SUBMISSION FOR PERMANENT RULE

1. Rule-Making Agency: NC Building Code Council

2. Rule citation & name (name not required for repeal):
2023 NC Electrical Code (230613 Item B-3)

3. Action:
☒ **ADOPTION** ☐ **AMENDMENT** ☐ **REPEAL** ☐ **READOPTION** ☐ **REPEAL through READOPTION**

4. Rule exempt from RRC review?
☐ **Yes. Cite authority:**
☒ **No**

5. Rule automatically subject to legislative review?
☐ **Yes. Cite authority:**
☒ **No**

6. Notice for Proposed Rule:

☒ **Notice Required**
Notice of Text published on: August 15, 2023 in NC Register, August 1, 2023 agency website
Link to Agency notice: https://www.ncosfm.gov/230912-notice1hearing
Hearing on: September 12, 2023
Adoption by Agency on: December 12, 2023
☐ **Notice not required under G.S.:**
Adoption by Agency on:

7. Rule establishes or increases a fee? (See G.S. 12-3.1)

☐ **Yes**
Agency submitted request for consultation on:
Consultation not required. Cite authority:

☒ **No**

8. Fiscal impact. Check all that apply.

☐ **This Rule was part of a combined analysis.**

☐ **State funds affected**
☐ **Local funds affected**
☒ **Substantial economic impact (≥$1,000,000)**
☒ **Approved by OSBM**
☐ **No fiscal note required**

9. REASON FOR ACTION

9A. What prompted this action? Check all that apply:

☒ **Agency**
☐ **Court order / cite:**
☐ **Federal statute / cite:**
☐ **Federal regulation / cite:**
☐ **Legislation enacted by the General Assembly**
Cite Session Law:
☐ **Petition for rule-making**
☐ **Other:**

9B. Explain: The NEC is amended and published every three years through a consensus process at the NFPA. The 2023 NEC is the latest published edition and represents national industry and life-safety updates. The newest edition provides the industry with a standard that regulates the newest equipment and technology in accordance with the most current practices. The NC Amendments represent changes proposed by the Ad-Hoc Committee that complement North Carolina construction methods.

Certain changes in the Code will both increase and decrease the cost of installation in various circumstances. This rule is anticipated to decrease and increase construction costs overall. This rule is anticipated to increase the cost of a dwelling by $80 or more. This rule is not expected to affect local and state funds. This rule is anticipated to a cause a substantial impact. A fiscal note has been prepared as is included with this submittal. For the NCBCC to adopt the proposed North Carolina amendments to the 2023 National Electrical Code to create the 2023 North Carolina Electrical Code and meet the requirements of NCGS Chapter 150B Administrative Procedures Act, the 2017 and 2020 NC Electrical Codes are required to be repealed. The NCBCC introduced a petition to repeal the 2017 and 2020 North Carolina Electrical Codes on 12/12/23. The effective date of these repeals is 1/1/25.

The delayed effective date of this Rule is January 1, 2025.
The Statutory authority for Rule-making is G. S. 143-136; 143-138.

SUBMISSION FOR PERMANENT RULE

10. Rulemaking Coordinator: David B. Rittlinger David B. Rittlinger Phone: (919)647-0008 E-Mail: david.rittlinger@ncdoi.gov Additional agency contact, if any: Phone: E-Mail:	11. Signature of Agency Head* or Rule-making Coordinator:  *If this function has been delegated (reassigned) pursuant to G.S. 143B-10(a), submit a copy of the delegation with this form. Typed Name: David B. Rittlinger Title: Interim NCDOI-OSFM Deputy Commissioner of Engineering and Chief Code Consultant

RRC AND OAH USE ONLY

Action taken:

- ☐ RRC extended period of review:
- ☐ RRC determined substantial changes:
- ☐ Withdrawn by agency
- ☐ Subject to Legislative Review
- ☐ Other:

Documents included:

1. Proposed North Carolina Amendments to the 2023 NEC to establish the 2023 North Carolina Electrical Code.*

   Free online access to the 2023 NEC (NFPA 70 National Electrical Code) can be found the link here: https://link.nfpa.org/free-access/publications/70/2023

   Underlined text indicates North Carolina proposed amendments to the 2023 NEC (NFPA 70 National Electrical Code) to establish the 2023 North Carolina Electrical Code.

   ~~Struckthrough~~ text indicates proposed deletions to the 2023 NEC (NFPA 70 National Electrical Code) to establish the 2023 North Carolina Electrical Code.

   *Of note, the Cover page, Contents, Committee Personnel and Index are not included as they do not contain permanent rule content. The permanent rule content is Article 90 through Chapter 9 of the 2023 NEC (NFPA 70 National Electrical Code) along with proposed North Carolina Amendments to establish the 2023 North Carolina Electrical Code.

2. Fiscal Note for the 2023 State Electrical Code.**

   **Pages 1 through 15 contain the fiscal note. Pages 16 through 20 contains the substantial changes between the 2020 North Carolina Electrical Code and the adopted 2023 North Carolina Electrical Code. Pages 21 through 26 contains the 2023 NEC Ad Hoc Committee Identification of Fiscal Change Significance from the 2020(2017 for one- & two-family dwellings) State Electrical Code to the Proposed 2023 State Electrical Code as well as a list of the Ad-Hoc Committee Members.

3. 8/14/23 OSBM approval of fiscal note correspondence (RE_Approval – 2023 Revisions to NC Electrical Code.

4. Appendix C Code Change Proposal North Carolina Building Code Council (231212 Item B-12) Repeal the 2017 NC Electrical Code and 2020 NC Electrical Code effective 1/1/2025 so the 2023 NC Electrical Code can be effective 1/1/2025.*** A link to the petition can be found here: https://www.ncosfm.gov/news/events/building-code-council-meeting-december-12-2023

   ***A Notice of Hearing for inclusion in the 1/16/24 NC Register was submitted by the agency on 12/19/23 to NC-OAH. This agency petition is scheduled to have an NCBCC public hearing on 3/18/24 and final adoption by the NCBBC on 3/19/24.

SUBMISSION FOR PERMANENT RULE

(see attached documents)

APPENDIX C
CODE CHANGE PROPOSAL
NORTH CAROLINA
BUILDING CODE COUNCIL

325North Salisbury Street, Room 5_44
Raleigh, North Carolina 27603
(919) 647-0009
carl.martin@ncdoi.gov

Petition for Rule Making Item Number _____

Granted by BCC _____ **Adopted by BCC** _____ **Approved by RRC** _____
Denied by BCC _____ **Disapproved by BCC** _____ **Objection by RRC** _____

PROPONENT: Kim Wooten PHONE: (704) 258 - 4150
REPRESENTING: BCC Electrical Adhoc Committee to Adopt the 2023 State Electrical Code
ADDRESS: 632 Whitt Town Raod
CITY: Roxboro STATE: NC ZIP: 27574
E-MAIL: aeriforo@gmail.com FAX: ( ) -

North Carolina State Building Code, Volume Electrical - Section All

CHECK ONE: [ ] Revise section to read as follows: [X] Delete section and substitute the following:
[ ] Add new section to read as follows: [ ] Delete section without substitution:

~~LINE THROUGH MATERIAL TO BE DELETED~~ UNDERLINE MATERIAL TO BE ADDED

Please type. Continue proposal or reason on plain paper attached to this form. See reverse side for instructions.

Will this proposal change the cost of construction? Decrease [x] Increase [x] No [ ]
Will this proposal increase to the cost of a dwelling by $80 or more? Yes [x] No [ ]
Will this proposal affect the Local or State funds? Local [ ] State [ ] No [x]
Will this proposal cause a substantial economic impact (≥$1,000,000)? Yes [x] No [ ]

- Non-Substantial – Provide an economic analysis including benefit/cost estimates.
- Substantial – The economic analysis must also include 2-alternatives, time value of money and risk analysis.
- Pursuant to §143-138(a1)(2) a cost-benefit analysis is required for all proposed amendments to the NC Energy Conservation Code. The Building Code Council shall also require same for the NC Residential Code, Chapter 11.

REASON:

The NEC is amended and published every three years through a consensus process at the NFPA. The 2023 NEC is the latest published edition and represents a national industry and life-safety updates. The newest edition provides the industry with a standard that regulates the newest equipment and technology in accordance with the most current practices. The NC Amendments represent changes proposed by the Adhoc Committee that complement North Carolina construction methods. Certain changes in the Code will both increase and decrease the cost of installation in various circumstances.

Signature Kim Wooten Date: 04/26/2023

Proposed North Carolina Amendments to 2023 NEC
Prepared by Electrical Adhoc Committee – April 28, 2023

Item 0: Retaining Existing NC Electrical Code Amendment, Article 10

Article 10 - ADMINISTRATIVE SECTION

10.1 TITLE

These Administrative Regulations along with the requirements included in the first printing of the 2023 Edition of the National Electrical Code (NFPA-70 - 2023) as adopted by the North Carolina Building Code Council on December 12, 2023, to be effective January 1, 2025, with the following amendments:

(1) 100
(2) 110.26(E)(2)(c)
(3) 210.8
(4) 210.8(A)
(5) 210.8(A)(5)
(6) 210.8(B)
(7) 210.8(F)
(8) 210.12(E)
(9) 210.52(B)(2)
(10) 230.71(B)
(11) 230.85
(12) 250.50
(13) 250.53(A)(2)
(14) 250.140
(15) 250.142(B)
(16) 300.3(B)
(17) Table 300.5
(18) 300.9
(19) 300.26
(20) 314.29
(21) 320.23(A)
(22) 334.15(C)
(23) 410.2
(24) 410.16(C)
(25) 517.26
(26) 551.71(F)(2)
(27) 555.10
(28) 680.1
(29) 680.4
(30) 680.21(D)
(31) 680.26(B)(2)
(32) 700.4(C)(2)
(33) 700.6
(34) 700.12(A)
(35) 701.6
(36) 701.12(A)

shall be known as the North Carolina Electrical Code, and may be cited as such or as the State Electrical Code; and will be referred to herein as “the code” or “this code”. Subsequent editions, printings, and Tentative Interim Amendments of the National Electrical Code issued by the NFPA shall not be applicable to the State Electrical Code unless officially adopted by the North Carolina Building Code Council.

10.2 SCOPE

Article 80 Administration and Enforcement of the code is hereby not adopted and does not apply for this code. For Scope and Exceptions to Applicability of Technical Codes, refer to the North Carolina Administrative Code and Policies.

10.3 PURPOSE

The purpose of the code is to provide minimum standards, provisions and requirements of safe and stable design, methods of construction and uses of materials in buildings or structures hereafter erected, constructed, enlarged, altered, repaired, moved, converted to other uses of demolished and to regulate the electrical systems, equipment, maintenance, use and occupancy of all buildings or structures. All regulations contained in this code have a reasonable and substantial connection with the public health, safety, morals, or general welfare, and their provisions shall be construed liberally to those ends.

10.4 ADMINISTRATION

For administrative regulations pertaining to inspection (rough-ins and finals), permits and Certificates of Electrical Compliance, see local ordinances and the North Carolina Administrative Code and Policies. When the provisions of other codes are determined to be contrary to the requirements of this code, this code shall prevail.

10.5 DEFINITION

Unless the context indicates otherwise, whenever the word "building" is used in this chapter, it shall be deemed to include the word "structure" and all installations such as plumbing systems, heating systems, cooling systems, electrical systems, elevators and other installations which are parts of, or permanently affixed to, the building or structure.

10.6 APPLICATION OF CODE TO EXISTING BUILDINGS

For requirements of existing structures, refer to the North Carolina Administrative Code and Policies.

10.7 SERVICE UTILITIES

10.7.1 Connection of Service Utilities – No person shall make connections from a utility, source of energy, fuel or power to any building or system which is regulated by the technical codes until approved by the Inspection Department and a Certificate of Compliance is issued (General Statute 143-143.2)

10.7.2 Authority to disconnect Service Utilities – The Inspection Department shall have the authority to require disconnecting a utility service to the building, structure or system regulated by the technical codes, in case of emergency or where necessary to eliminate an imminent hazard to life or property. The Inspection Department shall have the authority to disconnect a utility service when a building has been occupied prior to Certificate of Compliance or entry into the building for purposes of making inspections cannot be readily granted. The Inspection Department shall notify the serving utility, and whenever possible the owner or occupant of the building, structure or service system of the decision to disconnect prior to taking such action. If not notified prior to disconnecting, the owner or occupant shall be notified in writing within eight (8) working hours (General Statutes 143-143.2, 153A-365, 153A-366, 160A-425 and 160A-426).

10.8 TEMPORARY POWER

10.8.1 Scope. The provisions of this section apply to the utilization of portions of the wiring system within a building to facilitate construction.

10.8.2 Provisions for Temporary Power. The Code enforcement official shall give permission and issue a permit to energize the electrical service when the provisions of 10.8 and the following requirements have been met:

1) The service wiring and equipment, including the meter socket enclosure, shall be installed, the service wiring terminated, and the service equipment covers installed.

2) The portions of the electrical system that are to be energized shall be complete and physically protected.

3) The grounding electrode system shall be complete.

4) The grounding and the grounded conductors shall be terminated in the service equipment.

