

AMENDED IN ASSEMBLY APRIL 11, 2002

CALIFORNIA LEGISLATURE—2001–02 REGULAR SESSION

ASSEMBLY BILL

No. 2228

Introduced by Assembly Member Negrete McLeod

February 20, 2002

An act to ~~amend Section 2827~~ *add and repeal Section 2827.9* of the Public Utilities Code, relating to public utilities.

LEGISLATIVE COUNSEL'S DIGEST

AB 2228, as amended, Negrete McLeod. Public utilities: net energy metering.

Under existing law, electric service providers, as defined, are required to provide eligible customer-generators with net energy metering, as defined. Until January 1, 2003, an “eligible customer-generator” means a residential, small commercial, commercial, industrial, or agricultural customer of an electric service provider, who uses a solar or a wind turbine electrical generating facility, or a hybrid system of both, with a capacity of not more than one megawatt that is located on the customer’s owned, leased, or rented premises, is interconnected and operates in parallel with the electric grid, and is intended primarily to offset part or all of the customer’s own electrical requirements. After January 1, 2003, an “eligible customer-generator” means a residential or small commercial customer of an electric service provider, who uses a solar or a wind turbine electrical generating facility, or a hybrid system of both, with a capacity of not more than 10 kilowatts that is located on the customer’s premises, is interconnected and operates in parallel with the electric



grid, and is intended primarily to offset part or all of the customer’s own electrical requirements.

~~This bill would expand the definition of an “eligible customer-generator” to include an otherwise eligible customer who uses a solar, wind turbine, or biogas electrical generating facility, or a hybrid system, until January 1, 2006, also require electric service providers, as defined, to provide eligible customer-generators, as defined, with net energy metering. The bill would define an “eligible customer-generator” as a small commercial, commercial, industrial, or agricultural customer of an electric service provider, who uses a biogas electrical generating facility with a capacity of not more than one megawatt and receives at least part of its funding from government sources. The bill would provide that an electric service provider is not obligated to provide net energy metering to additional customer generators in its service territory when the combined total biogas generation in its service territory equals 10 megawatts.~~

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

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

1 ~~SECTION 1. Section 2827 of the Public Utilities Code, as~~
 2 *SECTION 1. Section 2827.9 is added to the Public Utilities*
 3 *Code, to read:*

4 *2827.9. (a) The Legislature finds and declares that a pilot*
 5 *program to provide net energy metering for eligible dairy biogas*
 6 *generation projects would enhance the continued diversification*
 7 *of California’s energy resource mix and would encourage the*
 8 *installation of livestock air emission controls that the State Air*
 9 *Resources Board believes may produce multimedia environmental*
 10 *benefits.*

11 *(b) As used in this section, the following definitions apply:*

12 *(1) “Electric service provider” means an electrical*
 13 *corporation, as defined in Section 218, a local publicly owned*
 14 *electric utility, as defined in Section 9604, or an electrical*
 15 *cooperative, as defined in Section 2776, or any other entity that*
 16 *offers electrical service.*

17 *(2) “Eligible customer-generator” means a small commercial*
 18 *customer, as defined in subdivision (h) of Section 331, commercial,*
 19 *industrial, or agricultural customer of an electric service provider,*



1 *who uses a biogas electrical generating facility with a capacity of*
2 *not more than one megawatt that is located on the customer's*
3 *owned, leased, or rented premises, is interconnected and operates*
4 *in parallel with the electric grid, and is intended primarily to offset*
5 *part or all of the customer's own electrical requirements. An*
6 *"eligible customer-generator" shall receive part or all of its*
7 *funding from state or federal government sources.*

