

Introduced by Senator Aanestad

February 25, 2009

An act to amend Section 2827 of the Public Utilities Code, relating to energy.

LEGISLATIVE COUNSEL'S DIGEST

SB 366, as introduced, Aanestad. Energy: renewable energy: biomass.

The Public Utilities Act imposes various duties and responsibilities on the Public Utilities Commission with respect to the purchase of electricity. Existing law requires every electric distribution utility or cooperative to develop a standard contract or tariff providing for net energy metering, and to make this contract available to eligible customer-generators, as defined, upon request. Existing law requires every electric service provider, upon request, to make available to eligible customer-generators, contracts for net energy metering subject to specified limitations on the number of contracts. Existing law limits eligible customer-generators to residential, small commercial, commercial, industrial, or agricultural customers of an electric service provider that use a solar or a wind turbine electrical generating facility, or a hybrid solar and wind turbine generating facility. The commission is responsible for enforcing these provisions.

This bill would change the definition of eligible customer-generators to include residential, small commercial, commercial, industrial, or agricultural customers of an electric service provider that use biomass electricity generating facilities.

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

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

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

2827. (a) The Legislature finds and declares that a program to provide net energy metering, co-energy metering, and wind energy co-metering for eligible customer-generators is one way to encourage substantial private investment in renewable energy resources, stimulate in-state economic growth, reduce demand for electricity during peak consumption periods, help stabilize California's energy supply infrastructure, enhance the continued diversification of California's energy resource mix, and reduce interconnection and administrative costs for electricity suppliers.

(b) As used in this section, the following terms have the following meanings:

(1) "Co-energy metering" means a program that is the same in all other respects as a net energy metering program, except that the local publicly owned electric utility has elected to apply a generation-to-generation energy and time-of-use credit formula as provided in subdivision (i).

(2) "Electrical cooperative" means an electrical cooperative as defined in Section 2776.

(3) "Electric distribution utility or cooperative" means an electrical corporation, a local publicly owned electric utility, or an electrical cooperative, or any other entity, except an electric service provider, that offers electrical service. This section shall not apply to a local publicly owned electric utility that serves more than 750,000 customers and that also conveys water to its customers.

(4) "Eligible customer-generator" means a residential, small commercial customer as defined in subdivision (h) of Section 331, commercial, industrial, or agricultural customer of an electricity distribution utility or cooperative, who uses a solar, *biomass*, or a wind turbine electrical generating facility, or a hybrid *solar-wind* system ~~of both~~, with a capacity of not more than one megawatt that is located on the customer's owned, leased, or rented premises, is interconnected and operates in parallel with the electric grid, and is intended primarily to offset part or all of the customer's own electrical requirements.

(5) "Net energy metering" means measuring the difference between the electricity supplied through the electric grid and the

electricity generated by an eligible customer-generator and fed back to the electric grid over a 12-month period as described in subdivision (h). An eligible customer-generator who already owns an existing solar, *biomass*, or wind turbine electrical generating facility, or a hybrid *solar-wind* system ~~of both~~, is eligible to receive net energy metering service in accordance with this section.

(6) “Ratemaking authority” means, for an electrical corporation, electrical cooperative, or electric service provider, the commission, and for a local publicly owned electric utility, the local elected body responsible for setting the rates of the local publicly owned utility.

(7) “Wind energy co-metering” means any wind energy project greater than 50 kilowatts, but not exceeding one megawatt, where the difference between the electricity supplied through the electric grid and the electricity generated by an eligible customer-generator and fed back to the electric grid over a 12-month period is as described in subdivision (h). Wind energy co-metering shall be accomplished pursuant to Section 2827.8.

(c) (1) Every electricity distribution utility or cooperative shall develop a standard contract or tariff providing for net energy metering, and shall make this standard contract or tariff available to eligible customer-generators, upon request, on a first-come-first-served basis until the time that the total rated generating capacity used by eligible customer-generators exceeds 2.5 percent of the electricity distribution utility or cooperative’s aggregate customer peak demand. Net energy metering shall be accomplished using a single meter capable of registering the flow of electricity in two directions. An additional meter or meters to monitor the flow of electricity in each direction may be installed with the consent of the customer-generator, at the expense of the electricity distribution utility or cooperative, and the additional metering shall be used only to provide the information necessary to accurately bill or credit the customer-generator pursuant to subdivision (h), or to collect solar, *biomass*, or wind ~~electric~~ *electrical* generating system performance information for research purposes. If the existing electrical meter of an eligible customer-generator is not capable of measuring the flow of electricity in two directions, the customer-generator shall be responsible for all expenses involved in purchasing and installing a meter that is able to measure electricity flow in two directions.