5) At least one receptacle outlet with ground fault circuit interrupter protection for personnel shall be installed with the circuit wiring terminated.

6) The applicable requirements of the North Carolina Electrical Code apply.

10.8.3 Uses Prohibited. In no case shall any portion of the permanent wiring be energized until the portions have been inspected and approved by an electrical Code Enforcement Official. Failure to comply with this section may result in disconnection of power or revocation of permit.

10.8.4 Application for Temporary Power. Application for temporary power shall be made by and in the name of the applicant. The application shall explicitly state the portions of the energized electrical system, mechanical system, or plumbing system for which application is made, its intended use and duration.

10.8.5 Security and Notification. The applicant shall maintain the energized electrical system or that portion of the building containing the energized electrical system in a secured and locked manner or under constant supervision to exclude unauthorized personnel. The applicant shall alert personnel working in the vicinity of the energized electrical system to its presence.

10.9 REQUIREMENTS OF OTHER STATE AGENCIES, OCCUPATIONAL LICENSING BOARDS, OR COMMISSIONS

The North Carolina State Building Codes do not include all additional requirements for buildings and structures that may be imposed by other State agencies, occupational licensing boards, and commissions. It shall be the responsibility of a permit holder, design professional, contractor, or occupational license holder to determine whether any additional requirements exist.

10.10 INSPECTIONS OF CABLE TIES FOR SECURING AND SUPPORTING OF WIRING METHODS.

The electrical inspector shall not require evidence that cable ties are listed and identified where used for securement and support of wiring methods allowed in Chapter 3 of this code. Nothing in this section prohibits an electrical inspector from requiring evidence that cable ties are listed for use in a plenum where applicable.

Item 1: Adding the definition of "Reliable Source of Power" in Article 100 which is the definition's section; (moving current amendment over to the new Code)

AMENDMENT 100

Amend NEC 2023, page 56:

Add new to Article without any deletions:

Reliable Source of Power. A source of power that possesses all of the following characteristics:

(1) The electric utility supplying the power has not conducted any intentional shutdowns longer than 10 continuous hours in the year prior to the plan submittal and is verified in writing by that electric utility.

(2) The source of power is not supplied by overhead conductors within 60 feet of the building(s) equipped with fire pump(s).

(3) Only the disconnect switches and overcurrent protection devices permitted in Article 695 and NFPA 20-2013 section 9.3.2 are installed in the normal source of power to the fire pump controller.

Item 2: Deleting subsection (c) of section 110.26(E)(2); (moving the current amendment over to the new Code)

AMENDMENT 110.26(E)(2)(c)

Amend NEC 2023, page 69:

(2) Outdoor. Outdoor installations shall comply with 110.26(E)(2)(a) through (E)(2)(c).

(a) *Installation Requirements.* Outdoor electrical equipment shall be the following:

(1) Installed in identified enclosures

(2) Protected from accidental contact by unauthorized personnel or by vehicular traffic

(3) Protected from accidental spillage or leakage from piping systems

(b) *Work Space.* The working clearance space shall include the zone described in 110.26(A). No architectural appurtenance or other equipment shall be located in this zone.

Exception: Structural overhangs or roof extensions shall be permitted in this zone.

(c) ~~*Dedicated Equipment Space.* The space equal to the width and depth of the equipment, and extending from grade to a height of 1.8 m (6 ft) above the equipment, shall be dedicated to the electrical installation. No piping or other equipment foreign to the electrical installation shall be located in this zone.~~

Exception: Structural overhangs or roof extensions shall be permitted in this zone.

Replace with:

(2) Outdoor. Outdoor installations shall comply with 110.26(E)(2)(a) through (c).

(a) *Installation Requirements.* Outdoor electrical equipment shall be the following:

(1) Installed in identified enclosures

(2) Protected from accidental contact by unauthorized personnel or by vehicular traffic

(3) Protected from accidental spillage or leakage from piping systems

(b) *Work Space.* The working clearance space shall include the zone described in 110.26(A). No architectural appurtenance or other equipment shall be located in this zone.

Exception: Structural overhangs or roof extensions shall be permitted in this zone.

(c) Deleted.

Exception: Structural overhangs or roof extensions shall be permitted in this zone.

Item 3: Retaining the language from 2017 NEC for section 210.8 and clarifying that cabinet doors shall not be considered doors or doorways when applying this section; (moving the intent of a current amendment over to the new Code)

AMENDMENT 210.8

Amend NEC 2023, page 80:

210.8 Ground-Fault Circuit-Interrupter Protection for Personnel. A listed Class A GFCI shall provide protection in accordance with 2120.8(A) through (F). The GFCI shall be installed in a readily accessible location.

Informational Note No. 1: See 215.9 for ground-fault circuit-interrupter protection for personnel on feeders.

For the purposes of this section, when determining the distance from receptacles the distance shall be measured as the shortest path the power supply cord of an appliance connected to the receptacle would follow without piercing a floor, wall, ceiling, or fixed barrier~~.~~

Replace with:

210.8 Ground-Fault Circuit-Interrupter Protection for Personnel. A listed Class A GFCI shall provide protection in accordance with 2120.8(A) through (F). The GFCI shall be installed in a readily accessible location.

Informational Note No. 1: See 215.9 for ground-fault circuit-interrupter protection for personnel on feeders.

For the purposes of this section, when determining the distance from receptacles the distance shall be measured as the shortest path the power supply cord of an appliance connected to the receptacle would follow without piercing a floor, wall, ceiling, or fixed barrier, or the shortest path without passing through a window, door or doorway, excluding cabinet doors.

Item 4: Adding GFCI receptacle Exception for sewer lift pumps for indoors and exterior; (moving the intent of a current amendment over to the new Code)

AMENDMENT 210.8(A) Exceptions

Amend NEC 2023, page 80:

(A) Dwelling Units. All 125-volt through 250-volt receptacles installed in the following locations and supplied by single-phase branch circuits rated 150 volts or less to ground shall have ground-fault circuit-interrupter protection for personnel.

Replace with:

(A) Dwelling Units. All 125-volt through 250-volt receptacles installed in the following locations and supplied by single-phase branch circuits rated 150 volts or less to ground shall have ground-fault circuit-interrupter protection for personnel.

Exception No. 5: A single outlet receptacle supplied by a dedicated branch circuit which is located and identified for specific use by a sewage lift pump.

Item 5: Retaining the language from 2017 NEC for section 210.8(A)(5); (moving the current amendment over to the new Code)

AMENDMENT 210.8(A)(5)

Amend NEC 2023, page 80:

(5) ~~Basements~~

Replace with:

(5) Unfinished portions or areas of the basement not intended as habitable rooms

Item 6: Adding GFCI receptacle Exception for sewer lift pumps to section 210.8(B) both indoors and exterior; (moving the intent of a current amendment over to the new Code)

AMENDMENT 210.8(B) Exceptions

Amend NEC 2023, page 81:

(B) Other Than Dwelling Units. All 125-volt through 250-volt receptacles supplied by single-phase branch circuits rated 150 volts or less to ground, 50 amperes or less, and all receptacles supplied by three-phase branch circuits rated 150 volts or less to ground, 100 amperes or less, installed in the following locations shall be provided with GFCI protection:

Replace with:

(B) Other Than Dwelling Units. All 125-volt through 250-volt receptacles supplied by single-phase branch circuits rated 150 volts or less to ground, 50 amperes or less, and all receptacles supplied by three-phase branch circuits rated 150 volts or less to ground, 100 amperes or less, installed in the following locations shall be provided with GFCI protection:

Exception No. 7: A single outlet receptacle supplied by a dedicated branch circuit which is located and identified for specific use by a sewage lift pump.

Item 7: Deleting requirements mandating well pump outlets be GFCI protected.

AMENDMENT 210.8(F) Exception

Amend NEC 2023, page 81:

(F) Outdoor Outlets. For dwellings, all outdoor outlets, other than those covered in 210.8(A), Exception No. 1, including outlets installed in the following locations, and supplied by single-phase branch circuits rated 150 volts or less to ground, 50 amperes or less, shall be provided with GFCI protection:

(1) Garages that have floors located at or below grade level

(2) Accessory buildings

(3) Boathouses

If equipment supplied by an outlet covered under the requirements of this section is replaced, the outlet shall be supplied with GFCI protection.

Replace with:

(F) Outdoor Outlets. For dwellings, all outdoor outlets, other than those covered in 210.8(A), Exception No. 1, including outlets installed in the following locations, and supplied by single-phase branch circuits rated 150 volts or less to ground, 50 amperes or less, shall be provided with GFCI protection:

(4) Garages that have floors located at or below grade level

(5) Accessory buildings

(6) Boathouses

If equipment supplied by an outlet covered under the requirements of this section is replaced, the outlet shall be supplied with GFCI protection.

Exception No. 3: GFCI protection shall not be required for submersible well pumps.

Item 8: Replacing the length of 1.8 m (6 ft) with 15.24 m (50 ft) in the Exception for section 210.12(D); (moving the intent of a current amendment over to the new Code)

AMENDMENT 210.12(E) Exception

Amend NEC 2023, page 83:

(E) Branch Circuit Wiring Extensions, Modifications, or Replacements. If the branch circuit wiring for any of the areas specified in 210.12 (B), (C), or (D) is modified, replaced, or extended, the branch circuit shall be protected by one of the following:

(1) By any of the means described in 210.12(A)(1) through (A)(6)
(2) A listed outlet branch-circuit-type AFCI located at the first receptacle outlet of the existing branch circuit

Exception: AFCI protection shall not be required where the extension of the existing branch circuit conductors is not more than ~~1.8 m (6 ft)~~ and does not include any additional outlets or devices, other than splicing devices. This measurement shall not include the conductors inside an enclosure, cabinet, or junction box.

Replace with:

(E) Branch Circuit Wiring Extensions, Modifications, or Replacements. If the branch circuit wiring for any of the areas specified in 210.12 (B), (C), or (D) is modified, replaced, or extended, the branch circuit shall be protected by one of the following:

(3) By any of the means described in 210.12(A)(1) through (A)(6)
(4) A listed outlet branch-circuit-type AFCI located at the first receptacle outlet of the existing branch circuit

Exception: AFCI protection shall not be required where the extension of the existing branch circuit conductors is not more than 15.24 m (50 ft) and does not include any additional outlets or devices, other than splicing devices. This measurement shall not include the conductors inside an enclosure, cabinet, or junction box.

Item 9: Adding an Exception to 210.52(B)(2) for allowing receptacles to be on the small-appliance circuit if with 1.8 m (6 ft) of the kitchen sink; (moving the current amendment over to the new Code)

AMENDMENT 210.52(B)(2) Exception

Amend NEC 2023, page 87:

(2) No Other Outlets. The two or more small-appliance branch circuits specified in 210.52(B)(1) shall have no other outlets.

Exception No. 1: A receptacle installed solely for the electrical supply to and support of an electric clock in any of the rooms specified in 210.52(B)(1) shall be permitted to be served by a small-appliance branch circuit.

Exception No. 2: Receptacles installed to provide power for supplemental equipment and lighting on gas-fired ranges, ovens, or counter mounted cooking units shall be permitted to be served by a small-appliance branch circuit.

Replace with:

(2) No Other Outlets. The two or more small-appliance branch circuits specified in 210.52(B)(1) shall have no other outlets.

Exception No. 1: A receptacle installed solely for the electrical supply to and support of an electric clock in any of the rooms specified in 210.52(B)(1) shall be permitted to be served by a small-appliance branch circuit.

Exception No. 2: Receptacles installed to provide power for supplemental equipment and lighting on gas-fired ranges, ovens, or counter mounted cooking units shall be permitted to be served by a small-appliance branch circuit.

Exception No. 3: Receptacles installed inside a dwelling and within 1.8 m (6 ft) of any kitchen sink measured by the shortest path the cord of an appliance connected to the receptacle would follow without piercing a floor, wall, ceiling, or fixed barrier shall be permitted to be served by a small-appliance branch circuit.

Item 10: Adding subsection (7) for allowing temporary services to use the 2017 NEC requirements of section 230.71(B); (moving the intent of a current amendment over to the new Code)

AMENDMENT 230.71(B)

Amend NEC 2023, page 112:

(B) Two to Six Service Disconnecting Means. Two to six service disconnects shall be permitted for each service by 230.2 or for each set of service-entrance conductors permitted by 230.40, Exception No. 1, 3, 4, or 5. The two to six service disconnecting means shall be permitted to consist of a combination of any of the following:

. . .

Replace with:

(B) Two to Six Service Disconnecting Means. Two to six service disconnects shall be permitted for each service by 230.2 or for each set of service-entrance conductors permitted by 230.40, Exception No. 1, 3, 4, or 5. The two to six service disconnecting means shall be permitted to consist of a combination of any of the following:

. . .

(7) Panelboards for temporary electrical service installations (saw service pole) at a construction site provided all the following:

a. ungrounded circuits do not exceed 150 volts to ground
b. the summation of the ratings of the overcurrent devices that serve together as the disconnecting means does not exceed 100 amperes
c. the number of circuit breaker handles, identified handle ties, or combination thereof that operate as the service disconnecting means does not exceed six operations of the hand

Item 11: Adding text that specifically recognize that meter/panel combos, service rated transfer switches, and main service panels meet the provisions of this section; (moving the intent of a current amendment over to the new Code)

AMENDMENT 230.85

Amend NEC 2023, page 114:

230.85 Emergency Disconnects. For one- and two-family dwelling units, an emergency disconnecting means shall be installed.