8 (3) *"Net energy metering" means measuring the difference*
9 *between the electricity supplied through the electric grid and the*
10 *difference between the electricity generated by an eligible*
11 *customer-generator and fed back to the electric grid over a*
12 *12-month period as described in subdivision (e). Net energy*
13 *metering shall be accomplished using a single meter capable of*
14 *registering the flow of electricity in two directions. An additional*
15 *meter or meters to monitor the flow of electricity in each direction*
16 *may be installed with the consent of the eligible*
17 *customer-generator, at the expense of the electric service provider,*
18 *and the additional metering shall be used only to provide the*
19 *information necessary to accurately bill or credit the eligible*
20 *customer-generator pursuant to subdivision (e), or to collect*
21 *biogas electric generating system performance information for*
22 *research purposes. If the existing electrical meter of an eligible*
23 *customer-generator is not capable of measuring the flow of*
24 *electricity in two directions, the eligible customer-generator shall*
25 *be responsible for all expenses involved in purchasing and*
26 *installing a meter that is able to measure electricity flow in two*
27 *directions. If an additional meter or meters are installed, the net*
28 *energy metering calculation shall yield a result identical to that of*
29 *a single meter.*

30 (c) (1) *Every electric service provider shall develop a standard*
31 *contract or tariff providing for net energy metering, and shall make*
32 *this contract available to eligible customer-generators, upon*
33 *request.*

34 (2) *If a customer participates in direct transactions pursuant to*
35 *paragraph (1) of subdivision (b) of Section 365 with an electric*
36 *supplier that does not provide distribution service for the direct*
37 *transactions, the service provider that provides distribution*
38 *service for an eligible customer-generator is not obligated to*
39 *provide net energy metering to the customer.*



1 (3) If a customer participates in direct transactions pursuant to
2 paragraph (1) of subdivision (b) of Section 365 with an electric
3 supplier, and the customer is an eligible customer-generator, the
4 service provider that provides distribution service for the direct
5 transactions may recover from the customer's electric service
6 provider the incremental costs of metering and billing service
7 related to net energy metering in an amount set by the commission.

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

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

33 (1) The eligible customer-generator shall, at the end of each
34 12-month period following the date of final interconnection of the
35 eligible customer-generator's system with an electric service
36 provider, and at each anniversary date thereafter, be billed for
37 electricity used during that period. The electric service provider
38 shall determine if the eligible customer-generator was a net
39 consumer or a net producer of electricity during that period.



1 (2) *At the end of each 12-month period, where the electricity*
2 *supplied during the period by the electric service provider exceeds*
3 *the electricity generated by the eligible customer-generator*
4 *during that same period, the eligible customer-generator is a net*
5 *electricity consumer and the electric service provider shall be*
6 *owed compensation for the eligible customer-generator’s net*
7 *kilowatthour consumption over that same period. The*
8 *compensation owed for the eligible customer-generator’s*
9 *consumption shall be calculated as follows:*

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

24 (B) *For eligible customer-generators taking service under*
25 *tariffs employing “time of use” rates, any net monthly*
26 *consumption of electricity shall be calculated according to the*
27 *terms of the contract or tariff to which the same customer would*
28 *be assigned to or be eligible for if the customer was not an eligible*
29 *customer-generator. When those eligible customer-generators are*
30 *net generators during any discrete time of use period, the net*
31 *kilowatthours produced shall be valued at the same price per*
32 *kilowatthour as the electric service provider would charge for*
33 *retail kilowatthour sales during that same time of use period. If the*
34 *eligible customer-generator’s time of use electrical meter is*
35 *unable to measure the flow of electricity in two directions,*
36 *paragraph (3) of subdivision (b) shall apply.*

37 (C) *The net balance of moneys owed shall be paid in*
38 *accordance with the electric service providers normal billing*
39 *cycle, except that if the eligible customer-generator is a net*
40 *electricity producer over a normal billing cycle, any excess*



1 kilowatthours generated during the billing cycle shall be carried
2 over to the following billing period, valued according to the
3 procedures set forth in this section, and appear as a credit on the
4 eligible customer-generator's account until the end of the annual
5 period when paragraph (3) shall apply.

