



STATE OF WISCONSIN
Department of Safety and Professional Services
1400 East Washington Avenue
Madison WI 53703

Mail to:
PO Box 8368
Madison WI 53708-8368

E-mail: dsps@wisconsin.gov
Web: <http://dsps.wi.gov>
Phone: 608-266-2112

Governor Scott Walker Secretary Dave Ross

ELECTRICAL CODE ADVISORY COMMITTEE MEETING
Room 121C, 1400 East Washington Avenue, Madison
Contact: Dale Kleven (608) 261-4472
December 2, 2016

The following agenda describes the issues that the Committee plans to consider at the meeting. At the time of the meeting, items may be removed from the agenda. Please consult the resulting meeting minutes for a description of the recommendations of the Committee.

AGENDA

9:00 A.M.

CALL TO ORDER – ROLL CALL

- A. Adoption of Agenda (1)**
- B. Approval of Minutes of September 26, 2016 (2-3)**
- C. Department Update**
- D. Review Department Changes and Recommendations to the SPS 305 and 316 Proposed Rulemaking Order (4-19)**
 - 1) SPS 305 – Licenses, Certifications and Registrations
 - 2) SPS 316 – Electrical
- E. Public Comments**
- F. Adjournment**

**SPS 316 ELECTRICAL CODE ADVISORY COMMITTEE MEETING
TELECONFERENCE/VIRTUAL MEETING MINUTES
September 26, 2016**

PRESENT Steven Bacalzo, Joseph Bembnister, Brad Gruenewald, Paul Gruettner, David Helgeson, Gene Jacobson (*arrived at 9:09 a.m.*), Charles Johansen, Bill Neitzel, John Nikolai, James Rugg

EXCUSED Shannon Clark

STAFF Dale Kleven, Rules Coordinator; Anthony Tadysak, DIS Engineering Consultant; Nifty Lynn Dio, Bureau Assistant; and other Department staff

CALL TO ORDER

Bill Neitzel, called the meeting to order at 9:02 a.m. A quorum of nine (9) members was confirmed.

ADOPTION OF AGENDA

MOTION: Steven Bacalzo moved, seconded by Paul Gruettner, to adopt the agenda as published. Motion carried unanimously.

APPROVAL OF MINUTES

Amendments to the Minutes

- *Page 2: Correct spelling of interrupters*

MOTION: Charles Johansen moved, seconded by Brad Gruenewald, to approve the minutes of August 29, 2016 as amended. Motion carried unanimously.

(Gene Jacobson joined the meeting at 9:09 a.m.)

REVIEW AND DISCUSSION OF SPS 305 AND 316 DRAFT RULE LANGUAGE

MOTION: Charles Johansen moved, seconded by Bembnister Bembnister, to strike “on or after April 1, 2014” from in the draft rule language. Motion carried unanimously.

MOTION: David Helgeson moved, seconded by Paul Gruettner, to revise SPS 316.012 (2)(e)2 in the draft rule language to state “The name and license number of the master electrician, residential master electrician, or the registered master electrician under SPS 305.437 responsible for the installation, unless exempted under s. 101.862(4), Stats.” Motion carried. *Bembnister voted no.*

- MOTION:** Gene Jacobson moved, seconded by John Nikolai, to accept DSPS staff recommended changes to the following sections of the draft rule language:
1. SPS 316.020: Include the language that installations conform to the 2017 National Electrical Code incorporated by reference in this chapter.
 2. SPS 316.210 (5): The language in existing SPS 316.210 (5) is identical to the language in 2017 NEC 210.70 (A) (1). SPS 316.210 (5) should be repealed.
 3. SPS 316.225 (2): NEC 225.30 (f) is not in the 2017 NEC (the change did not receive final approval). SPS 316.225 (2) should remain unchanged from how it currently reads.
 4. SPS 316.312 (2) and (3): Exception paragraphs are exception numbers in the 2017 NEC. The references to the exception paragraphs (b) and (c) should be changes to the exception numbers 2 and 3.
 5. SPS 316.675: The reference to NEC 230 subchapter VI should be changed to NEC 230 part VI.
 6. SPS 316.511 (1) and (2): Replace the language in the fourth line under “Extent of Classified Location” of Table 511.3(C). Since this is not an exception, the first sentence should remove the words “the exception under” and it would read “(1) Substitute the following wording for ‘Extent of classified location...’.” In addition, replace the language in the second line under “Extent of Classified Location” of Table 511.3(D). Same language change as above.

Motion carried unanimously.

MOTION: Steven Bacalzo moved, seconded by Brad Gruenewald, to approve the draft language for SPS 305 and 316 as modified at today’s meeting. Motion carried unanimously.

MOTION: Paul Gruettner moved, seconded by John Nikolai, we as a committee refer our recommendations to DSPS as written and modified. Motion carried. Opposed: Johansen

ADJOURNMENT

MOTION: Steven Bacalzo moved, seconded by Charles Johansen, to adjourn the meeting. Motion carried unanimously.

The meeting adjourned at 11:36 a.m.

