

**ASSEMBLY BILL**

**No. 2249**

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**Introduced by Assembly Member Buchanan**

February 24, 2012

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An act to amend Sections 2861, 2862, 2864, and 2865 of the Public Utilities Code, relating to solar energy.

LEGISLATIVE COUNSEL'S DIGEST

AB 2249, as introduced, Buchanan. Solar Water Heating and Efficiency Act of 2007.

The Solar Water Heating and Efficiency Act of 2007 makes findings and declarations of the Legislature relating to the promotion of solar water heating systems and other technologies that reduce natural gas demand and define terms for purposes of the act. The act requires the Public Utilities Commission (PUC) to evaluate data available from a specified pilot program, and, if it makes a specified determination, to design and implement a program of incentives for the installation of 200,000 solar water heating systems, as defined, in homes and businesses throughout the state by 2017. The act requires the PUC, in consultation with the State Energy Resources and Conservation Commission (Energy Commission) and interested members of the public, to establish eligibility criteria for the solar water heating systems receiving gas customer funded incentives. The PUC is required to establish conditions on those incentives. Pursuant to the act, a solar water heating system is defined to be a solar energy device that has the primary purpose of reducing demand for natural gas through water heating, space heating, or other methods of capturing energy from the sun to reduce natural gas consumption in a home, business, or any building receiving natural gas sold or transported for consumption in

this state and that meets or exceeds the eligibility criteria. The act excludes solar pool heating systems from the definition of a solar water heating system.

This bill would expand the definition of a solar water heating system to include a facility meeting the specified requirements and would qualify the exclusion from the definition of a solar water heating system as being limited to a single-family residential solar pool heating system. The bill would expand the statement of legislative intent to include schools as being sites where the 200,000 solar water heating systems may be located. The bill would revise certain eligibility criteria as being applicable to installation of solar water heating systems at municipal and educational sites. The bill would make other technical, nonsubstantive changes to the act.

The Solar Water Heating and Efficiency Act of 2007 requires the governing body of each publicly owned utility providing gas service to retail end-use gas customers to adopt, implement, and finance a solar water heating system incentive program to meet certain requirements.

By expanding the definition of a solar water heating system to include a facility meeting the specified requirements and qualifying the exclusion from the definition of a solar water heating system as being limited to a single-family residential solar pool heating system, the bill would impose a state-mandated local program.

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 a specified reason.

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

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

- 1 SECTION 1. Section 2861 of the Public Utilities Code is
- 2 amended to read:
- 3 2861. As used in this article, the following terms have the
- 4 following meanings:
- 5 (a) ~~“Energy Commission” means the State Energy Resources~~
- 6 ~~Conservation and Development Commission.~~
- 7 (b)

1 (a) “Gas customer” includes both “core” and “noncore”  
2 customers, as those terms are used in Chapter 2.2 (commencing  
3 with Section 328) of Part 1, that receive retail end-use gas service  
4 within the service territory of a gas corporation.

5 (e)

6 (b) “kW<sub>th</sub>” means the kilowatt thermal capacity of a solar water  
7 heating system, measured consistent with the standard established  
8 by the SRCC.

9 (d)

10 (c) “kWh<sub>th</sub>” means kilowatthours thermal as measured by the  
11 number of kilowatts thermal generated, or displaced, in an hour.

12 (e)

13 (d) “Low-income residential housing” means either of the  
14 following:

15 (1) Residential housing financed with low-income housing tax  
16 credits, tax-exempt mortgage revenue bonds, general obligation  
17 bonds, or local, state, or federal loans or grants, and for which the  
18 rents of the occupants who are lower income households, as defined  
19 in Section 50079.5 of the Health and Safety Code, do not exceed  
20 those prescribed by deed restrictions or regulatory agreements  
21 pursuant to the terms of the financing or financial assistance.

22 (2) A residential complex in which at least 20 percent of the  
23 total units are sold or rented to lower income households, as defined  
24 in Section 50079.5 of the Health and Safety Code, and the housing  
25 units targeted for lower income households are subject to a deed  
26 restriction or affordability covenant with a public entity that ensures  
27 that the units will be available at an affordable housing cost  
28 meeting the requirements of Section 50052.5 of the Health and  
29 Safety Code, or at an affordable rent meeting the requirements of  
30 Section 50053 of the Health and Safety Code, for a period of not  
31 less than 30 years.

32 (f)

33 (e) “New Solar Homes Partnership” means the 10-year program,  
34 administered by the Energy Commission, encouraging solar energy  
35 systems in new home construction.

36 (g)

37 (f) “Solar heating collector” means a device that is used to  
38 collect or capture heat from the sun and that is generally, but need  
39 not be, located on a roof.

40 (h)

1 (g) “Solar water heating system” means a solar energy device  
2 that has the primary purpose of reducing demand for natural gas  
3 through water heating, space heating, or other methods of capturing  
4 energy from the sun to reduce natural gas consumption in a home,  
5 business, or any building *or facility* receiving natural gas that is  
6 subject to the surcharge established pursuant to *subdivision (b) of*  
7 ~~Section 2860~~ 2863, or exempt from the surcharge pursuant to  
8 subdivision (c) of Section 2863, and that meets or exceeds the  
9 eligibility criteria established pursuant to Section 2864. “Solar  
10 water heating systems” do not include *single-family residential*  
11 solar pool heating systems.