6 (3) At the end of each 12-month period, where the electricity
7 generated by the eligible customer-generator during the 12-month
8 period exceeds the electricity supplied by the electric service
9 provider during that same period, the eligible customer-generator
10 is a net electricity producer and the electric service provider shall
11 retain any excess kilowatthours generated during the prior
12 12-month period. The eligible customer-generator shall not be
13 owed any compensation for those excess kilowatthours unless the
14 electric service provider enters into a purchase agreement with the
15 eligible customer-generator for those excess kilowatthours.

16 (4) The electric service provider shall provide every eligible
17 customer-generator with net electricity consumption information
18 with each regular bill. That information shall include the current
19 monetary balance owed the electric service provider for net
20 electricity consumed since the last 12-month period ended.
21 Notwithstanding subdivision (e), an electric service provider shall
22 permit that customer to pay monthly for net energy consumed.

23 (5) If an eligible customer-generator terminates the customer
24 relationship with the electric service provider, the electric service
25 provider shall reconcile the eligible customer-generator's
26 consumption and production of electricity during any part of a
27 12-month period following the last reconciliation according to the
28 requirements set forth in this subdivision, except that those
29 requirements shall apply only to the months since the most recent
30 12-month bill.

31 (6) If an electric service provider providing net metering to an
32 eligible customer-generator ceases providing that electrical
33 service to that customer during any 12-month period, and the
34 eligible customer-generator enters into a new net metering
35 contract or tariff with a new electric service provider, the 12-month
36 period, with respect to that new electric service provider, shall
37 commence on the date on which the new electric service provider
38 first supplies electric service to the customer-generator.

39 (7) Notwithstanding paragraph (1) of subdivision (c), an
40 electric service provider is not obligated to provide net energy



1 *metering to additional eligible customer-generators in its service*
2 *territory when the combined total biogas generation provided by*
3 *eligible customer-generators in its service territory equals 10*
4 *megawatts.*

5 *(f) This section shall remain in effect only until January 1,*
6 *2006, and as of that date is repealed, unless a later enacted statute,*
7 *that is enacted before January 1, 2006, deletes or extends that date.*
8 ~~amended by Section 11 of Chapter 8 of the 2001-02 First~~
9 ~~Extraordinary Session, is amended to read:~~

10 ~~2827. (a) The Legislature finds and declares that a program~~
11 ~~to provide net energy metering for eligible customer-generators is~~
12 ~~one way to encourage substantial private investment in renewable~~
13 ~~energy resources, stimulate in-state economic growth, reduce~~
14 ~~demand for electricity during peak consumption periods, help~~
15 ~~stabilize California's energy supply infrastructure, enhance the~~
16 ~~continued diversification of California's energy resource mix, and~~
17 ~~reduce interconnection and administrative costs for electricity~~
18 ~~suppliers.~~

19 ~~(b) As used in this section, the following definitions apply:~~

20 ~~(1) "Electric service provider" means an electrical~~
21 ~~corporation, as defined in Section 218, a local publicly owned~~
22 ~~electric utility, as defined in Section 9604, or an electrical~~
23 ~~cooperative, as defined in Section 2776, or any other entity that~~
24 ~~offers electrical service.~~

25 ~~(2) "Eligible customer-generator" means a residential, small~~
26 ~~commercial customer as defined in subdivision (h) of Section 331,~~
27 ~~commercial, industrial, or agricultural customer of an electric~~
28 ~~service provider, who uses a solar, biogas, or a wind turbine~~
29 ~~electrical generating facility, or a hybrid system, with a capacity~~
30 ~~of not more than one megawatt that is located on the customer's~~
31 ~~owned, leased, or rented premises, is interconnected and operates~~
32 ~~in parallel with the electric grid, and is intended primarily to offset~~
33 ~~part or all of the customer's own electrical requirements.~~

34 ~~(3) "Net energy metering" means measuring the difference~~
35 ~~between the electricity supplied through the electric grid and the~~
36 ~~electricity generated by an eligible customer-generator and fed~~
37 ~~back to the electric grid over a 12-month period as described in~~
38 ~~subdivision (e). Net energy metering shall be accomplished using~~
39 ~~a single meter capable of registering the flow of electricity in two~~
40 ~~directions. An additional meter or meters to monitor the flow of~~



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

18 (e) (1) Every electric service provider shall develop a standard
19 contract or tariff providing for net energy metering, and shall make
20 this contract available to eligible customer generators, upon
21 request.

