

AMENDED IN SENATE AUGUST 20, 2001

AMENDED IN SENATE JULY 10, 2001

AMENDED IN SENATE JULY 2, 2001

AMENDED IN SENATE JUNE 25, 2001

CALIFORNIA LEGISLATURE—2001–02 SECOND EXTRAORDINARY SESSION

ASSEMBLY BILL

No. 48

Introduced by Assembly Member Wright

May 22, 2001

An act to amend ~~Section 25402.1 of the Public Resources Code~~ Sections 25402.1 and 25619 of the *Public Resources Code*, and to add Section 9618 to the *Unemployment Insurance Code*, relating to energy.

LEGISLATIVE COUNSEL'S DIGEST

AB 48, as amended, Wright. Energy conservation.

(1) Existing law requires the State Energy Resources Conservation and Development Commission to prescribe, by regulation, lighting, *an* insulation climate control system, and other building design and construction standards that increase the efficiency in the use of energy for new residential and new nonresidential buildings and to provide an energy conservation manual that includes a prescriptive method of complying with the standards. Existing law prohibits a city, county, city and county, or state agency from issuing a permit for any building unless the building satisfies the standards prescribed by the commission that are in effect on the date an application for a building permit is filed, unless the city, county, or city and county files a determination with the

commission that its own standards are cost effective, and the commission makes a particular finding.

This bill would ~~permit enact the Solar Training, Education, and Certification Act of 2001. The bill would authorize cities, counties, and cities and counties to implement building standards requiring the use of solar water heating or photovoltaic systems without demonstrating cost effectiveness to the commission in new residential construction projects of 200 units or more in size.~~

The bill would require the commission to provide specified information to local building departments, and to develop a program ~~to educate builders and developers in construction techniques for zero energy buildings to encourage the construction of buildings that use solar thermal and photovoltaic systems.~~ The bill would require the building department of a city, county, or city and county to consider ~~and mitigate~~ the effects of new building construction demands on local energy supply infrastructure, and to make every effort to increase the use of solar and other renewable and peak electricity load shifting technologies in new buildings, thereby imposing a state-mandated local program. This bill would require the commission to accelerate and minimize the approval and permitting process for buildings that incorporate solar energy technologies.

The bill would also make technical, nonsubstantive changes.

(2) *Existing law requires the State Energy Resources and Conservation Commission to develop a grant program to offset a portion of the cost of an eligible solar energy system, as defined. Existing law requires that eligible solar energy systems for electricity generation be listed by a certified testing agency.*

This bill would require that, in the absence of certification, major components of eligible solar energy systems for electricity generation comply with specifications adopted by the commission.

(3) *Existing law establishes in state government the Employment Development Department, and specifies its powers and duties.*

This bill would require the department to administer a solar training and oversight program, as specified, to ensure that solar energy product and service providers in California possess adequate skills and training.

(4) 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, including the creation of a State Mandates Claims Fund

to pay the costs of mandates that do not exceed \$1,000,000 statewide and other procedures for claims whose statewide costs exceed \$1,000,000.

This bill would provide that, if the Commission on State Mandates determines that the bill contains costs mandated by the state, reimbursement for those costs shall be made pursuant to these statutory provisions.

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. (a) *This act shall be known, and may be cited,*
- 2 *as the Solar Training, Education, and Certification Act of 2001.*
- 3 (b) *The Legislature finds and declares all of the following:*
- 4 (1) *California's increasing energy needs require the*
- 5 *development of alternative energy resources, including solar*
- 6 *energy for the production of heat and electricity.*
- 7 (2) *California leads the nation and ranks as a world leader in*
- 8 *the development of technologies and programs to accelerate the*
- 9 *use of solar energy.*
- 10 (3) *A training and certification program authorized by the*
- 11 *Legislature and administered by the Employment Development*
- 12 *Department, in consultation and cooperation with the Contractors*
- 13 *State License Board and solar industry stakeholders, can help*
- 14 *mitigate the state's energy shortage by ensuring that appropriate*
- 15 *training and education is available for those practicing in and*
- 16 *entering into the solar energy design, construction, and*
- 17 *installation businesses.*
- 18 SEC. 2. Section 25402.1 of the Public Resources Code is
- 19 amended to read:
- 20 25402.1. In order to implement the requirements of
- 21 subdivisions (a) and (b) of Section 25402, the commission shall do
- 22 all of the following:
- 23 (a) Develop a public domain computer program that will
- 24 enable contractors, builders, architects, engineers, and
- 25 government officials to estimate the energy consumed by
- 26 residential and nonresidential buildings. The commission may
- 27 charge a fee for the use of the program, which shall be based upon
- 28 the actual cost of the program, including any computer costs.



