

AMENDED IN ASSEMBLY MARCH 17, 2016

CALIFORNIA LEGISLATURE—2015–16 REGULAR SESSION

**ASSEMBLY BILL**

**No. 2460**

---

**Introduced by Assembly Member Irwin**

February 19, 2016

---

~~An act to amend Section 2851 of the Public Utilities Code, relating to energy.~~ *An act to amend Sections 2861, 2863, 2864, 2865, 2866, 2867, and 2867.3 of, to amend and renumber Section 2862 of, to repeal Sections 2860, 2867.1, and 2867.2 of, and to repeal and add Section 2867.4 of, the Public Utilities Code, relating to energy.*

LEGISLATIVE COUNSEL'S DIGEST

AB 2460, as amended, Irwin. ~~California Solar Initiative: low-income residential housing.~~ *Solar thermal systems.*

*The Solar Water Heating and Efficiency Act of 2007, until August 1, 2017, requires the Public Utilities Commission, if it determines that a solar water heating program is cost effective for ratepayers and in the public interest, to implement a program to promote the installation of 200,000 solar water heating systems in homes, businesses, and buildings or facilities of eligible customer classes receiving natural gas service throughout the state by 2017. The act establishes the funding cap for the program, for the collective service territories of all gas corporations, at \$250,000,000. The act, until August 1, 2017, requires the governing body of each publicly owned utility providing gas service to retail end-use customers to adopt, implement, and finance a solar water heating system incentive program to encourage the installation of 200,000 solar water heating systems by 2017.*

*This bill would revise the program to, among other things, promote the installation of solar water systems throughout the state, set the*

*funding cap for the program between January 1, 2017, and July 31, 2027, at \$1,000,000,000, reserve 50% of the total program budget for the installation of solar water heating systems in low-income residential housing or in buildings in disadvantaged communities, and extend the operation of the program through July 31, 2027. Because a violation of any order, decision, rule, direction, demand, or requirement of the commission implementing these revisions would be a crime, this bill would impose a state-mandated local program. The bill would also require the governing body of each publicly owned utility providing gas service, until August 1, 2027, to adopt, implement, and finance a solar water heating system incentive program. Because the bill would extend the obligations of a publicly owned electric utility to adopt, implement, and finance the program, this 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 specified reasons.*

~~Under existing law, the Public Utilities Commission has regulatory authority over public utilities, including electrical corporations, as defined. Decisions of the commission adopted the California Solar Initiative. Existing law requires the commission to undertake certain steps in implementing the California Solar Initiative.~~

~~This bill would make a nonsubstantive change to the law requiring the commission to undertake certain steps in implementing the California Solar Initiative.~~

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

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

- 1     SECTION 1. Section 2860 of the Public Utilities Code is
- 2     repealed.
- 3     2860. ~~This article shall be known, and may be cited, as the~~
- 4     Solar Water Heating and Efficiency Act of 2007.
- 5     SEC. 2. Section 2861 of the Public Utilities Code is amended
- 6     to read:

1 2861. As used in this article, the following terms have the  
2 following meanings:

3 (a) *“Disadvantaged community” means a community identified*  
4 *by the California Environmental Protection Agency pursuant to*  
5 *Section 39711 of the Health and Safety Code.*

6 ~~(a)~~

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

11 ~~(b)~~

12 (c) *“kW<sub>th</sub>” or “kilowatts thermal” means the kilowatt unit of*  
13 *measure of the equivalent thermal capacity of a solar water heating*  
14 *system, measured consistent with the standard established by the*  
15 ~~SRCC.~~ *system that is calculated by multiplying the aperture area*  
16 *of the solar collector area of the system, expressed in square*  
17 *meters, by a conversion factor of 0.7.*

18 ~~(c)~~

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

21 ~~(d)~~

22 (e) *“Low-income residential housing” means either of the*  
23 *following:*

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

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

1 (e)

2 (f) “New Solar Homes Partnership” means the 10-year program,  
3 administered by the Energy Commission, encouraging solar energy  
4 systems in new home construction.

