

STATE OF CALIFORNIA
California Energy Commission

Minutes of the May 27, 2009, California Energy Commission Business Meeting.

The meeting was called to order at 10:01 by Chairman Karen Douglas. The Pledge of Allegiance was led by Chairman Douglas.

Present:

Karen Douglas, Chairman
James D. Boyd, Vice Chair
Arthur H. Rosenfeld, Commissioner
Jeffrey D. Byron, Commissioner
Julia Levin, 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. BIENNIAL CONFERENCE ON TRANSPORTATION ENERGY & ENVIRONMENTAL POLICY. Possible approval \$4,999, staff time, and use of the Energy Commission's name for the Twelfth Biennial Conference on Transportation Energy & Environmental Policy July 29–31, 2009, at Asilomar in Pacific Grove, California. (ERPA funding.) Contact: Mike Smith.
 - b. ELEVATOR COMMUNICATIONS, LLC. Possible approval of no-cost co-sponsorship with Elevator Communications, LLC, for the use of the Energy Commission's seal, Go Solar California logo and website link on the SolarDay™ 2009 website. Contact: Tony Goncalves.

Commissioner Rosenfeld moved and Commissioner Boyd seconded approval of the Consent Calendar. The vote was unanimous. (5-0)

2. CALIFORNIA REPORTING LLC. Possible approval of Contract 180-08-001 for \$74,700 with California Reporting LLC to provide hearing reporter services for Energy Commission Business Meetings and other hearings and workshops. (ERPA funding.) Contact: Susanne Garfield-Jones. (5 minutes)

Commissioner Rosenfeld moved and Commissioner Byron seconded approval of Contract 180-08-001. The vote was unanimous. (5-0)

3. CALIFORNIA INSTITUTE FOR ENERGY AND THE ENVIRONMENT. Possible approval of \$750,000 for five grant awards under Contract 500-01-043 with the University of California-California Institute for Energy and the Environment. The proposals result from three 2008 Enabling Technologies Development Solicitations that target individual research efforts in demand response, distribution grid, and energy efficiency. (PIER funding.) Contact: Mike Gravely

- a. San Diego State University, *An Integrated and Cognitive Home Energy Management System for Demand Response*, \$250,000. This project will develop software that manages energy demand in a residential community by offsetting residential load with localized renewable generation. The software will also assist in automating the use of home appliances by staggering their use to reduce peak load.
- b. EnerNex Corporation, *Feeder State Estimation with AMI and Advanced Sensors*, \$125,000. This project will demonstrate California estimates of distribution feeders by adapting existing transmission algorithms to more accurately characterize the unique behavior of distribution systems. This will allow for observation of distribution system behavior, faster detection of faults, and possible prevention of system failures.
- c. Systems Integration Specialists Company, Inc. (SISCO), *Development of a Java OPC UA Web Services Stack*, \$125,000. This project develops protocols to define, locate, and implement Web-based interaction for communication devices. This allows for standardized interaction between electricity distribution devices and substation automation, which currently does not occur. These protocols will allow for competition while ensuring that the necessary communication between devices occurs.
- d. Pacific Northwest National Laboratory (PNNL), *Development of Self-Correcting Building HVAC Controls*, \$125,000. This project will develop software that detects and self-corrects faults or calibration errors in HVAC systems. If the auto-correcting activities do not solve the problem, a help signal will be sent that also provides diagnostic information useful in repair.
- e. University of California at Berkeley, *People and Energy at Home: Information Display and Thermal Comfort Development for Residences*, \$125,000. This project proposes to: 1) review what motivates consumers to participate in demand response activities; and 2) develop software that analyzes customer behavior and uses that data to maximize thermal control while reducing energy consumption.

Commissioner Boyd moved and Commissioner Rosenfeld seconded approval of the five awards under Contract 500-01-043. The vote was unanimous. (5-0)

4. CALIFORNIA EMPLOYMENT DEVELOPMENT DEPARTMENT. Possible approval of Contract 600-08-008, an interagency agreement for \$4,500,000 with California Employment Development Department for workforce and industry development and training, labor market data for the Alternative and Renewable Fuels and Vehicle Technology Program. (ARFVT funding.) Contact: Mike Smith. (5 minutes)

Commissioner Boyd moved and Commissioner Rosenfeld seconded approval of Contract 600-08-008. The vote was unanimous. (5-0)

5. ACCUSTAFF. Possible approval of Contract 150-08-004 for \$74,500 with AccuStaff for temporary support services to assist the Energy Commission's Federal Economic Recovery Program during periods of peak workload. Due to uneven workload, contractor

support may be needed for working with stakeholders, funding agreement preparation and dissemination, project monitoring and evaluation, and payment of expenditure claims. (ERPA funding.) Contact: Mark Hutchison. (5 minutes)

Commissioner Boyd moved and Commissioner Rosenfeld seconded approval of Contract 150-08-004. The vote was 4-0-1. Commissioner Levin abstained.

