

**M e m o r a n d u m**

**Date:** May 21, 2008

**To:** The Commission  
(Meeting of May 29, 2008)

**From:** Pamela Loomis, Deputy Director  
Office of Governmental Affairs (OGA) — Sacramento

**Subject:** **AB 2224 (De la Torre) – California Clean Energy Curriculum and Training Initiative of 2008**  
**As amended: May 15, 2008**

**LEGISLATIVE SUBCOMMITTEE RECOMMENDATION: OPPOSE UNLESS AMENDED**

**SUMMARY OF BILL:**

This bill would establish the California Clean Energy Curriculum and Training Initiative of 2008, which would require the Labor and Workforce Development Agency to develop a standardized training curriculum to help build a skilled workforce in the clean energy sector. The California Public Utilities Commission (CPUC) would be required to fund the California Clean Energy Curriculum and Training Initiative using moneys from the Research, Development and Demonstration (RD&D) budget of the California Solar Initiative (CSI).

The CPUC would also be required to collaborate with industry stakeholders to provide information for the training initiative, provide technical assistance in the development and implementation of the training initiative, and connect industry stakeholders with training programs recognized by the Labor and Workforce Development Agency.

**SUMMARY OF SUPPORTING ARGUMENTS FOR RECOMMENDATION:**

- The CPUC has already launched the RD&D program and is in the process of selecting a Program Manager to begin the process of grant dissemination. This bill would potentially disrupt the program that has already been launched by the CPUC. If passed, the bill would require the CPUC to revisit the program and potentially require modifications to RD&D contracts.

## **SUMMARY OF SUGGESTED AMENDMENTS:**

Use another source of state workforce development funds to fund the California Clean Energy Curriculum and Training Initiative.

### **DIVISION ANALYSIS (Energy Division):**

- Public Utilities Code 2851 requires \$50 million of CSI funds to be allocated “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”<sup>1</sup>. Pursuant to this statute, the RD&D Program was established by D.07-09-042 in 2007.
- Per D.07-09-042, 70-85 percent of RD&D funding will be allocated to projects that support research, development and demonstration solar technologies<sup>2</sup>. AB 2224 would divert funds that would be used to support these projects, and, therefore, undermine the goals of the RD&D program.
- D.07-09-042 states that funding will be allocated through a competitive bid process, and implementation of the RD&D program is currently underway. The CPUC is in the process of selecting a Program Manager for grant dissemination. AB 2224 would require the CPUC to modify D.07-09-042, and possibly require the modification of existing RD&D grant contracts.
- AB 2224 also requires the CPUC “identify revenues allocated to the California Solar Initiative program that could be made available to fund the program”. Currently, the entire CSI budget is allocated to programs that are underway or in development. To allocate CSI funding to the California Clean Energy Curriculum and Training Initiative would mean taking funding away from existing programs and may compromise these programs’ effectiveness and the goals of the CSI.
- The issue of funding such an initiative could be addressed without legislation. AB 2224 appears to be aimed at similar goals as forth in the RD&D principles that were adopted by the Commission in D.07-09-042 and establish the principles for funding under the grant program. These goals include overcoming significant barriers to adoption of solar and promoting integration of solar technology into the grid by addressing the shortage of skilled labor in the clean energy sector. The California Clean Energy Curriculum and Training Initiative, or any party in support of the goals of such an initiative, could therefore bid for a RD&D grant to achieve these objectives. In other words, solar training and workforce would

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<sup>1</sup> PU Code 2851 (C)(c)(1).

<sup>2</sup> D.07-09-042, p.3.

likely be considered for grants in the existing RD&D program, as already specified by Commission decision.

**PROGRAM BACKGROUND:**

- The CSI has total budget of \$2.167 billion. Of that, \$1.897 million is allocated to the General Market Program (including direct incentives for PV and non-PV technologies), \$217 is allocated to programs for Low-Income residences, \$2.6 million is allocated to a solar hot water pilot program, and \$50 million is allocated to the RD&D program.
- Per D 07-09-042, the RD&D Program budget allocates 25 to 30 percent of the budget to Research and Development of solar technologies, 45 to 55 percent of the budget to Demonstration (i.e., activities that bring the technologies closer to market), and 5 to 10 percent to Deployment (i.e., activities that promote widespread commercialization of solar technologies).

**LEGISLATIVE HISTORY:**

None.

**FISCAL IMPACT:**

None.

**STATUS:**

AB 2224 is awaiting hearing in the Assembly Appropriations Committee.

**SUPPORT/OPPOSITION:**

Support: Environmental California Latino Issues Forum

Opposition: California Manufacturers Technology Association  
State Association of Electrical Workers

**STAFF CONTACTS:**

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**Date:** May 21, 2008

**BILL LANGUAGE:**

BILL NUMBER: AB 2224 AMENDED  
BILL TEXT

AMENDED IN ASSEMBLY MAY 15, 2008  
AMENDED IN ASSEMBLY MAY 8, 2008  
AMENDED IN ASSEMBLY APRIL 14, 2008  
AMENDED IN ASSEMBLY APRIL 1, 2008

INTRODUCED BY Assembly Member De La Torre

FEBRUARY 20, 2008

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 2224, as amended, De La Torre. California Clean Energy Curriculum and Training Initiative of 2008.

(1) 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 Labor and Workforce Development Agency ~~—, by July 1, 2009,—~~ to create the California Clean Energy Curriculum and Training Initiative of 2008 to establish standardized curriculum for use at schools and provide outreach, assistance, and guidance to schools on creating clean energy training programs, as provided. *The initiative would be implemented when the Legislature makes an appropriation of moneys for that purpose.*

(2) Existing law authorizes the Department of Finance, with the concurrence of the Controller, to administratively create funds necessary to properly manage and account for the financial activities and resources of the state. The Labor and Workforce Development Fund was created by the Department of Finance for purposes of receiving

the proceeds of specific penalties related to violations of labor laws.

