

**State of California**  
California Energy Commission  
Minutes of the March 9, 2016, Energy Commission Business Meeting

The meeting was called to order by Chair Weisenmiller. The Pledge of Allegiance was led by Chair Weisenmiller.

Present:

Robert B. Weisenmiller, Chair  
Karen Douglas, Commissioner

J. Andrew McAllister, Commissioner

David Hochschild, Commissioner  
Janea A. Scott, Commissioner

*The Chair announced that Item 1d will be moved to become Item 14 and Item 2 will be held for the next Business Meeting.*

*The Commission honored Dick Ratliff with a resolution celebrating his career and contributions to the California Energy Commission.*

*Regarding Item 11, Commissioner McAllister disclosed that his former employer Center for Sustainable Energy is a subcontractor and he would recuse himself on that item. Commissioner McAllister disclosed that his wife is a professor at UC Davis King Hall and that UC Davis is a part of Item 13.*

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. PROCTER & GAMBLE COGENERATION PROJECT (93-AFC-2C). Proposed order approving the petition to change the operational control of the Sacramento Cogeneration Authority's Procter & Gamble Cogeneration project, from Carson Energy Group to EthosEnergy Power Plant Services, LLC. Contact: Mary Dyas.
  - b. SUBPOENA FOR PROVISION OF DATA. Proposed resolution approving subpoena directing the California Independent System Operator to provide data needed by Energy Commission staff to evaluate generation and transmission outages, congestion, and load in assessing resource adequacy and system reliability. Contact : Michael Nyberg.
  - c. FRONTIER WIND. Proposed resolution approving Amended Grant Agreement EPC-14-071 with Frontier Wind for a budget reallocation to effectively leverage additional funding from the U.S. Department of Energy and to accommodate changes in corporate structure of the parent company of Frontier Wind. (EPIC funding) Contact: David Stoms.
  - d. COSTAR REALTY INFORMATION, INC. Proposed resolution approving Agreement 400-15-010 with CoStar Realty Information, Inc. for a \$59,124 contract to procure building characteristics data for nonresidential and multifamily sector. The data will help inform the building benchmarking program and other Energy Commission policy work. (ERPA funding) Contact: Laith Younis.

*Commissioner Douglas moved and Commissioner Scott seconded approval of Item 1a-c. The vote was unanimous (5-0). Item 1d was moved to Item 14.*

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

*Item 2 was held. No action taken.*

3. MOUNTAINVIEW GENERATING STATION PROJECT (00-AFC-02C). Proposed order approving the Petition to Amend the California Energy Commission Decision. The modifications proposed in the petition would replace certain combustion section components with advanced gas path components on the four existing combustion turbines and will increase the combined generating capability of the turbines by approximately 48 megawatts. Staff proposes new conditions of certification TRANS-8 to avoid potential hazards to aviation from thermal plumes. Contact: Joseph Douglas. (Staff presentation: 5 minutes)

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

4. RENEWABLES PORTFOLIO STANDARD PROGRAM. Proposed resolutions approving modification of select elements of the Renewables Portfolio Standard (RPS) Eligibility Guidebook. Contact: Lynette Green. (Staff presentation: 5 minutes)
  - a. Proposed resolution approving a process to allow local publicly owned electric utilities to move surplus retired renewable energy credits (RECs) reported for a specified compliance period to the next compliance period.
  - b. Proposed resolution updating the appeal process in Section VII.C. of the RPS Eligibility Guidebook to address recent amendments to the Energy Commission's complaint and investigation process in Title 20, California Code of Regulations, section 1230, et seq.

