

**STATE OF CALIFORNIA**  
**California Energy Commission**

Minutes of the June 3, 2009, Energy Commission Business Meeting.

The meeting was called to order at 10:02 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. INNOVATIVE ENERGY MANAGEMENT WORKSHOP. Possible approval of a no-cost co-sponsorship and use of the Energy Commission's name and logo for the U. S. Environmental Protection Agency's Innovative Energy Management Workshop, "Learn How To Save Energy and Money At Your Water & Wastewater Treatment Plants," June 23, 2009, in Irwindale. The workshop will focus on reducing energy use at water and wastewater treatment facilities. Contact: Shahid Chaudhry.
  - b. UNITED STATES CARBON SEQUESTRATION COUNCIL. Possible approval of Contract 500-08-057 for \$35,000 for Energy Commission membership in the United States Carbon Sequestration Council for one year. Membership provides access to scientific and technical information, and the most recent research results about carbon sequestration, to industry members, policy makers, and the public. (Federal funding.) Contact: Mike Gravely.
  - c. DE SOLUTIONS. Possible approval of no-cost Amendment A.2 to Grant Agreement PNG-06-002 with DE Solutions due to changes in scope and the bankruptcy of a key subcontractor. The amendment includes term extension from April 30, 2010, to December 31, 2010, and budget revision. Contact: Ken Koyama.
  - d. WEST PUBLISHING dba THOMSON WEST. Possible approval of Amendment 1 to Contract 140-08-002 for \$45,176 with West Publishing Corporation dba Thomson West to add two years of Westlaw service for legal research. (ERPA funding.) Contact: Elizabeth Flores.
  - e. MOUNTAINVIEW POWER PROJECT (00-AFC-2C). Possible approval of an amendment petition to change ownership of the Mountainview Power Project from Mountainview Power Company, LLC, a wholly owned subsidiary of Southern California Edison, to Southern California Edison. Contact: Chris Davis.

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

2. OTAY MESA ENERGY CENTER (99-AFC-5C). Possible approval of Otay Mesa Energy Center, LLC's, Petition to Amend the Final Commission Decision relating to the air quality conditions of certification dealing with the expiration date of the project Mobile Emission Reduction Credits and providing options for reducing the nitrogen oxide emissions. This petition also requests the deletion of the words, "rolling, rolling continuous and continuous" from air quality conditions of certification to clarify that compliance shall be based on clock-hour averaging periods. Contact: Donna Stone. (10 minutes)

*Commissioner Byron moved and Commissioner Boyd seconded approval of the Petition. The vote was unanimous. (5-0)*

3. TESLA POWER PROJECT (01-AFC-21C). Possible approval of Pacific Gas and Electric Company's (PG&E) petition to change the ownership of the Tesla Power Project from FPL Energy to PG&E and extend the deadline for commencement of the project from June 16, 2009, to June 16, 2014. Contact: Jack Caswell. (30 minutes)

*Commissioner Boyd moved to approve the ownership change and a time extension of 90-days, and to direct the Energy Commission's Siting Committee to conduct further proceedings and report back to the Commission in time for a final decision on the time extension within the 90 days. Commissioner Levin seconded the motion. The vote was unanimous. (5-0)*

4. PETERS SHORTHAND REPORTING CORPORATION. Possible approval of Contract 170-08-001 for \$74,999 with Peters Shorthand Reporting Corporation to provide verbatim transcripts of siting case hearings, workshops, and other hearings as necessary for power plant siting cases. (ERPA funding.) Contact: Katherine Nicholls. (5 minutes)

*Commissioner Boyd moved and Commissioner Rosenfeld seconded approval of Contract 170-08-001. The vote was unanimous. (5-0)*

5. PUBLIC SECTOR CONSULTANTS, INC. Possible approval of Purchase Order 08-409.00-016 for \$59,928 with Public Sector Consultants, Inc., to provide technical support and maintenance for the Energy Commission's Program Information Management System (PIMS). Work will include development of new baseline requirements in support of AB 118 and the Fuels and Transportation Division. (PIER funding.) Contact: Larry Smith. (5 minutes)