Replace with:

230.85 Emergency Disconnects. For one- and two-family dwelling units, an emergency disconnecting means shall be installed. Transfer switches and panelboards, including meter-panel combination enclosures, that include a main breaker or other listed means to disconnect all service conductors shall be considered emergency disconnects and shall comply with subsection (1) of this section when installed as a service disconnect.

Item 12: Replacing the word "present" with "available" in section 250.50; (moving the intent of a current amendment over to the new Code)

AMENDMENT 250.50

Amend NEC 2023, page 145:

250.50 Grounding Electrode System. All grounding electrodes as described in 250.52(A)(1) through (A)(7) that are ~~present~~ at each building or structure served shall be bonded together to form the grounding electrode system. If none of these grounding electrodes exist, one or more of the grounding electrodes specified in 250.52(A)(4) through (A)(8) shall be installed and used.

Exception: Concrete-encased electrodes of existing buildings or structures shall not be required to be part of the grounding electrode system if the rebar is not accessible for use without disturbing the concrete.

Replace with:

250.50 Grounding Electrode System. All grounding electrodes as described in 250.52(A)(1) through (A)(7) that are available at each building or structure served shall be bonded together to form the grounding electrode system. If none of these grounding electrodes exist, one or more of the grounding electrodes specified in 250.52(A)(4) through (A)(8) shall be installed and used.

Exception: Concrete-encased electrodes of existing buildings or structures shall not be required to be part of the grounding electrode system if the rebar is not accessible for use without disturbing the concrete.

Item 13: Adding Exception for a temporary service in section 250.53(A)(2); (moving the intent of a current amendment over to the new Code)

AMENDMENT 250.53(A)(2)

Amend NEC 2023, page 146:

(2) Supplemental Electrode Required. A single rod, pipe, or plate electrode shall be supplemented by an additional electrode of a type specified in 250.52(A)(2) through (A)(8). The supplemental electrode shall be permitted to be bonded to one of the following:

(1) Rod, pipe, or plate electrode
(2) Grounding electrode conductor
(3) Grounded service-entrance conductor
(4) Nonflexible grounded service raceway
(5) Any grounded service enclosure

~~*Exception:*~~ *If a single rod, pipe, or plate grounding electrode has a resistance to earth of 25 ohms or less, the supplemental electrode shall not be required.*

Replace with:

(2) Supplemental Electrode Required. A single rod, pipe, or plate electrode shall be supplemented by an additional electrode of a type specified in 250.52(A)(2) through (A)(8). The supplemental electrode shall be permitted to be bonded to one of the following:

(1) Rod, pipe, or plate electrode
(2) Grounding electrode conductor
(3) Grounded service-entrance conductor
(4) Nonflexible grounded service raceway
(5) Any grounded service enclosure

Exception No. 1: If a single rod, pipe, or plate grounding electrode has a resistance to earth of 25 ohms or less, the supplemental electrode shall not be required.

Exception No. 2: The supplemental ground electrode shall not be required at temporary electrical service installation (saw service pole) at a construction site provided all ungrounded circuits do not exceed 150 volts to ground, and the rating of the single disconnecting means or the summation of the ratings of multiple overcurrent devices that serve together as the disconnecting means, does not exceed 100 amperes.

Item 14: Adding a second Exception to section 250.140 and expanding the original Exception in subsection (3); (moving the intent of a current amendment over to the new Code)

AMENDMENT 250.140

Amend NEC 2023, page 160:

(B) Grounded Conductor Connections. For existing branch-circuit installations only, if an equipment grounding conductor is not present in the outlet or junction box the frame of the appliance shall be permitted to be connected to the grounded conductor if all the conditions in the following list items (1), (2), and (3) are met and the grounded conductor complies with either list item (4) or (5):

(1) The supply circuit is 120/240-volt, single-phase, 3-wire; or 208Y/120-volt derived from a 3-phase, 4-wire, wye-connected system.
(2) The grounded conductor is not smaller than 10 AWG copper or 8 AWG aluminum.
(3) Grounding contacts of receptacles furnished as part of the equipment are bonded to the equipment.
(4) ~~The grounded conductor is insulated, or the grounded conductor is uninsulated and part of a Type SE service-entrance cable and the branch circuit originates at the service equipment.~~
(5) The grounded conductor is part of a Type SE service-entrance cable that originates in equipment other than a service. The grounded conductor shall be insulated or field covered within the supply enclosure with listed insulating material, such as tape or sleeving to prevent contact of the uninsulated conductor with any normally non-current-carrying metal parts.

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Amendment 250.140 Continued from Previous Page

Replace with:

(B) Grounded Conductor Connections. For existing branch-circuit installations only, if an equipment grounding conductor is not present in the outlet or junction box the frame of the appliance shall be permitted to be connected to the grounded conductor if all the conditions in the following list items (1), (2), and (3) are met and the grounded conductor complies with either list item (4) or (5):

(1) The supply circuit is 120/240-volt, single-phase, 3-wire; or 208Y/120-volt derived from a 3-phase, 4-wire, wye-connected system.
(2) The grounded conductor is not smaller than 10 AWG copper or 8 AWG aluminum.
(3) Grounding contacts of receptacles furnished as part of the equipment are bonded to the equipment.
(4) Any of the following:
    a. The grounded conductor is insulated;
    b. The grounded conductor is uninsulated and part or a Type SE service-entrance cable and the branch circuit originates at the service;
    c. The grounded conductor is uninsulated and part of a cable assembly and all current-carrying conductors are protected by a ground fault circuit interrupter at the origination of the branch circuit; or
    d. A new 3-wire cable assembly not smaller than the existing conductors shall be permitted to be extended from the service to an enclosure where the existing conductors shall be spliced together and provisions are made so that the grounded conductors are insulated by tape, heat-shrink or other approved means inside the enclosure.
(5) The grounded conductor is part of a Type SE service-entrance cable that originates in equipment other than a service. The grounded conductor shall be insulated or field covered within the supply enclosure with listed insulating material, such as tape or sleeving to prevent contact of the uninsulated conductor with any normally non-current-carrying metal parts.

Item 15: Adding an Exception No. 4 for section 250.142(B); (moving the intent of a current amendment over to the new Code)

AMENDMENT 250.142(B)

Amend NEC 2023, page 160:

(B) Load-Side Equipment. Except as permitted in 250.30(A)(1), 250.32(B)(1), Exception No.1, and Part X of Article 250, a grounded circuit conductor shall not be connected to non–current-carrying metal parts of equipment on the load side of the service disconnecting means or on the load side of a separately derived system disconnecting means or the overcurrent devices for a separately derived system not having a main disconnecting means.

Exception No. 1: The frames of ranges, wall-mounted ovens, counter-mounted cooking units, and clothes dryers under the conditions permitted for existing installations by 250.140 shall be permitted to be connected to the grounded circuit conductor.

Exception No. 2: It shall be permissible to connect meter enclosures to the grounded circuit conductor on the load side of the service disconnect if all of the following conditions apply:

(1) Ground-fault protection of equipment is not installed.
(2) All meter enclosures are located immediately adjacent to the service disconnecting means.
(3) The size of the grounded circuit conductor is not smaller than the size specified in Table 250.122 for equipment grounding conductors.

Exception No. 3: Electrode-type boilers operating at over 1000 volts shall be grounded as required in 495.72(E)(1) and 495.74.

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Amendment 250.142(B) **Continued from Previous Page**

Replace with:

(B) Load-Side Equipment. Except as permitted in 250.30(A)(1), 250.32(B)(1), Exception No.1, and Part X of Article 250, a grounded circuit conductor shall not be connected to non–current-carrying metal parts of equipment on the load side of the service disconnecting means or on the load side of a separately derived system disconnecting means or the overcurrent devices for a separately derived system not having a main disconnecting means.

Exception No. 1: The frames of ranges, wall-mounted ovens, counter-mounted cooking units, and clothes dryers under the conditions permitted for existing installations by 250.140 shall be permitted to be connected to the grounded circuit conductor.

Exception No. 2: It shall be permissible to connect meter enclosures to the grounded circuit conductor on the load side of the service disconnect if all of the following conditions apply:

(1) Ground-fault protection of equipment is not installed.
(2) All meter enclosures are located immediately adjacent to the service disconnecting means.
(3) The size of the grounded circuit conductor is not smaller than the size specified in Table 250.122 for equipment grounding conductors.

Exception No. 3: Electrode-type boilers operating at over 1000 volts shall be grounded as required in 495.72(E)(1) and 495.74.

Exception No. 4: It shall be permissible to ground an existing panelboard enclosure by connection to the grounded circuit conductor for a one- and two-family dwelling where all the following conditions apply:

(1) When relocating or installing an additional main disconnecting means;
(2) Enacting 250.142(B) Exception No. 5: (1) redefines the existing service entrance conductors as a feeder in Article 100;
(3) An equipment grounding conductor in the existing panelboard is not present;
(4) Replacement of the existing service entrance conductors requires either the removal of the building finish or deemed impractical by the AHJ.
(5) All grounding electrode conductors are removed completely from the existing panelboard; and
(6) The grounded conductors are insulated by tape, heat-shrink, or other approved means except where covered by the sheathing of a cable assembly or as needed for joints, splices, and termination purposes.

Item 16: Adding subsection (5) for existing panelboards in dwellings to section 300.3(B); (moving the intent of a current amendment over to the new Code)

AMENDMENT 300.3(B)

Amend NEC 2023, page 166:

(B) Conductors of the Same Circuit. All conductors of the same circuit and, where used, the grounded conductor and all equipment grounding conductors and bonding conductors shall be contained within the same raceway, conduit body, auxiliary gutter, cable tray, cablebus assembly, trench, cable, or cord, unless otherwise permitted in accordance with 300.3(B)(1) through (B)(4).

. . .

Replace with:

(B) Conductors of the Same Circuit. All conductors of the same circuit and, where used, the grounded conductor and all equipment grounding conductors and bonding conductors shall be contained within the same raceway, auxiliary gutter, cable tray, cablebus assembly, trench, cable, or cord, unless otherwise permitted in accordance with 300.3(B)(1) through (B)(5).

. . .

(5) Existing Dwelling Panelboards. An equipment grounding conductor for the supply feeder of an existing panelboard in one-and two-family dwellings shall be permitted to be installed separately and outside of the raceway or cable assembly where all the following conditions apply:

(a) When relocating or installing an additional service disconnecting means:
(b) Enacting 300.3(B)(5)(a) redefines the existing service entrance conductors as a feeder in Article 100; and
(c) Replacement of the existing service entrance conductors requires the removal of the building finish or deemed impractical by the AHJ.

Item 17: Modifying Column 4 heading of Table 300.5 to increase voltage to 240 Volts and increase amperage to 50 Amperes; (moving the intent of a current amendment over to the new Code). The foot notes still apply.

AMENDMENT Table 300.5

Amend NEC 2023, page 169:

Table 300.5 Minimum Cover Requirements, 0 to 1000 Volts ac, 1500 Volts dc, Nominal, Burial in Millimeters (Inches)

	Type of Wiring Method or Circuit									
Location of Wiring Method or Circuit	Column 1 Direct Burial Cables or Conductors		Column 2 Rigid Metal Conduit or Intermediate Metal Conduit		Column 3 Nonmetallic Raceways Listed for Direct Burial Without Concrete Encasement or Other Approved Raceways		Column 4 Residential Branch Circuits Rated ~~120~~ Volts or Less with GFCI Protection and Maximum Overcurrent Protection of ~~20~~ Amperes		Column 5 Circuits for Control of Irrigation and Landscape Lighting Limited to Not More Than 30 Volts and Installed with Type UF or in Other Identified Cable or Raceway	
	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.
All locations not specified below	600	24	150	6	450	18	300	12	150[a,b]	6[a,b]
In trench below 5 mm (2 in.) thick concrete or equivalent	450	18	150	6	300	12	150	6	150	6
Under a building	0 (in raceway or Type MC or Type MI cable identified for direct burial)	0	0	0	0	0	0 (in raceway or Type MC or Type MI cable identified for direct burial)	0	0 (in raceway or Type MC or Type MI cable identified for direct burial)	0
Under minimum of 102 mm (4 in.) thick concrete exterior slab with no vehicular traffic and the slab extending not less than 152 mm (6 in.) beyond the underground installation	450	18	100	4	100	4	150 (direct burial) 100 (in raceway)	6 4	150 (direct burial) 100 (in raceway)	6 4
Under streets, highways, roads, alleys, driveways, and parking lots	600	24	600	24	600	24	600	24	600	24
One- and two-family dwelling driveways and outdoor parking areas, and used only for dwelling-related purposes	450	18	450	18	450	18	300	12	450	18
In or under airport runways, including adjacent areas where trespassing prohibited	400	18	450	18	450	18	450	18	450	18

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Amendment Table 300.5 Continued from Previous Page

