

Second Regular Session  
Seventy-fourth General Assembly  
STATE OF COLORADO

INTRODUCED

LLS NO. 24-0927.01 Richard Sweetman x4333

HOUSE BILL 24-1263

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HOUSE SPONSORSHIP

Wilson,

SENATE SPONSORSHIP

Pelton B.,

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House Committees  
Business Affairs & Labor

Senate Committees

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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.

In current law, an applicant for a journeyman electrician's license or a residential wireman's license must provide evidence of having certain minimum years of apprenticeship experience, accredited training, or practical experience. For the purpose of these requirements, **section 3** allows an applicant to have a minimum of 8,000 hours, rather than 4 years, of apprenticeship experience and to have a minimum of 4,000

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.*

hours, rather than 2 years, of practical experience. Specifically, an applicant for a journeyman electrician's license must furnish written evidence that:

- The applicant has at least 4 years or 8,000 hours of apprenticeship in the electrical trade or 4 years or 8,000 hours of practical experience in wiring for, installing, and repairing electrical apparatus and equipment for electric light, heat, and power; and
- At least 2 years or 4,000 hours of the applicant's experience is in commercial, industrial, or substantially similar work.

An applicant for a residential wireman's license must furnish written evidence that the applicant has at least 2 years of accredited training or 2 years or 4,000 hours of practical experience in wiring one-, two-, three-, and four-family dwellings.

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** 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, including military training.

**Section 2** also allows an applicant for a journeyman electrician's license or a residential wireman's license to claim up to 4,000 hours of practical experience by working:

- As an individual who is certified by the North American Board of Certified Energy Practitioners (NABCEP) to install photovoltaic systems (NABCEP PV installation professional); or
- As an apprentice to an NABCEP PV installation professional, so long as the supervising NABCEP PV installation professional provides proof of employment and an affidavit attesting that the applicant earned the hours as an apprentice.

For every 2 hours that an applicant works as described, the applicant may claim one hour of practical experience until July 1, 2029.

Under current law, for all applicants seeking work experience credit toward licensure, the board gives 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 particular experience received or the supervision under which the work has been performed is adequate. **Section 3** states the board may give such credit but is not required to do so.

**Section 4** requires that, for an apprentice who holds an active residential wireman 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 ensures that an individual who possesses an active residential wireman or master electrician license is not required to take the journeyman electrician license examination. **Section 4** also allows an apprentice to request an exemption from the board from future examination requirements, regardless of whether the apprentice has failed to pass the license examination in 2 consecutive 3-year periods.

**Section 5** requires the department of regulatory agencies (DORA) to:

- Uphold the rules and regulations of the current edition of the national electrical code, including applying the code to all equipment from the point at which service transformers generate voltage to usable systems for consumers, including all associated wiring; risers, whether overhead or underground; and metering systems;
- Cooperate with utility companies 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.

**Section 5** also states that all electrical equipment is subject to inspection by an authority having jurisdiction to conduct electrical inspections.

Under current law, the contract for any public works project that does not receive federal money in an amount of \$1,000,000 or more must require the general contractor or other firm to which the contract is awarded to submit, at the time the mechanical, electrical, or plumbing subcontractor is put under contract, documentation to the agency of government that certifies that all firms identified participate in apprenticeship programs 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. **Section 6** states that for the purposes of this requirement, an apprentice who has obtained a residential wireman, journeyman electrician, or master electrician license while enrolled in a registered apprenticeship program is considered a graduate.

**Section 7** removes, effective July 1, 2029, language that, for photovoltaic installations with a direct current design capacity of less than 300 kilowatts, allows the performance of all photovoltaic electrical work, the installation of photovoltaic modules, and the installation of photovoltaic module mounting equipment to be subject to on-site supervision by a certified photovoltaic energy practitioner designated by

the NABCEP.

**Section 7** also removes language:

- Stating that neither the public utilities commission nor a utility has responsibility for monitoring or enforcing compliance with statutory requirements concerning solar photovoltaic installations (installations);
- Requiring an applicant for funding or for an initial contract proposal for an installation (applicant) to obtain certain information; and
- Requiring a qualifying retail utility to obtain from an applicant and retain, for at least one year after completion of an installation, copies of all documentation submitted by the applicant in connection with the installation.

