

AMENDED IN ASSEMBLY APRIL 9, 2012

CALIFORNIA LEGISLATURE—2011–12 REGULAR SESSION

ASSEMBLY BILL

No. 2249

Introduced by Assembly Member Buchanan
(Coauthors: Assembly Members Huffman, Wieckowski, and Williams)
(Coauthor: Senator Wolk)

February 24, 2012

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 amended, 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, *to encourage the deployment of solar heating systems in both residential and commercial markets and in each end-use application sector in a balanced manner, to state that the commission should monitor and adjust incentives created by the act so that they are sufficient to significantly increase markets, and to state that the commission should ensure that increased, uniform growth in each market sector is achieved through program incentives or structure adjustments that prevent overutilization of program resources by any single sector.* The bill would revise certain eligibility criteria as being applicable to installation of solar water heating systems at municipal, government, nonprofit, 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) “Gas customer” includes both “core” and “noncore”
6 customers, as those terms are used in Chapter 2.2 (commencing
7 with Section 328) of Part 1, that receive retail end-use gas service
8 within the service territory of a gas corporation.

9 (b) “kW_{th}” means the kilowatt thermal capacity of a solar water
10 heating system, measured consistent with the standard established
11 by the SRCC.

12 (c) “kWh_{th}” means kilowatthours thermal as measured by the
13 number of kilowatts thermal generated, or displaced, in an hour.

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

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

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

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

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 2863, or exempt from the surcharge pursuant to subdivision
 8 (c) of Section 2863, and that meets or exceeds the eligibility criteria
 9 established pursuant to Section 2864. “Solar water heating systems”
 10 do not include single-family residential solar pool heating systems.

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

13 SEC. 2. Section 2862 of the Public Utilities Code is amended
 14 to read:

15 2862. The Legislature finds and declares all of the following:

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

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

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

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

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

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

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

36 (h) Solar water heating systems can also help preserve the
 37 environment and protect public health by reducing air pollution,
 38 including carbon dioxide, a leading global warming gas, and
 39 nitrogen oxide, a precursor to smog.

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

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

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

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

23 (m) *It is the intent of the Legislature that this act will encourage*
24 *the deployment of solar heating systems in both residential and*
25 *commercial markets and in each end-use application sector in a*
26 *balanced manner. It is the intent of the Legislature that the*
27 *commission monitor and adjust incentives created by the act so*
28 *that they are sufficient to significantly increase markets. It is the*
29 *intent of the Legislature that the commission ensure that increased,*
30 *uniform growth in each market sector is achieved through program*
31 *incentives or structure adjustments that prevent overutilization of*
32 *program resources by any single sector.*

33 SEC. 3. Section 2864 of the Public Utilities Code is amended
34 to read:

35 2864. (a) The commission, in consultation with the Energy
36 Commission and interested members of the public, shall establish
37 eligibility criteria for solar water heating systems receiving gas
38 customer funded incentives pursuant to this article. The criteria
39 should specify and include all of the following:

1 (1) Design, installation, and energy output or displacement
2 standards. To be eligible for rebate funding, a residential solar
3 water heating system shall, at a minimum, have a SRCC OG-300
4 Solar Water Heating System Certification. Solar collectors used
5 in systems for multifamily residential, commercial, municipal,
6 *government, nonprofit*, educational, or industrial water heating
7 shall, at a minimum, have a SRCC OG-100 Solar Water Heating
8 System Certification.

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

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

15 (4) Require that solar water heating systems are in buildings or
16 facilities connected to a natural gas utility's distribution system
17 within the state.

18 (5) Require that solar water heating systems have meters or
19 other kWh_{th} measuring devices in place to monitor and measure
20 the system's performance and the quantity of energy generated or
21 displaced by the system. The criteria shall require meters for
22 systems with a capacity for displacing over 30 kW_{th}. The criteria
23 may require meters for systems with a capacity of 30 kW_{th} or
24 smaller.

25 (6) Require that solar water heating systems are installed in
26 conformity with the manufacturer's specifications and all
27 applicable codes and standards.

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

30 SEC. 4. Section 2865 of the Public Utilities Code is amended
31 to read:

32 2865. (a) The commission shall establish conditions on gas
33 customer funded incentives pursuant to this article. The conditions
34 shall require both of the following:

35 (1) Appropriate siting and high-quality installation of the solar
36 water heating system based on installation guidelines that maximize
37 the performance of the system and prevent qualified systems from
38 being inefficiently or inappropriately installed. The conditions
39 shall not impact housing designs or densities presently authorized
40 by a city, county, or city and county. The goal of this paragraph

1 is to achieve efficient installation of solar water heating systems
2 and promote the greatest energy production or displacement per
3 gas customer dollar.

4 (2) Appropriate energy efficiency improvements in the new or
5 existing home or facility where the solar water heating system is
6 installed.

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

11 SEC. 5. No reimbursement is required by this act pursuant to
12 Section 6 of Article XIII B of the California Constitution because
13 a local agency or school district has the authority to levy service
14 charges, fees, or assessments sufficient to pay for the program or
15 level of service mandated by this act, within the meaning of Section
16 17556 of the Government Code.