



Eric Milstead
Director

Legislative Services Office

Idaho State Legislature

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MEMORANDUM

TO: Rules Review Subcommittee of the Senate Commerce & Human Resources Committee and the House Business Committee

FROM: Principal Legislative Research Analyst - Ryan Bush

DATE: October 11, 2016

SUBJECT: Division of Building Safety

IDAPA 07.01.06 - Rules Governing the Use of National Electrical Code - Proposed Rule (Docket No. 07-0106-1601)

IDAPA 07.02.02 - Rules Governing Plumbing Permits - (Fee Rule) Proposed Rule (Docket No. 07-0202-1601)

IDAPA 07.02.06 - Rules Concerning Idaho State Plumbing Code - Proposed Rule (Docket No. 07-0206-1601)

(1) 07.01.06 - Rules Governing the Use of National Electrical Code - Proposed Rule (Docket No. 07-0106-1601)

The Division of Building Safety submits notice of proposed rulemaking at IDAPA 07.01.06 - Rules Governing the Use of National Electrical Code. The proposed rule adopts and incorporates by reference the 2017 National Electrical Code (NEC). The Division states that all existing amendments to the NEC are being retained; however, the exception related to Arc-Fault Circuit-Interrupter Protection is being simplified to ensure clarity.

The Division states that negotiated rulemaking was conducted and that notice was published in the May edition of the Idaho Administrative Bulletin, Vol. 16-5, pages 38-39. There is no significant fiscal impact associated with this rulemaking.

The proposed rule appears to be within the statutory authority granted to the Division in Section 54-1006, Idaho Code.

(2) 07.02.02 - Rules Governing Plumbing Permits - (Fee Rule) Proposed Rule (Docket No. 07-0202-1601)

The Division of Building Safety submits notice of a proposed fee rule at IDAPA 07.02.02 - Rules Governing Plumbing Permits - (Fee Rule). The proposed rule allows a permit holder to transfer a plumbing permit to another eligible person if both parties agree, the new holder accepts responsibilities of the permit and the new holder pays a fee of forty-five dollars (\$45) to the Division. This rule change also allows a permit holder to receive a refund of the permit price if the work was not commenced or if the work has not progressed beyond fifty percent (50%) completion.

Mike Nugent, Manager
Research & Legislation

Cathy Holland-Smith, Manager
Budget & Policy Analysis

April Renfro, Manager
Legislative Audits

Glenn Harris, Manager
Information Technology

The Division states that negotiated rulemaking was not conducted the change was discussed at several meetings and no one expressed opposition. There is no fiscal impact associated with this rulemaking.

The proposed fee rule appears to be within the statutory authority granted to the Division in Sections 54-2606 and 54-2623, Idaho Code

(3) 07.02.06 - Rules Concerning Idaho State Plumbing Code - Proposed Rule (Docket No. 07-0206-1601)

The Division of Building Safety submits notice of proposed rulemaking at IDAPA 07.02.06 - Rules Concerning Idaho State Plumbing Code. The proposed rule adopts and incorporates by reference the 2015 Uniform Plumbing Code to serve as the base plumbing code. The Division states that this adoption removes unnecessary provisions and tables; includes provisions related to use of certain fixtures and alternate materials and methods; provides greater flexibility for inspection officials; and allows the Division to have written interpretations of the rules available for review.

The Division states that negotiated rulemaking was conducted and that notice was published in the April edition of the Idaho Administrative Bulletin, Vol. 16-4, pages 14-15. There is no fiscal impact associated with this rulemaking.

The proposed rule appears to be within the statutory authority granted to the Division in Section 54-2606, Idaho Code.

cc: Division of Building Safety
Steve Keys

INCORPORATION BY REFERENCE SYNOPSIS

In compliance with Section 67-5223(4), Idaho Code, the following is a synopsis of the differences between the materials previously incorporated by reference in this rule that are currently of full force and effect and newly revised or amended versions of these same materials that are being proposed for incorporation by reference under this rulemaking.

The following agency of the state of Idaho has prepared this synopsis as part of the proposed rulemaking for the chapter cited here under the docket number specified:

DIVISION OF BUILDING SAFETY
IDAPA 07.01.06 - Rules Governing the Use of National Electrical Code
Proposed Rulemaking - Docket No. 07-0106-1601

The formerly adopted and incorporated by reference National Electrical Code (NEC), 2014 Edition, is being amended. The 2017 NEC adds several new articles to the NEC that provides safety requirements for emerging technology. Articles have been added to address energy storage systems and direct current micro-grid installations. The 2017 NEC will also provide necessary guidance on the difference between small scale and large scale solar systems. There are numerous revisions and clarifications that will make it easier to understand and apply. A copy of an index identifying important changes to the 2017 NEC is attached to this summary. More detailed information about any change to the 2017 NEC may be available upon request to the Division of Building Safety.

