

AMENDED IN ASSEMBLY MARCH 13, 2008

CALIFORNIA LEGISLATURE—2007—08 REGULAR SESSION

ASSEMBLY BILL

No. 1920

Introduced by Assembly Member Huffman
(Coauthors: Assembly Members Laird and Portantino)
(Coauthor: Senator Migden)

February 8, 2008

An act to amend Section 25782 of the Public Resources Code, and to amend Sections 387.5 and 2827 of the Public Utilities Code, relating to energy.

LEGISLATIVE COUNSEL'S DIGEST

AB 1920, as amended, Huffman. ~~Renewable energy~~ *Solar and wind generating* resources: net metering.

(1) The existing Public Utilities Act imposes various duties and responsibilities on the Public Utilities Commission with respect to the purchase of electricity and requires the commission to review and adopt a procurement plan and a renewable energy procurement plan for each electrical corporation pursuant to the California Renewables Portfolio Standard Program. The program requires that a retail seller of electricity, including electrical corporations, community choice aggregators, and electric service providers, but not including local publicly owned electric utilities, purchase a specified minimum percentage of electricity generated by eligible renewable energy resources, as defined, in any given year as a specified percentage of total kilowatthours sold to retail end-use customers each calendar year. Under existing law the governing board of a local publicly owned electric utility is responsible for implementing and enforcing a renewables portfolio standard.

The act defines an “electric service provider” as an entity that offers electrical service to customers within the service territory of an electrical corporation, as defined. Pursuant to the act, an “electric service provider” does not include an electrical corporation or a local publicly owned electric corporation, but does include the unregulated affiliates and subsidiaries of an electrical corporation.

Existing law relative to private energy producers defines an “electric service provider” as an electrical corporation, electrical cooperative, or local publicly owned electric utility, excluding a local publicly owned electric utility that serves more than 750,000 customers and that also conveys water to its customers. Existing law relative to private energy producers requires every electric service provider, upon request, to make available to an eligible customer-generator, as defined, a standard contract or tariff for net energy metering on a first-come-first-served basis until the time that the total rated generating capacity used by eligible customer-generators exceeds a specified amount. Existing law provides that where the electricity generated by the eligible customer-generator exceeds the electricity supplied by the electric service provider during a 12-month period, the eligible customer-generator is a net electricity producer and the electric service provider retains any excess kilowatthours generated and the customer-generator is not owed compensation for those excess kilowatthours unless the electric service provider enters into a purchase agreement with the eligible customer-generator for those excess kilowatthours.

This bill would replace the definition of “electric service provider” in existing law relative to private energy producers with a definition of “~~electric utility or cooperative.~~” ~~The bill would expand the definition of an “eligible customer-generator” to include customers that generate electricity using an eligible renewable energy resource that meets existing sizing, interconnection, and operating requirements for solar and wind generation.~~ *utility.*” The bill would require the ratemaking authority, as defined, for the electric utility ~~or cooperative~~ to adopt, by July 1, 2009, a net surplus electricity compensation rate to compensate a net surplus customer-generator, as defined, for net surplus electricity, as defined, generated by an eligible customer-generator and delivered to the grid that is in excess of the amount of electricity that is delivered from the grid to the eligible customer-generator. The bill would require the electric utility ~~or cooperative~~ to offer a standard contract or tariff to eligible customer-generators that includes this rate. *The net surplus*

electricity compensation rate would be applicable to any eligible customer-generator that affirmatively elects to receive net surplus electricity compensation. The bill would, for an electric utility that is an electrical corporation or electrical cooperative, authorize the commission to adopt requirements for providing notice and the manner by which eligible customer-generators may elect to receive net surplus electricity compensation. The bill would provide that upon adoption of the net surplus electricity compensation rate *and the eligible customer-generator electing to receive net surplus electricity compensation*, any renewable energy credit, as defined, for net surplus electricity belongs to the electric utility ~~or cooperative~~ purchasing the electricity and that net surplus electricity counts toward the electric ~~utility or cooperative's~~ *utility's* renewables portfolio standard purchasing requirements.

Under existing law, a violation of any order, decision, rule, direction, demand, or requirement of the commission is a crime.

Because ~~the~~ this bill would require action by the commission to implement its requirements, a violation of these provisions would impose a state-mandated local program by expanding the definition of a crime.

