

**First Regular Session
Seventy-fifth General Assembly
STATE OF COLORADO**

REENGROSSED

*This Version Includes All Amendments
Adopted in the House of Introduction*

LLS NO. 25-0383.01 Josh Schultz x5486

SENATE BILL 25-165

SENATE SPONSORSHIP

Pelton B. and Daugherty, Carson

HOUSE SPONSORSHIP

Lindstedt and Woog,

Senate Committees

Business, Labor, & Technology
Appropriations

House Committees

A BILL FOR AN ACT

101 **CONCERNING ELECTRICAL WORK REGULATED IN THE STATE.**

Bill Summary

(Note: This summary applies to this bill as introduced and does not reflect any amendments that may be subsequently adopted. If this bill passes third reading in the house of introduction, a bill summary that applies to the reengrossed version of this bill will be available at <http://leg.colorado.gov>.)

Section 1 of the bill amends a definition and adds new definitions under the electricians' practice act.

Current law requires an applicant for a journeyman electrician's license or a residential wireman's license to provide evidence of having certain minimum years of apprenticeship experience, accredited training, or practical experience. For the purpose of these requirements, **section 2** allows an applicant for a journeyman electrician's license to have a minimum of 8,000 hours, as an alternative to 4 years, of certain

Shading denotes HOUSE amendment. Double underlining denotes SENATE amendment.
Capital letters or bold & italic numbers indicate new material to be added to existing law.
Dashes through the words or numbers indicate deletions from existing law.

SENATE
3rd Reading Unamended
April 30, 2025

SENATE
Amended 2nd Reading
April 29, 2025

apprenticeship or practical experience and an applicant for a residential wireman's license to have a minimum of 4,000 hours, as an alternative to 2 years, of certain practical experience.

Current law allows an applicant for a journeyman electrician's license or a residential wireman's license to substitute for required practical experience evidence of academic training or practical experience in the electrical field. **Section 2** also allows an applicant to also substitute evidence of training in photovoltaic systems installation. However, **section 2** also states that the state electrical board (board) may, but is no longer required to, provide work experience credit for academic training, military training, photovoltaic systems installation training, or substantially similar training.

Current law requires that, for all applicants seeking work experience credit toward licensure, the board give credit for electrical work that is not required to be performed by or under the supervision of a licensed electrician if the applicant can show that the experience or supervision is adequate. **Section 3** allows the board to give the credit, but it is not required to do so.

Section 4 requires that, for an apprentice who holds a residential wireman's license, an electrical contractor, an apprenticeship program, or a state apprenticeship agency that employs the apprentice must report qualifying years or hours of work experience only for commercial, industrial, or substantially similar work. **Section 4** also allows an individual who possesses an active residential wireman's or master electrician's license to not take the journeyman electrician license examination.

Section 5 requires the department of regulatory agencies to:

- Uphold the rules and regulations of the current edition of the national electrical code, including applying the code to certain equipment;
- Cooperate with utilities to maintain safe clearances and safe working distances for the utilities based on the current edition of the national electrical code; and
- Allow each utility to install its proper metering equipment with the assistance of qualified electrical personnel.

Current law requires that the contract for any public works project that does not receive federal money in an amount of \$1,000,000 or more require the general contractor or other entity to submit documentation to the agency that certifies that all firms identified:

- Participate in an apprenticeship program registered with the United States department of labor's office of apprenticeship or a state apprenticeship agency recognized by the United States department of labor (registered apprenticeship program); and
- Have a proven record of graduating apprentices.

Current law allows for photovoltaic installations with a direct current design capacity of less than 300 kilowatts, the performance of all photovoltaic electrical work, the installation of photovoltaic modules, and the installation of photovoltaic module mounting equipment (applicable work) to be subject to on-site supervision by a certified photovoltaic energy practitioner designated by the NABCEP. **Section 6** requires that the photovoltaic energy practitioner is also working for a contractor that is not a registered electrical contractor; is registered with the department of regulatory agencies as a photovoltaic installer no later than December 31, 2025; is a business in good standing with the state; and employs a NABCEP PV installation professional.

