

AMENDED IN SENATE APRIL 25, 2005  
AMENDED IN SENATE FEBRUARY 28, 2005

**SENATE BILL**

**No. 1**

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**Introduced by Senators Murray and Campbell**  
**(Coauthors: Senators Alquist, Chesbro, Ducheny, and Kehoe)**  
*(Coauthors: Assembly Members Bermudez, Chan, Huff, Laird, Leno,  
Lieber, Maze, Pavley, and Wolk)*

December 6, 2004

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An act to add Sections 25405.5 and 25405.6 to, and to add Chapter 8.8 (commencing with Section 25780) to Division 15 of, the Public Resources Code, and to add Sections 379.8, ~~387.5, and 760~~ and 387.5 to the Public Utilities Code, *and to amend Sections 73, 17053.84, and 23684 of the Revenue and Taxation Code*, relating to solar energy, ~~and making an appropriation therefor.~~

LEGISLATIVE COUNSEL'S DIGEST

SB 1, as amended, Murray. Energy: renewable energy resources: Million Solar Roofs Initiative.

(1) Existing law requires the State Energy Resources Conservation and Development Commission (Energy Commission) to expand and accelerate development of alternative sources of energy, including solar resources. Existing law requires the Energy Commission, until January 1, 2006, and to the extent that funds are appropriated for that purpose in the annual Budget Act, to implement a grant program to accomplish specified goals, including making solar energy systems cost competitive with alternate forms of energy.

Under existing law, the Public Utilities Commission (PUC) has regulatory authority over public utilities, including electrical corporations. The existing Public Utilities Act requires the PUC to require Pacific Gas and Electric Company, San Diego Gas and

Electric, and Southern California Edison to identify a separate electrical rate component to fund programs that enhance system reliability and provide in-state benefits. This rate component is a nonbypassable element of local distribution and collected on the basis of usage. The funds are collected to support cost-effective energy efficiency and conservation activities, public interest research and development not adequately provided by competitive and regulated markets, and renewable energy resources.

This bill would establish the Million Solar Roofs Initiative, administered by the Energy Commission, with the goals of placing 1,000,000 solar energy systems, as defined, on new and existing residential and commercial customer sites, or its generation capacity equivalent of 3,000 megawatts, establishing a self-sufficient solar industry in 10 years, and placing solar energy systems on 50% of new home developments in 13 years. The bill would establish the Million Solar Roofs Initiative Trust Fund and would ~~continuously appropriate~~ *provide that, upon appropriation by the Legislature, moneys deposited into the fund—to may be expended by the Energy Commission for purposes of carrying out the Million Solar Roofs Initiative. The program would require the Energy Commission to award incentives, pursuant to a declining schedule to be adopted by the Energy Commission, and would authorize certain other incentive programs, to support the installation of eligible solar energy systems. The bill would require the Energy Commission to establish eligibility criteria for solar energy systems and to establish conditions for incentives. The bill would require the Energy Commission to adopt guidelines governing the program at a publicly noticed meeting.*

This bill would require that the PUC, on or before February 1, 2006, and in consultation with the Energy Commission, issue an order opening a proceeding, or expanding the scope of an existing proceeding, to adopt, implement, and finance a comprehensive solar energy program to invest in and encourage the increased installation of residential and commercial solar energy systems, with the goal of placing solar energy systems on 1,000,000 residential and commercial customer sites or its equivalent of 3,000 megawatts of solar generating capacity, by December 31, 2018. The bill would require funding of the Million Solar Roofs Initiative to be an element of the program adopted by the PUC. The bill would require that the reasonable cost of the program be included in the distribution revenue requirements of electrical corporations. The bill would require that the program

adopted by the PUC be a cost-effective investment by ratepayers in peak electricity generation capacity that enables ratepayers to recoup the cost of their investment through lower rates as a result of avoiding purchases of electricity at peak rates generated by traditional generation resources. The bill would require the PUC to adopt the program no later than January 1, 2007.

This bill would require all local publicly owned electric utilities, as defined, to establish a solar roofs initiative consistent with the program adopted and implemented by the PUC, within a reasonable time after the PUC establishes any program for electrical corporations. All local publicly owned electric utilities would be required to report, on an annual basis, to its customers and to the Energy Commission, information relative to the utility's solar roofs initiative and would authorize the Energy Commission to establish guidelines for the information to be included in the utility's annual report. By imposing additional duties upon local publicly owned electric utilities, the bill would thereby impose a state-mandated local program.

(2) Existing law requires all electric service providers, as defined, to develop a standard contract or tariff providing for net energy metering, and to make this contract available to eligible customer generators, upon request. Existing law requires all electric service providers, upon request, to make available to eligible customer generators contracts for net energy metering on a first-come-first-served basis until the time that the total rated generating capacity used by eligible customer generators exceeds 0.5% of the electric service provider's aggregate customer peak demand.

This bill would, notwithstanding these requirements, require the PUC to order ~~electrical corporations~~ *electric service providers* to expand the availability of net energy metering so that it is offered on a first-come-first-served basis until the time that the total rated generating capacity used by all eligible customer-generators exceeds ~~0.5%~~ 5% of the ~~electrical corporation's total electricity sales~~ *electric service provider's aggregate custom peak demand*.

