24.39.10 - RULES OF THE IDAHO ELECTRICAL BOARD

000. LEGAL AUTHORITY.

The rules are promulgated pursuant to Sections 54-1001, 54-1005, 54-1006, 54-1007, 54-1009, 54-1018, 67-2604, 67-2614, 67-9406 and 67-9409, Idaho Code. (3-28-23)

001. SCOPE.

The rules prescribe criteria and fees for issuance of licenses, electrical permits, and inspections of electrical installations, civil penalties, and adoption and amendment of the National Electrical Code. (3-28-23)

002. DEFINITIONS.

01. Associated Buildings. All buildings, structures, and fixtures used for domestic purposes and in connection with the primary or secondary residence, such as garages, sheds, barns, or shops. (3-28-23)

02. Person. Includes an individual, company, firm, partnership, corporation, association or other organization. (3-28-23)

003. - 099. (RESERVED)

100. LICENSURE AND REGISTRATION.

01. Journeyman. An applicant must pass an examination designated by the Board and either (a) submit evidence of a minimum of eight thousand (8,000) hours of work experience as an apprentice making electrical installations in accordance with the requirements of the jurisdiction in which the applicant obtained the experience and satisfactory completion of a four-year sequence of instruction approved by the Idaho Division of Career-Technical Education, or (b) submit proof of sixteen thousand (16,000) hours of electrical experience in accordance with the requirements of the jurisdiction in which the applicant obtained the experience. (3-28-23)

a. Examination. An applicant may sit for the exam after showing proof of completion of either the approved 4-year sequence of instruction or 16,000 hours of electrical experience. (3-28-23)

b. Provisional Journeyman License. A provisional journeyman license can be issued to an applicant who has completed the 16,000 hours of electrical experience but has not yet passed the examination. (3-28-23)

c. Work experience in appliance repair, motor winding, or communications will not count towards the requirements to take the journeyman examination or obtain a provisional journeyman or journeyman license. (3-28-23)

d. No more than two thousand (2,000) hours of work experience gained while engaged in the practice of a limited electrical installer or trainee may be counted toward the satisfaction of the experience requirements for journeyman licensure. (3-28-23)

02. Master. A master electrician does not need to also hold a journeyman license. (3-28-23)

03. Limited Electrical Installer. An applicant must submit evidence of a minimum of four thousand (4,000) hours of work experience in the same limited category in accordance with the requirements of the jurisdiction in which the applicant obtained the experience. (3-28-23)

04. Electrical Contractor and Limited Electrical Contractor. Applicant or its entity designee must pass an examination designated by the Board and submit an application signed by the applicant or an official representative of the entity making the application and countersigned by the supervising electrician. (3-28-23)

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a. An entity applicant (such as, corporation, partnership, company, firm, or association) must designate in writing an individual to represent it for examination purposes. Any such designee shall be a supervisory employee and may not represent any other applicant for a contractor's license. (3-28-23)

b. In the event the working relationship between a contractor and its designee terminates, the contractor will notify the Division in writing within ten (10) days of the date of termination. The contractor may not purchase permits or make electrical installations unless another duly qualified designee passes the contractor's examination on behalf of the contractor. (3-28-23)

05. Continuing Education. To renew, journeymen and master electricians must provide proof of completion, during the prior three-year license cycle, of twenty-foureight (248) hours of continuing education instruction consisting of eightfour (84) hours of Idaho Electrical eCode update training covering changes included in the latest edition of the National Electrical Code and sixteenfour (164) hours of any combination of National Electrical Code update training, or industry-related training.

101. – 199. (RESERVED)

200. PRACTICE STANDARDS.

01. Electrical Contracting Work. Contracting work includes electrical maintenance or repair work, in addition to new electrical installations, unless such work is expressly exempted by Section 54-1016, Idaho Code. (3-28-23)

02. Contractor Scope. A contractor's allowable scope of work is the same as the scope of its licensed employee. (3-28-23)

03. Supervision. (3-28-23)

a. The master, journeyman, <u>residential electrician</u>, or limited electrical installer shall be designated the supervising electrician; must be available during working hours to carry out the duties of supervising, as set forth herein; and will be responsible for supervision of electrical installations made by said contractor as provided by Section 54-1010, Idaho Code. (3-28-23)

i. A master electrician, journeyman, <u>residential electrician</u>, or limited electrical installer is not qualified for one (1) year as the supervising electrician if his contractor license was revoked. (3-28-23)

ii. An individual contractor may act as his own supervising master, journeyman, <u>residential</u> <u>electrician</u>, or limited electrical installer upon the condition that he holds an active master, journeyman, <u>residential</u> <u>electrician</u>, or limited electrical installer license.

