

STATE OF WISCONSIN
Department of Safety and Professional Services

IN THE MATTER OF RULEMAKING PROCEEDINGS BEFORE THE
DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES

PROPOSED ORDER OF THE DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES
ADOPTING RULES
(CLEARINGHOUSE RULE)

PROPOSED ORDER

An order of the department to repeal SPS 316.007, 316.011, 316.100 (1) (a) and (2) (a), 316.210 (1), (3), and (5), 316.220 (1) and (2) (title), 316.225 (1), 316.230 (1) (a) (Note 1) and (c) and (4) (b), 316.310 (1) and (2), 316.314 (1) (title) and (2), 316.620 (2), 316.680, 316.915 (3), (6), (7), (8), (10), (12), and (13), and subch. V of ch. SPS 316; to renumber SPS 316.006, 316.008, subch. II of ch. SPS 316, 316.013, 316.015, subch. III of ch. SPS 316, 316.100 (1) (b) to (d), 316.210 (6), 316.220 (2), 316.225 (2), (3), (4), and (6), 316.314 (1), 316.406, 316.620 (1), subch. IV of Chapter SPS 316, 316.930, and 316.960; to renumber and amend SPS 316.009, 316.010, 316.012, 316.014, and 316.310 (intro.); to consolidate, renumber, and amend SPS 316.100 (2) (intro.) and (b) and 316.230 (4) (intro.) and (a); to amend SPS 305.41 (Note 3), 316.003 (Note), 316.210 (4), 316.230 (1) (a) (intro.), 316.312 (2) and (3), 316.400, and 316.675; to repeal and recreate SPS 305.62 (6), 305.63 (5), subch. I (title) of ch. SPS 316, 316.002, 316.004, 316.110, 316.210 (1) to (3), 316.300 (2), and 316.511; and to create SPS 305.01 (4) (j), SPS Table 305.02, line 37s., SPS Table 305.06, line 32s., 305.629, 316.003 (6), 316.006, subch. II of ch. SPS 316, 316.023 (3), 316.210 (6) and (7), 316.240, 316.250 (3), 316.404, 316.406 (2), and 316.551 relating to the electrical code and affecting small businesses.

Analysis prepared by the Department of Safety and Professional Services.

ANALYSIS

Statutes interpreted:

Section 101.82 (1), Stats.

Statutory authority:

Sections 101.19, 101.63, 101.73, 101.82, and 101.84, Stats.

Explanation of agency authority:

Section 101.19, Stats., requires the department to, by rule, fix and collect fees that, as closely as possible, equal the cost of providing the examination of plans for public buildings, public structures, places of employment and the components thereof and each inspection of a facility conducted to ensure that the construction is in accordance with the plans approved by the department.

Section 101.63, Stats., requires the department to adopt rules which establish standards for the construction and inspection of one- and 2-family dwellings and components thereof and, where feasible, to use standards that are nationally recognized.

Section 101.73, Stats., requires the department to:

- Adopt rules which establish standards for the use of building materials, methods and equipment in the manufacture and installation of modular homes for use as dwellings or dwelling units. Where feasible, the standards used shall be those nationally recognized and shall apply to the dwelling and to its electrical, heating, ventilating, air conditioning and other systems. Such rules shall take into account the conservation of energy in construction and maintenance of dwellings and the costs to home buyers of specific code provisions in relation to the benefits derived therefrom.
- Adopt rules for the examination of plans and specifications and for periodic in-plant and on-site inspections of manufacturing facilities, processes, fabrication, assembly and installation of modular homes to ensure that examinations and inspections are made in compliance with the rules adopted for construction, electrical wiring, heating, ventilating, air conditioning and other systems under ss. 101.70 to 101.77, Stats., and with the rules for indoor plumbing adopted by the department under ch. 145, Stats.
- Provide for examination of plans and specifications and in-plant inspections when contracted for by the manufacturer under s. 101.75 (1), Stats., and contract to provide on-site inspection services for the installation of modular homes for dwellings, at municipal expense, for any municipality which requires such service under s. 101.76 or 101.761, Stats.
- Adopt rules for the certification, including provisions for suspension and revocation thereof, of on-site inspectors of the installation of modular homes for dwellings. Persons certified as on-site inspectors may be employees of the department, a city, village, town or county or an independent agency.
- Adopt rules for the certification, including provisions for suspension and revocation thereof, of independent inspection agencies to conduct in-plant inspections of manufacturing facilities, processes, fabrication and assembly of modular homes for dwellings and to certify compliance with subch. I of ch. 101, Stats.

Section 101.82, Stats., requires the department to:

- Promulgate by rule a state electrical wiring code that establishes standards for installing, repairing, and maintaining electrical wiring. Where feasible, the rules shall reflect nationally recognized standards.
- Regulate master electricians, including residential master electricians, journeyman electricians, including residential journeyman electricians and industrial journeyman electricians, electrical apprentices, including residential electrical apprentices and industrial electrical apprentices, and registered electricians.
- Promulgate rules that establish criteria for the enrollment of registered electricians and for the registration of electrical apprentices.
- Promulgate rules that establish procedures for the enrollment of registered electricians, the registration of electrical apprentices, and the licensing of journeyman electricians and master electricians.
- Promulgate rules that establish requirements for the supervision of registered electricians. • Registered electricians must be supervised by licensed journeyman or master electricians.

- Promulgate rules that establish criteria and procedures for the licensing of electrical contractors.
- Promulgate rules that establish criteria and procedures for the certification of electrical inspectors for the purpose of inspecting electrical wiring.
- Promulgate rules that establish standards and a process for the inspection of electrical wiring, including the inspection of electrical wiring for which a municipality does not provide inspection under s. 101.86 (1), Stats.
- Promulgate rules that establish criteria and a process for the suspension or revocation of registrations issued to registered electricians, licenses issued to electricians and electrical contractors, and certifications issued to electrical inspectors.
- Establish by rule a schedule of fees sufficient to defray the costs incurred under subch. IV of ch. 101, Stats.

