



THE WIRE

*Published by
The Electrical Clearing House of Louisville
Established: 1912*

102 Whirlaway Ct, Cox's Creek, KY 40013
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www.echlky.com

NOVEMBER 2024

The Presidents' Letter

Our October meeting was very well attended with around 50 people present. This is the second straight month attendance has been up! The presentation on significant changes to the 2023 National Electrical Code went over exceptionally well. The discussion and questions were some of the best we've had in recent years. We will continue this discussion on code changes for the both the November 11th and December 9th meetings.

As far as I know, the 2023 National Electrical Code is still on track to be adopted and go into effect on January 1, 2025. A letter went out from the Department of Housing, Building, and Construction dated September 4, 2024 stating that unless the administrative regulations are delayed or found deficient, mandatory enforcement of the 2023 NEC will begin January 1, 2025.

The letter also stated that NEC Sections 210.52(C), 230.67, and 314.27(C) are not mandatory until July 15, 2026. In addition, the requirement for GFCI protection for personnel for receptacles over 125-volt listed in the 2023 NEC Section 210.8(A) and the requirement for GFCI protection listed in 210.8(D) (8), (9), (10), and (11) is not mandatory until UL Standards 943 and 101 are revised. **Make sure you check with your respective electrical inspector before you do any installation covered by these sections!**

After July 2024, any license renewals for contractor, master, or electrician licenses will be for two years. With this next renewal, you will pay a fee for two years. When you renew again two years later, you will be required to have 12 hours of continuing education for each license that is being renewed and will pay a fee for two years. Call the department at (502) 573-2002 with any questions.

The Sponsorship Form is on the website. If you know of any company that may be interested in becoming a sponsor, please print off the form and give it out to any prospective sponsor. The cost for a company or organization to become a sponsor is \$100.

Marilyn has mailed out invoices for membership dues. We ask that all members pay their invoice in a timely manner. This will greatly help with the financial status of our organization. Also, Marilyn will have a sign-up sheet

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NOVEMBER 11, 2024 Code Program

**Sign-in 6:30 P.M. - Program at 7:00 P.M.
ELKS LODGE # 8 - 2824 KLONDIKE LN -**

The program for November will be a continuation of the October, Code Updates. The presentation will be directed by Steve Willinghurst and cover the Code Sections that will be enforced beginning on January 1, 2025. Steve will also go over the Code Articles that are being delayed. This presentation will be a review/comparison of each section of the Code updates from 2017 to present.

Feel free to participate by asking questions and voicing your concerns.

Bring a friend and enjoy the program.

Dennis Steier will also go over the Code Questions in the November 2024 Wire.

See you Monday Evening, November 11, 2024, at 6:30pm.

Stay Alert! Work Smart & Stay Informed!

LG&E NEWS

Off/ On Scheduling

The demand for off/ on's has continued to grow. The schedule for both, overhead and underground off/on's have consistently stayed at 4-6 weeks out. If you know early on in a project that an off/ on will be required, please plan ahead and reach out to the electric locator to get on the schedule. However, if an appointment changes or is no longer needed, please notify the locator as well so that crews aren't dispatched for no reason. At times, other time slots can be available but may require flexibility on the time. As always, discuss with the appropriate electric locator to see what options are available to you.

**Submitted by Joel McCauley
Team Leader Electric Design Svcs
LG&E and KU Energy LLC**

NOVEMBER Code Questions

1. Does a motor installed in a Class 2 Division 2 location need to be identified for that type of location? Where would you find this answer in the 2017 NEC?

Yes No

Section: _____

2. Are there restrictions on how the phase arrangements of an AC bus system? Where would you find this answer in the 2017 NEC?

Yes No

Section: _____

3. Can a Type EVT flexible cord be used in Class 1 Division 1 applications? Where would you find this answer in the 2017 NEC?

