

STATE OF CALIFORNIA

Public Utilities Commission  
San Francisco

**M e m o r a n d u m**

**Date:** June 4, 2012

**To:** The Commission  
(Meeting of June 7, 2012)

**From:** Lynn Sadler, Director  
Office of Governmental Affairs (OGA) — Sacramento

**Subject:** **AB 2514 (Bradford) – Net energy metering.**  
**As amended: May 1, 2012**

**LEGISLATIVE SUBCOMMITTEE RECOMMENDATION: SUPPORT IF AMENDED**

**SUMMARY OF BILL**

AB 2514 would require the California Public Utilities Commission (CPUC) to complete a study of the Net Energy Metering (NEM) program by June 30, 2013, to determine: 1) the extent to which each class of ratepayers receiving service under NEM is paying the full cost of services provided to them by electrical corporations; and 2) the extent to which those customers pay their share of the costs of public purpose programs. The bill further requires that the CPUC report the results of the study to the Legislature within 30 days of its completion.

The amended bill further requires:

- The study to include a cost breakdown by each region of the state;
- The study to include the benefits of net metering; and,
- The CPUC, when evaluating the costs and benefits of NEM, to use a utility's system peak demand - as reported in Form No. 1 filed with the Federal Energy Regulatory Commission (FERC) - for the purposes of calculating the 5 percent program cap.

**SUMMARY OF SUPPORTING ARGUMENTS FOR RECOMMENDATION**

**AB 2514** will require a cost-effectiveness study of the NEM program, including an analysis on the extent to which NEM customers pay for public purpose programs. Energy Division has issued a request for proposals (RFP) for an update a NEM cost-effectiveness evaluation released by the CPUC in March 2010, and included an

analysis on the extent to which NEM customers pay for public purpose programs. The RFP for this new NEM study is posted on the DGS website at: <https://www.bidsync.com>. The bill is well-aligned with a forthcoming update to the NEM cost-effectiveness study.

On May 24, 2012, the CPUC approved D.12-05-036, clarifying that “aggregate customer peak demand” means the aggregation, or sum, of individual customers’ peak demand (i.e., their non-coincident peak demand). This interpretation is different from a utility’s system peak demand, or the highest coincident peak load ever recorded in a utility’s service territory, as referenced in this bill. While the two interpretations result in different participation levels allowed under the program, the amended bill does not preclude the CPUC from studying the impacts of NEM using D.12-05-036’s interpretation of “aggregate customer peak demand” in addition to examining the impacts using the “system peak demand” interpretation described in this bill. However, incongruity between the bill language and D.12-05-036 could create unnecessary confusion. Aligning the bill language with D.12-05-036 would both eliminate any confusion and ensure that the scope of the bill and the study called for in D.12-05-036 are the same.

## SUMMARY OF SUGGESTED AMENDMENTS

Revise the language in Section 2827.1 (a) to align with recently-adopted D.12-05-036:

*(a) By ~~June 30~~ **October 1**, 2013, the commission shall complete a study to determine **who benefits, and who bears the economic burden, if any, of the extent to which each class of ratepayers and each region of the state receiving service under the net energy metering tariff program authorized pursuant to Section 2827 is paying the full cost of the services provided to them by electrical corporations, the extent to which those customers pay their share of the costs of public purpose programs, and the benefits of net energy metering. In evaluating program costs and benefits for purposes of the study, the commission shall use the peak demand reported by those electric utilities filing a Form No. 1 with the Federal Energy Regulatory Commission to determine aggregate customer peak demand, and shall use the Energy Commission’s alternating current ratings to determine the total generating capacity of eligible customer generators, for purposes of calculating the 5 percent limitation in paragraphs (1) and (4) of subdivision (c) of Section 2827. The study shall quantify the costs and benefits of net energy metering to participants and non-participants and shall further disaggregate the results by utility, customer class, and household income groups within the residential class. The study shall further gather and present data on the income distribution of residential net energy metering participants. In order to assess the costs and benefits at various levels of net energy metering implementation, the study shall be conducted using multiple net energy metering penetration scenarios, including at minimum, the capacity needed to reach the solar photovoltaic goals of the California Solar Initiative and the estimated net energy metering capacity under the five percent cap as defined by the commission.***

## DIVISION ANALYSIS (Energy Division)

**1. The bill coincides with an updated and expanded NEM cost-benefit study currently being undertaken by the CPUC.**

The forthcoming CPUC NEM study is currently scoped to include an analysis of the issues set forth by this bill. The NEM study will also include: An analysis of NEM billing costs, interconnection costs, the costs and benefits of billing credits being set at the generation only rates under the separate NEM program for fuel cells, and an evaluation of alternatives to the NEM program that may more equitably balance the interests of participating and nonparticipating customers. The updated NEM Cost-Benefit RFP is currently posted on the DGS website at <https://www.bidsync.com>.

**2. The bill does not impact CPUC programs, and will not require a new CPUC rulemaking or new tariffs.**

It does not appear that a rulemaking or new tariffs are required to enact this bill. As written, the bill would require the CPUC to report back the legislature the findings of the updated and expanded NEM cost-benefit study.

**PROGRAM BACKGROUND**

NEM is an electricity tariff billing mechanism whose intent is to facilitate the installation of DG by offering retail-rate and generation-rate billing credits for any electricity exported to the grid at times when there is no simultaneous energy demand to utilize the generation onsite.