6. UNIVERSITY ENTERPRISES, INC. Possible approval of Amendment 8 to Contract 200-96-010 with University Enterprises, Inc., for student assistant salaries. This amendment will add \$1,000,000 of authority for each fiscal year from 2008/09 through 2010/11, and extend the expiration date to March 31, 2017. Funds will be added to this contract during resource allocation. Contact: Kyle Emigh. (5 minutes)

Commissioner Byron moved and Commissioner Boyd seconded approval of Amendment 8 to Contract 200-96-010. The vote was unanimous. (5-0)

7. WESTPORT POWER, INC. Possible approval of Contract 500-08-043 for \$500,000 with Westport Power, Inc., to develop a liquefied natural gas engine using advanced technology adapted to an existing diesel engine. This engine will be designed to meet 2010 EPA emission standards while equaling or exceeding equivalent diesel engine performance and fuel efficiency. (PIER natural gas funding.) Contact: Ken Koyama. (5 minutes)

Commissioner Boyd moved and Commissioner Rosenfeld seconded approval of Contract 500-08-043. The vote was unanimous. (5-0)

8. NATIONAL ENERGY TECHNOLOGY LABORATORY. Possible approval of Contract 500-08-047 for \$2,000,000 with U. S. Department of Energy National Energy Laboratory to develop and demonstrate an improved automobile heating and air conditioning system. New thermoelectric heating ventilation and air conditioner technology could potentially replace or downsize current vapor compression air conditioners in automobiles. (PIER electricity funding.) Contact: Ken Koyama. (5 minutes)

Commissioner Boyd moved and Commissioner Byron seconded approval of Contract 500-08-047. The vote was unanimous. (5-0)

9. CALIFORNIA COUNCIL ON SCIENCE AND TECHNOLOGY. Possible approval of Contract 500-08-045 for \$50,000 with California Council on Science and Technology to assess the ability of existing energy technologies to meet California's climate and energy goals for 2050 and identify technical gaps and pathways to meet these goals. Co-funding of \$450,000 will be provided. (PIER electricity funding.) Contact: Ken Koyama. (5 minutes)

Commissioner Boyd moved and Commissioner Rosenfeld seconded approval of Contract 500-08-045. The vote was unanimous. (5-0)

10. UC BERKELEY GLOBAL METROPOLITAN CENTER. Possible approval of Work Authorization MR-TMP-662 for \$250,000 to UC Berkeley Global Metropolitan Center to research the combined fuel-savings potential of land use and transportation measures in California's major metropolitan regions. The research will consider policy options that

would allow state and local agencies to more effectively pursue land-use strategies to reduce vehicle miles traveled and greenhouse gas emissions. Results will be incorporated into the Energy Commission's transportation/fuel demand models. (PIER electricity funding.) Contact: Ken Koyama. (5 minutes)

Commissioner Boyd moved and Commissioner Rosenfeld seconded approval of Work Authorization MR-TMP-662. The vote was unanimous. (5-0)

11. SCRIPPS INSTITUTION OF OCEANOGRAPHY. Possible approval of Contract 500-08-046 for \$199,077 with Scripps Institution of Oceanography to develop an instrument to measure and analyze the chemical composition of aerosols that form water droplets in the atmosphere. Increased aerosols may have decreased precipitation in the Sierra Nevada by 10-20 percent, possibly impacting the state's water supply and hydroelectricity generation. Determining the chemical composition of these aerosols is needed to identify the potential sources of these particles. (PIER electricity funding.) Contact: Guido Franco. (5 minutes)

Commissioner Boyd moved and Commissioner Rosenfeld seconded approval of Contract 500-08-046. The vote was unanimous. (5-0)

12. LAWRENCE BERKELEY NATIONAL LABORATORY. Possible approval of Contract 500-08-052 for \$1,959,879 with U. S. Department of Energy-Lawrence Berkeley National Laboratory to develop building system diagnostic tools. New software tools, measurement and evaluation systems, and fan system analysis tools will be integrated into an upgraded universal translator framework that can be used by commissioning agents, utility program energy analysts, and others to generate, trace and verify energy savings. (PIER electricity funding.) Contact: Chris Scruton. (5 minutes)

Item 12 was moved to the June 17, 2009, Business Meeting agenda.