Section 101.84, Stats., provides the department may:

- Hold hearings on any matter relating to this subchapter and issue subpoenas to compel the attendance of witnesses and the production of evidence at the hearings.
- Promulgate rules to differentiate the scope of installation, repair, or maintenance of electrical wiring that may be performed by electrical contractors, registered electricians, journeyman electricians, master electricians, and any additional types of electricians recognized by the department.
- The department may promulgate rules that recognize and regulate different types and subtypes of electricians that are in addition to those specified in s. 101.82 (1g), Stats., and that establish criteria and procedures for enrolling, registering, or licensing these electricians.

Related statutes or rules:

- Chapters SPS 361 to 366, Wisconsin Commercial Building Code
- Chapters SPS 320 to 325, Uniform Dwelling Code
- Chapter PSC 114, Wisconsin State Electrical Code (Volume I)

Plain language analysis:

The proposed rules update Wisconsin's electrical code to the 2017 edition of the National Electrical Code (NEC) with certain specified changes, additions, and omissions to the requirements of the NEC.

Out of over 2,300 changes in the 2014 and 2017 editions of the NEC reviewed by department staff and the Electrical Code Advisory Committee, department staff conducted a second review of less than 200 changes it considered to be the most significant. As a result of its additional review, the department determined 15, or less than 1%, of the changes from the 2014 and 2017 editions of the NEC would not be incorporated into Wisconsin's electrical code.

The proposed rules also develop a statewide electrical inspection program, as required by the provisions of 2007 Wisconsin Act 63.

Summary of, and comparison with, existing or proposed federal statutes and regulations:

There are several existing federal regulations that relate to the installation of electrical wiring and equipment. Some of these regulations require compliance with various editions of the National

Electrical Code. A search of the Code of Federal Regulations (CFR) found the following regulations:

- Title 29 CFR, Part 1910.302 through 1910.308 – Design Safety Standards for Electrical Systems, and 1910.331 through 1910.335 – Electrical Safety-Related Work Practices Standards. Subpart S of this regulation contains design safety standards for electrical systems, safety-related work practices and maintenance requirements and safety requirements for special electrical equipment to safeguard employees in their workplaces. Subpart R contains industrial lighting requirements and safe practices relating to lockouts and emergency lighting requirements for the safety of employees working in special industries. These regulations are part of the Occupational Safety and Health Standards.
- Title 29 CFR, Part 1926 – Safety and Health Regulations for Construction. Subpart K of this regulation contains installation safety requirements, safety requirements and environmental considerations for special equipment necessary to safeguard employees working in special industries.
- Title 30 CFR, Part 75 – Mandatory Safety Standards – Underground Coal Mines. Subpart F contains specific electrical safety requirements for the protection of employees working in underground coal mines.
- Title 30 CFR, Part 57 – Safety and Health Standards – Underground Metal and Nonmetal Mines. Subpart K of this regulation contains specific electrical safety requirements for the protection of employees working in underground metal and nonmetal mines.
- Title 24 CFR, Part 3280 – Manufactured Home Construction and Safety Standards. Subpart I of this regulation covers electrical systems in manufactured homes, and requires compliance with the 2005 NEC.
- Title 7 CFR, Part 1755 – Telecommunication Standards and Specifications for Materials, Equipment, and Construction. This regulation applies to telecommunications wiring and equipment and requires compliance with the NEC.

Comparison with rules in adjacent states:

An Internet-based search found that all adjacent states except Illinois adopt or incorporate by reference the National Electrical Code (NEC).

Illinois: Illinois does not administer a statewide electrical code.

Iowa: The Iowa Department of Public Safety administers a statewide electrical code that adopts the 2014 edition of the NEC with modifications (661 IAC 504.1).

Michigan: The Michigan Department of Licensing and Regulatory Affairs administers a statewide electrical code that incorporates by reference the 2014 edition of the NEC with modifications (Mich Admin Code, R 408.30801).

Minnesota: The Minnesota Department of Labor and Industry administers a statewide electrical code that incorporates by reference the 2014 edition of the NEC (Minnesota Rules, Part 1315.0200).

Summary of factual data and analytical methodologies:

The primary methodology for updating the Wisconsin Electrical Code, ch. SPS 316, was a review and assessment of the latest editions of the national technical standards that serve as the basis for Wisconsin code. Staff compared the changes in the 2014 and 2017 editions of the NEC to the 2011 edition currently adopted under SPS 316 and solicited code change proposals.

The department's review and assessment process also involved the participation of the Electrical Code Advisory Committee. The members of the Committee represent the many stakeholders involved in the electrical industry including utility representatives, inspectors, and building contractors.

Analysis and supporting documents used to determine effect on small business or in preparation of economic impact analysis:

The proposed rules were posted for a period of 14 days to solicit public comment on economic impact, including how the proposed rules may affect businesses, local government units, and individuals. Comments were received from one individual suggesting that some of the changes from the 2014 and 2017 NEC that are not being incorporated into Wisconsin's electrical code would minimally increase the economic impact of the proposed rules. These comments did not affect the department's analysis of the economic impact of the proposed rules.

With assistance of the members of Electrical Code Advisory Committee, the department carefully reviewed the changes in compliance proposed in the 2014 and 2017 National Electrical Code updates that were anticipated to increase costs and proposed 15 modifications to keep cost increases of the new code changes to a minimum.

Fiscal Estimate and Economic Impact Analysis:

The Fiscal Estimate and Economic Impact Analysis document is attached.

Effect on small business:

These proposed rules effect small businesses, as defined in s. 227.114 (1), Stats. See the attached Fiscal Estimate and Economic Impact Analysis document for additional information. The Department's Regulatory Review Coordinator may be contacted by email at Jeffrey.Weigand@wisconsin.gov, or by calling (608) 267-2435.

Agency contact person:

Dale Kleven, Administrative Rules Coordinator, Department of Safety and Professional Services, Division of Policy Development, 1400 East Washington Avenue, Room 151, P.O. Box 8366, Madison, Wisconsin 53708; telephone 608-261-4472; email at Dale2.Kleven@wisconsin.gov.

Place where comments are to be submitted and deadline for submission:

Comments may be submitted to Dale Kleven, Administrative Rules Coordinator, Department of Safety and Professional Services, Division of Policy Development, 1400 East Washington Avenue, Room 151, P.O. Box 8366, Madison, WI 53708-8935, or by email to DSPSAdminRules@wisconsin.gov. Comments must be received before 11:00 a.m. on February 2, 2017, to be included in the record of rule-making proceedings.