1 (b) Establish a formal process for certification of compliance
2 options for new products, materials, and calculation methods that
3 provides for adequate technical and public review to ensure
4 accurate, equitable, and timely evaluation of certification
5 applications. Proponents filing applications for new products,
6 materials, and calculation methods shall provide all information
7 needed to evaluate the application that is required by the
8 commission. The commission shall publish annually the results of
9 its certification decisions and instructions to users and local
10 building officials concerning requirements for showing
11 compliance with the building standards for new products,
12 materials, or calculation methods. The commission may charge
13 and collect a reasonable fee from applicants to cover the costs
14 under this subdivision. Any funds received by the commission for
15 purposes of this subdivision shall be deposited in the Energy
16 Resources Programs Account and, notwithstanding Section 13340
17 of the Government Code, are continuously appropriated to the
18 commission for the purposes of this subdivision. Any
19 unencumbered portion of funds collected as a fee for an
20 application remaining in the Energy Resources Programs Account
21 after completion of the certification process for that application
22 shall be returned to the applicant within a reasonable period of
23 time.

24 (c) Include a prescriptive method of complying with the
25 standards, including design aids such as a manual, sample
26 calculations, and model structural designs.

27 (d) Certify, not later than 180 days after approval of the
28 standards by the State Building Standards Commission, an energy
29 conservation manual for use by designers, builders, and
30 contractors of residential and nonresidential buildings. The
31 manual shall be furnished upon request at a price sufficient to
32 cover the costs of production and shall be distributed at no cost to
33 all affected local agencies. The manual shall contain, but not be
34 limited to, the following:

35 (1) The standards for energy conservation established by the
36 commission.

37 (2) Forms, charts, tables, and other data to assist designers and
38 builders in meeting the standards.

39 (3) Design suggestions for meeting or exceeding the standards.



(4) Any other information that the commission finds will assist persons in conforming to the standards.

(5) Instructions for use of the computer program for calculating energy consumption in residential and nonresidential buildings.

(6) The prescriptive method for use as an alternative to the computer program.

(e) The commission shall establish a continuing program of technical assistance to local building departments in the enforcement of subdivisions (a) and (b) of Section 25402 and this section. The program shall include the training of local officials in building technology and enforcement procedures related to energy conservation, and the development of complementary training programs conducted by local governments, educational institutions, and other public or private entities. The technical assistance program shall include the preparation and publication of forms and procedures for local building departments in performing the review of building plans and specifications. The commission shall provide, on a contract basis, a review of building plans and specifications submitted by a local building department, and shall adopt a schedule of fees sufficient to repay the cost of those services. The commission shall provide information to local building departments on solar energy and other renewable energy products, high efficiency appliances, and construction techniques that contribute to the goal of buildings that consume zero energy. ~~The commission shall develop a zero energy buildings program to educate builders and developers in construction techniques to develop buildings that consume zero energy.~~ *The commission shall develop a program to encourage the construction of buildings that use solar thermal and photovoltaic systems. The program shall recognize owners and builders who participate in the program by awarding a "Solar Seal" to homes that exceed the state's building standards in existence on the effective date of the act adding this section, by an amount not less than 30 percent, through the use of solar energy systems.*

(f) Subdivisions (a) and (b) of Section 25402 and this section, and the rules and regulations of the commission adopted pursuant thereto, shall be enforced by the building department of every city, county, or city and county. The building department of a city, county, or city and county shall consider ~~and mitigate~~ the effects of new building construction demands on local energy supply

1 infrastructure, and shall make every effort to increase the use of
2 solar and other renewable and peak electricity load shifting
3 technologies in new buildings.

