

AMENDED IN SENATE MAY 28, 2009

AMENDED IN SENATE APRIL 29, 2009

AMENDED IN SENATE APRIL 2, 2009

SENATE BILL

No. 542

Introduced by Senators Wiggins and Strickland

February 27, 2009

An act 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 or the American Recovery and Reinvestment Act of 2009, 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 ensure that solar energy system installers are informed that, if the solar energy system is to be installed on a manufactured home, the installation is required to 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:

- 1 SECTION 1. Section 25782 of the Public Resources Code is
- 2 amended to read:
- 3 25782. (a) The commission shall, by January 1, 2008, in
- 4 consultation with the Public Utilities Commission, local publicly
- 5 owned electric utilities, and interested members of the public,
- 6 establish eligibility criteria for solar energy systems receiving
- 7 ratepayer funded incentives that include all of the following:
- 8 (1) Design, installation, and electrical output standards or
- 9 incentives.

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

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

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

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

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

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

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

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

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

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

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

36 (c) The commission shall ensure that solar energy system
37 installers are informed that, if the solar energy system is to be
38 installed on a manufactured home, the installation is required to
39 comply with Section 18029 of the Health and Safety Code and
40 Section 4040 of Title 25 of the California Code of Regulations.

1 *The commission shall inform installers about the permitting*
2 *processes in its next update of the California Solar Initiative*
3 *Program Handbook.*

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

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

11 SEC. 2. Section 2851 of the Public Utilities Code is amended
12 to read:

13 2851. (a) In implementing the California Solar Initiative, the
14 commission shall do all of the following:

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

38 (2) The commission shall adopt a performance-based incentive
39 program so that by January 1, 2008, 100 percent of incentives for
40 solar energy systems of 100 kilowatts or greater and at least 50

1 percent of incentives for solar energy systems of 30 kilowatts or
2 greater are earned based on the actual electrical output of the solar
3 energy systems. The commission shall encourage, and may require,
4 performance-based incentives for solar energy systems of less than
5 30 kilowatts. Performance-based incentives shall decline at a rate
6 of no less than an average of 7 percent per year. In developing the
7 performance-based incentives, the commission may:

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

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

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

17 (3) By January 1, 2008, the commission, in consultation with
18 the State Energy Resources Conservation and Development
19 Commission, shall require reasonable and cost-effective energy
20 efficiency improvements in existing buildings as a condition of
21 providing incentives for eligible solar energy systems, with
22 appropriate exemptions or limitations to accommodate the limited
23 financial resources of low-income residential housing.

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

39 (5) Ensure that solar energy system installers are informed that
40 if the solar energy system is to be installed on a manufactured

1 home, that the installation is required to comply with Section 18029
2 of the Health and Safety Code and Section 4040 of Title 25 of the
3 California Code of Regulations. *The commission shall inform*
4 *installers about the permitting processes in its next update of the*
5 *California Solar Initiative Program Handbook.*

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

11 (c) (1) In implementing the California Solar Initiative, the
12 commission shall not allocate more than fifty million dollars
13 (\$50,000,000) to research, development, and demonstration that
14 explores solar technologies and other distributed generation
15 technologies that employ or could employ solar energy for
16 generation or storage of electricity or to offset natural gas usage.
17 Any program that allocates additional moneys to research,
18 development, and demonstration shall be developed in
19 collaboration with the Energy Commission to ensure there is no
20 duplication of efforts, and adopted by the commission through a
21 rulemaking or other appropriate public proceeding. Any grant
22 awarded by the commission for research, development, and
23 demonstration shall be approved by the full commission at a public
24 meeting. This subdivision does not prohibit the commission from
25 continuing to allocate moneys to research, development, and
26 demonstration pursuant to the self-generation incentive program
27 for distributed generation resources originally established pursuant
28 to Chapter 329 of the Statutes of 2000, as modified pursuant to
29 Section 379.6.

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

34 (3) On or before June 30, 2009, and by June 30th of every year
35 thereafter, the commission shall submit to the Legislature an
36 assessment of the success of the California Solar Initiative program.
37 That assessment shall include the number of residential and
38 commercial sites that have installed solar thermal devices for which
39 an award was made pursuant to subdivision (b) and the dollar value
40 of the award, the number of residential and commercial sites that

1 have installed solar energy systems, the electrical generating
2 capacity of the installed solar energy systems, the cost of the
3 program, total electrical system benefits, including the effect on
4 electrical service rates, environmental benefits, how the program
5 affects the operation and reliability of the electrical grid, how the
6 program has affected peak demand for electricity, the progress
7 made toward reaching the goals of the program, whether the
8 program is on schedule to meet the program goals, and
9 recommendations for improving the program to meet its goals. If
10 the commission allocates additional moneys to research,
11 development, and demonstration that explores solar technologies
12 and other distributed generation technologies pursuant to paragraph
13 (1), the commission shall include in the assessment submitted to
14 the Legislature, a description of the program, a summary of each
15 award made or project funded pursuant to the program, including
16 the intended purposes to be achieved by the particular award or
17 project, and the results of each award or project.

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

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

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

36 (e) In implementing the California Solar Initiative, the
37 commission shall ensure that the total cost over the duration of the
38 program does not exceed three billion three hundred fifty million
39 eight hundred thousand dollars (\$3,350,800,000). The financial

1 components of the California Solar Initiative shall consist of the
2 following:

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

13 (2) Programs adopted, implemented, and financed in the amount
14 of seven hundred eighty-four million dollars (\$784,000,000), by
15 charges collected by local publicly owned electric utilities pursuant
16 to Section 387.5. Nothing in this subdivision shall give the
17 commission power and jurisdiction with respect to a local publicly
18 owned electric utility or its customers.

19 (3) Programs for the installation of solar energy systems on new
20 construction, administered by the State Energy Resources
21 Conservation and Development Commission pursuant to Chapter
22 8.6 (commencing with Section 25740) of Division 15 of the Public
23 Resources Code, and funded by nonbypassable charges in the
24 amount of four hundred million dollars (\$400,000,000), collected
25 from customers of San Diego Gas and Electric Company, Southern
26 California Edison Company, and Pacific Gas and Electric Company
27 pursuant to Article 15 (commencing with Section 399).

28 SEC. 3. Section 2853 is added to the Public Utilities Code, to
29 read:

30 2853. (a) The Legislature finds and declares both of the
31 following:

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

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

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

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

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

8 (c) The commission shall ensure that the strategy developed
9 and implemented pursuant to subdivision (b) does not result in any
10 additional ratepayer surcharges and is funded through one or more
11 of the following:

12 (1) Existing utility energy efficiency programs.

13 (2) The California Solar Initiative, as defined in subdivision (a)
14 of Section 2852.

15 (3) Funds made available through the American Recovery and
16 Reinvestment Act of 2009 (Public Law 111-5).

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

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

28 *(f) The commission in developing and implementing subdivision*
29 *(b) shall use the same strategy it has adopted for purposes of*
30 *addressing the requirements of the Multifamily Affordable Solar*
31 *Housing program.*