TEXT OF RULE

SECTION 1. SPS 305.01 (4) (j) is created to read:

SPS 305.01 (4) (j) Inspection agency.

SECTION 2. SPS Table 305.02, line 37s., is created to read:

Table 305.02
(Partial Table)
FEES

	License, Certification or Registration Category	Type	Application Fee	Examination Fee	License, Certification or Registration Fee
37s.	Inspection Agency	Registration	\$15	NA	\$40

SECTION 3. SPS Table 305.06, line 32s., is created to read:

Table 305.06
(Partial Table)
TERMS

	License, Certification or Registration Category	Term	Expiration Date
32s.	Inspection Agency	4 years	Date of Issuance

SECTION 4. SPS 305.41 (Note 3) is amended to read:

SPS 305.41 (Note 3) Section 101.862 (4), Stats., exempts the following:

- (a) A residential property owner who installs, repairs, or maintains electrical wiring on premises that the property owner owns and occupies as a residence, unless a license or registration issued by the department is required by local ordinance.
- (am) A person engaged in installing electrical wiring within an existing industrial facility or existing manufacturing facility owned or leased by the person or by an entity for which the person is an agent or employee.
- (b) A person engaged in maintaining or repairing electrical wiring within a an existing facility or on premises owned or leased by the person or by an entity for which the person is an agent or employee.
- (c) A person engaged in installing, repairing, or maintaining electrical wiring, apparatus, or equipment for elevators and escalators.
- (d) A person engaged in installing, repairing, or maintaining equipment or systems that operate at 100 volts or less.
- (e) A person engaged in installing, repairing, or maintaining an electronic system designed to monitor a premises for the presence of an emergency, to issue an alarm for an emergency, or to detect and summon aid for an emergency.
- (f) A person engaged in installing, repairing, or maintaining electrical wiring of transmission facilities that support telecommunications service, as defined in s. 182.017 (1g) (cq), that is provided by a telecommunications provider, as defined in s. 196.01 (12), 2011 stats 196.01 (8p).
- (g) A person engaged in installing, repairing, or maintaining manufactured equipment or utilization equipment, including ballasts, electric signs and luminaires, or a any other manufactured system that is designed to provide a function that is not primarily electrical in nature if the installation, repair, or maintenance does not involve only involves the modification or installation of conductors beyond the disconnecting point or beyond the last junction, pull, or device box, whichever is nearer to the point where the person is performing the installation, repair, or maintenance that are considered part of the equipment or system under this paragraph. For purposes of this paragraph, any conductor going from the disconnecting point or the nearest junction, pull, or device box to the

manufactured equipment or utilization equipment or the manufactured system is considered part of the equipment or system.

(h) A person engaged in installing electrical wiring for components of a manufactured home, as defined in s. 101.91 (2), or a manufactured building, as defined in s. 101.71 (6), while the manufactured home or the manufactured building is at or in the facility at which it is being manufactured.

(i) A person employed by an electricity provider, or a subcontractor of an electricity provider, who installs, repairs, or maintains electrical wiring for equipment that is installed in the normal course of providing utility services by the electricity provider.

(j) A person engaged in installing, repairing, or maintaining electrical wiring that provides lighting or signals for public thoroughfares and for public airports.

(k) A person engaged in installing, repairing, or maintaining electric lines on the utility side of substations and other distribution facilities owned or operated by customers or members of electricity providers.

(L) A person employed by an electricity provider, or a subcontractor of an electricity provider, who installs, repairs, or maintains primary voltage electric facilities that are owned by the electricity provider's customers or members and that operate at greater than 600 volts.

(m) A person employed by an electricity provider, or a subcontractor of an electricity provider, who restores service during an emergency.

(n) A person who installs a replacement for an existing switch or outlet if the replacement switch or outlet has a rating of not more than 20 amperes.

(p) A person engaged in installing, repairing, or maintaining a private on-site wastewater treatment system, as defined in s. 145.01 (12), if the activity only involves installing or modifying a conductor going from the system's junction, pull, or device box to the nearest disconnecting point and the conductor is buried with the system.

(q) A person engaged in installing, repairing, or maintaining a pump for a well if the activity only involves installing or modifying a conductor going from the pump's junction, pull, or device box to the nearest disconnecting point and the conductor is buried with the pump.

SECTION 5. SPS 305.62 (6) is repealed and recreated to read:

SPS 305.62 (6) RESPONSIBILITIES. A person who inspects electrical construction work as a certified commercial electrical inspector shall do all of the following:

(a) Maintain a record of the inspections made including the dates and the findings of the inspections.

(b) Document any compliance deficiencies in the inspection report, and include the specific code reference or citation relative to the deficiency.

(c) Provide a copy of the inspection report to the property owner or his or her agent.

(d) Make inspection records available to the department upon request.

(e) Contact and indicate to the electrical utility, cooperative, or other entity furnishing electric current when an electrical service installation complies with ch. SPS 316 within 2 business days of the determination of compliance.

SECTION 6. SPS 305.629 is created to read:

SPS 305.629 Inspection agency. (1) GENERAL. No person or municipality may engage in or offer to engage in providing plan review, permit issuance, or inspections regarding electrical wiring under the scope of ch. SPS 316 unless the person or municipality holds a registration from the department as a registered inspection agency.

(2) APPLICATION FOR REGISTRATION. A person applying for an inspection agency registration shall submit all of the following:

- (a) An application in accordance with s. SPS 305.01.
- (b) An application fee and registration fee in accordance with s. SPS 305.02, Table 305.02.

(3) QUALIFICATIONS FOR REGISTRATION. The person applying for an inspection agency registration shall be one of the following:

- (a) If a municipality, the department head of the agency administering the electrical program.
- (b) If not a municipality, the owner of the business, a partner in the business applying on behalf of a partnership, or the chairman of the board or chief executive officer applying on behalf of a corporation.

