

Senate File 2107 - Introduced

SENATE FILE 2107
BY BOLKCOM and HOGG

A BILL FOR

1 An Act relating to solar energy purchase requirements
2 applicable to certain electric utilities.
3 BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF IOWA:

1 Section 1. Section 476.1, Code 2014, is amended by adding
2 the following new subsection:

3 NEW SUBSECTION. 5A. A community solar garden program
4 established pursuant to section 476.49 shall not be regarded as
5 a public utility for purposes of this chapter.

6 Sec. 2. Section 476.25, Code 2014, is amended by adding the
7 following new unnumbered paragraph:

8 NEW UNNUMBERED PARAGRAPH. The furnishing of electricity
9 pursuant to a community solar garden program under section
10 476.49 shall not be considered an unnecessary duplication
11 of electric utility facilities and shall not constitute a
12 violation of this section.

13 Sec. 3. Section 476.44, subsection 2, Code 2014, is amended
14 to read as follows:

15 2. a. (1) An electric utility subject to this division,
16 except a utility that elects rate regulation pursuant to
17 section 476.1A, shall ~~not~~ be required, by January 1, 2020,
18 to own or purchase, ~~at any one time, more than~~ its share of
19 one hundred five megawatts of power from ~~alternative energy~~
20 ~~production facilities or small hydro~~ solar energy facilities
21 located in this state at the rates established pursuant to
22 section 476.43. The board shall allocate the one hundred five
23 megawatts based upon each utility's percentage of the total
24 Iowa retail peak demand, for the year beginning January 1, ~~1990~~
25 2014, of all utilities subject to this section. If a utility
26 undergoes reorganization as defined in section 476.76, the
27 board shall combine the allocated purchases of power for each
28 utility involved in the reorganization.

29 (2) In satisfying the solar energy ownership or purchase
30 requirements pursuant to subparagraph (1), a minimum of ten
31 percent of the energy produced or purchased shall be produced
32 by or purchased from solar energy facilities with a nameplate
33 generating capacity of twenty kilowatts or less.

34 b. Notwithstanding the one hundred five megawatt ~~maximum~~
35 requirement, the board may increase the amount of ~~power~~ solar

1 energy that a utility is required to own or purchase at the
2 rates established pursuant to section 476.43 if the board
3 finds that a utility, including a reorganized utility, exceeds
4 its ~~1990~~ 2014 Iowa retail peak demand by twenty percent and
5 the additional ~~power~~ solar energy the utility is required to
6 purchase will encourage the development of ~~alternate energy~~
7 ~~production facilities and small hydro~~ solar energy facilities.
8 The increase shall not exceed the utility's increase in peak
9 demand multiplied by the ratio of the utility's share of the
10 one hundred five megawatt ~~maximum~~ requirement to its ~~1990~~ 2014
11 Iowa retail peak demand.

12 Sec. 4. NEW SECTION. **476.49 Community solar garden program.**

13 1. *Definitions.* For the purposes of this section, unless
14 the context otherwise requires:

15 a. "*Community solar garden facility*" means an electric
16 generating facility with a nameplate generating capacity of
17 one megawatt or less that generates electricity by means of
18 a ground-mounted or roof-mounted solar photovoltaic device
19 whereby subscribers receive a bill credit for the electricity
20 generated in proportion to the size of their subscription.

21 b. "*Subscriber*" means a retail customer of an electric
22 utility subject to this division who owns one or more
23 subscriptions to a community solar garden facility
24 interconnected with that utility.

25 c. "*Subscription*" means a proportional contractual
26 interest in a community solar garden facility, together with a
27 proportional interest in any state or federal tax credits for
28 which a community solar garden facility may be eligible.

29 2. *Program established — requirements.*

30 a. A community solar garden program is established to
31 encourage and enhance the generation of solar energy and to
32 encourage and enhance the ability of electric public utility
33 customers to participate in and derive benefit from alternate
34 solar energy projects.

