

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 ~~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~~ *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:

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

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

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

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

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

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

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

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

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

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

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

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

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

1 ~~with Section 18029 of the Health and Safety Code and Section~~
2 ~~4040 of Title 25 of the California Code of Regulations. ensure that~~
3 ~~solar energy system installers are informed that, if the solar energy~~
4 ~~system is to be installed on a manufactured home, the installation~~
5 ~~is required to comply with Section 18029 of the Health and Safety~~
6 ~~Code and Section 4040 of Title 25 of the California Code of~~
7 ~~Regulations.~~

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

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

15 SEC. 2. Section 2851 of the Public Utilities Code is amended
16 to read:

17 2851. (a) In implementing the California Solar Initiative, the
18 commission shall do all of the following:

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

1 paragraph and the incentives apply to only the first megawatt of
2 electricity generated by the system.

3 (2) The commission shall adopt a performance-based incentive
4 program so that by January 1, 2008, 100 percent of incentives for
5 solar energy systems of 100 kilowatts or greater and at least 50
6 percent of incentives for solar energy systems of 30 kilowatts or
7 greater are earned based on the actual electrical output of the solar
8 energy systems. The commission shall encourage, and may require,
9 performance-based incentives for solar energy systems of less than
10 30 kilowatts. Performance-based incentives shall decline at a rate
11 of no less than an average of 7 percent per year. In developing the
12 performance-based incentives, the commission may:

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

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

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

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

29 (4) Notwithstanding subdivision (g) of Section 2827, the
30 commission may develop a time-variant tariff that creates the
31 maximum incentive for ratepayers to install solar energy systems
32 so that the system's peak electricity production coincides with
33 California's peak electricity demands and that ~~assures~~ *ensures* that
34 ratepayers receive due value for their contribution to the purchase
35 of solar energy systems and customers with solar energy systems
36 continue to have an incentive to use electricity efficiently. In
37 developing the time-variant tariff, the commission may exclude
38 customers participating in the tariff from the rate cap for residential
39 customers for existing baseline quantities or usage by those
40 customers of up to 130 percent of existing baseline quantities, as

1 required by Section 80110 of the Water Code. Nothing in this
2 paragraph authorizes the commission to require time-variant pricing
3 for ratepayers without a solar energy system.

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

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

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

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

37 (3) On or before June 30, 2009, and by June 30th of every year
38 thereafter, the commission shall submit to the Legislature an
39 assessment of the success of the California Solar Initiative program.
40 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

1 program does not exceed three billion three hundred fifty million
2 eight hundred thousand dollars (\$3,350,800,000). The financial
3 components of the California Solar Initiative shall consist of the
4 following:

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

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

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

30 SEC. 3. Section 2853 is added to the Public Utilities Code, to
31 read:

32 2853. (a) The Legislature finds and declares both of the
33 following:

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

38 (2) Forty-three percent of this state's residential housing units
39 are rented, indicating that many housing units and many

1 Californians are unable to benefit from this state's programs to
2 support energy efficiency and the use of solar energy.

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

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

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

10 (c) The commission shall ensure that the strategy developed
11 and implemented pursuant to subdivision (b) does not result in any
12 additional ratepayer surcharges and is funded through ~~existing~~
13 ~~utility energy efficiency programs and the California Solar~~
14 ~~Initiative, as defined in subdivision (a) of Section 2852: one or~~
15 ~~more of the following:~~

16 (1) *Existing utility energy efficiency programs.*

17 (2) *The California Solar Initiative, as defined in subdivision (a)*
18 *of Section 2852.*

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

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

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