22 (2) If a customer participates in direct transactions pursuant to
23 paragraph (1) of subdivision (b) of Section 365 with an electric
24 supplier that does not provide distribution service for the direct
25 transactions, the service provider that provides distribution service
26 for an eligible customer generator is not obligated to provide net
27 energy metering to the customer.

28 (3) If a customer participates in direct transactions pursuant to
29 paragraph (1) of subdivision (b) of Section 365 with an electric
30 supplier, and the customer is an eligible customer generator, the
31 service provider that provides distribution service for the direct
32 transactions may recover from the customer's electric service
33 provider the incremental costs of metering and billing service
34 related to net energy metering in an amount set by the commission.

35 (d) Each net energy metering contract or tariff shall be
36 identical, with respect to rate structure, all retail rate components,
37 and any monthly charges, to the contract or tariff to which the same
38 customer would be assigned if such customer was not an eligible
39 customer generator, except that eligible customer generators shall
40 not be assessed standby charges on the electrical generating



1 capacity or the kilowatthour production of an eligible solar or wind
2 electrical generating facility. The charges for all retail rate
3 components for eligible customer-generators shall be based
4 exclusively on the customer-generator's net kilowatthour
5 consumption over a 12-month period, without regard to the
6 customer-generator's choice of electric service provider. Any new
7 or additional demand charge, standby charge, customer charge,
8 minimum monthly charge, interconnection charge, or other charge
9 that would increase an eligible customer-generator's costs beyond
10 those of other customers in the rate class to which the eligible
11 customer-generator would otherwise be assigned are contrary to
12 the intent of this legislation, and shall not form a part of net energy
13 metering contracts or tariffs.

14 (c) For ~~eligible residential and small commercial~~
15 ~~customer-generators~~, the net energy metering calculation shall be
16 made by measuring the difference between the electricity supplied
17 to the eligible customer-generator and the electricity generated by
18 the eligible customer-generator and fed back to the electric grid
19 over a 12-month period. The following rules shall apply to the
20 annualized net metering calculation:

21 (1) The ~~eligible residential or small commercial~~
22 ~~customer-generator~~ shall, at the end of each 12-month period
23 following the date of final interconnection of the eligible
24 customer-generator's system with an electric service provider, and
25 at each anniversary date thereafter, be billed for electricity used
26 during that period. The electric service provider shall determine if
27 the eligible residential or small commercial customer-generator
28 was a net consumer or a net producer of electricity during that
29 period.

30 (2) At the end of each 12-month period, where the electricity
31 supplied during the period by the electric service provider exceeds
32 the electricity generated by the eligible residential or small
33 commercial customer-generator during that same period, the
34 eligible residential or small commercial customer-generator is a
35 net electricity consumer and the electric service provider shall be
36 owed compensation for the eligible customer-generator's net
37 kilowatthour consumption over that same period. The
38 compensation owed for the eligible residential or small
39 commercial customer-generator's consumption shall be
40 calculated as follows:



1 (A) For all eligible customer-generators taking service under
2 tariffs employing “baseline” and “over baseline” rates, any net
3 monthly consumption of electricity shall be calculated according
4 to the terms of the contract or tariff to which the same customer
5 would be assigned to or be eligible for if the customer was not an
6 eligible customer-generator. If those same customer-generators
7 are net generators over a billing period, the net kilowatthours
8 generated shall be valued at the same price per kilowatthour as the
9 electric service provider would charge for the baseline quantity of
10 electricity during that billing period, and if the number of
11 kilowatthours generated exceeds the baseline quantity, the excess
12 shall be valued at the same price per kilowatthour as the electric
13 service provider would charge for electricity over the baseline
14 quantity during that billing period.