*Commissioner Rosenfeld moved and Commissioner Boyd seconded approval of Purchase Order 08-409.00-016. The vote was unanimous. (5-0)*

6. INFORMATION, INTEGRATION, INNOVATION AND ASSOCIATES, INC. Possible approval of California Multiple Award Schedule (CMAS) Purchase Order 08-409.00-014 for \$150,000 with Information, Integration, Innovation And Associates, Inc., to develop design documentation and provide support services for the New Solar Homes Partnership Web-based application. (ERPA funding.) Contact: Valerie Hall. (5 minutes)

*Commissioner Byron moved and Commissioner Rosenfeld seconded approval of Purchase Order 08-409.00-014. The vote was unanimous. (5-0)*

7. C & G TECHNOLOGIES. Possible approval of California Multiple Award Schedule (CMAS) Purchase Order 08-409.00-013 for \$150,000 with C & G Technologies to automate collection of data from regulated appliance manufacturers for the Appliance Efficiency Program. The goal is to design a webpage that allows a user to fill out and

submit forms through a Web-based interface. (ERPA funding.) Contact: Valerie Hall. (5 minutes)

*Commissioner Rosenfeld moved and Commissioner Levin seconded approval of Purchase Order 08-409.00-013. The vote was unanimous. (5-0)*

8. BENNINGFIELD GROUP. Possible approval of Contract 400-08-006 for \$129,942 with Benningfield Group to conduct market surveys of appliances sold on-line, via catalogs, and in wholesale and retail outlets. The survey results will indicate the level of compliance among manufacturers and guide the Appliance Efficiency Program's enforcement efforts. (ERPA funding.) Contact: Valerie Hall. (5 minutes)

*Commissioner Rosenfeld moved and Commissioner Byron seconded approval of Contract 400-08-006. The vote was unanimous. (5-0)*

9. UC RIVERSIDE. Possible approval of Contract 500-08-055 for \$650,000 with UC Riverside to advance the understanding of regional and near-source air quality impacts of distributed generation sources by improving the ability of models to accurately predict ground-level criteria and toxic air pollutant concentrations from distributed generation sources at the local level. (PIER electricity funding.) Contact: Marla Mueller. (5 minutes)

*Commissioner Byron moved and Commissioner Boyd seconded approval of Contract 500-08-055. The vote was unanimous. (5-0)*

10. LAWRENCE BERKELEY NATIONAL LABORATORY. Possible approval of Contract 500-08-059 for \$785,000 with Lawrence Berkeley National Laboratory (LBNL) to identify practical and cost-effective approaches to developing communities with roof and hardscape materials that have greatly lowered heat island effects. LBNL will conduct targeted research to better quantify the benefits of various approaches and building material technologies. Project results will assist policy makers to develop implementation guidelines for cool communities. The California Air Resources Board will contribute \$350,000 of the cost of the project. (PIER electricity funding.) Contact: Norm Bourassa. (5 minutes)

*Commissioner Rosenfeld moved and Commissioner Boyd seconded approval of Contract 500-08-059. The vote was unanimous. (5-0)*

11. LAWRENCE BERKELEY NATIONAL LABORATORY. Possible approval of Contract 500-08-061 for \$1,688,155 with Lawrence Berkeley National Laboratory to investigate residential energy-saving opportunities from tightening the building envelope and using innovative energy-efficient ventilation strategies, which will also improve indoor air quality. This work is expected to contribute to the next update of the Title 24 Building Energy Efficiency Standards. (PIER electricity funding.) Contact: Norm Bourassa. (10 minutes)

*Commissioner Boyd moved and Commissioner Rosenfeld seconded approval of Contract 500-08-061. The vote was unanimous. (5-0)*

12. GAS TECHNOLOGY INSTITUTE. Possible approval of Contract 500-08-051 for \$1,989,598 with Gas Technology Institute to develop new energy-efficient methods for

residential heating, ventilation, and air-conditioning (HVAC) systems that are better suited for the dry, cooling-dominated climates of California. The project goals include developing advanced radiant cooling and heating technologies as well as to develop performance improvement strategies for already installed equipment and the building envelope. Match funding of \$240,432 from a team of 10 partner organizations completes the total budget of \$2,230,030. (PIER electricity funding.) Contact: Norm Bourassa. (10 minutes)