(4) RESPONSIBILITIES. A person or municipality who is responsible for facilitating plan review, permit issuance, or inspection regarding electrical wiring under ch. SPS 316 as a registered inspection agency shall be responsible for all of the following:

- (a) Utilizing persons appropriately certified under s. SPS 305.62 to conduct the inspections.
- (b) Maintaining a record of the electrical permits issued under ch. SPS 316.012.
- (c) Making the records relative to permit issuance and inspections available to the department upon request.
- (d) Providing inspection services for all inspections required under ch. SPS 316.013.
- (e) Cooperating with the department in any program monitoring, enforcement activities, and investigations related to electrical wiring under the scope of ch. SPS 316.
- (f) Following all procedures established by the department for enforcement.

(5) RENEWAL. (a) A person may renew his or her registration as an inspection agency.

(b) An inspection agency registration shall be renewed in accordance with s. SPS 305.07.

SECTION 7. SPS 305.63 (5) is repealed and recreated to read:

SPS 305.63 (5) RESPONSIBILITIES. (a) A person who inspects one- and 2-family dwellings as a certified UDC-construction inspector, certified UDC-electrical inspector, certified UDC-HVAC inspector, certified UDC-plumbing inspector, or certified soil erosion inspector shall do all of the following:

1. Maintain a record of the inspections made including the dates and the findings of the inspections.

2. Document any compliance deficiencies in the inspection report, and include the specific code reference or citation relative to the deficiency.

3. Provide a copy of the inspection report to the property owner or his or her agent.

4. Make inspection records available to the department upon request.

(b) A person who inspects one- and 2- family dwellings as a certified UDC-electrical inspector shall contact and indicate to the electrical utility, cooperative, or other entity furnishing electric current when an electrical service installation complies with ch. SPS 316 within 2 business days of the determination of compliance.

SECTION 8. Subchapter I (title) of ch. SPS 316 is repealed and recreated to read:

Subchapter I – Purpose, Scope, and Application

[Note to LRB: Subchapter I includes ss. SPS 316.001 to 316.007.]

SECTION 9. SPS 316.002 is repealed and recreated to read:

SPS 316.002 Scope. (1) GENERAL. Except as provided in sub. (2), this chapter applies to electrical wiring installations.

(2) EXCLUSIONS. This chapter does not cover any of the following electrical wiring installations:

(a) Installations in ships, watercraft other than floating buildings, railway rolling stock, aircraft, or automotive vehicles other than mobile homes and recreational vehicles.

(b) Installations for generation, transformation, or distribution of power used exclusively by railways for signaling and communication purposes.

(c) Installations of communication equipment under exclusive control of communication utilities, located outdoors or in building spaces used exclusively for such installations.

(d) Installations in manufactured homes, other than electrical wiring alterations in existing manufactured homes.

(e) Installations under the exclusive control of an electric utility, or an electric cooperative where such installations meet any of the following situations:

1. Consist of service drops or service laterals, and associated metering.
2. Are located in legally established easements or right-of-ways designated by public service commissions, utility commissions, or other regulatory agencies having jurisdiction for such installations.
3. Are on property owned or leased by the electric utility for the purpose of communications, metering, generation, control, transformation, transmission, storage, or distribution of electric energy.

(f) Installations for the purpose of street or area lighting owned and under exclusive control of electrical utilities or municipalities where located outdoors on property owned or leased by the utility; on or along public highways, streets, roads or similar public thoroughfares; or outdoors on private property by established rights such as easements shall comply with this chapter or ch. PSC 114.

SECTION 10. SPS 316.003 (6) is created to read:

SPS 316.003 (6) ADDITIONS AND ALTERATIONS. Additions and alterations to electrical systems covered by this chapter shall comply with all provisions of this chapter at the time of permit application or, if no permit is required, the beginning of the project.

SECTION 11. SPS 316.003 (Note) is amended to read:

SPS 316.003 (**Note**) This chapter does not nullify any exclusions specified in the ~~standard~~ standards adopted under s. SPS ~~316.014~~ 316.007.

SECTION 12. SPS 316.004 is repealed and recreated to read:

SPS 316.004 Department authority. Under s. 101.02 (1), Stats., the department reserves the right to interpret the requirements in this chapter and in all adopted codes and standards. Any interpretation under this section shall supersede any differing interpretation by either a lower level jurisdiction or an issuer of the adopted code or standard.

Note: Section 101.86, Stats., prohibits municipalities from enacting rules that are more restrictive than this chapter. Section 101.86 (1) (a), Stats., provides a municipality may “[e]nact an electrical code or otherwise exercise jurisdiction over electrical wiring and inspection of electrical wiring by enactment of ordinances, provided that the electrical code or ordinance strictly conforms with the state electrical wiring code promulgated by the department under s. 101.82 (1). A county ordinance shall apply in any city, village or town which has not enacted such an ordinance.”

SECTION 13. SPS 316.006 is renumbered SPS 316.014.

SECTION 14. SPS 316.006 is created to read:

SPS 316.006 Definitions. In this chapter:

- (1) “Department” means the department of safety and professional services.
- (2) “Electrical wiring” has the meaning given in s. 101.80 (1m), Stats.

Note: Under s. 101.80 (1m), Stats., “electrical wiring” means all equipment, wiring, material, fittings, devices, appliances, fixtures, and apparatus used for the production, modification, regulation, control, distribution, utilization, or safeguarding of electrical energy for mechanical, chemical, cosmetic, heating, lighting, or similar purposes, as specified under the state electrical wiring code. “Electrical wiring” does not include the equipment, wiring, material, fittings, devices, appliances, fixtures, and apparatus used by a public utility, an electric cooperative, or a wholesale merchant operator for the purpose of generating, transmitting, distributing, or controlling heat, light, power, or natural gas to its customers or members.

- (3) “Farm” means a place where farming is conducted.

- (4) “Farming” has the meaning given in s. 102.04 (3), Stats.

Note: Under s. 102.04 (3), Stats., “farming” means the operation of farm premises owned or rented by the operator. “Farm premises” means areas used for operations herein set forth, but does not include other areas, greenhouses or other similar structures unless used principally for the production of food and farm plants.

