

Notice of Agency Rulemaking Proposal

AGENCY: 02-318, Department of Professional and Financial Regulation, Office of Professional and Occupational Regulation, Electricians' Examining Board

CHAPTER NUMBER AND TITLE:

Chapter 120: Electrical Installation Standards

TYPE OF RULE (*check one*): ☒ Routine Technical ☐ Major Substantive

PROPOSED RULE NUMBER:

BRIEF SUMMARY:

The proposed rulemaking would repeal the current Chapter 120, Electrical Installation Standards, and replace with a rule with the same title and in the same location that adopts and incorporates by reference into board rule the 2020 National Electrical Code, National Fire Protection Association ("NFPA") standard #70 ("2020 NEC") subject to certain amendments and exclusions.

Go to <https://www.maine.gov/pfr/professionallicensing/professions/electricians/index.html> to find the proposed rule and related rulemaking documents.

Date, time and location of PUBLIC HEARING (*if any*): March 19, 2021, 8:00 am. If the state of emergency in response to the novel coronavirus disease known as COVID-19 is still in place at the time of the hearing, the hearing will be held through remote access pursuant to 1 M.R.S. § 403-A. The information needed to access the hearing remotely will be posted on the Board's website at: <https://www.maine.gov/pfr/professionallicensing/professions/electricians/index.html>

If the state of emergency no longer exists at the time of the hearing, the hearing will be held at the Office of Professional and Occupational Regulation, 76 Northern Avenue, Gardiner, Maine. The hearing may be continued on additional dates if necessary. Comments on the proposed rules may be submitted to the Board Administrator no later than 5:00 p.m., Monday, March 29, 2021 by emailing her at electrician.board@maine.gov or by mailing your comments to her at Electricians' Examining Board, Attn: Catherine M. Carroll, 35 State House Station, Augusta, ME 04333-0035.

COMMENT DEADLINE: March 29, 2021 by 5:00 p.m.

CONTACT PERSON FOR THIS FILING (*include name, mailing address, telephone, fax, TTY, email*): Catherine M. Carroll, Board Administrator, 35 State House Station, Augusta, ME 04333, catherine.m.carroll@maine.gov, (tel) 207-624-8605, TTY users call Maine Relay 711

CONTACT PERSON FOR SMALL BUSINESS IMPACT STATEMENT (*if different*): N/A

FINANCIAL IMPACT ON MUNICIPALITIES OR COUNTIES (*if any*): N/A

STATUTORY AUTHORITY FOR THIS RULE: 32 M.R.S. §§ 1153, 1153-A

SUBSTANTIVE STATE OR FEDERAL LAW BEING IMPLEMENTED (*if different*): N/A

AGENCY WEBSITE: www.maine.gov/professionallicensing

EMAIL FOR OVERALL AGENCY RULEMAKING LIAISON: Kristin.Racine@maine.gov

* Check one of the following two boxes.

☐ The summary provided above is for publication in both the newspaper and website notices.

☒ The summary provided above is for the newspaper notice only. Title 5 §8053, sub-§5 & sub-§7, ¶D. A more detailed summary is attached for inclusion in the rulemaking notice posted on the Secretary of State’s website. Title 5 §8053, sub-§3, ¶D & sub-§6.

Please approve bottom portion of this form and assign appropriate AdvantageME number.

APPROVED FOR PAYMENT _____ DATE: _____
(authorized signature)

FUND	AGENCY	ORG	APP	OBJ	PROGRAM	FUNDING Profile JVC	FUND Pri JVC	FUND Line JVC
014	02A	4220	01	4946				

Notice of Agency Rulemaking Proposal

Additional Information for the Web *(if any)*

DETAILED SUMMARY:

The proposed rulemaking will repeal 02-318, Chapter 120, “Electrical Installation Standards” and replace with a new rule with the same title and in the same location that adopts and incorporates by reference into board rule the 2020 National Electrical Code, National Fire Protection Association standard #70 (“2020 NEC”), subject to certain amendments and exclusions. The board’s current Chapter 120 adopts and incorporates by reference the 2017 National Electrical Code, subject to certain amendments and exclusions.

