

Flexible cords and cables Receptacles
Tamper-resistant receptacle requirements
Switchboards and panelboards Generators
Luminaires, appliances, transformers and motors
New Article 425: Fixed Industrial Process Heating

Chapter 5: Special Occupancies

Hazardous (classified) locations
Commercial garages Fuel dispensers
Health care facility requirements RV parks
Marinas and boatyards

Chapter 6: Special Equipment

Industrial machinery Fire pumps
Pools and spas PV systems
New Article 691: Large-Scale PV Electric Power Production

Chapter 7: Special Conditions

Emergency systems Class 1, 2, and 3 remote control and signaling circuits
Fire alarms New Article 710: Stand-Alone systems
New Article 712: Direct-Current Microgrids

Preview of Potential Changes to the 2020 NEC

National Electrical Code 2017

North Little Rock, AR - Friday, October 26, 2018

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Learning Objectives

You'll be able to:

Review major changes in the National Electrical Code, including large-scale solar PV systems and electric storage systems.

Understand new GFCI protection for non-dwelling units.

Discuss the grounding of service entrances and separately-derived systems.

Examine regulations for flexible cords, cables, receptacles, switchboards and panel boards.

Apply required practices for emergency systems and fire alarm circuits.

Comply with requirements for hazardous locations, healthcare facilities, commercial garages and other special occupancies.



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Identify the major changes to the 2017 NEC

Examine requirements for wiring and protection

Learn about grounding and bonding

Explore special equipment and special occupancies

Discuss communications circuits, emergency systems and fire alarm circuits

Continuing Education Credits

Architects & Interior Designers

7.0 HSW CEHs
7.0 AIA HSW Learning Units

Professional Engineers

7.0 PDHs

International Code Council

.7 CEUs (Electrical)

Contractors

Non-Credit Continuing Ed.



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Faculty

John Staires *Chief Building Official at City of Glenpool, OK*

Mr. Staires has 28 years of experience as an electrical inspector and has served as the electrical inspections supervisor for the City of Tulsa since 2001. In this role he oversees all phases of electrical inspections, investigations, prosecutions, licensing issues and interpretation of electrical codes and standards. He serves as training coordinator for City of Tulsa Inspection Services and coordinates training for all inspectors pertaining to codes, standards and safety. Mr. Staires has earned the designations of Certified Electrical Code Official (CECO) and Certified Building Official (CBO) through the International Code Council (ICC). He is also certified through the ICC as a residential electrical inspector, general electric Inspector and electric plans examiner. Mr. Staires is chairman of the Electrical Exam Development Committee of the International Code Council and is a past president and former education director of the Oklahoma Chapter of the International Association of Electrical Inspectors (IAEI).

Seminar Information

Courtyard Little Rock North 4339 Warden Road North Little Rock, AR 72116 (501) 753-2000	Registration 8:00 - 8:30 am Morning Session 8:30 am - 12:30 pm	Lunch (On your own) 12:30 - 1:30 pm Afternoon Session 1:30 - 5:00 pm
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Tuition

\$279 for individual registration
\$259 for three or more simultaneous registrations.
Included with your registration: *Complementary continental breakfast and printed seminar manual.*

Receive a reduced tuition rate of \$101 by registering to be our on-site coordinator for the day. For availability and job description, please visit www.halfmoonseminars.org.

How to Register

- Visit us online at www.halfmoonseminars.org
- Mail-in or fax the attached form to 715-835-6066
- Call customer service at 715-835-5900

Cancellations: Cancel at least 48 hours before the start of the seminar (CDT), and receive a full tuition refund, minus a \$39 service charge for each registrant. Cancellations within 48 hours will receive a credit toward another seminar or the CD/manual package. You may also send another person to take your place.