Section 6 also removes language:

- Stating that neither the public utilities commission nor a utility is responsible for monitoring or enforcing compliance with statutory requirements concerning solar photovoltaic installations (installations); and
- Requiring a qualifying retail utility to obtain and retain all documentation submitted in connection with an installation.

Section 6 also defines "photovoltaic electrical work" as electrical work performed on a photovoltaic system that is covered electrical work in accordance with the national electrical code.

Section 7 addresses photovoltaic electrical work for installations of at least 300 kilowatts, requiring that the work must:

- Comply with electrical permitting requirements and be performed by an electrical contractor;
- Include a contemporaneous review of the work; and
- Be subject to compliance checks by state electrical inspectors or individuals appointed by the director of the division of professions and occupations in the department of regulatory agencies.

1 *Be it enacted by the General Assembly of the State of Colorado:*

2 **SECTION 1.** In Colorado Revised Statutes, 12-115-103, **amend**
3 **(2.5) and (3); and add (7.5), (7.7), (9.3), and (9.5) as follows:**

4 **12-115-103. Definitions.** As used in this article 115, unless the
5 **context otherwise requires:**

6 **(2.5) "Direct supervision" means that the supervising licensed**
7 **master electrician, journeyman electrician, or residential wireman, OR**
8 **PHOTOVOLTAIC INSTALLER is physically present at the same physical**

1 address where the apprentice is working.

2 (3) "Electric light, heat, and power" means the standard types of
3 electricity that are supplied by an electric utility, regardless of whether the
4 source is an electric utility or the inverter output circuit of a photovoltaic
5 system, direct-current lighting system, or a similar circuit from another
6 type of renewable energy system or electric vehicle charging
7 infrastructure, and used and consumed in a real estate improvement or
8 real estate fixture REGULATED IN ACCORDANCE WITH THE NATIONAL
9 ELECTRICAL CODE, EXCLUDING CHAPTER 8, "COMMUNICATIONS SYSTEMS".

10 (7.5) "NABCEP" MEANS THE NORTH AMERICAN BOARD OF
11 CERTIFIED ENERGY PRACTITIONERS.

12 (7.7) "NABCEP PV INSTALLATION PROFESSIONAL" MEANS AN
13 INDIVIDUAL WHO IS CERTIFIED BY THE NABCEP TO INSTALL
14 PHOTOVOLTAIC SYSTEMS.

15 (9.3) "PHOTOVOLTAIC INSTALLER" HAS THE MEANING SET FORTH
16 IN SECTION 40-2-128 (2)(a.5).

17 (9.5) "PV INSTALLATION TRAINING" MEANS TRAINING CONCERNING
18 PHOTOVOLTAIC SYSTEMS INSTALLATION PRACTICES DESCRIBED IN THE "PV
19 INSTALLATION PROFESSIONAL JOB TASK ANALYSIS" DOCUMENT
20 PUBLISHED BY THE NABCEP.

21 **SECTION 2.** In Colorado Revised Statutes, 12-115-110, **amend**
22 **(2)(a), (2)(b) introductory portion, (2)(b)(II), (3)(a), (3)(b) introductory**
23 **portion, and (3)(b)(II); and add (6) and (7) as follows:**

24 **12-115-110. License requirements - rules - continuing**
25 **education - photovoltaic installer registration - repeal.**

26 **(2) Journeyman electrician. (a) An applicant for a journeyman**
27 **electrician's license shall furnish written evidence that the applicant has**

1 had the following:

2 (I) EIGHT THOUSAND HOURS OVER A PERIOD OF at least four years'
3 apprenticeship in the electrical trade or EIGHT THOUSAND HOURS OVER A
4 PERIOD OF AT LEAST four years' practical experience in wiring for,
5 installing, and repairing electrical apparatus and equipment for electric
6 light, heat, and power;

7 (II) TWO THOUSAND HOURS OVER A PERIOD OF at least two of the
8 applicant's years' YEARS OF THE APPLICANT'S experience required by
9 subsection (2)(a)(I) of this section has been in commercial, industrial, or
10 substantially similar work; and