5 (f)

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

9 (g)

10 (h) “Solar water heating system” means a solar energy device  
11 that has the primary purpose of reducing demand for natural gas  
12 through water heating, space heating, or other methods of capturing  
13 energy from the sun to reduce natural gas consumption in a home,  
14 business, or any building or facility receiving natural gas that is  
15 subject to the surcharge established pursuant to subdivision (b) of  
16 Section 2863, or exempt from the surcharge pursuant to subdivision  
17 (c) of Section 2863, and that meets or exceeds the eligibility criteria  
18 established pursuant to Section 2864. “Solar water heating systems”  
19 include multifamily residential, governmental, educational, and  
20 nonprofit solar pool heating systems, but do not include  
21 single-family residential solar pool heating systems.

22 ~~(h) “SRCC” means the Solar Rating and Certification~~  
23 ~~Corporation.~~

24 *SEC. 3. Section 2862 of the Public Utilities Code is amended*  
25 *and renumbered to read:*

26 ~~2862. The~~

27 ~~2860. (a) Legislature finds and declares all of the following:~~

28 ~~(a)~~

29 ~~(1) California is heavily dependent on natural gas, importing~~  
30 ~~more than 80 percent of the natural gas it consumes. gas.~~

31 ~~(b) Rising worldwide demand for natural gas and a shrinking~~  
32 ~~supply create rising and unstable prices that can harm California~~  
33 ~~consumers and the economy.~~

34 ~~(2) The storage and delivery of natural gas relies on aging~~  
35 ~~infrastructure that is prone to leaks that can damage the~~  
36 ~~environment and imperil public health.~~

37 ~~(c)~~

38 ~~(3) Natural gas is a fossil fuel and a major source of global~~  
39 ~~warming pollution and the pollutants that cause air pollution,~~  
40 ~~including smog.~~

~~(d)~~

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

~~(e)~~

(5) Water heating for domestic and industrial use relies almost entirely on natural gas and accounts for a significant percentage of the state's natural gas consumption.

~~(f)~~

(6) Solar water heating systems represent the ~~largest major~~ untapped natural gas saving potential ~~remaining~~ in California.

~~(g)~~

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

~~(h)~~

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

~~(i)~~

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

*(10) Installing solar water heating systems in disadvantaged communities can provide local economic benefits while advancing the state's clean energy goals and policies to reduce the emissions of greenhouse gases.*

~~(j)~~

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

~~(k)~~

*(b) It is the intent of the Legislature to build a mainstream market for solar water heating systems that directly reduces demand for natural gas in homes, businesses, schools, ~~nonprofit, and nonprofit~~ and government buildings. ~~Toward that end, it is the goal of this article to install at least 200,000 solar water heating systems on homes, businesses, and other buildings or facilities of~~*

1 eligible customer classes throughout the state by 2017, thereby  
2 lowering prices and creating a self-sufficient market that will  
3 sustain itself beyond the life of this program.

4 (f)

5 (c) It is the intent of the Legislature that the solar water heating  
6 system incentives created by this article should be a cost-effective  
7 investment by gas customers. Gas customers will recoup the cost  
8 of their investment through lower prices *energy bills* as a result of  
9 avoiding purchases of natural gas.

