AMENDED IN ASSEMBLY MAY 6, 2014 AMENDED IN ASSEMBLY APRIL 21, 2014 AMENDED IN ASSEMBLY MARCH 28, 2014

CALIFORNIA LEGISLATURE—2013-14 REGULAR SESSION

ASSEMBLY BILL

No. 2649

Introduced by Assembly Members Mullin, V. Manuel Pérez, and Gorell

(Coauthors: Assembly Members Allen, Atkins, Maienschein, Ting, Wieckowski, and Williams)

(Coauthors: Senators Block, Correa, DeSaulnier, Fuller, Hill, Roth, and Vidak)

February 21, 2014

An act to amend Section 2827 of the Public Utilities Code, relating to energy, and declaring the urgency thereof, to take effect immediately. An act to add Article 9.5 (commencing with Section 389) to Chapter 2.3 of Part 1 of Division 1 of the Public Utilities Code, relating to public utilities, and declaring the urgency thereof, to take effect immediately.

LEGISLATIVE COUNSEL'S DIGEST

AB 2649, as amended, Mullin. Net energy metering: military bases. *Public Utilities: federal facilities: electrical charges*.

Under existing law, the Public Utilities Commission has regulatory authority over public utilities, including electrical corporations, as defined. Existing law requires every electric utility, as defined, to develop a standard contract or tariff providing for net energy metering, as defined, and to make this contract or tariff available to eligible customer-generators, as defined, upon request for generation by a renewable electrical generation facility, as defined. An eligible

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customer-generator is defined as meaning a residential customer, small commercial customer, or commercial, industrial, or agricultural customer of an electric utility, who uses a renewable electrical generation facility, or a combination of those facilities, with a total 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 electrical grid, and is intended primarily to offset part or all of the eustomer's own electrical requirements. Existing law relative to restructuring of the electrical services industry requires the commission to establish an effective mechanism that ensures the recovery of certain uneconomic costs for generation-related assets and obligations incurred by electrical corporations in the transition to the restructured market (competition transition charges) and other specified nonbypassable charges. Existing law requires the commission to approve and establish standby charges and to review and adjust the standby charges to encourage the utilization of electricity generated from other than conventional power sources.

This bill would-authorize a United States military installation to exceed the one megawatt capacity limitation if the total capacity of all renewable electrical generation facilities on the military installation does not exceed 100% of the minimum daytime load measured in the previous 12 months or if the total capacity of all renewable electrical generation facilities on the military installation does not result in the export of electricity beyond the meter and the military installation adopts reasonable and cost-effective control methods to ensure the generation of electricity from renewable electrical generation facilities does not exceed load. The bill would provide that each physically separate and distinct building within privatized residential housing communities on contiguous military properties is a separate premise for purposes of the one megawatt capacity limitation, in a manner identical to how it would be treated if located in an equivalent civilian community. require the commission, on or before April 1, 2015, to require an electrical corporation to calculate and assess the competition transition charges and other specified nonbypassable charges based on the actual metered consumption of electricity by military bases and facilities and privatized military housing, as defined. The bill would require the commission to calculate the standby charges for those facilities, as specified. The bill would require the commission to require the electrical corporations to implement the above provisions through advice letters submitted before April 1, 2015. The bill would specify that those facilities that operate

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independent generation facilities are not obligated to enter into an interconnection agreement with an electrical corporation.

Under existing law, a violation of the Public Utilities Act or an order or direction of the commission is a crime.

This bill would be part of the act and an order or other action of the commission would be required to implement the bill. Because a violation of this bill or an order or other action of the commission implementing those provisions would be a crime, this bill would thereby impose a state-mandated local program by creating new crimes and by expanding the definition of existing crimes.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

This bill would declare that it is to take effect immediately as an urgency statute.

Vote: $\frac{2}{3}$. Appropriation: no. Fiscal committee: yes. State-mandated local program: no-yes.