Note: Section 102.04 (3), Stats., states that the operation of farm premises shall be deemed to be the planting and cultivating of the soil thereof; the raising and harvesting of agricultural, horticultural or arboricultural crops thereon; the raising, breeding, tending, training and management of livestock, bees, poultry, fur-bearing animals, wildlife or aquatic life, or their products, thereon; the processing, drying, packing, packaging, freezing, grading, storing, delivering to storage, to market or to a carrier for transportation to market, distributing directly to consumers or marketing any of the above-named commodities, substantially all of which have been planted or produced thereon; the clearing of such premises and the salvaging of timber and management and use of wood lots thereon, but not including logging, lumbering or wood cutting operations unless conducted as an accessory to other farming operations; the managing, conserving, improving and maintaining of such premises or the tools, equipment and improvements thereon and the exchange of labor, services or the exchange of use of equipment with other farmers in pursuing such activities.

- (5) “Multifamily dwelling” has the meaning given in s. 101.971 (2), Stats.

Note: Under s. 101.971 (2), Stats., “multifamily dwelling” means “an apartment building, rowhouse, town house, condominium or manufactured building, as defined in s. 101.71 (6), that does not exceed 60 feet in height or 6 stories and that consists of 3 or more attached dwelling units the initial construction of which is begun on or after January 1, 1993. ‘Multifamily dwelling’ does not include a facility licensed under ch. 50.”

(6) “Municipality” means a city, village, town or county in this state.

(7) “One- and 2- family dwelling” means any building that contains one or 2 dwelling units that construction of which commenced on or after December 1, 1978.

(8) “Place of employment” has the meaning given in s. 101.01 (11), Stats.

Note: Under s. 101.01 (11), Stats., “place of employment” includes every place, whether indoors or out or underground and the premises appurtenant thereto where either temporarily or permanently any industry, trade or business is carried on, or where any process or operation, directly or indirectly related to any industry, trade or business, is carried on, and where any person is, directly or indirectly, employed by another for direct or indirect gain or profit, but does not include any place where persons are employed in private domestic service which does not involve the use of mechanical power or in farming. “Farming” includes those activities specified in s. 102.04 (3), Stats., and also includes the transportation of farm products, supplies or equipment directly to the farm by the operator of said farm or employees for use thereon, if such activities are directly or indirectly for the purpose of producing commodities for market, or as an accessory to such production. When used with relation to building codes, “place of employment” does not include an adult family home, as defined in s. 50.01 (1), Stats., or, except for the purposes of s. 101.11, Stats., a previously constructed building used as a community-based residential facility, as defined in s. 50.01 (1g), Stats., which serves 20 or fewer residents who are not related to the operator or administrator.

(9) “Public building” has the meaning given in s. 101.01 (12), Stats.

Note: Under s 101.01 (12), Stats., “public building” means any structure, including exterior parts of such building, such as a porch, exterior platform or steps providing means of ingress or egress, used in whole or in part as a place of resort, assemblage, lodging, trade, traffic, occupancy or use by the public or by 3 or more tenants. When used in relation to building codes, “public building” does not include a previously constructed building used as a community-based residential facility as defined in s. 50.01 (1g), Stats., which serves 20 or fewer residents who are not related to the operator or administrator or an adult family home, as defined in s. 50.01 (1), Stats.

SECTION 15. SPS 316.007 is repealed.

SECTION 16. SPS 316.008 is renumbered SPS 316.015.

SECTION 17. Subchapter II of ch. SPS 316 is renumbered subch. III of ch. SPS 316.

SECTION 18. SPS 316.009 and 316.010 are renumbered SPS 316.020 and 316.021 and amended to read:

SPS 316.020 Construction and operation. (1) GENERAL. All electrical power and communication equipment and lines shall be constructed, installed, operated and maintained so as to minimize hazards to life and property. All electrical installations shall conform to the 2017 National

Electrical Code, incorporated by reference in this chapter, and the requirements specified in this chapter.

Note: The federal and state Fair Housing Acts, the federal Americans with Disabilities Act, and the Wisconsin Commercial Building Code under chs. SPS 361 to 366 contain requirements relating to making buildings accessible to and usable by people with disabilities. Some of those requirements apply to the installation of various electrical devices. For example, in the federal Fair Housing Accessibility Guidelines, devices such as light switches, electrical outlets, thermostats and other environmental controls would meet the requirements if operable parts of the controls are located no higher than 48 inches, and no lower than 15 inches, above the floor. If the reach is over an obstruction between 20 and 25 inches in depth, the maximum height is reduced to 44 inches for forward approach; or 46 inches for side approach, provided the obstruction is no more than 24 inches in depth. Complete copies of the federal Fair Housing Accessibility Guidelines or the federal Americans with Disabilities Act Accessibility Guidelines can be obtained from the Superintendent of Documents, New Orders, P.O. Box 371954, Pittsburgh, PA 15250-7954.

(2) INSTALLATIONS OVER 600 VOLTS. Installations over 600 volts shall, in addition to the requirements of this chapter, comply with ch. PSC 114.

SPS 316.021 ~~Inspection and maintenance~~ Maintenance. All electrical wiring installations and equipment shall be cleaned and inspected at intervals as experience has shown to be necessary. Any equipment or electrical wiring installation known to be defective so as to endanger life or property shall be promptly repaired, permanently disconnected, or isolated until repairs can be made. ~~Construction, repairs, additions and changes to electrical equipment and conductors shall be made by qualified persons only.~~

SECTION 19. SPS 316.011 is repealed.

SECTION 20. SPS 316.012 is renumbered SPS 316.022 and amended to read:

SPS 316.022 Use of approved materials and construction methods.

(1) MATERIALS. Materials, equipment, and products that do not comply with the requirements of this chapter shall not be used unless approved in writing by a petition for variance issued by the department. Approval of materials, equipment, and products shall be based on sufficient data, tests, and other evidence that prove the material, equipment, or product meets the intent of the requirements of this chapter. Data, tests, and other evidence shall be provided by a qualified independent third party.

Note: Examples of a qualified independent third party include a nationally recognized testing laboratory and a professional engineer.

(2) METHODS OF INSTALLATION. Methods of installation that do not comply with the regulations of this chapter shall not be used unless approved by a petition for variance issued by the department.

(3) NEW PRODUCTS, CONSTRUCTIONS OR MATERIALS. The incorporated *National Electrical Code*® may require new products, constructions, or materials that may not be available at the time

this chapter is adopted. In such event, the department may permit the use of the products, constructions or materials which comply with a previous edition of the *National Electrical Code* ®.

SECTION 21. SPS 316.013 is renumbered SPS 316.023.