4. Yes No

Section: _____

4. What is the bender radius of a 6/3 with ground NMS cable? Where would you find this in the 2017 NEC?

Section: _____

5. How many amps is a number 16 THWN rated for in the 2014 NEC? Where would you find this answer in the 2017 NEC?

Section: _____

6. Where would you find any additional requirements for Bonding and Grounding for Panelboards in the 2017 NEC?

Section: _____

Code Corner

Article 210

With the adoption of the 2023 *NEC* in January by the State of Kentucky, I will be highlighting changes throughout this year's Wire. There was a revision to Section 210.8 that will have an effect in the kitchens in dwelling unit as well as some commercial applications.

Section 210.8(A)(6) Kitchens: This section has been revised and expanded to not just countertops anymore, all 125 volt through 250 volt will be GFCI protected receptacles. (The 250 volt requirement has been delayed in the adoption but will be added Later in the Code Cycle) This change means all receptacles in the kitchen of dwelling unit will require GFCI protection.

This change was made by CMP-2 and the reasoning for this change is that there have been 104 electrocutions that have taken place from 2011 to 2022 based on consumer protection agency data. Eighty-one percent of these were working on an appliance or other equipment, GFCI protection should be installed to protect the person(s) working with cord and plug equipment. The proximity of water isn't the only source of electrical danger. Most appliances and equipment contain a power supply and some sort of grounded frame. This combination allows for possible completion of a current route posing an electrical risk to the user.

When I do any training and people ask why we change the *NEC* every 3 years. My answer is that the electrical industry change so rapidly and if there may be a device that enhances the safety of an electrical installation it should be in the *NEC*.

90.1 Practical Safeguarding: The purpose of the *Code* is the practical safeguarding of person and property from hazards arising from the use of electricity That explains why CMP-2 made this revision in the 2023 *NEC*

Submitted by Dennis Steier

Top Three Code Violations Louisville Metro Inspections

NOVEMBER 2024

These violations are costing you time and money.

1. **NEC Article # 210.17 Electric Vehicle Branch Circuit**

An outlet(s) installed for the purpose of charging electric vehicles shall be supplied by a separate branch circuit. This circuit shall have no other outlets

2. **NEC Article # 210.64 ELECTRICAL Service Areas**

At least one 125-volt, single-phase, 15- or 20-ampere-rated receptacle outlet shall be installed within 15 m (50 ft.) of the electrical equipment.

Exception: The receptacle outlet shall not be required to be installed in one-and two-family dwellings.

3. **NEC Article # 210.52(A)(3) Floor Receptacles.**

Receptacle outlets in or on floors shall not be counted as part of the required number of receptacle outlets unless located within 450 mm (18 in.) of the wall.

You lose money when you are turned down on a project. It also cost you time, when you have to return to the job site to make the necessary changes to correct the violation, that too, cost you money. Time is money.

We hope this will help save you time and money on inspection fees by reviewing the articles and making sure you have not violated the code before calling for the initial inspection.

*Submitted by Arnold Hornback
Assistant Chief Electrical Inspector
Louisville Metro - Dept. of Codes and Regulations*

Presidents' Letter Cont'd

for people planning on attending the December 9th meeting. Local Union 369 and the National Electrical Contractors Association are sponsoring a dinner for our December meeting. We need members planning on attending the December 9th meeting to sign up so we can get a head count for dinner. Our next general membership meeting is scheduled for Monday November 11th at the Elks Lodge located at 2824 Klondike Lane. The meeting starts at 7:00 pm with sign-ins beginning at 6:30 pm. Hope to see you there.

Hope to see you there.

*As Always Stay Safe and Work Safe
Steve Willinghurst*

Purchase your 2023 Code Book

The 2023 Code was adopted and will be enforced beginning January 1, 2025. ECHL will be selling 2023 Code Books. Denise has secured a discount for ECHL Members, (see pricing listed below). If you would like one, call Denise at 491-5010, place your order, and pay for the book with a credit card and it will be ready for you at the next meeting, November 11, 2024. She will also have a few books the meeting for sale, but you need to write a check payable to CED for the cost. CED has a limited amount of code books available and this price is only while supplies last.

