

1 H.108

2 Introduced by Representatives Shaw of Pittsford and Stevens of Waterbury

3 Referred to Committee on

4 Date:

5 Subject: Professions and occupations; electricians and electrical installations;
6 energizing installations

7 Statement of purpose of bill as introduced: This bill proposes to require that
8 any existing electrical circuit that is disconnected after an electrical emergency
9 may not be reconnected until inspected by a master or journeyman electrician.

10 An act relating to electrical installations

11 It is hereby enacted by the General Assembly of the State of Vermont:

12 Sec. 1. 26 V.S.A. § 894 is amended to read:

13 § 894. ENERGIZING INSTALLATIONS; REENERGIZING AFTER
14 EMERGENCY DISCONNECTION

15 (a) A new electrical installation in or on a complex structure or an electrical
16 installation used for the testing or construction of a complex structure shall not
17 be connected or caused to be connected; to a source of electrical energy unless
18 prior to ~~such~~ the connection; either a temporary or a permanent energizing
19 permit is issued for that installation by the ~~commissioner~~ Commissioner or an
20 electrical inspector.

1 ~~(b) An existing electrical installation in any structure, including a~~
2 ~~single-family, owner-occupied freestanding residence, disconnected as the~~
3 ~~result of an emergency that affects the internal electrical circuits shall not be~~
4 ~~reconnected to a source of electrical energy until the electrical installation has~~
5 ~~been inspected and determined to be safe by a licensed journeyman or licensed~~
6 ~~master electrician. This subsection does not include the use of a generator due~~
7 ~~to an external loss of power.~~

8 (c) This section shall not be construed to limit or interfere with a
9 contractor's right to receive payment for electrical work for which a certificate
10 of completion has been granted.

11 Sec. 2. 26 V.S.A. § 904(a) is amended to read:

12 (a) To be eligible for licensure as a type-S journeyman, an applicant shall:

13 (1) complete an accredited training and experience program recognized
14 by the ~~board~~ Board; or

15 (2) have had training and experience, within or ~~without~~ outside this state
16 State, acceptable to the ~~board~~ Board; and

17 (3) pass an examination to the satisfaction of the ~~board~~ Board in one or
18 more of the following fields:

19 (A) ~~Automatic~~ automatic gas or oil heating;

20 (B) ~~Outdoor~~ outdoor advertising;

21 (C) ~~Refrigeration~~ refrigeration or air conditioning;

1 ~~(D) Appliance appliance and motor repairs;~~

2 (E) ~~Well~~ well pumps;

3 (F) ~~Farm~~ farm equipment;

4 (G) ~~Any~~ any miscellaneous specified area of specialized competence.

5 Sec. 3. 26 V.S.A. § 910 is amended to read:

6 § 910. LICENSE NOT REQUIRED

7 A license shall not be required for the following types of work:

8 (1) Any electrical work, including construction, installation, operation,
9 maintenance, and repair of electrical installations in, on, or about equipment or
10 premises, which are owned or leased by the operator of any industrial or
11 manufacturing plant, if the work is done under the supervision of an electrical
12 engineer or master electrician in the employ of the operator;

13 (2) Installation in laboratories of exposed electrical wiring for
14 experimental purposes only;

15 (3) Any electrical work by ~~an~~ the owner ~~or his or her regular employees~~
16 in the ~~owner's~~ owner-occupied, freestanding single unit residence, ~~in~~ or duplex
17 as defined in subdivision (6) of this section and outbuildings accessory to ~~such~~
18 the freestanding, single unit residence, ~~or any structure on owner-occupied~~
19 ~~farms~~;

20 (4) Electrical installations performed as a part of a training project of a
21 vocational school or other educational institution. However, the installation

1 ~~shall be inspected if the building in which the installation is made, is to be used~~
2 as a “complex ~~structure~~”; structure.”

3 (5) Electrical work performed by an electrician’s helper under the direct
4 supervision of a person who holds an appropriate license issued under this
5 chapter;

6 (6) Any electrical work in a building used for ~~dwelling or residential~~
7 purposes which contains no more than two dwelling units, provided that at
8 least one unit is owner-occupied

9 (7) Installation of solar electric modules and racking on complex
10 structures to the point of connection to field-fabricated wiring and erection of
11 net metered wind turbines.

12 (8) Installation of solar electric systems, including modules, racking,
13 and inverters, and the balance of the system on freestanding, single-family and
14 two-family dwellings up to and including the point of connection with the
15 existing electrical system, that connection being one or more back-fed breakers
16 in an existing breaker panel.

