

**State of California**  
California Energy Commission  
Minutes of the August 27, 2014 Energy Commission Business Meeting

The Meeting was called to order by Chair Robert B. Weisenmiller. The Pledge of Allegiance was led by Chair Weisenmiller.

Present:

Robert B. Weisenmiller, Chair  
Karen Douglas, Commissioner

David Hochschild, Commissioner  
Janea A. Scott, Commissioner

J. Andrew McAllister, Commissioner

1. CONSENT CALENDAR. (Items on the Consent Calendar will be taken up and voted on as a group. A commissioner may request that an item be moved and discussed later in the meeting.)
  - a. CITY OF LOS ANGELES. Proposed resolution approving the City of Los Angeles's locally adopted building energy standards to require greater energy efficiency than the 2013 Building Energy Efficiency Standards.  
Contact: Joe Loyer.
  - b. NATIONAL ASSOCIATION OF STATE ENERGY OFFICIALS (NASEO). Proposed resolution approving Agreement 160-14-001 with National Association of State Energy Officials (NASEO) for an \$11,178 contract to formalize the Energy Commission's membership in NASEO. This one-year membership allows staff to connect with key policy and decision makers, officials from other state and territorial energy offices, and affiliates from the private and public sectors. The membership also provides a forum for exchanging information, ideas and resources, and to learn about new funding and partnership opportunities. (ERPA funding) Contact: Mary Cole.

*Chair Weisenmiller announced that Item 1a is moved to discussion. Commissioner McAllister moved and Commissioner Hochschild seconded approval of Item 1a. The vote was unanimous. (5-0)*

*Commissioner McAllister recused himself and was absent during the vote on Item 1b. Commissioner Douglas moved and Commissioner Scott seconded approval of the item. The vote was unanimous. (4-0)*

2. ENERGY COMMISSION COMMITTEE APPOINTMENTS. Possible approval of appointments to the Energy Commission's Standing Committees and Siting Case Committees. Contact: Kevin Barker. (Staff presentation: 5 minutes)

*No action was taken on Item 2.*

3. 2013 PUBLIC DOMAIN CALIFORNIA BUILDING ENERGY CODE COMPLIANCE SOFTWARE-RESIDENTIAL, CBECC-RES, VERSION 3. Proposed resolution approving the 2013 Public Domain California Building Energy Code Compliance Residential software, CBECC-Res, version 3 that may be used to demonstrate performance compliance with the residential provisions of the 2013 Building Energy Efficiency Standards (also known as the Energy Code). Among other improvements, Version 3 is a major change to the Compliance Manager and incorporates increased processing speed, programming for additional HVAC systems and features, and

corrections to compliance reports. The resolution also decertifies prior versions of the software and authorizes the Executive Director to approve updates and rescind approval of previous versions of CBECC-Res and previously-approved Alternative Calculation Methods to incorporate further improvements to CBECC-Res. (Public Resources Code, section 25402.1 (a).) Contact: Martha Brook. (Staff presentation: 5 minutes)

*Commissioner McAllister moved and Commissioner Douglas seconded approval of Item 3. The vote was unanimous. (5—0)*

4. 2013 PUBLIC DOMAIN CALIFORNIA BUILDING ENERGY CODE COMPLIANCE SOFTWARE-NONRESIDENTIAL, CBECC-COM, VERSION 3. Proposed resolution approving the 2013 Public Domain California Building Energy Code Compliance Nonresidential software, CBECC-Com, version 3 that may be used to demonstrate performance compliance with the nonresidential provisions of the 2013 Building Energy Efficiency Standards. Among other improvements, Version 3 incorporates programming for additional HVAC systems and process-related energy features. The resolution also decertifies previous versions of the software and authorizes the Executive Director to approve updates and rescind approval of previous versions of CBECC-Com and previously-approved Alternative Calculation Methods to incorporate the improvements implemented in the most recent Compliance Manager from CBECC-Com. (Public Resources Code, section 25402.1 (a) and (b).) Contact: Martha Brook. (Staff presentation: 5 minutes)