*Commissioner Boyd moved and Commissioner Rosenfeld seconded approval of Contract 500-08-051. The vote was unanimous. (5-0)*

13. GAS TECHNOLOGY INSTITUTE. Possible approval of Contract 500-08-060 for \$1,984,761 with Gas Technology Institute to improve residential hot water heating energy performance. The research will analyze how residential water heating systems function in the field, identifying improvements for system design and operation. This work is expected to contribute to the 2011 update of the Title 24 Building Energy Efficiency Standards. (PIER natural gas funding) Contact: (Norm Bourassa) (5 minutes)

*Commissioner Byron moved and Commissioner Levin seconded approval of Contract 500-08-060. The vote was unanimous. (5-0)*

14. NATIONAL RENEWABLE ENERGY LABORATORY. Possible approval of Amendment 2 to Contract 500-05-027 with National Renewable Energy Laboratory (NREL), for \$3,000,000 to continue development of pre-production power blocks for residential and commercial applications. This second phase will develop pre-production power blocks that will be field demonstrated by vendors to show the increase in utility, reliability and reduction in cost over existing systems. The increased reliability and reduction in cost will accelerate the penetration of distributed energy resource and renewable systems into the electric distribution system. (PIER electricity funding.) Contact: Mike Gravely. (10 minutes)

*Commissioner Boyd moved and Commissioner Byron seconded approval of Amendment 2 to Contract 500-05-027. The vote was unanimous. (5-0)*

15. ELECTRIC POWER GROUP. Possible approval of Contract 500-08-048 for \$1,699,149 with Electric Power Group (EPG) to provide support for the California Independent System Operator to meet the Renewables Portfolio Standard (RPS) goals for the operational integration of renewables. EPG will research and demonstrate the application of next generation grid monitoring technologies, called synchrophasors, to enhance the capability of California's high-voltage electric power system to facilitate operational integration of renewables, increase grid capacity, and reduce congestion. (PIER electricity funding.) Contact: Mike Gravely. (10 minutes)

*Item 15 was considered with Item 16, and the items were voted on together.*

16. LAWRENCE BERKELEY NATIONAL LABORATORY. Possible approval of Contract 500-08-054 for \$550,000 with Lawrence Berkeley National Laboratory (LBNL) to provide support for the California Independent System Operator to meet the Renewables Portfolio Standard (RPS) goals for the operational integration of renewables. LBNL will research and demonstrate the application of next-generation grid-monitoring technologies, called synchrophasors, to enhance the capability of California's high voltage electric power system to facilitate operational integration of renewables, increase grid capacity, and reduce congestion. (PIER electricity funding.) Contact: Mike Gravely. (10 minutes)

*Commissioner Boyd moved and Commissioner Byron seconded approval of Contract 500-08-048 (Item 15) and Contract 500-08-054 (Item 16). The vote was unanimous. (5-0)*

17. NATIONAL RENEWABLE ENERGY LABORATORY. Possible approval of Contract 500-08-058 for \$300,000 with National Renewable Energy Laboratory (NREL) to help maximize the implementation of the Natural Gas Vehicle Research Roadmap. NREL, a preeminent alternative fuels research organization will help obtain the resources, data, and input from key stakeholders critical to successful implementation of the Roadmap. (PIER natural gas funding.) Contact: Ken Koyama. (5 minutes)

*Commissioner Boyd moved and Commissioner Rosenfeld seconded approval of Contract 500-08-058. The vote was unanimous. (5-0)*

18. HARPIRIS ENERGY Possible approval of competitive grant PIR-08-012 for \$284,500 to Harpiris Energy to develop a lower cost, unpressurized storage tank with integrated heat exchanger for active solar water heating systems. The cost reduction is expected to lead to wider use of solar energy for domestic water heating. Harpiris will provide a cost share of \$225,000. (PIER electricity funding.) Contact: Chris Scruton. (5 minutes)