1 If an additional meter or meters are installed, the net energy
2 metering calculation shall yield a result identical to that of a single
3 meter.

4 (2) (A) On an annual basis, beginning in 2003, every electricity
5 distribution utility or cooperative shall make available to the
6 ratemaking authority information on the total rated generating
7 capacity used by eligible customer-generators that are customers
8 of that provider in the provider's service area.

9 (B) An electric service provider operating pursuant to Section
10 394 shall make available to the ratemaking authority the
11 information required by this paragraph for each eligible
12 customer-generator that is their customer for each service area of
13 an ~~electric~~ *electrical* corporation, local publicly owned electric
14 utility, or electrical cooperative, in which the customer has net
15 energy metering.

16 (C) The ratemaking authority shall develop a process for making
17 the information required by this paragraph available to electricity
18 distribution utilities and cooperatives, and for using that
19 information to determine when, pursuant to paragraphs (1) and
20 (3), an electricity distribution utility or cooperative is not obligated
21 to provide net energy metering to additional customer-generators
22 in its service area.

23 (3) An electricity distribution utility or cooperative is not
24 obligated to provide net energy metering to additional
25 customer-generators in its service area when the combined total
26 peak demand of all customer-generators served by all the electricity
27 distribution utilities or cooperatives in that service area furnishing
28 net energy metering to eligible customer-generators exceeds 2.5
29 percent of the aggregate customer peak demand of those electricity
30 distribution utilities or cooperatives.

31 (4) By January 1, 2010, the commission, in consultation with
32 the Energy Commission, shall submit a report to the Governor and
33 the Legislature on the costs and benefits of net energy metering,
34 wind energy co-metering, and co-energy metering to participating
35 customers and nonparticipating customers and with options to
36 replace the economic costs and benefits of net energy metering,
37 wind energy co-metering, and co-energy metering with a
38 mechanism that more equitably balances the interests of
39 participating and nonparticipating customers, and that incorporates

1 the findings of the report on economic and environmental costs
2 and benefits of net metering required by subdivision (n).

3 (d) Every electricity distribution utility or cooperative shall
4 make all necessary forms and contracts for net energy metering
5 service available for download from the Internet.

6 (e) (1) Every electricity distribution utility or cooperative shall
7 ensure that requests for establishment of net energy metering are
8 processed in a time period not exceeding that for similarly situated
9 customers requesting new electric service, but not to exceed 30
10 working days from the date it receives a completed application
11 form for net energy metering service, including a signed
12 interconnection agreement from an eligible customer-generator
13 and the electric inspection clearance from the governmental
14 authority having jurisdiction.

15 (2) Every electricity distribution utility or cooperative shall
16 ensure that requests for an interconnection agreement from an
17 eligible customer-generator are processed in a time period not to
18 exceed 30 working days from the date it receives a completed
19 application form from the eligible customer-generator for an
20 interconnection agreement.

21 (3) If an electricity distribution utility or cooperative is unable
22 to process a request within the allowable timeframe pursuant to
23 paragraph (1) or (2), it shall notify the eligible customer-generator
24 and the ratemaking authority of the reason for its inability to
25 process the request and the expected completion date.

26 (f) (1) If a customer participates in direct transactions pursuant
27 to paragraph (1) of subdivision (b) of Section 365 with an electric
28 service provider that does not provide distribution service for the
29 direct transactions, the electricity distribution utility or cooperative
30 that provides distribution service for an eligible customer-generator
31 is not obligated to provide net energy metering to the customer.

32 (2) If a customer participates in direct transactions pursuant to
33 paragraph (1) of subdivision (b) of Section 365 with an electric
34 service provider, and the customer is an eligible
35 customer-generator, the electricity distribution utility or cooperative
36 that provides distribution service for the direct transactions may
37 recover from the customer's electric service provider the
38 incremental costs of metering and billing service related to net
39 energy metering in an amount set by the ratemaking authority.