DSPS Changes to SPS 316 – 2014 and 2017 NEC Provisions Not Adopted

NEC Section*	Provision	Action
210.8 (A) (7)	Added requirement for GFCI protection in dwelling units to include 125-volt, 15- and 20-ampere receptacles installed within 6 feet of a kitchen sink	Create SPS 316.210 (1) (a) to provide the requirements in NEC 210.8 (A) (7) do not apply to sinks located in kitchens
210.8 (A) (9) and (10)	Added requirements for GFCI protection in dwelling units to include 125-volt, 15- and 20-ampere receptacles installed within 6 feet of a bathtub or shower stall and in laundry areas	Create SPS 316.210 (1) (b) to provide the requirements in NEC 210.8 (A) (9) and (10) are not included as part of chapter 316
210.8 (B)	Expands GFCI requirements for other than dwelling units to all single-phase receptacles rated 150 volts to ground or less, 50 amperes or less; and three-phase receptacles rated 150 volts to ground or less, 100 amperes or less.	Create SPS 316.210 (1) (c) to use substitute wording for NEC 210.8 (B) that does not expand GFCI protection requirements to 150v receptacles
210.8 (B) (8)	Adds certain garages to locations where GFCI protection is required.	Create SPS 316.210 (1) (d) to use substitute wording for NEC 210.8 (B) (8) that does not add certain garages to locations where GFCI protection is required [substitute wording is from the 2011 NEC]
210.8 (B) (9) and (10)	Adds locations where GFCI protection is required in other than dwelling units to include crawlspaces at or below grade level and unfinished portions or areas of the basement not intended as habitable rooms	Create SPS 316.210 (1) (e) to provide the requirements in NEC 210.8 (B) (9) and (10) are not included as part of chapter 316
210.8 (D)	Added requirements for GFCI protection for outlets that supply dishwashers installed in dwelling units	Create SPS 316.210 (1) (g) to provide the requirements in NEC 210.8 (D) are not included as part of chapter 316
210.11 (C) (4)	New requirement for dwelling unit garages: at least one 120-volt, 20-ampere branch circuit shall be installed to supply receptacle outlets. Applies to attached garages and detached garages with electric power.	Create SPS 316.210 (2) to provide the requirements in NEC 210.11 (C) (4) are not included as part of chapter 316
210.12 (A)	Expanded the AFCI protection requirement in dwelling units to kitchens and laundry areas, and to specify that AFCI protection is required for branch circuits supplying outlets and devices	Create SPS 316.210 (3) (a) to provide the requirements in NEC 210.12 (A) do not apply to kitchens and laundry areas
210.12 (B)	New AFCI protection requirement for circuits supplying outlets and devices in dormitories. Includes bathrooms, bedrooms, living rooms, hallways, closets, and similar rooms.	Create SPS 316.210 (3) (b) to provide the requirements in NEC 210.12 (B) are not included as part of chapter 316

DSPS Changes to SPS 316 – 2014 and 2017 NEC Provisions Not Adopted

210.12 (C)	New AFCI protection requirement for all 120-volt, single phase, 15- and 20-ampere branch circuits supplying outlets and devices installed in guest rooms and guest suites of hotels and motels	Create SPS 316.210 (3) (b) to provide the requirements in NEC 210.12 (C) are not included as part of chapter 316
210.52 (G) (1)	Revised to require at least one receptacle outlet in each vehicle bay in a dwelling unit garage. An outlet may not be more than 1.7 m (5 1/2 ft) above the floor.	Create SPS 316.210 (6) to use substitute wording for NEC 210.52 (G) (1) so as to not require at least one receptacle outlet at a maximum height in each vehicle bay
210.71	New requirement for a minimum number of non-locking-type 125-volt, 15- and 20-ampere receptacles to be installed in non-dwelling-unit meeting rooms. Non-dwelling-unit meeting rooms at least 3.7 m (12 ft) wide and a floor area of at least 20 square meters (215 square feet) also have requirements for a minimum number of floor receptacles.	Revise SPS 316.210 (7) to provide the requirements in NEC 210.71 do not apply to chapter SPS 316
240.67	Existing arc energy reduction method for circuit breakers expanded to include fuses rated 1200A or greater. Effective January 1, 2020.	Create SPS 316.240 to provide the requirements in NEC 240.67 do not apply to chapter SPS 316
404.2 (C)	For switches controlling lighting loads, requires installation of the grounded conductor at the switch location	Create SPS 316.404 to provide the requirements in NEC 404.2 (C) do not apply to dwelling units
406.9 (B) (1)	Requires receptacle outlet boxes for receptacles of 15- and 20-ampere in a wet location be listed and identified as "extra duty"	Create SPS 316.406 (2) to use substitute language for NEC 406.9 (B) (1) so as to not require outlet box hoods installed in wet locations be listed and identified as "extra-duty"
551.71 (C)	Revised to require that every recreational vehicle site equipped with a 50-ampere receptacle also be equipped with a 30-ampere, 125-volt receptacle conforming to specifications	Create SPS 316.551 to use substitute wording for NEC 551.71 (C) so as to not require a 30-ampere receptacle where a 50-ampere receptacle is equipped

* All references are to the 2017 NEC

Chapter SPS 316

ELECTRICAL

Except as otherwise noted, these rule changes will take effect on the first day of the month following publication

Subchapter I — ~~Administration and Enforcement~~ Purpose, Scope, and Application

SPS 316.001 **Purpose. (1)** PRACTICAL SAFEGUARDING. Pursuant to ss. 101.02 (1), 101.63 (1), 101.73 (1), and 101.82 (1), Stats., the purpose of this chapter is the practical safeguarding of persons and property from hazards arising from the installation and use of electricity.

Note: Hazards often occur because of overloading of wiring systems by methods or usage not in conformity with this chapter. This occurs because initial wiring did not provide for increases in the use of electricity. An adequate initial installation and reasonable provisions for system changes will provide for future increases in the use of electricity.

(2) CODE INTENTION. This chapter is not intended as a design specification or as an instruction manual for untrained persons.

Note: The Wisconsin state electrical code is issued and administered by the department and by the public service commission in 2 chapters of the Wisconsin administrative code. The department has the responsibility for issuance and administration of this chapter, and the public service commission has the responsibility for issuance and administration of ch. PSC 114.

~~SPS 316.002 **Scope. (1)** COVERED. This chapter covers:~~

~~(a) Installations of electric and communication conductors and equipment in places of employment, within or on public and private buildings or other structures, including mobile homes, recreational vehicles, and floating buildings; and other premises such as yards, carnivals, parking and other lots, mines, trenches and tunnels, and industrial substations.~~

~~(b) Installations of conductors and equipment that connect to the supply of electricity.~~

~~(c) Installations of other outside conductors and equipment on the premises.~~

~~(d) Installations of optical fiber cable.~~

~~(e) Installations in buildings used by the electric utility, such as office buildings, warehouses, garages, machine shops and recreational buildings, that are not an integral part of a generating plant, substation or control center.~~

~~(f) Inspections of electrical construction of farms, public buildings and places of employment.~~

~~**(2)** NOT COVERED. This chapter does not cover:~~

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

~~(b) Installations of electric conductors and equipment 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, including associated lighting, under the exclusive control of electric utilities for the purpose of communications, metering, generation, control, transformation, transmission or distribution of electric energy. Such installations shall be located in buildings used exclusively by utilities for such purposes; 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.~~

~~(e) Installations for the purpose of street or area lighting owned and under exclusive control of electrical utilities or municipal electric departments 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, where such installations are in compliance with ch. PSC 114.~~

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.