~~(3) Existing law authorizes the PUC to fix the rates and charges for every public utility, and requires that those rates and charges be just and reasonable.~~

~~This bill would require the PUC, in collaboration with the Energy Commission, to develop time-variant electricity pricing tariffs for all~~

~~customers that are not subject to mandatory time-variant pricing, including net-metered customers.~~

~~(4) Existing law requires the Energy Commission to expand and accelerate development of alternative sources of energy, including solar resources~~

This bill would require that beginning January 1, 2010, a seller of production homes, as defined, offer the option of a solar energy system, as defined, to all customers negotiating to purchase a new production home constructed on land meeting certain criteria and to disclose certain information. The bill would require that not later than July 1, 2009, the Energy Commission initiate a public proceeding and make findings if and under what conditions solar energy systems are to be required on new residential and nonresidential buildings.

*(4) The Personal Income Tax Law and the Bank and Corporation Tax Law authorize various credits against the taxes imposed by those laws. Existing law allows a credit against those taxes for taxable years beginning on and after January 1, 2004, and before January 1, 2006, for certain amounts relating to the use of solar or wind energy systems, as defined.*

*This bill would make that credit applicable for taxable years beginning on and after January 1, 2004, and before January 1, 2017.*

*(5) Existing property tax law, until January 1, 2006, provides that, for property tax lien dates for the 1999–2000 to 2004–05 fiscal years, inclusive, the term “newly constructed” as used in the California Constitution does not include the construction or addition of any active solar energy system, as defined.*

*This bill would continue that exclusion for an active solar energy system, as defined, until January 1, 2018, for property tax lien dates for the 1999–2000 to 2016–17 fiscal years, inclusive. By requiring local taxing authorities to perform duties with regard to the continuation of the active solar energy system exclusion, the bill would impose a state-mandated local program.*

~~(5)~~

~~(6) Under existing law, a violation of the Public Utilities Act or an order or direction of the PUC is a crime.~~

Various provisions of this bill are within the act and require action by the PUC to implement the bill’s requirements. Because a violation of those provisions or of PUC actions to implement those provisions would be a crime, this bill would impose a state-mandated local program by creating new crimes.

~~(6)~~

(7) The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for specified reasons.

Vote:  $\frac{2}{3}$ -majority. Appropriation: ~~yes-no~~. Fiscal committee: yes. State-mandated local program: yes.

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

1 SECTION 1. Section 25405.5 is added to the Public  
2 Resources Code, to read:

3 25405.5. (a) As used in this section, the following terms have  
4 the following meanings:

5 (1) “kW” means kilowatts or 1,000 watts, as measured from  
6 the alternating current side of the solar energy system inverter  
7 consistent with Section 223 of Title 15 of the United States Code.

8 (2) “Production home” means a single family residence  
9 constructed as part of a development of at least 50 homes per  
10 project that is intended or offered for sale.

11 (3) “Solar energy system” means a photovoltaic solar collector  
12 or other photovoltaic solar energy device that has a primary  
13 purpose of providing for the collection and distribution of solar  
14 energy for the generation of electricity, and that produces at least  
15 1 kW, *but not more than 1 megawatt*, alternating current rated  
16 peak electricity.

17 (b) A seller of production homes shall offer a solar energy  
18 system option to all customers that enter into negotiations to  
19 purchase a new production home constructed on land for which  
20 an application for a tentative subdivision map has been deemed  
21 complete on or after January 1, 2010, and disclose the following:

22 (1) The total installed cost of the solar energy system option.

23 (2) The estimated cost savings associated with the solar energy  
24 system option, as determined by the commission pursuant to  
25 Chapter 8.8 (commencing with Section 25780) of Division 15.

26 SEC. 2. Section 25405.6 is added to the Public Resources  
27 Code, to read:

1 25405.6. Not later than July 1, ~~2009~~ 2006, the commission  
 2 shall initiate a public proceeding and make findings if and under  
 3 what conditions solar energy systems shall be required on new  
 4 residential and new nonresidential buildings, including the  
 5 establishment of numerical targets. For purposes of this section,  
 6 a solar energy system means a photovoltaic solar collector or  
 7 other photovoltaic solar energy device that has a primary purpose  
 8 of providing for the collection and distribution of solar energy for  
 9 the generation of electricity.

10 SEC. 3. Chapter 8.8 (commencing with Section 25780) is  
 11 added to Division 15 of the Public Resources Code, to read:

12

13 CHAPTER 8.8. MILLION SOLAR ROOFS INITIATIVE

14

15 25780. The Legislature finds and declares all of the  
 16 following:

17 (a) California has a pressing need to procure a steady supply  
 18 of affordable and reliable peak electricity.

19 (b) Solar generated electricity is uniquely suited to  
 20 California's needs because it produces electricity when  
 21 California needs it most, during the peak demand hours in  
 22 summer afternoons when the sun is brightest and air conditioners  
 23 are running at capacity.

24 (c) Procuring solar electric generation capacity to meet peak  
 25 electricity demand increases system reliability and decreases  
 26 California's dependence on unstable fossil fuel supplies.

27 (d) Solar generated electricity diversifies California's energy  
 28 portfolio. California currently relies on natural gas for the bulk of  
 29 its electricity generation needs. Increasing energy demands place  
 30 increasing pressure on limited natural gas supplies and threaten  
 31 to raise costs.

32 (e) More than 150,000 homes will be built annually in  
 33 California in the coming years, challenging energy reliability and  
 34 affordability.

35 (f) Investing in residential and commercial solar electricity  
 36 generation installations today will lower the cost of solar  
 37 generated electricity for all Californians in the future. In 10  
 38 years, solar peak electric generation can be procured without the  
 39 need for rebates.

1 (g) Increasing California’s solar electricity generation market  
2 will also bring additional manufacturing, installation, and sales  
3 jobs to the state at a higher rate than most conventional energy  
4 production sources.

5 (h) Funding a Million Solar Roofs Initiative is a cost-effective  
6 investment by ratepayers in peak electricity generation capacity  
7 and ratepayers will recoup the cost of their investment through  
8 lower rates as a result of avoiding purchases of electricity at peak  
9 rates, with additional system reliability and pollution reduction  
10 benefits.

11 (i) Solar energy systems provide substantial energy reliability  
12 and pollution reduction benefits. Solar energy systems also  
13 diversify our energy supply and thereby reduce our dependence  
14 on imported fossil fuels.

15 25781. As used in this chapter, the following terms have the  
16 following meanings:

17 (a) “kW” means kilowatts or 1,000 watts, as measured from  
18 the alternating current side of the solar energy system inverter  
19 consistent with Section 223 of Title 15 of the United States Code.

20 (b) “kWh” means kilowatthours, as measured by the number  
21 of kilowatts generated in an hour.

22 (c) “MW” means megawatts or 1,000,000 watts.

23 (d) “Solar energy system” means a photovoltaic solar collector  
24 or other photovoltaic solar energy device that has a primary  
25 purpose of providing for the collection and distribution of solar  
26 *electrical* energy for the generation of electricity, and that  
27 produces at least 1 kW alternating current rated peak electricity.

28 (e) “Million Solar Roofs Initiative” means the program  
29 established by this chapter.

30 25782. (a) The commission shall develop and implement a  
31 multiyear Million Solar Roofs Initiative to provide funding and  
32 support to foster the installation of solar energy systems on new  
33 and existing residential and commercial customer sites in  
34 California. The goals of this program are the placement of solar  
35 energy systems on 1,000,000 residential and commercial sites, or  
36 its generation capacity equivalent of 3,000 MW, the  
37 establishment of a self-sufficient solar industry in which solar  
38 energy systems are a viable mainstream option for both homes  
39 and businesses in 10 years, and the placement of solar energy  
40 systems on 50 percent of new homes in 13 years.

1 (b) All funds used for the Million Solar Roofs Initiative shall  
2 be expended in accordance with the following:

3 (1) The commission shall award monetary incentives for  
4 eligible solar energy systems not to exceed the existing level of  
5 incentive in effect on January 1, 2006. The incentive level shall  
6 decline each year thereafter at a rate of no less than 7 percent per  
7 year and shall be zero as of December 31, 2016. The commission  
8 shall adopt and publish a schedule of declining incentive levels  
9 no less than 60 days in advance of the first decline in incentive  
10 levels.

11 (2) Notwithstanding paragraph (1), the commission may  
12 increase the incentive level by not more than 50 percent above  
13 the maximum incentive level established pursuant to paragraph  
14 (1) for solar energy systems that are installed on “zero energy  
15 homes” or “zero energy commercial structures.” Prior to an  
16 increase in the incentive level, the commission shall adopt  
17 definitions for “zero energy homes” and “zero energy  
18 commercial structures” through a public process, including at  
19 least one public hearing with not less than 30 days’ notice.

20 (3) Notwithstanding paragraph (1), the commission may  
21 increase the incentive level by not more than 25 percent above  
22 the maximum incentive level established pursuant to paragraph  
23 (1) for solar energy systems that are installed on homes or  
24 commercial structures that exceed the commission’s established  
25 building standards by a specified percentage as determined by the  
26 commission.

27 (4) Awards shall be made for the installation of eligible solar  
28 energy systems on new or existing residential and commercial  
29 customer sites that are or will be receiving electrical distribution  
30 service from an electrical corporation that is contributing funds to  
31 support the Million Solar Roofs Initiative pursuant to Section  
32 379.8 of the Public Utilities Code.

33 (5) Awards shall not be made for eligible solar energy systems  
34 installed on the premises of individuals or entities that are not  
35 contributing funds to support the Million Solar Roofs Initiative.

36 (c) The commission shall establish eligibility criteria for solar  
37 energy systems, including the following:

38 (1) The solar energy system is intended primarily to offset part  
39 or all of the consumer’s own electricity demand.



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

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

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

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

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

15 (d) The commission ~~may~~ *shall* establish conditions on  
16 incentives that require or encourage all of the following:

17 (1) *Appropriate siting and high quality installation of the solar  
18 energy system by developing installation guidelines that  
19 maximize the performance of the system and prevent qualified  
20 systems from being inefficiently or inappropriately installed. The  
21 goal of this paragraph is to achieve efficient installation of solar  
22 energy systems to promote the greatest energy production per  
23 ratepayer dollar.*

24 (2) *Optimal solar energy system performance during periods  
25 of peak electricity demand, including the use of advanced  
26 metering systems, onsite performance meters, dispatchable  
27 battery backup systems, and performance based incentives.*

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

31 (4) *Rate equipment, components, and systems to assure  
32 reasonable performance and to develop standards that provide  
33 for compliance with the minimum ratings.*

34 (e) The commission may limit the amount of funds available  
35 for any system or project of multiple systems and reduce the  
36 level of funding for any system or project of multiple systems  
37 that has received, or may be eligible to receive, any other  
38 government or utility funding, incentive, or credit, except for any  
39 income or property tax credit or exemption.

1 (f) The commission may provide proportional program  
2 support, not to exceed 10 percent of the overall funds for the  
3 Million Solar Roofs Initiative, for installation of solar energy  
4 systems on affordable housing projects undertaken pursuant to  
5 Section 50052.5, 50053, or 50199.14 of the Health and Safety  
6 Code. If deemed appropriate in consultation with the California  
7 Tax Credit Allocation Committee, the commission may establish  
8 a revolving loan or loan guarantee program for affordable  
9 housing projects consistent with the requirements of Chapter 5.3  
10 (commencing with Section 25425).

11 (g) Pursuant to this chapter, the commission may provide  
12 incentives in the form of a monetary incentive or its equivalent to  
13 purchasers, lessees, lessors, or sellers of an eligible solar energy  
14 system. The incentive shall benefit the end-use consumer by  
15 directly and exclusively reducing the purchase or lease cost of  
16 the eligible solar energy system, or the cost of electricity  
17 produced by the eligible solar energy system. Incentives shall be  
18 issued on the basis of the rated electrical capacity of the system  
19 measured in watts, or in the electricity production of the system,  
20 measured in kW, as determined by the commission.

21 25783. In administering the Million Solar Roofs Initiative,  
22 the commission shall do all the following:

23 (a) Examine and implement, to the extent appropriate,  
24 financing options that could lower solar energy system financing  
25 costs to residential and commercial customers. The commission  
26 shall examine wholesale and retail mortgage markets, and other  
27 issues that it deems appropriate.

28 (b) Acquire, if the commission determines it necessary,  
29 appropriate technical and administrative services or expertise to  
30 support the Million Solar Roofs Initiative. The commission may  
31 award contracts to develop or administer all or a portion of the  
32 Million Solar Roofs Initiative.

33 (c) Publish educational materials designed to demonstrate how  
34 builders may incorporate ~~those~~ *solar energy systems during*  
35 *construction as well as* energy efficiency measures that best  
36 complement solar energy systems.

37 (d) Develop and publish the estimated annual electrical  
38 generation and savings for solar energy systems. The estimates  
39 shall vary by climate zone, type of system, size, lifecycle costs,

1 electricity prices, and other factors the commission determines to  
2 be relevant to a consumer when making a purchasing decision.

3 (e) Provide assistance to builders and contractors in support of  
4 the Million Solar Roofs Initiative. The assistance may include  
5 technical workshops, training, educational materials, and related  
6 research.

7 (f) Publish, and make available to the public, at least once  
8 annually, the balance of funds available for the Million Solar  
9 Roofs Initiative and the percentage of new and existing  
10 residential and commercial customer sites that are equipped with  
11 solar energy systems funded by the Million Solar Roofs  
12 Initiative.

13 (g) *Develop an offset program that allows a developer or*  
14 *seller of production homes to forego the offer requirement of*  
15 *Section 25405.5 on one project, by installing solar energy*  
16 *systems generating specified amounts of electricity on other*  
17 *projects. The amount of electricity required to be generated from*  
18 *solar energy systems used as an offset pursuant to this*  
19 *subdivision, shall be equal to the amount of electricity generated*  
20 *by solar energy systems installed on a similarly sized project*  
21 *within that climate zone, assuming 20 percent of the prospective*  
22 *buyers would have installed solar energy systems.*

23 25784. (a) The commission shall adopt guidelines governing  
24 the Million Solar Roofs Initiative authorized under this chapter,  
25 at a publicly noticed meeting offering all interested parties an  
26 opportunity to comment. Not less than 30 days' public notice  
27 shall be given of the meeting required by this section, before the  
28 commission initially adopts guidelines. Substantive changes to  
29 the guidelines shall not be adopted without at least 10 days'  
30 written notice to the public. Notwithstanding any other provision  
31 of law, any guidelines adopted pursuant to this chapter shall be  
32 exempt from the requirements of Chapter 3.5 (commencing with  
33 Section 11340) of Part 1 of Division 3 of Title 2 of the  
34 Government Code.

35 (b) Funds to further the purposes of this chapter may be  
36 committed for multiple years.

37 25785. (a) The Million Solar Roofs Initiative Trust Fund is  
38 hereby created in the State Treasury.

39 (b) The money in the fund may be expended to implement and  
40 support the Million Solar Roofs Initiative pursuant to this chapter

1 ~~and may be used for the commission's administration only upon~~  
2 ~~appropriation by the Legislature in the annual Budget Act.~~

3 (c) Revenues collected by electrical corporations pursuant to  
4 Section 379.8 of the Public Utilities Code shall be transmitted to  
5 the commission at least quarterly for deposit in the Million Solar  
6 Roofs Initiative Trust Fund. ~~After setting aside in the fund money~~  
7 ~~that may be needed for expenditures authorized by subdivision~~  
8 ~~(b), the~~ *The* Treasurer shall immediately deposit money received  
9 pursuant to this section into the Million Solar Roofs Initiative  
10 Trust Fund for the current calendar year. ~~Notwithstanding~~  
11 ~~Section 13340 of the Government Code, the money in the fund is~~  
12 ~~hereby continuously appropriated to the commission without~~  
13 ~~regard to fiscal year for the purposes enumerated in this chapter.~~

14 (d) Upon *appropriation by the Legislature and* notification by  
15 the commission, the Controller shall pay all awards of the money  
16 in the fund for purposes enumerated in this chapter. The  
17 eligibility of an award shall be determined solely by the  
18 commission based on the procedures it adopts under this chapter.  
19 Based on the eligibility of an award, the commission shall also  
20 establish the need for a multiyear commitment to any particular  
21 award and so advise the Department of Finance. An eligible  
22 award submitted by the commission to the Controller shall be  
23 accompanied by a summary description of how payment of the  
24 award furthers the purposes enumerated in this chapter, and an  
25 accounting of future costs associated with any award or group of  
26 awards known to the commission to represent a portion of a  
27 multiyear funding commitment.

28 SEC. 4. Section 379.8 is added to the Public Utilities Code, to  
29 read:

30 379.8. (a) Notwithstanding any other law, on or before  
31 February 1, 2006, the commission, in consultation with the State  
32 Energy Resources Conservation and Development Commission,  
33 shall initiate a new proceeding or expand the scope of an existing  
34 proceeding to adopt, implement, and finance a comprehensive  
35 solar energy program to invest in and encourage the increased  
36 installation of residential and commercial solar energy systems in  
37 the state. The goal of the program is placing solar energy systems  
38 on one million residential and commercial customer sites or its  
39 equivalent of 3,000 MW solar generating capacity in the state by  
40 December 31, 2018.

1 (b) The commission’s proceeding shall do all of the following:

2 (1) Evaluate current programs of the commission and the State  
3 Energy Resources Conservation and Development Commission  
4 to determine the level of additional funding needed to adequately  
5 support the goal of placing solar energy systems on one million  
6 residential and commercial customer sites or its equivalent of  
7 3,000 MW solar generating capacity in the state by December 31,  
8 2018.

9 (2) Encourage participation by a broad and diverse range of  
10 interests from all areas of the state, and interested state entities.

11 (c) The commission shall include the reasonable cost of the  
12 program in the distribution revenue requirements of electrical  
13 corporations.

14 (d) Notwithstanding any other provision of law, any charge  
15 imposed to fund the programs adopted and implemented pursuant  
16 to this section shall be imposed upon all customers, including  
17 those residential customers subject to the rate cap required by  
18 Section 80110 of the Water Code for existing baseline quantities  
19 or usage up to 130 percent of existing baseline quantities of  
20 electricity.

21 (e) The commission shall adopt the program no later than  
22 January 1, 2007.

23 (f) The program adopted by the commission pursuant to this  
24 section, shall do all of the following:

25 (1) Be a cost-effective investment by ratepayers in peak  
26 electricity generation capacity that enables ratepayers to recoup  
27 the cost of their investment through lower rates as a result of  
28 avoiding purchases of electricity at peak rates generated by  
29 traditional powerplants and peaker generation units, with  
30 additional system reliability and pollution reduction benefits.

31 (2) Utilize the most cost-effective administrative mechanism  
32 to adequately accomplish the goals of the program.

33 (3) Provide a predictable long-term funding mechanism  
34 sufficient to encourage adequate investment by the solar industry.

35 (4) Make time-variant pricing available for all ratepayers with  
36 a solar energy system, upon adoption of time-variant pricing  
37 tariffs pursuant to Section 760. The commission shall structure  
38 any time-variant pricing so that ratepayers receive due value for  
39 their contribution to the purchase of solar energy systems and

1 customers with solar energy systems continue to have an  
2 incentive to use electricity efficiently.

3 (5) Require San Diego Gas and Electric Company, Southern  
4 California Edison Company, and Pacific Gas and Electric  
5 Company to each designate at least one employee to be  
6 accountable for solar energy system installations and operations.

7 (6) Require San Diego Gas and Electric Company, Southern  
8 California Edison Company, and Pacific Gas and Electric  
9 Company to each monitor and report key solar program  
10 performance and progress data to the commission in a clearly  
11 identified place on the utility's Internet Web site.

12 (7) Consider energy efficiency and demand side management  
13 options, in addition to solar energy system procurement, for new  
14 residential and commercial construction.

15 (8) Notwithstanding Section 2827, ~~require electrical~~  
16 ~~corporations~~ *an electric service provider* to expand the  
17 availability of net energy metering so that it is offered on a  
18 first-come-first-served basis until the time that the total rated  
19 generating capacity used by all eligible customer-generators  
20 exceeds 5 percent of the ~~electrical corporation's total electricity~~  
21 ~~sales~~ *electric service provider's aggregate customer peak*  
22 *demand*. However, the net metering cap shall not exceed 2  
23 percent until the commission has established an appropriate net  
24 metering time-variant rate design that considers the costs to all  
25 net metering participants and ratepayers as a whole and that  
26 considers the recovery of the fixed costs of providing distribution  
27 service to customers. The commission shall monitor the level of  
28 net energy metering for each electrical corporation to ensure that  
29 the cap is increased in a timely manner as needed to further the  
30 objectives of this section.

31 (9) The commission may impose the requirements of this  
32 subdivision on an electrical corporation in addition to those  
33 specified, when and to the extent the commission determines this  
34 to be appropriate.

35 (g) The program adopted by the commission pursuant to this  
36 section shall also include elements for the purpose of funding a  
37 Million Solar Roofs Initiative by the State Energy Resources  
38 Conservation and Development Commission pursuant to Chapter  
39 8.8 (commencing with Section 25780) of Division 15 of the  
40 Public Resources Code. These program elements shall exclude

1 customers participating in the State Energy Resources  
2 Conservation and Development Commission’s Million Solar  
3 Roofs Initiative from the rate cap for residential customers for  
4 existing baseline quantities or usage by those customers of up to  
5 130 percent of existing baseline quantities, as required by Section  
6 80110 of the Water Code.

7 SEC. 5. Section 387.5 is added to the Public Utilities Code, to  
8 read:

9 387.5. (a) The governing body of a local publicly owned  
10 electric utility, as defined in Section 9604, shall establish a  
11 comprehensive solar roofs initiative consistent with programs  
12 adopted and implemented by the commission pursuant to Section  
13 379.8.

14 (b) The level of expenditure for program elements shall be  
15 consistent with those established for the three largest electrical  
16 corporations in California, and shall be at a rate proportional to  
17 the size of the ratepayer base served by the local publicly owned  
18 electric utility.

19 (c) A local publicly owned electric utility shall establish the  
20 program within a reasonable period of time, but not to exceed six  
21 months, after the commission adopts and implements its  
22 programs pursuant to Section 379.8.

23 (d) A local publicly owned electric utility shall, on an annual  
24 basis beginning June 1, 2007, report to its customers and to the  
25 State Energy Resources Conservation and Development  
26 Commission, information relative to the utility’s solar roofs  
27 initiative. The State Energy Resources Conservation and  
28 Development Commission may establish guidelines for the  
29 information to be included in the utility’s annual report. Any  
30 guidelines established pursuant to this subdivision shall be  
31 adopted in the manner specified in Section 25784 of the Public  
32 Resources Code. Notwithstanding any other provision of law,  
33 any guidelines adopted by the State Energy Resources  
34 Conservation and Development Commission pursuant to this  
35 subdivision shall be exempt from the requirements of Chapter 3.5  
36 (commencing with Section 11340) of Part 1 of Division 3 of  
37 Title 2 of the Government Code.

38 ~~SEC. 6. Section 760 is added to the Public Utilities Code, to~~  
39 ~~read:~~

1     ~~760. The commission, in collaboration with the State Energy~~  
2 ~~Resources Conservation and Development Commission, shall~~  
3 ~~develop optional time-variant electricity pricing tariffs for all~~  
4 ~~customers who are not subject to mandatory time-variant pricing,~~  
5 ~~including net-metered customers.~~

6     *SEC. 6. Section 73 of the Revenue and Taxation Code is*  
7 *amended to read:*

8     73. (a) Pursuant to the authority granted to the Legislature  
9 pursuant to paragraph (1) of subdivision (c) of Section 2 of  
10 Article XIII A of the California Constitution, the term “newly  
11 constructed,” as used in subdivision (a) of Section 2 of Article  
12 XIII A of the California Constitution, does not include the  
13 construction or addition of any active solar energy system, as  
14 defined in subdivision (b).

15     (b) (1) “Active solar energy system” means a system that uses  
16 solar devices, which are thermally isolated from living space or  
17 any other area where the energy is used, to provide for the  
18 collection, storage, or distribution of solar energy.

19     (2) “Active solar energy system” does not include solar  
20 swimming pool heaters or hot tub heaters.

21     (3) Active solar energy systems may be used for any of the  
22 following:

23     (A) Domestic, recreational, therapeutic, or service water  
24 heating.

25     (B) Space conditioning.

26     (C) Production of electricity.

27     (D) Process heat.

28     (E) Solar mechanical energy.

29     (c) (1) (A) The Legislature finds and declares that the  
30 definition of spare parts in this paragraph is declarative of the  
31 intent of the Legislature, in prior statutory enactments of this  
32 section that excluded active solar energy systems from the term  
33 “newly constructed,” as used in the California Constitution,  
34 thereby creating a tax appraisal exclusion.

35     (B) An active solar energy system that uses solar energy in the  
36 production of electricity includes storage devices, power  
37 conditioning equipment, transfer equipment, and parts related to  
38 the functioning of those items. In general, the use of solar energy  
39 in the production of electricity involves the transformation of  
40 sunlight into electricity through the use of devices ~~such as,~~



1 *including* solar cells or other collectors. However, an active solar  
2 energy system used in the production of electricity includes only  
3 equipment used up to, but not including, the stage of the  
4 transmission or use of the electricity. For the purpose of this  
5 paragraph, the term “parts” includes spare parts that are owned  
6 by the owner of, or the maintenance contractor for, an active  
7 solar energy system that uses solar energy in the production of  
8 electricity and which spare parts were specifically purchased,  
9 designed, or fabricated by or for that owner or maintenance  
10 contractor for installation in an active solar energy system that  
11 uses solar energy in the production of electricity, thereby  
12 including those parts in the tax appraisal exclusion created by  
13 this section.

14 (2) An active solar energy system that uses solar energy in the  
15 production of electricity also includes pipes and ducts that are  
16 used exclusively to carry energy derived from solar energy. Pipes  
17 and ducts that are used to carry both energy derived from solar  
18 energy and from energy derived from other sources are active  
19 solar energy system property only to the extent of 75 percent of  
20 their full cash value.

