

STATE OF CALIFORNIA

Public Utilities Commission
San Francisco

M e m o r a n d u m

Date: April 6, 2011

To: The Commission
(Meeting of April 14, 2011)

From: Edward Randolph, Director
Office of Governmental Affairs (OGA) — Sacramento

Subject: **SB 585 (Kehoe) – Energy: Solar Energy Systems: Funding.**
As amended: March 29, 2011

LEGISLATIVE SUBCOMMITTEE RECOMMENDATION: SUPPORT

SUMMARY OF BILL:

The bill amends the California Solar Initiative (CSI) statute to allow the 10-year program to collect additional funds above the current \$2.167 billion current cap in order to fully fund the non-residential portion of the solar program. The bill, sponsored by the California Solar Energy Industry Association and the Solar Alliance, would address the funding shortfall of approximately \$200 million needed to fully attain the California Public Utilities Commission (CPUC) authorized goals for the program.¹ The additional funding will help attain approximately 400 MW of non-residential solar through the CSI. The bill allows the CPUC to first authorize the use of interest accumulated in the balancing accounts, currently estimated at \$30 million, and then increase the revenue requirements by the residual amount needed to fully fund the non-residential portion of the solar program.

This bill grants the CPUC authority to order the utilities to encumber the program budget (i.e. grant projects confirmed reservations), and to collect additional revenues as needed.

This bill contains an urgency clause, and if passed as-is, would allow the CPUC to immediately amend the budget and effectively open the “wait-list” portions of the CSI program (i.e. the non-residential portions of CSI in Pacific Gas & Electric (PG&E) and San Diego Gas and Electric (SDG&E) territories).

¹ The current shortfall is estimated to be \$178 million, as shown in tables in Appendix A. These numbers fluctuate weekly as the program gains and loses projects in real-time. A more conservative figure for the funding shortfall is probably closer to \$200 million.

SUMMARY OF SUPPORTING ARGUMENTS FOR RECOMMENDATION:

This bill allows the CPUC to fully fund the CSI program's budget shortfall. This shortfall was identified in July of 2010, and in Decision (D.) 10-09-046. The shortfall was caused by: 1) many installed solar energy systems have outperformed original estimates; 2) an overestimation of the discount rate calculation for performance based incentives (PBI) payments which results in higher actual cash payments than originally calculated; and 3) the inability to use accrued interest on program funds collected. The CPUC began to address the funding shortfall in September of 2010, by shifting \$40 million in program administration funds to the non-residential incentive budget. Other fund and incentive management options were proposed in an Assigned Commissioner's Ruling, which included decreasing the incentive levels for commercial and governmental customers. However, based on overwhelming opposition to these proposals in filed comments, they were not enacted at that time. A shortfall persists, currently estimated to be between \$178 million and \$200 million, if the CSI program is to deliver 1,173 MW of solar installations from non-residential facilities (with an overall program goal of 1,750 MW).

Under current budget estimates, the incremental rate impact authorized by this bill would be approximately \$148 million (over the remaining 6 years of the program), although that will likely decrease due to offsets from additional interest accumulation as well as savings from future program drop-outs. This bill grants the CPUC authority to order the utilities to encumber the program budget (i.e. grant projects confirmed reservations), and to collect additional revenues as needed; however, no immediate rate collection increase will be required. Due to the time lag between program encumbrances and actual expenditures, especially under the five-year performance-based incentive payment system, the existing rate collection schedule and interest is fully adequate to cover projected expenditures in the program for several more years.

Addressing the budget shortfall will benefit the CSI general market program and the CSI-Thermal program. Due to the fact that the CSI general market program funds the electric-portion of the CSI-Thermal program, the funding shortfall has meant that the budget is also exhausted for the commercial portion of the CSI-Thermal program. The residential portion of the CSI program is fully-funded and not affected by the budget shortfall.

SUMMARY OF SUGGESTED AMENDMENTS:

This bill allows the CPUC to utilize interest first and then increase rates to attain the CPUC's CSI programmatic (megawatt) goals. The language should be amended to allow the CPUC to utilize any other "credits" to the balancing accounts. For example, the balancing accounts currently contain forfeited application fees (these accrue when a large project drops out CSI prior to project completion) which should also be used alongside the interest to reduce any amount of future collections.