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

5. EASTERN CONTRA COSTA TRANSIT AUTHORITY. Proposed resolution approving Agreement 008-15-ECD with Eastern Contra Costa Transit Authority for a \$1,355,000 loan at one percent interest to install roof and parking structure mounted photovoltaic (PV) panels at their facilities. The project will reduce about 520,400 kWh of grid electricity consumption annually resulting in annual energy cost savings of \$79,700. In addition, the project will reduce about 179.5 tons of carbon dioxide equivalent GHG emissions every year. Based on the loan amount, the simple payback is approximately 17 years. (ECAA funding) Contact: Shahid Chaudhry. (Staff presentation: 5 minutes)

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

6. SOLEDAD UNIFIED SCHOOL DISTRICT. Proposed resolution approving Agreement 006-15-ECG with Soledad Unified School District for a \$2,000,000 loan at zero percent interest to construct parking lot solar PV structures and install PV panels totaling 463 kW at Soledad High School. The project is estimated to generate 745,612 kWh of electricity annually, reducing 257 tons of GHG emissions, and saving the District approximately \$100,005 in electric utility cost annually. Based on the loan amount the simple payback is

approximately 20 years. (ECAA-Ed funding) Contact: Amir Ehyai. (Staff presentation: 5 minutes)

*Commissioner McAllister moved and Commissioner Hochschild seconded approval of Item 6. The vote was unanimous (5-0).*

7. CITY OF PETALUMA. Proposed resolution adopting California Environmental Quality Act findings for the City of Petaluma Biomass-to-Biofuel Project, and approving Agreement ARV-15-054 with the City of Petaluma for a Biomass-to-Biofuel Project. (ARFVTP funding) Contact: Chi-Chung Tsao. (Staff presentation: 5 minutes)
  - a. CALIFORNIA ENVIRONMENTAL QUALITY ACT FINDINGS. Findings that, based on the lead agency City of Petaluma's Environmental Impact Report (EIR), Addendum, and Revised Mitigation Monitoring Plan, the work under the proposed project presents no new significant or substantially more severe environmental impacts beyond those already considered and mitigated.
  - b. CITY OF PETALUMA BIOMASS-TO-BIOFUEL (B2B) PROJECT. Agreement with the City of Petaluma, for \$3,000,000, to design, build, and operate an anaerobic digestion system at an existing wastewater recycling facility. The system will include an anaerobic digester, biogas processing unit and pipelines, compressed natural gas fueling station, screw press, and high-strength waste housing. The anaerobic digestion system will produce approximately 150,000 gasoline gallon equivalents of renewable natural gas per year from the waste of food and beverage production, which will be used to fuel waste-collection vehicles.

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

8. GAS TECHNOLOGY INSTITUTE. Proposed resolution approving Agreement PIR-15-008 with Institute of Gas Technology dba Gas Technology Institute for a \$1,000,000 grant to integrate and demonstrate a production intent 6.7 liter medium-duty natural gas engine that will be capable of meeting future CARB on-road heavy-duty vehicle emission requirements. (PIER NG funding) Contact: Pilar Magana. (Staff presentation: 5 minutes)

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

9. 2015 INDUSTRIAL NATURAL GAS ENERGY EFFICIENCY GRANTS, GFO-15-501. This solicitation sought proposals to demonstrate pre-commercial and emerging energy efficiency technologies that can directly reduce natural gas use in California's industrial, agriculture and water sectors. (PIER NG funding) Contact Rajesh Kapoor. (Staff presentation: 10 minutes)
  - a. GAS TECHNOLOGY INSTITUTE. Proposed resolution approving Agreement PIR-15-006 with Institute of Gas Technology dba Gas Technology Institute for a \$1,299,985 grant to demonstrate a novel technology to increase the energy efficiency and recover waste heat from industrial furnaces. The technology has the potential of reducing natural gas use and reducing air emissions. The demonstration site for this project will be in Southern California.
  - b. JOSEPH GALLO FARMS. Proposed resolution approving Agreement PIR-15-007 with Gallo Cattle Company, LP dba Joseph Gallo Farms for a \$1,207,136

grant to demonstrate an innovative waste heat recovery system using advanced absorption chiller technology. The demonstration site for this project will be in the San Joaquin Valley.