Replace with:

Table 300.5 Minimum Cover Requirements, 0 to 1000 Volts, Nominal, Burial in Millimeters (Inches)

Location of Wiring Method or Circuit	Type of Wiring Method or Circuit									
	Column 1 Direct Burial Cables or Conductors		Column 2 Rigid Metal Conduit or Intermediate Metal Conduit		Column 3 Nonmetallic Raceways Listed for Direct Burial Without Concrete Encasement or Other Approved Raceways		Column 4 Residential Branch Circuits Rated 250 Volts or Less with GFCI Protection and Maximum Overcurrent Protection of 50 Amperes		Column 5 Circuits for Control of Irrigation and Landscape Lighting Limited to Not More Than 30 Volts and Installed with Type UF or in Other Identified Cable or Raceway	
	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.
All locations not specified below	600	24	150	6	450	18	300	12	150[a,b]	6[a,b]
In trench below 5 mm (2 in.) thick concrete or equivalent	450	18	150	6	300	12	150	6	150	6
Under a building	0 (in raceway or Type MC or Type MI cable identified for direct burial)	0	0	0	0	0	0 (in raceway or Type MC or Type MI cable identified for direct burial)	0	0 (in raceway or Type MC or Type MI cable identified for direct burial)	0
Under minimum of 102 mm (4 in.) thick concrete exterior slab with no vehicular traffic and the slab extending not less than 152 mm (6 in.) beyond the underground installation	450	18	100	4	100	4	150 (direct burial) 100 (in raceway)	6 4	150 (direct burial) 100 (in raceway)	6 4
Under streets, highways, roads, alleys, driveways, and parking lots	600	24	600	24	600	24	600	24	600	24
One- and two-family dwelling driveways and outdoor parking areas, and used only for dwelling-related purposes	450	18	450	18	450	18	300	12	450	18
In or under airport runways, including adjacent areas where trespassing prohibited	400	18	450	18	450	18	450	18	450	18

Item 18: Adding an Exception to section 300.9; (moving the current amendment over to the new Code)

AMENDMENT 300.9

Amend NEC 2023, page 171:

300.9 Raceways in Wet Locations Above Grade. Where raceways are installed in wet locations above grade, the interior of these raceways shall be considered to be a wet location. Insulated conductors and cables installed in raceways in wet locations above grade shall comply with 310.10(C).

Replace with:

300.9 Raceways in Wet Locations Above Grade. Where raceways are installed in wet locations above grade, the interior of these raceways shall be considered to be a wet location. Insulated conductors and cables installed in raceways in wet locations above grade shall comply with 310.10(C).

Exception: The interior of these raceways shall not be considered a wet location if:

(1) The section of raceway routed in a wet location above grade does not exceed 1.8 m (6 ft) in length;

(2) Any fittings or conduit bodies are watertight and listed for use in wet locations; and

(3) All termination points of the raceway are only open in any of the following:

a. A dry location;

b. Equipment suitable for outdoor use; or

c. Equipment listed for use in a wet location.

Item 19: Replacing entire section with TIA 23-8 issued by the NFPA

AMENDMENT 300.26

Amend NEC 2023, page 175:

~~**300.26 Remote-Control and Signaling Circuits Classifications.** Remote-control and signaling circuits shall be classified as either power-limited or non-power-limited and comply with the following:~~

~~(1) Class 1 power-limited remote-control and signaling circuits shall comply with 724.3.~~
~~(2) Class 2 and Class 3 power-limited remote-control and signaling circuits shall comply with 725.3.~~
~~(3) Non-power-limited remote-control and signaling circuits shall be installed in accordance with 300.2 through 300.25.~~
~~(4)~~

Replace with:

300.26 Remote-Control and Signaling Circuits Classification. Remote-control and signaling circuits shall be classified as either power-limited or non-power-limited and comply with 300.26(A) through (C).

(A) Class 1 Power-Limited Remote-Control and Signaling Circuits. Class 1 power-limited remote-control and signaling circuits shall comply with 724.3.

(B) Class 2 and Class 3 Power-Limited Remote-Control and Signaling Circuits. Class 2 and Class 3 power-limited remote-control and signaling circuits shall comply with 725.3.

(C) Non-Power-Limited Remote-Control and Signaling Circuits. Non-power-limited remote-control and signaling circuits shall be installed in accordance with 300.2 through 300.25 and comply with 300.26(C)(1) through (C)(3).

(1) Sizes and Use.
  (a) Conductors that are 18 AWG and 16 AWG copper shall be permitted to be used if they supply loads that do not exceed the ampacities specified in 402.5 and are installed in a raceway, an approved enclosure, or a listed cable.
  (b) Conductors that are 14 AWG copper-clad aluminum shall be permitted to be used in Type MC cable and Type TC cable. The continuous load shall not exceed 8 amperes.
  (c) Conductors larger than 16 AWG copper or 14 AWG copper-clad aluminum shall not supply loads greater than the ampacities specified in 310.14.
  (d) Flexible cords shall comply with the applicable general requirements, applications, and construction specifications for flexible cords and flexible cables in accordance with Article 400 Parts I and II.

(2) **Insulation.**
  (a) Insulation on conductors shall be rated for the system voltage and not less than 600 volts.
  (b) Conductors larger than 16 AWG copper or 14 AWG copper-clad aluminum shall comply with the applicable general requirements for conductors rated up to and including 2000 volt for type designations, insulations, markings, ampacity ratings, and uses in accordance with 310.3, 310.4, 310.6, 310.8, 310.10, and 310.14.
  (c) Conductors that are 18 AWG copper, 16 AWG copper, or 14 AWG copper-clad aluminum shall be Type FFH-2, Type KF-2, Type KFF-2, Type PAF, Type PAFF, Type PF, Type PFF, Type PGF, Type PGFF, Type PTF, Type PTFF, Type RFH-2, Type RFHH-2, Type RFHH-3, Type SF-2, SFF-2, Type TF, Type TFF, Type TFFN, Type TFN, Type ZF, or Type ZFF.

Item 20: Replacing entire section with TIA 23-10 issued by the NFPA

AMENDMENT 314.29

Amend NEC 2023, page 201:

~~**(A) In Buildings and Other Structures.** Boxes and conduit bodies shall be installed so the contained wiring and devices are accessible.~~

Replace with:

(A) In Buildings and Other Structures. Boxes and conduit bodies shall be installed so the contained wiring and devices are accessible. Boxes and conduit bodies that are recessed into or behind finished surfaces of buildings shall have access to their internal contents maintained by openings in their covers and in the building finish that comply with 314.29(A)(1), (A)(2), or (A)(3) as applicable. Removable finished covers and faceplates that maintain this access shall be permitted.

(1) Boxes 1650 cm3 (100 in.3) or Less in Size. The openings in the building surfaces, if reduced from the outer walls of the box, shall be centered not more than 25 mm (1 in.) from the centerline of the box, and shall not extend beyond the walls of the box. If rectangular, the opening shall be not less than 73 mm (2 7/8 in.) by 45 mm (1 3/4 in.) in size. If circular, the opening shall not be less than 90 mm (3½ in.) in diameter.

Exception: Smaller openings in building surfaces that accommodate one or more individual devices shall be permitted if all of the following conditions are met:

(1) The outlet box that supplies the device(s) is nonmetallic.

(2) The branch circuit wiring that supplies each device consists of a separate nonmetallic cable assembly originating outside the box, or individual sets of conductors in a single nonmetallic raceway, all of which originate outside the box. Other than the connections to a single device, these conductors are not spliced in the box or continued to another device, and no other wiring or raceways enter the box.

(3) Each device is capable of removal from the building surface opening without being damaged. If a special tool is required for this purpose, the applicable circuit directory for the device records the location of the tool, together with a product code/QR code for acquiring a replacement if necessary.

(4) All connections for each device to the branch circuit wiring are made with listed clamping-type wire connectors, which are supplied with the devices. The branch-circuit conductors are arranged to permit the connector(s) to be exposed after the device has been fully removed.

(5) The device assemblies are listed for this application.

(2) Boxes Larger Than 1650 cm3 (100 in.3) in Size. The openings shall not be smaller than the outer walls of the box.

(3) Conduit Bodies. The openings shall not be smaller than outer walls of the conduit body.

Item 21: Rewriting section 320.23(A) for clarification with NC Building Designs; (moving the intent of a current amendment over to the new Code)

AMENDMENT 320.23(A)

Amend NEC 2023, page 217:

320.23 In Accessible Attics. Type AC cables in accessible attics or roof spaces shall be installed as specified in 320.23(A) and (B).

~~**(A) Cabled Run Across the Top of Framing Members.** Where run across the top of framing members, or across the face of rafters or studding within 2.1 m (7 ft) of the floor or horizontal surface, the cable shall be protected by guard strips that are at least as high as the cable, unless the cables are physically considered outside any floored area. Where this space is not accessible by permanent stairs or ladders, protection shall only be required within 1.8 m (6 ft) of the nearest edge of the scuttle hole or attic entrance.~~

Replace with:

320.23 In Accessible Attics. Type AC cables in accessible attics or roof spaces shall be installed as specified in 320.23(A) and (B).

(A) Cables Run Across the Top of Framing Members. The cable shall be protected by guard strips that are at least as high as the cable where one of the following applies:

(1) Where this space is accessible by permanent stairs or ladders, protection shall be required in the area directly over a permanent floor not exceeding 2.1 m (7 ft) vertically from the floor, or where run across the top of floor joists.
(2) Where this space is not accessible by permanent stairs or ladders, protection shall be required within 1.8 m (6 ft) horizontally of the nearest edge of the scuttle hole or attic entrance where run across the top of any flooring, or flooring or ceiling joists. Protection is not required where run across the face of overhead roofing trusts or rafters.

Exception: For the purpose of this section, pull-down type stairs and portable ladders are not to be considered as permanent stairs or ladders.

Item 22: Removing Crawl Spaces from section 334.15(C) for clarification with NC Building Designs; (moving the current amendment over to the new Code)

AMENDMENT 334.15(C)

Amend NEC 2023, page 225:

(C) In Unfinished Basements and Crawl Spaces. Where cable is run at angles with joists in unfinished basements ~~and crawl spaces~~, it shall be permissible to secure cables not smaller than two 6 AWG or three 8 AWG conductors directly to the lower edges of the joists. Smaller cables shall be run either through bored holes in joists or on running boards. Nonmetallic-sheathed cable installed on the wall of an unfinished basement shall be permitted to be installed in a listed conduit or tubing or shall be protected in accordance with 300.4. Conduit or tubing shall be provided with bushing or adapter that provides protection from abrasion at the point the cable enters and exits the raceway. The sheath of the nonmetallic-sheathed cable shall extend through the conduit or tubing and into the outlet, device, or junction box not less than 6 mm (1⁄4 in.). The cable shall be secured within 300 mm (12 in.) of the point where the cable enters the conduit or tubing. Metal conduit, tubing, and metal outlet boxes shall be connected to an equipment grounding conductor complying with the provisions of 250.86 and 250.148.

Replace with:

(C) In Unfinished Basements and Crawl Spaces. Where cable is run at angles with joists in unfinished basements, it shall be permissible to secure cables not smaller than two 6 AWG or three 8 AWG conductors directly to the lower edges of the joists. Smaller cables shall be run either through bored holes in joists or on running boards. Nonmetallic-sheathed cable installed on the wall of an unfinished basement shall be permitted to be installed in a listed conduit or tubing or shall be protected in accordance with 300.4. Conduit or tubing shall be provided with bushing or adapter that provides protection from abrasion at the point the cable enters and exits the raceway. The sheath of the nonmetallic-sheathed cable shall extend through the conduit or tubing and into the outlet, device, or junction box not less than 6 mm (1⁄4 in.). The cable shall be secured within 300 mm (12 in.) of the point where the cable enters the conduit or tubing. Metal conduit, tubing, and metal outlet boxes shall be connected to an equipment grounding conductor complying with the provisions of 250.86 and 250.148.

Item 23: Adding Exception to definition of Closet Storage Space in section 410.2 for clarification with NC Building Designs; (moving the current amendment over to the new Code)

AMENDMENT 410.2

Amend NEC 2023, page 309:

410.2 Definition. The definition in this section shall apply only within this article.

Clothes Closet Storage Space. The closet storage space shall be the volume bounded by the sides and back closet walls and planes extending from the closet floor vertically to a height of 1.8 m (6 ft) or to the highest clothes-hanging rod and parallel to the walls at a horizontal distance of 600 mm (24 in.) from the sides and back of the closet walls, respectively. The volume extends vertically to the closet ceiling parallel to the walls at a horizontal distance of 300 mm (12 in.) or the width of the shelf, whichever is greater. For a closet that permits access to both sides of a hanging rod, the close closet storage space includes the volume below the highest rod extending 300 mm (12 in.) on either side of the rod on a plane horizontal to the floor extending the entire length of the rod. See Figure 410.16 (A).