SPS 316.003 **Application.** (1) TYPES OF INSTALLATIONS. The provisions of this chapter apply to all new installations, reconstructions, alterations and extensions.

(2) TESTING. Rooms which are used exclusively for routine or special electrical test work and are under the supervision of a qualified person, shall comply with this chapter where practicable for the character of the testing done.

(3) EXISTING INSTALLATIONS. Existing electrical installations shall conform to the electrical code that applied when the installations were installed. An existing electrical installation may be required to be brought into compliance with the current code's requirements by the department and within the time period determined by the department when a hazard to life, health or property exists or is created by the installation.

(4) REPAIRS. Repairs to electrical installations shall conform to the electrical code that applied when the installations were installed. A repair may be required to be brought into compliance with the current code's requirements by the department and within the time period determined by the department when a hazard to life, health or property exists or is created by the repair.

(5) DIFFERING RULES. (a) Where any department rule in this chapter differs from a requirement within a standard referenced in this chapter, the department rule shall govern.

(b) Where a provision of this chapter prescribes a general requirement and another provision of this chapter prescribes a specific or more detailed requirement regarding the same subject, the specific or more detailed requirement shall govern, except as provided in par. (a).

(c) Where different sections of this chapter specify conflicting requirements, the most restrictive requirement, as determined by the department, shall govern, except as provided in pars. (a) and (b).

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

Note: This chapter does not nullify any exclusions specified in the standards adopted under s. SPS 316.014 316.007.

~~SPS 316.004 **Authority.** (1) 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.~~

~~**Note:** Section 101.02 (1) of the Statutes reads: "The 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."~~

~~(2) MUNICIPAL AUTHORITY. Municipalities may exercise jurisdiction over inspection of electrical construction covered by the scope of this chapter. For public buildings and places of employment, s. SPS 316.920 (2) specifies the conditions required for municipalities to exercise this jurisdiction.~~

~~**Note:** Section SPS 320.02 (1) (a) prohibits any municipality from adopting an ordinance establishing restrictions on the electrical construction of one and two family dwellings covered by the Uniform Dwelling Code.~~

~~**Note:** Section SPS 361.03 (5) (b) prohibits any municipality from adopting an ordinance establishing restrictions on the electrical construction of multifamily dwellings as defined in s. SPS 362.0202.~~

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 subsection 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.

SPS 316.005 **Petition for variance.** The department shall consider and may grant a variance to a provision of this chapter in accordance with ch. SPS 303. The petition for variance shall include, where applicable, a position statement from the fire department having jurisdiction.

Note: Chapter SPS 303 requires the submittal of a petition for variance form (SBD-9890) and a fee, and that an equivalency is established in the petition for variance that meets the intent of the rule being petitioned. Chapter SPS 303 also requires the department to process regular petitions within 30 business days and priority petitions within 10 business days.

Note: The Department forms required in this chapter are available for a nominal fee at telephone 800-DOC-SALE (800-362-7253) or 411 (Telecommunications Relay), or at docsales@doa.state.wi.us. Forms are also available at no charge at the Department's Web site at <http://dsps.wi.gov> through links to Division of Industry Services forms.

~~SPS 316.006 **Penalties.** Penalties for violations of this chapter shall be assessed in accordance with s. 101.02 (12) and (13), or s. 101.88 (3), Stats.~~

~~**Note:** Section 101.02 (13) (a), Stats., indicates penalties will be assessed against any employer, employee, owner or other person who fails or refuses to perform any duty lawfully enjoined, within the time prescribed by the department, for which no penalty has been specifically provided, or who fails, neglects or refuses to comply with any lawful order made by the department, or any judgment or decree made by any court in connection with ss. 101.01 to 101.599, Stats. For each violation, failure or refusal, the employee, owner or other person must forfeit and pay into the state treasury a sum not less than \$10 nor more than \$100 for each violation.~~

~~**Note:** Section 101.02 (12), Stats., indicates that every day during which any person, persons, corporation or any officer, agent or employee thereof, fails to observe and comply with an order of the department will constitute a separate and distinct violation of such order.~~

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), 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), or, except for the purposes of s. 101.11, a previously constructed building used as a community-based residential facility, as defined in s. 50.01 (1g), 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) 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).

~~SPS 316.007—Fees.~~ Fees for petitions for variance, electrical plan review and electrical inspections issued under this chapter shall be submitted as specified in ch. SPS 302.

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®) – 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.

~~SPS 316.008 **Appeals.** (1) APPEAL OF LOCAL ORDER. Any person affected by a local order which may be in conflict with a provision of this chapter may petition the department for a hearing on the grounds that the local order is unreasonable and in conflict with the provision of this chapter. All appeals shall be acted on and a decision in writing shall be issued by the department within 30 business days of receiving an appeal.~~

~~Note: Section 101.01 (1) (f), Stats., defines "local order" as any ordinance, order, rule or determination of any common council, board of aldermen, board of trustees or the village board, of any village or city, or the board of health of any municipality, or an order or direction of any official of such municipality, upon any matter over which the department has jurisdiction.~~

~~(2) PETITION OF ADMINISTRATIVE RULE. Pursuant to s. 227.12, Stats., any municipality, corporation or any 5 or more persons having an interest in an administrative rule may petition the department requesting the adoption, amendment or repeal of the rule.~~

Subchapter II — Administration and Enforcement

Note: The creation of SPS 316.011 (2), 316.012, and 316.013 occurs on the first day of the 19th month beginning after the rules are published.

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. As of the first day of the 9th month beginning after publication [LRB inserts date], 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 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 or residential master electrician 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) 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 ch. 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.

SPS 316.014 Penalties. Penalties for violations of this chapter shall be assessed in accordance with s. 101.02 (12) and (13), or s. 101.88 (3), Stats.