(2) In a decision, the commission adopted the California Solar Initiative to provide incentives to customer-side photovoltaics and solar thermal electric projects under one megawatt. Existing law requires the commission, in implementing the California Solar Initiative, as defined, to authorize the award of monetary incentives for up to the first megawatt of alternating current generated by a solar energy system, as defined, that meets eligibility criteria established by the State Energy Resources Conservation and Development Commission. The eligibility requirements include a requirement that the solar energy system is intended primarily to offset part or all of the consumer's own electricity demand. Existing law requires the governing body of a local publicly owned electric utility that sells electricity at retail, to adopt, implement, and finance a solar initiative program, for the purpose of investing in, and encouraging the increased installation of, residential and commercial solar energy systems, meeting certain requirements. The eligibility requirements include the requirement that solar energy systems receiving monetary incentives are intended primarily to offset part or all of the consumer's own electricity demand.

This bill would provide that investments for solar energy systems that exceed the electricity demand of a consumer shall be permitted, but only the capacity needed to offset part or all of the electricity demand

of a consumer is eligible for ratepayer funded monetary incentives pursuant to the solar initiative programs.

(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 25782 of the Public Resources Code is
2 amended to read:

3 25782. (a) The commission shall, by January 1, 2008, in
4 consultation with the Public Utilities Commission, local publicly
5 owned electric utilities, and interested members of the public,
6 establish eligibility criteria for solar energy systems receiving
7 ratepayer funded incentives that include all of the following:

8 (1) Design, installation, and electrical output standards or
9 incentives.

10 (2) The solar energy system is intended primarily to offset part
11 or all of the electricity demand of the consumer. Investments for
12 solar energy systems that exceed the electricity demand of the
13 consumer shall be permitted, but only the capacity needed to offset
14 part or all of the electricity demand of the consumer is eligible for
15 ratepayer funded monetary incentives.

16 (3) All components in the solar energy system are new and
17 unused, and have not previously been placed in service in any
18 other location or for any other application.

19 (4) The solar energy system has a warranty of not less than 10
20 years to protect against defects and undue degradation of electrical
21 generation output.

22 (5) The solar energy system is located on the same premises of
23 the end-use consumer where the consumer's own electricity
24 demand is located.

25 (6) The solar energy system is connected to the electrical
26 corporation's electrical distribution system within the state.

1 (7) The solar energy system has meters or other devices in place
2 to monitor and measure the system’s performance and the quantity
3 of electricity generated by the system.

4 (8) The solar energy system is installed in conformance with
5 the manufacturer’s specifications and in compliance with all
6 applicable electrical and building code standards.

7 (b) The commission shall establish conditions on ratepayer
8 funded incentives that require all of the following:

9 (1) Appropriate siting and high quality installation of the solar
10 energy system by developing installation guidelines that maximize
11 the performance of the system and prevent qualified systems from
12 being inefficiently or inappropriately installed. The conditions
13 established by the commission shall not impact housing designs
14 or densities presently authorized by a city, county, or city and
15 county. The goal of this paragraph is to achieve efficient
16 installation of solar energy systems to promote the greatest energy
17 production per ratepayer dollar.

18 (2) Optimal solar energy system performance during periods of
19 peak electricity demand.

20 (3) Appropriate energy efficiency improvements in the new or
21 existing home or commercial structure where the solar energy
22 system is installed.

23 (c) The commission shall set rating standards for equipment,
24 components, and systems to assure reasonable performance and
25 shall develop standards that provide for compliance with the
26 minimum ratings.

27 (d) Upon establishment of eligibility criteria pursuant to
28 subdivision (a), no ratepayer funded incentives shall be made for
29 a solar energy system that does not meet the eligibility criteria.

30 SEC. 2. Section 387.5 of the Public Utilities Code is amended
31 to read:

32 387.5. (a) In order to further the state goal of encouraging the
33 installation of 3,000 megawatts of photovoltaic solar energy in
34 California within 10 years, the governing body of a local publicly
35 owned electric utility, as defined in subdivision (d) of Section
36 9604, that sells electricity at retail, shall adopt, implement, and
37 finance a solar initiative program, funded in accordance with
38 subdivision (b), for the purpose of investing in, and encouraging
39 the increased installation of, residential and commercial solar
40 energy systems.

1 (b) On or before January 1, 2008, a local publicly owned electric
2 utility shall offer monetary incentives for the installation of solar
3 energy systems of at least two dollars and eighty cents (\$2.80) per
4 installed watt, or for the electricity produced by the solar energy
5 system, measured in kilowatthours, as determined by the governing
6 board of a local publicly owned electric utility, for photovoltaic
7 solar energy systems. The incentive level shall decline each year
8 thereafter at a rate of no less than an average of 7 percent per year.

9 (c) A local publicly owned electric utility shall initiate a public
10 proceeding to fund a solar energy program to adequately support
11 the goal of installing 3,000 megawatts of photovoltaic solar energy
12 in California. The proceeding shall determine what additional
13 funding, if any, is necessary to provide the incentives pursuant to
14 subdivision (b). The public proceeding shall be completed and the
15 comprehensive solar energy program established by January 1,
16 2008.