*Commissioner Boyd moved and Commissioner Rosenfeld seconded approval of grant number PIR-08-012. The vote was unanimous. (5-0)*

19. BETA LIGHTING. Possible approval of competitive grant PIR-08-020 for \$300,000 to BETA Lighting to develop and demonstrate a networked, solid-state street lighting system with intelligent controls to maximize energy savings, reduce environmental impact, and increase public safety. Demand reduction of 25% and energy reduction of 50% is projected. (PIER electricity funding.) Contact: Chris Scruton. (5 minutes)

*Item 19 was considered with Items 20 and 21, and the items were voted on together.*

20. LIGHTING RESEARCH CENTER, RENSSELAER POLYTECHNIC INSTITUTE. Possible approval of competitive grant PIR-08-015 for \$294,942 to the Lighting Research Center at Rensselaer Polytechnic Institute to develop and field test a new building infrastructure that simplifies use of, and revision to, solid-state lighting components and designs. Paramount Studios has offered a facility for demonstrating and testing the system in California. The project has match funding of \$300,000 from Osram-Sylvania and \$500,000 from USG. (PIER electricity funding.) Contact: Chris Scruton. (5 minutes)

*Item 20 was considered was considered with Items 19 and 21, and the items were voted together.*

21. LAWRENCE BERKELEY NATIONAL LABORATORY. Possible approval of competitive grant PIR-08-013 for \$168,000 to Lawrence Berkeley National Laboratory to

document existing and emerging user interfaces for lighting control systems and to develop a consensus among users and manufacturers for standardized symbols and operational features. (PIER electricity funding.) Contact: Chris Scruton. (5 minutes)

*Commissioner Boyd moved and Commissioner Rosenfeld seconded approval of grants PIR-08-020 (Item 19), PIR-08-015 (Item 20), and PIR-08-013 (Item 21). The vote was unanimous. (5-0)*

22. BECKER ENGINEERING COMPANY. Possible approval of competitive grant PIR-08-011 for \$106,750 to Becker Engineering Company to develop a GreenGuide for refrigerated warehouses. The program involves outreach to designers, owners and operators, and will help expedite a transition to sustainable, energy-efficient, and cost-effective refrigerated storage facilities in California. (PIER electricity funding.) Contact: Chris Scruton. (5 minutes)

*Commissioner Boyd moved and Commissioner Rosenfeld seconded approval of grant number PIR-08-011. The vote was unanimous. (5-0)*

23. PURDUE UNIVERSITY. Possible approval of competitive grant PIR-08-017 for \$249,729 to Purdue University to begin development of low-cost balancing valves to optimize refrigerant flow in air-conditioning and refrigeration heat exchangers. This research could lead to improved capacity and efficiency of air conditioners. (PIER electricity funding.) Contact: Chris Scruton. (5 minutes)

*Commissioner Byron moved and Commissioner Levin seconded approval of grant number PIR-08-017. The vote was unanimous. (5-0)*

24. BEVILAQUA KNIGHT, INC. Possible approval of competitive grant PIR-08-018 for \$199,972 to Bevilaqua Knight, Inc., to work with the California Building Performance Contractors Association to develop guidelines for home retrofit techniques, innovative delivery strategies, and workforce development needs to achieve deep energy savings in California houses. Research will be coordinated with energy utilities, local governments, and state policy agencies. (PIER electricity funding.) Contact: Chris Scruton. (5 minutes)

*Commissioner Boyd moved and Commissioner Levin seconded approval of grant PIR-08-018. The vote was unanimous. (5-0)*

25. TECOGEN, INC. Possible approval of Agreement PIR-08-022 for a competitive grant of \$999,824 to Tecogen, Inc., to convert an automotive engine for a combined heat and power application. This will take advantage of advances in automotive engines for stationary applications. (PIER electricity funding.) Contact: Ken Koyama. (5 minutes)

*Commissioner Boyd moved and Commissioner Rosenfeld seconded approval of Agreement PIR-08-022. The vote was unanimous. (5-0)*