Note: Section 101.02 (13) (a), Stats., indicates penalties will be assessed against any employer, employee, owner or other person who fails or refuses to perform any duty lawfully enjoined, within the time prescribed by the department, for which no penalty has been specifically provided, or who fails, neglects or refuses to comply with any lawful order made by the department, or any judgment or decree made by any court in connection with ss. 101.01 to 101.599, Stats. For each violation, failure or refusal, the employee, owner or other person must forfeit and pay into the state treasury a sum not less than \$10 nor more than \$100 for each violation.

Note: Section 101.02 (12), Stats., indicates that every day during which any person, persons, corporation or any officer, agent or employee thereof, fails to observe and comply with an order of the department will constitute a separate and distinct violation of such order.

SPS 316.015 Appeals. (1) APPEAL OF LOCAL ORDER. Any person affected by a local order which may be in conflict with a provision of this chapter may petition the department for a hearing on the grounds that the local order is unreasonable and in conflict with the provision of this chapter. All appeals shall be acted on and a decision in writing shall be issued by the department within 30 business days of receiving an appeal.

Note: Section 101.01 (f), Stats., defines "local order" as any ordinance, order, rule or determination of any common council, board of aldermen, board of trustees or the village board, of any village or city, or the board of health of any municipality, or an order or direction of any official of such municipality, upon any matter over which the department has jurisdiction.

(2) PETITION OF ADMINISTRATIVE RULE. Pursuant to s. 227.12, Stats., any municipality, corporation or any 5 or more persons having an interest in an administrative rule may petition the department requesting the adoption, amendment or repeal of the rule.

SPS 316.016 Electrical plan review. Upon request, the department may perform electrical plan review for dwellings, public buildings, places of employment and electrical services.

SPS 316.017 Technical assistance. The department shall provide technical assistance to the extent possible with the available resources to any person, upon written request, regarding interpretation and application of this chapter. The technical assistance may consist of telephone, written, in-office or on-site review of specific problems.

Subchapter H III — General Requirements

~~SPS 316.009~~ 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 (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 316.010~~ 316.021 Inspection and maintenance Maintenance. All electrical installations and equipment shall be cleaned and inspected at intervals as experience has shown to be necessary. Any equipment or electrical 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.~~

~~SPS 316.011 Electrical inspection of public buildings and places of employment.~~ Inspection of electrical construction relating to public buildings and places of employment shall comply with the requirements of subch. IV.

~~SPS 316.012~~ 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®*.

~~SPS 316.013~~ 316.023 Electric fences. The following are department rules in addition to the requirements of the *NEC®*:

(1) ELECTRIC FENCE CONTROLLERS. (a) Electric fence controllers shall be of a type listed by a nationally recognized testing laboratory.

(b) Electric fence controllers shall be installed and used in the exact manner and for the exact purpose indicated by the manufacturer's instructions, markings, listings or labels.

(2) GROUNDING. Electric fence controllers shall be grounded as specified in NEC 250, except that where stray voltages in dairy barns or milking parlors create physical problems to the animals, the use of a single made electrode shall be permitted.

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

Note: Under s. 101.18, Stats., the Department is responsible for establishing "...reasonable standards, rules or regulations for the erection, construction, repair and maintenance of electric fences as shall render them safe."

~~SPS 316.014 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®) 2011.~~

~~**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 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.~~

Subchapter ~~III~~ IV — Changes, Additions or Omissions to the NEC®

SPS ~~316.015~~ 316.080 **Changes, additions or omissions to NEC®.** Changes, additions or omissions to the *National Electrical Code® (NEC®)* are specified in this subchapter and are rules of the department and not requirements of the NEC®.

Note: The referenced NEC® article or section number will correspond with the SPS designation number and title and will precede the text of the rule. Example: SPS 316.100 [NEC 100].

SPS 316.090 **Introduction.** The requirements specified in NEC 90.1, NEC 90.2 and NEC 90.4 are not included as part of this chapter.

SPS 316.100 **Definitions. (1) ADDITIONS.** The following are department definitions in addition to the definitions in NEC 100:

~~(a) "Department" means the department of safety and professional services.~~

~~(b)(a) "Floors" means stories as specified in chs. SPS 361 to 366.~~

~~(c)(b) "Nonrated construction" means Types III, IV and V construction in accordance with chs. SPS 361 to 366 and is considered to be nonfire-rated for the purposes of this chapter.~~

~~(d)(c) "Private sewage system" has the meaning specified under s. 145.01 (12), Stats.~~

Note: Under s. 145.01 (12), Stats., "private sewage system" means a sewage treatment and disposal system serving a single structure with a septic tank and soil absorption field located on the same parcel as the structure. This term also means an alternative sewage system approved by the department including a substitute for the septic tank or soil absorption field, a holding tank, a system serving more than one structure or a system located on a different parcel than the structure. A private sewage system may be owned by the property owner or a special purpose district.

(2) SUBSTITUTIONS. The following department definitions ~~are~~ is a substitutions for the respective definitions in NEC 100:

~~(a) "Building" means a structure that stands alone or is separated from adjoining structures by fire walls having not less than a 3 hour fire resistance rating with all openings in the wall protected with 3 hour rated fire door assemblies.~~

Note: See chs. SPS 361 to 366 for fire resistance standards.

~~(b) "Special permission" means a petition for variance in accordance with s. SPS 316.005.~~

~~SPS 316.110 **Requirements for electrical installation.** Substitute the following wording for the requirements in NEC 110.3 (B): Listed or labeled equipment shall be installed or used, or both, in accordance with any instructions included in the listing or labeling, provided the instructions, listing or labeling do not conflict with this chapter.~~

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.