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

1 SECTION 1. Article 9.5 (commencing with Section 389) is 2 added to Chapter 2.3 of Part 1 of Division 1 of the Public Utilities 3 Code, to read:

Article 9.5. Federal Facilities

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389. The Legislature finds and declares all of the following:

- (a) The United States Department of Defense provides national defense and global security that benefits Californians and California's economy.
- 11 (b) The United States Department of Defense facilities located 12 in California provide more than seventy billion dollars 13 (\$70,000,000,000) in direct spending and 300,000 jobs in 14 California.
- 15 (c) The United States Department of Defense is working to 16 achieve energy efficiency and renewable energy goals to meet both 17 presidential and departmental directives.

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 (d) The amount of electricity that the United States Department of Defense facilities located in California seek to generate on their own premises will serve their own electricity needs and will not export electricity.

- (e) Military bases approximate small cities in electrical load, diversity of land uses, and size.
- (f) Given the crucial contribution of our military, California should assist military facilities in California in achieving their energy independence goals.
- (g) The military owns and maintains its electric distribution system. Generation serving the military's own electricity load without export should not require upgrades to this distribution system. Even if upgrades are necessary, the military, not the ratepayers, will bear these costs.
- (h) At the request of the Governor and the electrical corporations, military bases have historically demonstrated their commitment and ability to provide demand reduction management at times of grid emergencies.
- (i) Development of additional energy facilities on military bases and military family housing will create opportunities for jobs for veterans at a time when many California service members are reentering the workforce and can provide skilled workers. Established programs, such as "Helmets to Hardhats," also provide valuable and needed transition from the battlefield to the civilian community.
- 389.3. (a) For the purposes of this article, the following shall apply:
 - (1) "Facilities" means either of the following:
 - (A) Military bases and facilities.
 - (B) Privatized military housing.
- (2) "Independent generation facility" means an electrical generation facility that meets all of the following requirements:
- (A) Is sized to provide no more than 100 percent of a facility's average minimum daytime load, measured in the prior 12 months.
- (B) Is prevented from exporting electricity to an electrical corporation's distribution system through a double throw switch or operating scheme specifically designed and engineered for that operation.
- (C) Is operated in parallel with the electrical transmission and distribution system.

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(3) "Military bases and facilities" mean those establishments under the jurisdiction of the United States Army, United States Air Force, United States Navy, United States Marine Corps, or the United States Coast Guard.

- (4) "Privatized military housing" means housing facilities managed by a private entity for the purpose of providing housing to active duty service members and their family members that are not individually metered for purposes of calculating electricity charges paid to an electrical corporation.
- (5) "Standby demand" means the entire reserved capacity needed to serve the electrical load of a facility that is regularly served by the facility's independent generation facility when that generation facility experiences a partial or complete outage.
- (b) To the extent authorized by federal law, an operator of an independent generation facility shall notify the electrical corporation pursuant to subdivision (b) of Section 119085 of the Health and Safety Code.
- (c) (1) The facilities shall not be obligated to enter into an interconnection agreement for an independent generation facility.
- (2) If a facility requests an interconnection agreement, the electrical corporation shall ensure that the request is processed in a time period not to exceed 30 working days from the date of receipt of the completed application by the electrical corporation.
- (3) If a facility requests an interconnection agreement, an electrical corporation shall not impose any requirements or fees, such as telemetry or metering devices, electric grid reliability studies, fees for electric grid reliability studies, interconnection charges, or require payment for the cost of any studies deemed necessary by the electrical corporation, on an interconnection request.
- 31 (d) On or before April 1, 2015, and to the extent authorized by 32 federal law, the commission shall, for a facility, do all of the 33 following:
 - (1) Require an electrical corporation to calculate and assess, based on the actual metered consumption of electricity provided from either the electrical corporation or an electric service provider that delivers electricity through the distribution system of the electrical corporation for the facility's billing period, the following charges:

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1 (A) The competition transition charge imposed pursuant to 2 Section 330.

