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OFFICE OF THE CITY CLERK
OAKLAND

CITY OF OAKLAND

BILL ANALYSIS



Date: March 5, 2009

2009 FEB 19 PM 3: 13

Bill Number: SB 7

Bill Author: Wiggins

DEPARTMENT INFORMATION

Contact: Scott Wentworth

Department: Public Works Agency, Facilities and Environment

Telephone: 238-3984 FAX # 238-7286 E-mail: swentworth@oaklandnet.com

RECOMMENDED POSITION: Amend

Summary of the Bill

Requires Pacific Gas and Electric Company (PG&E) to purchase electricity from customers who generate more electricity in a twelve-month period than they consume. Customers are provided the option to sell the electricity to PG&E at the same price they would have paid to buy it from PG&E, or to receive a credit for the surplus kilowatt-hours of electricity produced to apply in the future.

Monetary incentives for systems are capped at sizes that accommodate the customer's anticipated consumption, meaning customers cannot receive incentives to build systems that are expected to produce more electricity than their recent PG&E records show they consume on site.

Positive Factors for Oakland

SB 7 encourages continued energy efficiency improvement in homes with solar power systems. Without this bill, solar power system owners will not receive any payment for surplus energy they produce, even if the surplus is created by improving energy efficiency.

If a solar power system owner continues to invest their money in energy efficiency improvements and produces more electricity than they use in a 12-month period, they do not currently receive further benefit by getting paid for surplus energy created by their system. Their bill is very nearly zero, but PG&E does not send them a check for the excess power they produce.

By requiring payment for surplus electricity, solar power owners will be encouraged to continue reducing their electricity consumption through efficiency and conservation.

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Negative Factors for Oakland

SB 7 does not allow for sizing of solar power electricity generating systems to accommodate future additions of electric vehicles, including plug-in hybrids.

Proposed Amendment

Since SB 7 appears to be aimed to avoid requiring payment for surplus electricity from systems that are oversized beyond the customer's typical annual electricity needs, careful thought may be appropriate to create a method for solar power system owners to build systems that are big enough to charge electric vehicles. Allowances to sell surplus power beyond a customer's consumption may be linked to periods when the customer demonstrates ownership of an electric vehicle, including a plug-in hybrid. Under such an allowance, a customer would not receive payment for the portion of surplus generation attributed to the system capacity for their vehicle. Customers would have to decide how much risk to take when sizing systems in anticipation of using an electric vehicle.

Oakland could benefit from reduced greenhouse gas emissions associated with transportation by fostering the production of renewable energy for direct use in transportation.

PLEASE RATE THE EFFECT OF THIS MEASURE ON THE CITY OF OAKLAND:

- Critical** (top priority for City lobbyist, city position required ASAP)
- Very Important** (priority for City lobbyist, city position necessary)
- Somewhat Important** (City position desirable if time and resources are available)
- Minimal or** **None** (do not review with City Council, position not required)

Known support:

No known support

Known Opposition:

No known opposition

Attach bill text and state/federal legislative committee analysis, if available.

Respectfully submitted,



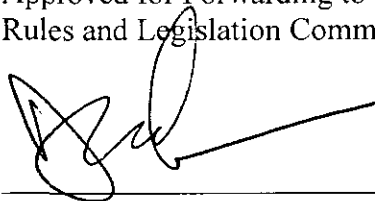
Raul Godinez II, P.E.
Director, Public Works Agency

Reviewed by:
Brooke A. Levin, Assistant Director

Reviewed by:
Susan Kattchee, Environmental Services Manager

Prepared by:
Scott Wentworth, Energy Engineer III
Environmental Services Division

Approved for Forwarding to
Rules and Legislation Committee



Office of City Administrator

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OAKLAND

Approved as to Form and Legality

OAKLAND CITY COUNCIL


City Attorney

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RESOLUTION No. _____ C.M.S.