(3-28-23)

b. The employing contractor or limited electrical contractor must ensure each apprentice, trainee, and provisional journeyman performs electrical work only under the constant on-the-job supervision and training of a master, journeyman, residential electrician, or installer. (3-28-23)

c. A journeyman who is an employee of a company, corporation, firm, or association with a facility account may sign as supervising electrician for that facility account in addition to signing as supervising journeyman for his own contractor's license so long as the journeyman is listed as the owner. (3-28-23)

04. Connecting and Energizing Prior to Inspections. At the request of a licensed electrical contractor and upon receipt of a copy of an electrical permit, a power supply company may connect and energize an electrical service, to the line side of the service disconnect, prior to a passed inspection in the following situations: to preserve life or property or to provide temporary service for construction. Any contractor energizing an electrical installation prior to an inspection assumes full responsibility for the installation. (3-28-23)

05. Limited Electrical Installations. A limited electrical installer must be employed by an electrical

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Commented [MH1]: The Electrical Board is considering the revisions indicated and is up for discussion and feedback.

(3-28-23)T

contractor or limited electrical contractor in the same restricted category and may only countersign a limited electrical contractor's license application as supervising limited electrical installer for work within the same restricted category. Limited electrical installations must comply with the National Electrical Code, as amended herein. The following categories of electrical installations constitute limited electrical installations, the practice of which shall require an electrical contractor or limited electrical contractor license and supervision by a journeyman, master electrician, or limited electrical installer: (3-28-23)

a. Elevator, Dumbwaiter, Escalator, or Moving-Walk Electrical. An elevator electrical limited licensee is only authorized to install, maintain, repair, and replace equipment, controls, and wiring beyond the disconnect switch in the machine room of the elevator and pertaining directly to the operation and control thereof when located in the elevator shaft and machine room. (3-28-23)

b. Sign Electrical. A sign electrical limited licensee is only authorized to install, maintain, repair, and replace equipment, controls, and wiring on the secondary side of sign disconnecting means; provided the disconnecting means is located on the sign or within sight therefrom. (3-28-23)

c. Manufacturing or Assembling Equipment. A licensed limited electrical manufacturing or assembling equipment installer is only authorized to install, maintain, repair, and replace equipment, controls, and accessory wiring, integral to the specific equipment, on the load side of the equipment disconnecting means. Electrical service and feeder are to be installed by others. The licensee may also install circuitry in modules or fabricated enclosures for the purpose of connecting the necessary components which individually bear a label from a nationally recognized testing laboratory when such equipment is designed and manufactured for a specific job installation. (3-28-23)

i. This subsection does not apply to a limited electrical manufacturing or assembling equipment installer installing electrical wiring, equipment, and apparatus in modular buildings as that phrase is defined in Section 39-4105, Idaho Code. Only journeyman electricians and electrical apprentices, employed by an electrical contractor, may perform such installations. (3-28-23)

d. Limited Energy Electrical. Limited energy systems are defined as fire and security alarm systems, class 2 and class 3 signaling circuits, key card operators, nurse call systems, motor and electrical apparatus controls and other limited energy applications covered by the NEC. Unless exempted by Section 54-1016, Idaho Code, any person who installs, maintains, replaces or repairs electrical wiring and equipment for limited energy systems in facilities other than one (1) or two (2) family dwellings shall be required to have a valid limited energy limited electrical license. (3-28-23)