- (B) The charge imposed pursuant to Section 367, commonly known as the power charge indifference adjustment.
- (C) The nuclear decommission charge imposed pursuant to Section 379.
- (D) The charge imposed pursuant to Section 366.1 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.
- (E) The charge imposed pursuant to Section 379.6 for the support of the self-generation incentive program.
- (F) The charges imposed pursuant to Section 381 or 384 for the support of public interest programs.
- (G) Transmission and distribution charges as approved by the commission on the applicable tariff.
- (2) (A) Calculate the standby charge for a facility that is currently subject to a standby charge based on the facility's standby demand. The standby demand shall be designated by the facility and remain at that level for a minimum of 12 months unless the electrical corporation determines that the standby demand needs to be adjusted to meet the actual demand.
- (B) Upon an electrical corporation's determination that the facility's designated standby demand is too low and does not reflect the actual level of needed reserved capacity, over any 15 minute period or through onsite verification, the electrical corporation shall increase the standby demand to reflect the actual needed reserve capacity.
- (C) Upon an electrical corporation's determination that the facility's designated standby demand is too high, over any 15 minute period or through onsite verification, the electrical corporation shall decrease the standby demand to reflect the actual needed reserve capacity.
- (D) If the standby demand is adjusted by the electrical corporation, another adjustment in the standby demand shall not be made for 12 months from the adjustment.
- (E) To the extent authorized by federal law, a facility shall notify the electrical corporation of permanent or material changes in the size, type, and operations of the facility for future adjustments to the standby demand.

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(3) Require electrical corporations to implement the provisions of this section through advice letters submitted prior to April 1, 2015.

- (e) Any activities undertaken on a facility's premises that reduce demand for an electrical corporation's supplied electricity, such as energy efficiency, load reduction, or independent generation are not subject to charges assessed on electricity delivered from the electrical corporation's distribution system or other charges of any kind that would increase the facility's costs beyond those of other customers in the rate class to which the facility would otherwise be assigned if the independent generation facility was not installed at the facility.
- (f) The commission may adjust the size limit for independent generation facilities on facilities if it determines that it can be done in a manner that does not affect the safety or reliability of electricity service to other customers of the electrical corporation.
- 389.5. Notwithstanding this article, facilities, at their sole discretion, may develop eligible energy generation projects authorized pursuant to Section 2827 or 2827.1 or through an electrical corporation's Generation Facility Interconnection Rule 21, as applicable and pursuant to applicable rules and tariffs.
- SEC. 2. No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution because the only costs that may be incurred by a local agency or school district will be incurred because this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a crime within the meaning of Section 6 of Article XIII B of the California Constitution.
- SEC. 3. This act is an urgency statute necessary for the immediate preservation of the public peace, health, or safety within the meaning of Article IV of the Constitution and shall go into immediate effect. The facts constituting the necessity are:

To allow renewable energy development in military installations and facilities in support of the state's energy policies and the United States military's renewable energy and national security goals as well as to support military families and veterans hiring programs, it is necessary for this act to take effect immediately.

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SECTION 1. The Legislature finds and declares all of the 2 following:

- (a) Existing interpretation of the state's net energy metering law has hindered the development of renewable electrical generation facilities on military installations, preventing the military from making progress towards meeting its renewable energy and energy security goals.
- (b) Military installations should not be defined as a single location or premise for purposes of developing renewable electrical generation facilities that are eligible for net energy metering because military bases more approximate the electricity load and layout of a small city. Since it would be unsuitable to limit the net metered capacity of a small city to one megawatt, the Legislature finds that military installations should be given the same flexibility as a small city to generate electricity from renewable electrical generation facilities to meet its onsite demand in order to meet renewable energy and energy security goals, including the Secretary of the Navy's goal for installations to obtain 50 percent of their shore power from alternative sources by 2020.
- (c) Application of the one megawatt capacity limitation for renewable electrical generation facilities that are eligible for net energy metering to an entire military base prevents military families living in privatized military housing from benefiting from rooftop solar energy.
- (d) Clarification of how the one megawatt capacity limitation should be applied to military installations will create substantial job opportunities, including those for veterans and their families, promote economic development in military communities, and bring the benefits of eligible renewable energy resources, including bill savings which will benefit communities of military families. The Legislature therefore finds it is necessary to clarify how the one megawatt capacity limitation for renewable electrical generation facilities that are eligible for net energy metering is to apply to military installations and military family housing communities.
- SEC. 2. 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