- c. GAS TECHNOLOGY INSTITUTE. Proposed resolution approving Agreement PIR-15-009 with Institute of Gas Technology dba Gas Technology Institute for a \$585,300 grant to demonstrate an emerging heat recovery technology to be installed and tested in industrial steam boilers. This project will independently document the energy efficiency, energy cost reductions, performance and installation requirements for the heat recovery system. The demonstrations for this project will be conducted in the San Joaquin Valley and the Central Coast.
- d. ERGSOL, INC. Proposed resolution approving Agreement PIR-15-010 with ergSol, Inc. for a \$1,200,000 grant to demonstrate an integrated high-efficient solar thermal system with high-performance evacuated tube collectors for industrial processes. The demonstration site for this project will be in the San Joaquin Valley.

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

10. CLEAN ENERGY RESEARCH CENTER FOR WATER AND ENERGY TECHNOLOGIES. A consortium of University of California campuses, in partnership with Lawrence Berkeley National Laboratory was selected by the U.S. Department of Energy to administer a research program, the U.S. China Clean Energy Research Center for Water and Energy Technologies (CERC-WET), to advance water-energy science and technology that increases water and energy efficiency, decreases GHG emissions, and increases climate resilience. The Energy Commission's \$2.5 million cost share funding will be directed to supplemental projects at UC Los Angeles, UC Irvine, and UC Merced that will address California's water and energy challenges. (EPIC funding) Contact: Sonya Ziaja. (Staff presentation 5 minutes)
  - a. UNIVERSITY OF CALIFORNIA, MERCED. Proposed resolution approving Agreement 300-15-004 with The Regents of the University of California, on behalf of the Merced campus, for a \$650,000 contract to improve upon optimization models for hydropower operations and environmental protection under future climate change conditions.
  - b. UNIVERSITY OF CALIFORNIA, IRVINE. Proposed resolution approving Agreement 300-15-005 with The Regents of the University of California, on behalf of the Irvine campus, for a \$720,000 contract to improve of the accuracy of near real-time, remotely sensed streamflow information. The project will enhance the short-term precipitation streamflow forecasts to improve the accuracy of hydropower generation estimations.
  - c. UNIVERSITY OF CALIFORNIA, LOS ANGELES. Proposed resolution approving Agreement 300-15-006 with The Regents of the University of California, on behalf of the Los Angeles campus, for a \$1,130,000 contract to fund research that will reduce water-related energy costs as well as relieve stress on water infrastructure and supply. This will include development of efficient high water recovery desalination processes for non-traditional waters; characterizing the potential for non-traditional water use in California;

development of recycled water scenarios for electricity generation; and improving the characterization of California's snowpack.

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

11. CALIFORNIA CLEAN ENERGY FUND DBA CALCEF VENTURES. Proposed resolution approving Agreement 300-15-007 with California Clean Energy Fund dba CalCEF Ventures for a \$33,000,000 contract to develop and manage the California Sustainable Energy Entrepreneur Development (CalSEED) Initiative. The CalSEED Initiative will support the early development of promising new energy concepts that can provide benefits to electric ratepayers in Pacific Gas and Electric, Southern California Edison, and San Diego Gas & Electric service territories. (EPIC funding) Contact: Joshua Croft. (Staff presentation: 5 minutes)

*Commissioner McAllister left the room for this item. Commissioner Scott moved and Commissioner Hochschild seconded approval of Item 11. The vote was 4-0.*