i. Limited energy systems do not include, and no license of any type is required for, the installation of landscape sprinkler controls or communication circuits, wires and apparatus that include telephone systems, telegraph facilities, outside wiring for fire and security alarm systems which are used for communication purposes, and central station systems of a similar nature, PBX systems, audio-visual and sound systems, public address and intercom systems, data communication systems, radio and television systems, and other similar systems. (3-28-23)

e. Irrigation Sprinkler Electrical. An irrigation system electrical limited licensee is only authorized to install, maintain, repair and replace equipment, controls and wiring beyond the disconnect switch supplying power to the electric irrigation machine. The irrigation machine is considered to include the hardware, motors and controls of the irrigation machine and underground conductors connecting the control centers on the irrigation machine to the load side of the disconnecting device. Disconnect device to be installed by others. (3-28-23)

f. Well Driller and Water Pump Installer. A license holder in this category is only authorized to perform the following types of installations: (3-28-23)

i. Single or three (3) phase water pumps: install, maintain, repair and replace all electrical equipment, wires, and accessories from the pump motor up to the load side, including fuses, of the disconnecting device. Disconnecting device to be installed by others. (3-28-23)

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ii. Domestic water pumps, one hundred twenty/two hundred forty (120/240) volt, single phase, sixty (60) amps or less: install, maintain, repair and replace all electrical equipment, wires, and accessories from the pump motor up to and including the disconnecting device. (3-28-23)

iii. Temporarily connect into a power source to test the installations, provided that all test wiring is removed before the installer leaves the site. (3-28-23)

iv. Individual residential wastewater pumping units. Install, maintain, repair and replace all electrical equipment, wires, and accessories from the pump motor up to and including the disconnecting device for systems that serve one-family, two-family, or three-family residential installations. (3-28-23)

g. Refrigeration, Heating, and Air-Conditioning Electrical Installer. A license holder in this category is only authorized to perform the following types of installations, which installations shall be limited to factory-assembled, packaged units: (3-28-23)

i. Heating Units (single phase): install, repair, and maintain all electrical equipment, wires, and accessories from the unit up to the load side, including fuses, of the disconnecting device. Disconnecting device to be installed by others. (3-28-23)

ii. Refrigeration, Air-Conditioning Equipment and Heat Pumps (single phase): install, repair, and maintain all electrical equipment, wires, and accessories from the unit up to the load side, including fuses, of the disconnecting device. Disconnecting device to be installed by others. (3-28-23)

iii. Refrigeration, Air-Conditioning and Heating Systems (three (3) phase): install, maintain, and repair all electrical equipment and accessories up to the load side, including fuses, of the disconnecting device. Disconnecting device to be installed by others. (3-28-23)

Dutside Wireman. Applicants for this license category shall provide documentation of having completed an electrical lineman apprenticeship program or similar program approved by the U.S. Department of Labor, Office of Apprenticeship. Any person currently licensed in this category is only authorized to perform the following types of installation (3-28-23)

i. Overhead distribution and transmission lines in excess of six hundred (600) volts (3-28-23)

ii. Underground distribution and transmission lines in excess of six hundred (600) volts. (3-28-23)

iii. Substation and switchyard construction in excess of six hundred (600) volts. (3-28-23)

i. Solar Photovoltaic. Applicants for this license category shall provide proof of photovoltaic installer certification by the North American Board of Certified Energy Practitioners (NABCEP) or equivalent. Any person licensed in this category is only authorized to perform the following types of installations: (3-28-23)

i. Solar Photovoltaic DC Systems: Install, maintain, repair, and replace all electrical equipment, wires, and accessories up to and including the inverter. (3-28-23)

ii. Solar Photovoltaic micro-inverter/AC Systems: Install, maintain, repair, and replace all electrical equipment, wires, and accessories up to and including the AC combiner box. (3-28-23)

06. Certification and Approval of Electrical Products and Materials. All materials, devices, fittings, equipment, apparatus, luminaires, and appliances installed or to be used in installations that are supplied with electric energy must be approved as provided in one (1) of the following methods: (3-28-23)

a. Testing Laboratory. Be tested, examined, and certified (Listed) by a Nationally Recognized Testing Laboratory (NRTL). (3-28-23)

b. Field Evaluation. Non-listed electrical equipment may be approved for use through a field

