IDAPA 07 TITLE 01 CHAPTER 06

07.01.06 - RULES GOVERNING THE USE OF NATIONAL ELECTRICAL CODE

000. LEGAL AUTHORITY.

The Idaho Electrical Board is authorized under Section 54-1001, Idaho Code, to adopt rules concerning the use of the National Electrical Code. (2-26-93)

001. TITLE AND SCOPE.

These rules shall be cited as IDAPA 07.01.06, "Rules Governing the Use of National Electrical Code," Division of Building Safety. These rules prescribe which edition of the National Electrical Code will be administered by the Idaho Electrical Board. (2-26-93)

002. WRITTEN INTERPRETATIONS.

This agency has no written interpretations of this chapter.

(2-26-93)

003. ADMINISTRATIVE APPEALS.

This chapter does not allow administrative relief of the provisions outlined herein.

(2-26-93)

004. -- 010. (RESERVED)

011. ADOPTION AND INCORPORATION BY REFERENCE OF THE NATIONAL ELECTRICAL CODE.

- **O1. Documents**. Under the provisions of Section 54-1001, Idaho Code, the National Electrical Code, 2017 Edition, (herein NEC) is hereby adopted and incorporated by reference for the state of Idaho and shall be in full force and effect on and after July 1, 2017, with the following amendments: (3-29-17)
- <u>a.</u> Article 110.3(A) and 110.3(B) shall not apply to submersible well pumps installed in swimming and marine areas, and shall apply to all equipment required in the installation of a submersible well pump in such areas except for the actual submersible well pump itself.
- $\underline{\mathbf{b}}$. Article 210.8(A)(7) Sinks. Delete article 210.8(A)(7) and replace with the following: Sinks located in areas other than kitchens where receptacles are installed within one and eight tenths (1.8) meters (six (6) feet) of the outside edge of the sink. (3-20-14)
 - bc. Article 210.8(A)(10). Delete article 210.8(A)(10). (3-20-14)
 - ed. Article 210.8(D). Delete article 210.8(D). (3-20-14)
- Article 210.52(E)(3). Delete article 210.52(E)(3) and replace with the following: Balconies, Decks, and Porches. Balconies, decks, and porches having an overall area of twenty (20) square feet or more that are accessible from inside the dwelling unit shall have at least one (1) receptacle outlet installed within the perimeter of the balcony, deck, or porch. The receptacle shall not be located more than two (2.0) meters (six and one half (6½) feet) above the balcony, deck, or porch surface.
- <u>e.</u> Add a new Article 225.30(F) One or Two Family Dwelling Unit(s). For a one-or two-family dwelling unit(s) with multiple feeders 1/0 or larger, it shall be permissible to install not more than six disconnects grouped at one location where the feeders enter the building, provided the feeder conductors originate at the same switchboard, panelboard, or overcurrent protective device location.

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Where the height of a crawl space does not exceed one and four tenths (1.4) meters or four and one half (4.5) feet it shall be permissible to secure NM cables, that run at angles with joist, to the bottom edge of joist. NM cables that run within two and one tenth (2.1) meters or seven (7) feet of crawl space access shall comply with Article 320.23.

(3-20-14)

