SENATE COMMITTEE OF REFERENCE REPORT

April 16, 2019	
Chair of Committee Date	
Committee on <u>Transportation & Energy</u> .	
After consideration on the merits, the Committee recommends the following:	ıe
HB19-1003 be amended as follows, and as so amended, be referred to the Committee of the Whole with favorable recommendation:	
Amend reengrossed bill, page 2, after line 1 insert:	
"SECTION 1. In Colorado Revised Statutes, 12-23-104, amen	d
(2)(f.5) as follows:	
12-23-104. Board powers and duties - rules. (2) In addition tall other powers and duties conferred or imposed upon the board by the article, the board is authorized to:	
(f.5) Regulate a licensed master electrician, journeyma	ın
electrician, or residential wireman who, acting within his or her scope of	of
competence, supervises a solar photovoltaic installation pursuant t	to
section 40-2-128. C.R.S.; ON AND AFTER JANUARY 1, 2020, AI	L
PHOTOVOLTAIC ELECTRICAL WORK FOR INSTALLATIONS OF AT LEAS	ίT
THREE HUNDRED KILOWATTS, INCLUDING THE INTERCONNECTION OF TH	
MODULES, GROUNDING OF THE MODULES, ANY BALANCE OF SYSTE	
WIRING, AND THE CUSTOMER-SIDE POINT OF CONNECTION TO THE UTILIT	
GRID, MUST BE PERFORMED BY A LICENSED MASTER ELECTRICIAN	-
LICENSED JOURNEYMAN ELECTRICIAN, LICENSED RESIDENTIAL WIREMAN	-
OR PROPERLY SUPERVISED ELECTRICAL APPRENTICES AND MUST COMPL	
WITH ALL APPLICABLE REQUIREMENTS OF THIS ARTICLE 23, INCLUDIN	
SECTIONS 12-23-105 AND 12-23-110.5, AND ALL APPLICABLE RULES C)F

21 Renumber succeeding sections accordingly.

THE BOARD.".

- 1 Page 2, line 3, after "add" insert "(2)(b)(I)(D) and".
- 2 Page 2, line 9, strike "of two FIVE megawatts or less" and substitute "of
- 3 two megawatts or less within the range specified under subsection
- 4 (2)(b)(I)(D) of this section".
- 5 Page 2, after line 18 insert:
- 6 "(D) A COMMUNITY SOLAR GARDEN MUST HAVE A NAMEPLATE
- 7 RATING OF FIVE MEGAWATTS OR LESS; EXCEPT THAT THE COMMISSION
- MAY, IN RULES ADOPTED PURSUANT TO SUBSECTION (3)(b) OF THIS
- SECTION, APPROVE THE FORMATION OF A COMMUNITY SOLAR GARDEN
- 10 WITH A NAMEPLATE RATING OF UP TO TEN MEGAWATTS ON OR AFTER JULY
- 11 1, 2023.".
- 12 Page 3, strike lines 6 through 15.
- 13 Reletter succeeding paragraphs accordingly.
- 14 Page 3, strike line 17 and substitute "ASSOCIATED ELECTRICAL
- 15 EOUIPMENT".
- 16 Page 3, line 18, strike "SECTION".
- 17 Page 3, strike lines 24 through 27.
- 18 Strike page 4 and substitute:
- 19 "SECTION 3. In Colorado Revised Statutes, 40-2-128, amend
- 20 (1) introductory portion, (1)(a)(I)(D), and (1)(d) introductory portion; and
- 21 **repeal** (1)(c) as follows:
- 22 40-2-128. Solar photovoltaic installations - supervision by
- 23 certified practitioners - qualifications of electrical contractors.
- 24 (1) For all photovoltaic installations funded wholly or partially through
- 25 ratepayer-funded incentives as part of the renewable energy standard 26 adjustment allowed under section 40-2-124 WITH A DIRECT CURRENT
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- DESIGN CAPACITY OF LESS THAN THREE HUNDRED KILOWATTS:
- 28 (a) (I) (D) By submitting an initial application for funding or an
- 29 initial contract proposal, the applicant assumes responsibility for
- 30 employing or contracting with one or more certified energy practitioners
- 31 or licensed master electricians, licensed journeyman electricians, or