~~SPS 316.210 **Branch circuits. (1) IDENTIFICATION FOR BRANCH CIRCUITS.** This is a department informational note to be used under NEC 210.5 (C):~~

~~**Note:** For 277/480 volt systems, the recommended wire colors are brown, orange and yellow. For 120/208 volt systems, the recommended wire colors are black, red and blue.~~

~~**(2)(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-amp receptacles installed in the following locations shall have ground-fault circuit interrupter protection for personnel.~~

~~(d) Substitute the following wording for NEC 210.8 (B) (8): Garages, service bays, and similar areas where electrical diagnostic equipment, electrical hand tools, or portable lighting equipment are to be used.~~

~~(e) The requirements in NEC 210.8 (B) (9) and (10) are not included as part of this chapter.~~

~~(f) 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, or 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.~~

~~(g) The requirements in NEC 210.8 (D) are not included as part of this chapter.~~

~~**(3) BRANCH CIRCUITS REQUIRED.** This is a department rule in addition to the requirements of NEC 210.11: Where an air conditioner sleeve is provided in a building wall, a receptacle outlet shall be located within 4 feet of the sleeve. If a circuit is not run to the outlet, a raceway shall be provided. When the air conditioner is installed in the sleeve, it shall be supplied by an individual branch circuit. A receptacle outlet installed for an air conditioner may not be counted as one of the receptacles required by NEC 210.52 (A).~~

~~**(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.~~

~~(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.~~

~~(5) LIGHTING OUTLETS REQUIRED.— Substitute the following wording for NEC 210.70 (A) (1):— At least one wall switch-controlled lighting outlet shall be installed in every habitable room, kitchen and bathroom.~~

~~(6)(5) COUNTERTOP RECEPTACLES. The requirements in NEC 210.52 (A) (4) are not included as part of this chapter.~~

~~(4) PENINSULAR COUNTERTOP SPACES.— Substitute the following wording for NEC 210.52 (C) (3):— At least one receptacle outlet must be installed at each peninsular countertop long dimension space with a long dimension of 2 feet or greater, and a short dimension of one foot or more, measured from the connected peninsular wall. A wall countertop space receptacle can serve as the receptacle for a peninsular countertop space where the spaces are contiguous and the receptacle is within 6 feet of the outside edge of the peninsular countertop.~~

~~(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 existing buildings this chapter.~~

SPS 316.220 **Branch-circuit, feeder and service calculations.** ~~(1) GENERAL. This is a department exception to the requirements in NEC 220.10:— Circuit load calculations may use unit load values lower than those identified in NEC Table 220.12 for lighting loads calculated using the maximum electrical energy conservation values specified under ch. SPS 363 for public buildings and places of employment.~~

~~(2) EXCEPTION.— This is a department exception to the requirements in NEC 220.40:~~

Exception: Under the supervision of a Wisconsin professional engineer, architect or designer of electrical systems, the feeder or service size may be computed using diversity factors or historical data of a similar type of building, other than one- and 2-family dwelling units.

SPS 316.225 **Outside branch circuits and feeders.** ~~(1) CLEARANCES FROM BUILDINGS FOR CONDUCTORS NOT OVER 600 VOLTS. Substitute the following wording for NEC 225.19 (A) Exception No. 4:— The requirement for maintaining the vertical clearance 3 feet from the edge of the roof does not apply to the final conductor span to the building.~~

~~(2)(1) NUMBER OF SUPPLIES. The following are department rules in addition to the requirements in NEC 225.30:~~

(a) For the purpose of this section, multiple feeders that are supplied from the same distribution point, having a total rating of 300 amperes or more, and that supply not more than 6 disconnecting means grouped at the same location shall be considered as one supply.

(b) Multi-occupancy buildings or structures may have one set of branch circuit conductors installed from a dwelling unit to the second building or structure's respective occupied space.

~~(3)(2) LOCATION. This is a department rule in addition to the requirements of NEC 225.32: The building disconnect required by NEC 225.31 shall be located in accordance with s. SPS 316.230 (3).~~

~~Note: See ch. PSC 114 regarding clearances of conductors of over 600 volts and for prohibition of constructing dwellings under or near overhead lines.~~

~~(4)(3) CLEARANCES OVER ROADWAYS, WALKWAYS, RAIL, WATER AND OPEN LAND. Substitute the following wording for the note to NEC 225.60 (C):~~

~~Note: For clearances of conductors of over 600 volts, see ch. PSC 114.~~

~~(6)(4) CLEARANCES OVER BUILDINGS AND OTHER STRUCTURES. Substitute the following wording for the note to NEC 225.61 (B):~~

~~Note: See ch. PSC 114 regarding clearances of conductors of over 600 volts and for prohibition of constructing dwellings under or near overhead lines.~~

SPS 316.230 **Services.** ~~(1) NUMBER OF SERVICES. (a) These are~~ This is a department informational notes to be used under NEC 230.2 (intro.):

~~Note: See definition of building in s. SPS 316.100 (2) (a).~~

~~Note: It is recommended that the electric utility or cooperative supplying electric current be contacted prior to service equipment installations for any special requirements.~~

(b) Substitute the following wording for NEC 230.2 (B) (2): Two or more service drops or laterals for the same class of service if located more than 150 feet apart, measured in a straight line, and provided that all electrical wiring supplied by each service has no common raceway or connection with any other service.

~~(c) This is a department rule in addition to the requirements of NEC 230.2 (B):— For a building which is not more than 3 stories in height and which contains only 3 or more attached, vertically separated, side by side or back to back dwelling units, with each dwelling unit served by an individual exterior exit within 6 feet of the exit discharge grade, a separate service drop or lateral shall be permitted for each 2 attached units.~~

(2) NUMBER OF SERVICE-ENTRANCE CONDUCTOR SETS. The requirements specified in NEC 230.40 Exception No. 3 are not included as part of this chapter.

(3) SERVICE EQUIPMENT — DISCONNECTING MEANS. (a) *General.* This is a department rule in addition to the requirements of NEC 230.70: Disconnecting means shall be provided to disconnect the utility wiring from the premises wiring at any point where utility wiring terminates and premises wiring extends overhead or underground to more than one building or structure.

(b) *Location.* This is a department rule in addition to the requirements of NEC 230.70 (A): Raceways containing service conductors or cables, or service entrance cable not contained within a raceway, may not extend longer than 8 feet into a building to the service disconnect or the first service disconnect of a group of disconnects as permitted by NEC 230.71. The raceways or conductors shall be considered to have entered the building at the point where they pass through the outer surface of the building exterior, except as permitted by NEC 230.6.

