

## Assembly Bill No. 58

### CHAPTER 836

An act to add Section 25401.6 to the Public Resources Code, and to amend Sections 2827 and 2827.7 of, to add Section 2827.8 to, and to repeal Section 2827 of, the Public Utilities Code, relating to public utilities.

[Approved by Governor September 24, 2002. Filed  
with Secretary of State September 24, 2002.]

#### LEGISLATIVE COUNSEL'S DIGEST

AB 58, Keeley. Net energy metering.

(1) Under existing law, the Public Utilities Commission is required to order the respective electrical corporations to collect and spend funds in accordance with a prescribed schedule. Under existing law, of the funds expended for in-state operation and development of emerging renewable resource technologies, a certain amount shall be used for programs designed to provide customer credits for purchases of renewable energy produced by certified energy providers.

This bill would require the commission, in its administration of these provisions, to establish a separate rebate for eligible distributed emerging technologies for affordable housing projects.

These provisions would only become operative if SB 1038 is also enacted and amends Section 383.5 of the Public Utilities Code.

(2) Existing law requires every electric service provider to develop a standard contract or tariff providing for net energy metering, and to make this contract available to eligible customer-generators, upon request. Existing law, commencing on January 1, 2003, requires every electric service provider, upon request, to make available to eligible customer-generators contracts for net energy metering subject to specified limitations on the number of contracts. Existing law requires, commencing in 1999, every electric service provider to make available to the ratemaking authority information on the total rated generating capacity used by eligible customer-generators that are customers of that provider in the provider's service area.

This bill would require every electric service provider, as defined, commencing January 1, 2003, to make available to the ratemaking authority information on the total rated generating capacity used by eligible customer-generators that are customers of that provider in the provider's service area. The bill would require every electric service provider to ensure that requests for establishment of net energy metering

service 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, including a signed interconnection agreement, from an eligible customer-generator and an electric inspection clearance. The bill would require an electric service provider to ensure that requests for an interconnection agreement be processed in a time period not to exceed 30 working days from the date the electric service provider receives the completed application. The bill would require an electric service provider that is unable to process the requests within these timeframes, to notify the customer-generator and the ratemaking authority. The bill would also require every electric service provider to make forms and contracts for net energy metering available for download from the Internet. The bill would specify special net-metering provisions for an eligible customer-generator with a capacity of more than 10 kilowatts, that receives electrical service from a local publicly owned electric utility that has elected to utilize a co-energy metering program. The bill would require, if the commission determines that there are cost or revenue obligations for an electric service provider that may not be recovered from customer-generators acting pursuant to the bill, that those obligations remain within the customer class from which any shortfall occurred and would prohibit those obligations from being shifted to any other customer class. The bill would require that net energy metering and co-energy metering customers shall not be exempt from the public benefits charge. The bill would require the commission, in its report to the Legislature, to examine different methods to ensure the public benefits charge remains a nonbypassable charge. The bill would require net metering customers to reimburse the Department of Water Resources for all charges that would otherwise be imposed on the customer by the commission to recover bond-related costs, as specified. The bill would require the commission to report to the Governor and the Legislature by January 1, 2005, on the economic and environmental costs and benefits of net energy metering. The bill would express legislative intent that the Treasurer incorporate net energy metering and co-energy metering projects as sustainable building methods or distributive energy technologies for purposes of evaluating low-income housing projects.

This bill would require eligible customer-generators, unless approved by the electric service provider, that utilize wind energy co-metering, as defined by the bill, with a capacity of more than 50 kilowatts, but not exceeding one megawatt, to utilize described meters.

The bill would provide that the consumption of electricity from the electric service provider for wind energy co-metering by an eligible



customer-generator is to be priced in accordance with the standard rate charged to the eligible customer-generator in accordance with the rate structure to which the customer would be assigned if the customer did not use an eligible wind electrical generating facility, and that the generation of electricity provided to the electric service provider is to result in a credit to the eligible customer-generator.