licensed residential wiremen to supervise the installation and as necessary to maintain the three-to-one ratio required by paragraphs (b) and (c) of this subsection (1) SUBSECTION (1)(b) OF THIS SECTION, including during any off-site, preinstallation assembly. Payment of any incentives for the work shall not be approved until the applicant supplies the name and certification number of each certified energy practitioner or the license number of each master electrician, journeyman electrician, or residential wireman who actually provided on-site supervision or was present to maintain the three-to-one ratio required by paragraphs (c) and (d) of this subsection (1) SUBSECTION (1)(d) OF THIS SECTION.

- (c) On a system with a direct current design capacity of more than five hundred kilowatts:
- (I) During any photovoltaic electrical work, the ratio of the number of persons who are assisting with the work and who are neither licensed electricians nor registered electrical apprentices to the number of persons who are certified as provided in paragraph (a) of this subsection (1) shall never exceed three to one, and a person who is both licensed and certified shall not count double for purposes of measuring this ratio; and
- (II) There shall be at least one on-site supervisor who is certified as provided in paragraph (a) of this subsection (1) during the following stages; except that, if at any time during any of the following stages, there are more than twelve persons on the work site who are neither licensed electricians nor registered electrical apprentices and who are not certified as provided in paragraph (a) of this subsection (1), there shall be at least two persons who are certified as provided in paragraph (a) of this subsection (1) present on the work site and providing direct supervision of:
 - (A) The installation of photovoltaic modules;
- (B) The installation of photovoltaic module mounting equipment; and
 - (C) Any photovoltaic electrical work.
- (d) On a system with a direct current design capacity of five hundred kilowatts or less THAN THREE HUNDRED KILOWATTS:

SECTION 4. In Colorado Revised Statutes, 12-115-107, amend as relocated by House Bill 19-1172 (2)(f) as follows:

- 12-115-107. Board powers and duties rules definition.
 (2) In addition to all other powers and duties conferred or imposed upon the board by this article 115, the board is authorized to:
- (f) Regulate a licensed master electrician, journeyman electrician, or residential wireman who, acting within his or her scope of competence,

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- supervises a solar photovoltaic installation pursuant to section 40-2-128.
- 2 ON AND AFTER JANUARY 1, 2020, ALL PHOTOVOLTAIC ELECTRICAL WORK
- 3 FOR INSTALLATIONS OF AT LEAST THREE HUNDRED KILOWATTS, INCLUDING
- 4 THE INTERCONNECTION OF THE MODULES, GROUNDING OF THE MODULES,
- 5 ANY BALANCE OF SYSTEM WIRING, AND THE CUSTOMER-SIDE POINT OF
- 6 CONNECTION TO THE UTILITY GRID, MUST BE PERFORMED BY A LICENSED
- 7 MASTER ELECTRICIAN, LICENSED JOURNEYMAN ELECTRICIAN, LICENSED
- 8 RESIDENTIAL WIREMAN, OR PROPERLY SUPERVISED ELECTRICAL
- 9 APPRENTICES AND MUST COMPLY WITH ALL APPLICABLE REQUIREMENTS
- 10 OF THIS ARTICLE 115, INCLUDING SECTIONS 12-115-109 AND 12-115-115,

11 AND ALL APPLICABLE RULES OF THE BOARD.

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SECTION 5. Act subject to petition - effective date. (1) Except as otherwise provided in subsection (2) of this section, this act takes effect at 12:01 a.m. on the day following the expiration of the ninety-day period after final adjournment of the general assembly (August 2, 2019, if adjournment sine die is on May 3, 2019); except that, if a referendum petition is filed pursuant to section 1 (3) of article V of the state constitution against this act or an item, section, or part of this act within such period, then the act, item, section, or part will not take effect unless approved by the people at the general election to be held in November 2020 and, in such case, will take effect on the date of the official declaration of the vote thereon by the governor.

(2) Section 4 of this act takes effect only if House Bill 19-1172 becomes law, in which case section 4 takes effect October 1, 2019.".

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