

AMENDED IN ASSEMBLY APRIL 15, 2009

CALIFORNIA LEGISLATURE—2009—10 REGULAR SESSION

**ASSEMBLY BILL**

**No. 380**

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**Introduced by Assembly Member De La Torre**

February 23, 2009

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An act to add Chapter 5 (commencing with Section 3100) to Division 3 of the Labor Code, ~~and to add Section 326 to the Public Utilities Code,~~ relating to energy.

LEGISLATIVE COUNSEL'S DIGEST

AB 380, as amended, De La Torre. California Clean Energy Curriculum and Training Initiative of 2009.

Under existing law, the Public Utilities Commission (PUC) has regulatory authority over public utilities, including electrical corporations. A decision of the PUC adopted the California Solar Initiative, an electrical corporation program to provide incentives for solar energy systems funded through rates paid by the electrical corporation ratepayers. ~~Existing law requires the PUC to undertake certain steps in implementing the California Solar Initiative and prohibits the PUC from allocating more than \$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.~~ Existing law requires local publicly owned electric utilities to initiate a public proceeding to fund a solar energy program to support the goal of installing 3,000 megawatts of photovoltaic solar energy in the state.

Existing law establishes the Labor and Workforce Development Agency, which is responsible for coordinating labor and employment

policy, services, and programs for workers and businesses through its various component agencies.

This bill would require the Secretary of Labor and Workforce Development, in collaboration with the major stakeholders, including appropriate state agencies, building trades unions, education, and the clean energy industry, to create by July 1, 2010, the California Clean Energy Curriculum and Training Initiative of 2009 to establish standardized curriculum for use at schools and provide outreach, assistance, and guidance to schools on creating clean energy training programs. The initiative would be implemented when the Legislature makes an appropriation of moneys for that purpose.

This bill also would establish the California Clean Energy Curriculum and Training Initiative Subaccount within the Labor and Workforce Development Fund within the State Treasury. The bill would require that, upon the appropriation of moneys, ~~not to exceed \$1,000,000,~~ by the Legislature to implement the initiative, the PUC order electrical corporations that have collected moneys for research, development, and demonstration for allocation by the PUC pursuant to a specified provision, to transfer an amount of those moneys, equivalent to the amount of the appropriation, to the subaccount for purposes of the initiative. By requiring moneys collected by electrical corporations to be transferred to the subaccount, a bill making such an appropriation also would impose a state tax.

~~The bill also would require the PUC to collaborate with all industry stakeholders and to perform other duties related to the California Solar Initiative program. Under the program, the PUC would not be permitted to assess or establish any new fees, surcharges, rates, or any other charges on ratepayers.~~

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

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

- 1 SECTION 1. The Legislature finds and declares all of the
- 2 following:
- 3 (a) It is the goal of the state to reduce global warming pollution
- 4 to 1990 levels by 2020, in part through clean energy technologies.
- 5 (b) It is also the goal of the state to install solar energy systems
- 6 with a generation capacity equivalent of 3,000 megawatts, to
- 7 establish a self-sufficient solar industry in which solar energy

1 systems are a viable mainstream option for both homes and  
2 businesses in 10 years, and to place solar energy systems on 50  
3 percent of new homes in 13 years.

4 (c) It is also the goal of the state to increase energy efficiency  
5 and other clean renewable energy resources such as solar hot water  
6 technologies, wind turbine, and zero-energy buildings.

7 (d) To establish this goal, the state will need a well-trained  
8 workforce, including licensed contractors, journeymen electricians,  
9 preapprentices, apprentices, and inspectors.

10 (e) Clean energy industries can bring long-term economical  
11 vitality and development to California's cities and rural areas.

12 (f) It is the goal of the state to make training programs at  
13 technical and vocational schools, skills centers, high schools, and  
14 community colleges, among others, accessible and available to all  
15 Californians, including those most in need, such as Californians  
16 living in economically depressed urban and rural areas. In addition,  
17 it is the goal of the state to expand apprenticeship programs,  
18 preapprenticeship programs, and vocational programs serving the  
19 clean energy industry.