Additional Learning

Webinar Series

Small Wind Energy Systems

- **Small Wind Energy System Components**
Thurs., Sept. 20, 2018, 11:00 AM - 1:00 PM CDT
- **Small Wind Energy Siting and Sizing**
Fri., Sept. 21, 2018, 11:00 AM - 1:00 PM CDT\

International Green Construction Code

- **Introduction to the International Green Construction Code (IgCC)**
Thurs., Sept. 20, 2018, 11:00 AM - 12:30 PM CDT
- **Chapters 4-5: Site Development and Material Use**
Thurs., Sept. 20, 2018, 1:00 - 2:30 PM CDT
- **Chapters 6-9: Energy, Water, Environmental Quality and Building Commissioning**
Fri., Sept. 21, 2018, 11:00 AM - 12:30 PM CDT
- **Chapters 10-11: Existing Buildings**
Fri., Sept. 21, 2018, 1:00 - 2:30 PM CDT

Slope Stabilization and Landslide Prevention

- **Analyzing the Stability of Slopes**
Tues., Sept. 25, 2018, 11:00 AM - 2:15 PM CDT
- **Slope Stabilization Methods**
Thurs., Sept. 27, 2018, 11:00 AM - 2:15 PM CDT

Stormwater Management Systems

- **Basics of Stormwater Regulations and Requirements, Including New EPA Regulations**
Thurs., Oct. 4, 2018, 11:00 AM - 12:00 PM CDT
- **Working with the Regulator**
Thurs., Oct. 4, 2018, 12:30 - 2:00 PM CDT
- **Site Planning and Choosing Best Management Practices**
Fri., Oct. 5, 2018, 11:00 AM - 12:00 PM CDT
- **Long-term Stormwater Management Practices**
Fri., Oct. 5, 2018, 12:30 - 2:00 PM CDT

For more information and other online learning opportunities visit:
www.halfmoonseminars.org/webinars/

Continuing Education Credit Information

This course is open to the public and offers 7.0 HSW continuing education hours to architects and registered interior designers and 7.0 PDHs to engineers in Arkansas. Educators and courses are not subject to preapproval in Arkansas.

This seminar is approved by the American Institute of Architects for 7.0 HSW Learning Units (Sponsor No. J885). Only full attendance can be reported to the AIA/CES.

Arkansas architects and engineers with continuing education requirements in other states will be able to apply the hours earned at this event, in most cases. Refer to specific state rules to determine eligibility, or contact HalfMoon Education for assistance.

The International Code Council has approved this event for .7 CEUs in the specialty area of Electrical.

This program offers a non-mandatory continuing education opportunity to building contractors. It has not been submitted for approval by any state building contractor licensing board for continuing education approval.

Attendance will be monitored, and attendance certificates will be available after the seminar for most individuals who complete the entire event. Attendance certificates not available at the seminar will be mailed to participants within fifteen business days.

Can’t Attend? Order the CD/Manual Package:

An audio recording of this seminar is available for \$289 (including shipping). Allow five weeks from the seminar date for delivery. Please refer to specific state licensing rules or certification requirements to determine if this learning method is eligible for continuing education credit.

Registration

National Electrical Code 2017
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How to Register	Registrant Information
Online: www.halfmoonseminars.org	Name: _____
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	Address: _____
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	Phone: _____
Fax: 715-835-6066	Additional Registrants:
	Name: _____
	Occupation: _____
	Email: _____
	Phone: _____
	Name: _____
	Occupation: _____
	Email: _____
	Phone: _____
Complete the entire form. Attach duplicates if necessary.	Email address is required for credit card receipt, program changes, and notification of upcoming seminars and products. Your email will not be sold or transferred.
	() I need special accommodations. Please contact me.

Tuition

() **I will be attending the live seminar.** Single Registrant - **\$279.00**. Three or more registrants from the same company registering at the same time - **\$259.00** each.

() **I am not attending.** Please send me the CD manual package for **\$289.00**. (S&H included. Please allow five weeks from seminar date for delivery)

Checks: Make payable to HalfMoon Education Inc.

Credit Card: *Mastercard, Visa, American Express, or Discover*

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