17 (d) The solar energy program of a local publicly owned electric
18 utility shall be consistent with all of the following:

19 (1) That a solar energy system receiving monetary incentives
20 comply with the eligibility criteria, design, installation, and
21 electrical output standards or incentives established by the State
22 Energy Resources Conservation and Development Commission
23 pursuant to Section 25782 of the Public Resources Code.

24 (2) That solar energy systems receiving monetary incentives
25 are intended primarily to offset part or all of the consumer's own
26 electricity demand. Investments for solar energy systems that
27 exceed the electricity demand of a consumer shall be permitted,
28 but only the capacity needed to offset part or all of the electricity
29 demand of the consumer is eligible for ratepayer funded monetary
30 incentives.

31 (3) That all components in the solar energy system are new and
32 unused, and have not previously been placed in service in any
33 other location or for any other application.

34 (4) That the solar energy system has a warranty of not less than
35 10 years to protect against defects and undue degradation of
36 electrical generation output.

37 (5) That the solar energy system be located on the same premises
38 of the end-use consumer where the consumer's own electricity
39 demand is located.

1 (6) That the solar energy system be connected to the electric
2 utility's electrical distribution system within the state.

3 (7) That the solar energy system has meters or other devices in
4 place to monitor and measure the system's performance and the
5 quantity of electricity generated by the system.

6 (8) That the solar energy system be installed in conformance
7 with the manufacturer's specifications and in compliance with all
8 applicable electrical and building code standards.

9 (e) A local publicly owned electric utility shall, on an annual
10 basis beginning June 1, 2008, make available to its customers, to
11 the Legislature, and to the State Energy Resources Conservation
12 and Development Commission, information relating to the utility's
13 solar initiative program established pursuant to this section,
14 including, but not limited to, the number of photovoltaic solar
15 watts installed, the total number of photovoltaic systems installed,
16 the total number of applicants, the amount of incentives awarded,
17 and the contribution toward the program goals.

18 (f) In establishing the program required by this section, no
19 moneys shall be diverted from any existing programs for
20 low-income ratepayers, or from cost-effective energy efficiency
21 or demand response programs.

22 (g) The statewide expenditures for solar programs adopted,
23 implemented, and financed by local publicly owned electric utilities
24 shall be seven hundred eighty-four million dollars (\$784,000,000).
25 The expenditure level for each local publicly owned electric utility
26 shall be based on that utility's percentage of the total statewide
27 load served by all local publicly owned electric utilities.
28 Expenditures by a local publicly owned electric utility may be less
29 than the utility's cap amount, provided that funding is adequate to
30 provide the incentives required by subdivisions (a) and (b).

31 SEC. 3. Section 2827 of the Public Utilities Code is amended
32 to read:

33 2827. (a) The Legislature finds and declares that a program
34 to provide net energy metering combined with net surplus
35 compensation, co-energy metering, and wind energy co-metering
36 for eligible customer-generators is one way to encourage substantial
37 private investment in renewable energy resources, stimulate in-state
38 economic growth, reduce demand for electricity during peak
39 consumption periods, help stabilize California's energy supply
40 infrastructure, enhance the continued diversification of California's

1 energy resource mix, reduce interconnection and administrative
 2 costs for electricity suppliers and encourage conservation and
 3 efficiency.

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

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

11 (2) “Electrical cooperative” means an electrical cooperative as
 12 defined in Section 2776.

13 (3) “Electric utility—~~or—cooperative~~” means an electrical
 14 corporation, a local publicly owned electric utility, or an electrical
 15 cooperative, or any other entity, except an electric service provider,
 16 that offers electrical service. This section shall not apply to a local
 17 publicly owned electric utility that serves more than 750,000
 18 customers and that also conveys water to its customers.

19 (4) “Eligible customer-generator” means a residential, small
 20 commercial customer as defined in subdivision (h) of Section 331,
 21 commercial, industrial, or agricultural customer of an electric
 22 utility—~~or—cooperative~~, who uses—~~an eligible renewable energy~~
 23 ~~resource~~ *a solar or a wind turbine electrical generating facility,*
 24 *or a hybrid system of both,* with a capacity of not more than one
 25 megawatt that is located on the customer’s owned, leased, or rented
 26 premises, and is interconnected and operates in parallel with the
 27 electric grid.