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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) (A) "Eligible customer-generator" means a residential eustomer, small commercial customer as defined in subdivision (h) of Section 331, or commercial, industrial, or agricultural eustomer of an electric utility, who uses a renewable electrical generation facility, or a combination of those facilities, with a total eapacity of not more than one megawatt, that is located on the eustomer's owned, leased, or rented premises, and is interconnected and operates in parallel with the electrical grid, and is intended primarily to offset part or all of the customer's own electrical requirements.
- (B) (i) A United States military installation may exceed the one megawatt capacity limitation if either of the following apply:
- (I) The total capacity of all renewable electrical generation facilities on the military installation does not exceed 100 percent of the minimum daytime load measured in the previous 12 months.
- (II) The total capacity of all renewable electrical generation facilities on the military installation does not result in the export of electricity beyond the meter and the military installation adopts

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reasonable and cost-effective control methods to ensure the generation of electricity from renewable electrical generation facilities does not exceed load.

- (ii) Each physically separate and distinct building within privatized residential housing communities on contiguous military properties shall be a separate premise for purposes of the one megawatt capacity limitation, in a manner identical to how they would be treated if located in an equivalent civilian community.
- (5) "Large electrical corporation" means an electrical corporation with more than 100,000 service connections in California.
- (6) "Net energy metering" means measuring the difference between the electricity supplied through the electrical grid and the electricity generated by an eligible customer-generator and fed back to the electrical grid over a 12-month period as described in subdivisions (c) and (h).
- (7) "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.
- (8) "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.
- (9) "Net surplus electricity compensation" means a per kilowatthour rate offered by the electric utility to the net surplus eustomer-generator for net surplus electricity that is set by the ratemaking authority pursuant to subdivision (h).
- (10) "Ratemaking authority" means, for an electrical corporation, the commission, for an electrical cooperative, its ratesetting body selected by its shareholders or members, and for a local publicly owned electric utility, the local elected body responsible for setting the rates of the local publicly owned utility.
- (11) "Renewable electrical generation facility" means a facility that generates electricity from a renewable source listed in paragraph (1) of subdivision (a) of Section 25741 of the Public Resources Code. A small hydroelectric generation facility is not an eligible renewable electrical generation facility if it will cause an adverse impact on instream beneficial uses or cause a change
- in the volume or timing of streamflow.

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(12) "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 electrical grid and the electricity generated by an eligible customer-generator and fed back to the electrical grid over a 12-month period is as described in subdivision (h). Wind energy co-metering shall be accomplished pursuant to Section 2827.8.

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(c) (1) Except as provided in paragraph (4) and in Section 2827.1, 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 eredit the eligible customer-generator pursuant to subdivision (h), or to collect generating system performance information for research purposes relative to a renewable electrical generation facility. 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

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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 contractor who is not the owner or operator of the facility and meter. A California licensed electrician shall perform the inspection of the electrical portion of the facility and meter.
- (3) (A) On an annual basis, 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 eustomer-generator that is their customer for each service area of an electrical corporation, local publicly owned 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 eustomer-generators in its service area.
- (4) (A) An electric utility that is not a large electrical corporation 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

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customer-generators exceeds 5 percent of the aggregate customer peak demand of those electric utilities.