11 (III) Effective January 1, 2011, During the last four EIGHT years
12 of THE APPLICANT'S training, apprenticeship, or practical experience in
13 wiring for, installing, and repairing electrical apparatus and equipment for
14 electric light, heat, and power, COMPLETION OF at least two hundred
15 eighty-eight hours of training in safety, the national electrical code and its
16 applications, and any other training required by the board that is provided
17 by an accredited college or university, an established industry training
18 program, or any other provider whose training is conducted in compliance
19 with rules promulgated ADOPTED by the board, in collaboration with
20 established industry training programs and industry representatives. THE
21 BOARD MAY GRANT AN APPLICANT CREDIT TOWARD THE TRAINING
22 REQUIREMENT IN THIS SUBSECTION (2)(a)(III) FOR TRAINING THAT
23 OCCURRED BEFORE THE LAST EIGHT YEARS OF THE APPLICANT'S TRAINING,
24 APPRENTICESHIP, OR PRACTICAL EXPERIENCE IF THE APPLICANT PROVIDES
25 PROOF OF COMPLETION OF NO LESS THAN FOUR HOURS OF ADDITIONAL
26 TRAINING ON THE CURRENT OR IMMEDIATELY PREVIOUS EDITION OF THE
27 NATIONAL ELECTRICAL CODE OR THE STANDARDS ADOPTED BY THE BOARD

1 PURSUANT SUBSECTION 12-115-107 (2)(a).

2 (b) An applicant shall be permitted to MAY substitute for required
3 practical experience evidence of academic training or practical experience
4 in the electrical field, which shall be IS credited as follows:

5 (II) If the applicant has academic training, including military
6 training OR PV INSTALLATION TRAINING, that does not qualify under
7 subsection (2)(b)(I) of this section, the board shall MAY provide work
8 experience credit for the training or for substantially similar training
9 established by rule.

10 (3) Residential wireman. (a) An applicant for a residential
11 wireman's license shall furnish written evidence that the applicant has at
12 least two years of accredited training or FOUR THOUSAND HOURS OVER A
13 PERIOD OF AT LEAST two years of practical experience in wiring one-,
14 two-, three-, and four-family dwellings.

15 (b) An applicant shall be permitted to MAY substitute for required
16 practical experience evidence of academic training in the electrical field,
17 which shall be IS credited as follows:

18 (II) If the applicant has academic training, including military
19 training OR PV INSTALLATION TRAINING, that is not sufficient to qualify
20 under subsection (3)(b)(I) of this section, the board shall MAY provide
21 work experience credit for the training according to a uniform ratio
22 established by rule.

23 (6) (a) FOR THE PURPOSES OF SUBSECTIONS (2)(a)(I) AND (3)(a) OF
24 THIS SECTION, IN ADDITION TO OTHER MEANS OF EARNING PRACTICAL
25 EXPERIENCE, AN APPLICANT EARNS PRACTICAL EXPERIENCE BY WORKING:

26 (I) TWO THOUSAND HOURS AS A NABCEP PV INSTALLATION
27 PROFESSIONAL WORKING FOR OR WORKING AS A PHOTOVOLTAIC

1 INSTALLER;

2 (II) UP TO TWO THOUSAND HOURS OF PRACTICAL EXPERIENCE
3 WORKING UNDER THE SUPERVISION OF A NABCEP PV INSTALLATION
4 PROFESSIONAL WORKING FOR OR WORKING AS A PHOTOVOLTAIC
5 INSTALLER, SO LONG AS THE SUPERVISING NABCEP PV INSTALLATION
6 PROFESSIONAL PROVIDES PROOF OF THE APPLICANT'S EMPLOYMENT AND
7 AN AFFIDAVIT ATTESTING THAT THE APPLICANT EARNED THE HOURS
8 WORKING UNDER THE SUPERVISION OF A NABCEP PV INSTALLATION
9 PROFESSIONAL; OR

10 (III) UP TO FOUR THOUSAND HOURS AS A NABCEP PV
11 INSTALLATION PROFESSIONAL WORKING FOR OR WORKING AS A
12 PHOTOVOLTAIC INSTALLER IF THE APPLICANT SUBMITS ADDITIONAL
13 DOCUMENTATION TO THE BOARD, INCLUDING PAYROLL RECORDS, WORK
14 ORDERS, PROJECT DESCRIPTIONS, OR OTHER RELEVANT MATERIALS THAT
15 DOCUMENT SIGNIFICANT SOLAR INDUSTRY WORK THAT QUALIFIES AS
16 ELECTRICAL HOURS. THE BOARD SHALL REVIEW THE DOCUMENTATION
17 AND DETERMINE HOW MANY HOURS OF PRACTICAL EXPERIENCE THE
18 APPLICANT EARN BEYOND THE TWO THOUSAND HOURS PERMITTED BY
19 SUBSECTION (6)(a)(I) OF THIS SECTION.