Suggested amendment:

2851.1. Notwithstanding the total cost limitation in subdivision (e) of Section 2851, and the component cost limitation in paragraph (1) of subdivision (e) of Section 2851, the commission, to fund program shortfalls identified for incentive step levels 8, 9, and 10 for nonresidential solar photovoltaic systems, shall first allocate any credits such as interest accumulated from customer collections and, for the remainder of the shortfall, increase collections from customers of San Diego Gas and Electric Company, Southern California Edison Company, and Pacific Gas and Electric Company for programs described in paragraph (1) of subdivision (e) of Section 2851.

DIVISION ANALYSIS (Energy Division):

The CSI program's general market program was designed to achieve 1,750 MW of new solar installations. The CSI general market program funds solar rebates in investor-owned utility (IOU) territories for all customer segments except new homes. The new homes portion of the state's solar program offerings is overseen by the California Energy Commission via the New Solar Homes Partnership (NSHP). In addition, the CPUC oversees two other rebate programs that target solar in affordable housing properties.

Current law caps the CSI program's expenses at \$2.167 billion. This cap applies to the entire CSI program which includes the CSI general market program, the Single-family Affordable Solar Homes (SASH) program, the Multifamily Affordable Solar Housing (MASH) program, the Research and Development & Demonstration (RD&D) Program, and the electric-funded portion of the CSI-Thermal (primarily hot water) Program. The wording of the existing statutory budget cap prevents the CPUC from authorizing the use of accumulated interest and/or forfeited application fees (or any other credit to the account) to contribute towards achievement of any of the CSI program's goals.

In July of 2010, the CPUC notified stakeholders that there was a pending shortfall in the non-residential portion of the CSI general market program. Although the budget situation is driven by many interrelated factors that fluctuate on a weekly basis, the primary driver of the current shortfall, which amounts to about 8% of the overall 10-year budget, was caused by an unexpected increase in the cost of performance-based incentive projects. The shortfall translates to a program deficit of approximately 400 MW.

To address the budget situation, the CPUC already increased the incentives budget by approximately \$40 million by transferring an allocation from administrative budgets of the Program Administrators and eliminating a portion of the program's evaluation budget. Despite this infusion, the CSI program exhausted available incentive funds in October 2010 (in SDG&E territory) and in December 2010 (in PG&E territory), before reaching the program's MW target assigned to non-residential customers. SCE still has

a balance in its non-residential program budget. PG&E and SDG&E are putting all new non-residential projects on wait-lists, and as projects drop-out of the program, some of these wait-listed projects will receive funding. Due to the fact that the CSI general market program funds the electric-portion of the CSI-Thermal program, the funding shortfall has meant that the budget is also exhausted for the commercial portion of the CSI-Thermal program. The residential portion of the CSI program is fully-funded and not affected by the budget shortfall.

If adopted by statute, this bill will allow the CSI Program Administrators to continue the CSI general market program, as well as the CSI-Thermal program's commercial program (funded by electric ratepayers).

The CSI program requires the rebates offered to customers decline over time as demand for the program grows. The program started with rebates of \$2.50/watt in 2007, and these rebates have declined an average of 7 times to where they are today at \$0.35/watt. Additional declines are slated for the future – such that the program's lowest rebate level is \$0.20/watt. As the incentive levels drop the program becomes ever more cost-effective.

Currently, rate collections in the CSI program are estimated to be \$160 million per year for the years 2013 and 2014, after which they should begin to fall in 2015 and 2016. Any additional funds needed to be collected under this bill could be collected in 2015 and 2016 when the collections are currently scheduled to decrease. This means this bill would not necessitate an immediate increase in rates.

