

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

REREVISED

*This Version Includes All Amendments
Adopted in the Second House*

LLS NO. 19-0692.01 Duane Gall x4335

HOUSE BILL 19-1003

HOUSE SPONSORSHIP

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House Committees

Energy & Environment
Appropriations

Senate Committees

Transportation & Energy

SENATE
Amended 3rd Reading
April 24, 2019

A BILL FOR AN ACT

101 **CONCERNING COMMUNITY SOLAR GARDENS.**

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>.)

The bill amends the current statute authorizing the creation of community solar gardens (CSGs) by:

- ! Increasing the maximum size of a CSG from 2 megawatts to 10 megawatts; and
- ! Removing the requirement that a CSG subscriber's identified physical location be in the same county as, or a county adjacent to, that of the CSG, while retaining the requirement that it be within the service territory of the

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

SENATE
Amended 2nd Reading
April 23, 2019

HOUSE
3rd Reading Unamended
April 1, 2019

HOUSE
Amended 2nd Reading
March 29, 2019

same electric utility.

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

2 **SECTION 1.** In Colorado Revised Statutes, 12-23-104, **amend**
3 **(2)(f.5)** as follows:

4 **12-23-104. Board powers and duties - rules. (2)** In addition to
5 **all other powers and duties conferred or imposed upon the board by this**
6 **article, the board is authorized to:**

7 **(f.5) Regulate a licensed master electrician, journeyman**
8 **electrician, or residential wireman who, acting within his or her scope of**
9 **competence, supervises a solar photovoltaic installation pursuant to**
10 **section 40-2-128. C.R.S.; ON AND AFTER JANUARY 1, 2020, ALL**
11 **PHOTOVOLTAIC ELECTRICAL WORK FOR INSTALLATIONS OF AT LEAST**
12 **THREE HUNDRED KILOWATTS, INCLUDING THE INTERCONNECTION OF THE**
13 **MODULES, GROUNDING OF THE MODULES, ANY BALANCE OF SYSTEM**
14 **WIRING, AND THE CUSTOMER-SIDE POINT OF CONNECTION TO THE UTILITY**
15 **GRID, MUST BE PERFORMED BY A LICENSED MASTER ELECTRICIAN,**
16 **LICENSED JOURNEYMAN ELECTRICIAN, LICENSED RESIDENTIAL WIREMAN,**
17 **OR PROPERLY SUPERVISED ELECTRICAL APPRENTICES AND MUST COMPLY**
18 **WITH ALL APPLICABLE REQUIREMENTS OF THIS ARTICLE 23, INCLUDING**
19 **SECTIONS 12-23-105 AND 12-23-110.5, AND ALL APPLICABLE RULES OF**
20 **THE BOARD.**

21 **SECTION 2.** In Colorado Revised Statutes, 40-2-127, **amend**
22 **(2)(b)(I)(A), (2)(b)(II), and (5)(b)(I); and add (2)(b)(I)(D) and (3.5) as**
23 **follows:**

24 **40-2-127. Community energy funds - community solar**
25 **gardens - definitions - rules - legislative declaration. (2) Definitions.**

1 As used in this section, unless the context otherwise requires:

2 (b) In addition:

3 (I) (A) "Community solar garden" means a solar electric
4 generation facility with a nameplate rating ~~of two megawatts or less~~
5 WITHIN THE RANGE SPECIFIED UNDER SUBSECTION (2)(b)(I)(D) OF THIS
6 SECTION that is located in or near a community served by a qualifying
7 retail utility where the beneficial use of the electricity generated by the
8 facility belongs to the subscribers to the community solar garden. There
9 shall be at least ten subscribers. The owner of the community solar garden
10 may be the qualifying retail utility or any other for-profit or nonprofit
11 entity or organization, including a subscriber organization organized
12 under this section, that contracts to sell the output from the community
13 solar garden to the qualifying retail utility. A community solar garden
14 shall be deemed to be "located on the site of customer facilities".

