ASSEMBLY BILL No. 1391

Introduced by Committee on Utilities and Commerce (Bradford (Chair), Fletcher (Vice Chair), Buchanan, Fong, Fuentes, Furutani, Gorell, Roger Hernández, Huffman, Ma, Nestande, Skinner, and Swanson)

February 23, 2011

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

legislative counsel's digest

AB 1391, as introduced, Committee on Utilities and Commerce. Electricity: net energy metering: report.

Existing law requires every electric utility, as defined, to make available to an eligible customer-generator, as defined, a standard contract or tariff for net energy metering on a first-come-first-served basis until the time that the total rated generating capacity used by eligible customer-generators exceeds 5% of the electric utility's aggregate customer peak demand. Existing law requires the Public Utilities Commission, in consultation with the Energy Commission, to submit a report to the Governor and the Legislature, by January 1, 2010, on the costs and benefits of net energy metering, wind energy co-metering, and co-energy metering.

This bill would delete this reporting requirement.

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

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

SECTION 1. Section 2827 of the Public Utilities Code is amended to read:

2827. (a) The Legislature finds and declares that a program to provide net energy metering combined with net surplus compensation, co-energy metering, and wind energy co-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, reduce interconnection and administrative costs for electricity suppliers, and encourage conservation and efficiency.

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

(1) "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 has elected to apply a generation-to-generation energy and time-of-use credit formula as provided in subdivision (i).

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

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

(4) "Eligible customer-generator" means a residential customer, small commercial customer as defined in subdivision (h) of Section 331, or commercial, industrial, or agricultural customer of an electric utility, 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, and 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.

(5) "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 subdivisions (c) and (h).

(6) "Net surplus customer-generator" means an eligible customer-generator that generates more electricity during a 12-month period than is supplied by the electric utility to the eligible customer-generator during the same 12-month period.

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

(8) "Net surplus electricity compensation" means a per kilowatthour rate offered by the electric utility to the net surplus customer-generator for net surplus electricity that is set by the ratemaking authority pursuant to subdivision (h).

(9) "Ratemaking authority" means, for an electrical corporation or electrical cooperative, the commission, and for a local publicly owned electric utility, the local elected body responsible for setting the rates of the local publicly owned utility.

(10) "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.

(c) (1) Every electric utility shall develop a standard contract or tariff providing for net energy metering, and shall make this standard contract or tariff 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 5 percent of the electric utility's aggregate customer peak demand. 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 eligible customer-generator, at the expense of the electric utility, and the additional metering shall be used only to provide the information necessary to accurately bill or credit the eligible 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 eligible 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 that is receiving service other than through the standard contract or tariff may elect to receive service through the standard contract or tariff until the electric utility reaches the generation limit set forth in this paragraph. Once the generation limit is reached, only eligible customer-generators that had previously elected to receive service pursuant to the standard contract or tariff have a right to continue to receive service pursuant to the standard contract or tariff. Eligibility for net energy metering does not limit an eligible customer-generator's eligibility for any other rebate, incentive, or credit provided by the electric utility, or pursuant to any governmental program, including rebates and incentives provided pursuant to the California Solar Initiative.

(2) An electrical corporation shall include a provision in the net energy metering contract or tariff requiring that any customer with an existing electrical generating facility and meter who enters into a new net energy metering contract shall provide an inspection report to the electrical corporation, unless the electrical generating facility and meter have been installed or inspected within the previous three years. The inspection report shall be prepared by a ~~California licensed~~ *California-licensed* contractor who is not the owner or operator of the facility and meter. A ~~California licensed~~ *California-licensed* electrician shall perform the inspection of the electrical portion of the facility and meter.

(3) (A) On an annual basis, beginning in 2003, every electric utility 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 and the net surplus electricity purchased by the electric utility pursuant to this section.

(B) An electric service provider operating pursuant to Section 394 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~~ *electrical* corporation, local publicly owned ~~electric~~ *electrical* utility, or electrical cooperative, in which the eligible customer-generator has net energy metering.