12. DEVELOPING A PORTFOLIO OF ADVANCED EFFICIENCY SOLUTIONS PHASE II: PLUG LOAD TECHNOLOGIES AND APPROACHES FOR BUILDINGS, GFO-15-310. This solicitation sought proposals to fund applied research and development projects that develop next generation plug load efficiency technologies and strategies for the building sector. This solicitation applies to new construction and existing residential and commercial buildings in California. Funded projects must emphasize emerging plug load technologies and improvements to processes and operations in new construction or existing buildings. (EPIC funding) Contact: Felix Villanueva. (Staff presentation: 10 minutes)
  - a. AGGIOS, INC. Proposed resolution approving Agreement EPC-15-021 with AGGIOS, Inc. for a \$1,996,999 grant to develop technology that can bring high levels of energy efficiency, typically found in mobile devices, to other electronic plug load devices, such set-top boxes, television sets, personal computers, and game consoles.
  - b. UNIVERSITY OF CALIFORNIA, IRVINE. Proposed resolution approving Agreement EPC-15-022 with The Regents of the University of California, on behalf of the Irvine campus, for a \$785,124 grant to fund the development and testing of a user interface to encourage greater utilization of computer power management features and to improve understanding of user behavior.
  - c. LAWRENCE BERKELEY NATIONAL LABORATORY. Proposed resolution approving Agreement EPC-15-023 with the Department of Energy's Lawrence Berkeley National Laboratory for a \$1,386,530 grant to demonstrate the next generation of energy efficient gaming systems.
  - d. LAWRENCE BERKELEY NATIONAL LABORATORY. Proposed resolution approving Agreement EPC-15-024 with the Department of Energy's Lawrence Berkeley National Laboratory for a \$1,600,000 grant to research and develop energy efficient plug load devices, such as zero stand-by power plug loads, direct DC-powered devices, and strategies for specialty security and medical equipment.
  - e. HOME ENERGY ANALYTICS, INC. Proposed resolution approving Agreement EPC-15-025 with Home Energy Analytics, Inc. for a \$884,100 grant to develop technology to reduce home idle loads utilizing smart meter analytics and a smart

phone app that will analyze the idle load of plug load devices in homes and provide recommendations to reduce it.

- f. LAWRENCE BERKELEY NATIONAL LABORATORY. Proposed resolution approving Agreement EPC-15-026 with the Department of Energy's Lawrence Berkeley National Laboratory for a \$ 1,630,699 grant to develop technologies that enable plug-load devices to transmit operating information—such as identity, power consumption, and functional state—through a communications network to alert building owners and operators of wasteful, or unsafe operation and provide them with clear, actionable advice on responding.

*Commissioner Hochschild moved and Commissioner McAllister seconded approval of Item 12. The vote was unanimous*

(5-0).

13. UNIVERSITY OF CALIFORNIA, DAVIS. Proposed resolution approving Agreement EPC-15-019 with The Regents of the University of California, on behalf of the Davis campus, for a \$1,212,186 grant to fund the development of tools and models to facilitate the optimal design, installation, and market acceptance of low-cost ground heat exchangers for ground-coupled heat pump systems in California. (EPIC funding) Contact: Heather Bird. (Staff presentation: 5 minutes)

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

14. COSTAR REALTY INFORMATION, INC. Proposed resolution approving Agreement 400-15-010 with CoStar Realty Information, Inc. for a \$59,124 contract to procure building characteristics data for nonresidential and multifamily sector. The data will help inform the building benchmarking program and other Energy Commission policy work. (ERPA funding) Contact: Laith Younis.

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

15. **Minutes:** Proposed approval of the January 13, 2016, January 27, 2016, February 4, 2016 and February 10, 2016 Business Meeting Minutes.

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

16. **Lead Commissioner or Presiding Member Reports.** The Commissioners reported on their recent activities.
17. **Chief Counsel's Report:** None
18. **Executive Director's Report.** None
19. **Public Adviser's Report.** The Public Adviser gave the report.
20. **Public Comment:** None

Appearances:

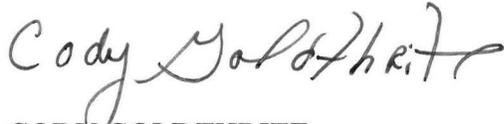
(\*by telephone)

\*Randy Walsh, San Diego Energy Desk

\*John Dennis, Los Angeles Department of Water and Power  
Phil Herrington, Southern California Edison  
Nathan Bengtsson, PG&E  
Dan St. John, City of Petaluma  
Ashok Gadgil, Lawrence Berkeley National Laboratory  
Danny Kennedy, Clean Energy Fund  
Sekita Grant, Green Light Institute  
Lisa Schmidt, Home Energy Analytics  
Alan Meier, Lawrence Berkeley National Laboratory  
Teresa Pistochini, UC Davis Western Cooling Efficiency Center

There being no further business, the meeting was adjourned.

Respectfully submitted,



CODY GOLDTHRITTE  
Secretariat