28 (5) “Eligible renewable energy resource” ~~has the same meaning~~
 29 ~~as in Section 399.12.~~

30 ~~(6)~~

31 (5) “Net energy metering” means measuring the difference
 32 between the electricity supplied through the electric grid and the
 33 electricity generated by an eligible customer-generator and fed
 34 back to the electric grid over a 12-month period as described in
 35 ~~subdivision~~ *subdivisions (c) and (h).*

36 ~~(7)~~

37 (6) “Net surplus customer-generator” means an eligible
 38 customer-generator that generates more electricity during a
 39 12-month period than is supplied by the electric utility—~~or~~

1 ~~cooperative~~ to the eligible customer-generator during the same
2 12-month period.

3 ~~(8)~~

4 (7) “Net surplus electricity” means all electricity generated by
5 an eligible customer-generator measured in kilowatthours over a
6 12-month period that exceeds the amount of electricity consumed
7 by that eligible customer-generator.

8 ~~(9)~~

9 (8) “Net surplus electricity compensation” means a per
10 kilowatthour rate offered by the electric utility ~~or cooperative~~ to
11 the net surplus customer-generator for net surplus electricity that
12 is set by the ratemaking authority pursuant to subdivision (h).

13 ~~(10)~~

14 (9) “Ratemaking authority” means, for an electrical corporation
15 or electrical cooperative, the commission, and for a local publicly
16 owned electric utility, the local elected body responsible for setting
17 the rates of the local publicly owned utility.

18 ~~(11)~~

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

26 (c) (1) Every electric utility ~~or cooperative~~ shall develop a
27 standard contract or tariff providing for net energy metering, and
28 shall make this standard contract or tariff available to eligible
29 customer-generators, upon request, on a first-come-first-served
30 basis until the time that the total rated generating capacity used by
31 eligible customer-generators exceeds 2.5 percent of the electric
32 ~~utility or cooperative’s~~ utility’s aggregate customer peak demand.
33 Net energy metering shall be accomplished using a single meter
34 capable of registering the flow of electricity in two directions. *Net*
35 *surplus electricity is not “used” by eligible customer-generators,*
36 *but is instead used by other customers of the electric utility, for*
37 *purposes of determining whether the generating capacity used by*
38 *eligible customer-generators exceeds 2.5 percent of the electric*
39 *utility’s aggregate customer peak demand. The electricity*
40 *generated and used by eligible customer-generators is included*

1 *in determining the electric utility's aggregate customer peak*
2 *demand. An additional meter or meters to monitor the flow of*
3 *electricity in each direction may be installed with the consent of*
4 *the eligible customer-generator, at the expense of the electric utility*
5 *or cooperative, and the additional metering shall be used only to*
6 *provide the information necessary to accurately bill or credit the*
7 *eligible customer-generator pursuant to subdivision (h), or to*
8 *collect generating system performance information for research*
9 *purposes relative to the eligible renewable energy resource solar*
10 *or wind electric generating system performance information for*
11 *research purposes. If the existing electrical meter of an eligible*
12 *customer-generator is not capable of measuring the flow of*
13 *electricity in two directions, the eligible customer-generator shall*
14 *be responsible for all expenses involved in purchasing and*
15 *installing a meter that is able to measure electricity flow in two*
16 *directions. If an additional meter or meters are installed, the net*
17 *energy metering calculation shall yield a result identical to that of*
18 *a single meter. An eligible customer generator that is receiving*
19 *service other than through the standard contract or tariff may elect*
20 *to receive service through the standard contract or tariff until the*
21 *electric utility or cooperative reaches the generation limit of this*
22 *paragraph. Eligibility for net energy metering does not limit an*
23 *eligible customer-generator's eligibility for any other rebate,*
24 *incentive, or credit provided by the electric utility or cooperative,*
25 *or pursuant to any governmental program, including rebates and*
26 *incentives provided pursuant to the California Solar Initiative.*

27 (2) (A) On an annual basis, beginning in 2003, every electric
28 utility or cooperative shall make available to the ratemaking
29 authority information on the total rated generating capacity used
30 by eligible customer-generators that are customers of that provider
31 in the provider's service area and the net surplus electricity
32 purchased by the electric utility or cooperative pursuant to this
33 section.

34 (B) An electric service provider operating pursuant to Section
35 394 shall make available to the ratemaking authority the
36 information required by this paragraph for each eligible
37 customer-generator that is their customer for each service area of
38 an electric corporation, local publicly owned electric utility, or
39 electrical cooperative, in which the eligible customer-generator
40 has net energy metering.

1 (C) The ratemaking authority shall develop a process for making
2 the information required by this paragraph available to electric
3 utilities ~~and cooperatives~~, and for using that information to
4 determine when, pursuant to paragraphs (1) and (3), an electric
5 utility ~~or cooperative~~ is not obligated to provide net energy
6 metering to additional eligible customer-generators in its service
7 area.