10 (m) ~~It is the intent of the Legislature that this article will~~  
11 ~~encourage the cost-effective deployment of solar heating systems~~  
12 ~~in both residential and commercial markets and in each end-use~~  
13 ~~application sector in a balanced manner. It is the intent of the~~  
14 ~~Legislature that the commission monitor and adjust incentives~~  
15 ~~created by this article so that they are cost-effective investments~~  
16 ~~sufficient to significantly increase markets and promote market~~  
17 ~~transformation. It is the intent of the Legislature that the~~  
18 ~~commission ensure that increased, uniform growth in each market~~  
19 ~~sector is achieved through program incentives or structure~~  
20 ~~adjustments that prevent overutilization of program resources by~~  
21 ~~any single sector.~~

22 *SEC. 4. Section 2863 of the Public Utilities Code is amended*  
23 *to read:*

24 2863. (a) ~~If, after a public hearing, the commission determines~~  
25 ~~that a solar water heating program is cost effective for ratepayers~~  
26 ~~and in the public interest, the~~ *By July 31, 2017, the* commission  
27 shall do all of the following:

28 (1) ~~Design and implement a~~ *Implement changes to the program*  
29 *as authorized pursuant to this section on December 31, 2016,*  
30 *applicable to the service territories of a gas corporation, to achieve*  
31 *the goal of the Legislature to promote the installation of 200,000*  
32 *corporation to promote the installation of* solar water heating  
33 systems in homes, businesses, and buildings or facilities of eligible  
34 customer classes receiving natural gas service throughout the state  
35 ~~by 2017.~~ *state.* Eligible customer classes shall include single-family  
36 and multifamily residential, commercial, industrial, governmental,  
37 nonprofit, and primary, secondary, and postsecondary educational  
38 customers. *The commission shall implement program changes in*  
39 *phases, if necessary, to enable seamless continuation of the*  
40 *availability of rebates as of January 1, 2017.*

1 (2) The program shall be administered by gas corporations or  
2 third-party administrators, as determined by the commission, and  
3 subject to the supervision of the commission.

4 (3) The commission shall coordinate the program with the  
5 Energy Commission's *programs and initiatives, including, but not*  
6 *limited to, the New Solar Homes-Partnership Partnership*, to  
7 achieve the goal of building zero-energy homes.

8 ~~(4) The commission shall determine an appropriate division of~~  
9 ~~funds between solar water heating systems that are and are not~~  
10 ~~solar pool heating systems.~~

11 (b) (1) The commission shall fund the program through the use  
12 of a surcharge applied to gas customers based upon the amount of  
13 natural gas consumed. The surcharge shall be in addition to any  
14 other charges for natural gas sold or transported for consumption  
15 in this state.

16 ~~(2) The commission shall impose the surcharge at a level that~~  
17 ~~is necessary to meet the goal of installing 200,000 solar water~~  
18 ~~heating systems, or the equivalent output of 200,000 solar water~~  
19 ~~heating systems, on homes, businesses, and buildings or facilities~~  
20 ~~of eligible customer classes receiving natural gas service in~~  
21 ~~California by 2017. Funding for the program established by this~~  
22 ~~article shall not, for the collective service territories of all gas~~  
23 ~~corporations, exceed two hundred fifty million dollars~~  
24 ~~(\$250,000,000) one billion dollars (\$1,000,000,000) over the~~  
25 ~~course of the 10-year program period from January 1, 2017, to~~  
26 ~~July 31, 2027, inclusive.~~

27 (3) *Fifty percent of the total program budget shall be reserved*  
28 *for the installation of solar water heating systems in low-income*  
29 *residential housing or in buildings in disadvantaged communities.*  
30 *The commission may revise the percentage if the budget for other*  
31 *types of customers becomes depleted.*

32 ~~(3)~~  
33 (4) The commission shall annually establish a surcharge rate  
34 for each class of gas customers. Any gas customer participating  
35 in the California Alternate Rates for Energy (CARE) or Family  
36 Electric Rate Assistance (FERA) programs shall be exempt from  
37 paying any surcharge imposed to fund the program designed and  
38 implemented pursuant to this article.

39 ~~(4)~~

(5) Any surcharge imposed to fund the program designed and implemented pursuant to this article shall not be imposed upon the portion of any gas customer's procurement of natural gas that is used or employed for a purpose that Section 896 excludes from being categorized as the consumption of natural gas.

~~(5)~~

(6) The gas corporation or other person or entity providing revenue cycle services, as defined in Section 328.1, shall be responsible for collecting the surcharge.