The proposed rule adopts the 2020 NEC with amendments to the following: Article 100, Definitions, Dormitory Unit; Article 200.6(D), Grounded Conductors of Different Systems; Article 210.5(C)(1)(b), Branch Circuits Supplied from More than One Nominal Voltage System, Posting of Identification Means; Article 210.8(B), Ground-Fault Circuit-Interrupter Protection for Personnel, Other Than Dwelling Units; Article 210.8(F), Ground-Fault Circuit-Interrupter Protection for Personnel, Outdoor Outlets; Article 215.12(C)(1)(b) Identification for Feeders, Identification of Ungrounded Conductors, Feeders Supplied from More than One Nominal Voltage System, Posting of Identification Means; Article 230.2(E) Number of Services, Identification; Article 334.10(3), Uses Permitted; Article 338.12(B)(1) and (2), Uses Not Permitted, Underground Service-Entrance Cable; Article 400.12(4), Uses Not Permitted, Where attached to building surfaces; Article 406.9(C), Receptacles in Damp or Wet Locations, Bathtub and Shower Space; Article 625.40, Electric Vehicle Branch Circuit; and Article 702.4(B)(2), Capacity and Rating, System Capacity, Automatic Transfer Equipment.

The proposed rule does not adopt Article 230.67, Surge Protection or Article 334.12(A)(2).

Rulemaking Fact Sheet

(5 MRS §8057-A)

AGENCY: 02-318, Department of Professional and Financial Regulation, Office of Professional and Occupational Regulation, Electricians' Examining Board

NAME, ADDRESS, PHONE NUMBER, EMAIL OF AGENCY CONTACT PERSON: Catherine M. Carroll, Board Administrator, 35 State House Station, Augusta, ME 04333, catherine.m.carroll@maine.gov, (tel) 207-624-8605, TTY users call Maine Relay 711

CHAPTER NUMBER AND RULE TITLE:

Chapter 120: Electrical Installation Standards

TYPE OF RULE (*check one*): ☒ Routine Technical ☐ Major Substantive

STATUTORY AUTHORITY: 32 M.R.S. §§ 1153, 1153-A

DATE, TIME AND PLACE OF PUBLIC HEARING: March 19, 2021, 8:00 am. If the state of emergency in response to the novel coronavirus disease known as COVID-19 is still in place at the time of the hearing, the hearing will be held through remote access pursuant to 1 M.R.S. § 403-A. The information needed to access the hearing remotely will be posted on the Board's website at <https://www.maine.gov/pfr/professionallicensing/professions/electricians/index.html>. If the state of emergency no longer exists at the time of the hearing, the hearing will be held at the Office of Professional and Occupational Regulation, 76 Northern Avenue, Gardiner, Maine. The hearing may be continued on additional dates if necessary. Comments on the proposed rules may be submitted to the Board Administrator no later than 5:00 p.m., Monday, March 29, 2021 by emailing her at electrician.board@maine.gov or by mailing your comments to her at Electricians' Examining Board, Attn: Catherine M. Carroll, 35 State House Station, Augusta, ME 04333-0035.

COMMENT DEADLINE: March 29, 2021, 5:00 p.m.

PRINCIPAL REASON(S) OR PURPOSE FOR PROPOSING THIS RULE:

As required by 32 M.R.S. § 1153-A, all electrical installations must comply with the National Electrical Code, National Fire Protection Association standard #70 ("NEC") that is adopted by rule by the board, and the board must establish by rule technical standards for the proper installation of electrical equipment. These standards must conform as nearly as practicable to the NEC. The proposed rulemaking would repeal the current Chapter 120, Electrical Installation Standards which adopts and incorporates by reference the 2017 NEC and replace with a new rule with the same title and in the same location that adopts and incorporates by reference the 2020 NEC.

IS MATERIAL INCORPORATED BY REFERENCE IN THE RULE? X YES NO

ANALYSIS AND EXPECTED OPERATION OF THE RULE:

The proposed rulemaking adopts and incorporates by reference into board rule the 2020 NEC with certain amendments and exclusions.

The proposed rulemaking will repeal 02-318, Chapter 120, "Electrical Installation Standards" and replace with a new rule with the same title and in the same location that adopts and incorporates by reference into board rule the 2020 National Electrical Code, National Fire Protection Association standard #70 ("2020 NEC"), subject to certain amendments and exclusions. The board's current Chapter 120 adopts and incorporates by reference the 2017 National Electrical Code, subject to certain amendments and exclusions.

The proposed rule adopts the 2020 NEC with amendments to the following: Article 100, Definitions, Dormitory Unit; Article 200.6(D), Grounded Conductors of Different Systems; Article 210.5(C)(1)(b), Branch Circuits Supplied from More

than One Nominal Voltage System, Posting of Identification Means; Article 210.8(B), Ground-Fault Circuit-Interrupter Protection for Personnel, Other Than Dwelling Units; Article 210.8(F), Ground-Fault Circuit-Interrupter Protection for Personnel, Outdoor Outlets; Article 215.12(C)(1)(b) Identification for Feeders, Identification of Ungrounded Conductors, Feeders Supplied from More than One Nominal Voltage System, Posting of Identification Means; Article 230.2(E) Number of Services, Identification; Article 334.10(3), Uses Permitted; Article 338.12(B)(1) and (2), Uses Not Permitted, Underground Service-Entrance Cable; Article 400.12(4), Uses Not Permitted, Where attached to building surfaces; Article 406.9(C), Receptacles in Damp or Wet Locations, Bathtub and Shower Space; Article 625.40, Electric Vehicle Branch Circuit; and Article 702.4(B)(2), Capacity and Rating, System Capacity, Automatic Transfer Equipment.