13. UC BERKELEY CENTER FOR THE BUILT ENVIRONMENT. Possible approval of Contract 500-08-044 for \$2,100,000 with UC Berkeley Center for the Built Environment to conduct research on how to reduce energy use and improve indoor environmental quality in commercial buildings. (PIER electricity funding.) Contact: Chris Scruton. (5 minutes)

Item 13 was listed in error.

14. UC DAVIS WESTERN COOLING EFFICIENCY CENTER. Possible approval of Contract 500-08-042 with University of California, Davis for \$2,260,000 to fund the Western Cooling Efficiency Center to conduct research and develop technology to advance cooling system performance in western climates. The project will assist companies with promising technologies through the emerging technologies programs of the investor-owned utilities, and share research results with all utilities, the California Public Utilities Commission, and the public, leveraging research and development funding by increasing the outreach. (PIER electricity funding.) Contact: Chris Scruton. (5 minutes)

Commissioner Boyd moved and Commissioner Rosenfeld seconded approval of Contract 500-08-042. The vote was unanimous. (5-0)

15. SENSUS MI. Possible approval of Contract 500-08-050 for \$1,262,252 with Sensus MI to research and demonstrate technology solutions for HVAC systems in buildings. The new technologies will be designed for rapid adoption by both existing and new buildings to provide centralized scalable software solutions that can continuously monitor building energy performance. (PIER electricity funding.) Contact: Norm Bourassa. (5 minutes)

Commissioner Levin moved and Commissioner Byron seconded approval of Contract 500-08-050. The vote was unanimous. (5-0)

16. NEW BUILDINGS INSTITUTE. Possible approval of Contract 500-08-049 for \$1,971,152 with New Buildings Institute to document the critical indicators of building energy performance. Work is needed to more accurately predict performance and develop reporting tools and procedures for designers, owners, and tenants of commercial buildings. The study includes projects that investigate HVAC controls, advanced design tools for skylights, and plug load energy management strategies. (PIER electricity funding.) Contact: Norm Bourassa. (5 minutes)

Commissioner Boyd moved and Commissioner Rosenfeld seconded approval of Contract 500-08-049. The vote was unanimous. (5-0)

17. UC DAVIS CALIFORNIA LIGHTING TECHNOLOGY CENTER. Possible approval of Contract 500-08-053 for \$3,200,000 with University of California Davis to fund the California Lighting Technology Center (CLTC) for three years to aid the development and commercialization of energy-efficient lighting. The agreement includes 15 specific energy-efficient lighting research and development tasks that will be performed in collaboration with utilities, manufacturers, universities, public agencies, demonstration partners, buildings professions, and trades. Specific market connections activities are included to foster early and widespread acceptance of the new technologies. (PIER electricity funding.) Contact: Michael Seaman. (5 minutes)

Commissioner Byron moved and Commissioner Rosenfeld seconded approval of Contract 500-08-053. The vote was unanimous. (5-0)

18. CHULA VISTA ENERGY UPGRADE PROJECT (07-AFC-04). Possible adoption of the Presiding Member's Proposed Decision for the Chula Vista Energy Upgrade Project, a simple-cycle electrical power plant facility in the city of Chula Vista, San Diego County. Contact: Raoul Renaud. (60 minutes)

Item 18 was moved to the June 17, 2009, Business Meeting Agenda.

19. **Minutes:** Approval of the May 6, 2009, Business Meeting Minutes.

Commissioner Rosenfeld moved and Commissioner Boyd seconded approval of the Minutes. The vote was unanimous. (5-0)

20. **Commission Committee Presentations/Discussion:** None.
21. **Chief Counsel's Report:** Chief Counsel Bill Chamberlain gave the report.
22. **Executive Director's Report:** Executive Director Melissa Jones gave the report.
23. **Public Adviser's Report:** None.
24. **Public Comment:** None.

There being no further business, the meeting was adjourned at 12:35.

Appearances:

Mr. Thomas Slaughter

Mr. Mauro Martins, Northern California Citizens for Clean Air

Ms. Rose Taylor

Mr. Dane Wigington

Ms. Deborah J. Whitman, Environmental Voices

Respectfully submitted,

HARRIET KALLEMEYN
Secretary to the Commission