(c) Funds shall be allocated ~~for the benefit of gas customers in the form of customer rebates~~ to promote utilization of solar water heating systems.

*(1) On and after January 1, 2017, the rebate amount shall be consistent with the amount the commission established for the calendar year 2016 until revised by the commission pursuant to paragraph (2).*

*(2) Beginning in 2017, and every two years thereafter, the commission shall consider revisions to the rebate amount, taking into account the cost of installing solar water heating systems and the price of natural gas to end-use customers.*

*(3) The commission shall ensure that a cap on the maximum rebate amount does not unreasonably impair the ability of industrial customers to participate in the program.*

(d) In designing and implementing the program required by this article, no moneys shall be diverted from any existing programs for low-income ratepayers or cost-effective energy efficiency programs.

*SEC. 5. Section 2864 of the Public Utilities Code is amended to read:*

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

(1) Design, installation, and energy output or displacement standards. To be eligible for rebate funding, a residential solar water heating system shall be certified by an accredited listing agency in accordance with standards adopted by the commission. Solar collectors used in systems for multifamily residential, commercial, government, nonprofit, educational, or industrial



1 water heating shall be certified by an accredited listing agency in  
2 accordance with standards adopted by the commission. Energy  
3 output of collectors and systems shall be determined in accordance  
4 with procedures set forth by the listing agency, and shall be based  
5 on testing results from accredited testing laboratories.

6 (2) ~~Require~~ *A requirement* that solar water heating system  
7 components are new and unused, and have not previously been  
8 placed in service in any other location or for any other application.

9 (3) ~~Require~~ *A requirement* that solar water heating collectors  
10 have a warranty of not less than 10 years to protect against defects  
11 and undue degradation.

12 (4) ~~Require~~ *A requirement* that solar water heating systems are  
13 in buildings or facilities connected to a natural gas utility's  
14 distribution system within the state.

15 (5) ~~Require~~ *A requirement* that solar water heating systems have  
16 meters or other kWh<sub>th</sub> measuring devices in place to monitor and  
17 measure the system's performance and the quantity of energy  
18 generated or displaced by the system. ~~The criteria shall require~~  
19 ~~meters for systems with a capacity for displacing over 30 kW<sub>th</sub>.~~  
20 ~~The criteria may require meters for systems with a capacity of 30~~  
21 ~~kW<sub>th</sub> or smaller. The cost of monitoring the system shall not exceed~~  
22 ~~2 percent of the system cost.~~

23 (6) ~~Require~~ *A requirement* that solar water heating systems are  
24 installed in conformity with the manufacturer's specifications and  
25 all applicable codes and standards.

26 (b) Gas customer funded incentives shall not be made for a solar  
27 water heating system that does not meet the eligibility criteria.

28 (c) The commission may adopt consensus solar standards  
29 applicable to products or systems as developed by accredited  
30 standards developers.

31 *SEC. 6. Section 2865 of the Public Utilities Code is amended*  
32 *to read:*

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

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

1 by a city, county, or city and county. The goal of this paragraph  
2 is to achieve efficient installation of solar water heating systems  
3 and promote the greatest energy production or displacement per  
4 gas customer dollar.

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

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

12 *SEC. 7. Section 2866 of the Public Utilities Code is amended*  
13 *to read:*

14 ~~2866.—(a) The commission shall provide not less than 10~~  
15 ~~percent of the overall funds for installation of solar water heating~~  
16 ~~systems on low-income residential housing.~~

17 ~~(b)~~

18 2866. (a) The commission may establish a grant program or  
19 a revolving loan or loan guarantee program for low-income  
20 residential housing consistent with the requirements of Chapter  
21 5.3 (commencing with Section 25425) of Division 15 of the Public  
22 Resources Code. ~~At Notwithstanding Section 2867.4, all loans~~  
23 ~~outstanding as of August 1, 2018, 2027, shall continue to be repaid~~  
24 ~~in a manner that is consistent with the terms and conditions of the~~  
25 ~~program adopted and implemented by the commission pursuant~~  
26 ~~to this subdivision, until repaid in full.~~

27 ~~(e)~~

28 (b) The commission may extend eligibility for funding pursuant  
29 to this section to include residential housing occupied by ratepayers  
30 participating in a commission approved and supervised gas  
31 corporation Low-Income Energy Efficiency (LIEE) program and  
32 who either:

33 (1) Occupy a single-family home.