20 SEC. 2. Chapter 5 (commencing with Section 3100) is added  
21 to Division 3 of the Labor Code, to read:

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23 CHAPTER 5. CALIFORNIA CLEAN ENERGY CURRICULUM AND  
24 TRAINING INITIATIVE OF 2009  
25

26 3100. This chapter shall be known, and may be cited, as the  
27 California Clean Energy Curriculum and Training Initiative of  
28 2009.

29 3101. (a) For purposes of this section, the following definitions  
30 apply:

31 (1) "Clean energy" means equipment, processes, and  
32 technologies that increase resource efficiency and reduce pollution,  
33 including the following:

34 (A) Energy audits that include a determination of energy savings.

35 (B) Retrofitting and weatherization activities that increase  
36 energy efficiency and conservation.

37 (C) Energy-efficient buildings.

38 (D) Retrofitting and installing energy-efficient household  
39 appliances, windows, doors, insulation, and lighting.

1 (E) Retrofitting and installing energy conservation technologies  
2 in existing homes, industrial buildings, commercial and public  
3 buildings, and farms, forest lands, and ranches to improve  
4 efficiency, including the use of energy management technologies  
5 and control systems.

6 (F) The manufacture, sale, assembly, installation, construction,  
7 and maintenance of energy-efficient technologies and renewable  
8 energy facilities or the component parts of renewable energy  
9 technologies.

10 (G) Projects related to energy-efficient technologies or practices  
11 and renewable energy production or the component parts of  
12 renewable energy plants and energy distribution, including energy  
13 storage and energy infrastructure (including transmission), and  
14 transportation (including logistics).

15 (2) (A) “Curriculum” means complete courses of study that  
16 cover those components necessary to effectively and safely install,  
17 inspect, or repair clean energy systems, and teach others how to  
18 do so and includes, but need not be limited to, all of the following:

- 19 (i) Safety.
- 20 (ii) Terminology.
- 21 (iii) Codes and guidelines.
- 22 (iv) Mathematics.
- 23 (v) Site evaluation
- 24 (vi) Cost estimating.
- 25 (vii) Product knowledge.
- 26 (viii) Structural considerations.
- 27 (ix) Handling and mounting techniques.
- 28 (x) Permitting.
- 29 (xi) State rebates and guidelines.
- 30 (xii) System analysis.
- 31 (xiii) Troubleshooting and repair.
- 32 (xiv) Introduction to Workers’ Rights.

33 (B) In addition, state-approved apprenticeship programs and  
34 other training programs may teach the following:

- 35 (i) Introduction to Photovoltaic Systems, including  
36 photovoltaics, PV Applications, the PV Industry, and Solar Energy  
37 Technologies.
- 38 (ii) Solar Radiation, including array orientation, and Solar  
39 Radiation Data Sets.

- 1 (iii) Site Surveys and Preplanning, including preliminary
- 2 assessment, preparing proposals, and installation planning.
- 3 (iv) System components and configurations.
- 4 (v) Cells, Modules, and Arrays, including photovoltaic cells,
- 5 current-voltage-(IV) Curve, and device response.
- 6 (vi) Batteries and Battery Systems.
- 7 (vii) Charge Controllers, including features, types, setpoints,
- 8 and applications.
- 9 (viii) Inverters AC Power, power conditioning unit, inverter
- 10 features and specifications.
- 11 (ix) System sizing methodologies and calculations.
- 12 (x) Mechanical Integration and mounting configurations.
- 13 (xi) Electrical Integration, including conductors and wiring
- 14 methods, overcurrent protection, disconnects, grounding, and
- 15 battery systems.
- 16 (xii) Utility Interconnection, including interactive distributed
- 17 generation.
- 18 (xiii) Permitting and Inspection, including the National Electrical
- 19 Code published by the National Fire Protection Association and
- 20 other relevant building codes.
- 21 (xiv) Commissioning, Maintenance, and Troubleshooting.
- 22 (xv) Economic analysis, including estimating, incentives,
- 23 rebates, and cost analysis.
- 24 (3) For the purposes of paragraph (2), “inspect” means a
- 25 standard course of study that covers all aspects of inspecting a
- 26 clean energy system by both visual and electronic meter testing
- 27 and includes all of the following:
- 28 (A) Code compliance.
- 29 (B) Structural components.
- 30 (C) Electrical connections and devices.
- 31 (D) Grounding.
- 32 (E) Performance standards.
- 33 (F) Workmanship.
- 34 (G) Safety.
- 35 (4) For the purposes of paragraph (2), “install” means a standard
- 36 course of study that covers the training, skills, licensing and
- 37 certification requirements, and competencies required to safely
- 38 install clean energy systems that comply with safety, structural,
- 39 and electrical codes, state and local codes, and public utility
- 40 requirements.