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evaluation process performed in accordance with recognized practices and procedures such as those contained in the 2012 edition of NFPA 791 - Recommended Practice and Procedures for Unlabeled Electrical Equipment Evaluation published by the National Fire Protection Association (NFPA). Such evaluations shall be conducted by: (3-28-23)

i. A field evaluation body approved by the authority having jurisdiction. The field evaluation body shall meet minimum recognized standards for competency, such as NFPA 790 - Standard for Competency of Third-Party Field Evaluation Bodies, 2012 edition, published by the National Fire Protection Association (NFPA); or

ii. In the case of industrial machinery only, as defined by NFPA 79 - Electrical Standard for Industrial Machinery, 2012 edition, a field evaluation may be performed by a professional engineer currently licensed to practice electrical engineering by the state of Idaho and who is not involved in the design of the equipment being evaluated or the facility in which the equipment is to be installed. (3-28-23)

c. Availability of NFPA Standards. The most recent edition of NFPA 790 - Standard for Competency of Third-Party Field Evaluation Bodies and NFPA 791 - Recommended Practice and Procedures for Unlabeled Electrical Equipment Evaluation published by the National Fire Protection Association (NFPA) are available at the Division. (3-28-23)

201. – 299. (RESERVED)

300. CIVIL PENALTIES.

The acts described in this section subject the violator to a civil penalty not to exceed one thousand dollars (\$1,000) for each separate count or offense. (3-28-23)

01. Statute or Rule. Failure to comply with any provision of Chapter 10, Title 54, Idaho Code or Board Rule. (3-28-23)

02. Licensure or Registration. Except as provided by Section 54-1016, Idaho Code, performance of electrical work without an active license or registration as required by Chapter 10, Title 54, Idaho Code. General contractors registered pursuant to Section 54-1016, Idaho Code who submit a bid on a multi-trade construction project which includes a licensed electrical contractor's pricing is not considered as acting or attempting to act as an electrical contractor. (3-28-23)

03. Performance Outside Scope. Performance of any electrical installation, alteration, or maintenance by a limited electrical contractor, limited electrical installer, or trainee outside the scope of the limited electrical license or registration. (3-28-23)

04. Employees. Knowing employment of a person who does not hold an active license or registration to perform electrical work. (3-28-23)

05. Supervision. Working as an apprentice or limited electrical installer trainee without the required journeyman, master, or installer supervision or employing an apprentice or trainee without providing the required supervision. (3-28-23)

06. Fees, Permits, and Inspections. Failure to obtain a required permit, pay applicable fees, properly post a permit, or request an inspection of any electrical work. (3-28-23)

07. Corrections. Failure to make corrections in the time allotted in the notice on any electrical work. (3-28-23)

08. Misrepresentation of Fees. Misrepresentation of the permit or inspection fees to the customer. (3-28-23)

09. Advertising. Advertising to engage in the business, trade, practice, or work of an electrical contractor as defined in Sections 54-1003A and 54-1010, Idaho Code, without holding a current and valid electrical contractor license issued by the Division or advertising without including the contractor license number in the

(3-28-23)

advertisement. Advertising includes, but is not limited to: newspaper, telephone directory, community flier ads or notices; telephone, television, radio, internet, or door-to-door solicitations. (3-28-23)

10. Order. Failure to comply with any lawful order of the Board or Division administrator. (3-28-23)

301. - 499. (RESERVED)

500. PERMITS AND INSPECTIONS.

01. Permits and Inspections. (3-28-23)

a. Permits. All electrical permits shall be purchased before work is commenced. Payment of the total permit fee shall be made prior to a final inspection. (3-28-23)

i. No wiring or equipment may be concealed in any manner from access or sight until the work has been inspected and approved for cover by the electrical inspector except for those installations pursuant to Section 54-1005(3), Idaho Code. (3-28-23)

b. Completion of Installation. Each installation made by a permit holder or his authorized representative shall request an inspection from the Division. (3-28-23)

c. Expiration of Permits. Every permit issued shall expire and become null and void after three hundred sixty-five (365) days from the purchase date. A permit may be renewed for an additional year upon receipt of Division approval and payment of a sixty-five dollar (\$65) renewal fee. (3-28-23)

d. Transferring a Permit. A permit may be transferred to another eligible party if such party provides to the Division written authorization signed and notarized by the original permit holder consenting to the transfer itself and assigning all responsibilities and conditions incorporated into the original permit issuance. A permit may be transferred to the owner of the property on which the electrical work is to be performed and for which the permit was issued or such owner's designated legal agent in cases where such owner has terminated his legal relationship with the electrical contractor who originally obtained the permit. An administrative fee in the amount of forty-five dollars (\$45) for the transfer of the permit shall be assessed by the Division. (3-28-23)