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- (B) The commission shall require every large electrical corporation to make the standard contract or tariff available to eligible customer-generators, continuously and without interruption, until such times as the large electrical corporation reaches its net energy metering program limit or July 1, 2017, whichever is earlier. A large electrical corporation reaches its program limit when the combined total peak demand of all electricity used by eligible customer-generators served by all the electric utilities in the large electrical corporation's service area furnishing net energy metering to eligible customer-generators exceeds 5 percent of the aggregate customer peak demand of those electric utilities. For purposes of calculating a large electrical corporation's program limit, "aggregate customer peak demand" means the highest sum of the noncoincident peak demands of all of the large electrical corporation's customers that occurs in any calendar year. To determine the aggregate customer peak demand, every large electrical corporation shall use a uniform method approved by the commission. The program limit calculated pursuant to this paragraph shall not be less than the following:
- (i) For San Diego Gas and Electric Company, when it has made 607 megawatts of nameplate generating capacity available to eligible customer-generators.
- (ii) For Southern California Edison Company, when it has made 2,240 megawatts of nameplate generating capacity available to eligible customer-generators.
- (iii) For Pacific Gas and Electric Company, when it has made 2,409 megawatts of nameplate generating capacity available to eligible customer-generators.
- (C) Every large electrical corporation shall file a monthly report with the commission detailing the progress toward the net energy metering program limit established in subparagraph (B). The report shall include separate calculations on progress toward the limits based on operating solar energy systems, cumulative numbers of interconnection requests for net energy metering eligible systems, and any other criteria required by the commission.
- (D) Beginning July 1, 2017, or upon reaching the net metering program limit of subparagraph (B), whichever is earlier, the obligation of a large electrical corporation to provide service

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pursuant to a standard contract or tariff shall be pursuant to Section 2827.1 and applicable state and federal requirements.

- (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 elearance 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, or Section 365.1, 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, or Section 365.1, 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

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electricity compensation in an amount set by the ratemaking authority.

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- (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 a renewable electrical generation facility, except that eligible customer-generators shall not be assessed standby charges on the electrical generating capacity or the kilowatthour production of a renewable electrical generation 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 a renewable electrical generation 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 ealculation 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 electrical 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, 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

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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 eustomer-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.

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(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.

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(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, upon an affirmative election by the net surplus 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 net surplus customer-generator to apply the net surplus electricity as a credit for kilowatthours subsequently supplied by the electric utility to the net 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 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, AB 2649 — 18 —

and that the 12-month period commences when the electric utility receives the eligible customer-generator's election. 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) An eligible customer-generator with multiple meters may elect to aggregate the electrical load of the meters located on the property where the renewable electrical generation facility is located and on all property adjacent or contiguous to the property on which the renewable electrical generation facility is located, if those properties are solely owned, leased, or rented by the eligible customer-generator. If the eligible customer-generator elects to aggregate the electric load pursuant to this paragraph, the electric utility shall use the aggregated load for the purpose of determining whether an eligible customer-generator is a net consumer or a net surplus customer-generator during a 12-month period.
- (B) If an eligible customer-generator chooses to aggregate pursuant to subparagraph (A), the eligible customer-generator shall be permanently ineligible to receive net surplus electricity compensation, and the electric utility shall retain any kilowatthours in excess of the eligible customer-generator's aggregated electrical load generated during the 12-month period.
- (C) If an eligible customer-generator with multiple meters elects to aggregate the electrical load of those meters pursuant to subparagraph (A), and different rate schedules are applicable to service at any of those meters, the electricity generated by the renewable electrical generation facility shall be allocated to each of the meters in proportion to the electrical load served by those meters. For example, if the eligible customer-generator receives electric service through three meters, two meters being at an agricultural rate that each provide service to 25 percent of the customer's total load, and a third meter, at a commercial rate, that provides service to 50 percent of the customer's total load, then 50 percent of the electrical generation of the eligible renewable generation facility shall be allocated to the third meter that provides service at the commercial rate and 25 percent of the generation shall be allocated to each of the two meters providing service at the agricultural rate. This proportionate allocation shall be computed each billing period.

