Item # 47
(9441)

STATE OF CALIFORNIA

Public Utilities Commission
San Francisco

M e m o r a n d u m

Date: May 18, 2010

To: The Commission
(Meeting of May 20, 2010)

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

Subject: **AB 1923 (Evans) - Energy: solar energy systems: theft prevention.**
As Amended: April 8, 2010

LEGISLATIVE SUBCOMMITTEE RECOMMENDATION: OPPOSE

SUMMARY OF BILL:

This bill amends the Public Utilities Code to allow the California Public Utilities Commission (CPUC) to authorize moneys allocated for the California Solar Initiative's (CSI) Research, Development, Demonstration, and Deployment (RD&D) Program to be used for RD&D related to antitheft technologies.

This bill inserts the following sentence to PU Code 2851 (c)(1): "Moneys allocated for research, development, and demonstration may also be used for research, development, and demonstration for antitheft technology to protect investments in solar energy systems", and

This bill contains findings and declarations stating that theft of photovoltaic panels in rural areas is increasingly common, with wineries as common targets. Between June 2008 and September 2009 in Napa County alone, over 400 solar panels worth more than $400,000 were stolen from wineries.

SUMMARY OF SUPPORTING ARGUMENTS FOR RECOMMENDATION:

The CPUC's existing CSI RD&D program, as authorized in Decision (D.)07-09-042, identifies general areas for the program to fund, including the integration of solar power into the grid, increase solar production, and innovative business models.[1] The CSI RD&D program plan does not prevent the CPUC from awarding a contract to a project related to anti-theft technologies. This bill is unnecessary and may create a precedent for other specific solar research areas to seek favored status under the CSI RD&D program. Furthermore, the CSI RD&D program is well underway, and the program has already received robust responses to its first two solicitations. The most recent solicitation received over 90 applicants.

There are many extremely low-cost solutions available to solar system owners interested in protecting their solar investment with anti-theft protection devices. In addition, the CSI Program promotes the use of continuous metering and monitoring technologies which notify system owners immediately if the system has been tampered with. The CSI Program rules currently require metering and monitoring on all systems, although CSI Program rules provide and exception for small systems and these rules were not in place prior to 2007 so many systems pre-date the rules. The CSI Program conducts marketing and outreach to potential and existing solar customers, and the marketing and outreach program has been expanded to include additional information about avoiding solar system theft.[2]

SUMMARY OF SUGGESTED AMENDMENTS:

None.

DIVISION ANALYSIS (Energy Division):

The impact on the CPUC would be limited. The Commission would likely need to consider whether any changes were required to have the CSI RD&D Program comply with the new statute. The bill does not appear to require the CPUC to make any program change.

LEGISLATIVE HISTORY:

SB 1 (Murray), Chapter 132 Statutes of 2006, established PU Code 2851 and authorized the CSI program. Several bills have made minor modifications to the code, but no changes have been made to the section of code related to the CSI RD&D program.

STATUS:

AB 1923 is in the Senate awaiting to be referred to a policy committee by the Senate Rules Committee.

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[1] For more information on the CSI RD&D program, see: http://www.cpuc.ca.gov/PUC/energy/Solar/rdd.htm.
[2] For a good article on solar system theft prevention, see: http://ecmweb.com/construction/solar-panel-theft-20100301/?cid=currentissue.

SUPPORT/OPPOSITION:

Support: California Solar Industries Association (CALSEIA)
California State Sheriff's Association (CSSA)
Napa County Office of Sheriff-Coroner
Pacific Gas and Electric Company (PG&E)
Wine Institute

Opposition: None on file.

STAFF CONTACTS:

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Date: May 18, 2010

BILL LANGUAGE:

BILL NUMBER: AB 1923 AMENDED
BILL TEXT

AMENDED IN ASSEMBLY APRIL 8, 2010

INTRODUCED BY Assembly Member Evans

FEBRUARY 16, 2010

An act *to amend Section 2851 of the Public Utilities Code,* relating to energy.

LEGISLATIVE COUNSEL'S DIGEST

AB 1923, as amended, Evans. Energy: ~~photovoltaic panels.~~ *solar energy systems: theft prevention* .

Under existing law, the Public Utilities Commission (CPUC) has regulatory authority over public utilities, including electrical corporations, as defined. Decisions of the CPUC adopted the California Solar Initiative. Existing law requires the CPUC to undertake certain steps in implementing the California Solar Initiative. Existing law prohibits the CPUC, in implementing the California Solar Initiative, from allocating more than $50,000,000 for 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.