02. Fee Schedule.

(3-28-23)

a. Residential Permits. Includes associated buildings with wiring being constructed on each property. (3-28-23)

i. New residential construction permi	ts:	(3-28-23	
New One- Family Dwelling Unit			
Up to 1,500 square feet of living space	\$130		
1,501 to 2,500 square feet of living space	\$195		
2,501 to 3,500 square feet of living space	\$260		
3,501 to 4,500 square feet of living space	\$325		
Over 4,500 square feet of living space	\$325 plus \$65 for each additional 1,000 square feet or portion thereof		
New Two- and N	Iulti- Family Dwelling Unit		

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Two-family dwellings	\$260	
Multi-family dwellings	\$130 per building plus \$65 per unit	

(3-28-23)

ii. Existing Dwelling Unit Permit: sixty-five dollars (\$65) per inspection. (3-28-23)

b. Other Installations Including Industrial and Commercial Permits. The following fees shall apply to industrial and commercial installations and installations not specifically mentioned elsewhere in this Fee Schedule. The electrical cost shall be the cost to the owner of all labor charges and all other costs that are incurred to complete the installation of all wiring and equipment installed as part of the system. Factory assembled industrial machinery to be operated by electrical energy shall not be included in calculating these fees. (3-28-23)

i. Wiring cost not exceeding ten thousand dollars (\$10,000): sixty dollars (\$60) plus two percent (2%) of total wiring cost. (3-28-23)

ii. Wiring cost over ten thousand dollars (\$10,000) but not exceeding one hundred thousand dollars (\$100,000): two hundred sixty dollars (\$260) plus one percent (1%) of wiring cost in excess of ten thousand dollars (\$10,000). (3-28-23)

iii. Wiring cost over one hundred thousand dollars (\$100,000): one thousand one hundred sixty dollars (\$1,160) plus one-half of one percent (.5%) of the portion of wiring costs exceeding one hundred thousand dollars (\$100,000). (3-28-23)

iv. Small work not exceeding five hundred dollars (\$500) in cost and not involving a change in service connections: ten dollars (\$10). (3-28-23)

03. Requested Inspection Permit. A sixty-five dollar (\$65) fee per inspection. (3-28-23)

04. Reinspection Fees. A fee of sixty-five dollars (\$65) per reinspection will be assessed for work not being ready for inspection, inaccurate description of jobsite locations or directions, or failure to respond to notice of correction. (3-28-23)

05. Virtual Inspection Request. Forty-five dollar (\$45) fee for Contractors and Specialty Contractors requesting a virtual inspection of qualified installations. (3-28-23)

06. Plan Check Fee. Sixty-five dollar (\$65) minimum for one (1) hour or less. Over one (1) hour: sixty-five dollars (\$65) plus sixty-five dollars (\$65) for each hour, or portion thereof, in excess of one (1) hour. (3-28-23)

501. – 599. (RESERVED)

600. IDAHO ELECTRICAL CODE.

01. Documents. Under the provisions of Section 54-1001, Idaho Code, the National Electrical Code, 201723 Edition, (herein NEC) is hereby adopted and incorporated by reference for the state of Idaho and are in full force and effect on and after July 1, 2017, with the following amendments: (3-28-23)T

a. Article 110.3(A) and 110.3(B) shall not apply to submersible well pumps installed in swimming and marine areas; provided however, such articles shall apply to all other equipment required in the installation of a submersible well pump in such areas except for the actual submersible well pump itself. (3-28-23)T

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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. (3-28-23)T