17 Sec. 4. EFFECTIVE DATE

18 This act shall take effect on passage.

Sec. 1. 26 V.S.A. chapter 15 is amended to read:

CHAPTER 15. ELECTRICIANS AND ELECTRICAL INSTALLATIONS

Subchapter 1. General Provisions

§ 881. DEFINITIONS

As used in this chapter, unless the context clearly requires otherwise:

(1) “Board” means the ~~electricians’ licensing board~~ Electricians’ Licensing Board created under this chapter.

(2) “Commissioner” means the Commissioner of Public Safety.

(3) “Complex structure” shall have the same meaning as the term “public building” as defined in 20 V.S.A. § 2900(8).

(4) “Electrical inspector” means a ~~state~~ State electrical inspector employed pursuant to section 915 of this title.

(5) “Electrical installation” means wires, fixtures, or apparatus installed in a ~~complex~~ structure or at the construction site of ~~such~~ a structure for the transmission and use of commercially supplied or privately generated electrical energy.

(6) “Electrician’s helper” means a person assisting in the construction, installation, or repair of an electrical installation under the direct supervision of a master or journeyman electrician who is present at the work site.

(7) “Legislative body” means the board of selectmen of a town, the board of aldermen or city council of a city, or the board of trustees of an incorporated village.

(8) “Municipal inspector” means an electrical inspector authorized to conduct municipal inspections pursuant to section 898 of this title.

(9) “Registered apprentice” means an apprentice registered with the ~~apprenticeship division of the state department of labor~~ Apprenticeship Division for the State Department of Labor for electrical training.

(10) “Work notice” means the notice required to be filed under this chapter by an electrician prior to commencement of electrical work.

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Subchapter 2. Regulation of Electrical Installations by Licensing Board

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§ 893. *COMMENCEMENT OF WORK; FEES; WORK NOTICE;
INSPECTION OF WORK; CERTIFICATE OF COMPLETION*

(a) ~~Electrical work in a complex structure~~ A person shall not commence work on an electrical installation in a complex structure until he or she submits a work notice accompanied by the required fee is submitted to the department Department ~~and the work notice is validated by the department~~ Department validates the work notice. There shall be a base fee of \$40.00 for each work notice, except for electrical work done on an electrical installation in ~~one one-~~ and ~~two family~~ two-family residential dwellings. In addition to the base fee, the Commissioner shall charge the following fees shall be charged:

(1) *Services*

(A) *Temporary—\$30.00.*

(B) *Permanent—1 phase and 3 phase through 400 amp—\$35.00.*

(C) Permanent—401 to 800 amp—\$50.00.

(D) Permanent—801 amp and larger—\$100.00.

(2) Transformers

(A) 1 to 25 KVA—\$10.00 each.

(B) 26 to 75 KVA—\$15.00 each.

(C) 76 to 200 KVA—\$25.00 each.

(D) Over 200 KVA—\$35.00 each.

(3) Motors and Generators

(A) Up to 5 hp, KW, KVA—\$10.00 each.

(B) 5 to 25 hp, KW, KVA—\$10.00 each.

(C) 25 to 100 hp, KW, KVA—\$15.00 each.

(D) Over 100 hp, KW, KVA—\$25.00 each.

(4) Other electrical work

(A) Each panel and feeder after the main disconnect—\$35.00.

(B) Outlets for receptacles, switches, fixtures, electric baseboard (per 50 units or portion thereof)—\$20.00.

(C) Yard lights, signs—\$5.00 each.

(D) Fuel oil, kerosene, LP, natural gas, and gasoline pumps—\$15.00 each.

(E) Boilers, furnaces, and other stationary appliances—\$10.00 each.

(F) Elevators—\$75.00 each.

(G) Platform lifts—\$40.00 each.

(H) Fire alarm initiating, signaling, and associated devices (per 50 units or portions thereof)—\$30.00.

(I) Fire alarm main panel and annunciator panels—\$50.00 each.

(J) Fire pumps—\$50.00.

(5) Reinspection fee. For each reinspection for code violations, there will be a fee of \$125.00.

(b) ~~The commissioner~~ Commissioner may establish inspection priorities for electrical inspections. ~~Priorities shall be based on the relative risks to persons and property, the type and size of the complex structure, and the type and number of electrical installations to be installed. Electrical installations regulated by the board~~ Board shall be inspected by the ~~commissioner~~ Commissioner or an electrical inspector in accordance with the procedures and priorities established by the ~~commissioner~~ Commissioner.

(c) ~~A~~ A person shall not cover an electrical installation in any part of a complex structure shall not be covered unless it is inspected by an electrical inspector. The provisions of this subsection may be specifically waived by an electrical inspector or if an electrical inspector waives the inspection requirement in writing. Upon completion of a new electrical installation in a complex structure, the applicant shall request a final inspection by an electrical inspector in writing. Within five working days of receipt of the

application, the ~~commissioner~~ Commissioner, or inspector, shall conduct an inspection, establish a reasonable date for inspection, or issue a waiver of inspection.