2017 NEC Significant Changes	
NEC Section	Synopsis of Change
Article 100 Definitions	
Accessible, Readily (Readily Accessible)	Revision to clarify that ready access is not precluded by the use of keys. New Informational Note covering supervised or controlled conditions.
Structure	Revision to include the phrase "other than equipment."
110.3(C)	New requirement for product testing, evaluation, and listing to be performed by a qualified testing laboratory in accordance with applicable product standards.
110.14(D)	New requirement for tightening torque values and calibrated torque tool to achieve torque value.
110.16(B)	Revision to require additional marking requirements for non-dwelling unit service equipment rated 1200 amperes or more.
110.24(A)	Revision to require calculation be documented and made available to those authorized to design, install, inspect, maintain, and operate the system.
110.26(A)(4)	New working space requirements for "limited access" areas.
110.26(E)(2)	New exception to permit structural overhangs or roof extensions in this zone.
210.5(C)(1)	New exception to requirement for marking conductors supplied from systems with different voltages.
210.8	Revision to provide direction on how receptacle proximity is determined.
210.8(A)(7)	Revision to indicate receptacle proximity is measured from top inside edge of sink bowl.
210.8(B)	Revision to expand GFCI protection to more receptacle voltage, phase, and current ratings.
210.8(B)(5)	Revision to indicate receptacle proximity is measured from top inside edge of sink bowl.
210.8(B)(9)	New requirement for GFCI protection of receptacles in crawl spaces. (other than dwelling units)
210.8(B)(10)	New requirement for GFCI protection of receptacles in unfinished areas of basements. (other than dwelling units)
210.8(E)	New requirement for GFCI protection of 120-volt lighting outlets installed in crawl spaces.
210.11(C)(4)	New requirement for a 20-ampere branch circuit dedicated to garage receptacle outlets.
210.12(B)	Revision to reference AFCI protection methods specified in 210.12 (A), to add bathrooms to the areas required to be protected, and to include "devices" installed at locations not meeting the definition of Outlet. (Dormitories)
210.12(C)	New requirement for AFCI protection in guest rooms and guest suites.
210.12(D)	Relocated from 210.12(B) and revised to also include dormitory units.
210.52(C)(3)	Revision to specify that peninsula countertops are considered to extend from the perpendicular wall at the end of the peninsula.
210.52(G)(1)	Revision to number and location of garage receptacle outlets.
210.64	Revisions on measurement, location, and applicability. New exception for services rated more than 120 volts to ground that supply certain types of equipment
210.70(A)(2)	Revision to permit dimmer control of stairway lighting outlet(s).
210.71	New requirement for receptacle outlets in meeting rooms.
220.12	New exception for bank and office occupancies permitting reduction of lighting

	load based on allowable load density prescribed by adopted energy codes.
225.30(F)	New requirement permitting multiple feeders supplying a one- or two-family dwelling.
230.29	Revision covering bonding metal structures used to support service conductors.
240.67	New requirement to provide means to reduce incident energy for fuses rated 1200 amperes or higher.
240.87	Revision to add two additional arc flash mitigation methods. New Informational Notes to assist with application.
250.30(A)(4)	Revision to better describe a grounding electrode and recognize the water pipe and the structural metal frame as covered in 250.68(C) that are being used are not grounding electrodes.
250.52(B)(3)	New list item to specify a pool-bonding grid as prescribed in 680.26(B)(1) and (B)(2) shall not be used as a grounding electrode.
250.68(C)(2)	Revision relocates text from 250.52(A)(2) to permit the structural metal frame of a building to serve as a conductor to interconnect electrodes when the hold-down bolts for a steel column are connected to a concrete encased electrode.
250.68(C)(3)	Revision to permit a rebar-type concrete encased electrode to extend the grounding electrode connection and provides additional installation requirements to prevent any corrosion due to contact with the earth.
Table 300.5	Revision to add a note to address burial depth requirements for pool, spa, and fountain lighting.
310.15(B)(3)(c)	Deletion of Table 310.15(B)(3)(c) and addition of a requirement where the distance above the roof to the bottom of the raceway or cable is less than 23 mm (7/8 in.), a temperature adder of 33°C (60°F) shall be included.
310.15(B)(7)	Revision to include a single-phase 208Y/120-volt systems.
336.10(9)	Permits Type TC-ER Cable 336.10(9) installation in one- and two-family dwellings.
400.12(5)	New exception to correlate with 300.22(C)(3).
404.2(C)	Revision adds new requirement for switching devices to meet 404.22 and exception to address replacement/retrofit limitations and numerical limits on neutral currents. Revision to clarify conditions exempt from providing a grounded conductor at switch locations.
404.22	New requirement for electronic lighting control switches and exception to correlate with 404.2(C) Exception.
406.5(F)	New requirement specific to work surfaces that are not considered to be countertops.
406.6(D)	New requirement to cover receptacle faceplates with night light and/or USB port.
406.12(D), (E), (F) & (G)	New requirement for tamper-resistant receptacles in educational, health care, certain location in assembly occupancies and dormitories.
Article 426	New article covering fixed resistance and electrode industrial process heating equipment.
440.9	New requirement for a wire type equipment grounding conductor to be provided in the outdoor portion of the metallic raceways that use non-threaded fittings.
555.3	Revision to add boatyards and commercial and noncommercial docking facilities and lowering the ground-fault protection threshold to a maximum 30 mA.
590.4(B)	Revision to a list format for clarity and add Type SE cable as a permitted wiring