0	Article 210 $\mathcal{R}(\Lambda)(10)$ Delete article 210 $\mathcal{R}(\Lambda)(10)$	(2 28 22)T
C.	$\frac{1000}{100}$	(3-20-23)1
d	Article 210 8(D) Delete article 210 8(D)	(3-28-23)T

e. 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. (3-28-23)T

f. Add a new Article 225.30(F) One (1) or Two (2) Family Dwelling Unit(s). For a one (1) or two (2) family dwelling unit(s) with multiple feeders with conductors one aught (1/0) or larger, it shall be permissible to install not more than six (6) disconnects grouped at one (1) location where the feeders enter the building, provided that the feeder conductors originate at the same switchboard, panelboard, or overcurrent protective device location. (3 -28 -23)T

g. 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 28 23)T

h. Article 334.10(3). Delete Article 334.10(3) and replace with the following: Other structures permitted to be of Types III, IV, and V construction. Cables shall be concealed within walls, floors, or ceilings that provide a thermal barrier of material that has at least a fifteen (15) minute finish rating as identified in listings of fire-rated assemblies. For the purpose of this section, cables located in attics and underfloor areas that are not designed to be occupied shall be considered concealed. (3-28-23)T

i. 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. (3-28-23)T

j. Article 682.10 shall not apply to submersible well pumps installed in swimming and marine areas; provided however, such articles shall apply to all other equipment required in the installation of a submersible well pump in such areas except for the actual submersible well pump itself. (3-28-23)T

k. 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. (3-28-23)T

I. Article 682.13. Add the following exceptions to Article 682.13: (3-28-23)T

i. Exception No 1. Wiring methods such as HDPE schedule eighty (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 two hundred (200) PSI (e.g. SIDR-7 or DR-9) is suitable for use as a chase only when the following conditions are met: (3-28-23)T

(1) When internal conductors are jacketed submersible pump cable. (3-28-23)T

(2) When used in continuous lengths, directly buried, or secured on a shoreline above and below the water line. (3-28-23)T

(3) When submersible pump wiring terminations in the body of water according to 682.13 Exception

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(3-28-23)T

ii. 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 one quarter (.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 (6) inches shall be over the sleeve and at least twelve (12) inches over the HDPE and water line. (3-28-23)T

iii. 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. (3-28-23)T

m. Article 682.14. Add the following additional exception to Article 682.14: For installations of submersible well pumps installed in public swimming and marine areas, submersible well pumps shall be considered directly connected and shall be anchored in place. Ballast is an acceptable form of anchoring. (3-28-23)T

n. Article 682.14(A). Add the following exception to Article 682.14(A): For installations of submersible well pumps installed in public swimming and marine areas, motor controller circuits such as remotely located stop pushbutton/s, disconnect/s, relay/s or switches shall be permitted as a required disconnecting means. Such circuits shall be identified at a minimum as "Emergency Pump Stop", or "Emergency Stop" with other obvious indications on the visible side of the enclosure, that it controls a submersible pump in the body of water. (3-28-23)T

o. Article 682.15. Add the following exceptions to Article 682.15: (3-28-23)T

i. Exception No. 1. Submersible pumps, and their motor leads, located in bodies of water, and that are rated sixty (60) amperes maximum, two hundred fifty (250) volts maximum of any phase, shall have GFCI or Ground Fault Equipment Protection designed to trip at a maximum of thirty (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. (3-28-23)T

ii. Exception No. 2. Installations or repair and replacement of submersible pumps located in bodies of water, that are rated over sixty (60) amperes, and rated at any voltage, shall be evaluated by a qualified designer or experienced licensed contractor, or involve engineering or be engineered, for each specific application, with the goal of public safety. Whenever possible, GFCI or Ground Fault Equipment Protection designed to trip at a maximum of thirty (30) milliamps or less, meeting listing or labeling requirements, shall be installed, and inspected by the AHJ prior to submersion in bodies of water. (3-28-23)T

p. 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. (3-28-23)T

q. 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-aaway 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 appropriately grounded and bonded per the NEC. (3 - 28 - 23)T

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No. 2 are met.