15 (B) For all eligible customer-generators taking service under
16 tariffs employing “time of use” rates, any net monthly
17 consumption of electricity shall be calculated according to the
18 terms of the contract or tariff to which the same customer would
19 be assigned to or be eligible for if the customer was not an eligible
20 customer-generator. When those same customer-generators are
21 net generators during any discrete time of use period, the net
22 kilowatthours produced shall be valued at the same price per
23 kilowatthour as the electric service provider would charge for
24 retail kilowatthour sales during that same time of use period. If the
25 eligible customer-generator’s time of use electrical meter is unable
26 to measure the flow of electricity in two directions, paragraph (3)
27 of subdivision (b) shall apply.

28 (C) For all residential and small commercial
29 customer-generators and for each monthly period, the net balance
30 of moneys owed to the electric service provider for net
31 consumption of electricity or credits owed to the
32 customer-generator for net generation of electricity shall be
33 carried forward until the end of each 12-month period. For all
34 commercial, industrial, and agricultural customer-generators the
35 net balance of moneys owed shall be paid in accordance with the
36 electric service provider’s normal billing cycle, except that if the
37 commercial, industrial, or agricultural customer-generator is a net
38 electricity producer over a normal billing cycle, any excess
39 kilowatthours generated during the billing cycle shall be carried
40 over to the following billing period, valued according to the



1 ~~procedures set forth in this section, and appear as a credit on the~~
2 ~~customer generator's account, until the end of the annual period~~
3 ~~when paragraph (3) of subdivision (e) shall apply.~~

4 ~~(3) At the end of each 12-month period, where the electricity~~
5 ~~generated by the eligible customer-generator during the 12-month~~
6 ~~period exceeds the electricity supplied by the electric service~~
7 ~~provider during that same period, the eligible customer-generator~~
8 ~~is a net electricity producer and the electric service provider shall~~
9 ~~retain any excess kilowatthours generated during the prior~~
10 ~~12-month period. The eligible customer-generator shall not be~~
11 ~~owed any compensation for those excess kilowatthours unless the~~
12 ~~electric service provider enters into a purchase agreement with the~~
13 ~~eligible customer-generator for those excess kilowatthours.~~

14 ~~(4) The electric service provider shall provide every eligible~~
15 ~~residential or small commercial customer-generator with net~~
16 ~~electricity consumption information with each regular bill. That~~
17 ~~information shall include the current monetary balance owed the~~
18 ~~electric service provider for net electricity consumed since the last~~
19 ~~12-month period ended. Notwithstanding subdivision (e), an~~
20 ~~electric service provider shall permit that customer to pay monthly~~
21 ~~for net energy consumed.~~

22 ~~(5) If an eligible residential or small commercial~~
23 ~~customer-generator terminates the customer relationship with the~~
24 ~~electric service provider, the electric service provider shall~~
25 ~~reconcile the eligible customer-generator's consumption and~~
26 ~~production of electricity during any part of a 12-month period~~
27 ~~following the last reconciliation, according to the requirements set~~
28 ~~forth in this subdivision, except that those requirements shall apply~~
29 ~~only to the months since the most recent 12-month bill.~~

30 ~~(6) If an electric service provider providing net metering to a~~
31 ~~residential or small commercial customer-generator ceases~~
32 ~~providing that electrical service to that customer during any~~
33 ~~12-month period, and the customer-generator enters into a new net~~
34 ~~metering contract or tariff with a new electric service provider, the~~
35 ~~12-month period, with respect to that new electric service~~
36 ~~provider, shall commence on the date on which the new electric~~
37 ~~service provider first supplies electric service to the~~
38 ~~customer-generator.~~

39 ~~(f) A solar or wind turbine electrical generating system, or a~~
40 ~~hybrid system of both, used by an eligible customer-generator~~



1 shall meet all applicable safety and performance standards
2 established by the National Electrical Code, the Institute of
3 Electrical and Electronics Engineers, and accredited testing
4 laboratories such as Underwriters Laboratories and, where
5 applicable, rules of the Public Utilities Commission regarding
6 safety and reliability. A customer-generator whose solar or wind
7 turbine electrical generating system, or a hybrid system of both,
8 meets those standards and rules shall not be required to install
9 additional controls, perform or pay for additional tests, or purchase
10 additional liability insurance.