Replace with:

410.2 Definition. The definition in this section shall apply only within this article.

Clothes Closet Storage Space. The closet storage space shall be the volume bounded by the sides and back closet walls and planes extending from the closet floor vertically to a height of 1.8 m (6 ft) or to the highest clothes-hanging rod and parallel to the walls at a horizontal distance of 600 mm (24 in.) from the sides and back of the closet walls, respectively. The volume extends vertically to the closet ceiling parallel to the walls at a horizontal distance of 300 mm (12 in.) or the width of the shelf, whichever is greater. For a closet that permits access to both sides of a hanging rod, the close closet storage space includes the volume below the highest rod extending 300 mm (12 in.) on either side of the rod on a plane horizontal to the floor extending the entire length of the rod. See Figure 410.16 (A).

Exception: Where a shelf is not present in the area of wall above the closet's entrance opening or doorway extending from the top of such opening or doorway vertically to the ceiling, including the area of ceiling extending perpendicular from the area of wall directly above the closet's entrance opening or doorway to a horizontal distance of 300 mm (12 in.), shall not be defined as closet storage space. See Figure 410.2 Exception.

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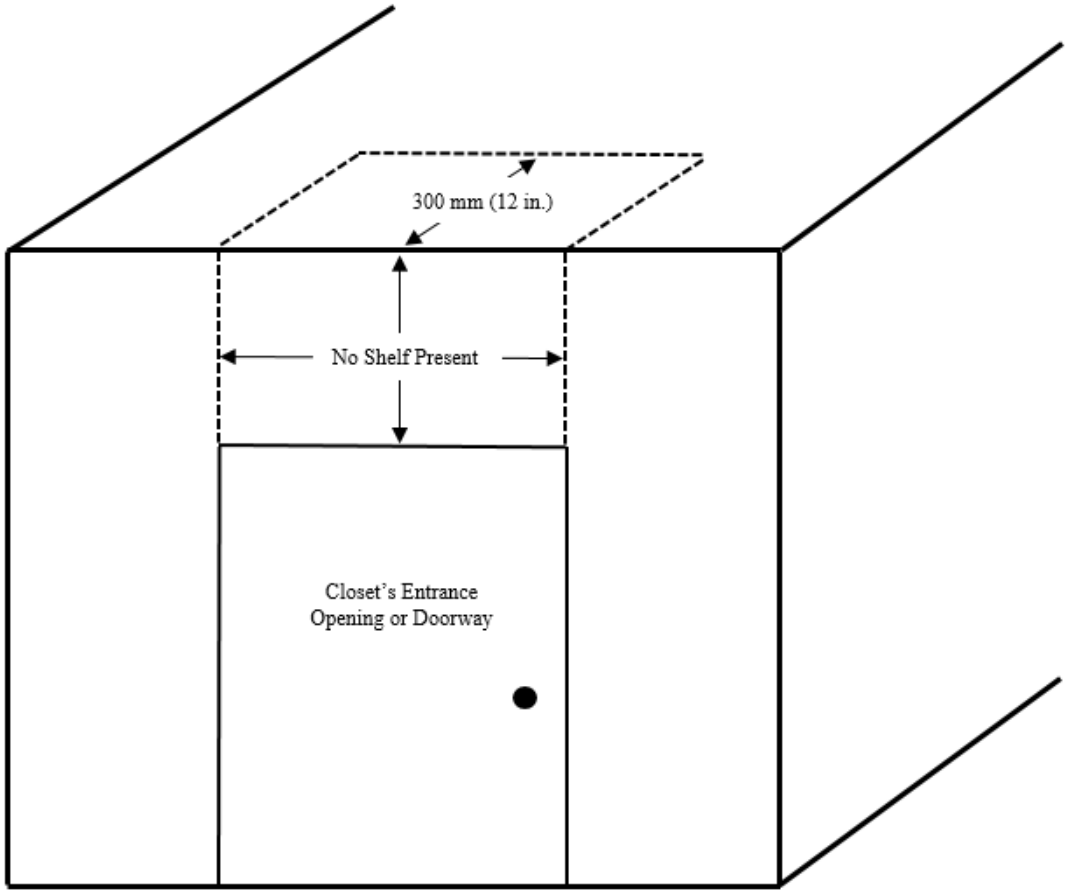

Figure 410.2 Exception Clothes Closet Storage Space Exception

Item 24: Adding subsection (6) to 410.16(C) to allow certain lighting fixtures in Exception to definition of Closet Storage Space in section 410.2 for clarification with NC Building Designs; (moving the current amendment over to the new Code)

AMENDMENT 410.16(C)

Amend NEC 2023, page 310:

(D) Location. The minimum clearance between luminaires installed in clothes closets and the nearest point of a clothes closet storage space shall be as follows:

(1) 300 mm (12 in.) for surface-mounted incandescent or LED luminaires with a completely enclosed light source installed on the wall above the door or on the ceiling.
(2) 150 mm (6 in.) for surface-mounted fluorescent luminaires installed on the wall above the door or on the ceiling.
(3) 150 mm (6 in.) for recessed incandescent or LED luminaires with a completely enclosed light source installed in the wall or the ceiling.
(4) 150 mm (6 in.) for recessed fluorescent luminaires installed in the wall or the ceiling.

Exception: Surface-mounted fluorescent or LED luminaires shall be permitted to be installed within the clothes closet storage space where identified for this use.

Replace with:

(D) Location. The minimum clearance between luminaires installed in clothes closets and the nearest point of a clothes closet storage space shall be as follows:

(1) 300 mm (12 in.) for surface-mounted incandescent or LED luminaires with a completely enclosed light source installed on the wall above the door or on the ceiling.
(2) 150 mm (6 in.) for surface-mounted fluorescent luminaires installed on the wall above the door or on the ceiling.
(3) 150 mm (6 in.) for recessed incandescent or LED luminaires with a completely enclosed light source installed in the wall or the ceiling.
(4) 150 mm (6 in.) for recessed fluorescent luminaires installed in the wall or the ceiling.

Exception No.1: Surface-mounted fluorescent or LED luminaires shall be permitted to be installed within the clothes closet storage space where identified for this use.

Exception No 2: LED luminaires with a completely enclosed light source or fluorescent luminaires shall be permitted to be installed within the area defined in 410.2 Exception.

Item 25: Adding additional language to include "Critical Branch Circuits" the application of the section.

AMENDMENT 517.26

Amend NEC 2023, page 469:

517.26 Application of Other Articles. The life safety branch of the essential electrical system shall meet the requirements of Article 700, except as amended as follows:

(1) Section 700.4 shall not apply.
(2) Section 700.10(D) shall not apply.
(3) Section 700.17 shall be replaced with the following: Branch circuits that supply emergency lighting shall be installed to provide service from a source in accordance with 700.12 when normal supply for lighting is interrupted or where single circuits supply luminaries containing secondary batteries.
(4) Section 700.32 shall not apply.

Replace with:

517.26 Application of Other Articles. The life safety branch and critical branch of the essential electrical system shall meet the requirements of Article 700, except as amended as follows:

(1) Section 700.4 shall not apply.
(2) Section 700.10(D) shall not apply.
(3) Section 700.17 shall be replaced with the following: Branch circuits that supply emergency lighting shall be installed to provide service from a source in accordance with 700.12 when normal supply for lighting is interrupted or where single circuits supply luminaries containing secondary batteries.
(4) Section 700.32 shall not apply.

Item 26: Requiring GFCI for 30- and 50-amp receptacles in RV site equipment the same at non-RV site equipment in (A) for RV parks; Retaining 2020 Code requirements.

AMENDMENT 551.71(F)(2)

Amend NEC 2023, page 516:

~~(2)~~ **Receptacles Installed in Recreational Vehicle Site Equipment.** Ground-fault circuit-interrupter protection shall ~~only be required for 125-volt, single-phase, 15- and 20-ampere receptacles.~~

~~Informational Note No. 1: Appliances used within the recreational vehicle can create leakage current levels at the supply receptacle(s) that could exceed the limits of a Class A GFCI device.~~

Informational Note No. ~~2~~: The definition of Feed Assembly clarifies that the power supply cord to a recreational vehicle is considered a feeder.

Replace with:

(2) **Receptacles Installed in Recreational Vehicle Site Equipment.** Ground-fault circuit-interrupter protection shall be provided as required in 210.8(B).

Informational Note No. 1: The definition of Feed Assembly clarifies that the power supply cord to a recreational vehicle is considered a feeder.

Item 27: Adding additional language to the signage requirement of section 555.10; (moving the intent of a current amendment over to the new Code)

AMENDMENT 555.10

Amend NEC 2023, page 527:

(2) The signs shall be clearly visible from all approaches to a marina, docking facility, or boatyard facility.

(3) The signs shall state ~~"WARNING — POTENTIAL SHOCK HAZARD — ELECTRICAL CURRENTS MAY BE PRESENT IN THE WATER."~~

Replace with:

(2) The signs shall be reflective, have reflective letters in all capital font, be a minimum of 18 inches in height and 24 inches in width, and clearly visible from all approaches to a marina, docking facility, or boatyard facility.

(3) The signs shall state "WARNING! NO SWIMMING! POTENTIAL SHOCK HAZARD — ELECTRICAL CURRENTS MAY BE PRESENT IN THE WATER!"

Item 28: Adding enterable aquariums to the scope of Article 680

AMENDMENT 680.1

Amend NEC 2023, page 586:

680.1 Scope. The provisions of this article apply to the construction and installation of electrical wiring for, and equipment in or adjacent to, all swimming, wading, therapeutic, and decorative pools; fountains; hot tubs; spas; and hydromassage bathtubs, whether permanently installed or storable, and to metallic axillary equipment, such as pumps, filters, and similar equipment. The term *body of water* used throughout Part I applies to all bodies of water covered in this scope unless otherwise amended.

Replace with:

680.1 Scope. The provisions of this article apply to the construction and installation of electrical wiring for, and equipment in or adjacent to, all swimming, wading, therapeutic, and decorative pools; fountains; hot tubs; spas; enterable aquariums; and hydromassage bathtubs, whether permanently installed or storable, and to metallic axillary equipment, such as pumps, filters, and similar equipment. The term *body of water* used throughout Part I applies to all bodies of water covered in this scope unless otherwise amended.

Item 29: Deleting new section 680.4 due to no State recognized standard currently exists for inspections and testing of existing pools; (moving the intent of a current amendment over to the new Code)

AMENDMENT 680.4

Amend NEC 2023, page 586:

680.4 Inspections After Installation. ~~The authority having jurisdiction shall be permitted to require periodic inspection and testing.~~

Replace with:

680.4 Inspections After Installation. Deleted.

Item 30: Revising section 680.21(D) to incorporate the intent of a current amendment with the new Code for existing pool pump motor circuitry; retaining current amendment

AMENDMENT 680.21(D)

Amend NEC 2023 page 588:

~~**(D) Pool Pump Motor Replacement.** Where a pool pump motor in 680.21(C) is replaced or repaired, the replacement pump motor shall be provided with ground-fault protection complying with 680.5(B) or (C), as applicable.~~

Replace with:

(D) Existing Pool Pump Motors, Branch-Circuits, and Overcurrent Protection.

(1) Pool Pump Motor Replacement. Where a pool pump motor in 680.21(C) is replaced or repaired, the replacement pump motor shall be provided with ground-fault protection complying with 680.5(B) or (C), as applicable.

(2) Existing Pool Pump Motor Branch Circuit and Overcurrent Protection. All branch circuits and overcurrent devices that supply power to a pool pump motor by direct connection or receptacle outlet shall comply with the provisions of 680.21(C) when the branch circuits or overcurrent devices are altered, installed, modified, relocated, repaired, or replaced.