This bill would authorize moneys allocated by the CPUC for research, development, and demonstration pursuant to the California Solar Initiative, to be used for research, development, and demonstration for antitheft technology to protect investments in solar energy systems.

~~Existing law requires the State Energy Resources Conservation and Development Commission to initiate a public proceeding to study and make findings whether, and under what conditions, solar energy systems should be required on new residential and nonresidential buildings and to periodically update the study. For these purposes, "solar energy system" means a photovoltaic solar collector or other photovoltaic solar energy device.~~

~~Existing law establishes the Solar Training, Education, and Certification Act of 2001. The act authorizes a local government to develop and administer a program to encourage the construction of buildings that use solar thermal and photovoltaic systems.~~

~~This bill would state the intent of the Legislature to enact legislation to discourage the theft of photovoltaic panels.~~

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

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

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

(a) Solar-generated electricity is uniquely suited to California's needs because it produces electricity when the state most needs it, during the peak demand hours in summer afternoons when the sun is brightest and the demand is at its highest.

(b) Procuring solar energy systems to meet peak electricity demand increases system reliability and decreases the state's dependence on unstable fossil fuel supplies.

(c) Increasing solar energy's portion of the state's electricity generation market will bring additional manufacturing, installation, and sales jobs to the state at a higher rate than most conventional energy production sources.

(d) The benefits of expanding the use of solar energy to generate electricity are numerous. Solar energy systems make use of secure, indigenous, and sustainable natural resources and provide substantial energy reliability. Solar energy has pollution reduction benefits, diversifies the state's energy supply, and thereby reduces the state's dependence on imported fossil fuels.

(e) Installing solar energy systems contributes to the state's achieving its climate change goals required by the California Global Warming Solutions Act of 2006 (Division 25.5 (commencing with Section 38500) of the Health and Safety Code).

(f) Over the past 15 years, the state has made significant investments and commitments to solar energy through the following actions:

(1) In 1995, legislation established net energy metering and declared that a program to provide net energy metering is one way to encourage private investment in renewable energy resources, stimulate in-state economic growth, enhance the continued diversification of California's energy resource mix, and reduce interconnection and administrative costs for electricity suppliers.

(2) In 2002, the state established the California Renewables Portfolio Standard Program with the goal of increasing the percentage of renewable energy in the state's energy supply to 20 percent by 2017. In 2006, legislation accelerated the timeline to 20 percent by 2010. In the 2008 update to the state's Energy Action Plan, the State Energy Resources Conservation and Development Commission and the Public Utilities Commission jointly supported expanding the state's renewable energy goals to attain the target of generating 33 percent of total retail sales of electricity in the state from eligible renewable energy resources.

(3) Beginning in late 2005 and continuing into 2006, the Public Utilities Commission established the California Solar Initiative to lead to one million solar roofs in California by 2018. While the commission was still formulating the California Solar Initiative, legislation was enacted that established as goals of the state, to install solar energy systems with a generation capacity equivalent of 3,000 megawatts, to establish a self-sufficient solar industry in which solar energy systems are a viable mainstream option for both homes and businesses in 10 years, and to place solar energy systems on 50 percent of new homes in 13 years.

(4) In 2008, legislation enhanced the state's commitment to solar

energy by extending and expanding a property tax exclusion for projects that utilize an active solar energy system and builder-installed active solar energy systems in new homes.

(g) Wineries, rural commercial properties, and individual solar energy system owners throughout the state have been subjected to increasing thefts related to their investment in solar technology. Between June 2008 and September 2009, in Napa County alone, over 400 solar panels worth more than $400,000 were stolen from wineries.

(h) The state has the ability to provide security for consumers who have invested in an energy source with public support and benefit. By doing so, the state can protect the strong investment it has made in the renewable energy sector of the state's electricity generation market.

(i) The California Solar Initiative includes $50 million for "Research, Development, Deployment, and Demonstration." To support California's investment in, and commitment to, solar energy, a portion of the funds should be invested in theft prevention, tracking, and security for solar panels.

SEC. 2. 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. *Moneys allocated for research, development, and demonstration may also be used for research, development, and demonstration for antitheft technology to protect investments in solar energy systems.* 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 cost 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 cost 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. Nothing in this subdivision shall 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).

~~SECTION 1.~~ ~~It is the intent of the Legislature to enact legislation to discourage the theft of photovoltaic panels.~~