SECTION 22. SPS 316.014 is renumbered SPS 316.007 and amended to read:

SPS 316.007 Adoption of standards by reference. (1) PRIMARY STANDARDS. The following standard is hereby incorporated by reference into this chapter, subject to the modifications specified in this chapter:

(a) National Fire Protection Association (NFPA), One Batterymarch Park, Quincy, MA 02169-7471, telephone 800-344-3555, www.nfpa.org: NFPA 70 National Electrical Code , (NEC) – ~~2014~~ 2017.

Note: Copies of the standard are on file in the offices of the Department and the Legislative Reference Bureau. A copy of the code may be purchased from the organization listed or may be reviewed on the organization's website at ~~not~~ no cost if the person is a registered user for the site.

(b) If a requirement in the standard adopted in par. (a) contains a cross-reference to another requirement modified by this chapter, the modification shall apply to the cross-reference unless specified otherwise in this chapter.

(2) SECONDARY REFERENCES. Any codes or standards referenced in the standard adopted in sub. (1) (a) shall apply to the prescribed extent of each such reference, except as modified by this chapter.

(3) ALTERNATE STANDARDS. Any alternate standard that is equivalent to or more stringent than a standard incorporated by reference or otherwise referenced under this chapter may be used in lieu of the incorporated or referenced standard if the alternate standard is accepted in writing by the department.

SECTION 23. SPS 316.015 is renumbered SPS 316.080.

SECTION 24. Subchapter II of ch. SPS 316 is created to read:

Subchapter II – Administration and Enforcement

SPS 316.011 Administration (1) MUNICIPAL ADMINISTRATION. (a) *Jurisdiction conditions.* Pursuant to s. 101.86 (1), Stats., municipalities may exercise jurisdiction over the inspection of electrical wiring installations at farms, public buildings, places of employment, campgrounds, manufactured home communities, public marinas, piers, docks, or wharves and recreational vehicle parks provided the municipality complies with all of the following:

1. The municipality holds a registration issued by the department as an inspection agency for the purpose of issuing permits and inspecting electrical wiring at farms, public buildings, places

of employment, campgrounds, manufactured home communities, public marinas, piers, docks, or wharves and recreational vehicle parks.

2. The municipality notifies the department at least 60 days prior to the date upon which the municipality intends to assume the jurisdiction.

3. The municipality provides the department with a copy of its electrical ordinances and subsequent revisions to the ordinances.

4. The municipality's ordinances adopt this chapter in its entirety.

5. The municipality employs or contracts with certified commercial electrical inspectors or independent inspection agencies to perform electrical inspection activities.

6. The municipality provides the department with the names of its certified commercial electrical inspectors and independent inspection agencies employed or contracted by the municipality, if applicable.

Note: Section 13.48 (13), Stats., exempts state buildings from local ordinances or regulations relating to building construction, permits and similar restrictions.

Note: These provisions do not limit municipal authority to implement regulatory oversight for other electrical wiring installations at other locations not addressed under this section. The permitting and inspection of electrical wiring installations for the construction of new one- and 2-family dwellings are addressed under ch. SPS 320.

(b) *County.* Ordinances enacted by a county under this subsection establishing electrical inspection functions may not prevent or prohibit a municipality within that county from assuming those functions at any time.

Note: Pursuant to s. 101.86 (1) (a), Stats., a county ordinance shall apply in any city, village or town which has not enacted such an ordinance.

(c) *Relinquishing of jurisdiction.* A municipality shall notify the department, in writing, at least 60 days prior to the date upon which the municipality intends to relinquish jurisdiction responsibilities.

(2) DEPARTMENT ADMINISTRATION. (a) In municipalities not exercising jurisdiction under sub. (1), the department shall provide permit and inspection services for the installation of electrical wiring on farms and in public buildings, places of employment, campgrounds, manufactured home communities, public marinas, piers, docks, or wharves and recreational vehicle parks.

(b) Pursuant to ss. 101.02 (5) and (15) and 101.82 (2m), Stats., municipalities engaging in providing plan review, permit issuance, or inspections regarding electrical wiring under the scope of this chapter as a designated inspection agency may be monitored or audited by the department for compliance with administrative requirements of this chapter and s. SPS 305.627.

SPS 316.012 Permits. (1) (a) Except for an electrical wiring project described in s. 101.875 (2), Stats., and as provided in par. (b), no electrical wiring project may commence unless the owner of the premises where the installation is to occur or their agent holds a permit from the designated

inspection agency if the project involves the installation of new or an addition to any electrical service, feeder or branch circuit serving any of the following:

1. A farm.
2. A public building, structure, or premises.
3. A place of employment.
4. A campground.
5. A manufactured home community.
6. A public marina, pier, dock, or wharf.
7. A recreational vehicle park.

(b) Under emergency conditions, the necessary electrical wiring may commence without obtaining a permit, provided the owner of the premises where the installation is to occur or their agent submits a permit application to the inspection agency designated by the department to provide electrical inspections for the installation no later than the next business day after commencement of the installation.

(2) The application for a permit required under sub. (1) shall contain all of the following information:

- (a) The name of the applicant.
- (b) The name of the building or property owner.
- (c) The location of the electrical wiring installation.
- (d) The scope and extent of the electrical wiring installation.
- (e) 1. The name of the person responsible for the installation.

2. The name and license number of the master electrician, residential master electrician, or registered master electrician under s. SPS 305.437 responsible for the installation, unless exempted under s. 101.862 (4), Stats.

(3) (a) The issuing inspection agency shall indicate on the electrical permit the date of issuance.

(b) A permit required under sub. (1) shall expire 12 months after the date of issuance, if installation of the electrical wiring has not commenced.

SPS 316.013 Inspections. (1) Except as provided under s. 101.875 (2), Stats., electrical wiring installations shall be subject to inspection.

Note: See s. SPS 320.10 regarding the inspections for the construction of new one- and 2-family dwellings.

(2) Inspections of electrical wiring installations described under s. SPS 316.012 (1) (a) shall be conducted by a certified commercial electrical inspector.

Note: See s. SPS 305.62 for certification provisions for commercial electrical inspectors.

(3) (a) The building owner or their agent shall notify the inspection agency designated by the department to provide electrical inspections when the electrical wiring installation is ready for inspection.