The proposed rule does not adopt Article 230.67, Surge Protection or Article 334.12(A)(2).

BRIEF SUMMARY OF RELEVANT INFORMATION CONSIDERED DURING DEVELOPMENT OF THE RULE
(including up to 3 primary sources relied upon)

Expertise of NFPA professionals in developing the 2020 NEC and expertise and input of members of the Electricians' Examining Board and board staff were considered in drafting the proposed rule.

ESTIMATED FISCAL IMPACT OF THE RULE: Within the scope of the entire 2020 NEC and related amendments, there are changes that may both increase and decrease the costs of electrical installations.

FOR EXISTING RULES WITH FISCAL IMPACT OF \$1 MILLION OR MORE, ALSO INCLUDE:

ECONOMIC IMPACT, WHETHER OR NOT QUANTIFIABLE IN MONETARY TERMS:
[see §8057-A(2)(A)]

INDIVIDUALS, MAJOR INTEREST GROUPS AND TYPES OF BUSINESSES AFFECTED
AND HOW THEY WILL BE AFFECTED: [see §8057-A(2)(B)]

BENEFITS OF THE RULE: [see §8057-A(2)(C)]

Note: If necessary, additional pages may be used.

Chapter 120: ELECTRICAL INSTALLATION STANDARDS

SUMMARY: This chapter adopts the current edition of the *National Electrical Code* to which all installations must conform.

1. All installations of electrical equipment commencing on or after [month] __, 2021 must comply with the 2020 edition of the *National Electrical Code*, *National Fire Protection Association* standard #70, as well as with all applicable statutes or rules of the State and this Board and all applicable ordinances, orders, rules and regulations of local municipalities.
2. The Board hereby adopts and incorporates into this chapter by reference the *National Electrical Code*, *National Fire Protection Association* standard # 70 (2020 edition), subject to the following amendments and exclusions:
 - A. The Board adopts Article 100, excepting the definition of Dormitory Unit, which the Board adopts as amended below:

ARTICLE 100**Definitions . . .**

Dormitory Unit. A building or a space in a building in which group sleeping accommodations are provided for any number of persons who are not members of the same family in one room, or a series of closely associated rooms, under joint occupancy and single management, with or without meals, but without individual cooking facilities. (CMP 2)

- B. The Board adopts Article 200.6(D) as amended below:

200.6 Means of Identifying Grounded Conductors...

(D) Grounded Conductors of Different Systems. Where grounded conductors of different systems are installed in the same raceway, cable, box, auxiliary gutter, or other type of enclosure, each grounded conductor shall be identified by system. Identification that distinguishes each system grounded conductor shall be permitted by one of the following means:

- (1) One system grounded conductor shall have an outer covering conforming to 200.6(A) or (B).
- (2) The grounded conductor(s) of other systems shall have a different outer covering conforming to 200.6(A) or 200.6(B) or by an outer covering of white or gray with a readily distinguishable colored stripe other than green running along the insulation.

- (3) Other and different means of identification allowed by 200.6(A) or (B) shall distinguish each system grounded conductor.

The means of identification shall be permanently posted where the conductors of different systems originate.

- C. The Board adopts Article 210.5(C)(1)(b) as amended below:

210.5 Identification for Branch Circuits. . .

(C) Identification of Ungrounded Conductors. . .

(1) Branch Circuits Supplied from More Than One Nominal Voltage System . . .

- (b) *Posting of Identification Means.* The method utilized for conductors originating within each branch-circuit panelboard or similar branch-circuit distribution equipment shall be permanently posted at each branch-circuit panelboard or similar branch-circuit distribution equipment. The label shall be of sufficient durability to withstand the environment involved and shall not be handwritten.

- D. The Board adopts Article 210.8(B) as amended below:

210.8 Ground-Fault Circuit-Interrupter Protection for Personnel . . .

(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, 50 amperes or less, installed in the locations specified in 210.8(B)(1) through (B)(12) shall have ground-fault circuit-interrupter protection for personnel.