*Commissioner McAllister moved and Commissioner Douglas seconded approval of Item 4. The vote was unanimous. (5-0)*

5. CALIFORNIA ADVANCED LIGHTING CONTROLS TRAINING PROGRAM. Possible approval of California Advanced Lighting Controls Training Program (CALCTP) as an Acceptance Test Technician Certification Provider (ATTCP). This will allow CALCTP to train and certify field technicians and employers on the Building Energy Efficiency Standards lighting control acceptance tests. Contact: Tav Commins. (Staff presentation: 10 minutes)

*Item 5 was removed from the agenda.*

6. NATIONAL LIGHTING CONTRACTORS ASSOCIATION OF AMERICA. Possible approval of the National Lighting Contractors Association of America (NLCAA) as an ATTCP. This will allow NLCAA to train and certify field technicians and employers on the Building Energy Efficiency Standards lighting control acceptance tests. Contact: Tav Commins. (Staff presentation: 10 minutes)

*Item 6 was removed from the agenda.*

7. CITY OF LOS ANGELES. Proposed resolution approving Agreement 001-14-ECD with the City of Los Angeles for a \$3,000,000 loan at one percent interest to retrofit inefficient streetlights with light emitting diodes (LEDs). On completion, the project will save the City approximately 2,238 MWh and \$282,956 annually. In addition, the project will reduce 576 tons of CO<sub>2</sub> equivalent greenhouse gas emissions every year. Based on the loan amount, the simple payback is approximately 10.6 years. (ECAA funding) Contact: Shahid Chaudhry. (Staff presentation: 5 minutes)

*Commissioner McAllister moved and Commissioner Douglas seconded approval of Item 7. The vote was unanimous. (5-0)*

8. HARTNELL COMMUNITY COLLEGE DISTRICT. Proposed resolution approving Agreement 003-14-ECG with Hartnell Community College District for a \$3,000,000 loan at zero percent interest for energy efficiency and renewable energy measures at the Hartnell College main campus. These measures will include boiler upgrades and installing solar photovoltaic panels. The project is estimated to save the college 1,919,095 kWh and 3,671 therms, resulting in annual energy cost savings of \$228,531. Based on the loan amount, the simple payback is approximately 13.1 years. (ECAA-Ed funding) Contact: Christopher Olvera. (Staff presentation: 10 minutes)

*Commissioner McAllister moved and Commissioner Scott seconded approval of Item 8. The vote was unanimous. (5-0)*

9. NEW SOLAR HOMES PARTNERSHIP GUIDEBOOK. Proposed resolution revising the New Solar Homes Partnership Guidebook (NSHP Guidebook). The NSHP Guidebook describes the requirements for participating in NSHP and receiving incentives for installing eligible solar energy systems on new residential construction located in specified investor-owned utility territories. Proposed changes to the NSHP Guidebook revise the program requirements and processes. Contact: Le-Quyen Nguyen. (Staff presentation: 5 minutes)

*Commissioner Hochschild moved and Commissioner McAllister seconded approval of Item 9. The vote was unanimous. (5-0)*

10. IVANPAH SOLAR ELECTRIC GENERATING SYSTEM (07-AFC-5C). Proposed order granting the petition to amend the maximum allowable annual fuel usage limit for the auxiliary and nighttime preservation boilers from 328 to 525 million standard cubic feet of natural gas for each power block to optimize operations and maximize solar output. Contact: Joseph Douglas (Staff presentation: 10 minutes).