**RESOLUTION TO SUPPORT, IF AMENDED, SB 7 LEGISLATION
EXPANDING ELECTRIC UTILITIES' OBLIGATIONS TO PURCHASE
ELECTRICITY FROM CUSTOMERS WHO GENERATE MORE
ELECTRICITY IN A TWELVE-MONTH PERIOD THAN THEY CONSUME**

WHEREAS, the City of Oakland and the Oakland community are impacted by limited electricity supplies which result in high electricity costs to residents and businesses; and

WHEREAS, the City may face costs to implement policies to address global climate change resulting, in part, from the use of fossil fuels to generate electricity; and

WHEREAS, the Oakland City Council has taken actions that promote producing and using electricity from renewable sources, including building 1 MW solar power at City facilities and requiring LEED Silver certification for certain City projects; and

WHEREAS, SB 7 (Wiggins) will (1) require Pacific Gas and Electric Company (PG&E) to purchase electricity from customers who generate more electricity in a twelve-month period than they consume, by providing them an option to sell the electricity to PG&E at the same price they would have paid to buy it from PG&E, or to receive a credit for the surplus kilowatt-hours of electricity produced to apply in the future; and (2) limit monetary incentives for systems to sizes that do not produce more electricity than the customer's recent PG&E records show they consume on site; and

WHEREAS, the City of Oakland would benefit by approval of this measure, which is expected to increase demand for products from renewable electricity industries, and create green collar jobs in Oakland by supporting the increased production and use of renewable electricity locally; and

WHEREAS, an opportunity is present to amend the legislation to allow customers to build systems that include future capacity for an electric vehicle, without paying the customer any system construction-relate incentives for the capacity associated with such a vehicle; now, therefore be it

RESOLVED: The City of Oakland declares its support for SB 7 (Wiggins) if amended to allow customers to size systems to produce power beyond their present consumption when the customer commits to using an electric vehicle or plug-in hybrid and forgoes payment for the portion of surplus generation attributed to the system capacity for a vehicle until they demonstrate that the capacity is being used for such a vehicle; and be it

FURTHER RESOLVED: That the City Council hereby directs the City Administrator and the City's legislative lobbyist to advocate for the above position in the California State Legislature.

IN COUNCIL, OAKLAND, CALIFORNIA, _____, 20_____

PASSED BY THE FOLLOWING VOTE:

AYES - BROOKS, DE LA FUENTE, KAPLAN, KERNIGHAN, NADEL, QUAN, REID and PRESIDENT BRUNNER

NOES -

ABSENT -

ABSTENTION -

ATTEST: _____
LaTonda Simmons
City Clerk and Clerk of the Council
of the City of Oakland, California

CURRENT BILL STATUS

MEASURE : S.B. No. 7
AUTHOR(S) : Wiggins.
TOPIC : Renewable energy sources: net metering.
HOUSE LOCATION : SEN

TYPE OF BILL :

- Active
- Non-Urgency
- Non-Appropriations
- Majority Vote Required
- State-Mandated Local Program
- Fiscal
- Non-Tax Levy

LAST HIST. ACT. DATE: 01/29/2009
LAST HIST. ACTION : To Com. on E., U. & C.

TITLE : 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.

COMPLETE BILL HISTORY

BILL NUMBER : S.B. No. 7
AUTHOR : Wiggins
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BILL HISTORY

2009
Jan. 29 To Com. on E., U. & C.
2008
Dec. 2 From print. May be acted upon on or after January 1.
Dec. 1 Introduced. Read first time. To Com. on RLS. for assignment. To
print.

Introduced by Senator Wiggins

December 1, 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

SB 7, as introduced, Wiggins. Renewable energy sources: 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 that recognizes the intent of the Legislature to encourage renewable resources, while taking into consideration the effect of the standard on rates, reliability, and financial resources and the goal of environmental improvement.

Existing law relative to private energy producers requires every electric distribution utility or cooperative, 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 distribution utility or cooperative during a 12-month period, the eligible customer-generator is a net electricity producer and the electric distribution utility or cooperative 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 require the electric distribution utility or cooperative, at the discretion of the eligible customer-generator, to either: (1) provide net surplus electricity compensation for any net surplus electricity generated in the 12-month period, or (2) allow the eligible customer-generator to apply the net surplus electricity as a credit for kilowatthours consumed during the following, and any subsequent, 12-month periods.

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

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

This bill would place additional requirements upon local publicly owned electric utilities with respect to providing net surplus electricity compensation payments and credits, thereby imposing a state-mandated local program.

(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 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 the 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 specified reasons.

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 consumer's own electricity demand. *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.