(3) Existing law provides that generation eligible for net energy metering installed on or before December 31, 2002, is entitled to the net energy metering terms in effect on the date of installation for the life of the installation.

This bill would make this provision applicable only to generation eligible for net energy metering that has all local and state permits required to commence construction on or before December 31, 2002, and has completed construction on or before September 30, 2003, regardless of any change in customer or ownership of the energy system. The applicable terms would be those in effect on the date local and state permits were acquired.

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

SECTION 1. Section 25401.6 is added to the Public Resources Code, to read:

25401.6. (a) In its administration of subdivision (e) of Section 383.5 of the Public Utilities Code, the commission shall establish a separate rebate for eligible distributed emerging technologies for affordable housing projects including, but not limited to, projects undertaken pursuant to Section 50052.5, 50053, or 50199.4 of the Health and Safety Code. In establishing the rebate, where the commission determines that the occupants of the housing shall have individual meters, the commission may adjust the amount of the rebate based on the capacity of the system, provided that a system may receive a rebate only up to 75 percent of the total installed costs. The commission may establish a reasonable limit on the total amount of funds dedicated for purposes of this section.

(b) It is the intent of the Legislature that this section fulfills the purpose of subparagraph (E) of paragraph (2) of subdivision (e) of Section 383.5 of the Public Utilities Code.

SEC. 2. Section 2827 of the Public Utilities Code, as amended by Section 11 of Chapter 8 of the Statutes of the 2001–02 First Extraordinary Session, is amended to read:

2827. (a) The Legislature finds and declares that a program to provide net energy metering for eligible customer-generators is one way to encourage substantial private investment in renewable energy



resources, stimulate in-state economic growth, reduce demand for electricity during peak consumption periods, help stabilize California's energy supply infrastructure, enhance the continued diversification of California's energy resource mix, and reduce interconnection and administrative costs for electricity suppliers.

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

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

(2) "Eligible customer-generator" means a residential, small commercial customer as defined in subdivision (h) of Section 331, 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.

(3) "Net energy metering" means measuring 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 as described in 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) Every electric service provider shall develop a standard contract or tariff providing for net energy metering, and shall 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 one-half of 1 percent of the electric service provider’s aggregate customer peak demand.

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

(2) 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 ratemaking authority.



(g) 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 did not use an eligible solar or wind electrical generating facility, except that eligible customer-generators shall not be assessed standby charges on the electrical generating capacity or the kilowatthour production of an eligible solar or wind electrical generating facility. The charges for all retail rate components for eligible customer-generators shall be based exclusively on the 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 charge, standby charge, customer charge, minimum monthly charge, interconnection charge, or any other charge that would increase an eligible customer-generator's costs beyond those of other customers who are not customer-generators in the rate class to which the eligible customer-generator would otherwise be assigned if the customer did not own, lease, rent, or otherwise operate an eligible solar or wind electrical generating facility are contrary to the intent of this section, and shall not form a part of net energy metering contracts or tariffs.

(h) For eligible residential and small commercial customer-generators, the net energy metering calculation shall be made by measuring the difference between the electricity supplied to the eligible customer-generator and the electricity generated by the eligible customer-generator and fed back to the electric grid over a 12-month period. The following rules shall 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 customer-generators are net generators during any discrete time of use period, the net kilowatthours produced shall be valued at the same price per kilowatthour as the electric service provider would charge for retail kilowatthour sales during that same time of use period. If the eligible customer-generator's time of use electrical meter is unable to measure the flow of electricity in two directions, paragraph (3) of subdivision (b) shall apply.

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

(3) At the end of each 12-month period, where the electricity generated by the eligible customer-generator during the 12-month





period exceeds the electricity supplied by the electric service provider during that same period, the eligible customer-generator is a net electricity producer and the electric service provider shall retain any excess kilowatthours generated during the prior 12-month period. The eligible 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 residential or small commercial 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 this subdivision, an electric service provider shall permit that customer to pay monthly for net energy consumed.