8 (3) An electric utility ~~or cooperative~~ is not obligated to provide
9 net energy metering to additional eligible customer-generators in
10 its service area when the combined total peak demand of all
11 *electricity used by eligible* customer-generators served by all the
12 electric utilities ~~or cooperatives~~ in that service area furnishing net
13 energy metering to eligible customer-generators exceeds 2.5
14 percent of the aggregate customer peak demand of those electric
15 ~~utilities or cooperatives.~~ *utilities. Net surplus electricity is not*
16 *“used” by eligible customer-generators, but is instead used by*
17 *other customers of the electric utility, for purposes of determining*
18 *whether the generating capacity used by eligible*
19 *customer-generators exceeds 2.5 percent of the electric utility’s*
20 *aggregate customer peak demand. The electricity generated and*
21 *used by eligible customer-generators is included in determining*
22 *the electric utility’s aggregate customer peak demand.*

23 (4) By January 1, 2010, the commission, in consultation with
24 the Energy Commission, shall submit a report to the Governor and
25 the Legislature on the costs and benefits of net energy metering
26 and net surplus electricity compensation, wind energy co-metering,
27 and co-energy metering to participating customers and
28 nonparticipating customers and with options to replace the
29 economic costs and benefits of net energy metering, wind energy
30 co-metering, and co-energy metering with a mechanism that more
31 equitably balances the interests of participating and
32 nonparticipating customers, and that incorporates the findings of
33 the report on economic and environmental costs and benefits of
34 net metering required by subdivision (n).

35 (d) Every electric utility ~~or cooperative~~ shall make all necessary
36 forms and contracts for net energy metering and net surplus
37 electricity compensation service available for download from the
38 Internet.

39 (e) (1) Every electric utility ~~or cooperative~~ shall ensure that
40 requests for establishment of net energy metering and net surplus

1 electricity compensation are processed in a time period not
2 exceeding that for similarly situated customers requesting new
3 electric service, but not to exceed 30 working days from the date
4 it receives a completed application form for net energy metering
5 service or net surplus electricity compensation, including a signed
6 interconnection agreement from an eligible customer-generator
7 and the electric inspection clearance from the governmental
8 authority having jurisdiction.

9 (2) Every electric utility ~~or cooperative~~ shall ensure that requests
10 for an interconnection agreement from an eligible
11 customer-generator are processed in a time period not to exceed
12 30 working days from the date it receives a completed application
13 form from the eligible customer-generator for an interconnection
14 agreement.

15 (3) If an electric utility ~~or cooperative~~ is unable to process a
16 request within the allowable timeframe pursuant to paragraph (1)
17 or (2), it shall notify the eligible customer-generator and the
18 ratemaking authority of the reason for its inability to process the
19 request and the expected completion date.

20 (f) (1) If a customer participates in direct transactions pursuant
21 to paragraph (1) of subdivision (b) of Section 365 with an electric
22 service provider that does not provide distribution service for the
23 direct transactions, the electric utility ~~or cooperative~~ that provides
24 distribution service for the eligible customer-generator is not
25 obligated to provide net energy metering or net surplus electricity
26 compensation to the customer.

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

36 (g) Except for the time-variant kilowatthour pricing portion of
37 any tariff adopted by the commission pursuant to paragraph (4) of
38 subdivision (a) of Section 2851, each net energy metering contract
39 or tariff shall be identical, with respect to rate structure, all retail
40 rate components, and any monthly charges, to the contract or tariff

1 to which the same customer would be assigned if the customer did
2 not use an eligible ~~renewable energy resource~~ *solar or wind*
3 *electrical generating facility*, except that eligible
4 customer-generators shall not be assessed standby charges on the
5 electrical generating capacity or the kilowatthour production of
6 an eligible ~~renewable energy resource~~ *solar or wind electrical*
7 *generating facility*. The charges for all retail rate components for
8 eligible customer-generators shall be based exclusively on the
9 customer-generator's net kilowatthour consumption over a
10 12-month period, without regard to the eligible
11 customer-generator's choice as to whom it purchases electricity
12 from that is not self-generated. Any new or additional demand
13 charge, standby charge, customer charge, minimum monthly
14 charge, interconnection charge, or any other charge that would
15 increase an eligible customer-generator's costs beyond those of
16 other customers who are not eligible customer-generators in the
17 rate class to which the eligible customer-generator would otherwise
18 be assigned if the customer did not own, lease, rent, or otherwise
19 operate an eligible ~~renewable energy resource~~ *solar or wind*
20 *electrical generating facility* are contrary to the intent of this
21 section, and shall not form a part of net energy metering contracts
22 or tariffs.