1 (g) Except for the time-variant kilowatthour pricing portion of
2 any tariff adopted by the commission pursuant to paragraph (4) of
3 subdivision (a) of Section 2851, each net energy metering contract
4 or tariff shall be identical, with respect to rate structure, all retail
5 rate components, and any monthly charges, to the contract or tariff
6 to which the same customer would be assigned if the customer did
7 not use an eligible solar, *biomass*, or wind electrical generating
8 facility, except that eligible customer-generators shall not be
9 assessed standby charges on the electrical generating capacity or
10 the kilowatthour production of an eligible solar, *biomass*, or wind
11 electrical generating facility. The charges for all retail rate
12 components for eligible customer-generators shall be based
13 exclusively on the customer-generator's net kilowatthour
14 consumption over a 12-month period, without regard to the
15 customer-generator's choice as to whom it purchases electricity
16 that is not self-generated. Any new or additional demand charge,
17 standby charge, customer charge, minimum monthly charge,
18 interconnection charge, or any other charge that would increase
19 an eligible customer-generator's costs beyond those of other
20 customers who are not eligible customer-generators in the rate
21 class to which the eligible customer-generator would otherwise
22 be assigned if the customer did not own, lease, rent, or otherwise
23 operate an eligible solar, *biomass*, or wind electrical generating
24 facility are contrary to the intent of this section, and shall not form
25 a part of net energy metering contracts or tariffs.

26 (h) For eligible residential and small commercial
27 customer-generators, the net energy metering calculation shall be
28 made by measuring the difference between the electricity supplied
29 to the eligible customer-generator and the electricity generated by
30 the eligible customer-generator and fed back to the electric grid
31 over a 12-month period. The following rules shall apply to the
32 annualized net metering calculation:

33 (1) The eligible residential or small commercial
34 customer-generator shall, at the end of each 12-month period
35 following the date of final interconnection of the eligible
36 customer-generator's system with an electricity distribution utility
37 or cooperative, and at each anniversary date thereafter, be billed
38 for electricity used during that 12-month period. The electricity
39 distribution utility or cooperative shall determine if the eligible

residential or small commercial customer-generator was a net consumer or a net producer of electricity during that period.

(2) At the end of each 12-month period, where the electricity supplied during the period by the electricity distribution utility or cooperative exceeds the electricity generated by the eligible residential or small commercial customer-generator during that same period, the eligible residential or small commercial customer-generator is a net electricity consumer and the electricity distribution utility or cooperative shall be owed compensation for the eligible customer-generator's net kilowatthour consumption over that 12-month period. The compensation owed for the eligible residential or small commercial customer-generator's consumption shall be calculated as follows:

(A) For all eligible customer-generators taking service under contracts or tariffs employing "baseline" and "over baseline" rates or charges, any net monthly consumption of electricity shall be calculated according to the terms of the contract or tariff to which the same customer would be assigned to, or be eligible for, if the customer was not an eligible customer-generator. If those same customer-generators are net generators over a billing period, the net kilowatthours generated shall be valued at the same price per kilowatthour as the electricity distribution utility or cooperative would charge for the baseline quantity of electricity during that billing period, and if the number of kilowatthours generated exceeds the baseline quantity, the excess shall be valued at the same price per kilowatthour as the electricity distribution utility or cooperative would charge for electricity over the baseline quantity during that billing period.

(B) For all eligible customer-generators taking service under contracts or tariffs employing "time-of-use" rates or charges, any net monthly consumption of electricity shall be calculated according to the terms of the contract or tariff to which the same customer would be assigned to, or be eligible for, if the customer was not an eligible customer-generator. When those same customer-generators are net generators during any discrete time-of-use period, the net kilowatthours produced shall be valued at the same price per kilowatthour as the electricity distribution utility or cooperative would charge for retail kilowatthour sales during that same "time-of-use" period. If the eligible customer-generator's "time-of-use" electrical meter is unable to

1 measure the flow of electricity in two directions, ~~subparagraph~~
2 ~~(A) of paragraph (1) of subdivision (c) shall apply.~~