Finally, it should be noted that the additional funding in this bill relates to the CPUC's general market program goals of 1,750 MW. Based on statutory requirements in SB 1 (Murray, 2006), the CPUC provided 90% of the \$2.1 billion IOU program funding for the general market program, and 10% for the low-income programs. Accordingly, the CPUC assigned a goal of 1,750 MW to the general market program, which is 90% of the CPUC's goal of 1,940. The legislature adopted a statewide goal of 3,000 MW in SB 1 (Murray, 2006), and the CPUC voluntarily adopted the goal of 1,940 based on the portion of the budget allocated to the CPUC in SB 1 (roughly 2/3rds of the overall budget). This additional funding authorized in this bill would not impact funding or shortfalls in other portions of the overall 3,000 MW solar program.

PROGRAM BACKGROUND:

The CSI program launched on January 1, 2007, with RD&D, low income, and general market programs. The largest part of the CSI program is the general market program and the largest part of the budget is the incentive pool for general market incentives. The general market has residential and non-residential components, with MW goals at 33% and 67% respectively. The residential program is scheduled to reach its targets in each PA territory, while the non-residential is now expected to fall significantly short of its targets in each PA territory.

LEGISLATIVE HISTORY:

Senate Bill (SB) 1 (Murray, 2006) authorized the CPUC to oversee the CSI program. It created PU Code 2851, and established key funding and other parameters for the program.

FISCAL IMPACT:

None.

STATUS:

SB 585 is pending hearing in the Senate Appropriations Committee.

SUPPORT/OPPOSITION:

Support: California Solar Energy Industry Association (sponsor)
Solar Alliance (sponsor)
AEE Solar, Inc.
Coalition for Adequate School Housing
KyotoUSA
Mainstream Energy Corp.
REC Solar, Inc.
School Innovations & Advocacy
Sharp Solar Electricity
Solar Alliance
SolarCity
Solaria Corporation
SPG Solar Inc.
TerraVerde Renewable Partners
The Vote Solar Initiative

Opposition: The Utility Reform Network (unless amended)

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BILL LANGUAGE:

BILL NUMBER: SB 585 AMENDED
BILL TEXT

AMENDED IN SENATE MARCH 29, 2011

INTRODUCED BY Senator Kehoe

FEBRUARY 17, 2011

An act to ~~amend Section 2851 of~~ *add*
Section 2851.1 to the Public Utilities Code, relating to solar
energy, and declaring the urgency thereof, to take effect
immediately.

LEGISLATIVE COUNSEL'S DIGEST

SB 585, as amended, Kehoe. Energy: solar energy systems: funding.
Under existing law, the Public Utilities Commission (PUC) has
regulatory authority over public utilities, including electrical
corporations. Decisions of the PUC adopted the California Solar
Initiative. Existing law requires the PUC, in implementing the
California Solar Initiative, to ensure that the total cost over the
duration of the program does not exceed \$3,350,800,000, and imposes
monetary limits on programs funded by charges collected from
customers of the state's 3 largest electrical corporations and
on programs adopted, implemented, and financed by charges collected
by local publicly owned electrical utilities.

This bill would ~~impose the total amount as a limit on the
amount of moneys collected through charges on electric utility
customers, rather than the total cost, and would specifically impose
the electrical corporation monetary limit on the amount of moneys
collected through charges on customers~~ *require the
commission, to fund certain program shortfalls, to first allocate
interest accumulated from customer collections and, for the remainder
of the shortfall, to increase collections from customers of the
state's 3 largest electrical corporations for specified programs*

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

Vote: 2/3. Appropriation: no. Fiscal committee: yes.
State-mandated local program: no.

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

*SECTION 1. Section 2851.1 is added to the
Public Utilities Code , to read:
2851.1. Notwithstanding the total cost limitation in subdivision
(e) of Section 2851, and the component cost limitation in paragraph
(1) of subdivision (e) of Section 2851, the commission, to fund
program shortfalls identified for incentive step levels 8, 9, and 10*

for nonresidential solar photovoltaic systems, shall first allocate interest accumulated from customer collections and, for the remainder of the shortfall, increase collections from customers of San Diego Gas and Electric Company, Southern California Edison Company, and Pacific Gas and Electric Company for programs described in paragraph (1) of subdivision (e) of Section 2851.