- E. The Board adopts Article 210.8(F) as amended below:

210.8 Ground-Fault Circuit-Interrupter Protection for Personnel . . .

(F) Outdoor Outlets. All outdoor outlets for dwellings, other than those covered in 210.8(A)(3), Exception to (3), that are supplied by single-phase branch circuits rated 150 volts to ground or less, 50 amperes or less, shall have ground-fault circuit-interrupter protection for personnel.

Exceptions: Ground-fault circuit-interrupter protection shall not be required on (1) lighting outlets other than those covered in 210.8(C), (2) heat pumps, (3) sewer pumps, or (4) water pumps.

- F. The Board adopts Article 215.12(C)(1)(b) as amended below:

215.12 Identification for Feeders. . .

(C) Identification of Ungrounded Conductors. . .

(1) Feeders Supplied from More Than One Nominal Voltage System. . .

- (b) *Posting of Identification Means.* The method utilized for conductors originating within each feeder panelboard or similar feeder distribution equipment shall be permanently posted at each feeder panelboard or similar feeder distribution equipment.

G. The Board adopts Article 230.2(E) as amended below:

230.2 Number of Services . . .

- (E) Identification.** Where a building or structure is supplied by more than one service, or any combination of branch circuits, feeders, and services, a permanent plaque or directory shall be installed at each service disconnect location and at each outside electrical meter location denoting all other services, feeders, and branch circuits supplying that building or structure and the area served by each. See 225.37.

H. The Board does not adopt Article 230.67, **Surge Protection.**

I. The Board adopts Article 334.10(3) as amended below:

334.10 Uses Permitted. . .

- (3) Other structures permitted to be of Types III, IV, and V construction. In buildings or structures with interior finished walls and/or ceilings, cables shall be concealed within walls, floors, or ceilings that provide a thermal barrier of material that has at least a 15-minute finish rating as identified in listings of fire-rated assemblies.

J. The Board does not adopt Article 334.12(A)(2).

K. The Board adopts Article 338.12(B)(1) and (2) as amended below:

338.12 Uses Not Permitted. . .

- (B) Underground Service-Entrance Cable.** Underground service-entrance cable (USE) shall not be used under the following conditions or in the following locations:

- (1) For interior wiring of branch circuits and feeders originating and terminating within the same building
- (2) For aboveground installations except where USE cable emerges from the ground and is terminated in an enclosure at a location acceptable to the Authority Having Jurisdiction and the cable is protected in accordance with 300.5(D)

- L. The Board adopts Article 400.12(4) as amended below:

400.12 Uses Not Permitted. Unless specifically permitted in 400.10, flexible cords, flexible cables, cord sets, and power supply cords shall not be used for the following: . . .

- (4) Where attached to building surfaces

Exception to (4): Flexible cord and flexible cable shall be permitted to be attached to building surfaces in accordance with 368.56(B) and 590.4. Flexible cord and cable shall also be permitted to have one connection to the building surface for a suitable tension take-up device. Length of the cord or cable from the supply termination to the take-up device shall be limited to 6' (1.83 m). Strain relief cable grips shall be provided for the cord or cable at the equipment terminations.

- M. The Board adopts Article 406.9(C) as amended below:

406.9 Receptacles in Damp or Wet Locations. . .

- (C) **Bathtub and Shower Space.** Receptacles shall not be installed within or directly over a bathtub or shower stall.

- N. The Board adopts Article 625.40 as amended below:

625.40 Electric Vehicle Branch Circuit. Each outlet installed for the purpose of charging electric vehicles shall be supplied by an individual branch circuit. Each circuit shall have no other outlets.

Exception: Installations that comply with documented manufacturer installation instructions.

- O. The Board adopts Article 702.4(B)(2) as amended below:

702.4 Capacity and Rating. . .

- (B) **System Capacity. . .**

- (2) **Automatic Transfer Equipment.** For other than single-family dwellings, where automatic transfer equipment is used, an optional standby system shall comply with 702.4(B)(2)(a) or (B)(2)(b) in accordance with Article 220 or by another approved method.

- (a) *Full Load.* The standby source shall be capable of supplying the full load that is transferred by the automatic transfer equipment.

- (b) *Load Management.* Where a system is employed that will automatically manage the connected load, the standby source

shall have a capacity sufficient to supply the maximum load that will be connected by the load management system.

3. Copies of the *National Electrical Code*, *National Fire Protection Association* standard #70 may be purchased from:

National Fire Protection Association
1 Batterymarch Park, P.O. Box 9101
Quincy, MA 02269-9101
Telephone: 1-800-344-3555
www.nfpa.org

STATUTORY AUTHORITY:

32 M.R.S. §§ 1153 and 1153-A

EFFECTIVE DATE: