

STATE OF CALIFORNIA

Public Utilities Commission
San Francisco

M e m o r a n d u m

Date: April 27, 2009

To: The Commission
(Meeting of May 7, 2009)

From: Pamela Loomis, Director
Office of Governmental Affairs (OGA) — Sacramento

Subject: **SB 542 (Wiggins and Strickland)- Solar energy and energy efficiency programs.
As Amended April 2, 2009**

LEGISLATIVE SUBCOMMITTEE RECOMMENDATION: OPPOSE UNLESS AMENDED

SUMMARY OF BILL:

This bill would require the CPUC to do the following five things:

- (1) Develop and implement a cost-effective strategy to expand the participation of multi-tenant residential and commercial properties in ratepayer funded energy efficiency and solar energy programs by July 1, 2010.
- (2) Prepare and submit a report to the Legislature on the program strategy by July 1, 2010.
- (3) Ensure that the strategy developed and implemented does not result in any additional ratepayer surcharges and is funded through existing utility energy efficiency programs and the California Solar Initiative.
- (4) Ensure that the strategy developed and implemented is cost effective for utility customers.
- (5) Consider, in developing the strategy, whether synergies exist between its energy efficiency programs and the solar energy programs that can make energy efficiency and solar investments cost effective for utility customers in multi-unit residential or commercial rental properties.

SUMMARY OF SUPPORTING ARGUMENTS FOR RECOMMENDATION:

This bill is similar to SB 1460 (Wiggins, 2008) that the CPUC supported with amendments, most of which are included or reiterated here. Since last year, the Commission has made considerable progress in the energy efficiency strategic planning process and in the development of virtual net metering (VNM) for CSI. It is now clearer

that this bill would complicate, not complement, an already active and complex landscape of demand side programs.

SUMMARY OF SUGGESTED AMENDMENTS:

- Proposed changes include: eliminate unrealistic dates, modify duplicative reporting requirements, remove cost-effectiveness limitations, and broaden to "all demand side management", not just solar and energy efficiency.
- The following amendments are suggested to limit the bill to provide guidance and intent language.
 - This bill would require the PUC, ~~by July 1, 2010,~~ to develop and implement a strategy or strategies to expand the participation of customers, including multi-unit residential and commercial rental properties in utility ~~energy efficiency and solar energy programs~~ *demand side management programs including demand response, energy efficiency and distributed generation. The PUC should develop such strategies during its ongoing oversight review of demand side programs,* and should ~~include information on the strategy or strategies in its annual reports~~ *prepare and submit a report on the program* to the Legislature ~~by that date.~~ The bill would require the PUC to ensure that the strategy implemented does not result in any additional ratepayer surcharges, is funded through existing programs, and is cost effective for utility customers. The bill would require the PUC to consider, in developing the strategy, whether synergies exist between its ~~energy efficiency programs and the solar energy programs of the California Solar Initiative~~ *demand side management programs*, that, in the determination of the PUC, can make ~~energy efficiency and solar investments~~ *integrated demand side management investments* cost effective for utility customers including multi-unit commercial and residential rental properties.

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

SECTION 1. Section 2853 is added to the Public Utilities Code, to read:

2853. (a) The Legislature finds and declares both of the following:

(1) Owners of multi-unit residential or commercial rental property ~~that are individually metered or master-metered~~ have little financial incentive to ~~implement~~ *invest in* reasonable and cost-effective ~~energy efficiency improvements and solar energy projects~~ *demand side management programs or technologies.* ~~for a particular project site.~~

(2) Forty-three percent of this state's residential housing units are rented, indicating that many housing units and many Californians are ~~unable~~ *less likely* to benefit from this state's *demand side* programs to support energy efficiency, *demand response* and the use of solar energy *and other distributed generation technologies.*

(b) ~~By July 1, 2010,~~ The commission shall do both of the following:

(1) Develop and implement a strategy to expand the participation rates of utility customers including multi-unit residential and commercial rental properties in utility ~~energy efficiency and solar energy~~ *demand side management* programs.

(2) ~~Prepare and submit a report to the Legislature on the program developed~~ *Report on the strategy developed* pursuant to paragraph (1) *in relevant reports on demand side management programs submitted to the Legislature.*

~~(c) The commission shall ensure that the strategy developed and implemented pursuant to subdivision (b) does not result in any additional ratepayer surcharges and is funded through existing utility energy efficiency programs and the California Solar Initiative, as defined in subdivision (a) of Section 2852.~~

~~(d) The commission shall ensure that the strategy developed and implemented pursuant to subdivision (b) is cost effective for utility customers.~~

(ec) The commission shall consider, in developing the strategy pursuant to subdivision (b), whether synergies exist between its existing **demand side management programs** energy efficiency programs and the solar energy programs of the California Solar Initiative, including the low-income provisions of the California Solar Initiative, that, in the determination of the commission, can make energy efficiency and solar investments **demand side programs** cost effective for utility customers in multi-unit residential or commercial rental properties.

DIVISION ANALYSIS (Energy Division):

Multi-tenant properties face a number of challenges in deploying demand side management (DSM) technologies, including energy efficiency and solar distributed generation. SB 542 states that a considerable portion of the state's residential units (43%) are rental properties. Additionally, according to the Building Owners and Management Association, commercial building energy use accounts for up to 40% of all commercial energy consumption. The CPUC's development of a strategy to target solar and energy efficiency programs at multi-tenant residential and commercial properties may result in significant energy savings. The state has a long history of both solar and energy efficiency programs, and while multi-tenant properties are eligible for solar and EE programs, these properties face a well understood number of barriers to maximizing their effective participation.

The most commonly referred to barrier is the "split incentive" barrier where the landlord has little incentive to invest in upgrades that reduce energy consumption when the energy bill is paid for by the tenant, not the landlord. Commercial and residential tenants have little incentive to invest in improving energy efficiency or installing onsite generation since such capital improvements would be largely left with the owner when the tenant leaves. Likewise, owners have little incentive to spend more on capital improvements for energy efficiency or onsite generation, as the energy savings typically accrue to tenants who are individually metered and pay the energy bills. Building owners who are master metered may reap the benefits of capital improvements if they are willing to invest in them, yet in these cases incentives for tenants to actually conserve energy are minimized. Thus, there are numerous "split incentives" or even disincentives for the designers, builders, owners, and tenants. These are longstanding issues that are well known to demand-side program designers, who have been working on strategies to address them for more than 30 years. Addressing this problem is not nearly as simple as this proposed legislation appears to suggest.

(1) The CPUC is already pursuing multifamily property participation in both solar and energy efficiency programs, as well as synergies between the programs.

SB 542 would be more effective in explicitly supporting the implementation and integration of existing programs and efforts at the CPUC (described below) than in

requiring the creation of a new, narrowly defined strategy with seemingly parallel priorities and reporting requirements.

Multi-tenant Energy Efficiency. The CPUC's approach to energy efficiency encompasses multiple programs that are developed and implemented by the IOUs with CPUC oversight and approval. This bill refers to the CPUC's "energy efficiency program," without distinguishing them for their diversity and practical implementation of each. The IOUs currently offer energy efficiency programs targeting multi-tenant buildings. The CPUC currently requires the IOUs to submit portfolios of programs for Commission consideration, and the programs span a three-year time horizon. In the current 2006-09 EE programs utilities included a number of programs that serve multi-tenant residential and commercial buildings. These include the:

- "Direct Install" programs that install basic EE measures at no cost to existing small commercial customers, regardless of whether they are a stand-alone building or many small businesses in one building.
- A wide range of incentives that reduce the cost of energy efficient lighting and appliances are paid either to the manufacturers of these goods to sell them at lower prices in California, or to consumers and buildings owners at the time they purchase these measures.

For 2009-2011 the Commission already has authorized the utilities to spend approximately \$300 million per year for low income EE programs that install a range of efficiency measures at no cost to the existing occupants. Multi-family dwellings are fully eligible to receive these services for eligible households meeting the income limits. A substantial number of those assisted are living in multi-family dwellings.

The IOUs are currently developing and seeking approval for their energy efficiency plans for the 2009-2011 program cycle. In CPUC Rulemaking (R.) 06-04-010, the CPUC is currently considering an integrated demand side management (IDSM) strategy to better coordinate the efforts of the IOUs' energy efficiency, demand response and distributed generation programs, as part of the Statewide Strategic Plan. 2009-2011 program development. Decision (D.) 07-10-032 in that proceeding directed the CPUC "to develop a strategy to integrate energy efficiency offerings with demand response and renewable distributed generation solutions in order to determine the best combination of resources to meet a particular customer's needs. The CPUC is also directed by this bill to prepare a strategy to integrate consumer demand side programs in a manner that is cost effective and avoids confusion to customers." This combination of resources should also include integration supporting technologies such as smart meters, storage, and smart grid technologies. This bill, as written, would unnecessarily narrow the scope of that strategy and possibly add to implementation costs by arbitrarily setting deadlines.

Multi-tenant Solar. All multi-tenant properties are currently eligible for solar incentives under the existing California Solar Initiative (CSI). The program is not currently tracking which residential or commercial properties that have engaged in the program are multi-tenant facilities, but there is some participation by these facilities in both sectors. Furthermore, under the CSI program, ten percent of the budget is set aside for low-income programs, and half of that budget is specifically for the Multi-family Affordable

Solar Housing (MASH) program. The MASH program has just started, and the Commission has created a new tariff referred to as "Virtual Net Metering (VNM)" to address some instances of the split incentive problem. In D.08-10-036 (p. 39-40), the Commission has already committed to consider whether virtual net metering is appropriate to be extended to other multi-tenant properties (other than those that go through the MASH program). The VNM model adopted in the CSI multifamily affordable housing program could become a model for solar on all (i.e. residential and commercial) multi-tenant buildings, however further work in the rulemaking is planned to consider the issue. Additionally, the VNM program only addresses the metering issue with respect to solar, it does not address cost-recovery for system investment, and that still needs to be worked out separately between the building owner and the tenant, in accordance with otherwise applicable tenancy laws.

Integrated Demand Side Management (IDSMD) is a goal for the CPUC that involves all DSM programs, not just solar and energy efficiency. This bill unnecessarily limits the scope of the proposed strategy to energy efficiency and solar and pursuing "synergies" between those two programs. The CPUC is currently working to integrate the efforts of all of its demand side management programs. It would seem more appropriate if the program proposed in this bill would also seek to integrate the full array of the CPUC's demand side management programs such as other kinds of renewable distributed generation (wind, renewable fuel cells, biogas, etc.) and demand response. In addition, the CPUC has specifically asked the IOUs to develop an integrated audit tool to be used by the energy efficiency programs, but also made available to DG programs like the CSI and the DR program. Currently CPUC staff is reviewing the proposals from the IOUs on their integrated audit tool and program development. We recommend the bill be revised to include all demand side customer resources as described above, without limiting the ability of staff to develop more comprehensive approaches to IDSMD, or creating redundant reporting requirements.

(2) The bill establishes an artificial deadline for preparing a strategy and reporting out to the legislature which is out of sync with the CPUC's timelines for energy efficiency strategic planning and solar program review.

This problem has been well understood for decades, and yet it has not been solved. It is unlikely that the Commission could develop a comprehensive solution to the problem and prepare a defensible report to the Legislature in such a short period of time. Rather, the legislature should seek to support the efforts already underway at the CPUC to address the issue.

This bill would require a strategy to be in place by July 1, 2010, which is six months after the date this bill could become effective (likely to be January 1, 2010). It is unrealistic to expect that the CPUC could develop and implement and report on a strategy on that time frame. We recommend the bill be revised to give the Commission at least 18 months from the effective date to consider enhancements to existing efficiency, solar, distributed generation, and demand response programs to garner greater participation by owners or occupants of multi-tenant buildings, and a subsequent 12 months before needing to report on the implementation of these enhancements.

Energy Efficiency. The Commission oversight of the utility energy efficiency portfolios occurs in three year cycles. The Commission undertook an energy efficiency strategic planning process prior to the 2009-2011 program plan filings. The utilities recently refilled their 2009-2011 energy efficiency program portfolio plans. The EE strategic plan already includes multi-tenant properties as an issue to address, and the EE portfolios proposed already address the strategic plan.

Solar. The Commission's oversight of the solar program is handled in an ongoing distributed generation rulemaking. The legislature requires the Commission to report on the program annually, commencing in June 2009. Separately, the Commission has stated its intention to review the program on a biennial basis, starting in 2009. The review cycle may be a more appropriate time to consider additional programmatic strategies aimed at multi-tenant building program participation.

Metering and Cost Recovery Mechanisms. Addressing the challenges of deploying energy efficiency and solar distributed generation in multi-tenant buildings will require addressing current metering regulations which complicate the appropriate allocation of energy efficiency and DG investment costs and benefits between tenants and building owners. There is a variety of different metering arrangements in commercial and residential multi-tenant developments in California, and a complex statute governing these. The CPUC needs to analyze further options for metering and submetering, including virtual net metering, to determine whether opportunities exist to support additional EE and solar deployment. Even if the metering challenges are addressed, the cost recovery of investments usually needs to be addressed separately.

A better approach for this bill may be to require the CPUC to report on the program, progress and the barriers to a more effective deployment of integrated demand side programs in multi-tenant buildings so that the legislature can focus on removing the barriers which are outside of the CPUC's jurisdiction. It is possible that the CPUC would have to return to the legislature with proposed legislative amendments in order to remove barriers to the metering challenges that hamper this sector. Allowing flexibility in timing and implementation of this bill is key to allowing the CPUC sufficient time to return to the legislature, if required.

Many local governments have rent control or rent policies that dictate the terms under which owners can pass along to tenants capital improvement costs. This greatly complicates the interest of owners to invest in building improvements when the owner does not pay the utility bills, and thus does not see a stream of utility cost savings from which to amortize capital improvements.

(3) The bill requires that the program it proposes be both cost-effective and “not result in any additional ratepayer surcharges” and is funded through existing utility energy efficiency programs and the California Solar Initiative.

Existing statute and Commission decisions on both solar and energy efficiency are extensively detailed in their policy parameters for funding for both policy areas. The Commission has a policy to only approve energy efficiency portfolios that are cost effective on a portfolio basis. The Commission does not hold each "strategy" within the energy efficiency plan or each program within the portfolio to the standard of cost-

effective. Thus some of the efficiency programs currently offered are not cost-effective, and some of these may currently be serving multi-tenant residential and commercial building occupants. It is important that the CPUC retain its policy of having an overall-balanced and cost-effective portfolio of efficiency programs, without requiring that each individual program is cost-effective.

This provision can be problematic for distributed generation for several reasons:

- Some potential solutions to the multi-tenant building problem may not be cost effective at current market prices, especially for DG applications with their complex metering needs. Some programs targeting multi-tenant properties have been pursued by utility program administrators, with a range of cost-effectiveness. Multi-tenant building participation in DSM programs is a complex and potentially expensive problem, and the limits to "cost-effective" programs are neither helpful nor realistic.
- Spending on the CSI program is capped per SB 1 (Murray, 2006), and therefore program expenditures required for the strategy proposed in this bill would necessarily require reduced spending on other solar program elements.
- There may be new costs associated with addressing the multi-tenant problem, for example, it is not yet clear how much the Commission's authorization of Virtual Net Metering will cost the utilities for implementation. The legislation unnecessarily binds the hands of the Commission to not authorize anything that would raise costs.

PROGRAM BACKGROUND:

Distributed Generation Programs

- **California Solar Initiative (CSI)** - The CSI has a goal of installing 3,000 MW of distributed solar by 2017. The CSI provides both upfront and performance-based incentives for solar systems that are sized to offset customer load, and eligible for net energy metering (NEM).
- **The Self Generation Incentive Program (SGIP)**, was established in 2001 and is one of the largest DG incentive programs in the United States, with approximately 1,200 projects totaling 300MW on-line at the end of 2007. This program would be left out of the integration proposed in this bill.

Although the CSI has not tracked data specific to multi-tenant buildings, anecdotally staff knows that some solar systems have been installed on multi-tenant buildings. In some cases, multi-tenant buildings have put in separately metered systems on one facility. Building owners may need to recoup solar system investment costs from their tenants using a side agreement since the tenant usually pays for the electricity bill.

- **Demand Response**

The CPUC has oversight over demand response programs, and these programs are also considered demand side programs, though as written, the bill would also leave out these programs.

- **Energy Efficiency**

The California Long Term Energy Efficiency Strategic Plan adopted by the PUC in D.07-10-032, directs the utilities to provide integrated program offerings that integrate the full range of demand-side management options including energy efficiency, demand response, and distributed generation which are fundamental to achieving California's strategic energy goals.

- **Sub-Metering**

On September 6, 2007, the CPUC adopted a decision (D.07-09-004) allowing sub-metering of electricity in high-rise, multi tenant commercial buildings. While the decision will offer commercial building tenants a tool to improve their energy efficiency, the scope of the decision is limited in that it applies only to Pacific Gas & Electric's service territory and only to certain commercial buildings. The new rule was a result of an agreement between PG&E and the BOMA. Virtual Net Metering is proposed for the MASH program but has yet to be implemented or its costs fully estimated.

LEGISLATIVE HISTORY:

This bill is similar to SB 1460 (Wiggins, 2008) that the CPUC supported with amendments, most of which are included or reiterated here.

STATUS:

SB 542 has been referred to the Senate Appropriations Committee upon passage from the Senate Energy, Utilities and Commerce Committee on April 21, 2009.

SUPPORT/OPPOSITION:

Support: Recolte Energy
 Western Center on Law & Poverty

Opposition: None on file.

STAFF CONTACTS:

Alicia Priego, Legislative Liaison, OGA (916) 322-8858 arp@cpuc.ca.gov

Date: April 27, 2009

BILL LANGUAGE:

BILL NUMBER: SB 542 AMENDED
BILL TEXT

AMENDED IN SENATE APRIL 2, 2009

INTRODUCED BY Senators Wiggins and Strickland

FEBRUARY 27, 2009

An act to ~~add Section 2853 to~~ amend
Section 25782 of the Public Resources Code, and to amend Section 2851
of , and to add Section 2853 to, the Public
Utilities Code, relating to energy.

LEGISLATIVE COUNSEL'S DIGEST

SB 542, as amended, Wiggins. Solar energy and energy efficiency programs.

Under existing law, the Public Utilities Commission (PUC) has regulatory authority over public utilities, including electrical corporations, as defined. A decision of the PUC adopted the California Solar Initiative. Existing law requires the PUC to undertake certain steps in implementing the California Solar Initiative. Existing law establishes a surcharge on all natural gas consumed in the state and upon electricity distributed by the state's three largest electrical corporations, to fund certain low-income assistance programs, cost-effective energy efficiency and conservation activities, and public interest research and development.

This bill would require the PUC, by July 1, 2010, to develop and implement a strategy to expand the participation of multiunit residential and commercial rental properties in utility energy efficiency and solar energy programs and to prepare and submit a report on the program to the Legislature by that date. The bill would require the PUC to ensure that the strategy implemented does not result in any additional ratepayer surcharges, is funded through existing programs, and is cost effective for utility customers. The bill would require the PUC to consider, in developing the strategy, whether synergies exist between its energy efficiency programs and the solar energy programs of the California Solar Initiative, that, in the determination of the PUC, can make energy efficiency and solar investments cost effective for utility customers in multiunit commercial and residential rental properties. *The bill would require the PUC, in implementing the California Solar Initiative, to ensure that solar energy system installers are informed that if the solar energy system is to be installed on a manufactured home, that the installation is required to comply with certain statutory and regulatory requirements pertaining to the alteration of manufactured housing.*

Existing law requires the State Energy Resources Conservation and Development Commission (Energy Commission), in consultation with the PUC, local publicly owned electric utilities, and interested members of the public, to establish and thereafter revise eligibility criteria for solar energy systems and to establish conditions for

ratepayer funded incentives that are applicable to the California Solar Initiative.