*Commissioner Douglas moved and Commissioner Hochschild seconded approval of Item 10. The vote was unanimous. (5-0)*

11. U.S. GEOLOGICAL SURVEY. Proposed resolution approving Agreement 500-14-001 with the U.S. Geological Survey for a \$325,000 contract to measure subsidence associated with the Delta Island levees using a ground-based mobile laser scanning, light detection and ranging technology system. The data gathered in this agreement will assist in safeguarding the natural gas system against risks posed by a failing Delta Island levee infrastructure and aggravated by sea level rise. (PIER natural gas funding) Contact: Susan Wilhelm. (Staff presentation: 5 minutes)

*Commissioner Douglas moved and Commissioner McAllister seconded approval of Item 11. The vote was unanimous. (5-0)*

12. ENERGY COMMISSION APPLICATION TO THE U.S. FISH AND WILDLIFE SERVICE. Proposed resolution directing the Executive Director to submit an application to the U.S. Fish and Wildlife Service (USFWS) for an incidental take permit pursuant to Section 10 of the Federal Endangered Species Act, for implementation of the Desert Renewable Energy Conservation Plan (DRECP). The completed permit application would be included with the public draft of the DRECP and Environmental Impact Statement/Environmental Impact Review (EIS/EIR), which is scheduled to be released for public review and comment by the end of this summer. The proposed action is limited to authorizing the submittal of the application so that it may be published with the DRECP and EIS/EIR, and does not involve any consideration or approval of the DRECP and EIS/EIR at this time. Contact: Scott Flint. (Staff presentation: 10 minutes)

*Commissioner Scott recused herself and was absent during the discussion of Item 12.*

*Commissioner Douglas moved and Commissioner Hochschild seconded approval of the item. The vote was unanimous. (4-0)*

13. ELECTRIC VEHICLE CHARGING INFRASTRUCTURE GRANTS, PON-13-606. This grant solicitation sought proposals to install electric vehicle charging infrastructure along California highway corridors, at destination locations, at workplaces, and at multi-family unit dwellings. (ARFVTP funding) Contact: Brian Fauble. (Staff presentation: 5 minutes)
  - a. CORRIDOR POWER, INC. Proposed resolution approving Agreement ARV-14-019 with Corridor Power, Inc. for a \$499,937 grant to deploy a fast-charging plaza consisting of ten electric vehicle fast chargers in Encinitas, CA.
  - b. COUNTY OF SONOMA. Proposed resolution approving Agreement ARV-14-020 with the County of Sonoma for a \$500,000 grant to renovate ten existing electric vehicle chargers and deploy three new electric vehicle chargers in Sonoma County.

*Commissioner Scott moved and Commissioner Douglas seconded approval of Item 13. The vote was unanimous. (5-0)*

14. FORESIGHT RENEWABLE SOLUTIONS, LLC. Proposed resolution approving Amendment 1 to Grant Agreement PIR-12-004 with Foresight Renewable Solutions, LLC, to expand the project scope to include a flow battery energy storage system in place of compressed air energy storage. This change is necessary due to an unexpected interruption in the compressed air energy storage supply chain. (PIER natural gas funding) Contact: Michael Kane. (Staff presentation: 5 minutes)

*Commissioner Douglas moved and Commissioner Scott seconded approval of Item 14. The vote was unanimous. (5-0)*

15. TRUSTEES OF THE CALIFORNIA STATE UNIVERSITY. Proposed resolution approving the six highest ranking grant applications totaling \$854,016 from the Public Interest Energy Research (PIER) program's Natural Gas Energy Innovations Small Grant Solicitation 14-01. These grants were competitively selected and are capped at \$150,000 each. (PIER natural gas funding) Contact: Raquel Kravitz. (Staff presentation: 10 minutes)
  - a. West Biofuels, LLC., San Rafael, CA, *On-Site Agricultural Biomass Gasification as a Natural Gas Substitute*, Liao, Chang-Hsien, \$150,000. This project will determine the feasibility of using currently under-utilized agricultural biomass residues for conversion to synthetic gas to replace or blend with natural gas for direct, on-site industrial and agricultural use. If successful, this project will benefit California ratepayers by providing a viable alternative to natural gas to help achieve environmental and energy sustainability goals.
  - b. Physical Sciences Inc., Pleasanton, CA, *Natural Gas Leak Detection Sensor for Widely Deployable Networks*, Frish, Michael, \$150,000. Natural gas leaks from pipeline infrastructure are potential safety risks as well as greenhouse gas sources. This project will determine the feasibility of developing miniature methane laser sensors to detect natural gas leaks in pipelines. The goal is to achieve low-cost mass production and low power consumption for widespread deployment of the sensors at gas meters and other key locations within the natural gas pipeline infrastructure. If successful, this project will benefit California ratepayers by decreasing the safety risks associated with natural gas leaks from gas pipelines.