Item 31: Revising section 680.26(B)(2) to prevent the single wire option for in-ground pools; Replacing section with TIA 23-10 issued by the NFPA

AMENDMENT 680.26(B)(2)

Amend NEC 2023 page 592:

~~**(2) Perimeter Surfaces.** The perimeter surface to be bonded shall be considered to extend for 1 m (3 ft) horizontally beyond the inside walls of the pool and shall include unpaved surfaces and other types of paving. Perimeter surfaces separated from the pool by a permanent wall or building 1.5 m (5 ft) in height or more shall require equipotential bonding only on the pool side of the permanent wall or building. Bonding to perimeter surfaces shall be provided as specified in 680.26(B)(2)(a), (B)(2)(b), or (B)(2)(c) and shall be attached to the pool reinforcing steel or copper conductor grid at a minimum of four (4) points uniformly spaced around the perimeter of the pool. For nonconductive pool shells, bonding at four points shall not be required.~~

~~(a) *Structural Reinforcing Steel.* Structural reinforcing steel shall be bonded in accordance with 680.26(B)(1)(a).~~

(b) ~~*Copper Ring.* Where structural reinforcing steel is not available or is encapsulated in a nonconductive compound, a copper conductor(s) shall be utilized where the following requirements are met:~~
~~(1) At least one minimum 8 AWG bare solid copper conductor shall be provided.~~
~~(2) The conductors shall follow the contour of the perimeter surface.~~
~~(3) Only listed splices shall be permitted.~~
~~(4) The required conductor shall be 450 mm to 600 mm (18 in. to 24 in.) from the inside walls of the pool.~~
~~(5) The required conductor shall be secured within or under the perimeter surface 100 mm to 150 mm (4 in. to 6 in.) below the subgrade.~~

(c) ~~*Copper Grid.* Where structural reinforcing steel is not available or is encapsulated in a nonconductive compound, a copper grid shall be utilized where the following requirements are met:~~

~~(1) The copper grid shall be constructed of 8 AWG solid bare copper and be arranged in accordance with 680.26(B)(1)(b)(3).~~
~~(2) The copper grid shall follow the contour of the perimeter surface extending 1 (3 ft) horizontally beyond the inside walls of the pool.~~
~~(3) Only listed splices or exothermic welding shall be permitted.~~
~~(4) The copper grid shall be secured within or under the deck or unpaved surfaces between 100 mm to 150 mm (4 in. to 6 in.) below the subgrade.~~

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Replace with:

(2) Perimeter Surfaces. The perimeter surface to be bonded shall be considered to extend for 900 mm (3 ft) horizontally beyond the inside walls of the pool while also at a height between 900 mm (3 ft) above and 600 mm (2 ft) below the maximum water level. The perimeter surface shall include unpaved surfaces, concrete, and other types of paving. Perimeter surfaces separated from the pool by a permanent wall or building 1.5 m (5 ft) in height or more shall require equipotential bonding only on the pool side of the permanent wall or building. Bonding to perimeter surfaces shall be provided as specified in 680.26(B)(2)(a), (B)(2)(b), (B)(2)(c), and (B)(2)(d). For conductive pool shells where bonding to perimeter surfaces is required, it shall be attached to the pool reinforcing steel or copper conductor grid at a minimum of four (4) points uniformly spaced around the perimeter of the pool, or if the bonded perimeter surface does not surround the entire pool, it shall be attached to the pool reinforcing steel or copper conductor grid at a minimum of four uniformly spaced points along the bonded perimeter surface. For nonconductive pool shells where bonding to the perimeter surfaces is required, bonding at four points shall not be required, and the perimeter bonding shall be attached to the 8 AWG copper equipotential bonding conductor and, if present, to any conductive support structure for the pool.

Informational Note: Because the perimeter surface can incorporate various types of materials at various locations and elevations above and below maximum water level, perimeter surface required to be bonded might not surround the entire pool. The 8 AWG copper equipotential bonding conductor can encircle the entire pool to facilitate connection of bonded parts.

(a) *Conductive Paved Portions of Perimeter Surfaces.* Conductive paved portions of perimeter surfaces, including masonry pavers, if used, shall be bonded with unencapsulated structural reinforcing steel in accordance with 680.26(B)(1)(a), or with unencapsulated steel structural welded wire reinforcement (welded wire mesh, welded wire fabric), bonded together by steel tie wires or the equivalent. Steel welded wire reinforcement shall be fully embedded within the pavement unless the pavement will not allow for embedding. If the reinforcing steel is absent, or is encapsulated in a nonconductive compound, or embedding is not possible, unencapsulated welded wire steel reinforcement or a copper conductor grid shall be provided and shall be secured directly under the paving, and not more than 150 mm (6 in.) below finished grade.

Unencapsulated steel welded wire reinforcement that is not fully embedded in concrete, and copper grid regardless of location, where used for equipotential bonding, shall be listed for corrosion resistance and mechanical performance. This listing requirement shall become effective January 1, 2025. The copper grid or unencapsulated steel welded wire reinforcement shall also meet the following:

(1) Copper grid is constructed of 8 AWG solid bare copper and arranged in accordance with 680.26(B)(1)(b)(3).
(2) Steel welded wire reinforcement is minimum ASTM 6x6-W2.0 x W2.0 or minimum No. 3 rebar constructed in a 300 mm (12 in.) grid.

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(3) Copper grid and steel welded wire reinforcement follow the contour of the perimeter surface extending not less than 900 mm (3 ft) horizontally beyond the inside walls of the pool.
(4) Only listed splicing devices or exothermic welding are used.

Informational Note No. 1: Performance of the equipotential bonding system at the perimeter surface is improved as the distance between the bonding means and finished grade is minimized, either by embedding within, or by direct contact with the underside of, the finished pavement.

Informational Note No. 2: See ASTM A615/A615M, Standard Specification for Deformed and Plain Carbon-Steel Bars for Concrete Reinforcement; A1064/A1064M, Standard Specification for Carbon-Steel Wire and Welded Wire Reinforcement, Plain and Deformed, for Concrete; A1022/A1022M, Standard Specification for Deformed and Plain Stainless Steel Wire and Welded Wire for Concrete Reinforcement; A1060A/A1060M, Standard Specification for Zinc-Coated (Galvanized) Steel Welded Wire Reinforcement, Plain and Deformed, for Concrete; and ACI Standard ACI 318, Building Code for Structural Concrete, for examples of standards currently used in the listing of reinforcing steel bars and steel welded wire reinforcement.

(b) *Unpaved Portions of Perimeter Surfaces.* Unpaved portions of perimeter surfaces shall be bonded with any of the following methods:

(1) Copper conductor(s) shall meet the following:
   a. At least one minimum 8 AWG bare solid copper conductor, including the 8 AWG bare copper equipotential bonding conductor if available.
   b. The conductors follow the contour of the perimeter surface.
   c. Only listed splicing devices or exothermic welding are used.
   d. The conductor(s) is 450 mm to 600 mm (18 in. to 24 in.) from the inside walls of the pool.
   e. The conductor(s) is under the unpaved portion of the perimeter surface 100 mm to 150 mm (4 in. to 6 in.) below finished grade.
   f. Be installed only in perimeter surfaces not intended to have direct access to swimmers in the pool.

(2) Copper grid or unencapsulated steel welded wire reinforcement used for equipotential bonding of unpaved portions of perimeter surfaces shall meet the following:
   a. Be installed in accordance with 680.26(B)(2)(a).
   b. Be located within unpaved surface(s) between 100 mm to 150 mm (4 in. to 6 in.) below finished grade.

(c) *Nonconductive Perimeter Surfaces.* Equipotential bonding shall not be required for nonconductive portions of perimeter surfaces that are separated from earth or raised on nonconducting supports, and it shall not be required for any perimeter surface that is electrically separated from the pool structure and raised on nonconductive supports above an equipotentially bonded surface.

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Informational Note: Nonconductive materials include, but are not limited to, wood, plastic, wood-plastic composites, fiberglass, and fiberglass composites.

(d) *Interconnection of Bonded Portions of Perimeter Surfaces.* All surfaces where equipotential bonding is required shall be interconnected using listed splicing devices or exothermic welding. Where copper wire is used for this purpose, it shall be solid copper, not smaller than 8 AWG. The conductor shall be permitted to encircle the pool to facilitate bonding connections to portions of the perimeter covered in 680.26(B)(2)(a) and (B)(2)(b) that are not contiguous.

Item 32: Adding the requirement that emergency sources shall be listed or approved.

AMENDMENT 700.4(C)(2)

Amend NEC 2023, page 626:

c. Emergency Source. ~~Emergency~~ sources shall be permitted to operate in parallel where the necessary equipment to establish and maintain a synchronous condition is provided.

Replace with:

(3) Emergency Source. Listed or approved emergency sources shall be permitted to operate in parallel where the necessary equipment to establish and maintain a synchronous condition is provided.

Item 33: Adding the requirement that the signals of this section be able to be constantly noticed by someone 24-hours a day, everyday.

AMENDMENT 700.6

Amend NEC 2023, page 627:

700.6 Signals. Audible, visual, and facility or network remote annunciation devices shall be provided, where applicable, for the purpose described in 700.6(A) through (D).

Replace with:

700.6 Signals. Audible, visual, and facility or network remote annunciation devices shall be provided, where applicable, for the purpose described in 700.6(A) through (D). These devices shall be installed in a location that is attended at all times.

Item 34: Adding the requirement that emergency sources shall be listed or approved.

AMENDMENT 700.12(A)

Amend NEC 2023, page 629:

700.12(A) Power Source Consideration. In selecting ~~an~~ emergency source of power, consideration shall be given to the occupancy and the type of service to be rendered, whether of minimum duration, as for evacuation of a theater, or longer duration, as for supplying emergency power and lighting due to an indefinite period of current failure from trouble either inside or outside the building.

Replace with:

700.12(A) Power Source Consideration. In selecting a listed or approved emergency source of power, consideration shall be given to the occupancy and the type of service to be rendered, whether of minimum duration, as for evacuation of a theater, or longer duration, as for supplying emergency power and lighting due to an indefinite period of current failure from trouble either inside or outside the building.

Item 35: Adding the requirement that the signals of this section be able to be constantly noticed by someone 24-hours a day, everyday.

AMENDMENT 701.6

Amend NEC 2023, page 633:

701.6 Signals. Audible and visual signal devices shall be provided, where practicable, for the purposes described in 706.6(A), (B), (C), and (D).

Replace with:

701.6 Signals. Audible and visual signal devices shall be provided, where practicable, for the purposes described in 706.6(A), (B), (C), and (D). These devices shall be installed in a location that is attended at all times.

Item 36: Adding the requirement that legally required standby sources shall be listed or approved.

AMENDMENT 701.12(A)

Amend NEC 2023, page 629:

700.12(A) Power Source Consideration. In selecting a legally required standby source of power, consideration shall be given to the type of service to be rendered, whether of short-time duration or long duration.

Replace with:

700.12(A) Power Source Consideration. In selecting a listed or approved legally required standby source of power, consideration shall be given to the type of service to be rendered, whether of short-time duration or long duration.

Electrical Ad hoc Committee's Recommendations For The Adoption of the 2023 North Carolina State Electrical Code.

This Document Was Prepared On April 29, 2023.

Ad hoc Committee Members: Kim Wooten (Chairwoman)

- Rob Axford (IBEW)
- Tony Benton (Union County Inspection Department)
- Terry Cromer (Electrical Contractor/Retired Inspector)
- Gerald Harvell (NC Educator)
- Bryan Holland (NEMA)
- Cliff Isaac (NCHBA)
- Don Iverson (Equipment Manufacturer Representative)
- Misha Meinert (UNC Engineer)
- Gerry O'Connor (Eaton)
- Steven Stack (Union County Inspection Department)
- Benjamen Wesley (OSFM/ State Electrical Division)

The Ad hoc Committee first met on February 17th, 2023, and held the last meeting on April 28th, 2023, with a total of 6 meetings held during this time.

Line No.	NEC Section	Synopsis of Change	Committee Comments
1	110.26(E)(2)(c)	Deletes the requirements for dedicated space beneath and above exterior equipment.	This was a 2020 State Electrical Code Amendment to be renewed for the 2023 State Electrical Code.
2	210.8(A)(header)	Include Doors and doorways for excluding the measurement for GFCI protection of receptacles. Also, remove GFCI requirements from 250-volt range, dryer and fixed-in-place cooking equipment receptacle outlets.	This was a 2020 State Electrical Code Amendment to be renewed for the 2023 State Electrical Code.
3	210.8(A)(EX)	This section requires exterior receptacle and basement receptacles to be GFCI protected.	Committee recommends that an exception should be made for single, dedicated receptacle outlets installed for the purpose of sewage lift pumps, either indoors or outdoors.
4	210.8(A)(2)	The 2020 State Electrical Code allowed for the exemption of garage door openers for GFCI protection within a garage.	The committee has recommended that this Amendment be repealed.
5	210.8(A)(5)	For the 2020 State Electrical Code, there was an Amendment changing the requirements from “basements” to “unfinished basements”.	This was a 2020 State Electrical Code Amendment to be renewed for the 2023 State Electrical Code.
7	210.8(A)(7)	Requires GFCI protection for areas similar to kitchens.	Adopt as written in the 2023 NEC.
8	210.8(B)	The 2020 State Electrical Code provided an exemption for sewage lift pumps from being required to have GFCI protection for receptacle outlets.	This was a 2020 State Electrical Code Amendment to be renewed for the 2023 State Electrical Code.
9	210.8(F)	In the 2020 State Electrical Code there was an Amendment that deleted this Section.	The committee recommends the adoption of this section in the 2023 NEC as written, excluding only well pump outlets when installed for a submersible pump only.
10	210.12(E)	For the 2020 State Electrical Code there was an Amendment that increased the length from 6’ to 50’.	This was a 2020 State Electrical Code Amendment to be renewed for the 2023 State Electrical Code.
11	210.52(B)(2)	Receptacles installed inside a dwelling and within 1.8 m (6 ft) of any kitchen sink measured by the shortest path the cord of an appliance connected to the receptacle would follow without piercing a floor, wall, ceiling, or fixed barrier.	This was a 2020 State Electrical Code Amendment to be renewed for the 2023 State Electrical Code.
12	210.52(C)(2)	Allows for the receptacle serving an island or peninsular be deleted with provisions.	Adopt as written in the 2023 NEC.