34 (2) Occupy at least 50 percent of all units in a multifamily  
35 dwelling structure.

36 ~~(d)~~

37 (c) The commission shall ensure that lower income households,  
38 as defined in Section 50079.5 of the Health and Safety Code, and,  
39 if the commission expands the program pursuant to subdivision  
40 ~~(e)~~, (b), ratepayers participating in a LIEE program, that receive

1 gas service at residential housing with a solar water heating system  
2 receiving incentives pursuant to subdivision (a), benefit from the  
3 installation of the solar water heating systems through reduced or  
4 lowered energy costs.

5 ~~(e) No later than January 1, 2010, the~~

6 *(d) The commission shall do all of the following to implement*  
7 *the requirements of this section:*

8 *(1) Maximize incentives to properties that are committed to*  
9 *continuously serving the needs of lower income households, as*  
10 *defined in Section 50079.5 of the Health and Safety Code, and, if*  
11 *the commission expands the program pursuant to subdivision (e),*  
12 *(b), ratepayers participating in a LIEE program.*

13 *(2) Establish conditions on the installation of solar water heating*  
14 *systems that ensure properties on which solar water heating systems*  
15 *are installed under subdivision (a) remain low-income residential*  
16 *properties for at least 10 years from the time of installation,*  
17 *including property ownership restrictions and income rental*  
18 *protections, and appropriate enforcement of these conditions.*

19 ~~*(f) All moneys set aside for the purpose of funding the*~~  
20 ~~*installation of solar water heating systems on low-income*~~  
21 ~~*residential housing that are unexpended and unencumbered on*~~  
22 ~~*August 1, 2018, and all moneys thereafter repaid pursuant to*~~  
23 ~~*subdivision (b), except to the extent that those moneys are*~~  
24 ~~*encumbered pursuant to this section, shall be utilized to augment*~~  
25 ~~*cost-effective energy efficiency measures in low-income residential*~~  
26 ~~*housing that benefit ratepayers.*~~

27 *SEC. 8. Section 2867 of the Public Utilities Code is amended*  
28 *to read:*

29 *2867. (a) ~~The~~Consistent with subdivision (c) of Section 2863,*  
30 *the commission shall consider reductions over time in rebates*  
31 *provided through this program ~~shall decline over time. They~~ the*  
32 *program. The rebate shall be structured so as to drive down the*  
33 *cost of the solar water heating technologies, and be paid out on a*  
34 *performance-based incentive basis so that incentives are earned*  
35 *based on the actual energy savings, or on predicted energy savings*  
36 *as established by the commission.*

37 *(b) The commission shall consider federal tax credits and other*  
38 *incentives available for this technology when determining the*  
39 *appropriate rebate amount.*

1 (c) The commission shall consider the impact of rebates for  
2 solar water heating systems pursuant to this article on existing  
3 incentive programs for energy efficiency technology.

4 (d) In coordination with the commission, the Energy  
5 Commission shall consider, when appropriate, coupling rebates  
6 for solar water heating systems with complementary energy  
7 efficiency technologies, including, but not limited to, efficient hot  
8 water heating tanks and tankless or on demand hot water systems  
9 that can be installed in addition to the solar water heating system.