**Section 7** also states that, as used in the context of photovoltaic electrical work, for ground-mounted systems, "grounding" includes the wiring of bonding jumpers and grounding conductors. "Grounding" does not include work related to the racking assembly, racking construction, or the physical mounting of modules.

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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 (3); and **add** (7.5), (7.7), and (9.5) as follows:

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

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

14 (7.5) "NABCEP" MEANS THE NORTH AMERICAN BOARD OF  
15 CERTIFIED ENERGY PRACTITIONERS.

1 (7.7) "NABCEP PV INSTALLATION PROFESSIONAL" MEANS AN  
2 INDIVIDUAL WHO IS CERTIFIED BY THE NABCEP TO INSTALL  
3 PHOTOVOLTAIC SYSTEMS.

4 (9.5) "PV INSTALLATION TRAINING" MEANS TRAINING CONCERNING  
5 PHOTOVOLTAIC SYSTEMS INSTALLATION PRACTICES DESCRIBED IN THE "PV  
6 INSTALLATION PROFESSIONAL JOB TASK ANALYSIS" DOCUMENT  
7 PUBLISHED BY THE NABCEP.

8 **SECTION 2.** In Colorado Revised Statutes, 12-115-110, **amend**  
9 (2)(a)(I), (2)(a)(II), (2)(b) introductory portion, (2)(b)(II), (3)(a), (3)(b)  
10 introductory portion, and (3)(b)(II); and **add** (6) as follows:

11 **12-115-110. License requirements - rules - continuing**  
12 **education - repeal. (2) Journeyman electrician.** (a) An applicant for  
13 a journeyman electrician's license shall furnish written evidence that the  
14 applicant has had the following:

15 (I) At least four years' OR EIGHT THOUSAND HOURS' apprenticeship  
16 in the electrical trade or four years' OR EIGHT THOUSAND HOURS' practical  
17 experience in wiring for, installing, and repairing electrical apparatus and  
18 equipment for electric light, heat, and power;

19 (II) At least two ~~of the applicant's years'~~ YEARS OR FOUR  
20 THOUSAND HOURS OF THE APPLICANT'S experience required by subsection  
21 (2)(a)(I) of this section has been in commercial, industrial, or  
22 substantially similar work; and

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

26 (II) If the applicant has academic training, including military  
27 training OR PV INSTALLATION TRAINING that does not qualify under

1 subsection (2)(b)(I) of this section, the board ~~shall~~ MAY provide work  
2 experience credit for the training or for substantially similar training  
3 established by rule.

4 (3) **Residential wireman.** (a) An applicant for a residential  
5 wireman's license shall furnish written evidence that the applicant has at  
6 least two years of accredited training or two years OR FOUR THOUSAND  
7 HOURS of practical experience in wiring one-, two-, three-, and  
8 four-family dwellings.

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

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

17 (6) (a) FOR THE PURPOSES OF SUBSECTIONS (2)(a)(I) AND (3)(a) OF  
18 THIS SECTION, UNTIL JULY 1, 2029, AN APPLICANT MAY CLAIM UP TO FOUR  
19 THOUSAND HOURS OF PRACTICAL EXPERIENCE BY WORKING:

20 (I) AS AN NABCEP PV INSTALLATION PROFESSIONAL; OR

21 (II) AS AN APPRENTICE TO AN NABCEP PV INSTALLATION  
22 PROFESSIONAL, SO LONG AS THE SUPERVISING NABCEP PV INSTALLATION  
23 PROFESSIONAL PROVIDES PROOF OF EMPLOYMENT AND AN AFFIDAVIT  
24 ATTESTING THAT THE APPLICANT EARNED THE HOURS AS AN APPRENTICE.

25 (b) FOR EVERY TWO HOURS THAT AN APPLICANT WORKS AS  
26 DESCRIBED IN SUBSECTION (6)(a)(I) OR (6)(a)(II) OF THIS SECTION, THE  
27 APPLICANT MAY CLAIM ONE HOUR FOR THE PURPOSES OF SUBSECTIONS

1 (2)(a)(I) AND (3)(a) OF THIS SECTION.

2 (c) THIS SUBSECTION (6) IS REPEALED, EFFECTIVE AUGUST 1, 2029.

