

AMENDED IN SENATE APRIL 13, 2005

SENATE BILL

No. 816

Introduced by Senator Kehoe

(Principal coauthor: Assembly Member Saldana)

February 22, 2005

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

LEGISLATIVE COUNSEL'S DIGEST

SB 816, as amended, Kehoe. Electric service providers: net metering.

Existing law requires every electric service provider, as defined, to develop a standard contract or tariff providing for net energy metering, and to make this contract available to eligible customer generators, upon request, on a first-come-first-served basis until ~~the time that~~ the total rated generating capacity used by eligible customer generators exceeds 0.5% of the electric service provider's aggregate customer peak demand.

This bill would establish for the San Diego Gas and Electric Company a separate limit of 50 megawatts ~~or 1½% of its aggregate customer peak demand. The bill would require the Public Utilities Commission, when interconnected net metering for the territory of the San Diego Gas and Electric Company reaches 40 megawatts, to reevaluate the total rated generating capacity limit for the territory and to prepare and submit to the Legislature a report recommending any modification to the limit that the commission determines to be necessary.~~

The bill would make a finding and declaration of the Legislature regarding the inapplicability of a general statute within the meaning of Section 16 of Article IV of the California Constitution.

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 is
2 amended to read:

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

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

13 (1) "Electric service provider" means an electrical corporation,
14 as defined in Section 218, a local publicly owned electric utility,
15 as defined in Section 9604, or an electrical cooperative, as
16 defined in Section 2776, or any other entity that offers electrical
17 service. This section shall not apply to a local publicly owned
18 electric utility, as defined in Section 9604 of the Public Utilities
19 Code, that serves more than 750,000 customers and that also
20 conveys water to its customers.

21 (2) "Eligible customer-generator" means a residential, small
22 commercial customer as defined in subdivision (h) of Section
23 331, commercial, industrial, or agricultural customer of an
24 electric service provider, who uses a solar or a wind turbine
25 electrical generating facility, or a hybrid system of both, with a
26 capacity of not more than one megawatt that is located on the
27 customer's owned, leased, or rented premises, is interconnected
28 and operates in parallel with the electric grid, and is intended
29 primarily to offset part or all of the customer's own electrical
30 requirements.

31 (3) "Net energy metering" means measuring the difference
32 between the electricity supplied through the electric grid and the
33 electricity generated by an eligible customer-generator and fed
34 back to the electric grid over a 12-month period as described in
35 subdivision (h). Net energy metering shall be accomplished using

a single meter capable of registering the flow of electricity in two directions. An additional meter or meters to monitor the flow of electricity in each direction may be installed with the consent of the customer-generator, at the expense of the electric service provider, and the additional metering shall be used only to provide the information necessary to accurately bill or credit the customer-generator pursuant to subdivision (h), or to collect solar or wind electric generating system performance information for research purposes. If the existing electrical meter of an eligible customer-generator is not capable of measuring the flow of electricity in two directions, the customer-generator shall be responsible for all expenses involved in purchasing and installing a meter that is able to measure electricity flow in two directions. If an additional meter or meters are installed, the net energy metering calculation shall yield a result identical to that of a single meter. An eligible customer-generator who already owns an existing solar or wind turbine electrical generating facility, or a hybrid system of both, is eligible to receive net energy metering service in accordance with this section.

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

(5) “Co-energy metering” means a program that is the same in all other respects as a net energy metering program, except that the local publicly owned electric utility, as defined in Section 9604, has elected to apply a generation-to-generation energy and time-of-use credit formula as provided in subdivision (i).