10 *SEC. 9. Section 2867.1 of the Public Utilities Code is repealed.*

11 ~~2867.1. (a) Not later than July 1, 2010, the commission shall~~  
12 ~~report to the Legislature as to the effectiveness of the program and~~  
13 ~~make recommendations as to any changes that should be made to~~  
14 ~~the program. This report shall include justification for the size of~~  
15 ~~the rebate program in terms of total available incentive moneys as~~  
16 ~~well as the anticipated benefits of the program in its entirety. To~~  
17 ~~facilitate the understanding of how solar water heating systems~~  
18 ~~compare with other clean energy and energy efficiency~~  
19 ~~technologies, all documents related to and rebates provided by this~~  
20 ~~program shall be measured in both kWh<sub>th</sub> and therms of natural~~  
21 ~~gas saved.~~

22 ~~(b) Not later than February 1, 2014, the commission shall~~  
23 ~~complete a review of whether the rebate levels established by the~~  
24 ~~commission will be sufficient to spur investment to reach the~~  
25 ~~program goal of installing 200,000 solar water heating systems in~~  
26 ~~homes, businesses, and other buildings or facilities receiving~~  
27 ~~natural gas service throughout the state by 2017, and shall report~~  
28 ~~to the Legislature on the results of its review. The report submitted~~  
29 ~~pursuant to this subdivision shall be submitted in compliance with~~  
30 ~~Section 9795 of the Government Code.~~

31 *SEC. 10. Section 2867.2 of the Public Utilities Code is*  
32 *repealed.*

33 ~~2867.2. Except for the Solar Water Heating Pilot Program in~~  
34 ~~San Diego, solar water heating technologies shall not be eligible~~  
35 ~~for California Solar Initiative (CSI) funds, pursuant to Section~~  
36 ~~2851, unless they also displace electricity, in which case only the~~  
37 ~~electricity displacing portion of the technology may be eligible~~  
38 ~~under the CSI program, as determined by the commission.~~

39 *SEC. 11. Section 2867.3 of the Public Utilities Code is amended*  
40 *to read:*

1     2867.3. ~~In order to further the state goal of encouraging the~~  
2 ~~installation of 200,000 solar water heaters by 2017, the~~ *The*  
3 governing body of each publicly owned utility providing gas  
4 service to retail end-use gas customers shall, after a public  
5 proceeding, adopt, implement, and finance a solar water heating  
6 system incentive program that does all the following:

7     (a) Ensures that any solar water heating system receiving  
8 monetary incentives complies with eligibility criteria adopted by  
9 the governing body. The eligibility criteria shall include those  
10 elements contained in paragraphs (1) to (6), inclusive, of  
11 subdivision (a) of Section 2864.

12     (b) Includes minimum ratings and standards for equipment,  
13 components, and systems to ensure reasonable performance and  
14 compliance with the minimum ratings and standards.

15     (c) Includes an element that addresses the installation of solar  
16 water heating systems on low-income residential housing. If  
17 deemed appropriate in consultation with the California Tax Credit  
18 Allocation Committee, the governing board may establish a grant  
19 program or a revolving loan or loan guarantee program for  
20 low-income residential housing consistent with the requirements  
21 of Chapter 5.3 (commencing with Section 25425) of Division 15  
22 of the Public Resources Code.

23     *SEC. 12. Section 2867.4 of the Public Utilities Code is*  
24 *repealed.*

25     ~~2867.4. This article shall remain in effect only until August 1,~~  
26 ~~2018, and as of that date is repealed, unless a later enacted statute,~~  
27 ~~that is enacted before August 1, 2018, deletes or extends that date.~~

28     *SEC. 13. Section 2867.4 is added to the Public Utilities Code,*  
29 *to read:*

30     *2867.4. This article shall become inoperative on August 1,*  
31 *2027, and, as of January 1, 2028, is repealed, unless a later*  
32 *enacted statute, that becomes operative on or before January 1,*  
33 *2028, deletes or extends the dates on which it becomes inoperative*  
34 *and is repealed.*