3 (C) For all eligible residential and small commercial
4 customer-generators and for each billing period, the net balance
5 of moneys owed to the electricity distribution utility or cooperative
6 for net consumption of electricity or credits owed to the eligible
7 customer-generator for net generation of electricity shall be carried
8 forward as a monetary value until the end of each 12-month period.
9 For all eligible commercial, industrial, and agricultural
10 customer-generators, the net balance of moneys owed shall be paid
11 in accordance with the electricity distribution utility or
12 cooperative's normal billing cycle, except that if the eligible
13 commercial, industrial, or agricultural customer-generator is a net
14 electricity producer over a normal billing cycle, any excess
15 kilowatthours generated during the billing cycle shall be carried
16 over to the following billing period as a monetary value, calculated
17 according to the procedures set forth in this section, and appear as
18 a credit on the eligible customer-generator's account, until the end
19 of the annual period when paragraph (3) shall apply.

20 (3) At the end of each 12-month period, where the electricity
21 generated by the eligible customer-generator during the 12-month
22 period exceeds the electricity supplied by the electricity distribution
23 utility or cooperative during that same period, the eligible
24 customer-generator is a net electricity producer and the electricity
25 distribution utility or cooperative shall retain any excess
26 kilowatthours generated during the prior 12-month period. The
27 eligible customer-generator shall not be owed any compensation
28 for those excess kilowatthours unless the electricity distribution
29 utility or cooperative enters into a purchase agreement with the
30 eligible customer-generator for those excess kilowatthours.

31 (4) The electricity distribution utility or cooperative shall provide
32 every eligible residential or small commercial customer-generator
33 with net electricity consumption information with each regular
34 bill. That information shall include the current monetary balance
35 owed the electricity distribution utility or cooperative for net
36 electricity consumed, or the current amount of excess electricity
37 produced, since the last 12-month period ended. Notwithstanding
38 this subdivision, an electricity distribution utility or cooperative
39 shall permit that customer to pay monthly for net energy consumed.

1 (5) If an eligible residential or small commercial
2 customer-generator terminates the customer relationship with the
3 electricity distribution utility or cooperative, the electricity
4 distribution utility or cooperative shall reconcile the eligible
5 customer-generator's consumption and production of electricity
6 during any part of a 12-month period following the last
7 reconciliation, according to the requirements set forth in this
8 subdivision, except that those requirements shall apply only to the
9 months since the most recent 12-month bill.

10 (6) If an electric service provider or electricity distribution utility
11 or cooperative providing net energy metering to a residential or
12 small commercial customer-generator ceases providing that electric
13 service to that customer during any 12-month period, and the
14 customer-generator enters into a new net energy metering contract
15 or tariff with a new electric service provider or electricity
16 distribution utility or cooperative, the 12-month period, with respect
17 to that new electric service provider or electricity distribution utility
18 or cooperative, shall commence on the date on which the new
19 electric service provider or electricity distribution utility or
20 cooperative first supplies electric service to the customer-generator.

21 (i) Notwithstanding any other provisions of this section, the
22 following provisions shall apply to an eligible customer-generator
23 with a capacity of more than 10 kilowatts, but not exceeding one
24 megawatt, that receives electric service from a local publicly owned
25 electric utility that has elected to utilize a co-energy metering
26 program unless the local publicly owned electric utility chooses
27 to provide service for eligible customer-generators with a capacity
28 of more than 10 kilowatts in accordance with subdivisions (g) and
29 (h):

30 (1) The eligible customer-generator shall be required to utilize
31 a meter, or multiple meters, capable of separately measuring
32 electricity flow in both directions. All meters shall provide
33 "time-of-use" measurements of electricity flow, and the customer
34 shall take service on a time-of-use rate schedule. If the existing
35 meter of the eligible customer-generator is not a time-of-use meter
36 or is not capable of measuring total flow of energy in both
37 directions, the eligible customer-generator shall be responsible for
38 all expenses involved in purchasing and installing a meter that is
39 both time-of-use and able to measure total electricity flow in both
40 directions. This subdivision shall not restrict the ability of an

1 eligible customer-generator to utilize any economic incentives
2 provided by a government agency or an electricity distribution
3 utility or cooperative to reduce its costs for purchasing and
4 installing a time-of-use meter.