(5) If an eligible residential or small commercial 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 a residential or small commercial customer-generator ceases providing that electrical service to that customer during any 12-month period, and the 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.

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

(1) The eligible customer-generator shall be required to utilize a meter, or multiple meters, capable of separately measuring electricity flow in both directions. All meters shall provide "time-of-use" measurements of electricity flow, and the customer shall take service on



a time-of-use rate schedule. If the existing meter of the eligible customer-generator is not a time-of-use meter or is not capable of measuring total flow of energy in both directions, the eligible customer-generator shall be responsible for all expenses involved in purchasing and installing a meter that is both time-of-use and able to measure total electricity flow in both directions. This subdivision shall not restrict the ability of an eligible customer-generator to utilize any economic incentives provided by a government agency or the electric service provider to reduce its costs for purchasing and installing a time-of-use meter.

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

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

(j) A solar or wind turbine electrical generating system, or a hybrid system of both, used by an eligible customer-generator shall meet all applicable safety and performance standards established by the National Electrical Code, the Institute of Electrical and Electronics Engineers,



and accredited testing laboratories such as Underwriters Laboratories and, where applicable, rules of the Public Utilities Commission regarding safety and reliability. A customer-generator whose solar or wind turbine electrical generating system, or a hybrid system of both, meets those standards and rules shall not be required to install additional controls, perform or pay for additional tests, or purchase additional liability insurance.

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

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

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

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



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

SEC. 3. Section 2827 of the Public Utilities Code, as added by Section 12 of Chapter 8 of the Statutes of the 2001–02 First Extraordinary Session, is repealed.

SEC. 4. Section 2827.7 of the Public Utilities Code is amended to read:

2827.7. Generation eligible for net energy metering that has all local and state permits required to commence construction on or before December 31, 2002, and has completed construction on or before September 30, 2003, shall be entitled, regardless of any change in customer or ownership of the energy system, for the life of the installation, to the net energy metering terms in effect on the date the local and state permits were acquired.

SEC. 5. Section 2827.8 is added to the Public Utilities Code, to read:

2827.8. Notwithstanding any other provisions of this article, the following provisions apply to an eligible customer-generator utilizing wind energy co-metering with a capacity of more than 50 kilowatts, but not exceeding one megawatt, unless approved by the electric service provider.

(a) The eligible customer-generator shall be required to utilize a meter, or multiple meters, capable of separately measuring electricity flow in both directions. All meters shall provide “time-of-use” measurements of electricity flow, and the customer shall take service on a time-of-use rate schedule. If the existing meter of the eligible customer-generator is not a time-of-use meter or is not capable of measuring total flow of energy in both directions, the eligible customer-generator is responsible for all expenses involved in purchasing and installing a meter that is both time-of-use and able to measure total electricity flow in both directions. This subdivision shall not restrict the ability of an eligible customer-generator to utilize any economic incentives provided by a government agency or the electric service provider to reduce its costs for purchasing and installing a time-of-use meter.

(b) The consumption of electricity from the electric service provider for wind energy co-metering by an eligible customer-generator shall be priced in accordance with the standard rate charged to the eligible customer-generator in accordance with the rate structure to which the customer would be assigned if the customer did not use an eligible wind electrical generating facility. The generation of electricity provided to the electric service provider shall result in a credit to the eligible



customer-generator and shall be priced in accordance with the generation component, excluding surcharges to cover the purchase of power by the Department of Water Resources, established under the applicable structure to which the customer would be assigned if the customer did not use an eligible wind electrical generating facility.

SEC. 6. Section 1 of this act, adding Section 25401.6 to the Public Utilities Code, shall only become operative if SB 1038 of the 2001–02 Regular Session of the Legislature is enacted and becomes effective on or before January 1, 2003, and SB 1038 amends Section 383.5 of the Public Utilities Code.