15 (D) A COMMUNITY SOLAR GARDEN MUST HAVE A NAMEPLATE
16 RATING OF FIVE MEGAWATTS OR LESS; EXCEPT THAT THE COMMISSION
17 MAY, IN RULES ADOPTED PURSUANT TO SUBSECTION (3)(b) OF THIS
18 SECTION, APPROVE THE FORMATION OF A COMMUNITY SOLAR GARDEN
19 WITH A NAMEPLATE RATING OF UP TO TEN MEGAWATTS ON OR AFTER JULY
20 1, 2023.

21 (II) "Subscriber" means a retail customer of a qualifying retail
22 utility who owns a subscription and who has identified one or more
23 physical locations to which the subscription is attributed. Such physical
24 locations must be within the service territory of the same qualifying retail
25 utility ~~and also in the same county as, or a county adjacent to, that of AS~~
26 the community solar garden. The subscriber may change from time to
27 time the premises to which the community solar garden electricity

1 generation shall be attributed, so long as the premises are within the
2 ~~geographical limits allowed for a subscriber~~ SAME SERVICE TERRITORY.

3 **(3.5) Standards for construction and operation.** THE
4 FOLLOWING REQUIREMENTS APPLY TO ANY COMMUNITY SOLAR GARDEN
5 EXCEEDING TWO MEGAWATTS:

6 ==
7 (a) THE INITIAL INSTALLATION OF ANY PHOTOVOLTAIC MODULE OR
8 ASSOCIATED ELECTRICAL EQUIPMENT == IS SUBJECT TO FINAL INSPECTION
9 AND APPROVAL IN ACCORDANCE WITH SECTION 12-23-116.

10 (b) FOLLOWING THE DEVELOPMENT OR ACQUISITION BY A
11 QUALIFYING RETAIL UTILITY OF A COMMUNITY SOLAR GARDEN IN WHICH
12 THE QUALIFYING RETAIL UTILITY RETAINS OWNERSHIP, THE QUALIFYING
13 RETAIL UTILITY SHALL EITHER USE ITS OWN EMPLOYEES TO OPERATE AND
14 MAINTAIN THE COMMUNITY SOLAR GARDEN OR CONTRACT FOR OPERATION
15 AND MAINTENANCE OF THE COMMUNITY SOLAR GARDEN BY A
16 CONTRACTOR WHOSE EMPLOYEES HAVE ACCESS TO AN APPRENTICESHIP
17 PROGRAM REGISTERED WITH THE UNITED STATES DEPARTMENT OF
18 LABOR'S OFFICE OF APPRENTICESHIP AND TRAINING OR WITH A STATE
19 APPRENTICESHIP COUNCIL RECOGNIZED BY THAT OFFICE; EXCEPT THAT
20 THIS APPRENTICESHIP REQUIREMENT DOES NOT APPLY TO:

21 (I) THE DESIGN, PLANNING, OR ENGINEERING OF THE
22 INFRASTRUCTURE;

23 (II) MANAGEMENT FUNCTIONS TO OPERATE THE INFRASTRUCTURE;

24 OR

25 (III) ANY WORK INCLUDED IN A WARRANTY.

26 ==

27 **(5) Purchases of the output from community solar gardens.**

1 (b) (I) (A) The output from a community solar garden shall be sold only
2 to the qualifying retail utility serving the geographic area where the
3 community solar garden is located.

4 (B) Once a community solar garden is part of a qualifying retail
5 utility's plan for acquisition of renewable resources, as approved by the
6 commission, THE COMMISSION SHALL BY JANUARY 30, 2020, INITIATE A
7 PROCEEDING, OR CONSIDER IN AN ACTIVE PROCEEDING, TO DETERMINE
8 WHETHER the qualifying retail utility shall purchase all of the electricity
9 and renewable energy credits generated by the community solar garden
10 OR WHETHER A SUBSCRIBER MAY, UPON BECOMING A SUBSCRIBER, CHOOSE
11 TO RETAIN OR SELL TO THE QUALIFYING RETAIL UTILITY THE SUBSCRIBER'S
12 RENEWABLE ENERGY CREDITS.

13 (C) The amount of electricity and renewable energy credits
14 generated by each community solar garden shall be determined by a
15 production meter installed by the qualifying retail utility or third-party
16 system owner and paid for by the owner of the community solar garden.