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(D) This paragraph shall not become operative for an electrical corporation unless the commission determines that allowing eligible customer-generators to aggregate their load from multiple meters will not result in an increase in the expected revenue obligations of customers who are not eligible customer-generators. The commission shall make this determination by September 30, 2013. In making this determination, the commission shall determine if there are any public purpose or other noncommodity charges that the eligible customer-generators would pay pursuant to the net energy metering program as it exists prior to aggregation, that the eligible customer-generator would not pay if permitted to aggregate the electrical load of multiple meters pursuant to this paragraph.

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(E) A local publicly owned electric utility or electrical cooperative shall only allow eligible customer-generators to aggregate their load if the utility's ratemaking authority determines that allowing eligible customer-generators to aggregate their load from multiple meters will not result in an increase in the expected revenue obligations of customers that are not eligible customer-generators. The ratemaking authority of a local publicly owned electric utility or electrical cooperative shall make this determination within 180 days of the first request made by an eligible customer-generator to aggregate their load. In making the determination, the ratemaking authority shall determine if there are any public purpose or other noncommodity charges that the eligible customer-generator would pay pursuant to the net energy metering or co-energy metering program of the utility as it exists prior to aggregation, that the eligible customer-generator would not pay if permitted to aggregate the electrical load of multiple meters pursuant to this paragraph. If the ratemaking authority determines that load aggregation will not cause an incremental rate impact on the utility's customers that are not eligible customer-generators, the local publicly owned electric utility or electrical cooperative shall permit an eligible customer-generator to elect to aggregate the electrical load of multiple meters pursuant to this paragraph. The ratemaking authority may reconsider any determination made pursuant to this subparagraph in a subsequent public proceeding.

(F) For purposes of this paragraph, parcels that are divided by a street, highway, or public thoroughfare are considered contiguous,

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provided they are otherwise contiguous and under the same ownership.

- (G) An eligible customer-generator may only elect to aggregate the electrical load of multiple meters if the renewable electrical generation facility, or a combination of those facilities, has a total generating capacity of not more than one megawatt.
- (H) Notwithstanding subdivision (g), an eligible customer-generator electing to aggregate the electrical load of multiple meters pursuant to this subdivision shall remit service charges for the cost of providing billing services to the electric utility that provides service to the meters.
- (5) (A) 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 eligible customer-generators and other bundled service customers.
- (6) (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

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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 399.30.

- (7) 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.
- (8) 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.
- (9) 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 eustomer 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 eustomer-generator.
- (i) Notwithstanding any other provisions of this section, 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

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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 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 a renewable electrical generation 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 a renewable electrical generation facility.
- (3) All costs and credits shall be shown on the eligible eustomer-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

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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 renewable electrical generation facility 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 Incorporated and, where applicable, rules of the commission regarding safety and reliability. A customer-generator whose renewable electrical generation facility 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 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 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 399) of Chapter 2.3 of Part 1.
- (1) A net energy metering, co-energy metering, or wind energy eo-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

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nonbypassable. Until the commission has made a determination regarding the nonbypassable charges, net energy metering, eo-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 (e), 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.
- (o) Nothing in this section limits the authority of the commission, an electric utility, or any local, state, or federal agency to ensure the safe and reliable operation of a renewable electrical generation facility.
- SEC. 3. This act is an urgency statute necessary for the immediate preservation of the public peace, health, or safety within the meaning of Article IV of the Constitution and shall go into immediate effect. The facts constituting the necessity are:

In order to allow renewable energy development on military installations in support of the state's energy policies and the United States military's renewable energy and national security goals, as well as to support military families and veterans hiring programs,

30 it is necessary that this act take effect immediately.