(C) The ratemaking authority shall develop a process for making the information required by this paragraph available to electric utilities, and for using that information to determine when, pursuant to paragraphs (1) and (4), an electric utility is not obligated to provide net energy metering to additional eligible customer-generators in its service area.

(4) An electric utility is not obligated to provide net energy metering to additional eligible customer-generators in its service area when the combined total peak demand of all electricity used by eligible customer-generators served by all the electric utilities in that service area furnishing net energy metering to eligible customer-generators exceeds 5 percent of the aggregate customer peak demand of those electric utilities.

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

(d) Every electric utility shall make all necessary forms and contracts for net energy metering and net surplus electricity compensation service available for download from the Internet.

(e) (1) Every electric utility shall ensure that requests for establishment of net energy metering and net surplus electricity compensation 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 it receives a completed application form for net energy metering service or net surplus electricity compensation, including a signed interconnection agreement from an eligible customer-generator and the electric inspection clearance from the governmental authority having jurisdiction.

(2) Every electric utility 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 it receives a completed application form from the eligible customer-generator for an interconnection agreement.

(3) If an electric utility is unable to process a request within the allowable timeframe pursuant to paragraph (1) or (2), it shall notify the eligible 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 service provider that does not provide distribution service for the direct transactions, the electric utility that provides distribution service for the eligible customer-generator is not obligated to provide net energy metering or net surplus electricity compensation to the customer.

(2) If a customer participates in direct transactions pursuant to paragraph (1) of subdivision (b) of Section 365 with an electric service provider, and the customer is an eligible customer-generator, the electric utility 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 and net surplus electricity compensation in an amount set by the ratemaking authority.

(g) Except for the time-variant kilowatthour pricing portion of any tariff adopted by the commission pursuant to paragraph (4) of subdivision (a) of Section 2851, 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 eligible customer-generator's choice as to from whom it purchases electricity that is not self-generated. 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 eligible 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 is contrary to the intent of this section, and shall not form a part of net energy metering contracts or tariffs.

(h) For eligible 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 utility, and at each anniversary date thereafter, *shall* be billed for electricity used during that 12-month period. The electric utility shall determine if the eligible residential or small commercial customer-generator was a net consumer or a net surplus customer-generator during that period.

(2) At the end of each 12-month period, where the electricity supplied during the period by the electric utility 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 utility shall be owed compensation for the eligible customer-generator's net kilowatthour consumption over that 12-month 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 contracts or 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 utility 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 utility would charge for electricity over the baseline quantity during that billing period.

(B) For all eligible customer-generators taking service under contracts or 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, 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 utility 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 (1) of subdivision (c) shall apply.

(C) For all eligible residential and small commercial customer-generators and for each billing period, the net balance of moneys owed to the electric utility for net consumption of electricity or credits owed to the eligible 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 eligible commercial, industrial, and agricultural customer-generators, the net balance of moneys owed shall be paid in accordance with the electric utility’s normal billing cycle, except that if the eligible 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 eligible commercial, industrial, or agricultural 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 utility during that same period, the eligible customer-generator is a net surplus customer-generator and the electric utility ~~shall~~, upon an affirmative election by the eligible customer-generator, *shall* either (A) provide net surplus electricity compensation for any net surplus electricity generated during the prior 12-month period, or (B) allow the eligible customer-generator to apply the net surplus electricity as a credit for kilowatthours subsequently supplied by the electric utility to the surplus customer-generator. For an eligible customer-generator that does not affirmatively elect to receive service pursuant to net surplus electricity compensation, the electric utility shall retain any excess kilowatthours generated during the prior 12-month period. The eligible customer-generator not affirmatively electing to receive service pursuant to net surplus electricity compensation shall not be owed any compensation for the net surplus electricity unless the electric utility enters into a purchase agreement with the eligible customer-generator for those excess kilowatthours. ~~Every electric utility shall, by~~ *By* January 31, 2010, *every electric utility shall* provide notice to eligible customer-generators that they are eligible to receive net surplus electricity compensation for net surplus electricity, that they must elect to receive net surplus electricity compensation, and that the 12-month period commences when the electric utility receives the eligible customer-generator's election. ~~The commission may, for~~ *For* an electric utility that is an electrical corporation or electrical cooperative, *the commission may* adopt requirements for providing notice and the manner by which eligible customer-generators may elect to receive net surplus electricity compensation.