Regular 2023 Code Book \$117.00 (includes tax)
Hardback 2023 Code Book \$265.00 (includes tax)

You can only use a credit card if you call Denise at CED and pay in advance, and we will have the book at the meeting. If you want a book at the meeting, you will need to make a check payable to CED.

If you have any questions, please feel free to call Denise, 502-491-5010.

Dues Renewal - Cost Went up

It was brought to our attention that when ECHL Invoices went out in the September Wire, some of the invoices were incorrectly stating the amount of the dues at \$40.

We addressed the membership about our financial issues at a meeting earlier in the year. All members present voted to raise the dues to \$60.

If you mailed in \$40, you will receive an additional invoice for \$20, to bring your dues current. We apologize for the mistake.

Thank you for your understanding.

Catered Meal - December Meeting

IBEW is sponsoring a catered dinner for our paid members at our December 9th meeting. You need to put your name in the pot and sign-up, stating that you will attend so we can obtain a head court. Marilyn and Denise will have the form at the registration table. You need to come a bit early to sign in and fix your plate before the meeting begins. We will provide more details at the November meeting. Enjoy!

NEC: Air Conditioning and Refrigerating Equipment — Part 2

Requirements for the disconnecting means of HVACR hermetic motors

Art. 440, Part 2 provides the requirements for the disconnecting means of the hermetic motors used in HVAC and refrigeration equipment. These disconnects are often accessible to unqualified persons, especially in residential applications. Where that is the case, any enclosure or hinged cover that exposes live parts when open must require a tool to open or be capable of being locked [440.11].

Select the disconnect based on the nameplate rated-load current or branch-circuit selection current (whichever is greater) and the locked rotor current per 440.12(A)(1) and (2). In essence, the ampere rating must be at least 115% of the nameplate rated-load current or branch-circuit selection current (whichever is greater) and you must determine the equivalent horsepower to comply with 430.109.

If the disconnect for a hermetic motor-compressor also supplies other loads, it has what is called a combination load. Determine the ampere rating for the disconnect per 440.12(B)(1). Note that the rating must be at least 115% of the sum of all currents at the rated-load condition determined per 440.12(B)(2).

If the equipment is cord-connected, a separable connector or plug and receptacle can serve as the disconnect [440.13].

NEC: Air-Conditioning Cont'd

Where can you install this disconnect? It must be within sight and readily accessible from the equipment it supplies. This requirement is waived if several conditions are met: it's in a facility with written safety procedures, and if a plug and receptacle serve as the disconnecting means per 440.13.

If it can still meet the working space requirements of 110.26(A), it can be installed on or within the HVAC or refrigeration equipment [440.14]. However, you cannot locate it on panels that are designed to permit access to the equipment or where the disconnect would obscure the equipment nameplates [440.14].

When you mount the disconnect, take into consideration how it will be used and how the space around it will be used. This precludes, for example, mounting it with a single No. 10 screw to vinyl siding on a house because it should not move when operated. It also needs to be situated so a technician changing the starting capacitor won't smack his back on it. Make it readily accessible without putting it in the way. Mount it so the visual aesthetics are preserved. For example, rather than mount it at some random height, mount it at the same height as something else or mount it at some standard height such as 4 ft. But wait, Art. 440 does not require any of these things, so why do them? Because 110.12 applies to all electrical installations and requires you to install electrical equipment in a professional and skillful manner.

While the wording is, on its face, open to wide interpretation, it's also true that any qualified person understands the intended meaning due to training and experience. It's never good to see what you can get by with; it's always good to "sign" your work with solid workmanship.

Source: Internet Search—Article by [Mark Lamendola](#), EC&M - December 2022