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

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

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

9 (7) The solar energy system has meters or other devices in place
10 to monitor and measure the system's performance and the quantity
11 of electricity generated by the system.

12 (8) The solar energy system is installed in conformance with
13 the manufacturer's specifications and in compliance with all
14 applicable electrical and building code standards.

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

17 (1) Appropriate siting and high quality installation of the solar
18 energy system by developing installation guidelines that maximize
19 the performance of the system and prevent qualified systems from
20 being inefficiently or inappropriately installed. The conditions
21 established by the commission shall not impact housing designs
22 or densities presently authorized by a city, county, or city and
23 county. The goal of this paragraph is to achieve efficient
24 installation of solar energy systems to promote the greatest energy
25 production per ratepayer dollar.

26 (2) Optimal solar energy system performance during periods of
27 peak electricity demand.

28 (3) Appropriate energy efficiency improvements in the new or
29 existing home or commercial structure where the solar energy
30 system is installed.

31 (c) The commission shall set rating standards for equipment,
32 components, and systems to ~~assure~~ ensure reasonable performance
33 and shall develop standards that provide for compliance with the
34 minimum ratings.

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

38 SEC. 2. Section 387.5 of the Public Utilities Code is amended
39 to read:

1 387.5. (a) In order to further the state goal of encouraging the
2 installation of 3,000 megawatts of photovoltaic solar energy in
3 California within 10 years, the governing body of a local publicly
4 owned electric utility that sells electricity at retail, shall adopt,
5 implement, and finance a solar initiative program, funded in
6 accordance with subdivision (b), for the purpose of investing in,
7 and encouraging the increased installation of, residential and
8 commercial solar energy systems.

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

17 (c) A local publicly owned electric utility shall initiate a public
18 proceeding to fund a solar energy program to adequately support
19 the goal of installing 3,000 megawatts of photovoltaic solar energy
20 in California. The proceeding shall determine what additional
21 funding, if any, is necessary to provide the incentives pursuant to
22 subdivision (b). The public proceeding shall be completed and the
23 comprehensive solar energy program established by January 1,
24 2008.

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

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

32 (2) That solar energy systems receiving monetary incentives
33 are intended primarily to offset part or all of the consumer's own
34 electricity demand. *Investments for solar energy systems that*
35 *exceed the electricity demand of the consumer shall be permitted,*
36 *but only the capacity needed to offset part or all of the electricity*
37 *demand of the consumer is eligible for ratepayer funded monetary*
38 *incentives.*

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

4 (4) That the solar energy system has a warranty of not less than
5 10 years to protect against defects and undue degradation of
6 electrical generation output.

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

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

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

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

18 (e) A local publicly owned electric utility shall, on an annual
19 basis beginning June 1, 2008, make available to its customers, to
20 the Legislature, and to the State Energy Resources Conservation
21 and Development Commission, information relating to the utility's
22 solar initiative program established pursuant to this section,
23 including, but not limited to, the number of photovoltaic solar
24 watts installed, the total number of photovoltaic systems installed,
25 the total number of applicants, the amount of incentives awarded,
26 and the contribution toward the program goals.

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

31 (g) The statewide expenditures for solar programs adopted,
32 implemented, and financed by local publicly owned electric utilities
33 shall be seven hundred eighty-four million dollars (\$784,000,000).
34 The expenditure level for each local publicly owned electric utility
35 shall be based on that utility's percentage of the total statewide
36 load served by all local publicly owned electric utilities.
37 Expenditures by a local publicly owned electric utility may be less
38 than the utility's cap amount, provided that funding is adequate to
39 provide the incentives required by subdivisions (a) and (b).

1 SEC. 3. Section 2827 of the Public Utilities Code is amended
2 to read:

3 2827. (a) The Legislature finds and declares that a program
4 to provide net energy metering, *combined with net surplus*
5 *compensation*, co-energy metering, and wind energy co-metering
6 for eligible customer-generators is one way to encourage substantial
7 private investment in renewable energy resources, stimulate in-state
8 economic growth, reduce demand for electricity during peak
9 consumption periods, help stabilize California's energy supply
10 infrastructure, enhance the continued diversification of California's
11 energy resource mix, and reduce interconnection and administrative
12 costs for electricity suppliers.

