

**COMMUNITY AFFAIRS**

**DIVISION OF CODES AND STANDARDS**

**Uniform Construction Code**

**Electrical Subcode**

**Proposed Amendment: N.J.A.C. 5:23-3.16**

Authorized By: Lori Grifa, Commissioner, Department of Community Affairs.

Authority: N.J.S.A. 52:27D-124.

Calendar Reference: See Summary below for explanation of exception to calendar requirement.

Proposal Number: PRN 2012-009.

Submit written comments by March 3, 2012 to:

Amy Fenwick Frank

Division of Codes and Standards

PO Box 802

Trenton, NJ 08625-0802

Fax Number: (609) 633-6729

Email: AFrank@dca.state.nj.us

The agency proposal follows:

**Summary**

Under the State Uniform Construction Code (UCC) Act, N.J.S.A. 52:17D-119 et seq., the Commissioner of the Department of Community Affairs historically adopts the latest versions of national and international model codes for use in New Jersey. P.L. 1996, c. 53 amended the

UCC Act to give the Commissioner “the authority to limit the adoption of later revisions to the model code to include only those standards in effect on July 1, 1995, and any later revisions or amendments of model codes which would not be inconsistent with the purpose of the Act.”

Accordingly, after review by the UCC Advisory Board, and the electrical subcode committee of the Board, the Department proposes to adopt the 2011 edition of the National Electrical Code (NEC) with revisions.

The proposed amendments reflect the modifications to the model code the Department is proposing to adopt.

A summary of the proposed amendments follows:

1. At N.J.A.C. 5:23-3.16(a)1 and 2, the proposed amendments update the references to the 2011 NEC.
2. At N.J.A.C. 5:23-3.16(a)2i, the proposed amendment revises the reference to the bulletin on the Informational Notes of the electrical subcode (previously known as the Fine Print Notes). Bulletin 09-1 will be updated to reflect the adoption of the 2011 NEC during the rulemaking process by publishing new Bulletin 12-1.
3. At N.J.A.C. 5:23-3.16(b)2i, the proposed amendment deletes the reference to N.J.A.C. 5:23-3.8 and 3.8A because N.J.A.C. 5:23-3.7 adequately addresses approvals.
4. At N.J.A.C. 5:23-3.16(b)3i, the proposed amendment makes clear that receptacles that are not readily accessible, which serve appliances in a dedicated space and which serve permanently installed fire or burglar alarms systems, do not meet the requirements of Section 210.52(G) for receptacles in dwelling units. This text is contained within the 2011 NEC.

5. At N.J.A.C. 5:23-3.16(b)3ii, the proposed amendment deletes text of the NEC, specifically Section 210.12(B), entitled “Branch Circuit Extensions or Modifications – Dwelling Units,” that is regulated by the Rehabilitation Subcode, N.J.A.C. 5:23-6.
6. At N.J.A.C. 5:23-3.16(b)4ii, the proposed amendment deletes the modification to the code section as the language is contained in the 2011 NEC.
7. At N.J.A.C. 5:23-3.16(b)4iv and v, the proposed amendment deletes the modifications to the code sections as those sections no longer exist in the 2011 NEC.
8. At N.J.A.C. 5:23-3.16(b)5i, the proposed amendment deletes text of the NEC that requires the installation of arc-fault circuit-interrupter (AFCI) receptacles when receptacles are being replaced in a dwelling unit. This is regulated by the Rehabilitation Subcode.
9. At N.J.A.C. 5:23-3.16(b)7i, the proposed amendment deletes the modification to the code section that has been removed from the 2011 NEC and adds an amendment to Chapter 6 that is the result of a Tentative Interim Amendment (TIA) issued by the National Fire Protection Association. This TIA includes is a new exception that allows pre-packaged spas and hot tubs to be installed without the perimeter surface equipotential bonding meeting certain criteria.
10. At N.J.A.C. 5:23-3.16(b)9, the proposed amendment updates the title of the deleted section.

As the Department has provided a 60-day comment period on this notice of proposal, this notice is excepted from the rulemaking calendar requirement pursuant to N.J.A.C. 1:30-3.3(a)5.