35     *SEC. 14. No reimbursement is required by this act pursuant*  
36 *to Section 6 of Article XIII B of the California Constitution because*  
37 *a local agency or school district has the authority to levy service*  
38 *charges, fees, or assessments sufficient to pay for the program or*  
39 *level of service mandated by this act or because costs that may be*  
40 *incurred by a local agency or school district will be incurred*

1 *because this act creates a new crime or infraction, eliminates a*  
2 *crime or infraction, or changes the penalty for a crime or*  
3 *infraction, within the meaning of Section 17556 of the Government*  
4 *Code, or changes the definition of a crime within the meaning of*  
5 *Section 6 of Article XIII B of the California Constitution.*

6 ~~SECTION 1. Section 2851 of the Public Utilities Code is~~  
7 ~~amended to read:~~

8 ~~2851. (a) In implementing the California Solar Initiative, the~~  
9 ~~commission shall do all of the following:~~

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

33 ~~(B) The incentive level for the installation of a solar energy~~  
34 ~~system pursuant to Section 2852 shall be zero as of December 31,~~  
35 ~~2021.~~

36 ~~(2) The commission shall adopt a performance-based incentive~~  
37 ~~program so that by January 1, 2008, 100 percent of incentives for~~  
38 ~~solar energy systems of 100 kilowatts or greater and at least 50~~  
39 ~~percent of incentives for solar energy systems of 30 kilowatts or~~  
40 ~~greater are earned based on the actual electrical output of the solar~~

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

6 (A) ~~Apply performance-based incentives only to customer~~  
7 ~~classes designated by the commission.~~

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

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

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

21 (4) ~~Notwithstanding subdivision (g) of Section 2827, the~~  
22 ~~commission may develop a time-variant tariff that creates the~~  
23 ~~maximum incentive for ratepayers to install solar energy systems~~  
24 ~~so that the system's peak electricity production coincides with~~  
25 ~~California's peak electricity demands and that ensures that~~  
26 ~~ratepayers receive due value for their contribution to the purchase~~  
27 ~~of solar energy systems and customers with solar energy systems~~  
28 ~~continue to have an incentive to use electricity efficiently. In~~  
29 ~~developing the time-variant tariff, the commission may exclude~~  
30 ~~customers participating in the tariff from the rate cap for residential~~  
31 ~~customers for existing baseline quantities or usage by those~~  
32 ~~customers of up to 130 percent of existing baseline quantities, as~~  
33 ~~required by Section 739.9. Nothing in this paragraph authorizes~~  
34 ~~the commission to require time-variant pricing for ratepayers~~  
35 ~~without a solar energy system.~~

36 (b) ~~Notwithstanding subdivision (a), in implementing the~~  
37 ~~California Solar Initiative, the commission may authorize the award~~  
38 ~~of monetary incentives for solar thermal and solar water heating~~  
39 ~~devices, in a total amount up to one hundred million eight hundred~~  
40 ~~thousand dollars (\$100,800,000).~~

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

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

~~(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, including those residential customers subject to the rate limitation specified in Section 739.9 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 shall 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.~~



1     ~~(e) Except as provided in subdivision (f), in implementing the~~  
2     ~~California Solar Initiative, the commission shall ensure that the~~  
3     ~~total cost over the duration of the program does not exceed three~~  
4     ~~billion five hundred fifty million eight hundred thousand dollars~~  
5     ~~(\$3,550,800,000). Except as provided in subdivision (f), financial~~  
6     ~~components of the California Solar Initiative shall consist of the~~  
7     ~~following:~~

8     ~~(1) Programs under the supervision of the commission funded~~  
9     ~~by charges collected from customers of San Diego Gas and Electric~~  
10    ~~Company, Southern California Edison Company, and Pacific Gas~~  
11    ~~and Electric Company. Except as provided in subdivision (f), the~~  
12    ~~total cost over the duration of these programs shall not exceed two~~  
13    ~~billion three hundred sixty-six million eight hundred thousand~~  
14    ~~dollars (\$2,366,800,000) and includes moneys collected directly~~  
15    ~~into a tracking account for support of the California Solar Initiative.~~