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r.	Article 210.12(A). Delete.	(3-28-	23)T	Commented [MH2]: Update the 2017 NEC amendments
	A (1, 110,2(A)) 1,110,2(D) (1, 11, 4, 1-4, -1, -1, 11,	1. (11. 1.1		to reflect the 2023 version of the NEC.
and marine are	Article 110.3(A) and 110.3(B). Shall not apply to submersible well as; provided however, such articles shall apply to all other equipment re			
	ell pump in such areas except for the actual submersible well pump itself)	
b.	Article 210.8 (A). Delete reference to 250-volt receptacles.	()	
c.	Article 210.8(A)(7) Sinks. Delete article 210.8(A)(7) and replace	with the following: Sin	ıks -	
	s other than kitchens where receptacles are installed within one and eig side edge of the sink.	ht tenths (1.8) meters (si	<u>x (6)</u>	
d.	Article 210.8(A)(11). Delete article 210.8(A)(11) Laundry Areas.	()	
е.	Article 210.8 (F). Delete Article 210.8 (F) for GFCI protection for ou	tdoor outlets. ()	
f.	Article 210.8(D) Ground-fault Circuit-Interrupter Protection for Per ons (7) through (12).	rsonnel. Specific Applia	<u>nces.</u>	Commented [MH3]: New amendment proposed through
Defete subsecti		(public comment.
g.	Article 210.12(B). Shall not apply to single family one- and two-family	ly dwellings. (Commented [MH4]: The Electrical Board is considering
h.	Article 210.52(E)(3). Delete and replace with the following: Bal			exempting the AFCI requirement in one and two family dwelling structures.
	ks, and porches having an overall area of twenty (20) square feet or m lling unit shall have at least one (1) receptacle outlet installed within			
*	The receptacle shall not be located more than two (2.0) meters (six and or porch surface.	one half (6½) feet) abov	<u>e the</u>)	
i.	Article 230.67 Surge Protection. Delete NEC Article 230.67.	()	
j.	Article 230.85 Emergency Disconnects. Delete Article 230.85.	()	
k.	Article 314.27(C) Boxes at Ceiling-Suspended (Paddle) Fan Outlets.	Delete second paragraph	<u>.</u>	
of material that	Article 334.10(3). Delete and replace with the following: Other struct construction. Cables shall be concealed within walls, floors, or ceilings has at least a fifteen (15)-minute finish rating as identified in listings of section, cables located in attics and underfloor areas that are not desi cealed.	that provide a thermal bar fire-rated assemblies. For	rrier r the	
m	Article 334.15(C). Where the height of a crawl space does not exce	eed one and four tenths	(14)	
bottom edge o	and one half (4.5) feet, it shall be permissible to secure NM cables, that if joist. NM cables that run within two and one tenth (2.1) meters or s	run at angles with joist, t	o the	Commented [MH5]: Updated the existing amendment code reference to reflect the reference in the 2023 NEC.
access shall con	mply with Article 320.23.	()	
operating at a r accordance with model SEC 17 shall be approp Overcurrent pr Wiring within minimum - 10	Pole Lighting. Poles used as lighting standards along roadways are forty (40) feet or less in nominal height and that support no m nominal voltage of three hundred (300) volts or less to ground, shall not equipment by the NEC. The disconnecting means may be mounted th NEC, Article 225.32, exception 3. Special purpose fuseable connect 91-SF) or equivalent shall be installed in a listed handhole (undergrou priately grounded and bonded per the requirements of the NEC applica otection shall be provided by a (fast-acting – minimum - 100K RMS the pole for the luminaires shall be protected by supplementary over K RMS Amps 600 VAC) in break-a-away fuse holder accessible fro ncorporating utilization equipment or exceeding the prescribed number	ore than four (4) lumin be considered a structure to the pole or elsewhe ors (model SEC 1791–L nd) enclosure. The enclu- ble to Article 230- Serv Amps 600 VAC) rated current device (time-de m the hand hole. Any	aires as it re in DF or osure ices. fuse. ay _ poles	
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forty (40) feet, may 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. A service may not need a Watt Hour Meter.