(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.~~

~~(b) *Exception.* Service equipment having a rating of not less than 100 amperes, 3 wire or 4 wire, may be installed in an existing 2 family dwelling only where both of the following conditions are complied with:~~

- ~~1. The load computed in accordance with NEC 220 does not exceed 80 amperes.~~
- ~~2. Specific written approval is granted by the municipal inspection department having jurisdiction.~~

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

SPS 316.250 **Grounding and bonding.** **(1) SUPPLEMENTAL ELECTRODE REQUIRED.** The exception in NEC 250.53 (A) (2) is not included as part of this chapter.

(2) SUPPLEMENTAL ELECTRODE. This is a department rule in addition to the requirements in NEC 250.53 (A) (3): A single electrode consisting of a rod, pipe or plate shall be augmented by one additional electrode of any of the types in NEC 250.52 (A) (4) to (A) (8).

(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.

SPS 316.300 **Wiring methods.** **(1) ELECTRICAL REQUIREMENTS FOR PRIVATE SEWAGE SYSTEMS.** These department rules apply to private sewage systems and are in addition to the requirements of NEC 300:

(a) *Wiring methods.* All effluent pump circuit wiring shall comply with the approved wiring methods as specified in NEC 300 and all of the following requirements:

1. Effluent pumps shall be supplied by a separate branch circuit supplying no other loads.
2. Alarm wiring may not be connected to the pump circuit.
3. All aboveground cables and flexible cords shall be enclosed to protect against physical damage.
4. The neutral conductor may not be common to both alarm and pump circuits.
5. Where the wiring enclosure for the alarm and pump circuit is located outside the pump chamber, any openings into the pump chamber for circuit wiring shall be sealed or plugged to prevent the passage of gas or vapor into the wiring enclosure.

Note: This prohibits use of a multi-wire branch circuit to supply both the alarm and pump.

Note: See NEC 430.102 for location of disconnects.

(b) *Ground-fault circuit protection.* A single receptacle located at the pump chamber that has an alarm or pump connected to it does not require ground-fault circuit-interrupter protection.

~~**(2) PROTECTION AGAINST PHYSICAL DAMAGE.** The requirements specified in NEC 300.4 (D) are not included as part of this chapter.~~

(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.

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:~~

~~**(1)** Where more than two NM cables containing two or more current carrying conductors are installed, without maintaining spacing between the cables, through the same opening in wood framing that is to be fire or draft stopped using thermal insulation, caulk or sealing foam, the allowable ampacity of each conductor shall be adjusted in accordance with Table 310.15 (B) (3) (a) and the provisions of 310.15 (A) (2) shall not apply.~~

~~**(2)** Where more than two NM cables containing two or more current carrying conductors are installed in contact with thermal insulation without maintaining spacing between cables, the allowable ampacity of each conductor shall be adjusted in accordance with Table 310.15 (B) (3) (a).~~

SPS 316.312 **Cabinets, cutout boxes and meter socket enclosures.** **(1) CABLES.** Substitute the following wording for NEC 312.5 (C) Exception (intro.):

Exception: Cables with entirely nonmetallic sheaths may enter an enclosure through one or more nonflexible raceways of not less than 12 inches and not more than 10 feet in length, provided all of the following conditions are met:

(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 (c) number 3~~: A fitting is provided on each end of the raceway to protect the cable from abrasion.

SPS 316.314 **Outlet, device, pull and junction boxes; conduit bodies; fittings; and handhole enclosures.** (4) ~~CONDUCTORS ENTERING BOXES, CONDUIT BODIES, OR FITTINGS.~~ This is a department exception to the requirements of NEC 314.17 (B) and (C):

Exception: Nonmetallic sheathed cable is not required to be secured to the box or conduit body where it is installed in accordance with the wiring method specified in s. SPS 316.312.

~~(2) OUTLET BOXES. This is a department rule in addition to the requirements of NEC 314.27 (A): In a dwelling unit, a ceiling outlet box installed for use as a lighting fixture outlet in a habitable room or kitchen and located where a ceiling fan could be installed shall be a type listed for ceiling fan support.~~

SPS 316.334 **Nonmetallic-sheathed cable: Types NM, NMC and NMS.** (1) USES PERMITTED. Substitute the following wording for NEC 334.10 (3): Other structures permitted to be of Types III, IV, and V construction except as prohibited in NEC 334.12.

(2) TYPES NM, NMC, AND NMS. The requirements specified in NEC 334.12 (A) (2) are not included as part of this chapter.

History: CR 08-047: cr. Register February 2009 No. 638, eff. 3-1-09; CR 13-042: am. (2) (title) Register November 2013 No. 695, eff. 12-1-13.

SPS 316.358 **Uses permitted.** This is a department rule in addition to the requirements of NEC 358.12: Electrical metallic tubing may not be used in direct contact with earth, in concrete slabs or floors poured on earth, or in exterior concrete walls below grade.

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).

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

SPS 316.406 **Receptacles, cord connectors and attachment plugs (caps).** (1) The requirements in NEC 406.4 (D) (4) are not included as part of this chapter.

(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.

SPS 316.450 **Transformers and transformer vaults (including secondary ties).** (1) OVERCURRENT PROTECTION. This is a department rule in addition to the requirements in NEC Table 450.3 (A) Note 3: The qualified person shall be either an employee at that location or an employee contracted for this purpose who is readily available.

(2) LOCATION. Substitute the following wording for NEC 450.41: Vaults containing oil-insulated transformers shall be located where the vaults can be ventilated to the outside air without using flues or ducts, except where a petition for variance is approved.

~~SPS 316.511 **Commercial garages, repair and storage.** (1) The requirements specified in NEC 511.3 (C) (1) (a) are not included as part of this chapter.~~

~~(2) Substitute the following wording for NEC 511.3 (C) (2) (a): The ceiling area shall be unclassified where ventilation is provided from a point not more than 18 inches from the highest point in the ceiling. The ventilation shall conform to chapters 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.~~

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.

SPS 316.547 **Agricultural buildings.** This is a department exception to the requirements in NEC 547.5 (G):

Exception: Ground-fault circuit-interrupter protection is not required for a single receptacle providing power for an electric fence controller used for livestock containment where an accessible ground-fault circuit-interrupter protected receptacle is located within 900 mm (3 ft) of the non-GFCI protected receptacle.

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.