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

(c) (1) (A) Every electric service provider shall develop a standard contract or tariff providing for net energy metering, and

1 shall make this ~~contract~~ *tariff* available to eligible
2 customer-generators, upon request, on a first-come-first-served
3 basis until the time that both of the following events have
4 occurred:

5 (A) ~~Except as provided in subparagraph (B), in the territory of~~
6 ~~each electric service provider, except as provided in~~
7 ~~subparagraph (B), the total rated generating capacity used by~~
8 ~~eligible customer-generators exceeds one-half of 1 percent of the~~
9 ~~electric service provider's aggregate customer peak demand.~~

10 (B) ~~In the territory of the San Diego Gas and Electric~~
11 ~~Company, the total rated generating capacity used by eligible~~
12 ~~customer-generators exceeds 50 megawatts or 1 and one-half~~
13 ~~percent of its aggregate customer peak demand. When~~
14 ~~interconnected net metering for that territory reaches 40~~
15 ~~megawatts, the commission shall reevaluate the total rated~~
16 ~~generating capacity limit for the territory and prepare and submit~~
17 ~~to the Legislature a report recommending any modification to the~~
18 ~~limit that the commission determines to be necessary.~~

19 (B) *Notwithstanding subparagraph (A), the San Diego Gas*
20 *and Electric Company shall make its standard net energy*
21 *metering tariff available to eligible customer-generators until the*
22 *total rated generating capacity used by eligible*
23 *customer-generators within its service territory exceeds 50*
24 *megawatts.*

25 (2) On an annual basis, beginning in 2003, every electric
26 service provider shall make available to the ratemaking authority
27 information on the total rated generating capacity used by
28 eligible customer-generators that are customers of that provider
29 in the provider's service area. For those electric service providers
30 who are operating pursuant to Section 394, they shall make
31 available to the ratemaking authority the information required by
32 this paragraph for each eligible customer-generator that is their
33 customer for each service area of an electric corporation, local
34 publicly owned electric utility, or electrical cooperative, in which
35 the customer has net energy metering. The ratemaking authority
36 shall develop a process for making the information required by
37 this paragraph available to energy service providers, and for
38 using that information to determine when, pursuant to paragraph
39 (3), a service provider is not obligated to provide net energy
40 metering to additional customer-generators in its service area.

(3) Notwithstanding paragraph (1), an electric service provider is not obligated to provide net energy metering to additional customer-generators in its service area when the combined total peak demand of all customer-generators served by all the electric service providers in that service area furnishing net energy metering to eligible customer-generators exceeds one-half of 1 percent of the aggregate customer peak demand of those electric service providers.

(d) Electric service providers shall make all necessary forms and contracts for net metering service available for download from the Internet.

(e) (1) Every electric service provider shall ensure that requests for establishment of net energy metering are processed in a time period not exceeding that for similarly situated customers requesting new electric service, but not to exceed 30 working days from the date the electric service provider receives a completed application form for net metering service, including a signed interconnection agreement from an eligible customer-generator and the electric inspection clearance from the governmental authority having jurisdiction. If an electric service provider is unable to process the request within the allowable timeframe, the electric service provider shall notify both the customer-generator and the ratemaking authority of the reason for its inability to process the request and the expected completion date.

(2) Electric service providers shall ensure that requests for an interconnection agreement from an eligible customer-generator are processed in a time period not to exceed 30 working days from the date the electric service provider receives a completed application form from the eligible customer-generator for an interconnection agreement. If an electric service provider is unable to process the request within the allowable timeframe, the electric service provider shall notify the customer-generator and the ratemaking authority of the reason for its inability to process the request and the expected completion date.

(f) (1) If a customer participates in direct transactions pursuant to 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

1 distribution service for an eligible customer-generator is not
2 obligated to provide net energy metering to the customer.

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

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

33 (h) For eligible residential and small commercial
34 customer-generators, the net energy metering calculation shall be
35 made by measuring the difference between the electricity
36 supplied to the eligible customer-generator and the electricity
37 generated by the eligible customer-generator and fed back to the
38 electric grid over a 12-month period. The following rules shall
39 apply to the annualized net metering calculation:

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

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

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

(B) For all eligible customer-generators taking service under tariffs employing "time-of-use" rates, any net monthly consumption of electricity shall be calculated according to the terms of the contract or tariff to which the same customer would be assigned to or be eligible for if the customer was not an eligible customer-generator. When those same

1 customer-generators are net generators during any discrete
2 time-of-use period, the net kilowatthours produced shall be
3 valued at the same price per kilowatthour as the electric service
4 provider would charge for retail kilowatthour sales during that
5 same time-of-use period. If the eligible customer-generator's
6 time-of-use electrical meter is unable to measure the flow of
7 electricity in two directions, paragraph (3) of subdivision (b)
8 shall apply.