(4) (A) ~~The ratemaking authority shall, by~~ *By* January 1, 2011, *the ratemaking authority shall* establish a net surplus electricity compensation valuation to compensate the net surplus customer-generator for the value of net surplus electricity generated by the net surplus customer-generator. The commission shall establish the valuation in a ratemaking proceeding. The ratemaking

authority for a local publicly owned electric utility shall establish the valuation in a public proceeding. The net surplus electricity compensation valuation shall be established so as to provide the net surplus customer-generator just and reasonable compensation for the value of net surplus electricity, while leaving other ratepayers unaffected. The ratemaking authority shall determine whether the compensation will include, where appropriate justification exists, either or both of the following components:

(i) The value of the electricity itself.

(ii) The value of the renewable attributes of the electricity.

(B) In establishing the rate pursuant to subparagraph (A), the ratemaking authority shall ensure that the rate does not result in a shifting of costs between solar customer-generators and other bundled service customers.

(5) (A) Upon adoption of the net surplus electricity compensation rate by the ratemaking authority, any renewable energy credit, as defined in Section 399.12, for net surplus electricity purchased by the electric utility shall belong to the electric utility. Any renewable energy credit associated with electricity generated by the eligible customer-generator that is utilized by the eligible customer-generator shall remain the property of the eligible customer-generator.

(B) Upon adoption of the net surplus electricity compensation rate by the ratemaking authority, the net surplus electricity purchased by the electric utility shall count toward the electric utility's renewables portfolio standard annual procurement targets for the purposes of paragraph (1) of subdivision (b) of Section 399.15, or for a local publicly owned electric utility, the renewables portfolio standard annual procurement targets established pursuant to Section 387.

(6) The electric utility shall provide every eligible residential or small commercial customer-generator with net electricity consumption and net surplus electricity generation information with each regular bill. That information shall include the current monetary balance owed the electric utility for net electricity consumed, or the net surplus electricity generated, since the last 12-month period ended. Notwithstanding this subdivision, an electric utility shall permit that customer to pay monthly for net energy consumed.

(7) If an eligible residential or small commercial customer-generator terminates the customer relationship with the electric utility, the electric utility 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.

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

(i) Notwithstanding any other provisions of this section, ~~the following provisions~~ *paragraphs (1), (2), and (3)* shall apply to an eligible customer-generator with a capacity of more than 10 kilowatts, but not exceeding one megawatt, that receives electric service from a local publicly owned electric utility that has elected to utilize a co-energy metering program unless the local publicly owned electric utility 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~~ *electricity* 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 governmental agency or an electric utility to reduce its costs for purchasing and installing a time-of-use meter.

(2) The consumption of electricity from the local publicly owned electric utility 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 local publicly owned electric utility 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 local publicly owned electric utility 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 local publicly owned electric utility 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 a local publicly owned electric utility may choose to carry the credit over as a kilowatthour credit consistent with the provisions of any applicable contract or tariff, including any differences attributable to the time of generation of the electricity. At the end of each 12-month period, the local publicly owned electric utility 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, including Underwriters Laboratories and, where applicable, rules of the 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 electrical 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~~ *shall* not be shifted to any other customer class. Net energy metering and co-energy metering customers shall not be exempt from the public goods charges imposed pursuant to Article 7 (commencing with Section 381), Article 8 (commencing with Section 385), or Article 15 (commencing with Section 399) of Chapter 2.3 of Part 1. In its report to the Legislature, the commission shall examine different methods to ensure that the public goods charges remain nonbypassable.

(*l*) A net energy metering, co-energy metering, or wind energy co-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 energy metering, co-energy metering, and wind energy co-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*), an eligible customer-generator shall not be required to replace its existing meter except as set forth in paragraph (1) of subdivision (c), nor shall the electric utility require additional measurement of usage beyond that which is necessary for customers in the same rate class as the eligible customer-generator.

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

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