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

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

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

22 (3) "Electric distribution utility or cooperative" means an
23 electrical corporation, a local publicly owned electric utility, or an
24 electrical cooperative, or any other entity, except an electric service
25 provider, that offers electrical service. This section shall not apply
26 to a local publicly owned electric utility that serves more than
27 750,000 customers and that also conveys water to its customers.

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

38 (5) "Net energy metering" means measuring the difference
39 between the electricity supplied through the electric grid and the
40 electricity generated by an eligible customer-generator and fed

1 back to the electric grid over a 12-month period as described in
2 subdivision (h). An eligible customer-generator who already owns
3 an existing solar or wind turbine electrical generating facility, or
4 a hybrid system of both, is eligible to receive net energy metering
5 service in accordance with this section.

6 (6) *“Net surplus customer-generator” means an eligible*
7 *customer-generator that generates more electricity during a*
8 *12-month period than is supplied by the electric distribution utility*
9 *or cooperative to the eligible customer-generator during the same*
10 *12-month period.*

11 (7) *“Net surplus electricity” means all electricity generated by*
12 *an eligible customer-generator measured in kilowatthours over a*
13 *12-month period that exceeds the amount of electricity consumed*
14 *by that eligible customer-generator.*

15 (8) *“Net surplus electricity compensation” means a payment*
16 *at a per kilowatthour rate offered by the electric distribution utility*
17 *or cooperative to the net surplus customer-generator for net*
18 *surplus electricity pursuant to subdivision (h).*

19 (6)

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

25 (7)

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

33 (c) (1) Every electricity distribution utility or cooperative shall
34 develop a standard contract or tariff providing for net energy
35 metering, and shall make this standard contract or tariff available
36 to eligible customer-generators, upon request, on a
37 first-come-first-served basis until the time that the total rated
38 generating capacity used by eligible customer-generators exceeds
39 2.5 percent of the electricity distribution utility or cooperative’s
40 aggregate customer peak demand. Net energy metering shall be

1 accomplished using a single meter capable of registering the flow
2 of electricity in two directions. An additional meter or meters to
3 monitor the flow of electricity in each direction may be installed
4 with the consent of the customer-generator, at the expense of the
5 electricity distribution utility or cooperative, and the additional
6 metering shall be used only to provide the information necessary
7 to accurately bill or credit the customer-generator pursuant to
8 subdivision (h), or to collect solar or wind electric generating
9 system performance information for research purposes. If the
10 existing electrical meter of an eligible customer-generator is not
11 capable of measuring the flow of electricity in two directions, the
12 customer-generator shall be responsible for all expenses involved
13 in purchasing and installing a meter that is able to measure
14 electricity flow in two directions. If an additional meter or meters
15 are installed, the net energy metering calculation shall yield a result
16 identical to that of a single meter.

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

22 (B) An electric service provider operating pursuant to Section
23 394 shall make available to the ratemaking authority the
24 information required by this paragraph for each eligible
25 customer-generator that is their customer for each service area of
26 an electric corporation, local publicly owned electric utility, or
27 electrical cooperative, in which the ~~customer~~ *eligible*
28 *customer-generator* has net energy metering.

29 (C) The ratemaking authority shall develop a process for making
30 the information required by this paragraph available to electricity
31 distribution utilities and cooperatives, and for using that
32 information to determine when, pursuant to paragraphs (1) and
33 (3), an electricity distribution utility or cooperative is not obligated
34 to provide net energy metering to additional customer-generators
35 in its service area.

36 (3) An electricity distribution utility or cooperative is not
37 obligated to provide net energy metering to additional *eligible*
38 customer-generators in its service area when the combined total
39 peak demand of all *electricity used by eligible* customer-generators
40 served by all the electricity distribution utilities or cooperatives in

1 that service area furnishing net energy metering to eligible
2 customer-generators exceeds 2.5 percent of the aggregate customer
3 peak demand of those electricity distribution utilities or
4 cooperatives.

5 (4) By January 1, 2010, the commission, in consultation with
6 the Energy Commission, shall submit a report to the Governor and
7 the Legislature on the costs and benefits of net energy metering,
8 wind energy co-metering, and co-energy metering to participating
9 customers and nonparticipating customers and with options to
10 replace the economic costs and benefits of net energy metering,
11 wind energy co-metering, and co-energy metering with a
12 mechanism that more equitably balances the interests of
13 participating and nonparticipating customers, and that incorporates
14 the findings of the report on economic and environmental costs
15 and benefits of net metering required by subdivision (n).