1 (5) “Schools” means state-approved apprenticeship programs,  
2 training programs, technical and vocational schools, community  
3 colleges and universities, high schools, and other public and private  
4 educational institutions operating in the state that have been  
5 approved by the Division of Apprenticeship Standards or registered  
6 with the Bureau of Private Postsecondary and Vocational  
7 Education.

8 (6) “Solar energy system” means a solar energy device that has  
9 the primary purpose of providing for the collection and distribution  
10 of solar energy for the generation of electricity, that produces at  
11 least one kilowatt, and not more than five megawatts, alternating  
12 current rated peak electricity, and that meets or exceeds the  
13 eligibility criteria established pursuant to Section 25782 of the  
14 Public Resources Code.

15 (7) “Solar water heating system” means a solar energy device  
16 that has the primary purpose of reducing demand for natural gas  
17 or electricity through water heating, space heating, or other  
18 methods of capturing energy from the sun to reduce energy  
19 consumption in a building.

20 (b) The Secretary of Labor and Workforce Development, in  
21 collaboration with the major stakeholders, including appropriate  
22 state agencies, building trades unions, education, and the clean  
23 energy industry, shall, by July 1, 2010, create the California Clean  
24 Energy Training Initiative of 2009 to do all of the following:

25 (1) Establish standardized curriculum for use at schools.  
26 (2) Provide outreach, assistance, and guidance to schools on  
27 creating clean energy training programs.

28 (c) In developing the curriculum, the Secretary of Labor and  
29 Workforce Development shall do all of the following:

30 (1) Direct the Division of Apprenticeship Standards to establish  
31 and convene the Electrical Industry Training Committee to develop  
32 a model solar curriculum to be included in the California Clean  
33 Energy Curriculum.

34 (2) Develop a program utilizing the Division of Apprenticeship  
35 Standards, Employment Training Panel, and the Workforce  
36 Investment Board to provide outreach, assistance, and guidance  
37 to schools on creating clean energy training programs.

38 (3) Ensure full participation of all stakeholders, including, but  
39 not limited to, federal, state, and local government agencies,  
40 including the State Department of Education; labor organizations,

1 including teachers, building trades, and electricians; joint  
2 labor-management training programs; workforce investment  
3 boards; utilities; public or private employers; industry, including  
4 the solar and other renewable energy technology industries;  
5 educational institutions; small businesses; cooperatives; qualified  
6 service and conservation corps; and nonprofit and  
7 community-based organizations when creating both the solar and  
8 all other components of the curriculum outlined in paragraph (1).

9 (4) Ensure full participation from private industry, including  
10 encouraging the commitment of funds by the private industry for  
11 training programs intended to meet the state's workforce needs  
12 within the clean energy markets.

13 (5) Collaborate with all stakeholders described in paragraph (3)  
14 to disseminate information on successful innovations for labor  
15 market services and worker training with respect to clean energy  
16 technologies.

17 (6) Encourage training programs that demonstrate all of the  
18 following:

19 (A) Experience in implementing and operating worker skills  
20 training and education.

21 (B) The ability to identify and target populations of individuals  
22 who would benefit from training and be actively involved in  
23 activities related to solar energy, renewable energy industries, and  
24 energy efficiency.