35 b. Pursuant to the program, an electric public utility

1 subject to rate regulation shall be required to establish and
2 maintain one or more community solar garden facilities. The
3 program shall be designed to offset the energy use of not
4 less than five subscribers to each community solar garden
5 facility, of which no single subscriber has more than a forty
6 percent interest in the facility. A community solar garden
7 facility may be owned by the utility or by any other entity
8 or organization, including a subscriber organization, that
9 contracts to sell the output from the community solar garden
10 facility to the utility.

11 *c.* A community solar garden facility must be located
12 within a utility's service area. Subscribers shall be retail
13 customers of the utility located in the same county or a county
14 contiguous to where the facility is located. Each subscription
15 shall be sized to represent at least two hundred watts of the
16 community solar garden facility's generating capacity and
17 to supply, when combined with other distributed generation
18 resources serving the premises, no more than one hundred twenty
19 percent of the average annual consumption of electricity by
20 each subscriber at the premises to which the subscription is
21 attached.

22 *d.* A utility establishing a community solar garden
23 program shall be required to purchase from a community solar
24 garden facility all electricity generated by the facility
25 at the same rates applicable to alternate energy production
26 facilities pursuant to section 476.43, or at an alternative
27 rate established pursuant to section 476.50. A subscriber's
28 portion of the electricity purchased by the utility shall be
29 credited to the subscriber's account with the utility. The
30 board shall develop interconnection agreements for utilization
31 by a community solar garden facility interconnecting with the
32 utility as provided in section 476.50.

33 *e.* A utility shall not be required to purchase an amount of
34 electricity from one or more community solar garden facilities
35 in an amount exceeding four percent of its average annual

1 electricity sales. The requirements of this section are
2 applicable in addition to, and not in lieu of, the maximum
3 purchase and ownership restrictions specified in section
4 476.44.

5 3. *Plans — submission requirements.*

6 a. A public utility subject to this section shall submit a
7 community solar garden program plan to the board by September
8 30, 2014, incorporating the following components:

9 (1) The proposed location of one or more community solar
10 garden facilities to be operated and maintained by the utility.

11 (2) Uniform standards, fees, and processes for the
12 interconnection of community solar garden facilities that will
13 allow the utility to recover reasonable interconnection costs
14 for each facility.

15 (3) Information to be provided to potential subscribers
16 to ensure fair disclosure of future costs and benefits of
17 subscriptions.

18 (4) An implementation schedule for facility
19 interconnection.

20 b. The board may approve, disapprove, or modify the plan.
21 Once approved, a plan shall be implemented within ninety days
22 following the date of approval. Within one hundred eighty
23 days following the date of approval, the utility shall begin
24 crediting subscriber accounts for each community solar garden
25 facility within its service area.

26 c. The utility shall file an updated plan on an annual
27 basis summarizing the operation and status of its community
28 solar garden program and detailing the amount of electricity
29 generated by facilities and credited to subscriber accounts.

30 **Sec. 5. NEW SECTION. 476.50 Solar interconnection**
31 **agreements — alternative tariff rate.**

32 1. An electric public utility may enter into
33 interconnection agreements with customers operating distributed
34 generation solar photovoltaic devices. A utility entering
35 into such an agreement may apply to the board for approval

1 of an alternative tariff rate that compensates customers
2 through a billing credit mechanism for the value to the
3 utility, its customers, and society for operating such devices
4 interconnected to the utility system and operated by customers
5 primarily for meeting their own energy needs. If approved,
6 the alternative rate would apply in lieu of the rate otherwise
7 applicable to alternate energy production facilities pursuant
8 to section 476.43.

9 2. An application for an alternative tariff rate submitted
10 by a utility pursuant to this section shall demonstrate that
11 the proposed rate conforms with the following:

12 a. Appropriately applies the methodology established by the
13 board pursuant to subsection 3.

14 b. Includes a mechanism to allow recovery of the cost to
15 serve customers receiving the alternative tariff rate.