4 (1) No building permit for any residential or nonresidential
5 building may be issued by a local building department, unless a
6 review by the building department of the plans for the proposed
7 residential or nonresidential building contains detailed energy
8 system specifications and confirms that the building satisfies the
9 minimum standards established pursuant to subdivision (a) or (b)
10 of Section 25402 and this section applicable to the building.

11 (2) Where there is no local building department, the
12 commission shall enforce subdivisions (a) and (b) of Section
13 25402 and this section.

14 (3) If a local building department fails to enforce subdivisions
15 (a) and (b) of Section 25402 and this section or any other provision
16 of this chapter or standard adopted pursuant thereto, the
17 commission may provide enforcement after furnishing 10 days'
18 written notice to the local building department.

19 (4) A city, county, or city and county may, by ordinance or
20 resolution, prescribe a schedule of fees sufficient to pay the costs
21 incurred in the enforcement of subdivisions (a) and (b) of Section
22 25402 and this section. The commission may establish a schedule
23 of fees sufficient to pay the costs incurred by that enforcement.

24 (5) No construction of any state building shall commence until
25 the Department of General Services or the state agency that
26 otherwise has jurisdiction over the property reviews the plans for
27 the proposed building and certifies that the plans satisfy the
28 minimum standards established pursuant to Chapter 2.8
29 (commencing with Section 15814.30) of Part 10b of Division 3 of
30 Title 2 of the Government Code, subdivision (a) or (b) of Section
31 25402, and this section that are applicable to the building.

32 (6) The commission shall establish procedures to accelerate
33 and minimize, and shall assist a city, county, or city and county in
34 accelerating and minimizing, the approval and permitting process
35 for residential and nonresidential buildings that incorporate solar
36 energy technologies.

37 (g) Subdivisions (a) and (b) of Section 25402 and this section
38 apply only to new residential and nonresidential buildings on
39 which actual site preparation and construction have not
40 commenced prior to the effective date of rules and regulations



adopted pursuant to those sections that are applicable to those buildings. Nothing in those sections prohibits either of the following:

(1) The enforcement of state or local energy conservation or energy insulation standards, adopted prior to the effective date of rules and regulations adopted pursuant to subdivisions (a) and (b) of Section 25402 and this section with regard to residential and nonresidential buildings on which actual site preparation and construction have commenced prior to that date.

~~(2) The enforcement of city, county, or city and county energy conservation or energy insulation standards, whenever adopted, with regard to residential and nonresidential buildings on which actual site preparation and construction have not commenced prior to the effective date of rules and regulations adopted pursuant to subdivisions (a) and (b) of Section 25402 and this section, if the city, county, or city and county files the basis of its determination that the standards are cost effective with the commission and the commission finds that the standards will require the diminution of energy consumption levels permitted by the rules and regulations adopted pursuant to those sections, except that cities, counties, or cities and counties may implement building standards requiring the use of solar water heating or photovoltaic systems without demonstrating cost effectiveness to the commission. If, after two~~

(2) (A) The enforcement of city, county, or city and county energy conservation or energy insulation standards, whenever adopted, with regard to residential and nonresidential buildings on which actual site preparation and construction have not commenced prior to the effective date of rules and regulations adopted pursuant to subdivisions (a) and (b) of Section 25402 and this section, if all of the following conditions occur:

(1) The city, county, or city and county files with the commission the basis of its determination that the standards are cost-effective. Cost-effectiveness takes into consideration air quality benefits, energy supply diversity benefits, peak load reduction benefits, gas and electric system reliability benefits, and the benefit of reduced reliance on energy imported from other states or countries.

(2) The commission finds that the standards will require the diminution of energy consumption levels permitted by the rules and regulations adopted pursuant to those sections.

(B) Notwithstanding subparagraph (A), cities, counties, or cities and counties may implement building standards requiring the use of solar water heating or photovoltaic systems in new residential construction projects 200 units or more in size.

(C) If, after two or more years after the filing with the commission of the determination that any ~~non~~solar standards are cost effective, there has been a substantial change in the factual circumstances affecting the determination, upon application by any interested party, the city, county, or city and county shall update and file a new basis of its determination that the standards are cost effective. The determination that the standards are cost effective shall be adopted by the governing body of the city, county, or city and county at a public meeting. If, at the meeting on the matter, the governing body determines that the standards are no longer cost effective, the standards shall, as of that date, be unenforceable and no building permit or other entitlement shall be denied based on the noncompliance with the standards.