0.	Article 422.5 (A)(7). Delete Article 422.5 (A)(7) GFCI protection for dwelling unit dis	protection for dwelling unit dishwashers.		
		(_)	
n	Article 480.7(B) Battery Emergency Disconnect Delete	(5	

q. 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.

r. Article 682.10. Shall not apply to submersible well pumps installed in swimming and marine areas; provided however, such articles shall apply to all other equipment required in the installation of a submersible well pump in such areas except for the actual submersible well pump itself. ()

s. Article 682.11. Add the following exception: This article shall not apply to service equipment that is located on or at the dwelling unit and which is not susceptible to flooding. (

t. Article 682.13. Add the following exceptions:

u. Exception No 1. Wiring methods such as HDPE schedule eighty (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 two hundred (200) PSI (e.g. SIDR-7 or DR-9) is suitable for use as a chase only when the following conditions are met: when internal conductors are jacketed submersible pump cable; when used in continuous lengths, directly buried, or secured on a shoreline above and below the water line; when submersible pump wiring terminations in the body of water according to 682.13 Exception No. 2 are met.

ii. 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 one quarter (.25) inches thick, such as heavy-duty heat shrink or other equivalent method approved by the authority having jurisdiction. (e.g. 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 (6) inches shall be over the sleeve and at least twelve (12) inches over the HDPE and water line. ()

iii. 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. ()

v. Article 682.14. Add the following additional exception: For installations of submersible well pumps installed in public swimming and marine areas, submersible well pumps shall be considered directly connected and shall be anchored in place. Ballast is an acceptable form of anchoring. ()

w. Article 682.14(A). Add the following exception: For installations of submersible well pumps installed in public swimming and marine areas, motor controller circuits such as remotely located stop pushbutton/s, disconnect/s, relay/s or switches shall be permitted as a required disconnecting means. Such circuits shall be identified at a minimum as "Emergency Pump Stop", or "Emergency Stop" with other obvious indications on the visible side of the enclosure, that it controls a submersible pump in the body of water. ()

x. Article 682.15. Add the following exceptions:

i. Exception No. 1. Submersible pumps, and their motor leads, located in bodies of water, and that

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are rated sixty (60) amperes maximum, two hundred fifty (250) volts maximum of any phase, shall have GFCI or Ground Fault Equipment Protection designed to trip at a maximum of thirty (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.

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

y. Article 690.12 Rapid Shut Down. Add following Exemptions:

i. PV systems not installed on or in buildings, PV output circuits and dc to dc converter output circuits that are installed in metallic raceways or metal clad cables, or installed in enclosed metallic cable trays, or are underground shall not be required to comply with Article 690.12. Detached structures whose sole purpose is to house PV system equipment shall not be considered buildings and thus may have roof mounted PV systems without rapid shutdown equipment according to this exception. ()

ii. PV system circuits installed on or in buildings without the presence of a utility supplied power source shall not be required to comply with Article 690.12 where all of the following apply: the minimum distance to bring electric utility power lines or service conductors to the building is 1000 feet or greater; the building has a minimum setback distance of 100 feet from any building or structure located on adjacent properties; A lockable service entrance rated AC disconnect is installed outside at a readily accessible location; and the AC disconnect has a permanent placard or label with the following words or equivalent:

<u>WARNING</u> SOLAR PV SYSTEM IS NOT EQUIPPED WITH RAPID SHUTDOWN

The warning placard or label shall comply with Article 110.21(B).

z. Article 690.12(A) Exception. PV system circuits originating within or from arrays not attached to buildings that terminate on the exterior of buildings or inside nearest the point of entrance, and PV system circuits installed in accordance with Article 230.6 shall not be considered controlled conductors for the purposes of this section.

aa. Article 706.15 Off Grid Systems. Replace 706.15 with the following. For one-family and two-family dwellings, a disconnecting means or its remote control shall be located at a readily accessible location.

 bb.
 Article 706.5: Listing. Energy storage systems shall be listed. This shall not apply to lead-acid batteries.

 batteries.
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 02.
 Availability. A copy of the 2023 National Electrical Code is available at the offices of the

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601. – 999. (RESERVED)

Commented [MH6]: New amendment based upon public comment.

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