~~SECTION 1. Section 2851 of the Public Utilities Code is amended to read:~~

~~2851. (a) In implementing the California Solar Initiative, the commission shall do all of the following:~~

~~(1) The commission shall authorize the award of monetary incentives for up to the first megawatt of alternating current generated by solar energy systems that meet the eligibility criteria established by the State Energy Resources Conservation and Development Commission pursuant to Chapter 8.8 (commencing with Section 25780) of Division 15 of the Public Resources Code. The commission shall determine the eligibility of a solar energy system, as defined in Section 25781 of the Public Resources Code, to receive monetary incentives until the time the State Energy Resources Conservation and Development Commission establishes eligibility criteria pursuant to Section 25782. Monetary incentives shall not be awarded for solar energy systems that do not meet the eligibility criteria. The incentive level authorized by the commission shall decline each year following implementation of the California Solar Initiative, at a rate of no less than an average of 7 percent per year, and shall be zero as of December 31, 2016. The commission shall adopt and publish a schedule of declining incentive levels no less than 30 days in advance of the first decline in incentive levels. The commission may develop incentives based upon the output of electricity from the system, provided those incentives are consistent with the declining incentive levels of this paragraph and the incentives apply to only the first megawatt of electricity generated by the system.~~

~~(2) The commission shall adopt a performance based incentive program so that by January 1, 2008, 100 percent of incentives for solar energy systems of 100 kilowatts or greater and at least 50 percent of incentives for solar energy systems of 30 kilowatts or greater are earned based on the actual electrical output of the solar energy systems. The commission shall encourage, and may require, performance based incentives for solar energy systems of less than 30 kilowatts. Performance based incentives shall decline at a rate of no less than an average of 7 percent per year. In developing the performance based incentives, the commission may:~~

~~(A) Apply performance based incentives only to customer classes designated by the commission.~~

~~(B) Design the performance based incentives so that customers may receive a higher level of incentives than under incentives based on installed electrical capacity.~~

~~(C) Develop financing options that help offset the installation costs of the solar energy system, provided that this financing is ultimately repaid in full by the consumer or through the application of the performance based rebates.~~

~~(3) By January 1, 2008, the commission, in consultation with the State Energy Resources Conservation and Development Commission, shall require reasonable and cost effective energy efficiency improvements in existing buildings as a condition of providing incentives for eligible solar energy systems, with appropriate exemptions or~~

~~limitations to accommodate the limited financial resources of low income residential housing.~~

~~—(4) Notwithstanding subdivision (g) of Section 2827, the commission may develop a time variant tariff that creates the maximum incentive for ratepayers to install solar energy systems so that the system's peak electricity production coincides with California's peak electricity demands and that assures that ratepayers receive due value for their contribution to the purchase of solar energy systems and customers with solar energy systems continue to have an incentive to use electricity efficiently. In developing the time variant tariff, the commission may exclude customers participating in the tariff from the rate cap for residential customers for existing baseline quantities or usage by those customers of up to 130 percent of existing baseline quantities, as required by Section 80110 of the Water Code. Nothing in this paragraph authorizes the commission to require time variant pricing for ratepayers without a solar energy system.~~

~~—(b) Notwithstanding subdivision (a), in implementing the California Solar Initiative, the commission may authorize the award of monetary incentives for solar thermal and solar water heating devices, in a total amount up to one hundred million eight hundred thousand dollars (\$100,800,000).~~

~~—(c) (1) In implementing the California Solar Initiative, the commission shall not allocate more than fifty million dollars (\$50,000,000) to research, development, and demonstration that explores solar technologies and other distributed generation technologies that employ or could employ solar energy for generation or storage of electricity or to offset natural gas usage. Any program that allocates additional moneys to research, development, and demonstration shall be developed in collaboration with the Energy Commission to ensure there is no duplication of efforts, and adopted by the commission through a rulemaking or other appropriate public proceeding. Any grant awarded by the commission for research, development, and demonstration shall be approved by the full commission at a public meeting. This subdivision does not prohibit the commission from continuing to allocate moneys to research, development, and demonstration pursuant to the self-generation incentive program for distributed generation resources originally established pursuant to Chapter 329 of the Statutes of 2000, as modified pursuant to Section 379.6.~~