20 (b) FOR EVERY TWO HOURS THAT AN APPLICANT WORKS AS
21 DESCRIBED IN SUBSECTION (6)(a)(II) OR (6)(a)(III) OF THIS SECTION, THE
22 APPLICANT EARN ONE HOUR FOR THE PURPOSES OF SUBSECTION (2)(a)(I)
23 OR (3)(a) OF THIS SECTION.

24 (7) (a) A CONTRACTOR THAT IS OPERATING AS OF SEPTEMBER 1,
25 2025, AND THAT PERFORMS WORK AS A PHOTOVOLTAIC INSTALLER
26 PURSUANT TO SECTION 40-2-128 WITH AT LEAST ONE NABCEP CERTIFIED
27 EMPLOYEE SHALL REGISTER AS A PHOTOVOLTAIC INSTALLER WITH THE

1 BOARD ON OR BEFORE DECEMBER 31, 2026; EXCEPT THAT A CONTRACTOR
2 MAY REGISTER WITH THE BOARD DURING A SIXTY-DAY GRACE PERIOD IN
3 ACCORDANCE WITH SECTION 12-20-202 (1)(e).

4 (b) A CONTRACTOR REGISTERING AS A PHOTOVOLTAIC INSTALLER
5 PURSUANT TO THIS SUBSECTION (7) SHALL DESIGNATE AN AGENT OR
6 AGENTS FOR THE PURPOSE OF REGISTRATION WITH THE BOARD.

7 (c) IF NONE OF THE AGENTS DESIGNATED PURSUANT TO
8 SUBSECTION (7)(b) OF THIS SECTION ARE AFFILIATED WITH THE
9 CONTRACTOR:

10 (I) THE CONTRACTOR'S REGISTRATION AS A PHOTOVOLTAIC
11 INSTALLER WITH THE BOARD IS INVALID; AND

12 (II) THE CONTRACTOR'S REGISTRATION IS INELIGIBLE FOR
13 REINSTATEMENT.

14 **SECTION 3.** In Colorado Revised Statutes, **amend 12-115-111**
15 as follows:

16 **12-115-111. Credit for experience not subject to supervision**
17 **of a licensed electrician.** For all applicants seeking work experience
18 credit toward licensure, the board shall MAY give credit for electrical
19 work that is not required to be performed by or under the supervision of
20 a licensed electrician if the applicant can show that the particular
21 experience received or the supervision under which the work has been
22 performed is adequate.

23 **SECTION 4.** In Colorado Revised Statutes, 40-2-128, **amend**
24 (1)(a)(I)(A) and (2)(a)(I); and **add (2)(a.5)** as follows:

25 **40-2-128. Solar photovoltaic installations - supervision -**
26 **qualifications of electrical contractors - definitions.** (1) For all
27 photovoltaic installations allowed under section 40-2-124 with a direct

1 current design capacity of less than three hundred kilowatts:

2 (a)(I)(A) The performance of all photovoltaic electrical work, the
3 installation of photovoltaic modules, and the installation of photovoltaic
4 module mounting equipment is subject to on-site supervision by a
5 certified photovoltaic energy practitioner, as designated by the North
6 American Board of Certified Energy Practitioners (NABCEP) AND THAT
7 IS WORKING FOR A PHOTOVOLTAIC INSTALLER, or a licensed master
8 electrician, licensed journeyman electrician, or licensed residential
9 wireman, as THOSE TERMS ARE defined in section 12-115-103.