	method to be installed in a raceway underground.
600.34(A) through (F)	New requirements covering the installation and field wiring of photovoltaic (PV) powered signs.
625.1	Revision to include wireless charging technology to the equipment types covered in Article 625.
680.14	New requirement specifying conditions under which an area is considered to be a corrosive environment and for certification/identification of the wiring methods used in such locations.
690.1	Revisions to correlate with new Article 691 and to clarify that energy storage systems and loads supplied by the PV system output are not within the scope of Article 690.
690.12	Revisions to specify objective of rapid shutdown and to provide exception exempting circuits associated with certain PV installation from the rapid-shutdown requirement. Cross-reference to 690.56(C) deleted because it is expected that designers, installers, and inspectors will review and implement all applicable marking requirements from 690.56, including those covering rapid shutdown
690.12(A)	Revision to clarify that rapid shutdown applies only to conductors of circuits supplied by the PV system.
690.12(B)	Revisions to establish a boundary creating two areas of rapid shutdown protection, to provide separate requirements for protection inside and outside of the boundary, and to specify performance requirements for the rapid shutdown equipment inside and outside the boundary.
690.12(C)	New requirements covering the operation, indication, location, number of, and type of device(s) used to initiate rapid shutdown.
690.12(D)	Revision specifying equipment used for rapid shutdown protection must be listed specifically for providing that protection.
Article 691	New article with requirements on applicability, installation, equipment approval, engineered design, disconnection, and arc-fault mitigation unique to large-scale photovoltaic electric supply stations.
Article 706	New article covering energy storage systems that includes defined terms and requirements on system classification, equipment certification, disconnecting means, connection to other energy sources, location, directories, circuit sizing, overcurrent protection, charge control, electrochemical energy storage systems, flow battery energy storage systems, and other energy storage technologies.
Article 710	New article covering stand-alone systems that includes requirements on equipment certification, supply capacity, conductor sizing, use of 120-volt circuits to supply 240-volt equipment, energy storage equipment, back-fed circuit breakers, and supply voltage and frequency control.
Article 712	New article covering direct current micro-grids that includes defined terms and requirements on equipment certification, circuit requirements, disconnecting means, wiring methods, ground-fault and arc-fault detection/protection, grounding, marking, overcurrent protection, and systems rated over 1000 volts

PROPOSED RULE COST/BENEFIT ANALYSIS

Section 67-5223(3), Idaho Code, requires the preparation of an economic impact statement for all proposed rules imposing or increasing fees or charges. This cost/benefit analysis, which must be filed with the proposed rule, must include the reasonably estimated costs to the agency to implement the rule and the reasonably estimated costs to be borne by citizens, or the private sector, or both.

Department or Agency: Division of Building Safety

Agency Contact: Steve Keys, Deputy Administrator - Operations **Phone:** (208) 332-8986

Date: August 15, 2016

IDAPA, Chapter and Title Number and Chapter Name: IDAPA 07.02.02 – Rules Governing Plumbing Permits

Fee Rule Status: **Proposed** **Temporary**

Rulemaking Docket Number: Docket No. 07-0202-1601

STATEMENT OF ECONOMIC IMPACT:

The economic impact of the fee itself to the Division and the Plumbing Board dedicated fund is expected to be neutral inasmuch as the fee imposed by the Division for administering the transfer of a plumbing permit to a new permit holder is expected to cover the administrative costs to the Division in processing the request. The effect of the fee would only have a negligible adverse effect on the dedicated Plumbing Board fund due to a slight decrease in fees previously paid for new permits that will no longer be required. The impact to the permit holder desiring to transfer a permit would be a one-time fee of \$45; however, the fee is expected to be significantly less expensive than securing an entirely new plumbing permit.

INCORPORATION BY REFERENCE SYNOPSIS

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DIVISION OF BUILDING SAFETY
IDAPA 07.02.06 - Rules Concerning Idaho State Plumbing Code
Proposed Rulemaking - Docket No. 07-0206-1601

In the past five years there have been many plumbing code changes that have positively affected the plumbing trade. Many of these changes are less restrictive and advantageous to contractors and property owners by providing them with more options. The rulemaking adopts the 2015 Uniform Plumbing Code (UPC) to serve as the base plumbing code for the Idaho State Plumbing Code to be published in 2017, including certain appendices. Currently, the State of Idaho uses the 2009 Uniform Plumbing Code (UPC) as the base code. The new 2015 code removes unnecessary provisions and tables from the rules which are already included in the 2015 UPC, and includes provision related to the use of certain fixtures, as well as alternate materials and methods used by plumbers. A copy of an index identifying important changes to the 2012 and 2015 UPC is attached to this summary. More detailed information about any change to the 2015 UPC may be available upon request to the Division of Building Safety.

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