21 (3) An active solar energy system that uses solar energy in the  
22 production of electricity does not include auxiliary equipment,  
23 such as furnaces and hot water heaters, that use a source of power  
24 other than solar energy to provide usable energy. An active solar  
25 energy system that uses solar energy in the production of  
26 electricity does include equipment, such as ducts and hot water  
27 tanks, that is utilized by both auxiliary equipment and solar  
28 energy equipment, that is, dual use equipment. That equipment is  
29 active solar energy system property only to the extent of 75  
30 percent of its full cash value.

31 (d) This section shall apply to property tax lien dates for the  
32 1999–2000 to ~~2004–05~~ 2016-17 fiscal years, inclusive. For  
33 purposes of supplemental assessment, this section shall apply  
34 only to qualifying construction or additions completed on or after  
35 January 1, 1999.

36 (e) This section shall remain in effect only until January 1,  
37 ~~2006~~ 2018, and as of that date is repealed, unless a later enacted  
38 statute that is enacted before January 1, ~~2006~~ 2018, deletes or  
39 extends that date.

1     *SEC. 7. Section 17053.84 of the Revenue and Taxation Code*  
2     *is amended to read:*

3     17053.84. (a) For each taxable year beginning on or after  
4     January 1, 2001, and before January 1, 2004, there shall be  
5     allowed as a credit against the “net tax,” as defined in Section  
6     17039, an amount equal to the lesser of 15 percent of the cost  
7     that is paid or incurred by a taxpayer, after deducting the value of  
8     any other municipal, state, or federal sponsored financial  
9     incentives, during the taxable year for the purchase and  
10    installation of any solar or wind energy system installed on  
11    property in this state, or the applicable dollar amount per rated  
12    watt of that solar or wind energy system, as determined by the  
13    Franchise Tax Board in consultation with the State Energy  
14    Resources Conservation and Development Commission.

15    (b) For each taxable year beginning on or after January 1,  
16    2004, and before January 1, ~~2006~~ 2017, there shall be allowed as  
17    a credit against the “net tax,” as defined in Section 17039, an  
18    amount equal to the lesser of 7.5 percent of the cost that is paid  
19    or incurred by a taxpayer, after deducting the value of any other  
20    municipal, state, or federal sponsored financial incentives, during  
21    the taxable year for the purchase and installation of any solar or  
22    wind energy system installed on property in this state, or the  
23    applicable dollar amount per rated watt of that solar or wind  
24    energy system, as determined by the Franchise Tax Board in  
25    consultation with the State Energy Resources Conservation and  
26    Development Commission.

27    (c) For purposes of this section:

28    (1) “Applicable dollar amount” means four dollars and fifty  
29    cents (\$4.50) for any taxable year beginning on or after January  
30    1, 2001, and before January 1, ~~2006~~ 2017.

31    (2) “Solar energy system” means a solar energy device, in the  
32    form of a photovoltaic system, with a peak generating capacity of  
33    up to, but not more than 200 kilowatts, used for the individual  
34    function of generating electricity, that is certified by the State  
35    Energy Resources Conservation and Development Commission  
36    and installed with a five-year warranty against breakdown or  
37    undue degradation.

38    (3) “Wind energy system” means a wind energy conversion  
39    system consisting of a wind turbine, a tower, and associated  
40    control or conversion electronics, with a peak generating capacity

1 of up to, but not exceeding, 200 kilowatts, use for the individual  
2 function of generating electricity, that is certified by the State  
3 Energy Resources Conservation and Development Commission  
4 and installed with a five-year warranty against breakdown or  
5 undue degradation.

6 (4) A credit may be allowed under this section with respect to  
7 only one solar or wind energy system per each separate legal  
8 parcel of property or per each address of the taxpayer in the state.

9 (5) No credit may be allowed under this section unless the  
10 solar or wind energy system is actually used for purposes of  
11 producing electricity and primarily used to meet the taxpayer's  
12 own energy needs.

13 (d) No other credit and no deduction may be allowed under  
14 this part for any cost for which a credit is allowed by this section.  
15 The basis of the solar or wind energy system shall be reduced by  
16 the amount allowed as a credit under subdivision (a) or (b).

17 (e) No credit shall be allowed to any taxpayer engaged in  
18 those lines of business described in Sector 22 of the North  
19 American Industry Classification System (NAICS) Manual  
20 published by the United States Office of Management and  
21 Budget, 1997 edition.

22 (f) If any solar or wind energy system for which a credit is  
23 allowed pursuant to this section is thereafter sold or removed  
24 from this state within one year from the date the solar or wind  
25 energy system is first placed in service in this state, the amount  
26 of credit allowed by this section for that solar or wind energy  
27 system shall be recaptured by adding that credit amount to the net  
28 tax of the taxpayer for the taxable year in which the solar or wind  
29 energy system is sold or removed.

30 (g) In the case where the credit allowed by this section  
31 exceeds the "net tax," the excess may be carried over to reduce  
32 the "net tax" in the following year, and the succeeding seven  
33 years if necessary, until the credit is exhausted.

34 (h) This section shall remain in effect only until December 1,  
35 ~~2006~~ 2017, and as of that date is repealed.