16    ~~(2) Programs adopted, implemented, and financed in the amount~~  
17    ~~of seven hundred eighty-four million dollars (\$784,000,000), by~~  
18    ~~charges collected by local publicly owned electric utilities pursuant~~  
19    ~~to Section 2854. Nothing in this subdivision shall give the~~  
20    ~~commission power and jurisdiction with respect to a local publicly~~  
21    ~~owned electric utility or its customers.~~

22    ~~(3) (A) Programs for the installation of solar energy systems~~  
23    ~~on new construction (New Solar Homes Partnership Program),~~  
24    ~~administered by the Energy Commission, and funded by charges~~  
25    ~~in the amount of four hundred million dollars (\$400,000,000),~~  
26    ~~collected from customers of San Diego Gas and Electric Company,~~  
27    ~~Southern California Edison Company, and Pacific Gas and Electric~~  
28    ~~Company. If the commission is notified by the Energy Commission~~  
29    ~~that funding available pursuant to Section 25751 of the Public~~  
30    ~~Resources Code for the New Solar Homes Partnership Program~~  
31    ~~and any other funding for the purposes of this paragraph have been~~  
32    ~~exhausted, the commission may require an electrical corporation~~  
33    ~~to continue administration of the program pursuant to the guidelines~~  
34    ~~established for the program by the Energy Commission, until the~~  
35    ~~funding limit authorized by this paragraph has been reached. The~~  
36    ~~commission may determine whether a third party, including the~~  
37    ~~Energy Commission, should administer the utility's continuation~~  
38    ~~of the New Solar Homes Partnership Program. The commission,~~  
39    ~~in consultation with the Energy Commission, shall supervise the~~  
40    ~~administration of the continuation of the New Solar Homes~~

1 ~~Partnership Program by an electrical corporation or third-party~~  
2 ~~administrator. After the exhaustion of funds, the Energy~~  
3 ~~Commission shall notify the Joint Legislative Budget Committee~~  
4 ~~30 days prior to the continuation of the program. This subparagraph~~  
5 ~~shall become inoperative on June 1, 2018.~~

6 ~~(B) If the commission requires a continuation of the program~~  
7 ~~pursuant to subparagraph (A), any funding made available pursuant~~  
8 ~~to the continuation program shall be encumbered through the~~  
9 ~~issuance of rebate reservations by no later than June 1, 2018, and~~  
10 ~~disbursed by no later than December 31, 2021.~~

11 ~~(4) The changes made to this subdivision by Chapter 39 of the~~  
12 ~~Statutes of 2012 do not authorize the levy of a charge or any~~  
13 ~~increase in the amount collected pursuant to any existing charge,~~  
14 ~~nor do the changes add to, or detract from, the commission's~~  
15 ~~existing authority to levy or increase charges.~~

16 ~~(f) Upon the expenditure or reservation in any electrical~~  
17 ~~corporation's service territory of the amount specified in paragraph~~  
18 ~~(1) of subdivision (e) for low-income residential housing programs~~  
19 ~~pursuant to subdivision (c) of Section 2852, the commission shall~~  
20 ~~authorize the continued collection of the charge for the purposes~~  
21 ~~of Section 2852. The commission shall ensure that the total amount~~  
22 ~~collected pursuant to this subdivision does not exceed one hundred~~  
23 ~~eight million dollars (\$108,000,000). Upon approval by the~~  
24 ~~commission, an electrical corporation may use amounts collected~~  
25 ~~pursuant to subdivision (e) for purposes of funding the general~~  
26 ~~market portion of the California Solar Initiative, that remain~~  
27 ~~unspent and unencumbered after December 31, 2016, to reduce~~  
28 ~~the electrical corporation's portion of the total amount collected~~  
29 ~~pursuant to this subdivision.~~