16 c. Charges the customer for all electricity consumed by the
17 customer at an applicable rate schedule for sales to that class
18 of customer.

19 d. Credits the customer for all electricity generated by the
20 solar photovoltaic device.

21 e. Applies charges and credits to a monthly billing that
22 includes a provision so that the unused portion of the credit
23 in any month or billing period shall be carried forward and
24 credited against all charges. In the event that the customer
25 has a positive balance after the twelve-month cycle ending
26 on the last day in February, that balance will be eliminated
27 and the credit cycle will restart the following billing period
28 beginning on March 1.

29 3. The board shall establish a solar value methodology
30 for utilization by utilities in developing and applying for
31 an alternative tariff rate pursuant to this section. The
32 methodology shall, at a minimum, account for the value of
33 energy and its delivery, generation capacity, transmission
34 capacity, transmission and distribution line losses, and
35 environmental value. The board may, based on known and

1 measurable evidence of the cost or benefit of solar operation
2 to the utility, incorporate other values into the methodology,
3 including credits for locally manufactured or assembled
4 energy systems, systems installed at high-value locations on
5 the distribution grid, or other factors. In developing the
6 methodology pursuant to this subsection, the board may consult
7 stakeholders with experience and expertise in power systems,
8 solar energy, and electric utility ratemaking regarding the
9 proposed methodology, underlying assumptions, and preliminary
10 data.

11 4. Applications shall be subject to the approval provisions
12 of section 476.6. A utility shall recalculate the alternative
13 tariff rate on an annual cycle, and shall file the recalculated
14 alternative rate with the board for approval. The board may
15 not authorize a utility to charge an alternative tariff rate
16 that is lower than the utility's applicable retail rate until
17 three years after the board originally approved the alternative
18 tariff rate.

19 5. A utility shall enter into an interconnection agreement
20 with an owner of a solar photovoltaic device receiving an
21 alternative tariff rate as provided in this section for a term
22 of at least twenty years, unless a shorter term is agreed to by
23 the parties. The board shall develop standard interconnection
24 agreement forms for utilization by the utility and the owner.
25 An owner must be paid the same rate per kilowatt-hour generated
26 each year for the duration of the interconnection agreement.

27 6. A utility must provide to the customer the meter and
28 any other equipment needed to provide service pursuant to the
29 interconnection agreement.

30

EXPLANATION

31 The inclusion of this explanation does not constitute agreement with
32 the explanation's substance by the members of the general assembly.

33 This bill specifies solar energy purchase requirements
34 applicable to electric public utilities and provides
35 for alternative tariff rates applicable to solar energy

1 interconnection agreements.

2 Currently, electric utilities are required to own alternate
3 energy production facilities or small hydro facilities located
4 in Iowa, or to enter into long-term contracts to purchase or
5 wheel electricity from such facilities. Alternate energy
6 production facilities are defined in Code section 476.42
7 to include solar, wind turbine, waste management, resource
8 recovery, refuse-derived fuel, agricultural crops or residues,
9 or woodburning facilities.

10 There is a limitation on the amount of electricity required
11 to be produced by a facility which is owned by an electric
12 utility, or purchased or wheeled from an alternate energy
13 production facility or small hydro facility. An electric
14 utility is not required to own or purchase, at any one time,
15 more than its share of 105 megawatts of power from alternate
16 energy production facilities or small hydro facilities.

17 The bill modifies the 105 megawatt purchase requirement
18 and limitation to make it applicable strictly to solar energy
19 derived from solar energy facilities in this state. The 105
20 megawatt solar energy ownership or purchase requirements must
21 be attained by January 1, 2020. The bill provides that out of
22 this amount, a minimum of 10 percent of the energy produced
23 or purchased shall be produced by or purchased from solar
24 energy facilities with a nameplate generating capacity of
25 20 kilowatts or less. The bill makes conforming changes to
26 related provisions.