36 *SEC. 8. Section 23684 of the Revenue and Taxation Code is*  
37 *amended to read:*

38 23684. (a) For each taxable year beginning on or after  
39 January 1, 2001, and before January 1, 2004, there shall be  
40 allowed as a credit against the "tax," as defined in Section 23036,

1 an amount equal to the lesser of 15 percent of the cost that is paid  
2 or incurred by a taxpayer, after deducting the value of any other  
3 municipal, state, or federal sponsored financial incentives, during  
4 the taxable year for the purchase and installation of any solar or  
5 wind energy system installed on property in this state, or the  
6 applicable dollar amount per rated watt of that solar or wind  
7 energy system, as determined by the Franchise Tax Board in  
8 consultation with the State Energy Resources Conservation and  
9 Development Commission.

10 (b) For each taxable year beginning on or after January 1,  
11 2004, and before January 1, ~~2006~~ 2017, there shall be allowed as  
12 a credit against the “net tax,” as defined in Section 17039, an  
13 amount equal to the lesser of 7.5 percent of the cost that is paid  
14 or incurred by a taxpayer, after deducting the value of any other  
15 municipal, state, or federal sponsored financial incentives, during  
16 the taxable year for the purchase and installation of any solar or  
17 wind energy system installed on property in this state, or the  
18 applicable dollar amount per rated watt of that solar or wind  
19 energy system, as determined by the Franchise Tax Board in  
20 consultation with the State Energy Resources Conservation and  
21 Development Commission.

22 (c) For purposes of this section:

23 (1) “Applicable dollar amount” means four dollars and fifty  
24 cents (\$4.50) for any taxable year beginning on or after January  
25 1, 2001, and before January 1, ~~2006~~ 2017.

26 (2) “Solar energy system” means a solar energy device, in the  
27 form of a photovoltaic system, with a peak generating capacity of  
28 up to, but not more than 200 kilowatts, used for the individual  
29 function of generating electricity, that is certified by the State  
30 Energy Resources Conservation and Development Commission  
31 and installed with a five-year warranty against breakdown or  
32 undue degradation.

33 (3) “Wind energy system” means a wind energy conversion  
34 system consisting of a wind turbine, a tower, and associated  
35 control or conversion electronics, with a peak generating capacity  
36 of up to, but not exceeding, 200 kilowatts, used for the individual  
37 function of generating electricity, that is certified by the State  
38 Energy Resources Conservation and Development Commission  
39 and installed with a five-year warranty against breakdown or  
40 undue degradation.

1 (4) A credit may be allowed under this section with respect to  
2 only one solar or wind energy system per each separate legal  
3 parcel of property or per each address of the taxpayer in the state.

4 (5) No credit may be allowed under this section unless the  
5 solar or wind energy system is actually used for purposes of  
6 producing electricity and is primarily used to meet the taxpayer's  
7 own energy needs.

8 (d) No other credit and no deduction may be allowed under  
9 this part for any cost for which a credit is allowed by this section.  
10 The basis of the solar or wind energy system shall be reduced by  
11 the amount allowed as a credit under subdivision (a) or (b).

12 (e) No credit may be allowed to any taxpayer engaged in those  
13 lines of business described in Sector 22 of the North American  
14 Industry Classification System (NAICS) Manual published by  
15 the United States Office of Management and Budget, 1997  
16 edition.

17 (f) If any solar or wind energy system for which a credit is  
18 allowed pursuant to this section is thereafter sold or removed  
19 from this state within one year from the date the solar or wind  
20 energy system is first placed in service in this state, the amount  
21 of credit allowed by this section for that solar or wind energy  
22 system shall be recaptured by adding that credit amount to the tax  
23 of the taxpayer for the taxable year in which the solar or wind  
24 energy system is sold or removed.

25 (g) In the case where the credit allowed by this section  
26 exceeds the "tax," the excess may be carried over to reduce the  
27 "tax" in the following year, and the succeeding seven years if  
28 necessary, until the credit is exhausted.

29 (h) This section shall remain in effect only until December 1,  
30 ~~2006~~ 2017, and as of that date is repealed.

31 ~~SEC. 7.~~

32 *SEC. 9.* No reimbursement is required by this act pursuant to  
33 Section 6 of Article XIII B of the California Constitution because  
34 the only costs that may be incurred by a local agency or school  
35 district will be incurred because this act creates a new crime or  
36 infraction, eliminates a crime or infraction, or changes the  
37 penalty for a crime or infraction, within the meaning of Section  
38 17556 of the Government Code, or changes the definition of a  
39 crime within the meaning of Section 6 of Article XIII B of the  
40 California Constitution.

1     ~~SEC. 8.~~

2     *SEC. 10.* No reimbursement is required by this act pursuant to  
3 Section 6 of Article XIII B of the California Constitution *for*  
4 *certain other costs that may be incurred by a local agency or*  
5 *school district* because a local agency or school district has the  
6 authority to levy service charges, fees, or assessments sufficient  
7 to pay for the program or level of service mandated by this act,  
8 within the meaning of Section 17556 of the Government Code.

9     *SEC. 11.* No reimbursement is required by this act pursuant  
10 to Section 6 of Article XIII B of the California Constitution  
11 because the duties imposed on a local agency or school district  
12 by this act were expressly included in a ballot measure approved  
13 by the voters in a statewide election, within the meaning of  
14 Section 17556 of the Government Code.