~~—(2) The Legislature finds and declares that a program that provides a stable source of monetary incentives for eligible solar energy systems will encourage private investment sufficient to make solar technologies cost effective.~~

~~—(3) On or before June 30, 2009, and by June 30th of every year thereafter, the commission shall submit to the Legislature an assessment of the success of the California Solar Initiative program. That assessment shall include the number of residential and commercial sites that have installed solar thermal devices for which an award was made pursuant to subdivision (b) and the dollar value of the award, the number of residential and commercial sites that have installed solar energy systems, the electrical generating capacity of the installed solar energy systems, the cost of the program, total electrical system benefits, including the effect on electrical service rates, environmental benefits, how the program affects the operation and reliability of the electrical grid, how the program has affected peak demand for electricity, the progress made toward~~

~~reaching the goals of the program, whether the program is on schedule to meet the program goals, and recommendations for improving the program to meet its goals. If the commission allocates additional moneys to research, development, and demonstration that explores solar technologies and other distributed generation technologies pursuant to paragraph (1), the commission shall include in the assessment submitted to the Legislature, a description of the program, a summary of each award made or project funded pursuant to the program, including the intended purposes to be achieved by the particular award or project, and the results of each award or project.~~

~~—(d) (1) The commission shall not impose any charge upon the consumption of natural gas, or upon natural gas ratepayers, to fund the California Solar Initiative.~~

~~—(2) Notwithstanding any other provision of law, any charge imposed to fund the program adopted and implemented pursuant to this section shall be imposed upon all customers not participating in the California Alternate Rates for Energy (CARE) or family electric rate assistance (FERA) programs as provided in paragraph (2), including those residential customers subject to the rate cap required by Section 80110 of the Water Code for existing baseline quantities or usage up to 130 percent of existing baseline quantities of electricity.~~

~~—(3) The costs of the program adopted and implemented pursuant to this section may not be recovered from customers participating in the California Alternate Rates for Energy or CARE program established pursuant to Section 739.1, except to the extent that program costs are recovered out of the nonbypassable system benefits charge authorized pursuant to Section 399.8.~~

~~—(e) In implementing the California Solar Initiative, the commission shall ensure that the total amount of money collected through charges on electric utility customers, over the duration of the program, does not exceed three billion three hundred fifty million eight hundred thousand dollars (\$3,350,800,000). The financial components of the California Solar Initiative shall consist of the following:~~

~~—(1) Programs under the supervision of the commission funded by charges collected from customers of San Diego Gas and Electric Company, Southern California Edison Company, and Pacific Gas and Electric Company. The total amount of moneys collected through charges on customers of San Diego Gas and Electric Company, Southern California Edison Company, and Pacific Gas and Electric Company over the duration of these programs shall not exceed two billion one hundred sixty six million eight hundred thousand dollars (\$2,166,800,000) and includes moneys collected directly into a tracking account for support of the California Solar Initiative and moneys collected into other accounts that are used to further the goals of the California Solar Initiative.~~

~~—(2) Programs adopted, implemented, and financed in the amount of seven hundred eighty four million dollars (\$784,000,000), by charges collected by local publicly owned electric utilities pursuant to Section 387.5. This subdivision does not give the commission power and jurisdiction with respect to a local publicly owned electric utility or its customers.~~

~~—(3) Programs for the installation of solar energy systems on new construction, administered by the State Energy Resources Conservation and Development Commission pursuant to Chapter 8.6 (commencing with~~

~~Section 25740) of Division 15 of the Public Resources Code, and funded by nonbypassable charges in the amount of four hundred million dollars (\$400,000,000), collected from customers of San Diego Gas and Electric Company, Southern California Edison Company, and Pacific Gas and Electric Company pursuant to Article 15 (commencing with Section 399).~~

SEC. 2. 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 make additional funding available as soon as possible for the nonresidential incentives provided under the California Solar Initiative, which needs the funds before 2012 to remain solvent, it is necessary for this act to take effect immediately.