

AMENDED IN SENATE JUNE 3, 1998
AMENDED IN ASSEMBLY MARCH 9, 1998

CALIFORNIA LEGISLATURE—1997–98 REGULAR SESSION

ASSEMBLY BILL

No. 1755

Introduced by Assembly Members Keeley and Takasugi

February 4, 1998

An act to amend Section 2827 of the Public Utilities Code, and to add Section 73 to the Revenue and Taxation Code, relating to solar energy.

LEGISLATIVE COUNSEL'S DIGEST

AB 1755, as amended, Keeley. ~~Net energy metering: electricity~~ *Solar and wind turbine energy systems: net energy metering.*

(1) Existing law requires every electric utility in the state, including a privately owned or publicly owned public utility, municipally owned utility, and electrical cooperative that offers residential service, whether or not the entity is subject to the jurisdiction of the Public Utilities Commission, to develop a standard contract or tariff providing for net energy metering to be available to eligible customer-generators, in accordance with specified restrictions. Existing law defines "net energy metering" to mean using a single, nondemand, non-time-differentiated meter to measure the difference between the electricity supplied by a utility and the electricity generated by an eligible customer-generator. Existing law defines "eligible customer-generator" to mean a residential

customer of an electric utility, including specified entities, who owns and operates a solar electrical generating facility with a capacity of not more than 10 kilowatts that is located on the customer's premises, operates in parallel with the utility's transmission and distribution facilities, and is intended primarily to offset part or all of the customer's own electrical requirements.

This bill would require every electric service provider, as defined, to develop a standard contract and make such a contract available to customer-generators, as prescribed. The bill would modify the definitions of net energy metering and eligible customer-generator, as specified. The bill would require net energy metering to be accomplished, as specified.

(2) Former statutory property tax law, enacted pursuant to the authority granted to the Legislature pursuant to paragraph (1) of subdivision (c) of Section 2 of Article XIII A of the California Constitution, generally provided that the term "newly constructed" as used in the California Constitution does not include the construction or addition of any active solar energy system, as defined. The former statutory provisions specified related matters pertaining to active solar energy systems subject to the exclusion. The former provisions applied only to the lien dates for fiscal years 1981-82 to 1993-94, inclusive, and were repealed as of January 1, 1995.

This bill would reinstate those provisions, without substantive change, to apply to ~~property tax lien dates commencing with the 1998-99 fiscal year~~ *qualifying construction completed on or after January 1, 1998. The bill would specify that it applies with respect to property tax assessments attaching as a lien on or after January 1, 1998.* By requiring local taxing authorities to perform duties with regard to the reenactment of the active solar energy system exclusion, the bill would impose a state-mandated local program.

(3) The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.



This bill would provide that no reimbursement is required by this act for a specified reason.

Vote: majority. Appropriation: no. Fiscal committee: yes. State-mandated local program: yes.

The people of the State of California do enact as follows:

1 SECTION 1. Section 2827 of the Public Utilities Code
2 is amended to read:

3 2827. (a) (1) The Legislature finds and declares that
4 a program to provide net energy metering for eligible
5 customer-generators is one way to encourage private
6 investment in renewable energy resources, stimulate
7 in-state economic growth, enhance the continued
8 diversification of California's energy resource mix, and
9 reduce interconnection and administrative costs for
10 electricity suppliers.

11 (2) ~~Electric~~ *As used in this section, "electric service*
12 *provider" means an electric corporation, as defined in*
13 *Section 218, a local publicly owned electric utility, as*
14 *defined in Section 9604, or an electrical cooperative, as*
15 *defined in Section 2776. "Electric service provider" also*
16 *means an entity that offers electrical service to residential*
17 *and small commercial customers, as defined in Section*
18 *394, if that entity offers net energy metering. Any entity*
19 *that offers net electrical metering to residential and small*
20 *commercial customers shall comply with this section.*

21 (b) "Eligible customer-generator" means a customer
22 of an electric service provider, who uses a solar or a wind
23 turbine electrical generating facility, or a ~~hybird~~ *hybrid*
24 system of both, with a capacity of not more than 10
25 kilowatts that is located on the customer's premises, is
26 interconnected and operates in parallel with the electric
27 grid, and is intended primarily to offset part or all of the
28 customer's own electrical requirements.

29 (c) "Net energy metering" means measuring the
30 difference between the electricity supplied through the
31 electric grid and the electricity generated by an eligible
32 customer-generator and fed back to the electric grid ~~on~~
33 ~~an annual basis~~ *over a 12-month period as described in*