This bill 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 by the Legislature to implement the initiative, the PUC ~~to~~ order electrical corporations that have collected moneys for research, development, and demonstration ~~that would be available~~ 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 ~~. The moneys transferred to the subaccount would be available to the Labor and Workforce Development Agency for purposes of the initiative upon appropriation by the Legislature.~~*

By requiring moneys collected by electrical corporations to be transferred to the State Treasury, the bill would impose a tax, resulting in a change in state taxes for the purpose of increasing state revenues within the meaning of Section 3 of Article XIII A of the California Constitution, and thus would require for passage the approval of 2/3 of the membership of each house of the Legislature.

The bill also would require the Public Utilities Commission to collaborate with all industry stakeholders to disseminate information on successful innovations for labor market services and worker training with respect to clean energy technologies, facilitate the connection of clean industry stakeholders with training programs recognized by the Labor and Workforce Development Agency, provide technical support and information relative to clean energy, and identify revenues allocated to the California Solar Initiative program that could be made available to fund the program. Under the program, the commission would not be permitted to assess or establish any new fees, surcharges, rates, or any other charges on ratepayers.

Vote: 2/3. Appropriation: no. Fiscal committee: yes.  
State-mandated local program: no.

THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLLOWS:

SECTION 1. The Legislature finds and declares all of the following:

(a) It is the goal of the state to reduce global warming pollution to 1990 levels by 2020, in part through clean energy technologies.

(b) It is also the goal of the state to install solar energy systems with a generation capacity equivalent of 3,000 megawatts, to establish a self-sufficient solar industry in which solar energy systems are a viable mainstream option for both homes and businesses in 10 years, and to place solar energy systems on 50 percent of new homes in 13 years.

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

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

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

(f) It is the goal of the state to expand apprenticeship programs, preapprenticeship programs, and vocational programs serving the clean energy industry.

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

CHAPTER 5. CALIFORNIA CLEAN ENERGY CURRICULUM AND TRAINING INITIATIVE OF 2008

3100. This chapter shall be known, and may be cited, as the California Clean Energy Curriculum and Training Initiative of 2008.

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

(1) "Clean energy" means energy derived through the use of energy efficient technologies, and renewable energy technologies that meet the requirements of the California Renewables Portfolio Standard Program, including, but not limited to, solar energy systems and solar water heating systems.

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

(A) Introduction to Photovoltaic Systems, including photovoltaics, PV Applications, the PV Industry, and Solar Energy Technologies.

(B) Solar Radiation, including array orientation, and Solar Radiation Data Sets.

(C) Site Surveys and Preplanning, including preliminary assessment, preparing proposals, and installation planning.

(D) System components and configurations.

(E) Cells, Modules, and Arrays, including photovoltaic cells, current-voltage-(IV) Curve, and device response.

(F) Batteries and Battery Systems.

(G) Charge Controllers, including features, types, setpoints, and applications.

(H) Inverters AC Power, power conditioning unit, inverter features and specifications.

(I) System sizing methodologies and calculations.

(J) Mechanical Integration and mounting configurations.

(K) Electrical Integration, including conductors and wiring methods, overcurrent protection, disconnects, grounding, and battery systems.

(L) Utility Interconnection, including interactive distributed generation.

(M) Permitting and Inspection, including the National Electrical Code published by the National Fire Protection Association and other relevant building codes.

(N) Commissioning, Maintenance, and Troubleshooting.

(O) Economic analysis, including estimating, incentives, rebates, and cost analysis.

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

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

(5) "Solar water heating system" means a solar energy device that has the primary purpose of reducing demand for natural gas or electricity through water heating, space heating, or other methods of capturing energy from the sun to reduce energy consumption in a building.

(b) In implementing the "California Clean Energy Curriculum and Training Initiative of 2008, the Secretary of Labor and Workforce Development shall ~~—, by July 1, 2009,—~~ do all of the following:

(1) Direct the Division of Apprenticeship Standards to establish and convene the Electrical Industry Training Committee to develop a model Clean Energy Curriculum.

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

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

(b) ~~The~~ *Implementation of the California Clean Energy Curriculum and Training Initiative shall be subject to an appropriation of moneys by the Legislature.*

(c) *Following an appropriation of moneys by the Legislature pursuant to subdivision (b), the Public Utilities Commission shall order electrical corporations that have collected moneys for research, development, and demonstration ~~that would be available~~ for allocation by the ~~Public Utilities Commission~~ *commission pursuant to paragraph (1) of subdivision (c) of Section 2851 of the Public Utilities Code to transfer an amount of those moneys equivalent to the amount of the appropriation to the California Clean Energy Curriculum and Training Initiative Subaccount.**

~~—(c)~~

(d) The moneys transferred pursuant to subdivision ~~(b)~~ (c) shall be available to the Labor and Workforce Development Agency for purposes of this chapter ~~upon appropriation by the Legislature~~ .

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

326. (a) In order to further the objectives of the California Solar Initiative and in accordance with the California Clean Energy Curriculum and Training Initiative of 2008, the Public Utilities Commission shall do all of the following:

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

(2) Facilitate the connection of clean industry stakeholders with training programs recognized by the Labor and Workforce Development Agency as defined in Chapter 5 (commencing with Section 3100) of

Division 3 of the Labor Code.

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

(4) Identify revenues allocated to the California Solar Initiative program that could be made available to fund ~~the California Clean Energy Curriculum and Training Program~~ *training programs* . The commission shall allocate funds appropriated for this purpose ~~in equal proportions~~ as follows:

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

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

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

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

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