16 (d) Every electricity distribution utility or cooperative shall
17 make all necessary forms and contracts for net energy metering
18 *and net surplus electricity compensation* service available for
19 download from the Internet.

20 (e) (1) Every electricity distribution utility or cooperative shall
21 ensure that requests for establishment of net energy metering *and*
22 *net surplus electricity compensation* are processed in a time period
23 not exceeding that for similarly situated customers requesting new
24 electric service, but not to exceed 30 working days from the date
25 it receives a completed application form for net energy metering
26 service *or net surplus energy compensation*, including a signed
27 interconnection agreement from an eligible customer-generator
28 and the electric inspection clearance from the governmental
29 authority having jurisdiction.

30 (2) Every electricity distribution utility or cooperative shall
31 ensure that requests for an interconnection agreement from an
32 eligible customer-generator are processed in a time period not to
33 exceed 30 working days from the date it receives a completed
34 application form from the eligible customer-generator for an
35 interconnection agreement.

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

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

7 (2) If a customer participates in direct transactions pursuant to
8 paragraph (1) of subdivision (b) of Section 365 with an electric
9 service provider, and the customer is an eligible
10 customer-generator, the electricity distribution utility or cooperative
11 that provides distribution service for the direct transactions may
12 recover from the customer's electric service provider the
13 incremental costs of metering and billing service related to net
14 energy metering in an amount set by the ratemaking authority.

15 (g) Except for the time-variant kilowatthour pricing portion of
16 any tariff adopted by the commission pursuant to paragraph (4) of
17 subdivision (a) of Section 2851, each net energy metering contract
18 or tariff shall be identical, with respect to rate structure, all retail
19 rate components, and any monthly charges, to the contract or tariff
20 to which the same customer would be assigned if the customer did
21 not use an eligible solar or wind electrical generating facility,
22 except that eligible customer-generators shall not be assessed
23 standby charges on the electrical generating capacity or the
24 kilowatthour production of an eligible solar or wind electrical
25 generating facility. The charges for all retail rate components for
26 eligible customer-generators shall be based exclusively on the
27 customer-generator's net kilowatthour consumption over a
28 12-month period, without regard to the customer-generator's choice
29 as to whom it purchases electricity that is not self-generated. Any
30 new or additional demand charge, standby charge, customer charge,
31 minimum monthly charge, interconnection charge, or any other
32 charge that would increase an eligible customer-generator's costs
33 beyond those of other customers who are not eligible
34 customer-generators in the rate class to which the eligible
35 customer-generator would otherwise be assigned if the customer
36 did not own, lease, rent, or otherwise operate an eligible solar or
37 wind electrical generating facility are contrary to the intent of this
38 section, and shall not form a part of net energy metering contracts
39 or tariffs.

1 (h) For eligible residential and small commercial
2 customer-generators, the net energy metering calculation shall be
3 made by measuring the difference between the electricity supplied
4 to the eligible customer-generator and the electricity generated by
5 the eligible customer-generator and fed back to the electric grid
6 over a 12-month period. The following rules shall apply to the
7 annualized net metering calculation:

8 (1) The eligible residential or small commercial
9 customer-generator shall, at the end of each 12-month period
10 following the date of final interconnection of the eligible
11 customer-generator's system with an electricity distribution utility
12 or cooperative, and at each anniversary date thereafter, be billed
13 for electricity used during that 12-month period. The electricity
14 distribution utility or cooperative shall determine if the eligible
15 residential or small commercial customer-generator was a net
16 consumer or a net ~~producer of electricity surplus~~
17 *customer-generator* during that period.

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

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

1 same price per kilowatthour as the electricity distribution utility
2 or cooperative would charge for electricity over the baseline
3 quantity during that billing period.