1 subdivision (f). Net energy metering shall be
2 accomplished using a single meter capable of registering
3 the flow of electricity in two directions. An additional
4 meter or meters to monitor the flow of electricity in each
5 direction may be installed with the consent of the
6 customer-generator, at the expense of the electric service
7 provider, and the additional metering shall be used only
8 to provide the information necessary to accurately bill or
9 credit the customer-generator pursuant to the provisions
10 of subdivision (f), or to collect solar *or wind* electric
11 generating system performance information for research
12 purposes. *If the existing electrical meter of an eligible*
13 *customer-generator is not capable of measuring the flow*
14 *of electricity in two directions, the customer-generator*
15 *shall be responsible for the expense of purchasing and*
16 *installing a meter that is able to measure electricity flow*
17 *in two directions.* If an additional meter or meters are
18 installed, the net energy metering calculation shall yield
19 a result identical to that of a single meter. *An eligible*
20 *customer-generator who already owns an existing solar or*
21 *wind turbine electrical generating facility, or a hybrid*
22 *system of both, is eligible to receive net energy metering*
23 *service in accordance with this section.*

24 (d) (1) Every electric service provider shall develop
25 a standard contract or tariff providing for net energy
26 metering, and shall make this contract available to
27 eligible customer-generators, upon request, on a
28 first-come, first-served basis until the time that the total
29 rated generating capacity used by eligible
30 customer-generators equals one-tenth of 1 percent of the
31 electric service provider's aggregate customer peak
32 demand.

33 (2) Notwithstanding paragraph (1), an electric
34 service provider is not obligated to provide net *energy*
35 metering to additional customer-generators in its service
36 area when the combined total peak demand of all
37 customer-generators served by all the electric service
38 providers in that service area furnishing net *energy*
39 metering to eligible customer-generators equals



1 one-tenth of 1 percent of the aggregate customer peak
2 demand of those electric service providers.

3 (e) Each net energy metering contract or tariff shall
4 be identical, with respect to rate structure, all retail rate
5 components, and any monthly charges, to the contract or
6 tariff to which the same customer would be assigned if
7 such customer was not an eligible customer-generator.
8 The charges for all retail rate components for eligible
9 customer-generators shall be based exclusively on the
10 customer-generator's net kilowatthour consumption
11 *over a 12-month period*, without regard to the
12 customer-generator's choice of electric service provider,
13 in accordance with subdivision (f). Any new or additional
14 demand charge, standby charge, customer charge,
15 minimum monthly charge, interconnection charge, or
16 other charge that would increase an eligible
17 customer-generator's costs beyond those of other
18 customers in the rate class to which the eligible
19 customer-generator would otherwise be assigned are
20 contrary to the intent of this legislation, and shall not form
21 a part of net energy metering contracts or tariffs.

22 (f) The net energy metering calculation shall be made
23 by measuring the difference between the electricity
24 supplied to the eligible customer-generator and the
25 electricity generated by the eligible customer-generator
26 and fed back to the electric grid over ~~an annual~~ a
27 *12-month* period. The following rules shall apply to the
28 annualized net metering calculation:

29 ~~(1) The electric service provider shall measure the net~~
30 ~~energy produced or consumed during a regular billing~~
31 ~~period, in accordance with normal metering practices.~~

32 ~~(2) Where the electricity supplied by the electric~~
33 ~~service provider exceeds the electricity generated by the~~
34 ~~customer-generator during the billing period, the~~
35 ~~customer-generator shall be billed for the net energy~~
36 ~~supplied in accordance with subdivision (e).~~

37 ~~(3) Where the electricity generated by the~~
38 ~~customer-generator exceeds the electricity supplied by~~
39 ~~the electric service provider, the electric service provider~~
40 ~~shall credit the customer-generator for the excess~~



1 kilowatthours generated in accordance with subdivision
2 (e). This kilowatthour credit shall appear on the next
3 regular bill.

4 (4) At the end of each annual period, the electric
5 service provider shall retain any remaining unused credit
6 for the excess kilowatthours generated during the prior
7 annual period and the customer-generator shall not be
8 owed any compensation for that unused credit unless the
9 electric service provider enters into a purchase
10 agreement with the customer-generator for any
11 remaining unused credit. When a customer-generator
12 terminates their customer relationship with their electric
13 service provider, the customer-generator shall not be
14 owed any compensation for unused credit.

15 (1) *The eligible customer-generator shall, at the end*
16 *of each 12-month period following the establishment of a*
17 *net energy metering contract or tariff with an electric*
18 *service provider, and at each anniversary date thereafter,*
19 *be billed for electricity used during that period. The*
20 *electric service provider shall determine if the eligible*
21 *customer-generator was a net consumer or a net*
22 *producer of electricity during that period.*

23 (2) *At the end of each 12-month period, where the*
24 *electricity supplied during the period by the electric*
25 *service provider exceeds the electricity generated by the*
26 *eligible customer-generator during that same period, the*
27 *eligible customer-generator is a net electricity consumer*
28 *and the electric service provider shall be owed*
29 *compensation for the eligible customer-generator's net*
30 *kilowatthour consumption over that same period, as*
31 *calculated based on the provisions set forth in subdivision*
32 *(e).*

33 (3) *At the end of each 12-month period, where the*
34 *electricity generated by the eligible customer-generator*
35 *during the 12-month period exceeds the electricity*
36 *supplied by the electric service provider during that*
37 *same period, the eligible customer-generator is a net*
38 *electricity producer and the electric service provider*
39 *shall retain any excess kilowatthours generated during*
40 *the prior 12-month period. The eligible*