11 (g) This section shall remain in effect only until January 1,
12 2003, and as of that date is repealed, unless a later enacted statute,
13 that is enacted before January 1, 2003, deletes or extends that date.

14 SEC. 2.— Section 2827 of the Public Utilities Code, as added by
15 Section 12 of Chapter 8 of the 2001-02 First Extraordinary
16 Session, is amended to read:

17 2827.— (a) The Legislature finds and declares that a program
18 to provide net energy metering for eligible customer-generators is
19 one way to encourage private investment in renewable energy
20 resources, stimulate in-state economic growth, enhance the
21 continued diversification of California's energy resource mix, and
22 reduce interconnection and administrative costs for electricity
23 suppliers.

24 (b) As used in this section, the following definitions apply:

25 (1) "Electric service provider" means an electric corporation,
26 as defined in Section 218, a local publicly owned electric utility,
27 as defined in Section 9604, or an electrical cooperative, as defined
28 in Section 2776. "Electric service provider" also means an entity
29 that offers electrical service to residential and small commercial
30 customers, as defined in Section 394, if that entity offers net
31 energy metering. Any entity that offers net energy metering to
32 residential and small commercial customers shall comply with this
33 section.

34 (2) "Eligible customer-generator" means a residential
35 customer, or a small commercial customer as defined in
36 subdivision (h) of Section 331, of an electric service provider, who
37 uses a solar, biogas, or a wind turbine electrical generating facility,
38 or a hybrid system, with a capacity of not more than 10 kilowatts
39 that is located on the customer's premises, is interconnected and



1 operates in parallel with the electric grid, and is intended primarily
2 to offset part or all of the customer's own electrical requirements.

3 (3) ~~“Net energy metering” means measuring the difference~~
4 ~~between the electricity supplied through the electric grid and the~~
5 ~~electricity generated by an eligible customer-generator and fed~~
6 ~~back to the electric grid over a 12-month period as described in~~
7 ~~subdivision (e). Net energy metering shall be accomplished using~~
8 ~~a single meter capable of registering the flow of electricity in two~~
9 ~~directions. An additional meter or meters to monitor the flow of~~
10 ~~electricity in each direction may be installed with the consent of~~
11 ~~the customer-generator, at the expense of the electric service~~
12 ~~provider, and the additional metering shall be used only to provide~~
13 ~~the information necessary to accurately bill or credit the~~
14 ~~customer-generator pursuant to subdivision (e), or to collect solar~~
15 ~~or wind electric generating system performance information for~~
16 ~~research purposes. If the existing electrical meter of an eligible~~
17 ~~customer-generator is not capable of measuring the flow of~~
18 ~~electricity in two directions, the customer-generator shall be~~
19 ~~responsible for all expenses involved in purchasing and installing~~
20 ~~a meter that is able to measure electricity flow in two directions.~~
21 ~~If an additional meter or meters are installed, the net energy~~
22 ~~metering calculation shall yield a result identical to that of a single~~
23 ~~meter. An eligible customer-generator who already owns an~~
24 ~~existing solar or wind turbine electrical generating facility, or a~~
25 ~~hybrid system of both, is eligible to receive net energy metering~~
26 ~~service in accordance with this section.~~

27 (4) ~~“Ratemaking authority” means, for an electrical~~
28 ~~corporation as defined in Section 218, or an electrical cooperative~~
29 ~~as defined in Section 2776, the commission, and for a local~~
30 ~~publicly owned electric utility as defined in Section 9604, the local~~
31 ~~elected body responsible for regulating the rates of the utility.~~