Line No.	NEC Section	Synopsis of Change	Committee Comments
13	215.15	Requires barriers for live parts of equipment supplied by feeder taps.	Adopt as written in the 2023 NEC.
14	225.41	Requirement for exterior emergency disconnects for outside branch circuits of feeders.	Adopt as written in the 2023 NEC.
15	230.67(A)(B)(C)(E)	Surge Protection for certain types of services. This section was deleted in the 2020 State Electrical Code.	Adopt as written in the 2023 NEC.
16	230.67(D)	Surge Protection for service changes.	Adopt as written in the 2023 NEC.
17	230.71(B)	Amendment from the 2020 State Electrical Code permitting construction saw poles to have more than (1) disconnect per enclosure	This was a 2020 State Electrical Code Amendment to be renewed for the 2023 State Electrical Code.
18	230.85	Requirement for exterior emergency disconnects for services on one-and two-family dwellings, including service changes.	Adopt as written in the 2023 NEC.
19	230.85	Transfer switches and panelboards, including meter-panel combination enclosures, that include a main breaker or other listed means to disconnect all service conductors shall be considered emergency disconnects and shall comply with subsection (1) of this section when installed as a service disconnect.	This was a 2020 State Electrical Code Amendment to be renewed for the 2023 State Electrical Code.
20	230.95	Requirement for GFPE protection for services of 1,000-amps or more and over 150-volts to ground.	Adopt as written in the 2023 NEC.
21	Article 245	Overcurrent protection for Systems Rated Over 1,000-volts ac, 1,500 -volts dc.	Adopt as written in the 2023 NEC.
22	250.50	State Amendment changing word from “present” to “available”.	This was a 2020 State Electrical Code Amendment to be renewed for the 2023 State Electrical Code.
23	250.53(A)(2)	Amendment allows for a single ground rod or plate for saw poles meeting certain criteria.	This was a 2020 State Electrical Code Amendment to be renewed for the 2023 State Electrical Code.
24	250.140	2020 NC State Electrical Code included exceptions for existing range and dryer circuits.	This was a 2020 State Electrical Code Amendment to be renewed for the 2023 State Electrical Code.
25	250.142	2020 NC State Electrical Code included exceptions for dealing with situations where service changes are encountered with 3-wire SE cables.	This was a 2020 State Electrical Code Amendment to be renewed for the 2023 State Electrical Code.

Line No.	NEC Section	Synopsis of Change	Committee Comments
26	300.3	2020 NC State Electrical Code included exceptions for dealing with situations where service changes are encountered with 3-wire SE cables.	This was a 2020 State Electrical Code Amendment to be renewed for the 2023 State Electrical Code.
27	Table 300.5	NC State Amendment that permitted reduced depth for residential wiring methods that met certain criteria.	This was a 2020 State Electrical Code Amendment to be renewed for the 2023 State Electrical Code.
28	300.9	NC State Amendment that states that the interior of raceways meeting certain criteria may be considered a dry location.	This was a 2020 State Electrical Code Amendment to be renewed for the 2023 State Electrical Code.
29	300.26	This section dealt with “Remote-Control & Signaling Circuits Classification”	TIA issued that re-organized this section. Adopt as written in the 2023 NEC TIA.
30	Article 305	General Requirements for Wiring Methods and Materials for Systems Rated Over 1000 Volts ac, 1500 Volts dc, Nominal.	Adopt as written in the 2023 NEC.
31	Article 310	Minor changes to this Article after the mass changes found in the 2020 NEC.	Adopt as written in the 2023 NEC.
32	312.10	New changes that govern screws for enclosures listed in this article.	Adopt as written in the 2023 NEC.
33	Article 314	This article deals with outlet, device, pull, and junction boxes. Limited changes throughout article.	Adopt as written in the 2023 NEC.
	314.29	TIA issued from the NFPA.	Adopt as written in the 2023 NEC TIA.
34	Article 315	Medium Voltage Conductors, Cable, Cable Joints, and Cable Terminations. It appears this article was Article 311 in the 2020 NEC/ State Electrical Code.	Adopt as written in the 2023 NEC.
35	320.23	2020 State Electrical Code Amendment that permitted cables not located on tops of joists and trusses to be installed without guard strips.	This was a 2020 State Electrical Code Amendment to be renewed for the 2023 State Electrical Code.
36	334.15(C)	NC State Electrical Code Amendment that permits cables to be installed on the bottom of floor joists in crawl spaces without running boards.	This was a 2020 State Electrical Code Amendment to be renewed for the 2023 State Electrical Code.
37	Article 352	Article 352 deals with PVC conduit. Minor changes.	Adopt as written in the 2023 NEC.
38	406.4(D)(4)	NC State Electrical Code Amendment that permits receptacles that are replaced are not required to be AFCI protected.	The committee recommends that this amendment not be renewed
39	410.2 & 410.16	NC State Electrical Code Amendment that permits certain types of luminaires to be installed within clothes closets with minimal distance requirements.	This was a 2020 State Electrical Code Amendment to be renewed for the 2023 State Electrical Code.

Line No.	NEC Section	Synopsis of Change	Committee Comments
40	517.26	This section gives the "Application of Other Articles". Life safety branch is to be installed under Article 700 as well.	The committee recommends that the critical branch of the essential system also be added to these requirements.
41	555.10(3)	This section requires signage near a boat dock.	The committee recommends for the wording of the sign to be as follows: **WARNING! NO SWIMMING! POTENTIAL SHOCK HAZARD – ELECTRICAL CURRENTS MAY BE PRESENT IN THE WATER!** Sign shall be reflective, with letters all capitals, reflective, with a minimal dimension of 18" wide by 24" long.
42	555.35	GFPE & GFCI protection for marinas, boatyards, & commercial & noncommercial docking facilities.	Adopt as written in the 2023 NEC.
43	702.4	A representative with the Tesla company proposed an Amendment to add verbiage to this Section.	The committee rejected this amendment.
44	680.1	This section states the scope of this article.	The committee recommends including enterable aquariums to the scope of this article.
45	680.26	A TIA was issued by the NFPA, in relation to the equipotential bonding around special systems listed in this article.	The committee recommends adopting this TIA as an amendment, however, also recommends the removal of single wire #8AWG as an approved method.
46	700.4(C)(2)	Original wording of this section: "***Emergency Sources.*** *Emergency sources shall be permitted to operate in parallel where the necessary equipment to establish and maintain a synchronous condition is provided."*	Committee recommends that the new wording reads as follows: ": "***Emergency Sources.*** *Listed or approved emergency sources shall be permitted to operate in parallel where the necessary equipment to establish and maintain a synchronous condition is provided."*
47	700.6	Original wording of this section: "***Signals****. Audible, visual, and facility or network remote annunciation devices shall be provided, where applicable, for the purpose described in 700.6(A) through (D)".*	Committee recommends to add this sentence to the end of the section: "*These devices shall be located in a 24-hour attended location".*

Line No.	NEC Section	Synopsis of Change	Committee Comments
48	700.12(A)	Original wording of this section read: "*Power Source Consideration. In selecting an emergency source of power, consideration shall be given to the occupancy and the type of service to be rendered, whether of minimum duration, as for evacuation of a theater, or longer duration, as for supplying emergency power and lighting due to an indefinite period of current failure from trouble either inside or outside the building*."	The recommends the section should be written as follows: "*Power Source Consideration. In selecting a <u>listed or approved</u> emergency source of power, consideration shall be given to the occupancy and the type of service to be rendered, whether of minimum duration, as for evacuation of a theater, or longer duration, as for supplying emergency power and lighting due to an indefinite period of current failure from trouble either inside or outside the building*."
49	701.6	Original wording of this section reads as follows: "*Audible and visual signal devices shall be provided, where practicable, for the purposes described in 706.6(A), (B), (C), and (D).*	The recommends the section should be written as follows: *Audible and visual signal devices shall be provided, where practicable, for the purposes described in 706.6(A), (B), (C), and (D). <u>These devices shall be located in a 24-hour attended location".</u>*
50	701.12(A)	Original wording of this section reads as follows: ***Power Source Considerations**. In selecting a legally required standby source of power, consideration shall be given to the type of service to be rendered, whether of short-time duration or long duration."*	The recommends the section should be written as follows: ***Power Source Considerations**. In selecting a <u>listed or approved legally</u> required standby source of power, consideration shall be given to the type of service to be rendered, whether of short-time duration or long duration."*

Appendix C

2023 NEC Ad Hoc Committee Identification of Fiscal Change Significance from the 2020(2017 for one- & two-family dwellings) State Electrical Code to the Proposed 2023 State Electrical Code

Line No.	NEC Section	Synopsis of Change with Committee Amendments	Fiscal Change	Significance	Evaluation
1	110.17	Servicing and maintaining equipment must be done by qualified persons (2020-2023)	Increase	Minimal	No
2	110.22	The source of supply's location for disconnect must now be posted (2020-2023)	Increase	Minimal	No
3	210.8(A)(Ex)	Excludes dedicated receptacle outlets for sewage pumps from GFCI protection in dwelling units.	Decrease	Minimal	No
4	210.8(A)(2)	Receptacle outlets in garages are all required to have GFCI protection.	Increase	Minimal	No
5	210.8(A)(3)	Exterior receptacle outlets rated 250-volts will require GFCI protection.	Increase	Minimal	No
6	210.8(A)(5)	Add Amendment excluding finished basement from GFCI protection requirements.	Decrease	Minimal	No
7	210.8(A)(6)(7)(8)	Ranges, cooking equipment, and receptacles in these areas will be required to be GFCI protected.	Increase	Minimal	Yes
8	210.8(A)(11)	250-volt, 30-amp receptacles for clothes dryers must be GFCI protected.	Increase	Minimal	Yes
9	210.8(B)(4)	Buffet serving areas must have GFCI protection.	Increase	Minimal	No
10	210.8(B)(13)	Adds aquariums, baitwells & similar open aquatic vessels to GFCI requirements.	Increase	Minimal	No
11	210.8(D)(1)-(12)	Appliances listed, regardless of location and connection type must be GFCI protected.	Increase	Minimal	No
12	210.8(E)	Receptacle outlets required by 210.63 are required to be GFCI protected regardless of location	Increase	Minimal	No
13	210.8(F)	Except for submersible well pumps exterior outlets for dwelling units are required to have GFCI protection, 50-amps and less, single-phase, 150-volts or less to ground. Listed HVAC equipment exempt until 09/1/2026.	Increase	Minimal	Yes
14	210.12(B)(1)	All 125-volt, 15- and 20-amp branch circuits in kitchens of one- and two-family dwellings will require AFCI protection.	Increase	Minimal	Yes

15	210.12(B)(13)	Laundry areas of dwelling units required AFCI protection	Increase	Minimal	Yes
16	210.12(E)	Amendment renewed to increase allowable footage for a branch circuit extension from 6’ to 50’.	Decrease	Minimal	No
17	210.52(C)(2)	Option is given to delete kitchen island receptacle.	Decrease	Minimal	No
18	225.41	One- and two-family dwellings fed by a feeder must now have an emergency disconnect installed on the exterior of the structure	Increase	Minimal	No
19	230.67	Surge protection is required for dwelling units and other areas with sleeping units.	Increase	Minimal	Yes
20	230.71(B)	For one- and two-family dwellings, a single overcurrent will for each enclosure.	Increase	Minimal	No
21	230.71(Ex)	Permits temporary saw pole services that meet certain criteria may have up to six service disconnects per enclosure.	Decrease	Minimal	No
22	230.85	Emergency disconnect going to be required on the exterior of one- or two-family dwellings	Increase	Minimal	Yes
23	240.11	Selective coordination requirements for feeders.	Increase	Minimal	No
24	250.50	Changes wording from present to available for required electrodes.	Decrease	Minimal	No
25	250.53(B)(2)	Permits a single rod or plate electrode for temporary saw poles that meet certain criteria	Decrease	Minimal	No
26	250.64(G)	Grounding electrode conductors not permitted to enter vents.	Increase	Minimal	No
27	250.140	Amendment added to allow for leniency for circuits of existing clothes dryers and ranges.	Decrease	Minimal	No
28	250.142	Amendment added to allow for leniency for existing 3-wire cables feeding panels when new overcurrent device is installed ahead of panel	Decrease	Minimal	No
29	Table 300.5(A)	Table 300.5(A) reduces cover requirements for up to 250-volts, 50-ampere, GFCI circuits.	Decrease	Minimal	No
30	300.9	Allows for the interior of a raceway located above grade to be considered a dry location if it meets certain criteria	Decrease	Minimal	No
31	312.10	New requirements for screws attaching covers.	Increase	Minimal	No
32	314.5	New requirements for screws attaching covers.	Increase	Minimal	No
33	314.27(C)	New requirement for one- and two-family dwellings that require most ceiling outlet boxes in habitable rooms to allow for ceiling fan installations	Increase	Minimal	No
34	320.23(A)	Eliminates the requirements to protect cables mounted above walking areas in attics	Decrease	Minimal	No