- c. Palios Corporation, Santa Clara, CA, *Apparatus for In-Situ Determination of Gas Pipeline Yield Strength*, Stephanou, Phillip, \$148,087. This project will determine the feasibility of using a novel ultrasonic measurement system to enable quick and cost effective non-destructive determination of the yield strength of undisturbed and in-place steel natural gas transmission pipelines in the field. If successful, this project will benefit California ratepayers by improving public safety and reducing the cost and disruptions to service caused by intrusive measurements or unnecessary repairs.
- d. University of California, Davis, Davis, CA, *Energy-Efficient Clothes Dryers: Self-Calibrating Automatic Cycle Termination Controller*, Pistoichini, Theresa, \$129,614. This project will develop a low-cost, self-calibrating automatic controller to reduce energy use in gas clothes dryers by 20 percent or more, through accurately terminating the drying cycle when the remaining moisture content of the load is two percent or less. If successful, this project will benefit California ratepayers by reducing the cost to operate clothes dryers.
- e. University of California, Davis, Davis, CA, *Enrichment of Microbial Communities for Biogas Production in High-Solids*, Simmons, Christopher, \$126,315. This project will enhance biorenewable methane production by improving anaerobic digestion through development and characterization of a microbial community adapted to high-solids conditions. This project targets seasonal food processing residues, and aims to facilitate the distribution and to accelerate the adoption of anaerobic digestion in the food processing industry. If successful, this project will benefit California ratepayers by increasing renewable biomethane production to offset fossil fuel use.
- f. Solar Stream Innovations, Chino Hills, CA, *Enhancing Winter Solar Water Heating and High Temperature Chiller Operation*, Lee, Jeffrey, \$150,000. This project will determine the feasibility of fabricating a vacuum insulated manifold for retrofitting evacuated tube solar water heating collectors to increase winter water and space heating, and to generate high temperatures for efficient summer chiller operation. If this project is successful, the impact of the proposed project on California ratepayers will be to decrease natural gas peak demand during the winter for heating and during the summer for electricity generation.

*Commissioner McAllister disclosed on behalf of himself and Commissioner Douglas that they each have a relationship with UC Davis that does not involve any agreements under consideration today. Commissioner McAllister then moved and Commissioner Scott seconded approval of Item 15.*

16. **Minutes:** Possible approval of the July 22, 2014, Business Meeting Minutes.

*Commissioner McAllister moved and Commissioner Scott seconded approval of the Minutes. The vote was unanimous. (5-0)*

17. **Lead Commissioner or Presiding Member Reports.** The commissioners reported on their recent activities and site visits.

18. **Chief Counsel's Report:** None.

19. **Executive Director's Report.** Executive Director Rob Oglesby gave the report.

20. **Public Adviser's Report.** Public Adviser Alana Mathews gave the report.

21. **Public Comment:**

Robert Shearer  
Paul Verynani, CHA Corporation  
Jack Yapp, NLCAA  
Tommy Young, Energy Code 2013

Appearances

Mark Berman, Davis Energy Group  
Jeffery D. Harris, Ellison, Schneider & Harris LLP  
Javier Mariscal, Southern California Edison  
George Nesbitt, HERS Rater  
Anna Osborne , Interface Engineering (by telephone)  
Bob Raymer, California Building Industry Association  
Timothy R. Sisk, NRG Energy, Inc.  
Fred Stefany, Lennar  
Osama Younan, City of Los Angeles

There being no further business, the meeting was adjourned.

Respectfully submitted,

HARRIET KALLEMEYN  
Secretary to the Commission