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

5 **12-115-111. Credit for experience not subject to supervision**  
6 **of a licensed electrician.** For all applicants seeking work experience  
7 credit toward licensure, the board ~~shall~~ MAY give credit for electrical  
8 work that is not required to be performed by or under the supervision of  
9 a licensed electrician if the applicant can show that the particular  
10 experience received or the supervision under which the work has been  
11 performed is adequate.

12 **SECTION 4.** In Colorado Revised Statutes, 12-115-115, **amend**  
13 (4)(a); and **add** (3)(d) as follows:

14 **12-115-115. Apprentices - supervision - registration -**  
15 **discipline - rules.** (3) (d) FOR AN APPRENTICE WHO HOLDS AN ACTIVE  
16 RESIDENTIAL WIREMAN LICENSE, AN ELECTRICAL CONTRACTOR, AN  
17 APPRENTICESHIP PROGRAM REGISTERED WITH THE UNITED STATES  
18 DEPARTMENT OF LABOR'S OFFICE OF APPRENTICESHIP, OR A STATE  
19 APPRENTICESHIP AGENCY RECOGNIZED BY THE UNITED STATES  
20 DEPARTMENT OF LABOR THAT EMPLOYS THE APPRENTICE IN THIS STATE  
21 SHALL REPORT QUALIFYING YEARS OR HOURS OF WORK EXPERIENCE ONLY  
22 FOR COMMERCIAL, INDUSTRIAL, OR SUBSTANTIALLY SIMILAR WORK, AS  
23 REQUIRED BY SECTION 12-115-110 (2)(a)(II).

24 (4) On and after January 1, 2021, contingent on the availability of  
25 existing resources within the department or the receipt of gifts, grants,  
26 and donations pursuant to subsection (7) of this section:

27 (a) (I) An apprentice who has been registered for at least six years,

1 has completed eight thousand hours of practical training, ~~and~~ meets all  
2 other journeyman electrician license requirements specified in section  
3 12-115-110, AND DOES NOT POSSESS AN ACTIVE RESIDENTIAL WIREMAN  
4 OR MASTER ELECTRICIAN LICENSE shall take the journeyman electrician  
5 license examination at least every three years in alignment with the  
6 license renewal cycle until the apprentice receives a passing score.

7 (II) ~~If an apprentice has failed to pass the license examination in~~  
8 ~~two consecutive three-year periods,~~ the AN apprentice may request an  
9 exemption from the board from future examination requirements. The  
10 board shall grant the exemption if the board determines that the  
11 apprentice has legitimate educational or professional circumstances that  
12 justify the exemption. The board shall promulgate rules concerning the  
13 process of requesting and approving license examination exemptions.

14 **SECTION 5.** In Colorado Revised Statutes, **add** 12-115-125 as  
15 follows:

16 **12-115-125. Duties of department relating to electrical work.**

17 (1) THE DEPARTMENT SHALL UPHOLD THE RULES AND REGULATIONS OF  
18 THE CURRENT EDITION OF THE NATIONAL ELECTRICAL CODE IN ITS  
19 ENTIRETY, INCLUDING APPLYING THE CODE TO ALL EQUIPMENT FROM THE  
20 POINT AT WHICH SERVICE TRANSFORMERS GENERATE VOLTAGE TO USABLE  
21 SYSTEMS FOR CONSUMERS, INCLUDING ALL ASSOCIATED WIRING; RISERS,  
22 WHETHER OVERHEAD OR UNDERGROUND; AND METERING SYSTEMS.

23 (2) THE DEPARTMENT SHALL COOPERATE WITH UTILITY COMPANIES  
24 TO MAINTAIN SAFE CLEARANCES AND SAFE WORKING DISTANCES FOR THE  
25 UTILITIES BASED ON THE CURRENT EDITION OF THE NATIONAL ELECTRICAL  
26 CODE.

27 (3) THE DEPARTMENT SHALL ALLOW EACH UTILITY TO INSTALL ITS



1 PROPER METERING EQUIPMENT WITH THE ASSISTANCE OF QUALIFIED  
2 ELECTRICAL PERSONNEL.

3 (4) ALL EQUIPMENT IS SUBJECT TO INSPECTION BY AN AUTHORITY  
4 HAVING JURISDICTION TO PERFORM ELECTRICAL INSPECTIONS.