25 (C) The ability to help individuals achieve economic  
26 self-sufficiency.

27 (7) Ensure that the California Clean Energy Curriculum and  
28 Training Initiative of 2009 is accessible, available, and affordable  
29 to all Californians and that it especially serves economically  
30 depressed urban and rural communities, including all of the  
31 following:

32 (A) Workers impacted by national energy and environmental  
33 policy.

34 (B) Individuals in need of updated training related to the energy  
35 efficiency and renewable energy industries.

36 (C) Veterans or past and present members of reserve components  
37 of the Armed Forces.

38 (D) Unemployed individuals.

39 (E) Individuals, including at-risk youth, seeking employment  
40 pathways out of poverty and into economic self-sufficiency.

1 3102. (a) There is hereby created the California Clean Energy  
 2 Curriculum and Training Initiative Subaccount within the Labor  
 3 and Workforce Development Fund within the State Treasury.

4 (b) Implementation of the California Clean Energy Curriculum  
 5 and Training Initiative shall be subject to appropriation of moneys,  
 6 ~~not to exceed one million dollars (\$1,000,000)~~, moneys by the  
 7 Legislature.

8 (c) Following an appropriation of moneys by the Legislature  
 9 pursuant to subdivision (b), the Public Utilities Commission (PUC)  
 10 shall order electrical corporations that have collected moneys for  
 11 research, development, and demonstration for allocation by the  
 12 PUC pursuant to paragraph (1) of subdivision (c) of Section 2851  
 13 of the Public Utilities Code to transfer an amount of those moneys  
 14 equivalent to the amount of the appropriation to the California  
 15 Clean Energy Curriculum and Training Initiative Subaccount. *Of*  
 16 *the amount appropriated, not more than one million dollars*  
 17 *(\$1,000,000) shall be expended for the establishment of a*  
 18 *standardized curriculum for use at the schools, pursuant to*  
 19 *subdivision (c) of Section 3101.*

20 (d) The moneys transferred pursuant to subdivision (c) shall be  
 21 available to the Labor and Workforce Development Agency for  
 22 purposes of this chapter.

23 ~~SEC. 3. Section 326 is added to the Public Utilities Code, to~~  
 24 ~~read:~~

25 ~~326. (a) In order to further the objectives of the California~~  
 26 ~~Solar Initiative and in accordance with the California Clean Energy~~  
 27 ~~Curriculum and Training Initiative of 2009, the Public Utilities~~  
 28 ~~Commission (PUC) shall do all of the following:~~

29 ~~(1) Collaborate with all industry stakeholders to disseminate~~  
 30 ~~information on successful innovations for labor market services~~  
 31 ~~and worker training with respect to clean energy technologies.~~

32 ~~(2) Facilitate the connection of clean industry stakeholders with~~  
 33 ~~training programs recognized by the Labor and Workforce~~  
 34 ~~Development Agency as defined in Chapter 5 (commencing with~~  
 35 ~~Section 3100) of Division 3 of the Labor Code.~~

36 ~~(3) Provide technical support and information relative to clean~~  
 37 ~~energy technologies to the Electrical Industry Training Committee.~~

38 ~~(4) Identify revenues allocated to the California Solar Initiative~~  
 39 ~~program that could be made available to fund training programs.~~

1 ~~The PUC shall allocate funds appropriated for this purpose as~~  
2 ~~follows:~~

3 ~~(A) The Workforce Investment Board for the creation of a~~  
4 ~~preapprenticeship program targeting the clean energy industry as~~  
5 ~~defined in this act.~~

6 ~~(B) The Division of Apprenticeship Standards to provide~~  
7 ~~supplemental funding for apprenticeship programs serving the~~  
8 ~~clean energy industry.~~

9 ~~(C) The Employment Training Panel for distribution to business~~  
10 ~~in the clean energy industry.~~

11 ~~(b) In adopting and implementing this section, the PUC shall~~  
12 ~~not assess or establish any new fees, surcharges, rates, or any other~~  
13 ~~charges on ratepayers.~~