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AMENDED IN ASSEMBLY APRIL 23, 2002  
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CALIFORNIA LEGISLATURE—2001–02 REGULAR SESSION

**ASSEMBLY BILL**

**No. 2228**

**Introduced by Assembly Member Negrete McLeod**

February 20, 2002

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An act to 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, until January 1, 2006, also require electric service providers, as defined to mean electrical corporations, to provide eligible customer generators, as defined, with net energy metering under a pilot program. 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 define an "eligible biogas digester customer generator" as a customer who is the recipient of local, state, or federal funds, or who self-finances pilot projects designed to encourage the development of biogas digestion power production technologies, and would prescribe the conditions under which these customers may participate in the pilot program established by the bill. 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. *require electrical corporations, as defined, to provide eligible biogas digester customer- generators with net energy metering under a pilot program. The bill would define an "eligible biogas digester customer generator", in part, as a customer of an electrical corporation that uses a biogas digester electrical generating facility, as defined, with a certain capacity that is located on or adjacent to the customer's premises, is interconnected and operates in parallel with the electric grid, and is sized to offset part or all of the customer's own electrical requirements and that receives certain funding. The bill would prescribe conditions under which these customers may participate in the pilot program established by the bill.*

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 2827.9 is added to the Public Utilities
- 2 Code, to read:

2827.9. (a) (1) The Legislature finds and declares that a pilot program to provide net energy metering for eligible dairy biogas generation projects *digester customer-generators* would enhance the continued diversification of California's energy resource mix and would encourage the installation of livestock air emission controls that the State Air Resources Board believes may produce ~~multimedia~~ *multiple* environmental benefits.

(2) ~~It is, therefore, the intent of the Legislature in enacting the act adding this section to accomplish both of the following:~~

(A) ~~To enact a program in furtherance of Chapter 7 of the Statutes of the 2001-02 First Extraordinary Session.~~

(B) ~~To ensure the immediate implementation of energy efficiency programs in order to reduce the consumption of energy and to assist in reducing costs by reducing peak energy demand.~~

(2) *The Legislature further finds and declares that the net energy metering pilot program authorized pursuant to this section for eligible biogas digester customer-generators, which nets out generation charges against generation charges on a time of use basis, furthers the intent of Chapter 7 of the Statutes of 2001, First Extraordinary Session, by facilitating the implementation of energy efficiency programs in order to reduce consumption of energy, reduce the costs associated with energy demand, and achieve a reduction in peak electricity demand.*

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

(1) ~~“Electric service provider~~ *Electrical corporation*” means an electrical corporation, as defined in Section 218.

(2) (A) ~~“Eligible biogas digester customer-generator” means a customer who is the recipient of local, state, or federal funds, or who self-finances pilot projects designed to encourage the development of biogas digestion power production technologies, and who has developed either a dairy manure methane power production project or has reduced peak usage by revision of system operations to produce replacement energy as a byproduct or anaerobic digestion of biosolids and animal wastes. An eligible biogas digester customer-generator shall be assigned a time of use meter.~~

(B) ~~At the end of each monthly period, when the electricity supplied during the period by the electric service provider exceeds the electricity generated by the eligible biogas digester customer-generator during that same period, the eligible biogas~~

~~digester customer-generator is a net electricity consumer and the electric service provider is owed compensation for the net kilowatthour consumption of the eligible biogas digester customer-generator over that same period. The compensation owed for the consumption of the eligible biogas digester customer-generator shall be calculated in accordance with both of the following:~~

~~(i) The generator charges for any net monthly consumption of electricity shall be calculated according to the terms of the time-of-use tariff to which the same customer would be assigned. When those eligible biogas digester customer-generators are net generators during any discrete time-of-use period, the net kilowatthours produced shall be valued at the same generation price per kilowatthour as the electric service provider would charge for retail kilowatthour sales during that same time-of-use period.~~

~~(ii) All charges other than the generation charges described in clause (i) shall be calculated in accordance with the applicable tariff of the eligible biogas digester customer-generator, based on the total monthly consumption of electricity by the eligible biogas digester customer-generator.~~

~~(C) A project shall be sized to offset part or all of the electrical requirements of the eligible biogas digester customer-generators, but in no event shall the project-specific load exceed one megawatt.~~

~~(3) “Eligible customer-generator” means a small commercial customer, as defined in subdivision (h) of Section 331, 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 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. An “eligible customer-generator” shall receive part or all of its funding from state or federal government sources: a customer of an electrical corporation that meets both of the following criteria:~~