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

29 (1) The eligible residential or small commercial
30 customer-generator shall, at the end of each 12-month period
31 following the date of final interconnection of the eligible
32 customer-generator's system with an electric utility ~~or cooperative~~,
33 and at each anniversary date thereafter, be billed for electricity
34 used during that 12-month period. The electric utility ~~or cooperative~~
35 shall determine if the eligible residential or small commercial
36 customer-generator was a net consumer or a net surplus
37 customer-generator during that period.

38 (2) At the end of each 12-month period, where the electricity
39 supplied during the period by the electric utility ~~or cooperative~~
40 exceeds the electricity generated by the eligible residential or small

1 commercial customer-generator during that same period, the
2 eligible residential or small commercial customer-generator is a
3 net electricity consumer and the electric utility ~~or cooperative~~ shall
4 be owed compensation for the eligible customer-generator's net
5 kilowatthour consumption over that 12-month period. The
6 compensation owed for the eligible residential or small commercial
7 customer-generator's consumption shall be calculated as follows:

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

22 (B) For all eligible customer-generators taking service under
23 contracts or tariffs employing "time of use" rates ~~or charges~~, any
24 net monthly consumption of electricity shall be calculated
25 according to the terms of the contract or tariff to which the same
26 customer would be assigned to, or be eligible for, if the customer
27 was not an eligible customer-generator. When those same
28 customer-generators are net generators during any discrete time
29 of use period, the net kilowatthours produced shall be valued at
30 the same price per kilowatthour as the electric utility ~~or cooperative~~
31 would charge for retail kilowatthour sales during that same time
32 of use period. If the eligible customer-generator's time of use
33 electrical meter is unable to measure the flow of electricity in two
34 directions, subparagraph (A) of paragraph (1) of subdivision (c)
35 shall apply.

36 (C) For all eligible residential and small commercial
37 customer-generators and for each billing period, the net balance
38 of moneys owed to the electric utility ~~or cooperative~~ for net
39 consumption of electricity or credits owed to the eligible
40 customer-generator for net generation of electricity shall be carried

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

14 (3) At the end of each 12-month period, where the electricity
15 generated by the eligible customer-generator during the 12-month
16 period exceeds the electricity supplied by the electric utility ~~or~~
17 ~~cooperative~~ during that same period, the eligible
18 customer-generator is a net surplus customer-generator and the
19 electric utility ~~or cooperative shall provide net surplus electricity~~
20 compensation for any net surplus electricity generated during the
21 prior 12-month period. ~~Every electric utility or cooperative shall,~~
22 ~~by January 31, 2009, provide notice of this paragraph to existing~~
23 ~~customer-generators, in a form approved by the ratemaking~~
24 ~~authority. For any eligible customer-generator receiving service~~
25 ~~pursuant to a contract or tariff that provides that the electric utility~~
26 ~~or cooperative retains any excess kilowatthours and that the eligible~~
27 ~~customer-generator is not owed compensation for those excess~~
28 ~~kilowatthours, the requirements of this paragraph shall commence~~
29 ~~on February 1, 2009, and the eligible customer-generator's~~
30 ~~12-month billing cycle will continue until January 31, 2010. The~~
31 ~~requirements of this paragraph apply to any eligible~~
32 ~~customer-generator that commence service pursuant to the standard~~
33 ~~contract or tariff after January 1, 2009. shall, upon an affirmative~~
34 ~~election by the eligible customer-generator, provide net surplus~~
35 ~~electricity compensation for any net surplus electricity generated~~
36 ~~during the prior 12-month period. For an eligible~~
37 ~~customer-generator that does not affirmatively elect to receive~~
38 ~~service pursuant to net surplus electricity compensation, the~~
39 ~~electric utility shall retain any excess kilowatthours generated~~
40 ~~during the prior 12-month period. The eligible customer-generator~~

1 *shall not be owed any compensation for the net surplus electricity*
2 *unless the electric utility enters into a purchase agreement with*
3 *the eligible customer-generator for those excess kilowatthours.*
4 *Every electric utility shall, by January 31, 2009, provide notice to*
5 *eligible customer-generators that they are eligible to receive net*
6 *surplus electricity compensation for net surplus electricity, that*
7 *they must elect to receive net surplus electricity compensation,*
8 *and that the 12-month period commences when the electric utility*
9 *receives the eligible customer-generator's election. The*
10 *commission may, for an electric utility that is an electrical*
11 *corporation or electrical cooperative, adopt requirements for*
12 *providing notice and the manner by which eligible*
13 *customer-generators may elect to receive net surplus electricity*
14 *compensation.*

15 (4) The ratemaking authority shall, by July 1, 2009, establish a
16 net surplus electricity compensation rate to compensate the net
17 surplus customer-generator for all net surplus electricity generated
18 by the net surplus customer-generator. The commission shall
19 establish the rate in a ratemaking proceeding. The ratemaking
20 authority for a local publicly owned electric utility shall establish
21 the rate in a public proceeding. The net surplus electricity
22 compensation rate shall be established so as to provide the net
23 surplus customer-generator fair and adequate compensation for
24 the net surplus electricity, including the value of the electricity
25 itself, the value of the renewable attributes of the electricity, the
26 carbon value or other environmental attributes of the electricity,
27 the time-of-use value or peak demand value of the electricity, and
28 the distributed generation value of the electricity.