SPS 316.620 **Elevators, dumbwaiters, escalators, moving walks, platform lifts and stairway chairlifts.** ~~(4)~~ This is a department exception to the requirements in NEC 620:

Exception: Wherever NEC 620 requires disconnecting means with overcurrent protection to be located in an elevator machine room, control room, machinery space or control space and the elevator does not have such a room or space directly accessible from a building floor level, such devices shall be located instead in lockable cabinets or electrical rooms accessible only to qualified persons.

~~(2) This is a department informational note to be used under NEC 620.25:~~

~~Note: See NEC 620.53, 620.54 and 620.55 for additional requirements.~~

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.

~~SPS 316.680 **Swimming pools, fountains and similar installations.** (1) PERIMETER SURFACES. This is a department rule in addition to the requirements of NEC 680.26 (B) (2). The requirements specified in NEC 680.26 (B) (2) does not apply to a listed self-contained spa or hot tub constructed with nonmetallic walls.~~

~~(2) POOL WATER. This is a department rule in addition to the requirements of NEC 680.26 (C). The requirements specified in NEC 680.26 (C) does not apply to a listed self-contained spa or hot tub constructed with nonmetallic walls.~~

SPS 316.700 **Emergency systems.** (1) WIRING, EMERGENCY SYSTEM. This is a department rule in addition to the requirements of NEC 700.10 (B):

(a) Except as provided in par. (b), emergency circuit wiring shall be listed raceways, Type AC cable or Type MC cable.

(b) Emergency lighting fixtures may use flexible cord connections in compliance with NEC 410.62 (C) for electric discharge luminaries.

(2) GENERAL REQUIREMENTS. This is a department rule in addition to the requirements in NEC 700.12 (intro.): The enclosure of the alternate source of power located outdoors for emergency systems shall be located at least 10 feet horizontally from any combustible portion of a Type III, Type IV, or Type V building and at least 20 feet from an outdoor electrical transformer, electrical metering, service equipment or normal power distribution equipment. These dimensions may be reduced where a noncombustible barrier is installed that extends at least 3 feet beyond each side of the alternate power source and transformer. The height of the barrier shall be at least one foot above the top of the transformer, electrical metering, service equipment, or alternate power source, whichever is higher.

(3) GENERAL REQUIREMENTS, DUAL SUPPLIES. The requirements in NEC 700.12 (B) (3) are not included as part of this chapter.

Note: See chs. SPS 361 to 366 for further requirements.

SPS 316.701 **Legally required standby systems.** (1) ADDITION. This is a department rule in addition to the requirements in NEC 701.12 (intro.): The enclosure of the alternate source of power located outdoors for legally required standby systems shall be located at least 10 feet horizontally from any combustible portion of a Type III, Type IV, or Type V building and at least 20 feet from an outdoor electrical transformer, electrical metering, service equipment or normal power distribution equipment. These dimensions may be reduced where a noncombustible barrier is installed that extends at least 3 feet beyond each side of the alternate power source and transformer. The height of the barrier shall be at least one foot above the top of the transformer, electrical metering, service equipment, or alternate power source, whichever is higher.

(2) DELETION. The requirements specified in NEC 701.12 (B) (3) are not included as part of this chapter.

Note: See chs. SPS 361 to 366 for further requirements.

Subchapter ~~IV~~ V — Electrical Inspection

Note: Subchapter V is repealed on the first day of the 19th month beginning after the rules are published.

SPS 316.900 **Purpose.** Pursuant to s. 101.82, Stats., the purpose of this subchapter is to establish rules for the inspection of electrical construction of farms, public buildings and places of employment.

SPS 316.905 **Scope.** This subchapter specifies the electrical construction to be inspected, the inspection procedures to be followed and the procedures for connection of electric service.

SPS 316.910 **Application.** This subchapter applies to persons, independent inspection agencies, municipalities and state governmental agencies engaged in the inspection of electrical construction for the purposes of administering and enforcing this chapter on farms and in public buildings and places of employment, and to companies or utilities providing connection of electric service.

SPS 316.915 **Definitions.** In this subchapter: **(1)** "Certified inspector" means a certified commercial electrical inspector.

(2) "Commercial electrical inspector" means a person who conducts inspections of electrical construction of farms, public buildings and places of employment.

(3) "Department" means the department of safety and professional services.

(4) "Electrical construction" means the installation of electrical wiring.

(5) "Electrical contractor" means any person, firm or corporation engaged in the business of erecting, installing, altering, repairing, servicing or maintaining electrical wiring.

(6) "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 covered by the scope of this chapter.

(7) "Farm" means a place where farming is conducted.

(8) "Farming" has the meaning specified under 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.

(9) "Independent inspection agency" means any corporation, partnership or sole proprietor, other than a municipal corporation, that performs inspections of buildings.

(10) "Municipality" means a city, village, town or county in this state.

(11) "Person" includes all partnerships, associations, and bodies politic or corporate.

(12) "Place of employment" has the meaning specified under s. 101.01 (11), Stats.

Note: Under s. 101.01 (11), Stats.:

(11) "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), and also includes the transportation of farm products, supplies, or equipment directly to the farm by the operator of the 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 any of the following:

(a) An adult family home, as defined in s. 50.01 (1).

(b) Except for the purposes of s. 101.11, a previously constructed building used as a community-based residential facility, as defined in s. 50.01 (1g), which serves 20 or fewer residents who are not related to the operator or administrator.

(c) A home-based business, as defined by the department by rule.

(13) "Public building" has the meaning specified under s. 101.01 (12), Stats.

Note: Under s. 101.01 (12), Stats.:

(12) "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 any of the following

(a) A previously constructed building used as a community-based residential facility as defined in s. 50.01 (1g) which serves 20 or fewer residents who are not related to the operator or administrator.

(b) An adult family home, as defined in s. 50.01 (1).

(c) A home-based business, as defined by the department by rule.

SPS 316.920 **Authority.** **(1)** DEPARTMENTAL AUTHORITY. Pursuant to ss. 101.82 and 101.84, Stats., the department is granted the authority and jurisdiction over the inspection of electrical construction of farms, public buildings and places of employment.