~~(i) Uses a biogas digester electrical generating facility with a capacity of not more than one megawatt that is located on or adjacent to the customer’s owned, leased, or rented premises, is~~

1 *interconnected and operates in parallel with the electric grid, and*  
2 *is sized to offset part or all of the eligible biogas digester*  
3 *customer-generator's own electrical requirements.*

4 (ii) *Is the recipient of local, state, or federal funds, or who*  
5 *self-finances pilot projects designed to encourage the development*  
6 *of biogas digester electrical generating facilities.*

7 (3) *"Eligible biogas digester electrical generating facility"*  
8 *means a generating facility used to produce electricity by either a*  
9 *manure methane production project or as a byproduct of the*  
10 *anaerobic digestion of bio-solids and animal waste.*

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

35 ~~(e) (1) Every electric service provider shall develop a standard~~  
36 ~~contract or tariff providing for net energy metering, and shall make~~  
37 ~~this contract available to eligible customer-generators, upon~~  
38 ~~request.~~

39 ~~(2) If a customer participates in direct transactions pursuant to~~  
40 ~~paragraph (1) of subdivision (b) of Section 365 with an electric~~

supplier that does not provide distribution service for the direct transactions, the service provider that provides distribution service for an eligible customer-generator is not obligated to provide net energy metering to the customer.

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

(c) Every electrical corporation shall, not later than 60 days from the effective date of this section, file with the commission a standard tariff providing for net energy metering for eligible biogas digester customer-generators, consistent with this section. Every electrical corporation shall make this tariff available to eligible biogas digester customer-generators upon request, on a first come, first serve basis, until the total cumulative rated generating capacity used by the eligible biogas digester customer-generators equals 5 megawatts within the service territory of the electrical corporation. The combined statewide cumulative rated generating capacity used by the eligible biogas digester customer-generators in the service territories of all three electrical corporations in the state may not exceed 15 megawatts.

(d) Each net energy metering contract or tariff shall be identical, with respect to rate structure, all retail rate components, and any monthly charges, to the contract or tariff to which the same customer would be assigned if the customer was not an eligible customer-generator, except that eligible customer-generators shall not be assessed standby charges on the electrical generating capacity or the kilowatthour production of a biogas electrical generating facility biogas digester customer-generator. The charges for all retail rate components for eligible customer-generators shall be based exclusively on the eligible biogas digester customer-generators shall be based exclusively on the eligible biogas digester customer-generator's net kilowatthour consumption over a 12-month period, without regard to the customer-generator's choice of electric service provider. Any new or additional demand monthly period. Any new or additional demand charge, standby charge, customer charge, minimum

1 monthly charge, interconnection charge, or other charge that  
2 would increase an eligible *biogas digester* customer-generator's  
3 costs beyond those of other customers in the rate class to which the  
4 eligible *biogas digester* customer-generator would otherwise be  
5 assigned are contrary to the intent of this legislation, and shall not  
6 form a part of net energy metering ~~contracts or tariffs~~.

7 (e) The net energy metering calculation shall be made by  
8 measuring the difference between the electricity supplied to the  
9 eligible customer-generator and the electricity generated by the  
10 eligible customer-generator and fed back to the electric grid over  
11 a ~~12-month~~ *monthly* period. The following rules shall apply to the  
12 ~~annualized net monthly period~~ metering calculation:

13 (1) The eligible *biogas digester* customer-generator shall, at  
14 the end of each ~~12-month~~ *monthly* period following the date of  
15 final interconnection of the ~~eligible customer-generator's system~~  
16 ~~with an electric service provider, and at each anniversary date~~  
17 ~~thereafter, be billed for eligible biogas digester~~  
18 ~~customer-generator's system with an electrical corporation, and~~  
19 ~~at the end of each monthly billing cycle thereafter, be billed for~~  
20 electricity used during that period. The ~~electric service provider~~  
21 ~~electrical corporation~~ shall determine if the eligible *biogas*  
22 *digester* customer-generator was a net consumer or a net producer  
23 of electricity during that period.