(d) ~~A~~ The Commissioner shall issue a certificate of completion shall be issued if the ~~commissioner~~ Commissioner or electrical inspector determines after inspection that the electrical installation in a complex structure is in compliance with the standards and requirements adopted by the ~~board~~ Board.

(e) ~~No part of a complex structure, in which part a new electrical installation has been made, shall be sold or conveyed for use or occupancy~~ A person shall not sell, convey, occupy, or use any part of a complex structure in which an electrical installation has been installed without first securing a certificate of completion for the new electrical installation.

(f) ~~The ~~commissioner~~ Commissioner or an inspector designated by the ~~commissioner~~ Commissioner shall have authority to enter any premises in which an electrical installation subject to the rules of the ~~board~~ Board is being or has been installed, replaced, or repaired for the purpose of making ~~such~~ an inspection as is necessary to carry out his or her responsibilities under this subchapter. If the owner or occupant of the premises refuses to permit entry by the ~~commissioner~~ Commissioner, or an electrical inspector, any ~~superior court~~ Superior Court, on application of the ~~commissioner~~ Commissioner, shall have jurisdiction to issue an order enforcing such right of entry.~~

~~(g) The Board may use its authority to adopt rules under section 891 of this title to apply the requirements of this section to electrical installations in one- and two-family residential dwellings.~~

(g) The Board may use its authority to adopt rules under section 891 of this title to apply the requirements of this section to electrical installations in one- and two-family residential dwellings other than for work that does not require a license under subdivision 910(3) of this title.

§ 894. ENERGIZING INSTALLATIONS; REENERGIZING AFTER EMERGENCY DISCONNECTION

(a) A person shall not connect a new electrical installation in or on a complex structure or an electrical installation used for the testing or construction of a complex structure ~~shall not be connected or caused to be connected,~~ to a source of electrical energy unless the Commissioner or an electrical inspector issues a temporary or permanent energizing permit prior to such the connection, ~~either a temporary or a permanent energizing permit is issued for that installation by the commissioner or an electrical inspector.~~

(b)(1) A person shall not connect an existing electrical installation that was disconnected as the result of an emergency to a source of electrical energy until a licensed journeyman electrician or licensed master electrician inspects the electrical installation and determines the installation to be safe.

(2) This subsection does not apply to the use of a generator due to an external loss of power.

(c) This section shall not be construed to limit or interfere with a contractor's right to receive payment for electrical work for which a certificate of completion has been granted.

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§ 899. PRIVATE INSPECTIONS

(a) Upon a determination that the resources of the ~~state~~ State and the municipality are insufficient to provide the approval or inspection services required by this chapter, the ~~commissioner~~ Commissioner may assign responsibility for inspecting electrical installations on its own premises to a ~~private corporation, partnership, or sole proprietorship~~ person that has an ongoing need for services. Applications to conduct private inspections under this section shall be in the manner prescribed by the ~~commissioner~~ Commissioner.

(b) The ~~commissioner~~ Commissioner may grant an application under this section if he or she determines that the applicant has the ability to carry out inspections. The ~~commissioner~~ Commissioner shall consider at least the following factors:

(1) the size of the facility;

(2) *self-insurance or other indication of incentive and motivation for safety;*

(3) *whether the applicant's training program for inspectors and inspection procedures are at least equivalent to the ~~state's~~ State's program and procedures.*

(c) *A person authorized to perform private inspections under this section shall:*

(1) *participate in ~~state-sponsored~~ State-sponsored training programs;*

(2) *file monthly reports with the ~~commissioner~~ Commissioner containing the number and type of inspections, electrical installations, violations for that month, and the license numbers of the electrical contractors performing work;*

(3) *permit electrical inspectors to perform random inspections of the applicant's facility;*

(4) *pay the ~~department~~ Department an annual flat fee. The amount of the fee shall be negotiated by the ~~department~~ Department and the applicant and shall take into consideration the cost to the applicant of conducting private inspections. The fee shall not exceed the fee established under section 893 of this title.*

(d) *The ~~commissioner~~ Commissioner may revoke an approval to conduct private inspections whenever the ~~commissioner~~ Commissioner determines that*

the training program is insufficient or that the business has failed to comply with the provisions of subdivisions (c)(1)–(3) of this section.

Subchapter 3. Licensing Electricians

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§ 904. TYPE-S JOURNEYMAN ELECTRICIAN

(a) To be eligible for licensure as a type-S journeyman, an applicant shall:

(1) complete an accredited training and experience program recognized by the ~~board~~ Board; or

(2) have had training and experience, within or ~~without~~ outside this state State, acceptable to the ~~board~~ Board; and

(3) pass an examination to the satisfaction of the ~~board~~ Board in one or more of the following fields:

(A) ~~Automatic~~ automatic gas or oil heating;

(B) ~~Outdoor~~ outdoor advertising;

(C) ~~Refrigeration~~ refrigeration or air conditioning;

(D) ~~Appliance~~ appliance and motor repairs;

(E) ~~Well~~ well pumps;

(F) ~~Farm~~ farm equipment;

(G) solar installations;

(H) Any miscellaneous specified an area of specialized competence specified by the Commissioner.