(2) MUNICIPAL AUTHORITY. (a) *Jurisdiction conditions.* Pursuant to s. 101.86 (1), Stats., municipalities may exercise jurisdiction over inspection of electrical construction in public buildings and places of employment by passage of ordinances, providing all of the following conditions are complied with:

1. The municipality's ordinances meet the minimum requirements of this subchapter.
2. The municipality notifies the department at least 30 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 inspectors or independent inspection agencies to perform electrical inspection functions.
6. The municipality provides the department with the names of its certified inspectors or independent inspection agencies employed or contracted by the municipality.

7. The municipality provides the department with any information requested by the department relative to the electrical inspection of public buildings and places of employment.

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

(b) *Joint jurisdiction.* Municipalities may jointly exercise the jurisdiction granted in par. (a).

(c) *Municipal contracts.* A municipality may contract with a certified inspector, independent inspection agency or the department for those inspection services that the municipality does not perform under par. (a) or (b).

(d) *County.* 1. Ordinances enacted by a county under this subsection establishing electrical inspection functions shall apply to all municipalities within that county which have not assumed jurisdiction.

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

(e) *Relinquishing of jurisdiction.* The municipality shall notify the department, in writing, at least 30 days prior to the date upon which the municipality intends to relinquish jurisdiction responsibilities.

~~SPS 316.930 **Electrical plan review.** Upon request, the department may perform electrical plan review for dwellings, public buildings, places of employment and electrical services.~~

SPS 316.940 **Inspections. (1) PERSONS AUTHORIZED TO PERFORM INSPECTIONS.** (a) *General.* Inspections performed for a municipality, independent inspection agency or the department for the purpose of administering and enforcing this chapter shall be performed by a certified inspector.

(b) *Right of entry.* A certified inspector performing inspections under par. (a) may, during reasonable hours, enter any building or premises in the discharge of his or her official duties for the purpose of making inspections, re-inspections or testing of electrical construction.

Note: Section SPS 305.63 contains requirements pertaining to the certification of commercial electrical inspectors.

(2) MUNICIPAL INSPECTIONS. (a) *Electrical wiring requiring inspection.* Municipalities exercising jurisdiction under s. SPS 316.920 (2) shall provide for inspection of all electrical wiring in all of the following:

1. New construction, additions, alterations and changes of use of public buildings and places of employment requiring submittal of building plans under s. SPS 361.30 for the classes of occupancies specified under sub. (4) (a).

2. Such other installations as required by the municipality.

(b) *Inspection types.* Inspections required to be performed shall be of all of the following types for the purpose of determining if the electrical construction complies with this chapter:

1. An inspection before the construction is concealed.

2. Re-inspections, as necessary, to confirm compliance and satisfactory completion of all electrical construction.

3. A final inspection.

(c) *Permit required.* 1. Except as provided in subd. 2., electrical wiring as specified in par. (a) may not be installed until an application for a permit and the required fees have been submitted to the municipality exercising jurisdiction under s. SPS 316.920 (2).

2. Under emergency conditions, the necessary electrical construction may be commenced without submitting an application for a permit. The person performing the emergency electrical construction shall report the construction to the municipality no later than the next business day. The emergency electrical construction shall conform to this chapter.

(d) *Inspection.* 1. Upon completion of the electrical wiring required to be inspected under par. (a) or before any electrical wiring is to be hidden from view, the person, firm or corporation installing the electrical wiring shall notify the municipality that the installation is ready for inspection.

2. The certified inspector responsible for the inspection shall perform the requested inspection within 2 business days after receiving notification.

3. If upon inspection, it is found that the installation is fully in compliance with this chapter and the municipal ordinances, the certified inspector shall approve the installation and authorize concealment of the electrical wiring or connection of electric service. For connection of electric service, the certified inspector shall issue the certificate required in s. SPS 316.950 (1).

4. If the installation is incomplete or not in compliance with this chapter or the municipal ordinances, orders to correct shall be issued in accordance with the municipal ordinances.

(3) INDEPENDENT AGENCY INSPECTIONS. (a) *Municipalities.* Independent inspection agencies performing inspections for municipalities exercising jurisdiction under s. SPS 316.920 (2) shall provide inspections in accordance with the requirements of sub. (2) for municipalities.

(b) *Department.* Independent inspection agencies performing inspections for the department shall provide inspections as specified in the contract with the department.

(4) DEPARTMENT INSPECTION PROGRAM. (a) *Specific inspections.* The department may inspect all electrical wiring in new construction, additions, alterations and change of use of public buildings and places of employment requiring submittal of building plans under s. SPS 361.30 in all of the following occupancies that are not within the boundaries of municipalities exercising jurisdiction:

1. Nursing homes and health care facilities.

2. Hotels, motels, and other buildings that provide overnight accommodations.

3. Day care centers and schools.

4. Community-based residential facilities.

5. Restaurants having a capacity of 100 or more occupants.
6. All indoor theaters.

(b) *Random inspections.* The department may perform random inspections of electrical wiring in any new construction, additions, alterations, and change of use of public buildings and places of employment that are not within the boundaries of municipalities exercising jurisdiction.

(c) *Requested or complaint inspections.* The department may perform inspection of electrical construction in public buildings or places of employment in any municipality upon written request or complaint.

(d) *Farm inspections.* The department may inspect electrical construction on farms.

SPS 316.950 **Connection of electric service.** The company or utility furnishing electric current shall obtain proof that electrical wiring complies with this chapter before furnishing the service, as follows:

(1) CERTIFICATE REQUIRED. The electrical wiring required to be inspected under s. SPS 316.940 (2) (a) may not be connected for use until a certificate is filed with the company or utility furnishing electric current. The certified inspector authorized to perform the inspection shall complete and file the certificate with the company or utility.

(2) STATEMENT REQUIRED. Electrical wiring not requiring a certificate under sub. (1) may not be connected for use until a written statement is filed with the company or utility furnishing electric current indicating that the electrical wiring complies with this chapter. The electrical contractor or other person doing the wiring shall complete and file the written statement with the company or utility.

~~SPS 316.960 **Technical assistance.** The department shall provide technical assistance to the extent possible with the available resources to any person, upon written request, regarding interpretation and application of this chapter. The technical assistance may consist of telephone, written, in office or on site review of specific problems.~~