- **f.** Article 675.8(B). Compliance with Article 675.8(B) will include the additional requirement that a disconnecting means always be provided at the point of service from the utility no matter where the disconnecting means for the machine is located. (3-20-14)
- g. Article 682.10 shall not apply to submersible well pumps installed in swimming and marine areas, and shall apply to all equipment required in the installation of a submersible well pump in such areas except for the actual submersible well pump itself.
- **h.** Article 682.11. Add the following exception to Article 682.11: This article shall not apply to service equipment that is located on or at the dwelling unit and which is not susceptible to flooding.
 - <u>i.</u> Article 682.13. Add the following exceptions to Article 682.13:
- <u>i.</u> Exception No 1. Wiring methods such as HDPE schedule 80 electrical conduit or its equivalent or greater, and clearly marked at a minimum "Caution Electrical" to indicate that it contains electrical conductors shall be approved. It shall be buried whenever practical, and in accordance with the requirements of the authority having jurisdiction. The use of gray HDPE water pipe rated at 250 PSI (eg. SIDR-7 or DR-9) is suitable for use as a chase only when the following conditions are met:
 - A. When internal conductors are jacketed submersible pump cable.
- B. When used in continuous lengths, directly buried, or secured on a shoreline above and below the water line.
- C. When submersible pump wiring terminations in the body of water according to 682.13 Exception No. 2 are met.
- <u>ii.</u> Exception No 2. Any listed and approved splices required to be made at the submersible well pump itself, outside of a recognized submersed pump sleeve or housing, when wires are too large to be housed inside such sleeve, shall be covered with a non-metallic, impact resistant material, no less than .25 inches thick, such as heavy duty heat shrink or other equivalent method approved by the authority having jurisdiction. (Eg. install a heat shrink over the sleeve or housing that the submersible well pump is installed in, and then recover (apply heat) the heat shrink over both the HDPE and the water line). At least six inches (6") shall be over the sleeve and at least twelve inches (12") over the HDPE and water line.
- <u>iii.</u> Exception No. 3. Pipe, conduit, PVC well casing, or other electrically unlisted tubing may be used as a chase, but not as a raceway, to protect conductors or cables from physical damage. Conductors or cables within a chase shall be rated for the location.
- <u>j.</u> Article 682.14. Add the following additional exception to Article 682.14: Submersible well pumps shall be considered directly connected and shall be anchored in place. Ballast is an acceptable form of anchoring.
- k. Article 682.14(A). Add the following exception to Article 682.14(A): Motor controller circuits to include remotely located stop pushbuttons, disconnects, relays and switches shall be permitted as a required disconnecting means. Such circuits shall be identified at a minimum as "Emergency Pump Stop", or with other obvious indications on the outside of the enclosure, that it disconnects a submersible pump.
 - <u>Article 682.15. Add the following exceptions to Article 682.15:</u>

Exception No. 1. For submersible pumps, and their motor leads, located in bodies of water, and are rated 60 amperes maximum, 250 volts maximum of any phase, shall have GFCI or Ground Fault Equipment Protection

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designed to trip at a maximum of 30 milliamps or less, protected by means selected by a licensed installer, meeting listing or labeling requirements, and inspected by the AHJ prior to submersion in bodies of water.

Exception No. 2. For installations or repair and replacement of submersible pumps located in bodies of water, that are rated over 60 amperes, and rated at any voltage, shall be evaluated by a qualified designer (Experienced Licensed Contractor), or involve Engineering or be engineered, for each specific application, with the utmost goal of public safety. Whenever possible, GFCI or Ground Fault Equipment Protection designed to trip at a maximum of 30 milliamps or less, meeting listing or labeling requirements, shall be installed, then inspected by the AHJ prior to submersion in bodies of water.

- gm. Article 550.32(B). Compliance with Article 550.32(B) shall limit installation of a service on a manufactured home to those homes manufactured after January 1, 1992. (5-3-03)
- hn. Poles used as lighting standards that are forty (40) feet or less in nominal height and that support no more than four (4) luminaires operating at a nominal voltage of three hundred (300) volts or less, shall not be considered to constitute a structure as that term is defined by the National Electrical Code (NEC). The disconnecting means shall not be mounted to the pole. The disconnecting means may be permitted elsewhere in accordance with NEC, Article 225.32, exception 3. SEC special purpose fuseable connectors (model SEC 1791–DF or model SEC 1791-SF) or equivalent shall be installed in a listed handhole (underground) enclosure. The enclosure shall be appropriately grounded and bonded per the requirements of the NEC applicable to Article 230-Services. Overcurrent protection shall be provided by a (fast-acting minimum 100K RMS Amps 600 VAC) rated fuse. Wiring within the pole for the luminaires shall be protected by supplementary overcurrent device (time-delay minimum 10K RMS Amps 600 VAC) in break-a-away fuse holder accessible from the hand hole. Any poles supporting or incorporating utilization equipment or exceeding the prescribed number of luminaires, or in excess of forty (40) feet, shall be considered structures, and an appropriate service disconnecting means shall be required per the NEC. All luminaire-supporting poles shall be appropriately grounded and bonded per the NEC.
- io. Compliance with Article 210.12 Arc-Fault Circuit-Interrupter Protection. Article 210.12 shall apply in full. Exception: In dwelling units Arc-Fault Circuit-Interrupter Protection shall only apply to all branch circuits and outlets supplying bedrooms. All other locations in dwelling units are exempt from the requirements of Article 210.12. (3-29-17)
- **O2. Availability**. A copy of the National Electrical Code is available at the offices of the Division of Building Safety at 1090 E. Watertower Street, Suite 150, Meridian, Idaho 83642, 1250 Ironwood Drive, Suite 220, Coeur d'Alene, Idaho 83814, and 2055 Garrett Way, Suite 7, Pocatello, Idaho 83201. (3-20-14)

012. -- 999. (RESERVED)

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