1. Finding/nature of emergency (Emergency Rule only):

N/A

2. Detailed description of the objective of the proposed rule:

The objective of this rulemaking project is to update Wisconsin’s Electrical Code to the 2017 edition of the National Electrical Code (NEC) while evaluating the electrical requirements in SPS 316 that add or modify requirements to the NEC.

This rule-making project will also develop a statewide electrical inspection program pursuant to 2007 Wisconsin Act 63. The project may address administrative issues flowing from the statutory mandate that inspection of electrical construction must occur in municipalities that have not adopted and enforced ordinances for the inspection of electrical construction.

Code chapters incidentally affected by this project may be revised to assure clarity and consistency of the rules. The rules will also be reviewed in relation to Governor Walker’s Executive Order No. 61 which directs the Department to analyze its rules to increase efficiency and decrease costs to small businesses.

3. Description of the existing policies relevant to the rule, new policies proposed to be included in the rule, and an analysis of policy alternatives:

Currently, the Department’s electrical rules can be found in ch. SPS 316. Subchapter III outlines Wisconsin’s partial adoption of prior versions of the NEC and s. SPS 316.014 (1) (a) incorporates the 2011 NEC by reference. The Wisconsin Electrical Code has incorporated the NEC by reference since 1972.

The 2014 NEC revised the prior version to enhance clarity and usability. It was also changed to accommodate the electrical needs of emerging alternative energy systems. The development of the 2017 NEC is currently underway, with a first draft already published. The Department will be writing these rules while following the development of the new revisions. This rule making project will not be completed until after the 2017 NEC has been published. To keep current, an evaluation of the new NEC changes is required. Outdated codes can lead to confusion in the industry and delay adoption of new technologies that benefit consumers.
The Department has provided limited electrical inspection along with consultation on the electrical code. The topic of increased electrical inspection will be considered and discussed along with the creation of administrative rules in keeping with the statutory mandate of 2007 Act 63. Without these changes, the code would fall out of step with the statutory requirements leading to confusion and noncompliance.

As part of this review, Wisconsin’s electrical code will be examined for opportunities to increase efficiency and decrease costs to small businesses pursuant to Executive Order No. 61.

4. Detailed explanation of statutory authority for the rule (including the statutory citation and language):

S. 227.11 (2) (a), Stats. empowers the Department of Safety and Professional Services to promulgate rules interpreting the provision of any statute the Department enforces or administers. Additionally, s. 101.02 (1), Stats. states, "[t]he department shall adopt reasonable and proper rules and regulations relative to the exercise of its powers and authorities and proper rules to govern its proceedings and to regulate the mode and manner of all investigations and hearings."

The Department is given specific powers regarding the electrical code, inspections, and fee setting as follows.

S. 101.82, Stats., reads in part: Departmental duties. The department shall:

(1) 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.

(1g) Regulate all of the following types of electricians:

(a) Master electricians, including residential master electricians.

(b) Journeyman electricians, including residential journeyman electricians and industrial journeyman electricians.

(c) Electrical apprentices, including residential electrical apprentices and industrial electrical apprentices.

(d) Registered electricians.

(1m) Promulgate rules that establish criteria for the enrollment of registered electricians and for the registration of electrical apprentices.

(1n) 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.
(1r) Promulgate rules that establish requirements for the supervision of registered electricians. Registered electricians must be supervised by licensed journeyman or master electricians.

(1v) Promulgate rules that establish criteria and procedures for the licensing of electrical contractors.

(2) Promulgate rules that establish criteria and procedures for the certification of electrical inspectors for the purpose of inspecting electrical wiring.

(2m) 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).

(3r) 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.

(4) Establish by rule a schedule of fees sufficient to defray the costs incurred under this subchapter.

S. 101.84, Stats., reads: **Departmental powers.** The department may:

(1) 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.

(3) 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 under sub. (5).

(5) 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) and that establish criteria and procedures for enrolling, registering, or licensing these electricians.

S. 101.63, Stats., reads in part: **Departmental duties.** The department shall:

(1) Adopt rules which establish standards for the construction and inspection of one- and 2-family dwellings and components thereof. 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, including plumbing, as defined in s. 145.01 (10). No set of rules may be adopted which has not taken into account the conservation of energy in construction and maintenance of dwellings and the costs of specific code provisions to home buyers in relationship to the benefits derived from the provisions. Rules promulgated under this subsection do not apply to a bed and breakfast establishment, as defined under s. 254.61 (1), except that the rules apply to all of the following: (a) The 3rd floor level of a bed and breakfast establishment that uses that level other than as storage.

S. 101.73, Stats., reads in part: **Departmental duties.** The department shall:
(1) 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.

(2) 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 and with the rules for indoor plumbing adopted by the department under ch. 145.

(3) Provide for examination of plans and specifications and in-plant inspections when contracted for by the manufacturer under s. 101.75 (1) and shall 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.

(5) 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.

(6) 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 this subchapter.

S. 101.19, Stats., reads in part: Fees and records.

(1g) The department, by rule promulgated under ch. 227, shall fix and collect fees which shall, as closely as possible, equal the cost of providing the following services:

(a) The examination of plans for public buildings, public structures, places of employment and the components thereof.

(d) Each inspection of a facility conducted to ensure that the construction is in accordance with the plans approved by the department.

5. Estimate of amount of time that state employees will spend developing the rule and of other resources necessary to develop the rule:

The staff time needed to revise the rules is expected to be 1,000 hours. This time includes research, consulting, drafting rule revisions, consulting with stakeholders, processing the rule revisions through public hearings, legislative review, and adoption. There are no other resources necessary to revise the rules.
6. List with description all entities that may be affected by the proposed rule:

These rules will affect any building, structure or premises where the installation of electrical wiring will be undertaken, other than those buildings, structures or premises regulated by the Public Service Commission. The rules will also affect any designer, installer or inspector of electrical wiring along with owners and frequenters of buildings, structures or premises where electrical wiring is installed.

7. Summary and preliminary comparison with any existing or proposed federal regulation that is intended to address the activities to be regulated by the proposed rule:

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 NEC. A search of the Code of Federal Regulations (CFR) found the following regulations pertaining to activities that may be covered by this rule.

- 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 in the Department of Labor 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 in the Department of Labor contains installation safety requirements, safety requirements and environmental considerations for special equipment necessary to safeguard employees working in special industries.


- Title 30 CFR, Part 57 – Safety and Health Standards – Underground Metal and Nonmetal Mines. Subpart K of this regulation in the Department of Labor 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 in the Department of Housing and Urban Development 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 in the Department of Agriculture applies to telecommunications wiring and equipment and requires compliance with the NEC.
8. *Anticipated economic impact of implementing the rule:*

The Department believes that the proposed changes will have little or no adverse economic impact. Nevertheless, it plans to solicit information and advice from businesses, local government units, and individuals in relation to the economic effects of the new NEC provisions.

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