24 (2) At the end of each ~~12-month~~ *monthly* period, where the  
25 electricity supplied during the period by the ~~electric service~~  
26 ~~provider~~ *electrical corporation* exceeds the electricity generated  
27 by the eligible *biogas digester* customer-generator during that  
28 same period, the eligible *biogas digester* customer-generator is a  
29 net electricity consumer and the ~~electric service provider~~ *electrical*  
30 *corporation* shall be owed compensation for the eligible *biogas*  
31 *digester* customer-generator's net kilowatthour consumption over  
32 that same period. The compensation owed for the eligible *biogas*  
33 *digester* customer-generator's consumption shall be calculated as  
34 follows:

35 (A) ~~For eligible customer generators taking service under~~  
36 ~~tariffs employing "baseline" and "over baseline" rates, any net~~  
37 ~~monthly consumption of electricity shall be calculated according~~  
38 ~~to the terms of the contract or tariff to which the same customer~~  
39 ~~would be assigned to or be eligible for if the customer was not an~~  
40 ~~eligible customer generator. If those eligible customer generators~~



1 ~~are net generators over a billing period the net kilowatthours~~  
2 ~~generated will be valued at the same price per kilowatthour as the~~  
3 ~~electric service provider would charge for the baseline quantity of~~  
4 ~~electricity during that billing period, and if the number of~~  
5 ~~kilowatthours generated exceeds baseline quantity, the excess~~  
6 ~~shall be valued at the same price per kilowatthour as the electric~~  
7 ~~service provider would charge for electricity over the baseline~~  
8 ~~quantity during that billing period.~~

9 ~~(B) For eligible customer generators taking service under~~  
10 ~~tariffs employing “time of use” rates, any net monthly~~

11 *(A) The generation charges for any net monthly consumption*  
12 *of electricity shall be calculated according to the terms of the*  
13 ~~contract or tariff to which the same customer would be assigned~~  
14 *to or be eligible for if the customer was not an eligible biogas*  
15 *digester customer-generator. When those eligible biogas digester*  
16 *customer-generators are net generators during any discrete time of*  
17 *use period, the net kilowatthours produced shall be valued at the*  
18 *same price per kilowatthour as the electric service provider*  
19 *electrical corporation would charge for retail kilowatthour sales*  
20 *for generation during that same time of use period. If the eligible*  
21 *biogas digester customer-generator’s time-of-use electrical meter*  
22 *is unable to measure the flow of electricity in two directions,*  
23 *paragraph (3) (4) of subdivision (b) shall apply. All other charges,*  
24 *other than generation charges, shall be calculated in accordance*  
25 *with the eligible biogas digester customer-generator’s applicable*  
26 *tariff and based on the total kilowatthours delivered by the*  
27 *electrical corporation to the eligible biogas digester*  
28 *customer-generator.*

29 ~~(C) The net balance of moneys owed shall be paid in~~  
30 ~~accordance with the electric service providers normal billing~~  
31 ~~cycle, except that if the eligible customer-generator is a net~~  
32 ~~electricity producer over a normal billing cycle, any excess~~  
33 ~~kilowatthours generated during the billing cycle shall be carried~~  
34 ~~over to the following billing period, valued according to the~~  
35 ~~procedures set forth in this section, and appear as a credit on the~~  
36 ~~eligible customer-generator’s account until the end of the annual~~  
37 ~~period when paragraph (3) shall apply.~~

38 *(B) The net balance of moneys owed shall be paid in*  
39 *accordance with the electrical corporation’s normal billing cycle.*



(3) At the end of each ~~12-month~~ *monthly* period, where the electricity ~~generated by the eligible customer-generator during the 12-month~~ *generated by the eligible biogas digester customer-generator during the monthly* period exceeds the electricity supplied by the ~~electric service provider during that same period,~~ *the eligible customer-generator electrical corporation during that same period, the eligible biogas digester customer-generator* is a net electricity producer and the ~~electric service provider electrical corporation~~ shall retain any excess kilowatthours generated during the prior ~~12-month~~ *monthly* period. The ~~eligible customer-generator shall~~ *eligible biogas digester customer-generator shall* not be owed any compensation for those excess kilowatthours ~~unless the electric service provider enters into a purchase agreement with the eligible customer-generator for those excess kilowatthours.~~

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

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

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

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

~~metering to additional eligible customer-generators in its service territory when the combined total biogas generation provided by eligible customer-generators in its service territory equals 10 megawatts.~~

~~(f) The cumulative load in the service territories of all electrical corporations participating in the pilot project established by this section shall not exceed 15 megawatts, and the load for which the netting of the generation charges of eligible biogas digester customer-generators shall not exceed 5 megawatts within the service territory of each electrical corporation.~~

~~(g).~~

*(4) If an eligible biogas digester customer-generator terminates service with the electrical corporation, the electrical corporation shall reconcile the eligible biogas digester customer-generator's consumption and production of electricity during any monthly period.*

*(f) This section shall remain in effect only until January 1, 2006, and as of that date is repealed, unless a later enacted statute, that is enacted before January 1, 2006, deletes or extends that date.*