12 (h) “SRCC” means the Solar Rating and Certification  
13 Corporation.  
14

15 SEC. 2. Section 2862 of the Public Utilities Code is amended  
16 to read:

17 2862. The Legislature finds and declares all of the following:

18 (a) California is heavily dependent on natural gas, importing  
19 more than 80 percent of the natural gas it consumes.

20 (b) Rising worldwide demand for natural gas and a shrinking  
21 supply create rising and unstable prices that can harm California  
22 consumers and the economy.

23 (c) Natural gas is a fossil fuel and a major source of global  
24 warming pollution and the pollutants that cause air pollution,  
25 including smog.

26 (d) California’s growing population and economy will put a  
27 strain on energy supplies and threaten the ability of the state to  
28 meet its global warming goals unless specific steps are taken to  
29 reduce demand and generate energy cleanly and efficiently.

30 (e) Water heating for domestic and industrial use relies almost  
31 entirely on natural gas and accounts for a significant percentage  
32 of the state’s natural gas consumption.

33 (f) Solar water heating systems represent the largest untapped  
34 natural gas saving potential remaining in California.

35 (g) In addition to financial and energy savings, solar water  
36 heating systems can help protect against future gas and electricity  
37 shortages and reduce our dependence on foreign sources of energy.

38 (h) Solar water heating systems can also help preserve the  
39 environment and protect public health by reducing air pollution,

1 including carbon dioxide, a leading global warming gas, and  
2 nitrogen oxide, a precursor to smog.

3 (i) Growing demand for these technologies will create jobs in  
4 California as well as promote greater energy independence, protect  
5 consumers from rising energy costs and result in cleaner air.

6 (j) It is in the interest of the State of California to promote solar  
7 water heating systems and other technologies that directly reduce  
8 demand for natural gas in homes and businesses.

9 (k) It is the intent of the Legislature to build a mainstream  
10 market for solar water heating systems that directly reduces demand  
11 for natural gas in homes, businesses, *schools*, and government  
12 buildings. Toward that end, it is the goal of this article to install  
13 at least 200,000 solar water heating systems on homes, businesses,  
14 *schools*, and government buildings throughout the state by 2017,  
15 thereby lowering prices and creating a self-sufficient market that  
16 will sustain itself beyond the life of this program.

17 (l) It is the intent of the Legislature that the solar water heating  
18 system incentives created by the act should be a cost-effective  
19 investment by gas customers. Gas customers will recoup the cost  
20 of their investment through lower prices as a result of avoiding  
21 purchases of natural gas, and benefit from additional system  
22 stability and pollution reduction benefits.

23 SEC. 3. Section 2864 of the Public Utilities Code is amended  
24 to read:

25 2864. (a) The commission, in consultation with the Energy  
26 Commission and interested members of the public, shall establish  
27 eligibility criteria for solar water heating systems receiving gas  
28 customer funded incentives pursuant to this article. The criteria  
29 should specify and include all of the following:

30 (1) Design, installation, and energy output or displacement  
31 standards. To be eligible for rebate funding, a residential solar  
32 water heating system shall, at a minimum, have a SRCC OG-300  
33 Solar Water Heating System Certification. Solar collectors used  
34 in systems for multifamily residential, commercial, *municipal*,  
35 *educational*, or industrial water heating shall, at a minimum, have  
36 a SRCC OG-100 Solar Water Heating System Certification.

37 (2) Require that solar water heating system components are new  
38 and unused, and have not previously been placed in service in any  
39 other location or for any other application.

1 (3) Require that solar water heating collectors have a warranty  
 2 of not less than 10 years to protect against defects and undue  
 3 degradation.

4 (4) Require that solar water heating systems are in buildings *or*  
 5 *facilities* connected to a natural gas utility’s distribution system  
 6 within the state.

7 (5) Require that solar water heating systems have meters or  
 8 other kWh<sub>th</sub> measuring devices in place to monitor and measure  
 9 the system’s performance and the quantity of energy generated or  
 10 displaced by the system. The criteria shall require meters for  
 11 systems with a capacity for displacing over 30 kW<sub>th</sub>. The criteria  
 12 may require meters for systems with a capacity of 30 kW<sub>th</sub> or  
 13 smaller.

14 (6) Require that solar water heating systems are installed in  
 15 conformity with the manufacturer’s specifications and all  
 16 applicable codes and standards.

17 (b) No gas customer funded incentives shall be made for a solar  
 18 water heating system that does not meet the eligibility criteria.

19 SEC. 4. Section 2865 of the Public Utilities Code is amended  
 20 to read:

21 2865. (a) The commission shall establish conditions on gas  
 22 customer funded incentives pursuant to this article. The conditions  
 23 shall require both of the following:

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

33 (2) Appropriate energy efficiency improvements in the new or  
 34 existing home or ~~commercial structure~~ *facility* where the solar ~~hot~~  
 35 water *heating* system is installed.

36 (b) The commission shall set rating standards for equipment,  
 37 components, and systems to ensure reasonable performance and  
 38 shall develop standards that provide for compliance with the  
 39 minimum ratings.

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

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