### **Social Impact**

The proposed amendments would have a positive social impact because, by maintaining consistency throughout the UCC and by adopting the most up-to-date standards, the UCC provides a single, clear, and modern set of technical standards for construction in New Jersey.

### **Economic Impact**

There are no significant differences between the requirements of the currently adopted electrical subcode (the 2008 National Electrical Code) and the 2011 National Electrical Code proposed for adoption. The Department anticipates that the proposed amendments would have a positive economic impact because implementation of current and coherent standards would provide for a cost-effective means of code enforcement. It is anticipated that the proposed adoption of the language from the Tentative Interim Amendment on the equipotential bonding grid will resolve some confusion that has existed with regard to this requirement.

### **Federal Standards Statement**

No Federal standards analysis is required because the amendments are not being proposed in order to implement, comply with, or participate in any program established under Federal law or under a State law that incorporates or refers to Federal law, standards, or requirements.

### **Jobs Impact**

The assignment of code enforcement responsibilities is not expected to have an impact on the generation or loss of jobs.

### **Agriculture Industry Impact**

The Department does not anticipate that the proposed amendments would impact the agriculture industry.

### **Regulatory Flexibility Statement**

The proposed amendments simply update the referenced edition of the National Electrical Code. As such, the proposed amendments do not impose any new reporting, recordkeeping or compliance requirements on “small businesses” as defined under the Regulatory Flexibility Act,

N.J.S.A. 52:14B-16 et seq., nor do they require small businesses to engage any professional services which they would not have needed to engage under the current rules.

### **Housing Affordability Impact Analysis**

Inasmuch as the proposed amendments only concern adoption of the most recent edition of the adopted model code and would make other changes of a technical or corrective nature, there is an extreme unlikelihood that they would have an impact on the production of affordable housing.

### **Smart Growth Development Impact Analysis**

Inasmuch as the proposed amendments only concern adoption of the most recent edition of the adopted model code and would make other changes of a technical or corrective nature, there is an extreme unlikelihood that they would evoke a change in housing production within Planning Areas 1 and 2, or within designated centers, under the State Development and Redevelopment Plan.

**Full text** of the proposal follows (additions indicated in boldface **thus**; deletions indicated in brackets [thus]):

5:23-3.16 Electrical subcode

(a) Rules concerning the subcode adopted are as follows:

1. Pursuant to authority of P.L. 1975, c. 217, as modified by P.L. 1996, c. 53, the Commissioner hereby adopts the model code of the National Fire Protection Association, known as "The National Electrical Code [2008] **2011**" as the electrical subcode for New Jersey.

i. (No change.)

2. The National Electrical Code [2008] **2011** may be known and cited as "the electrical subcode."

i. Codes and standards referenced in the [Fine Print Notes (FPNs)] **Informational Notes** of the electrical subcode (NEC [2008] **2011**) shall be considered adopted by reference to the extent prescribed by each related section. These codes and standards also are printed in DCA Bulletin #[09-1]**12-1**, which contains a list of adopted codes and standards that are applicable to the enforcement of the electrical subcode.

3. (No change.)

(b) The following chapters or articles of the electrical subcode are amended as follows:

1. (No change.)

2. Chapter 1 of the electrical subcode, Article 100, entitled "Definitions," is amended as follows:

i. The definition of the term "approved" is amended to delete the phrase "the authority having jurisdiction" and substitute in lieu thereof, the phrase "electrical subcode official.

Approval shall be in accordance with N.J.A.C. 5:23-3.7[, 3.8 and 3.8A]."

ii. – iii. (No change.)

3. Chapter 2 of the electrical subcode, entitled "Wiring and Protection," is amended as follows:

i. Section [210.8 (A)(2)] **210.8(A)(2)** and (5) of Article 210, entitled Branch Circuits, is deleted; it is replaced by Section 210.8(A)(2) and (5) and the exceptions in the National Electrical Code 2005 as follows:

"210.8(A)(2) - Garages, and also accessory buildings that have a floor located at or below grade level not intended as habitable rooms and limited to storage areas, work areas, and areas of similar use.

Exception No. 1 to (2) - Receptacles that are not readily accessible.

Exception No. 2 to (2) - A single receptacle or a duplex receptacle for two appliances located within dedicated space for each appliance that, in normal use, is not easily moved from one place to another and that is cord-and-plug connected in accordance with 400.7(A)(6), (A)7, or (A)(8).