5 (2) The consumption of electricity from the local publicly owned
6 electric utility shall result in a cost to the eligible
7 customer-generator to be priced in accordance with the standard
8 rate charged to the eligible customer-generator in accordance with
9 the rate structure to which the customer would be assigned if the
10 customer did not use an eligible solar, *biomass*, or wind electrical
11 generating facility. The generation of electricity provided to the
12 local publicly owned electric utility shall result in a credit to the
13 eligible customer-generator and shall be priced in accordance with
14 the generation component, established under the applicable
15 structure to which the customer would be assigned if the customer
16 did not use an eligible solar, *biomass*, or wind electrical generating
17 facility.

18 (3) All costs and credits shall be shown on the eligible
19 customer-generator's bill for each billing period. In any months
20 in which the eligible customer-generator has been a net consumer
21 of electricity calculated on the basis of value determined pursuant
22 to paragraph (2), the customer-generator shall owe to the local
23 publicly owned electric utility the balance of electricity costs and
24 credits during that billing period. In any billing period in which
25 the eligible customer-generator has been a net producer of
26 electricity calculated on the basis of value determined pursuant to
27 paragraph (2), the local publicly owned electric utility shall owe
28 to the eligible customer-generator the balance of electricity costs
29 and credits during that billing period. Any net credit to the eligible
30 customer-generator of electricity costs may be carried forward to
31 subsequent billing periods, provided that a local publicly owned
32 electric utility may choose to carry the credit over as a kilowatthour
33 credit consistent with the provisions of any applicable contract or
34 tariff, including any differences attributable to the time of
35 generation of the electricity. At the end of each 12-month period,
36 the local publicly owned electric utility may reduce any net credit
37 due to the eligible customer-generator to zero.

38 (j) A solar, *biomass*, or wind turbine electrical generating
39 system, or a hybrid *solar-wind* system ~~of both~~, used by an eligible
40 customer-generator shall meet all applicable safety and

performance standards established by the National Electrical Code, the Institute of Electrical and Electronics Engineers, and accredited testing laboratories, including Underwriters Laboratories and, where applicable, rules of the commission regarding safety and reliability. A customer-generator whose solar, *biomass*, or wind turbine electrical generating system, or a hybrid *solar-wind* system ~~of both~~, meets those standards and rules shall not be required to install additional controls, perform or pay for additional tests, or purchase additional liability insurance.

(k) If the commission determines that there are cost or revenue obligations for an electric corporation, as defined in Section 218, that may not be recovered from customer-generators acting pursuant to this section, those obligations shall remain within the customer class from which any shortfall occurred and may not be shifted to any other customer class. Net energy metering and co-energy metering customers shall not be exempt from the public goods charges imposed pursuant to Article 7 (commencing with Section 381), Article 8 (commencing with Section 385), or Article 15 (commencing with Section 399) of Chapter 2.3 of Part 1. In its report to the Legislature, the commission shall examine different methods to ensure that the public goods charges remain nonbypassable.

(l) A net energy metering, co-energy metering, or wind energy co-metering customer shall reimburse the Department of Water Resources for all charges that would otherwise be imposed on the customer by the commission to recover bond-related costs pursuant to an agreement between the commission and the Department of Water Resources pursuant to Section 80110 of the Water Code, as well as the costs of the department equal to the share of the department's estimated net unavoidable power purchase contract costs attributable to the customer. The commission shall incorporate the determination into an existing proceeding before the commission, and shall ensure that the charges are nonbypassable. Until the commission has made a determination regarding the nonbypassable charges, net energy metering, co-energy metering, and wind energy co-metering shall continue under the same rules, procedures, terms, and conditions as were applicable on December 31, 2002.

(m) In implementing the requirements of subdivisions (k) and (l), a customer-generator shall not be required to replace its existing

1 meter except as set forth in ~~subparagraph (A)~~ of paragraph (1) of
2 subdivision (c), nor shall the electricity distribution utility or
3 cooperative require additional measurement of usage beyond that
4 which is necessary for customers in the same rate class as the
5 eligible customer-generator.
6 (n) It is the intent of the Legislature that the Treasurer
7 incorporate net energy metering, co-energy metering, and wind
8 energy co-metering projects undertaken pursuant to this section
9 as sustainable building methods or distributive energy technologies
10 for purposes of evaluating low-income housing projects.