10 (2) As used in this section, unless the context otherwise requires:

11 (a)(I) "Photovoltaic electrical work" means wiring, grounding, or
12 repairing electrical apparatus and equipment in a photovoltaic distributed
13 generation system MEANS ELECTRICAL WORK PERFORMED ON A
14 PHOTOVOLTAIC SYSTEM THAT IS COVERED ELECTRICAL WORK IN
15 ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE, INCLUDING
16 ARTICLES 90.2 (1), 90.2 (3), 100, AND 690 OF THE NATIONAL ELECTRICAL
17 CODE.

18 (a.5) "PHOTOVOLTAIC INSTALLER" MEANS A CONTRACTOR THAT:

19 (I) IS NOT A REGISTERED ELECTRICAL CONTRACTOR, AS DEFINED
20 IN SECTION 12-115-103 (4);

21 (II) IS REGISTERED WITH THE STATE ELECTRICAL BOARD AS A
22 PHOTOVOLTAIC INSTALLER PURSUANT TO SECTION 12-115-110 (7) NO
23 LATER THAN DECEMBER 31, 2026;

24 (III) IS A BUSINESS IN GOOD STANDING WITH THE STATE AND
25 REGISTERED WITH THE SECRETARY OF STATE;

26 (IV) IS PERFORMING PHOTOVOLTAIC ELECTRICAL WORK AS OF
27 SEPTEMBER 1, 2025; AND

1 (V) EMPLOYS A NABCEP PV INSTALLATION PROFESSIONAL, AS
2 DEFINED IN SECTION 12-115-103 (7.7).

3 **SECTION 5.** In Colorado Revised Statutes, 12-115-107, **amend**
4 (2)(f); and **add** (2)(f.5) as follows:

5 **12-115-107. Board powers and duties - rules - definitions.**
6 (2) In addition to all other powers and duties conferred or imposed upon
7 the board by this article 115, the board is authorized to:

8 (f) (I) Regulate a licensed master electrician, journeyman
9 electrician, or residential wireman, OR PHOTOVOLTAIC INSTALLER WHO,
10 acting within his or her THEIR scope of competence, supervises a solar
11 photovoltaic installation pursuant to section 40-2-128.

12 (II) ~~On and after January 1, 2020,~~ All photovoltaic electrical work
13 for installations of at least three hundred kilowatts, including the
14 interconnection of the modules, grounding of the modules, any balance
15 of system wiring, and the customer-side point of connection to the utility
16 grid, must:

17 (A) Be performed by a licensed master electrician, A licensed
18 journeyman electrician, A licensed residential wireman, or properly
19 supervised electrical apprentices; and **must**

20 (B) Comply with all applicable requirements of this article 115,
21 including sections 12-115-109 and 12-115-115, and all applicable rules
22 of the board.

23 (III) ONLY AN ELECTRICAL CONTRACTOR OR A PHOTOVOLTAIC
24 INSTALLER MAY PERFORM OR OFFER TO PERFORM PHOTOVOLTAIC
25 ELECTRICAL WORK FOR INSTALLATIONS OF LESS THAN THREE HUNDRED
26 KILOWATTS.

27 (f.5) REGULATE PHOTOVOLTAIC ELECTRICAL WORK FOR

1 INSTALLATIONS OF LESS THAN THREE HUNDRED KILOWATTS PERFORMED
2 IN ACCORDANCE WITH SECTION 40-2-128;

3 **SECTION 6.** In Colorado Revised Statutes, 12-115-117, amend
4 (1)(l); and add (1)(m) as follows:

5 **12-115-117. Fees.** (1) As established pursuant to section
6 12-20-105, fees shall be charged by the board for the following:

7 (l) Apprentice registration; AND

8 (m) PHOTOVOLTAIC INSTALLER REGISTRATION.

9 **SECTION 7. Act subject to petition - effective date.** This act
10 takes effect at 12:01 a.m. on the day following the expiration of the
11 ninety-day period after final adjournment of the general assembly; except
12 that, if a referendum petition is filed pursuant to section 1 (3) of article V
13 of the state constitution against this act or an item, section, or part of this
14 act within such period, then the act, item, section, or part will not take
15 effect unless approved by the people at the general election to be held in
16 November 2026 and, in such case, will take effect on the date of the
17 official declaration of the vote thereon by the governor.