17 **SECTION 3.** In Colorado Revised Statutes, 40-2-128, **amend** (1)
18 introductory portion, (1)(a)(I)(D), and (1)(d) introductory portion; and
19 **repeal** (1)(c) as follows:

20 **40-2-128. Solar photovoltaic installations - supervision by**
21 **certified practitioners - qualifications of electrical contractors.**

22 (1) For all photovoltaic installations funded wholly or partially through
23 ratepayer-funded incentives as part of the renewable energy standard
24 adjustment allowed under section 40-2-124 WITH A DIRECT CURRENT
25 DESIGN CAPACITY OF LESS THAN THREE HUNDRED KILOWATTS:

26 (a) (I) (D) By submitting an initial application for funding or an
27 initial contract proposal, the applicant assumes responsibility for

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

13 (c) On a system with a direct current design capacity of more than
14 five hundred kilowatts:

15 (f) During any photovoltaic electrical work, the ratio of the
16 number of persons who are assisting with the work and who are neither
17 licensed electricians nor registered electrical apprentices to the number
18 of persons who are certified as provided in paragraph (a) of this
19 subsection (1) shall never exceed three to one, and a person who is both
20 licensed and certified shall not count double for purposes of measuring
21 this ratio; and

22 (H) There shall be at least one on-site supervisor who is certified
23 as provided in paragraph (a) of this subsection (1) during the following
24 stages; except that, if at any time during any of the following stages, there
25 are more than twelve persons on the work site who are neither licensed
26 electricians nor registered electrical apprentices and who are not certified
27 as provided in paragraph (a) of this subsection (1), there shall be at least

1 two persons who are certified as provided in paragraph (a) of this
2 subsection (1) present on the work site and providing direct supervision
3 of:

4 (A) The installation of photovoltaic modules;

5 (B) The installation of photovoltaic module mounting equipment;

6 and

7 (C) Any photovoltaic electrical work.

8 (d) On a system with a direct current design capacity of five
9 hundred kilowatts or less THAN THREE HUNDRED KILOWATTS:

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

12 **12-115-107. Board powers and duties - rules - definition.**

13 (2) In addition to all other powers and duties conferred or imposed upon
14 the board by this article 115, the board is authorized to:

15 (f) Regulate a licensed master electrician, journeyman electrician,
16 or residential wireman who, acting within his or her scope of competence,
17 supervises a solar photovoltaic installation pursuant to section 40-2-128.

18 ON AND AFTER JANUARY 1, 2020, ALL PHOTOVOLTAIC ELECTRICAL WORK
19 FOR INSTALLATIONS OF AT LEAST THREE HUNDRED KILOWATTS, INCLUDING
20 THE INTERCONNECTION OF THE MODULES, GROUNDING OF THE MODULES,
21 ANY BALANCE OF SYSTEM WIRING, AND THE CUSTOMER-SIDE POINT OF
22 CONNECTION TO THE UTILITY GRID, MUST BE PERFORMED BY A LICENSED
23 MASTER ELECTRICIAN, LICENSED JOURNEYMAN ELECTRICIAN, LICENSED
24 RESIDENTIAL WIREMAN, OR PROPERLY SUPERVISED ELECTRICAL
25 APPRENTICES AND MUST COMPLY WITH ALL APPLICABLE REQUIREMENTS
26 OF THIS ARTICLE 115, INCLUDING SECTIONS 12-115-109 AND 12-115-115,
27 AND ALL APPLICABLE RULES OF THE BOARD.

1 **SECTION 5. Act subject to petition - effective date.** (1) Except
2 as otherwise provided in subsection (2) of this section, this act takes
3 effect at 12:01 a.m. on the day following the expiration of the ninety-day
4 period after final adjournment of the general assembly (August 2, 2019,
5 if adjournment sine die is on May 3, 2019); except that, if a referendum
6 petition is filed pursuant to section 1 (3) of article V of the state
7 constitution against this act or an item, section, or part of this act within
8 such period, then the act, item, section, or part will not take effect unless
9 approved by the people at the general election to be held in November
10 2020 and, in such case, will take effect on the date of the official
11 declaration of the vote thereon by the governor.

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