Receptacles installed under the exceptions to 210.8(A)(2) shall not be considered as meeting the requirements of 210.52(G).

210.8(A)(5) - Unfinished basements: For purposes of this section, unfinished basements are defined as portions or areas of the basement not intended as habitable rooms and limited to storage areas, work areas, and the like.

Exception No. 1 to (5) - Receptacles that are not readily accessible.

Exception No. 2 to (5) - A single receptacle or a duplex receptacle for two appliances located within dedicated space for each appliance that, in normal use, is not easily moved from one place to another and that is cord-and-plug connected in accordance with 400.7(A)(6), (A)7, or (A)(8).

Exception No. 3 to (5) - A receptacle supplying only a permanently installed fire alarm or burglar alarm system shall not be required to have ground-fault circuit-interrupter protection.

**Receptacles installed under the exceptions to 210.8(A)(5) shall not be considered as meeting the requirements of 210.52(G)."**

**ii. Section 210.12(B), entitled "Branch Circuit Extensions or Modifications – Dwelling Units," is deleted in its entirety.**

4. Chapter 3 of the electrical subcode, entitled "Wiring Methods and Materials," is amended as follows:

i. (No change.)

[ii. Section 334.10(1) is amended to add "and accessory buildings or structures" after the word dwellings.]

[iii.] ii. (No change in text.)

[iv. In Section 342.30, Intermediate Metal Conduit, "or permitted to be unsupported in accordance with 342.30.(C)" shall be deleted; in Section 344.30, Rigid Metal Conduit, "or permitted to be unsupported in accordance with 344.30.(C)" shall be deleted; in Section 352.30, Rigid Polyvinyl Chloride Conduit, "or permitted to be unsupported in accordance with 352.30.(C)" shall be deleted; in Section 355.30, Metallic Tubing Reinforced Thermosetting Resin Conduit, "or permitted to be unsupported in accordance with 355.30.(C)" shall be deleted; and in Section 358.30, Electrical Metallic Tubing, "or permitted to be unsupported in accordance with 358.30.(C)" shall be deleted.

v. Subsection (C) shall be deleted from each of the following sections: Section 342.30, Intermediate Metal Conduit, Section 344.30, Rigid Metal Conduit, Section 352.30, Rigid Polyvinyl Chloride Conduit, Section 355.30, Metallic Tubing Reinforced Thermosetting Resin Conduit, and Section 358.30, Electrical Metallic Tubing.]

**5. Chapter 4 of the electrical subcode, entitled "Equipment for General Use" is amended as follows:**

**i. Section 406.4(D)(4), entitled "Arc-Fault Circuit-Interrupter Protection," is deleted in its entirety.**

[5.] 6. (No change in text.)

[6.] **7.** Chapter 6 of the electrical subcode, entitled "Special Equipment," is amended as follows:

i. [Section 645.17, Power Distribution Units, is amended to delete the words "each panelboard has no more than 42 overcurrent devices and".] **Section 680.42(B), entitled "Bonding," shall be deleted and the following shall be inserted:**

**"680.42(B) Bonding. Bonding by metal-to-metal mounting on a common frame or base shall be permitted.**

**Exception No. 1: The metal bands or hoops used to secure wooden staves shall not be required to be bonded as required in 680.26.**

**Exception No. 2: A listed self-contained spa or hot tub that meets all of the following conditions shall not be required to have equipotential bonding of perimeter surfaces installed as required in 680.26(B)(2):**

**(1) Is installed in accordance with manufacturer's instructions on or above grade.**

**(2) The vertical measurement from all permanent perimeter surfaces within 30 horizontal inches (76 cm) of the spa to the top rim of the spa is greater than 28 inches (71 cm).**

**Informational Note: For further information regarding the grounding and bonding requirements for self-contained spas and hot tubs, see ANSI/UL 1563 – 2009, Standard for Electric Spas, Equipment Assemblies, and Associated Equipment."**

[7.] **8.** (No change in text.)

[8.] **9. Informative** Annex H of the electrical subcode, entitled "Administration and Enforcement," is deleted in its entirety.

(c) (No change.)