This bill would require the Energy Commission to additionally establish as a condition for ratepayer funded incentives, that if the solar energy system is to be installed on manufactured housing, that it comply with certain statutory and regulatory requirements pertaining to the alteration of manufactured housing.

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 25782 of the Public Resources Code is amended to read:

25782. (a) The commission shall, by January 1, 2008, in consultation with the Public Utilities Commission, local publicly owned electric utilities, and interested members of the public, establish eligibility criteria for solar energy systems receiving ratepayer funded incentives that include all of the following:

(1) Design, installation, and electrical output standards or incentives.

(2) The solar energy system is intended primarily to offset part or all of the consumer's own electricity demand.

(3) All components in the solar energy system are new and unused, and have not previously been placed in service in any other location or for any other application.

(4) The solar energy system has a warranty of not less than 10 years to protect against defects and undue degradation of electrical generation output.

(5) The solar energy system is located on the same premises of the end-use consumer where the consumer's own electricity demand is located.

(6) The solar energy system is connected to the electrical corporation's electrical distribution system within the state.

(7) The solar energy system has meters or other devices in place to monitor and measure the system's performance and the quantity of electricity generated by the system.

(8) The solar energy system is installed in conformance with the manufacturer's specifications and in compliance with all applicable electrical and building code standards.

(b) The commission shall establish conditions on ratepayer funded incentives that require all of the following:

(1) Appropriate siting and high quality installation of the solar energy system by developing installation guidelines that maximize the performance of the system and prevent qualified systems from being inefficiently or inappropriately installed. The conditions established by the commission shall not impact housing designs or densities presently authorized by a city, county, or city and county. The goal of this paragraph is to achieve efficient installation of solar energy systems to promote the greatest energy production per ratepayer dollar.

(2) Optimal solar energy system performance during periods of peak electricity demand.

(3) Appropriate energy efficiency improvements in the new or existing home or commercial structure where the solar energy system is installed.

(c) The commission shall additionally require as a condition on ratepayer-funded incentives, that if the solar energy system is to be installed on a manufactured home, that the installation complies

with Section 18029 of the Health and Safety Code and Section 4040 of Title 25 of the California Code of Regulations.

—(e)

(d) The commission shall set rating standards for equipment, components, and systems to assure reasonable performance and shall develop standards that provide for compliance with the minimum ratings.

—(d)

(e) Upon establishment of eligibility criteria pursuant to subdivision (a), no ratepayer funded incentives shall be made for a solar energy system that does not meet the eligibility criteria.

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.

(5) Ensure that solar energy system installers are informed that if the solar energy system is to be installed on a manufactured home, that the installation is required to comply with Section 18029 of the Health and Safety Code and Section 4040 of Title 25 of the California Code of Regulations.

(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 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.~~ SEC. 3. Section 2853 is added to the Public Utilities Code, to read:

2853. (a) The Legislature finds and declares both of the following:

(1) Owners of multiunit residential or commercial rental property that are individually metered or master-metered have little financial incentive to implement reasonable and cost-effective energy efficiency improvements and solar energy projects.

(2) Forty-three percent of this state's residential housing units are rented, indicating that many housing units and many Californians are unable to benefit from this state's programs to support energy efficiency and the use of solar energy.

(b) By July 1, 2010, the commission shall do both of the following:

(1) Develop and implement a strategy to expand the participation rates of multiunit residential and commercial rental properties in utility energy efficiency and solar energy programs.

(2) Prepare and submit a report to the Legislature on the program developed pursuant to paragraph (1).

(c) The commission shall ensure that the strategy developed and implemented pursuant to subdivision (b) does not result in any additional ratepayer surcharges and is funded through existing utility energy efficiency programs and the California Solar Initiative, as defined in subdivision (a) of Section 2852.

(d) The commission shall ensure that the strategy developed and implemented pursuant to subdivision (b) is cost effective for utility customers.

(e) The commission shall consider, in developing the strategy pursuant to subdivision (b), whether synergies exist between its energy efficiency programs and the solar energy programs of the California Solar Initiative, including the low-income provisions of the California Solar Initiative, that, in the determination of the commission, can make energy efficiency and solar investments cost effective for utility customers in multiunit residential or commercial rental properties.