(h) The commission may exempt from the requirements of this section and of any regulations adopted pursuant thereto any proposed building for which compliance would be impossible without substantial delays and increases in cost of construction, if the commission finds that substantial funds have been expended in good faith on planning, designing, architecture or engineering prior to the date of adoption of the regulations.

(i) If a dispute arises between an applicant for a building permit, or the state pursuant to paragraph (5) of subdivision (f), and the building department regarding interpretation of Section 25402 or the regulations adopted pursuant thereto, either party may submit the dispute to the commission for resolution. The commission's determination of the matter shall be binding on the parties.

(j) Nothing in Section 25130, 25131, or 25402, or in this section prevents enforcement of any regulation adopted pursuant to this chapter, or Chapter 11.5 (commencing with Section 19878) of Part 3 of Division 13 of the Health and Safety Code, as they existed prior to September 16, 1977.

~~SEC. 2.—~~

SEC. 3. Section 25619 of the Public Resources Code is amended to read:

25619. (a) The commission shall develop a grant program to offset a portion of the cost of eligible solar energy systems. The goals of the program are all of the following:

(1) To make solar energy systems cost competitive with alternate forms of energy.

(2) To provide support for electricity storage capabilities in solar electric applications to facilitate enhanced reliability in the event of a power outage.

(3) To encourage the purchase by California residents of California-made solar systems.

(b) (1) The grant for an eligible solar energy system shall be based on either the performance of, or the type of, the solar energy system, as the commission determines, and the amount of the grant shall not exceed seven hundred fifty dollars (\$750). Except as provided in paragraph (2), if a grant is awarded pursuant to this section for an eligible solar energy system that produces electricity, no grant shall be made for that system from any other grant program administered by the commission.

(2) An applicant who receives a grant for a photovoltaic solar energy system from another program administered by the commission, may also receive a grant for that system pursuant to this section, if all of the following conditions are met:

(A) The system will accomplish the purpose specified in paragraph (3) of subdivision (a).

(B) The system is an eligible solar energy system.

(C) The system includes adequate battery storage, as determined by the commission.

(c) Purchasers, sellers, owner-builders, or owner-developers of the solar energy system may apply for a grant under this section. An owner-builder or owner-developer of a new single-family dwelling on which a system is installed may elect not to apply for a grant on a solar energy system installed on a new single-family dwelling. If an owner-builder or owner-developer of a new single-family dwelling on which a system is installed elects not to apply for the grant for a solar energy system, the purchaser of the dwelling may apply for the grant. The seller, owner-builder, or owner-developer shall reflect the amount of the grant received on the purchaser's bill of sale.

(d) The commission shall develop and adopt guidelines to provide appropriate consumer protection under the grant program

1 and to govern other aspects of the grant program. The guidelines
2 shall be adopted at a publicly noticed meeting and all interested
3 parties shall be provided an opportunity to comment either orally
4 or in writing. Not less than 30 days notice shall be provided for the
5 public meeting. Subsequent substantive changes to adopted
6 guidelines shall be adopted by the commission at a public meeting
7 upon written notice to the public of not less than 10 days. The
8 guidelines adopted pursuant to this subdivision are not subject to
9 the requirements of Chapter 3.5 (commencing with Section
10 11340) of Division 3 of Title 2 of the Government Code.

11 (e) The commission shall require installers of solar energy
12 systems funded through grants under this section to be properly
13 licensed to do so by the Contractors' State License Board. This
14 requirement does not apply to the owner of a single-family
15 dwelling who installs a solar energy system on his or her
16 single-family dwelling.

17 (f) The award of a grant pursuant to this section is subject to
18 appeal to the commission upon a showing that factors other than
19 those described in the guidelines adopted by the commission were
20 applied in making the award. Any action taken by an applicant to
21 apply for, or become or remain eligible to receive an award,
22 including satisfying conditions specified by the commission, does
23 not constitute the rendering of goods, services, or a direct benefit
24 to the commission. Awards made pursuant to this section are not
25 subject to any repayment requirements of Chapter 7.4
26 (commencing with Section 25645).