1 *customer-generator shall not be owed any compensation*
2 *for those excess kilowatthours unless the electric service*
3 *provider enters into a purchase agreement with the*
4 *eligible customer-generator for those excess*
5 *kilowatthours.*

6 (4) *The electric service provider shall provide every*
7 *eligible customer-generator with electricity*
8 *consumption information on each regular bill. That*
9 *information shall include the current monetary balance*
10 *owed the electric service provider for net electricity*
11 *consumed since the last 12-month period ended. Eligible*
12 *customer-generators shall be sent this information not*
13 *less than six times per year.*

14 (5) *If an eligible customer-generator terminates the*
15 *customer relationship with the electric service provider,*
16 *the electric service provider shall reconcile the eligible*
17 *customer-generator's consumption and production of*
18 *electricity during any part of a 12-month period following*
19 *the last reconciliation, according to the requirements set*
20 *forth in this subdivision, except that those requirements*
21 *shall apply only to the months since the most recent*
22 *12-month bill.*

23 (g) A solar or wind turbine electrical generating
24 system, or a ~~hybrid~~ hybrid system of both, used by an
25 eligible customer-generator shall meet all applicable
26 safety and performance standards established by the
27 National Electrical Code, the Institute of Electrical and
28 Electronics Engineers, and accredited testing
29 laboratories such as Underwriters Laboratories and,
30 where applicable, rules of the commission regarding
31 safety and reliability. A customer-generator whose solar
32 or wind turbine electrical generating system, or a ~~hybrid~~
33 hybrid system of both, meets those standards and rules
34 shall not be required to install additional controls,
35 perform or pay for additional tests, or purchase additional
36 liability insurance.

37 SEC. 2. Section 73 is added to the Revenue and
38 Taxation Code, to read:

39 73. (a) Pursuant to the authority granted to the
40 Legislature pursuant to paragraph (1) of subdivision (c)



1 of Section 2 of Article XIII A of the California
2 Constitution, the term “newly constructed,” as used in
3 subdivision (a) of Section 2 of Article XIII A of the
4 California Constitution, does not include the construction
5 or addition of any active solar energy system, as defined
6 in subdivision (b).

7 (b) (1) “Active solar energy system” means a system
8 that uses solar devices, which are thermally isolated from
9 living space or any other area where the energy is used,
10 to provide for the collection, storage, or distribution of
11 solar energy.

12 (2) “Active solar energy system” does not include solar
13 swimming pool heaters or hot tub heaters.

14 (3) Active solar energy systems may be used for any of
15 the following:

16 (A) Domestic, recreational, therapeutic, or service
17 water heating.

18 (B) Space conditioning.

19 (C) Production of electricity.

20 (D) Process heat.

21 (E) Solar mechanical energy.

22 (c) (1) An active solar energy system that uses solar
23 energy in the production of electricity includes storage
24 devices, power conditioning equipment, transfer
25 equipment, and parts related to the functioning of those
26 items. In general, the use of solar energy in the
27 production of electricity involves the transformation of
28 sunlight into electricity through the use of devices such
29 as solar cells or other collectors. However, an active solar
30 energy system used in the production of electricity
31 includes only equipment used up to, but not including,
32 the stage of the transmission or use of the electricity.

33 (2) An active solar energy system that uses solar
34 energy in the production of electricity also includes pipes
35 and ducts that are used exclusively to carry energy
36 derived from solar energy. Pipes and ducts that are used
37 to carry both energy derived from solar energy and from
38 energy derived from other sources are active solar energy
39 system property only to the extent of 75 percent of their
40 full cash value.



1 (3) An active solar energy system that uses solar
2 energy in the production of electricity does not include
3 auxiliary equipment, such as furnaces and hot water
4 heaters, that use a source of power other than solar
5 energy to provide usable energy. An active solar energy
6 system that uses solar energy in the production of
7 electricity does include equipment, such as ducts and hot
8 water tanks, that is utilized by both auxiliary equipment
9 and solar energy equipment, that is, dual use equipment.
10 That equipment is active solar energy system property
11 only to the extent of 75 percent of its full cash value.

12 ~~(d) This section shall apply to lien dates commencing~~
13 ~~in the 1998-99 fiscal year. For purposes of supplemental~~
14 ~~assessment, this section shall apply only to qualifying~~
15 ~~construction completed on or after January 1, 1998.~~

16 *(d) This section applies only to qualifying construction*
17 *completed on or after January 1, 1998. This section applies*
18 *with respect to property tax assessments attaching as a*
19 *lien on or after January 1, 1998.*

20 SEC. 3. No reimbursement is required by this act
21 pursuant to Section 6 of Article XIII B of the California
22 Constitution because the duties imposed on a local
23 agency or school district by this act were expressly
24 included in a ballot measure approved by the voters in a
25 statewide election, within the meaning of Section 17556
26 of the Government Code.

27 Notwithstanding Section 17580 of the Government
28 Code, unless otherwise specified, the provisions of this act
29 shall become operative on the same date that the act
30 takes effect pursuant to the California Constitution.