32 (e) (1) ~~Every electric service provider shall develop a standard~~
33 ~~contract or tariff providing for net energy metering, and shall make~~
34 ~~this contract available to eligible customer-generators, upon~~
35 ~~request, on a first-come-first-served basis until the time that the~~
36 ~~total rated generating capacity used by eligible~~
37 ~~customer-generators equals one-tenth of 1 percent of the electric~~
38 ~~service provider's aggregate customer peak demand.~~

39 (2) ~~On an annual basis, beginning in 1999, every electric~~
40 ~~service provider shall make available to the ratemaking authority~~



1 ~~information on the total rated generating capacity used by eligible~~
2 ~~customer generators that are customers of that provider in the~~
3 ~~provider's service area. For those electric service providers who~~
4 ~~are operating pursuant to Section 394, they shall make available~~
5 ~~to the ratemaking authority the information required by this~~
6 ~~paragraph for each eligible customer generator that is their~~
7 ~~customer for each service area of an electric corporation, local~~
8 ~~publicly owned electric utility, or electrical cooperative, in which~~
9 ~~the customer has net energy metering. The ratemaking authority~~
10 ~~shall develop a process for making the information required by this~~
11 ~~paragraph available to energy service providers, and for using that~~
12 ~~information to determine when, pursuant to paragraph (3), a~~
13 ~~service provider is not obligated to provide net energy metering to~~
14 ~~additional customer generators in its service area.~~

15 ~~(3) Notwithstanding paragraph (1), an electric service provider~~
16 ~~is not obligated to provide net energy metering to additional~~
17 ~~customer generators in its service area when the combined total~~
18 ~~peak demand of all customer generators served by all the electric~~
19 ~~service providers in that service area furnishing net energy~~
20 ~~metering to eligible customer generators equals one-tenth of 1~~
21 ~~percent of the aggregate customer peak demand of those electric~~
22 ~~service providers.~~

23 ~~(4) If a customer participates in direct transactions pursuant to~~
24 ~~paragraph (1) of subdivision (b) of Section 365 with an electric~~
25 ~~supplier that does not offer net energy metering and is therefore not~~
26 ~~an electric service provider, the customer is not an eligible~~
27 ~~customer generator and the electric corporation, as defined in~~
28 ~~Section 218, that provides distribution service for the direct~~
29 ~~transactions, is not obligated to provide net energy metering to the~~
30 ~~customer.~~

31 ~~(5) If a customer participates in direct transactions pursuant to~~
32 ~~paragraph (1) of subdivision (b) of Section 365 with an electric~~
33 ~~supplier that offers net energy metering and is therefore an electric~~
34 ~~service provider, and the customer is an eligible~~
35 ~~customer generator, the electric corporation, as defined in Section~~
36 ~~218, that provides distribution service for the direct transactions~~
37 ~~may recover from the customer's electric service provider the~~
38 ~~incremental costs of metering and billing service related to net~~
39 ~~energy metering in an amount set by the commission.~~



1 ~~(d) Each net energy metering contract or tariff shall be~~
2 ~~identical, with respect to rate structure, all retail rate components,~~
3 ~~and any monthly charges, to the contract or tariff to which the same~~
4 ~~customer would be assigned if such customer was not an eligible~~
5 ~~customer-generator. The charges for all retail rate components for~~
6 ~~eligible customer-generators shall be based exclusively on the~~
7 ~~customer-generator's net kilowatthour consumption over a~~
8 ~~12-month period, without regard to the customer-generator's~~
9 ~~choice of electric service provider that offers net energy metering~~
10 ~~and is subject to this section pursuant to paragraph (1) of~~
11 ~~subdivision (b), in accordance with subdivision (c). Any new or~~
12 ~~additional demand charge, standby charge, customer charge,~~
13 ~~minimum monthly charge, interconnection charge, or other charge~~
14 ~~that would increase an eligible customer-generator's costs beyond~~
15 ~~those of other customers in the rate class to which the eligible~~
16 ~~customer-generator would otherwise be assigned are contrary to~~
17 ~~the intent of this legislation, and shall not form a part of net energy~~
18 ~~metering contracts or tariffs.~~

