



REPORT TO LAW & LEGISLATION COMMITTEE City of Sacramento

915 I Street, Sacramento, CA 95814-2671

STAFF REPORT
April 17, 2012

Honorable Members of the
Law and Legislation Committee

Title: Legislative Position: Support AB 2249 (Buchanan) – Solar Pool Heating

Location/Council District: Citywide

Recommendation: Adopt a Support position on AB 2249 (Buchanan) – Solar Pool Heating

Contact: Mark Prestwich, Special Projects Manager, City Manager's Office

Presenters: Mark Prestwich, Special Projects Manager, City Manager's Office

Department: City Manager's Office

Division: Government Affairs

Organization No: 09200

Description/Analysis

Issue: AB 2249 (Buchanan) will include non-residential solar pool heating systems in the types of solar water heating systems eligible to receive installation incentives as part of the existing California Solar Initiative (CSI). The primary purpose of solar water heating systems is to reduce demand for natural gas through water heating, space heating or other methods of capturing energy from the sun. The CSI program has a current unspent balance of more than \$250 million, due partly to historically low natural gas prices and a lack of public awareness of the program. The CSI program was created in 2007 and is funded through a consumption-based surcharge on gas customers. The program is set to expire in 2017.

Policy Considerations: Expanding the scope of the CSI program to include non-residential pools will mitigate the upfront cost barrier that sometimes prevents municipalities, schools and non-profits from transitioning to solar solutions. AB 2249 is also consistent with the City's legislative principles that encourage support for renewable energy technologies and air quality improvements.

Environmental Considerations:

Sustainability Considerations: California is heavily dependent on natural gas, importing more than 80 percent of the natural gas it consumes. Natural gas is a fossil fuel and a source of air pollution. Solar water heating systems help preserve the environment and protect public health by reducing air pollution, including carbon dioxide.

Committee/Commission Action: None.

Rationale for Recommendation: Passage of AB 2249 will ensure more highly efficient solar heating systems are installed in California pools, providing near-term employment for local construction workers while also saving natural gas for higher value purposes.

Financial Considerations: The Public Utilities Commission will be responsible for establishing incentives for non-residential solar pool heating systems if AB 2249 is adopted.

Emerging Small Business Development (ESBD): None.

Respectfully Submitted by: 
Mark T. Prestwich, Special Projects Manager

Approved By: 
John F. Shrey, City Manager

Table of Contents:

Pg 1 Report
Pg 4 Attachments

Attachments

Pg 4 Draft Position Letter
Pg 7 Bill Text

DRAFT LETTER OF SUPPORT

April 17, 2012

The Honorable Joan Buchanan
California State Assembly
State Capitol
Sacramento, CA 95814

RE: AB 2249 – Letter of Support

Dear Assembly Member Buchanan,

The City of Sacramento is pleased to support AB 2249 which will provide meaningful changes to the Solar Water Heating and Efficiency Act of 2007 by allowing the incentive to extend to non-residential pools.

Passage of AB 2249 will ensure more highly efficient solar heating systems are installed in California pools. The City is also pleased that AB 2249 will result in near-term employment for local construction workers while also saving natural gas for higher value purposes.

There are a number of pools within the Sacramento region that will benefit from this legislation. The opportunity to reduce long-term operational costs and improve the environment will surely be attractive to commercial-sized pool operators, as well as cash-strapped non-profits, schools and municipalities.

For the above reasons, we enthusiastically support AB 2249!

Sincerely,

JAY SCHENIRER, Chair
Law and Legislation Committee

cc: Senate President Pro Tempore Darrell Steinberg
Assembly Member Dr. Richard Pan
Assembly Member Roger Dickinson
Assembly Member Alyson Huber
Mayor Johnson and Members of the City Council
David Jones, Emanuels Jones and Associates
Charles Anderson, League of California Cities

ASSEMBLY BILL

No. 2249

Introduced by Assembly Member Buchanan

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 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_{th} " 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_{th} " 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 (†)
13 (h) "SRCC" means the Solar Rating and Certification
14 Corporation.

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_{th} 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 kWh_{th}. The criteria
12 may require meters for systems with a capacity of 30 kWh_{th} 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.

O