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

26 (3) At the end of each 12-month period, where the electricity
27 generated by the eligible customer-generator during the
28 12-month period exceeds the electricity supplied by the electric
29 service provider during that same period, the eligible
30 customer-generator is a net electricity producer and the electric
31 service provider shall retain any excess kilowatthours generated
32 during the prior 12-month period. The eligible
33 customer-generator shall not be owed any compensation for
34 those excess kilowatthours unless the electric service provider
35 enters into a purchase agreement with the eligible
36 customer-generator for those excess kilowatthours.

37 (4) The electric service provider shall provide every eligible
38 residential or small commercial customer-generator with net
39 electricity consumption information with each regular bill. That
40 information shall include the current monetary balance owed the

1 electric service provider for net electricity consumed since the
2 last 12-month period ended. Notwithstanding this subdivision, an
3 electric service provider shall permit that customer to pay
4 monthly for net energy consumed.

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

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

22 (i) Notwithstanding any other provisions of this section, the
23 following provisions shall apply to an eligible
24 customer-generator with a capacity of more than 10 kilowatts,
25 but not exceeding one megawatt, that receives electrical service
26 from a local publicly owned electric utility, as defined in Section
27 9604, that has elected to utilize a co-energy metering program
28 unless the electric service provider chooses to provide service for
29 eligible customer-generators with a capacity of more than 10
30 kilowatts in accordance with subdivisions (g) and (h):

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

1 in both directions. This subdivision shall not restrict the ability of
2 an eligible customer-generator to utilize any economic incentives
3 provided by a government agency or the electric service provider
4 to reduce its costs for purchasing and installing a time-of-use
5 meter.

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

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

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

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

10 (k) If the commission determines that there are cost or revenue
11 obligations for an electric corporation, as defined in Section 218,
12 that may not be recovered from customer-generators acting
13 pursuant to this section, those obligations shall remain within the
14 customer class from which any shortfall occurred and may not be
15 shifted to any other customer class. Net metering and
16 co-metering customers shall not be exempt from the public
17 benefits charge. In its report to the Legislature, the commission
18 shall examine different methods to ensure that the public benefits
19 charge remains a nonbypassable charge.

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

34 (m) In implementing the requirements of subdivisions (k) and
35 (l), a customer-generator shall not be required to replace its
36 existing meter except as set forth in paragraph (3) of subdivision
37 (b), nor shall the electric service provider require additional
38 measurement of usage beyond that which is necessary for
39 customers in the same rate class as the eligible
40 customer-generator.

1 (n) On or before January 1, 2005, the commission shall submit
2 a report to the Governor and the Legislature that assesses the
3 economic and environmental costs and benefits of net metering
4 to customer-generators, ratepayers, and utilities, including any
5 beneficial and adverse effects on public benefit programs and
6 special purpose surcharges. The report shall be prepared by an
7 independent party under contract with the commission.

8 (o) It is the intent of the Legislature that the Treasurer
9 incorporate net energy metering and co-energy metering projects
10 undertaken pursuant to this section as sustainable building
11 methods or distributive energy technologies for purposes of
12 evaluating low-income housing projects.

13 SEC. 2. The Legislature finds and declares that, because of
14 the unique circumstances applicable only to the territory of the
15 San Diego Gas and Electric Company, a statute of general
16 applicability cannot be enacted within the meaning of
17 subdivision (b) of Section 16 of Article IV of the California
18 Constitution. Therefore, this special statute is necessary.