19 ~~(e) The net energy metering calculation shall be made by~~
20 ~~measuring the difference between the electricity supplied to the~~
21 ~~eligible customer-generator and the electricity generated by the~~
22 ~~eligible customer-generator and fed back to the electric grid over~~
23 ~~a 12-month period. The following rules shall apply to the~~
24 ~~annualized net metering calculation:~~

25 ~~(1) The eligible customer-generator shall, at the end of each~~
26 ~~12-month period following the date of final interconnection of the~~
27 ~~eligible customer-generator's system with an electric service~~
28 ~~provider, and at each anniversary date thereafter, be billed for~~
29 ~~electricity used during that period. The electric service provider~~
30 ~~shall determine if the eligible customer-generator was a net~~
31 ~~consumer or a net producer of electricity during that period.~~

32 ~~(2) At the end of each 12-month period, where the electricity~~
33 ~~supplied during the period by the electric service provider exceeds~~
34 ~~the electricity generated by the eligible customer-generator during~~
35 ~~that same period, the eligible customer-generator is a net~~
36 ~~electricity consumer and the electric service provider shall be~~
37 ~~owed compensation for the eligible customer-generator's net~~
38 ~~kilowatthour consumption over that same period. The~~
39 ~~compensation owed for the eligible customer-generator's net~~



1 ~~12-month kilowatthour consumption shall be calculated as~~
2 ~~follows:~~

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

17 ~~(B) For eligible customer-generators taking service under~~
18 ~~tariffs employing “time of use” rates, any net monthly~~
19 ~~consumption of electricity shall be calculated according to the~~
20 ~~terms of the contract or tariff to which the same customer would~~
21 ~~be assigned to or be eligible for if the customer was not an eligible~~
22 ~~customer-generator. When those same customer-generators are~~
23 ~~net generators during any discrete time of use period, the net~~
24 ~~kilowatthours produced shall be valued at the same price per~~
25 ~~kilowatthour as the electric service provider would charge for~~
26 ~~retail kilowatthour sales during that same time of use period. If the~~
27 ~~eligible customer-generator’s time of use electrical meter is unable~~
28 ~~to measure the flow of electricity in two directions, paragraph (3)~~
29 ~~of subdivision (b) shall apply.~~

30 ~~(C) For all customer-generators and for each monthly period,~~
31 ~~the net balance of moneys owed to the electric service provider for~~
32 ~~net consumption of electricity or credits owed to the~~
33 ~~customer-generator for net generation of electricity shall be~~
34 ~~carried forward until the end of each 12-month period.~~

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 electric service~~
38 ~~provider during that same period, the eligible customer-generator~~
39 ~~is a net electricity producer and the electric service provider shall~~
40 ~~retain any excess kilowatthours generated during the prior~~



1 ~~12-month period. The eligible customer-generator shall not be~~
2 ~~owed any compensation for those excess kilowatthours unless the~~
3 ~~electric service provider enters into a purchase agreement with the~~
4 ~~eligible customer-generator for those excess kilowatthours.~~

5 ~~(4) The electric service provider shall provide every eligible~~
6 ~~customer-generator with net electricity consumption information~~
7 ~~with each regular bill. That information shall include the current~~
8 ~~monetary balance owed the electric service provider for net~~
9 ~~electricity consumed since the last 12-month period ended.~~
10 ~~Notwithstanding subdivision (c), an electric service provider shall~~
11 ~~permit that customer to pay monthly for net energy consumed.~~

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

20 ~~(6) If an electric service provider providing net metering to a~~
21 ~~customer-generator ceases providing that electrical service to that~~
22 ~~customer during any 12-month period, and the customer-generator~~
23 ~~enters into a new net metering contract or tariff with a new electric~~
24 ~~service provider, the 12-month period, with respect to that new~~
25 ~~electric service provider, shall commence on the date on which the~~
26 ~~new electric service provider first supplies electric service to the~~
27 ~~customer-generator.~~

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



1 ~~(g) This section shall become operative on January 1, 2003.~~

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