



**ANALYSIS**  
**(Revised 6/10/09)**

**CALIFORNIA PUBLIC  
UTILITIES COMMISSION**

**SB 7 (Wiggins) -**  
**(As Amended May 5, 2009)**

**SUMMARY**

This bill would amend Public Utilities (PU) Code 2827 to allow net energy metering customer-generators to carry forward an annual bill credit for up to 24 months (one, or both, of the two following 12-month periods).

This bill would change the date of a required report to the Governor and the Legislature on the costs and benefits of net energy metering (NEM) from January 1, 2010 to June 30, 2010, and require the CPUC to include an evaluation of the impact of net surplus electricity generation and bill credits.<sup>1</sup>

**CPUC POSITION AND SUPPORTING ARGUMENTS**

**Support with Technical Amendments.** This bill allows solar customer-generators to carry a net energy metering (NEM) bill credit forward for a longer period of time than is currently allowed. Currently, customer generators receive a monetary credit for any excess kilowatt hours generated during discreet time periods. A customer can use the monetary bill credits towards any charges for net consumption that occur during other time periods. Bill credits roll forward month to month, and currently bill credits are reduced to zero at the end of each 12-month "true up" period. Under NEM, a customer is not paid by the utility for net excess generation – but the process of bill credits allows a customer to size a system to meet average total annual load. This is a simple way to manage fluctuations in generation and consumption across periods.

SB7 provides a customer additional flexibility by allowing the monetary bill credits to be carried forward for 2 additional 12-month periods, or 2 additional years.

In addition, the bill provides additional time for the CPUC to complete a NEM cost-benefit study so that the study (already underway) can incorporate additional analysis related to the impact of excess kilowatt hours and excess credits on solar generators and other ratepayers.

**SUMMARY OF SUGGESTED AMENDMENTS (if any):**

**(1) Delete references to net surplus customer generator and net surplus electricity (2827(b)(6) and 2827(b)(7).**

**(2) Delete language in bill that modifies 2827 (h) (3) that would codify, in a confusing way, how to carry forward the 12 month bill credit.**

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<sup>1</sup> PU Code 2827(c)(4) requires this report and describes necessary elements.

*"the eligible customer-generator is a net surplus customer-generator and the electricity distribution utility or cooperative shall allow the eligible customer-generator to apply the net surplus electricity as a credit for kilowatthours consumed during one, or both, of the two following 12-month Periods"*

**(3) Instead, modify the existing PU Code 2827 (h) (3) – as suggest in bold/underline below.**

(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 electricity distribution utility or cooperative during that same period, the eligible customer-generator is a net electricity producer and the electricity distribution utility or cooperative shall retain any excess kilowatthours generated during the prior 12-month period. The eligible customer-generator shall be allowed to carry forward net credits as a monetary value as established in 2827 (h)(2) for 2 additional 12-month periods, but after that time the eligible customer-generator shall not be owed any compensation for those monetary credits excess kilowatt hours unless the electricity distribution utility or cooperative enters into a purchase agreement with the eligible customer-generator for those excess kilowatthours.

**DETAILED ANALYSIS OF BILL'S PROVISIONS:**

The bill allows solar and wind NEM customers<sup>2</sup> with a net bill credit to carry credits forward to one or both of the next two 12-month true-up periods. This would mean that any annual fluctuations in demand or generation could be managed, and bill credits would not be lost to the customer after a 12 month period.

The main provisions of the bill are identified below:

- The bill allows net bill credits for NEM customers to carry forward to one or both of the next two 12-month true-up periods.
- The bill does not alter the implementation of the CSI, Self Generation Incentive Program (SGIP) or NEM programs, but allows any bill credit to carry forward “as a credit for kilowatthours consumed during one, or both, of the two following 12-month periods.” The bill keeps CSI program requirements related to requiring customers to size solar systems equal to or less than their load.
- Amended Section 2827(c)(4) delays the NEM cost-benefit report to Legislature until June 30, 2010 and asks for additional evaluation of the impact of net surplus generation and credits.
- The bill improves significantly upon prior versions of the bill which would have paid customer generators for net surplus electricity.

The CPUC's responsibilities under this bill would be to review and approve amended utility NEM tariffs and to oversee a small expansion of the NEM cost benefit study that is already underway. Both activities are minor and absorbable in current workload.

**BACKGROUND INFORMATION ON IMPACTED PROGRAMS, PRACTICE OR POLICY:**

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<sup>2</sup> This bill does not modify other forms of NEM that are available to agricultural biogas facilities and fuel cells.

**Current Net Energy Metering (NEM) Program:** Under existing NEM program rules, a utility measures the difference between the electricity supplied to a customer and the electricity generated by a customer generator and supplied to the grid. The "net difference" is billed to the customer, and so NEM is often described as letting a customer's meter 'run backwards and forward'.

Under current practice, NEM customers receive a monetary credit for any excess generation and receive a monetary charge for any consumption. Customers don't "swap" kilowatt hours with the utility. Under the current program, NEM customers can carry bill credits forward for only a 12 month period, after which time, the bill nets to zero and any excess credits are forfeited to the utility.

**California Solar Initiative (CSI):** This bill would support participation in the CSI, which provides incentives for solar installation, by facilitating and enhancing solar customer's net energy metering participation. The CSI has a goal of installing 1,940 MW of distributed solar by 2017 in investor-owned utility territories. The CSI provides both upfront and performance-based incentives for solar systems that are sized to offset customer load, and eligible for NEM. The economics of solar, at the present time, depend heavily on full retail NEM, which provides an ongoing mechanism for solar customers to balance their consumption and generation periods.

**Self Generation Incentive Program (SGIP):** This bill would support participation in the SGIP, which provides incentives for wind and fuel cells, by enhancing a wind customer's net energy metering participation. Small wind customers (with equipment less than 30 kW in size) are funded under a companion program administered by the California Energy Commission, the Emerging Renewables Program (ERP). Both SGIP and ERP funded wind turbines are eligible for NEM and would be affected by the changes proposed in this bill. Fuel cells are also eligible for NEM, see PU Code 2827.10, but the details of fuel-cell NEM are different and not affected by this bill.

#### **LEGISLATIVE HISTORY :**

Net Energy Metering statute (PU Code section 2827) was established by Senate Bill (SB) 656 (Alquist, 1995, co-author: Assembly Member Takasugi). NEM has been substantially altered several times including major revisions from SB 1 (Murray, 2006).

AB 1920 (Huffman, 2008) proposed similar changes to the Public Resources Code and the Public Utilities Code. AB 1920 would have also provided compensation for excess electricity generation by NEM customer generators and allowed over-sizing of systems.

AB 920 (Huffman, 2009) proposes similar changes, and the CPUC opposes that bill because it fundamentally alters the intent of the NEM statute and confuses "net bill surplus" (measured in dollars) and "net surplus generation" (measured in kilowatt hours). AB 920 additionally requires that the CPUC establish a rate for net surplus generation through a ratemaking proceeding.

#### **OTHER STATES' OR FEDERAL INFORMATION (if known):**

Several other states allow for payment for excess generation. However, these states have far smaller solar incentive programs and many of them do not provide solar generators compensation for excess kilowatt hours at "full retail" rates. Oregon allows excess generation value to be used towards a fund for low income programs instead of directly compensating the customer.

**STATUS:** Pending hearing in Assembly Utilities and Commerce Committee.

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