35	334.15(C)	Permits NM cables to be secured to the bottom of floor joists in crawl spaces	Decrease	Minimal	No
36	406.9(C)	Bathtub space was redefined. Some exceptions are permitted.	Decrease	Minimal	No
37	406.12	Tamper resistant increased locations	Increase	Minimal	No
38	408.4(B)	Requires to list location of source of supply.	Increase	Minimal	No
39	410.2	Allowances made in order to install LED or fluorescent luminaires in smaller closets.	Decrease	Minimal	No
40	410.16	Allowances made in order to install LED or fluorescent luminaires in smaller closets.	Decrease	Minimal	No
41	445.19	Readily accessible emergency shutdown of prime movers of generators.	Increase	Minimal	No
42	517.26	Critical branch of the essential system to be covered by Article 700 as well.	Increase	Minimal	No
43	551.71(F)(2)	Amendment requiring GFCI protection for 30- and 50-amp receptacle outlets for RV parks.	Increase	Minimal	Yes
44	555.10	Wording for signs around boat docks amended to make stress no swimming	Increase	Minimal	No
45	680.1	Include “enterable aquariums” to scope of Article 680	Increase	Minimal	No
46	680.4	Delete Inspection of existing swimming pools	Increase	Minimal	No
47	680.5	GFCI or SPGFCI protection to be provide on most all pool pump motors.	Increase	Minimal	No
48	680.21(D)	Requires any modification to pool pump branch circuit to include GFCI or SPGFCI protection	Increase	Minimal	No
49	680.26	Adopt TIA from the NFPA and remove the single wire method from the list of perimeter bonding methods.	Increase	Minimal	No

Evaluation

Home Depot, Lowes, or Amazon												
			Eaton		GE		Siemens		Square D		Average Cost	
20 Amp	Standard	1-Pole Breaker	$	7.58	$	7.18	$	6.98	$	6.68	$	7.11
20 Amp	AFCI/GFCI	1-Pole Breaker	$	62.98	$	73.98	$	62.52	$	59.98	$	64.87
Eaton 20 Amp	GFCI/Tamper	Receptacle	NA		NA		NA		NA		$	23.44
30 Amp	Standard	2-Pole Breaker	$	17.93	$	16.98	$	16.98	$	15.98	$	16.97
30 Amp	GFCI	2-Pole Breaker	$	106.26	$	126.00	$	98.00	$	119.00	$	112.32
50 Amp	Standard	2-Pole Breaker	$	17.93	$	16.98	$	16.98	$	15.98	$	16.97
50 Amp	GFCI	2-Pole Breaker	$	106.26	$	126.00	$	129.00	$	119.00	$	120.07
Surge Protection	Standard	Whole Home	$	66.48	$	46.25	$	99.35	$	106.00	$	77.52

Average Home Appliances & Installation Methods			Average Cost	Cost Increase
Laundry	2017/2020NEC	20 Amp GFCI Receptacle on Standard 20 Amp 1-Pole Breaker	$7.11	$57.76
	2023 NEC	20 Amp AFCI/GFCI 1-Pole Breaker	$64.87	
Small Appliance	2017/2020 NEC	20 Amp GFCI Receptacle on Standard 20 Amp 1-Pole Breaker	$7.11	$57.76
	2020 NEC	20 Amp AFCI/GFCI 1-Pole Breaker	$64.87	
Small Appliance	2017/2020 NEC	20 Amp GFCI Receptacle on Standard 20 Amp 1-Pole Breaker	$7.11	$57.76
	2023 NEC	20 Amp AFCI/GFCI 1-Pole Breaker	$64.87	
Refrigerator	2017/2020 NEC	20 Amp GFCI Receptacle on Standard 20 Amp 1-Pole Breaker	$7.11	$57.76
	2023 NEC	20 Amp AFCI/GFCI 1-Pole Breaker	$64.87	
Dishwasher	2017/2020 NEC	Standard 20 Amp 1- Pole Breaker Allowed	$7.11	$57.76
	2023 NEC	20 Amp AFCI/GFCI 1-Pole Breaker	$64.87	
Microwave	2017/2020 NEC	Standard 20 Amp 1-Pole Breaker	$7.11	$57.76
	2023 NEC	20 Amp AFCI/GFCI 1-Pole Breaker	$64.87	
Dryer	2017/2020 NEC	Standard 30 Amp 2-Pole Breaker	$16.97	$95.35
	2023 NEC	GFCI 30 Amp 2-Pole Breaker	$112.32	
Range	2017/2020 NEC	Standard 50 Amp 2-Pole Breaker	$16.97	$103.10
	2023 NEC	GFCI 50 Amp 2-Pole Breaker	$120.07	
Outdoor Air Conditioner	2017/2020 NEC	Standard 30 Amp 2-Pole Breaker	$16.97	$95.35
	2023 NEC	GFCI 30 Amp 2-Pole Breaker	$112.32	
Surge Protection	2017/2020 NEC	Not Required	$-	$77.52
	2023 NEC	Required	$77.52	

Emergency Disconnect	2017 NEC	Not Required	$-	$161.00
	2023 NEC	NEMA 3R Service Rated Enclosure	$161.00	
RV Receptacle Outlets, 30/50	2017/2020 NEC	Standard 30- or 50-amp Breaker	$16.97	$95.35
	2023 NEC	GFCI 30- or 50-amp Breaker	$112.32	

Appendix D

2023 NEC Ad Hoc Committee to Adopt the 2023 State Electrical Code (2020 NEC with Amendments)

Kim Wooten	BCC Council/ Electrical Contractor / Ad Hoc Chairman	704-258-4150	Kwooten@fstrategies.com
Rob Axford	IBEW	919-596-8220	raxford@ibew553.org
Tony Benton	Union County Inspection Department	704-634-9196	tony.benton@unioncountync.gov
Terry Cromer	Electrical Contractor/ Retired Inspector	336-382-1928	Terry@ncaec.us
Gerald Harvell	NC Educator	704-301-8656	electricchief@gmail.com
Bryan Holland	NEMA	972-358-0543	Bryan.Holland@nema.org
Cliff Isaac	NCHBA	919-676-9090	Clsaac@nchba.org
Don Iverson	Equipment Manufacturer Representative	517-204-0559	Don.Iverson@se.com
Misha Meinert	UNC Engineer	919-869-4158	Misha.meinert@fac.unc.edu
Gerry O'Connor	Eaton	773-962-7894	GerryJOconnor@eaton.com
Steven Stack	Union County Inspection Department	704-292-2577	steven.stack@unioncountync.gov
Benjamen Wesley	NCDOI/OSFM	919-532-4175	Ben.wesley@ncdoi.gov

From: Rittlinger, David B
To: Starling, Joseph
Cc: Kim Wooten; Bridget Herring (herring.ncbcc@gmail.com); Childs, Nathan D; Wesley, Ben
Subject: RE: Approval - 2023 Revisions to NC Electrical Code
Date: Tuesday, August 15, 2023 11:35:09 AM
Attachments: image003.png
image005.png
image006.png
image008.png
image009.png
image001.jpg

Joe,
Good morning.
I will have this approved by OSBM fiscal note for the 2023 NEC (NC Electrical Code) posted to the NCDOI website at the following location. Per our discussion this morning, a special public hearing in October will be scheduled this week so that the fiscal note and the code petition available for a full public comment period per NCGS 143-138 (a) and (a1)(1) and NCGS 150B-21.2 and .4.

https://www.ncleg.gov/EnactedLegislation/Statutes/HTML/BySection/Chapter_143/GS_143-138.html
https://www.ncleg.gov/EnactedLegislation/Statutes/HTML/BySection/Chapter_150B/GS_150B-21.2.html
https://www.ncleg.gov/EnactedLegislation/Statutes/HTML/BySection/Chapter_150B/GS_150B-21.4.html

Thank you.
Let me know if you have any questions.

david.rittlinger@ncdoi.gov

Link to free view of 2018 NC Codes
https://codes.iccsafe.org/codes/north-carolina

From: Starling, Joseph <joseph.starling@ncdoi.gov>
Sent: Monday, August 14, 2023 8:22 PM
To: Rittlinger, David B <david.rittlinger@ncdoi.gov>
Cc: Kim Wooten <kwooten@fstrategies.com>; Bridget Herring (herring.ncbcc@gmail.com) <herring.ncbcc@gmail.com>; Childs, Nathan D <nchilds@NCDOJ.GOV>; Wesley, Ben <ben.wesley@ncdoi.gov>

Subject: FW: Approval - 2023 Revisions to NC Electrical Code

David,

I noticed some discrepancies in the numbers, so Julie worked with me to make an amendment. Attached is the final approved version.

If you have already posted the first one, replace it with this. If you have trouble getting it posted live first thing Tuesday morning, call me so I can push it through the system.

Joe Starling

Joseph Daniel Starling, PE
Deputy Commissioner | Deputy State Fire Marshal
Division Chief of Engineering | Field Services

N.C. Department of Insurance
Office of State Fire Marshal
1202 Mail Service Center
Raleigh, NC 27699-1202
919.397.6159

From: Ventaloro, Julie W <julie.ventaloro@osbm.nc.gov>
Sent: Monday, August 14, 2023 7:15 PM
To: Starling, Joseph <joseph.starling@ncdoi.gov>
Subject: Fw: Approval - 2023 Revisions to NC Electrical Code

Joe,

Attached is the final *amended* version of the Building Code Council's fiscal note for the electrical code. As before, the proposed changes to the North Carolina State Electrical Code are approved for publication. (Since only the fiscal note was amended, and not the code itself, I'm not copying OAH).

Please note that the web address where it will be posted is slightly different than the version approved earlier today:

https://www.osbm.nc.gov/documents/files/BCC_2023-08-14a

Julie Ventaloro
Economic Analyst
NC Office of State Budget and Management
Chat with me in Teams

984-236-0694

From: Ventaloro, Julie W
Sent: Monday, August 14, 2023 1:17 PM
To: Starling, Joseph <joseph.starling@ncdoi.gov>
Cc: McLenaghan, Ed <ed.mclenaghan@osbm.nc.gov>; McGhee, Dana <dana.McGhee@oah.nc.gov>; Snyder, Ashley B <ashley.snyder@oah.nc.gov>
Subject: Approval - 2023 Revisions to NC Electrical Code

OSBM has reviewed the Building Code Council's proposed changes to the North Carolina State Electrical Code in accordance with G.S. 150B-21.4. OSBM has determined the amendments will have substantial impacts, with little to no impact on state or local governments. The fiscal note is approved for publication.

The .pdf file of the fiscal note (attached) will be posted on our website at the following URL (please allow for some time):

https://www.osbm.nc.gov/documents/files/BCC_2023-08-14

Please let me know if you have any questions.

Julie Ventaloro
Economic Analyst
NC Office of State Budget and Management
Chat with me in Teams
984-236-0694

Email correspondence to and from this address may be subject to the North Carolina Public Records Law and may be disclosed to third parties by an authorized state official.

APPENDIX C
CODE CHANGE PROPOSAL
NORTH CAROLINA
BUILDING CODE COUNCIL

1429 Rock Quarry Road, Suite 105
Raleigh, North Carolina 27610
(919) 647-0008
david.rittlinger@ncdoi.gov

Petition for Rule Making Item Number _____

Granted by BCC	_____	**Adopted by BCC**	_____	**Approved by RRC**	_____
Denied by BCC	_____	**Disapproved by BCC**	_____	**Objection by RRC**	_____

PROPONENT: David B. Rittlinger PHONE: (919)888-0284
REPRESENTING: NCDOI-OSFM Engineering and Codes
ADDRESS: Mail Service Center 1202
CITY: Raleigh STATE: NC ZIP: 27699-1202
E-MAIL: david.rittlinger@ncdoi.gov FAX: (___) -

North Carolina State Building Code, Volume Repeal the 2017 NC Electrical Code and 2020 NC Electrical Code - Section

CHECK ONE: [ ] Revise section to read as follows: [X] Delete section and substitute the following:
[ ] Add new section to read as follows: [ ] Delete section without substitution:

~~LINE THROUGH MATERIAL TO BE DELETED~~ UNDERLINE MATERIAL TO BE ADDED

Please type. Continue proposal or reason on plain paper attached to this form. See reverse side for instructions.

Repeal the 2017 NC Electrical Code and 2020 NC Electrical Code effective 1/1/2025 so the 2023 NC Electrical Code can be adopted effective 1/1/2025. See the reason below.

Will this proposal change the cost of construction?	Decrease	[X]	Increase	[X]	No	[ ]
Will this proposal increase to the cost of a dwelling by $80 or more?			Yes	[X]	No	[ ]
Will this proposal affect the Local or State funds?	Local	[ ]	State	[ ]	No	[X]
Will this proposal cause a substantial economic impact (≥$1,000,000)?			Yes	[X]	No	[ ]

- Non-Substantial – Provide an economic analysis including benefit/cost estimates.
- Substantial – The economic analysis must also include 2-alternatives, time value of money and risk analysis.
- Pursuant to §143-138(a1)(2) a cost-benefit analysis is required for all proposed amendments to the NC Energy Conservation Code. The Building Code Council shall also require same for the NC Residential Code, Chapter 11.

REASON: For the NCBCC to adopt the proposed North Carolina amendments to the 2023 National Electrical Code to create the 2023 North Carolina Electrical Code on 12/12/23 and meet the requirements of NCGS Chapter 150B Administrative Procedures Act, the 2017 and 2020 NC Electrical Codes are required to be repealed. The effective date is 1/1/25. A fiscal note and cost benefit analysis is provided with the proposed adoption of 2023 North Carolina Electrical Code. The proposed 2023 NC Electrical Code, fiscal note and cost benefit analysis can be found at the following link: https://www.ncosfm.gov/news/events/building-code-council-meeting-june-13-2023

Signature: *David B. Rittlinger* Date: October 17, 2023