27 (g) For the purposes of this section, the following terms have
28 the following meanings:

29 (1) "Cost" includes equipment, installation charges, and all
30 components necessary to carry out the intended use of the system
31 if those components are an integral part of the system. In the case
32 of a system that is leased, "cost" means the principal recovery
33 portion of all lease payments scheduled to be made during the full
34 term of the lease, which is the cost incurred by the taxpayer in
35 acquiring the solar energy system, excluding interest charges and
36 maintenance expenses.

37 (2) (A) "Eligible solar energy system" means any new,
38 previously unused solar energy device whose primary purpose is
39 to provide for the collection, conversion, transfer, distribution,
40 storage, or control of solar energy for water heating or electricity



1 generation, and that meets applicable standards and requirements
 2 imposed by state and local permitting authorities, including, but
 3 not limited to, the National Electric Code. Eligible solar energy
 4 systems for water heating purposes shall be certified by the Solar
 5 Rating and Certification Corporation (SRCC) or any other
 6 nationally recognized certification agency that certifies complete
 7 systems. Major components of eligible solar energy systems for
 8 electricity generation shall be listed by a certified testing agency,
 9 such as the Underwriters Laboratory. *In the absence of*
 10 *certification, major components of eligible solar energy systems*
 11 *for electricity generation shall comply with specifications adopted*
 12 *by the commission.*

13 (B) “Eligible solar energy system” does not include any of the
 14 following:

15 (i) Wind energy devices that produce electricity or provide
 16 mechanical work.

17 (ii) Additions to or augmentation of existing solar energy
 18 systems.

19 (iii) A device that produces electricity for a structure unless the
 20 device is interconnected and operates in parallel with the electric
 21 grid.

22 (C) Eligible solar energy systems shall have a warranty of not
 23 less than three years.

24 (3) “Installed” means placed in a functionally operative state.

25 (h) This section shall remain in effect only until January 1,
 26 2006, and as of that date is repealed, unless a later enacted statute,
 27 that is enacted before January 1, 2006, deletes or extends that date.

28 *SEC. 4. Section 9618 is added to the Unemployment*
 29 *Insurance Code, to read:*

30 *9618. (a) The department shall administer a solar training*
 31 *and oversight program. The department shall solicit program*
 32 *design input from representatives in the solar energy industry and*
 33 *other affected stakeholder groups.*

34 *(b) The department shall develop appropriate educational,*
 35 *training, and testing materials and curriculum, to ensure that solar*
 36 *energy product and service providers in California possess*
 37 *adequate skills and training. The department shall provide*
 38 *manufacturers or other solar energy equipment providers who*
 39 *furnish in-house training and certification programs the*
 40 *opportunity to integrate their programs with state sponsored*

1 *programs. The department shall provide training and*
2 *accreditation for new educators and trainers in the solar energy*
3 *discipline to adequately train new entrants into the solar energy*
4 *field.*

5 *(c) The department shall develop an administrative procedure*
6 *to support the certification of designers and installers of solar*
7 *energy products installed in California, including provisions for*
8 *examination, grading of examinations, and ongoing certification*
9 *update and tracking.*

10 *(d) Elements of the training program shall include, but need not*
11 *be limited to, all of the following:*

12 *(1) The science of photovoltaics and small scale solar thermal*
13 *technologies.*

14 *(2) The design of solar systems.*

15 *(3) The installation of solar systems.*

16 *(4) Permitting of solar systems.*

17 *(5) Safety.*

18 *(6) System and component certification.*

19 *(7) State and federal incentive programs.*

20 *SEC. 5. Notwithstanding Section 17610 of the Government*
21 *Code, if the Commission on State Mandates determines that this*
22 *act contains costs mandated by the state, reimbursement to local*
23 *agencies and school districts for those costs shall be made pursuant*
24 *to Part 7 (commencing with Section 17500) of Division 4 of Title*
25 *2 of the Government Code. If the statewide cost of the claim for*
26 *reimbursement does not exceed one million dollars (\$1,000,000),*
27 *reimbursement shall be made from the State Mandates Claims*
28 *Fund.*