Under existing complementary state laws, the CPUC oversees a range of policies that support self-generation:

1. Rebates: Rebates through the California Solar Initiative (CSI) and SGIP. The CSI program provides rebates for solar PV systems up to 1 MW (and allows systems up to 5 MW), with the exception of certain state-owned facilities (per AB 2724, 2010). SGIP provides incentives to wind turbines, fuel cells, gas turbines, micro-turbines and internal combustion engines, waste heat capture, small conduit hydro, combined heat and power, advanced energy storage, and pressure reduction turbines. Similar to NEM, the SGIP and CSI programs are designed to reduce a customer's onsite load.
2. Simplified Interconnection: Reduced interconnection costs are available under utility Rule 21 tariffs that exempt self-generation renewable energy systems under 1 MW from most studies and fees. Rule 21 also offers these systems accelerated interconnection timelines. Separately, the CPUC exempted renewable self-generation systems from standby charges in 2003.
3. Net Energy Metering: Per PU Code 2827, NEM customer-generators who take service from IOUs have their monthly net generation valued at the full retail rate at the time the energy is exported, and may elect to receive compensation of any net surplus

generation above annual load.<sup>1</sup> PU Code 2827.10 sets out a separate program for eligible fuel cell customer-generators that have their monthly net generation valued at the generation rate only. An installed NEM project provides a subsidy to the customer-generator that, under current law, lasts for the lifetime of the installation. This subsidy will be of increasing importance to new customer-generators as CSI and SGIP incentives phase out.

## LEGISLATIVE HISTORY

1. At least three other bills modifying the NEM program are pending in this legislative session:
  - o AB 2165 (Hill): Increases the generation-only NEM program cap for eligible fuel cell projects;
  - o SB 594 (Wolk): Allows for NEM meter aggregation of multiple meters for a single customer on a contiguous property;
  - o SB 1537 (Kehoe): Prohibits the CPUC from adopting any new demand charges for NEM customers.
2. The NEM statute has been modified numerous times in the past decade. It was first established in response to AB 656 (1996), and subsequently modified by: AB 1755 (1998), AB 918 (2000), AB X1-29 (2001), SB 1038 (2002), AB 2228 (2003), AB 1214 (2004), AB 920 (2009), AB 510 (2010), and SB 489 (2011).

## FISCAL IMPACT

AB 2514 could require one-time costs of up to \$250,000 to commission a new study, as the bill requires components to the proposed study that are outside the scope of the RFP that has already been issued.

## STATUS:

AB 2514 is pending consideration in the Senate Committee on Energy, Utilities and Communications.

## SUPPORT/OPPOSITION

### Support

California Chamber of Commerce  
Natural Resources Defense Council (if amended)  
Pacific Gas & Electric  
PacifiCorp  
San Diego Gas & Electric

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<sup>1</sup> PU Code 2827(h)(2)(B).

Southern California Edison

Opposition

CALSEIA  
Community College League of California  
Environment California  
Mainstream Energy Corp./REC Solar/AEE Solar  
Récolte Energy  
Sage Renewable Energy Consulting, Inc.  
San Diego Solar Coalition  
SEIA  
Sierra Club California  
Silicon Valley Leadership Group  
Sullivan Solar Power  
Suntech Power  
Verengo, Inc.  
Vista Solar  
Vote Solar Initiative

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## BILL LANGUAGE

BILL NUMBER: AB 2514    AMENDED  
BILL TEXT

AMENDED IN ASSEMBLY    MAY 1, 2012

INTRODUCED BY    Assembly Member Bradford

FEBRUARY 24, 2012

An act to add and repeal Section 2827.1 of the Public Utilities Code, relating to electricity.

### LEGISLATIVE COUNSEL'S DIGEST

AB 2514, as amended, Bradford. Net energy metering.

Under existing law, the Public Utilities Commission has regulatory authority over public utilities, including electrical corporations. Existing law, relative to private energy producers, 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 of renewable electrical generation facilities, as defined, used by eligible customer-generators exceeds 5% of the electric utility's aggregate customer peak demand. Electrical corporations are an electric utility for these purposes.

This bill would require the commission to complete a study by June 30, 2013, to determine the extent to which each class of ratepayers and each region of the state receiving service under the net energy metering tariff is paying the full cost of the services provided to them by electrical corporations ~~and~~, the extent to which those customers pay their share of the costs of public purpose programs, and the benefits of net energy metering. The bill would require the commission to report the results of the study to the Legislature within 30 days of its completion.

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

THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLLOWS:

SECTION 1. Section 2827.1 is added to the Public Utilities Code, to read:

2827.1. (a) By June 30, 2013, the commission shall complete a study to determine the extent to which each class of ratepayers and each region of the state receiving service under the net energy metering tariff authorized pursuant to Section 2827 is paying the full cost of the services provided to them by electrical corporations ~~and~~, the extent to which those customers pay their share of the costs of public purpose programs, and the benefits of net energy metering.

*In evaluating program costs and benefits for purposes of the study, the commission shall use the peak demand reported by those electric utilities filing a Form No. 1 with the Federal Energy Regulatory Commission to determine aggregate customer peak demand, and shall use the Energy Commission's alternating current ratings to determine the total generating capacity of eligible customer-generators, for purposes of calculating the 5-percent limitation in paragraphs (1) and (4) of subdivision (c) of Section 2827 .*

(b) (1) The commission shall report the results of the study to the Legislature within 30 days of its completion.

(2) The report shall be submitted in compliance with Section 9795 of the Government Code.

(3) Pursuant to Section 10231.5 of the Government Code, this section is repealed on July 1, 2017.