4 (B) For all eligible customer-generators taking service under
5 contracts or tariffs employing “time-of-use” rates or charges, any
6 net monthly consumption of electricity shall be calculated
7 according to the terms of the contract or tariff to which the same
8 customer would be assigned to, or be eligible for, if the customer
9 was not an eligible customer-generator. When those same
10 customer-generators are net generators during any discrete
11 time-of-use period, the net kilowatthours produced shall be valued
12 at the same price per kilowatthour as the electricity distribution
13 utility or cooperative would charge for retail kilowatthour sales
14 during that same “time-of-use” period. If the eligible
15 customer-generator’s “time-of-use” electrical meter is unable to
16 measure the flow of electricity in two directions, subparagraph
17 (A) of paragraph (1) of subdivision (c) shall apply.

18 (C) For all eligible residential and small commercial
19 customer-generators and for each billing period, the net balance
20 of moneys owed to the electricity distribution utility or cooperative
21 for net consumption of electricity or credits owed to the eligible
22 customer-generator for net generation of electricity shall be carried
23 forward as a monetary value until the end of each 12-month period.
24 For all eligible commercial, industrial, and agricultural
25 customer-generators, the net balance of moneys owed shall be paid
26 in accordance with the electricity distribution utility or
27 cooperative’s normal billing cycle, except that if the eligible
28 commercial, industrial, or agricultural customer-generator is a net
29 electricity producer over a normal billing cycle, any excess
30 kilowatthours generated during the billing cycle shall be carried
31 over to the following billing period as a monetary value, calculated
32 according to the procedures set forth in this section, and appear as
33 a credit on the eligible customer-generator’s account, until the end
34 of the annual period when paragraph (3) shall apply.

35 (3) At the end of each 12-month period, where the electricity
36 generated by the eligible customer-generator during the 12-month
37 period exceeds the electricity supplied by the electricity distribution
38 utility or cooperative during that same period, the eligible
39 customer-generator is a net ~~electricity producer~~ *surplus*
40 *customer-generator* and the electricity distribution utility or

1 cooperative shall ~~retain any excess kilowatthours generated during~~
2 ~~the prior 12-month period. The eligible customer-generator shall~~
3 ~~not be owed any compensation for those excess kilowatthours~~
4 ~~unless the electricity distribution utility or cooperative enters into~~
5 ~~a purchase agreement with the eligible customer-generator for~~
6 ~~those excess kilowatthours., at the discretion of the eligible~~
7 ~~customer-generator, either: (A) provide a net surplus electricity~~
8 ~~compensation payment for any net surplus electricity generated~~
9 ~~during the prior 12-month period, or (B) allow the eligible~~
10 ~~customer-generator to apply the net surplus electricity as a credit~~
11 ~~for kilowatthours consumed during the following, or any~~
12 ~~subsequent, 12-month period.~~

13 *(4) Net surplus electricity compensation shall provide for*
14 *payment for every kilowatthour of electricity that is not less than*
15 *the existing market cost for electricity (market price referent) as*
16 *determined by the commission pursuant to subdivision (c) of*
17 *Section 399.15.*

18 ~~(4)~~

19 (5) The electricity distribution utility or cooperative shall provide
20 every eligible residential or small commercial customer-generator
21 with net electricity consumption *and net surplus electricity*
22 *generation* information with each regular bill. That information
23 shall include the current monetary balance owed the electricity
24 distribution utility or cooperative for net electricity consumed, or
25 ~~the current amount of excess electricity produced~~ *net surplus*
26 *electricity generated*, since the last 12-month period ended.
27 Notwithstanding this subdivision, an electricity distribution utility
28 or cooperative shall permit that customer to pay monthly for net
29 energy consumed.

30 ~~(5)~~

31 (6) If an eligible residential or small commercial
32 customer-generator terminates the customer relationship with the
33 electricity distribution utility or cooperative, the electricity
34 distribution utility or cooperative shall reconcile the eligible
35 customer-generator's consumption and production of electricity
36 during any part of a 12-month period following the last
37 reconciliation, according to the requirements set forth in this
38 subdivision, except that those requirements shall apply only to the
39 months since the most recent 12-month bill.

40 ~~(6)~~

1 (7) If an electric service provider or electricity distribution utility
2 or cooperative providing net energy metering to a residential or
3 small commercial customer-generator ceases providing that electric
4 service to that customer during any 12-month period, and the
5 customer-generator enters into a new net energy metering contract
6 or tariff with a new electric service provider or electricity
7 distribution utility or cooperative, the 12-month period, with respect
8 to that new electric service provider or electricity distribution utility
9 or cooperative, shall commence on the date on which the new
10 electric service provider or electricity distribution utility or
11 cooperative first supplies electric service to the customer-generator.