(b) Except as provided in par. (c), to facilitate inspection all of the following shall apply:

1. Electrical wiring shall remain accessible and exposed for inspection purposes.
2. Electrical wiring may not be energized.

(c) 1. The concealment or energizing of electrical wiring, other than an electrical service, may proceed if inspection has not been completed within 2 business days after notification is received or as otherwise agreed between the wiring installer and the designated inspection agency providing the inspection.

2. The notification that an electrical wiring installation is ready for final inspection shall be made to indicate when all electrical fixtures, outlets and face plates are in place and the installation or that portion of the installation is energized.

(d) 1. If upon inspection, it is found that the installation is in compliance with this chapter, the certified inspector shall approve the installation prior to concealing or energizing the electrical wiring.

2. If upon inspection, it is found that the installation is incomplete or not in compliance with this chapter, orders to correct shall be issued. An order may include the condition that the electrical wiring is to remain unconcealed and non-energized until re-inspected.

SECTION 25. SPS 316.023 (3) is created to read:

SPS 316.023 (3) EXCEPTION. Subsections (1) and (2) do not apply to electric fence controllers designed and manufactured for the purpose of controlling humans.

SECTION 26. Subchapter III of ch. SPS 316 is renumbered subch. IV of ch. SPS 316.

SECTION 27. SPS 316.100 (1) (a) is repealed.

SECTION 28. SPS 316.100 (1) (b) to (d) are renumbered SPS 316.100 (a) to (c).

SECTION 29. SPS 316.100 (2) (intro.) and (b) are consolidated, renumbered SPS 316.100 (2) and amended to read:

SPS 316.100 (2) SUBSTITUTIONS. The following department definitions are substitutions ~~definition is a substitution~~ for the respective definitions ~~definition~~ in NEC 100: ~~(b)~~ "Special permission" means a petition for variance in accordance with s. SPS 316.005.

SECTION 30. SPS 316.100 (2) (a) is repealed.

SECTION 31. SPS 316.110 is repealed and recreated to read:

SPS 316.110 Examination, identification, installation, use, and listing of equipment.

This is a department exception to the requirements of NEC 110.3 (C):

Exception: As provided under s. SPS 316.022 (1), product testing and evaluation may be conducted by a qualified independent third party, including a nationally recognized testing laboratory or a professional engineer.

SECTION 32. SPS 316.210 (1) to (3) are repealed and recreated to read:

SPS 316.210 (1) GROUND-FAULT CIRCUIT-INTERRUPTER PROTECTION FOR PERSONNEL.

- (a) The requirements in NEC 210.8 (A) (7) do not apply to sinks located in kitchens.
- (b) The requirements in NEC 210.8 (A) (9) and (10) are not included as part of this chapter.
- (c) Substitute the following wording for NEC 210.8 (B): All 125-volt, single-phase, 15- and 20-ampere receptacles installed in the following locations shall have ground-fault circuit interrupter protection for personnel.
- (d) The requirements in NEC 210.8 (B) (9) and (10) are not included as part of this chapter.
- (e) This is a department exception to the requirements in NEC 210.8 (A) and (B).

Exception: Ground-fault circuit-interrupter protection shall not be required for a single receptacle providing power for sump, sewage, or condensate pumps where an accessible ground-fault circuit-interrupter protected receptacle is located within 900 mm (3 ft) of the non-GFCI protected receptacle.

- (f) The requirements in NEC 210.8 (D) are not included as part of this chapter.
- (2) BRANCH CIRCUITS REQUIRED.** The requirements in NEC 210.11 (C) (4) are not included as part of this chapter.
- (3) ARC-FAULT CIRCUIT-INTERRUPTER PROTECTION.** (a) The requirements in NEC 210.12 (A) do not apply to kitchens and laundry areas.
- (b) The requirements in NEC 210.12 (B) and (C) are not included as part of this chapter.

SECTION 33. SPS 316.210 (4) is amended to read:

SPS 316.210 (4) BRANCH CIRCUIT EXTENSIONS OR MODIFICATIONS — DWELLING UNITS AND DORMITORY UNITS. The requirements in NEC 210.12 ~~(B)~~ (D) are not included as part of this chapter.

SECTION 34. SPS 316.210 (5) is repealed.

SECTION 35. SPS 316.210 (6) is renumbered SPS 316.210 (5).

SECTION 36. SPS 316.210 (6) and (7) are created to read:

SPS 316.210 (6) GARAGES. Substitute the following wording for NEC 210.52 (G) (1): In each attached garage and in each detached garage with electric power.

(7) MEETING ROOMS. The requirements in NEC 210.71 do not apply to this chapter.

SECTION 37. SPS 316.220 (1) and (2) (title) are repealed.

SECTION 38. SPS 316.220 (2) is renumbered SPS 316.220.

SECTION 39. SPS 316.225 (1) is repealed.

SECTION 40. SPS 316.225 (2), (3), (4), and (6) are renumbered SPS 316.225 (1), (2), (3), and (4).

SECTION 41. SPS 316.230 (1) (a) (intro.) is amended to read:

SPS 316.230 (1) (a) (intro.) ~~These are~~ This is a department informational ~~notes~~ note to be used under NEC 230.2 (intro.):

SECTION 42. SPS 316.230 (1) (a) (Note 1) and (c) are repealed.

SECTION 43. SPS 316.230 (4) (intro.) and (a) are consolidated, renumbered SPS 316.230 (4) and amended to read:

SPS 316.230 (4) RATING OF SERVICE DISCONNECTING MEANS. This is a department rule in addition to the requirements of NEC 230.79: ~~(a) Two or multi family dwellings. Except as provided in par. (b), for~~ For 2-family or multi-family dwellings, the service equipment shall have a rating of not less than 150 amperes, 3-wire or 4-wire. ~~Where the combined rating of all service disconnecting means is 150 amperes or larger, the service or feeder equipment rating for each dwelling unit shall have a rating of not less than 60 amperes.~~

SECTION 44. SPS 316.230 (4) (b) is repealed.

SECTION 45. SPS 316.240 is created to read:

SPS 316.240 Overcurrent protection. The requirements in NEC 240.67 do not apply to this chapter.