5 **SECTION 6.** In Colorado Revised Statutes, 24-92-115, **amend**  
6 (1)(c) as follows:

7 **24-92-115. Apprenticeship utilization requirements -**  
8 **mechanical, electrical, and plumbing contracts - public projects -**  
9 **definition.** (1) (c) ~~For the purposes of AS USED IN~~ subsection (1)(a)(II)  
10 of this section, "graduating" means the completion of a multiyear  
11 program, including the requisite classroom coursework and on-the-job  
12 training requirements and a certificate of completion issued by the United  
13 States department of labor's office of apprenticeship or awarded pursuant  
14 to article 15.7 of title 8. AN APPRENTICE WHO HAS OBTAINED A  
15 RESIDENTIAL WIREMAN, JOURNEYMAN ELECTRICIAN, OR MASTER  
16 ELECTRICIAN LICENSE WHILE ENROLLED IN AN APPRENTICESHIP PROGRAM  
17 REGISTERED WITH THE UNITED STATES DEPARTMENT OF LABOR'S OFFICE  
18 OF APPRENTICESHIP OR A STATE APPRENTICESHIP AGENCY RECOGNIZED BY  
19 THE UNITED STATES DEPARTMENT OF LABOR IS CONSIDERED A GRADUATE.

20 **SECTION 7.** In Colorado Revised Statutes, 40-2-128, **amend**  
21 (1)(a)(I)(A) and (2)(a)(I); and **repeal** (1)(a)(II) as follows:

22 **40-2-128. Solar photovoltaic installations - supervision by**  
23 **certified practitioners - qualifications of electrical contractors -**  
24 **definitions.** (1) For all photovoltaic installations allowed under section  
25 40-2-124 with a direct current design capacity of less than three hundred  
26 kilowatts:

27 (a) (I) (A) The performance of all photovoltaic electrical work, the

1 installation of photovoltaic modules, and the installation of photovoltaic  
2 module mounting equipment is subject to on-site supervision by a  
3 ~~certified photovoltaic energy practitioner, as designated by the North~~  
4 ~~American Board of Certified Energy Practitioners (NABCEP), or a~~  
5 licensed master electrician, licensed journeyman electrician, or licensed  
6 residential wireman, as THOSE TERMS ARE defined in section 12-115-103.

7 (II) ~~Neither the commission nor the utility shall have~~  
8 ~~responsibility for monitoring or enforcing compliance with this section.~~  
9 ~~It shall be the responsibility of the applicant to obtain the information~~  
10 ~~required by subparagraph (I) of this paragraph (a), and it shall be the~~  
11 ~~responsibility of the qualifying retail utility to obtain from the applicant~~  
12 ~~and retain, for at least one year after completion of the installation, copies~~  
13 ~~of all documentation submitted by the applicant in connection with the~~  
14 ~~installation.~~

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

16 (a) (I) "Photovoltaic electrical work" means wiring, grounding, or  
17 repairing electrical apparatus and equipment in a photovoltaic distributed  
18 generation system. AS USED IN THIS SUBSECTION (2)(a)(I), FOR  
19 GROUND-MOUNTED SYSTEMS, "GROUNDING" INCLUDES THE WIRING OF  
20 BONDING JUMPERS AND GROUNDING CONDUCTORS. "GROUNDING" FOR  
21 GROUND-MOUNTED SYSTEMS DOES NOT INCLUDE WORK RELATED TO THE  
22 RACKING ASSEMBLY, RACKING CONSTRUCTION, OR THE PHYSICAL  
23 MOUNTING OF MODULES.

24 **SECTION 8. Act subject to petition - effective date.** Section  
25 40-2-128 (1)(a)(I)(A), Colorado Revised Statutes, as amended in section  
26 7 of this act, takes effect July 1, 2029, and the remainder of this act takes  
27 effect at 12:01 a.m. on the day following the expiration of the ninety-day

1 period after final adjournment of the general assembly; except that, if a  
2 referendum petition is filed pursuant to section 1 (3) of article V of the  
3 state constitution against this act or an item, section, or part of this act  
4 within such period, then the act, item, section, or part will not take effect  
5 unless approved by the people at the general election to be held in  
6 November 2024 and, in such case, will take effect on the date of the  
7 official declaration of the vote thereon by the governor; except that  
8 section 40-2-128 (1)(a)(I)(A), Colorado Revised Statutes, as amended in  
9 section 7 of this act, takes effect July 1, 2029.