12 (i) Notwithstanding any other provisions of this section, the
13 following provisions shall apply to an eligible customer-generator
14 with a capacity of more than 10 kilowatts, but not exceeding one
15 megawatt, that receives electric service from a local publicly owned
16 electric utility that has elected to utilize a co-energy metering
17 program unless the local publicly owned electric utility chooses
18 to provide service for eligible customer-generators with a capacity
19 of more than 10 kilowatts in accordance with subdivisions (g) and
20 (h):

21 (1) The eligible customer-generator shall be required to utilize
22 a meter, or multiple meters, capable of separately measuring
23 electricity flow in both directions. All meters shall provide
24 "time-of-use" measurements of electricity flow, and the customer
25 shall take service on a time-of-use rate schedule. If the existing
26 meter of the eligible customer-generator is not a time-of-use meter
27 or is not capable of measuring total flow of energy in both
28 directions, the eligible customer-generator shall be responsible for
29 all expenses involved in purchasing and installing a meter that is
30 both time-of-use and able to measure total electricity flow in both
31 directions. This subdivision shall not restrict the ability of an
32 eligible customer-generator to utilize any economic incentives
33 provided by a government agency or an electricity distribution
34 utility or cooperative to reduce its costs for purchasing and
35 installing a time-of-use meter.

36 (2) The consumption of electricity from the local publicly owned
37 electric utility shall result in a cost to the eligible
38 customer-generator to be priced in accordance with the standard
39 rate charged to the eligible customer-generator in accordance with
40 the rate structure to which the customer would be assigned if the

1 customer did not use an eligible solar or wind electrical generating
2 facility. The generation of electricity provided to the local publicly
3 owned electric utility shall result in a credit to the eligible
4 customer-generator and shall be priced in accordance with the
5 generation component, established under the applicable structure
6 to which the customer would be assigned if the customer did not
7 use an eligible solar or wind electrical generating facility.

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

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

39 (k) If the commission determines that there are cost or revenue
40 obligations for an electric corporation, as defined in Section 218,

1 that may not be recovered from customer-generators acting
2 pursuant to this section, those obligations shall remain within the
3 customer class from which any shortfall occurred and may not be
4 shifted to any other customer class. Net energy metering and
5 co-energy metering customers shall not be exempt from the public
6 goods charges imposed pursuant to Article 7 (commencing with
7 Section 381), Article 8 (commencing with Section 385), or Article
8 15 (commencing with Section 399) of Chapter 2.3 of Part 1. In its
9 report to the Legislature, the commission shall examine different
10 methods to ensure that the public goods charges remain
11 nonbypassable.

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

28 (m) In implementing the requirements of subdivisions (k) and
29 (l), a customer-generator shall not be required to replace its existing
30 meter except as set forth in subparagraph (A) of paragraph (1) of
31 subdivision (c), nor shall the electricity distribution utility or
32 cooperative require additional measurement of usage beyond that
33 which is necessary for customers in the same rate class as the
34 eligible customer-generator.

35 (n) It is the intent of the Legislature that the Treasurer
36 incorporate net energy metering, co-energy metering, and wind
37 energy co-metering projects undertaken pursuant to this section
38 as sustainable building methods or distributive energy technologies
39 for purposes of evaluating low-income housing projects.

1 SEC. 4. No reimbursement is required by this act pursuant to
2 Section 6 of Article XIII B of the California Constitution because
3 the only costs that may be incurred by a local agency or school
4 district will be incurred because this act creates a new crime or
5 infraction, eliminates a crime or infraction, or changes the penalty
6 for a crime or infraction, within the meaning of Section 17556 of
7 the Government Code, or changes the definition of a crime within
8 the meaning of Section 6 of Article XIII B of the California
9 Constitution.

10 With respect to certain other costs, no reimbursement is required
11 by this act pursuant to Section 6 of Article XIII B of the California
12 Constitution because a local agency or school district has the
13 authority to levy service charges, fees, or assessments sufficient
14 to pay for the program or level of service mandated by this act,
15 within the meaning of Section 17556 of the Government Code.