SECTION 46. SPS 316.250 (3) is created to read:

SPS 316.250 (3) TYPES OF EQUIPMENT GROUNDING CONDUCTORS. This is a department rule in addition to the requirements of NEC 250.118: A metallic raceway installed in direct contact with earth, in concrete slabs or floors poured on earth, or in exterior concrete walls below grade shall be augmented with a supplemental equipment grounding conductor identified in NEC 250.118 (1).

This supplemental conductor shall be sized in accordance with NEC 250.122. An aluminum equipment grounding conductor used for this purpose shall be insulated.

SECTION 47. SPS 316.300 (2) is repealed and recreated to read:

SPS 316.300 (2) PROTECTION AGAINST PHYSICAL DAMAGE. This is a department exception in addition to the exceptions under NEC 300.4 (D):

Exception No. 4: This distance does not need to be maintained within 8 inches of a device, junction box, splice, or termination point.

SECTION 48. SPS 316.310 (intro.) is renumbered SPS 316.310 and amended to read:

SPS 316.310 Conductors for general wiring. This is a department rule in addition to the requirements in NEC 310.15 (B) (3) (a): The derating factors shown in NEC Table 310.15 (B) (3) (a) do not apply to branch circuits supplying an individual dwelling unit ~~except under the following conditions:~~

~~Exception No. 6: The derating factors shown in NEC Table 310.15 (B) (3) (a) do not apply to branch circuits supplying an individual dwelling unit except under the following conditions:~~

SECTION 49. SPS 316.310 (1) and (2) are repealed.

SECTION 50. SPS 316.312 (2) and (3) are amended to read:

SPS 316.312 (2) OMISSION. The requirements specified in NEC 312.5 (C) Exception ~~paragraph (b)~~ number 2 are not included as part of this chapter.

(3) FITTING. Substitute the following wording for NEC 312.5 (C) Exception ~~paragraph (e)~~ number 3: A fitting is provided on each end of the raceway to protect the cable from abrasion.

SECTION 51. SPS 316.314 (1) (title) and (2) are repealed.

SECTION 52. SPS 316.314 (1) is renumbered SPS 316.314.

SECTION 53. SPS 316.400 is amended to read:

SPS 316.400 Flexible cords and cables. This is a department exception in addition to the exception in NEC ~~400.8~~ 400.12 (4):

Exception No. 2: Flexible cords and cables permitted by NEC ~~400.7~~ 400.10 (A) that are connected to sources other than busways may be attached to adequately supported equipment or building surfaces provided the type of cord or cable, the attachment to the building and equipment, and the support comply with the provisions of NEC 368.56 (B).

SECTION 54. SPS 316.404 is created to read:

SPS 316.404 Switches controlling lighting loads. The requirements in NEC 404.2 (C) do not apply to dwelling units.

SECTION 55. SPS 316.406 is renumbered SPS 316.406 (1).

SECTION 56. SPS 316.406 (2) is created to read:

SPS 316.406 (2) Substitute the following wording for NEC 406.9 (B) (1): Receptacles of 15 and 20 amperes, 125 and 250 volts installed in a wet location shall have an enclosure that is weatherproof whether or not the attachment plug cap is inserted.

SECTION 57. SPS 316.511 is repealed and recreated to read:

SPS 316.511 Commercial garages, repair and storage. (1) Substitute the following wording for “Extent of Classified Location” in NEC Table 511.3 (C) under which the floor area of a major repair garage is considered unclassified: Up to 450 mm (18 in.) above floor level of the room where the room is provided with ventilation from a point not more than 300 mm (12 in.) from the lowest point of the floor area and the ventilation conforms to chs. SPS 361 to 366.

(2) Substitute the following wording for “Extent of Classified Location” in NEC Table 511.3 (D) under which the ceiling area of a major repair garage is considered unclassified: Within 450 mm (18 in.) of ceiling where ventilation is provided from a point not more than 450 mm (18 in.) from the highest point in the ceiling and the ventilation conforms to chs. SPS 361 to 366.

Note: The Commercial Building Code, chapters SPS 361 to 366, adopts and references the International Mechanical Code, IMC, for the design of ventilation systems. The adopted provisions of the International Mechanical Code under section 502.16 prescribe provisions for repair garages for natural gas- and hydrogen- fueled vehicles.

SECTION 58. SPS 316.551 is created to read:

SPS 316.551 Recreational vehicles and recreational vehicle parks. Substitute the following wording for NEC 551.71 (C): A minimum of 20 percent of existing and 40 percent of all new recreational vehicle sites, with electrical supply, shall each be equipped with a 50-ampere, 125/250-volt receptacle conforming to the configuration as identified in Figure 551.46 (C) (1). These electrical supplies shall be permitted to include additional receptacles that have configurations in accordance with 551.81.

SECTION 59. SPS 316.620 (1) is renumbered SPS 316.620.

SECTION 60. SPS 316.620 (2) is repealed.

SECTION 61. SPS 316.675 is amended to read:

SPS 316.675 Electrically driven or controlled irrigation machines. This is a department rule in addition to the requirements in NEC 675.8: A service disconnecting means with overcurrent protection shall be provided at the service point in accordance with NEC 230 subchapter Part VI.

SECTION 62. SPS 316.680 is repealed.

SECTION 63. Subchapter IV of Chapter SPS 316 is renumbered subch. V of ch. SPS 316.

SECTION 64. SPS 316.915 (3), (6), (7), (8), (10), (12), and (13) are repealed.

SECTION 65. SPS 316.930 is renumbered SPS 316.016.

SECTION 66. SPS 316.960 is renumbered SPS 316.017.

SECTION 67. Subchapter V of ch. SPS 316 is repealed.

SECTION 68. EFFECTIVE DATE. Pursuant to s. 227.22 (2) (intro.) and (b), Stats., these rules shall take effect on the first day of the month following publication in the Wisconsin Administrative Register, except the treatment of s. SPS 305.629 (1) in SECTION 6 and s. SPS 316.011 (1) (a) 1. in SECTION 24, which shall take effect on the first day of the 9th month beginning after publication and the treatment of ss. SPS 316.011 (2), 316.012, and 316.013 in SECTION 24 and subch. V of ch. SPS 316 in SECTION 67, which shall take effect on the first day of the 19th month beginning after publication.

(END OF TEXT OF RULE)