27 The bill additionally establishes a community solar garden
28 program. The bill defines a "community solar garden facility"
29 to mean an electric generating facility with a nameplate
30 generating capacity of one megawatt or less that generates
31 electricity by means of a ground-mounted or roof-mounted solar
32 photovoltaic device whereby subscribers receive a billing
33 credit for the electricity generated in proportion to the size
34 of their subscription. The bill defines "subscriber" to mean
35 a retail customer of an electric utility who owns one or more

1 subscriptions of a community solar garden interconnected with
2 that utility. The bill defines a "subscription" to mean a
3 proportional contractual interest in a community solar garden
4 facility, together with a proportional interest in any state or
5 federal tax credits for which a community solar garden facility
6 may be eligible.

7 The bill provides that an electric public utility subject to
8 rate regulation shall be required to establish and maintain one
9 or more community solar garden facilities, consisting of not
10 less than five subscribers to each facility, of which no single
11 subscriber has more than a 40 percent interest in the facility.
12 The bill states that a community solar garden facility may be
13 owned by the utility or by any other entity or organization,
14 including a subscriber organization, that contracts to sell the
15 output from the community solar garden facility to the utility.

16 The bill requires a community solar garden facility to
17 be located within the utility's service area, and requires
18 subscribers to be retail customers of the utility located in
19 the same county or a county contiguous to where the facility
20 is located. Each subscription is required to be sized to
21 represent at least 200 watts of the community solar garden
22 facility's generating capacity and to supply, when combined
23 with other distributed generation resources serving the
24 premises, no more than 120 percent of the average annual
25 consumption of electricity by each subscriber at the premises
26 to which the subscription is attached. The bill provides that
27 rates applicable to facilities shall either be the same rates
28 applicable to alternate energy production facilities pursuant
29 to Code section 476.43, or an alternative rate established
30 according to a methodology specified in the bill. The bill
31 provides that a subscriber's portion of the electricity
32 purchased shall be provided as a credit on the subscriber's
33 billing, that a utility shall not be required to purchase an
34 amount of electricity from one or more community solar garden
35 facilities in an amount exceeding 4 percent of its average

1 annual electricity sales, and that the community solar garden
2 requirements are in addition to, and not in lieu of, alternate
3 energy purchase and ownership requirements specified in Code
4 section 476.44.

5 The bill requires a utility subject to the bill's provisions
6 to submit a community solar garden program plan to the
7 Iowa utilities board by September 30, 2014, incorporating
8 specified components. The bill provides that the plan shall
9 be implemented within 90 days following the date of approval,
10 and that within 180 days following the date of approval, the
11 utility shall begin crediting subscriber accounts for each
12 community solar garden facility within its service area. The
13 utility is required to file an updated plan on an annual
14 basis summarizing the operation and status of its community
15 solar garden program and detailing the amount of electricity
16 generated by facilities and credited to subscribers.

17 The bill additionally includes provisions regarding solar
18 interconnection agreements in general, and alternative tariff
19 rates applicable to them. The bill provides that a public
20 utility entering into a solar energy interconnection agreement
21 may apply to the board for approval of an alternative tariff
22 rate that compensates customers through a billing credit
23 mechanism for the value to the utility, its customers, and
24 society for operating such devices interconnected to the
25 utility system and operated by customers primarily for meeting
26 their own energy needs. The bill specifies criteria which
27 an alternative tariff rate is required to conform to, and
28 creates a solar value methodology for utilization by public
29 utilities in developing and applying for the alternative tariff
30 rate. The bill provides that applications for an alternative
31 rate shall be subject to the rate approval provisions of
32 Code section 476.6, and that the utility shall enter into an
33 interconnection agreement with an owner of a solar photovoltaic
34 device receiving the alternative rate for a term of at least 20
35 years, unless a shorter term is agreed to by the parties. The

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1 board is directed to develop standard interconnection agreement
2 forms for utilization by the utility and the owner, which are
3 also applicable to interconnection with community solar garden
4 facilities. The bill provides that the utility must provide
5 the customer with the meter and any other equipment needed to
6 provide service pursuant to the interconnection agreement.