29 (5) (A) Upon adoption of the net surplus electricity
30 compensation rate by the ratemaking authority, any renewable
31 energy credit, as defined in Section 399.12, for net surplus
32 electricity purchased by the electric utility ~~or cooperative~~ shall
33 belong to the electric utility ~~or cooperative~~. Any renewable energy
34 credit associated with electricity generated by the eligible
35 customer-generator that is utilized by the eligible
36 customer-generator shall remain the property of the eligible
37 customer-generator.

38 (B) Upon adoption of the net surplus electricity compensation
39 rate by the ratemaking authority, the net surplus electricity
40 purchased by the electric utility ~~or cooperative~~ shall count toward

1 the electric ~~utility or cooperative's~~ *utility's* renewables portfolio
2 standard annual procurement targets for purposes of paragraph (1)
3 of subdivision (b) of Section 399.15, or for a local publicly owned
4 electric utility, the renewables portfolio standard annual
5 procurement targets established pursuant to Section 387.

6 (6) The electric utility ~~or cooperative~~ shall provide every eligible
7 residential or small commercial customer-generator with net
8 electricity consumption and net surplus electricity generation
9 information with each regular bill. That information shall include
10 the current monetary balance owed the electric utility ~~or~~
11 ~~cooperative~~ for net electricity consumed, or the net surplus
12 electricity generated, since the last 12-month period ended.
13 Notwithstanding this subdivision, an electric utility ~~or cooperative~~

14 shall permit that customer to pay monthly for net energy consumed.
15 (7) If an eligible residential or small commercial
16 customer-generator terminates the customer relationship with the
17 electric utility ~~or cooperative~~, ~~the electricity distribution utility or~~
18 ~~cooperative utility~~, *the electric utility* shall reconcile the eligible
19 customer-generator's consumption and production of electricity
20 during any part of a 12-month period following the last
21 reconciliation, according to the requirements set forth in this
22 subdivision, except that those requirements shall apply only to the
23 months since the most recent 12-month bill.

24 (8) If an electric service provider or electric utility ~~or cooperative~~
25 providing net energy metering to a residential or small commercial
26 customer-generator ceases providing that electric service to that
27 customer during any 12-month period, and the customer-generator
28 enters into a new net energy metering contract or tariff with a new
29 electric service provider or electric utility ~~or cooperative~~, the
30 12-month period, with respect to that new electric service provider
31 or electric utility ~~or cooperative~~, shall commence on the date on
32 which the new electric service provider or electric utility ~~or~~
33 ~~cooperative~~ first supplies electric service to the customer-generator.

34 (i) Notwithstanding any other provisions of this section, the
35 following provisions shall apply to an eligible customer-generator
36 with a capacity of more than 10 kilowatts, but not exceeding one
37 megawatt, that receives electric service from a local publicly owned
38 electric utility that has elected to utilize a co-energy metering
39 program unless the local publicly owned electric utility chooses
40 to provide service for eligible customer-generators with a capacity

1 of more than 10 kilowatts in accordance with subdivisions (g) and
2 (h):

3 (1) The eligible customer-generator shall be required to utilize
4 a meter, or multiple meters, capable of separately measuring
5 electricity flow in both directions. All meters shall provide
6 “time-of-use” measurements of electricity flow, and the customer
7 shall take service on a time-of-use rate schedule. If the existing
8 meter of the eligible customer-generator is not a time-of-use meter
9 or is not capable of measuring total flow of energy in both
10 directions, the eligible customer-generator shall be responsible for
11 all expenses involved in purchasing and installing a meter that is
12 both time-of-use and able to measure total electricity flow in both
13 directions. This subdivision shall not restrict the ability of an
14 eligible customer-generator to utilize any economic incentives
15 provided by a government agency or an electric utility—~~or~~
16 ~~cooperative~~ to reduce its costs for purchasing and installing a
17 time-of-use meter.

18 (2) The consumption of electricity from the local publicly owned
19 electric utility shall result in a cost to the eligible
20 customer-generator to be priced in accordance with the standard
21 rate charged to the eligible customer-generator in accordance with
22 the rate structure to which the customer would be assigned if the
23 customer did not use an eligible solar or wind electrical generating
24 facility. The generation of electricity provided to the local publicly
25 owned electric utility shall result in a credit to the eligible
26 customer-generator and shall be priced in accordance with the
27 generation component, established under the applicable structure
28 to which the customer would be assigned if the customer did not
29 use an eligible solar or wind electrical generating facility.