(b) Upon successful completion of the examination and payment of the required fee for each field in which a license is to be issued, the applicant shall receive a license in the form of a wallet-size card which shall be carried at all times while performing his or her trade and shall be displayed upon request. Upon request of the licensee and upon payment of the required fee, the ~~board~~ Board shall issue a license certificate suitable for framing.

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§ 906. QUALIFIED OUT-OF-STATE LICENSEES; EXAMINATIONS NOT REQUIRED

~~Licenses shall be issued without examination on payment of the required fee.~~ The Commissioner shall issue a master's or journeyman's, or type-S journeyman's license, as the case may be, shall be issued without examination on payment of the required fee to a person to whom a master electrician's license or a journeyman electrician's, or substantially equivalent type-S journeyman's license has been previously issued by another state, whose provided that:

(1) the issuing State has adopted standards that are equivalent to those of this ~~state~~, State; and

(2) if under the laws or regulations of the state issuing the license a similar privilege is granted to electricians licensed under the laws of this ~~state~~ State.

§ 907. RECOGNITION OF EXPERIENCE IN OR OUT OF STATE

The ~~board~~ Board, in determining the qualifications of an applicant for a license, may in its discretion give recognition;

(1) in the case of an application for a master's license, to the applicant's experience as a licensed journeyman in another state;

(2) in the case of an application for a journeyman's license, to an apprenticeship served in another state;

(3) in the case of an application for a type-S journeyman's license, to an apprenticeship or to work experience in the relevant field in this State or in another state; or

(4) ~~may otherwise give recognition~~ to experience or prior qualifications.

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§ 910. LICENSE NOT REQUIRED

A license shall not be required for the following types of work:

(1) Any electrical work, including construction, installation, operation, maintenance, and repair of electrical installations in, on or about equipment or premises, which are owned or leased by the operator of any industrial or manufacturing plant, if the work is done under the supervision of an electrical engineer or master electrician in the employ of the operator;

(2) Installation in laboratories of exposed electrical wiring for experimental purposes only;

(3) Any electrical work by an owner ~~or his or her regular employees~~ in the owner's freestanding ~~single-unit~~ single-unit or two-unit residence, in outbuildings accessory to ~~such freestanding single-unit~~ his or her residence, or any structure on an owner-occupied ~~farms;~~ farm.

(4) Electrical installations performed as a part of a training project of a vocational school or other educational institution. However, the installation shall be inspected if the building in which the installation is made, is to be used as a "complex structure"; or occupied following the training.

(5) Electrical work performed by an electrician's helper under the direct supervision of a person who holds an appropriate license issued under this chapter;

(6) ~~Any electrical work in a building used for dwelling or residential purposes which contains no more than two dwelling units;~~ [Repealed.]

(7) Installation of solar electric modules and racking ~~on complex structures~~ to the point of connection to field-fabricated wiring and erection of net metered wind turbines.

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*Sec. 2. TYPE-S JOURNEYMAN'S LICENSE; STAKEHOLDER
ENGAGEMENT PROCESS*

(a) The Department of Public Safety shall conduct a stakeholder engagement process to solicit feedback and participation by interested persons

in developing the type-S journeyman's license for renewable energy installations pursuant to 26 V.S.A. § 904.

(b) The Department shall seek input from stakeholders on potential testing and certification standards, areas of specialization, credit for prior work experience within or outside Vermont, recognition of other states' or national accreditation or licensure standards, and other relevant issues.

(c) On or before January 15, 2016, the Department shall report on the results of the stakeholder engagement process to the House Committee on General, Housing and Military Affairs and to the Senate Committee on Economic Development, Housing and General Affairs.

Sec. 3. ELECTRICIANS' LICENSING BOARD; REPORT

**AUTHORITY TO PERFORM ELECTRICAL WORK WITHOUT
A LICENSE**

On or before January 15, 2016, the Electricians' Licensing Board shall study and consider the appropriate nature, scope, and specific types of electrical work that a person may be allowed to perform without an electrician's license and submit its findings and recommendations to the House Committee on General, Housing and Military Affairs and to the Senate Committee on Economic Development, Housing and General Affairs.

Sec. 4. EFFECTIVE DATES

This act shall take effect on July 1, 2015, except that the amendments to 26 V.S.A. § 910 in Sec. 1 shall take effect on July 1, 2017.