30 (3) All costs and credits shall be shown on the eligible
31 customer-generator’s bill for each billing period. In any months
32 in which the eligible customer-generator has been a net consumer
33 of electricity calculated on the basis of value determined pursuant
34 to paragraph (2), the customer-generator shall owe to the local
35 publicly owned electric utility the balance of electricity costs and
36 credits during that billing period. In any billing period in which
37 the eligible customer-generator has been a net producer of
38 electricity calculated on the basis of value determined pursuant to
39 paragraph (2), the local publicly owned electric utility shall owe
40 to the eligible customer-generator the balance of electricity costs

1 and credits during that billing period. Any net credit to the eligible
2 customer-generator of electricity costs may be carried forward to
3 subsequent billing periods, provided that a local publicly owned
4 electric utility may choose to carry the credit over as a kilowatthour
5 credit consistent with the provisions of any applicable contract or
6 tariff, including any differences attributable to the time of
7 generation of the electricity. At the end of each 12-month period,
8 the local publicly owned electric utility may reduce any net credit
9 due to the eligible customer-generator to zero.

10 (j) A solar or wind turbine electrical generating system, or a
11 hybrid system of both, used by an eligible customer-generator shall
12 meet all applicable safety and performance standards established
13 by the National Electrical Code, the Institute of Electrical and
14 Electronics Engineers, and accredited testing laboratories, including
15 Underwriters Laboratories and, where applicable, rules of the
16 commission regarding safety and reliability. A customer-generator
17 whose solar or wind turbine electrical generating system, or a
18 hybrid system of both, meets those standards and rules shall not
19 be required to install additional controls, perform or pay for
20 additional tests, or purchase additional liability insurance.

21 (k) If the commission determines that there are cost or revenue
22 obligations for an electric corporation, as defined in Section 218,
23 that may not be recovered from customer-generators acting
24 pursuant to this section, those obligations shall remain within the
25 customer class from which any shortfall occurred and may not be
26 shifted to any other customer class. Net energy metering and
27 co-energy metering customers shall not be exempt from the public
28 goods charges imposed pursuant to Article 7 (commencing with
29 Section 381), Article 8 (commencing with Section 385), or Article
30 15 (commencing with Section 399) of Chapter 2.3 of Part 1. In its
31 report to the Legislature, the commission shall examine different
32 methods to ensure that the public goods charges remain
33 nonbypassable.

34 (l) A net energy metering, co-energy metering, or wind energy
35 co-metering customer shall reimburse the Department of Water
36 Resources for all charges that would otherwise be imposed on the
37 customer by the commission to recover bond-related costs pursuant
38 to an agreement between the commission and the Department of
39 Water Resources pursuant to Section 80110 of the Water Code,
40 as well as the costs of the department equal to the share of the

1 department's estimated net unavoidable power purchase contract
2 costs attributable to the customer. The commission shall
3 incorporate the determination into an existing proceeding before
4 the commission, and shall ensure that the charges are
5 nonbypassable. Until the commission has made a determination
6 regarding the nonbypassable charges, net energy metering,
7 co-energy metering, and wind energy co-metering shall continue
8 under the same rules, procedures, terms, and conditions as were
9 applicable on December 31, 2002.

10 (m) In implementing the requirements of subdivisions (k) and
11 (l), an eligible customer-generator shall not be required to replace
12 its existing meter except as set forth in subparagraph (A) of
13 paragraph (1) of subdivision (c), nor shall the electric utility ~~or~~
14 ~~cooperative~~ require additional measurement of usage beyond that
15 which is necessary for customers in the same rate class as the
16 eligible customer-generator.

17 (n) It is the intent of the Legislature that the Treasurer
18 incorporate net energy metering, including net surplus electricity
19 compensation, co-energy metering, and wind energy co-metering
20 projects undertaken pursuant to this section as sustainable building
21 methods or distributive energy technologies for purposes of
22 evaluating low-income housing projects.

23 SEC. 4. No reimbursement is required by this act pursuant to
24 Section 6 of Article XIII B of the California Constitution because
25 the only costs that may be incurred by a local agency or school
26 district will be incurred because this act creates a new crime or
27 infraction, eliminates a crime or infraction, or changes the penalty
28 for a crime or infraction, within the meaning of Section 17556 of
29 the Government Code, or changes the definition of a crime within
30 the meaning of Section 6 of Article XIII B of the California
31 Constitution.