26. STURMAN INDUSTRIES. Possible approval of Agreement PIR-08-023 for a competitive grant of \$997,696 to Sturman Industries to extend the market for natural gas-fueled stoichiometric spark ignited internal combustion engines, by achieving 40 percent brake thermal efficiency and ultra-low emissions, for combined heat and power applications in California. (PIER natural gas funding.) Contact: Ken Koyama. (5 minutes)

*Commissioner Byron moved and Commissioner Boyd seconded approval of Agreement PIR-08-023. The vote was unanimous. (5-0)*

27. KENNETH SHAWN SMALLWOOD. Possible approval of Agreement PIR-08-025 for a competitive grant of \$181,800 to Kenneth Shawn Smallwood evaluate and improve protocols for determining bird use in wind resource areas. Information gained will be used to inform revisions to the Department of Fish and Game and Energy Commission's 2007 Guidelines for Reducing Impacts to Birds and Bats from Wind Energy Development. (PIER electricity funding.) Contact: Linda Spiegel. (5 minutes)

*Commissioner Levin moved and Commissioner Boyd seconded approval of Agreement PIR-08-025. The vote was unanimous. (5-0)*

28. ALTOSTRATUS, INC. Possible approval of Agreement PIR-08-030 for a competitive grant of \$120,492 to Altostratus, Inc. to develop a modeling system that will be the basis for providing developers, designers and policy makers with the tools and data to facilitate prioritizing and ranking community-scale energy technologies based on energy impacts via indirect effects. (PIER electricity funding.) Contact: Linda Spiegel. (5 minutes)

*Commissioner Levin moved and Commissioner Rosenfeld seconded approval of Agreement PIR-08-030. The vote was unanimous. (5-0)*

29. LAWRENCE BERKELEY NATIONAL LABORATORY. Possible approval of Agreement PIR-08-009 for a competitive grant of \$400,000 to Lawrence Berkeley National Laboratory to create an integrated modeling framework to analyze and compare options to reduce greenhouse gas emissions in California. (PIER funding.) Contact: Guido Franco. (5 minutes)

*Commissioner Boyd moved and Commissioner Levin seconded approval of Agreement PIR-08-009. The vote was unanimous. (5-0)*

30. ORDER INSTITUTING INFORMATIONAL PROCEEDING. Possible adoption of Order Instituting an Informational Proceeding to gather information to develop guidelines to govern the administration and award of federal funds received pursuant to the American Recovery and Reinvestment Act of 2009. The guidelines will focus on the Energy Commission's implementation of the State Energy Program and the Energy Efficiency and Conservation Block Grant Program and will describe program objectives, eligibility requirements and limitations, available funding, evaluation criteria, and administrative procedures to apply for funding. Contact: Gabe Herrera. (10 minutes)

*Commissioner Levin moved adoption of the Order and establishment of an ad hoc committee consisting of the presiding members of the Budget and Management Committee and the Efficiency Committee to oversee the proceeding. The committee will be called the Ad Hoc Committee on the American Recovery and Reinvestment Act of 2009. Commissioner Rosenfeld seconded the motion. The vote was unanimous. (5-0)*

31. ENERGY SENSE/MASCO. Possible adoption of the Energy Efficiency Committee's proposed decision regarding the alleged violation by Energy Sense/Masco of the conflict-of-interest provisions of the Home Energy Rating System (HERS) program contained in Sections 1670-1675 of Title 20 of the California Code of Regulations. Contact: Dennis Beck. (15 minutes)

*Commissioner Byron moved approval of the proposed decision, and that the decision be precedential. Commissioner Rosenfeld seconded. The vote was unanimous. (5-0)*

32. **Minutes:** Approval of the May 27, 2009, Business Meeting Minutes.

*Commissioner Rosenfeld moved and Commissioner Boyd seconded approval of the May 27 Minutes. The vote was unanimous. (5-0)*

33. **Commission Committee Presentations/Discussion:** None.

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

35. **Executive Director's Report:** Executive Director Melissa Jones gave the report.

36. **Public Adviser's Report:** None.

37. **Public Comment:** None.

There being no further business, the meeting was adjourned to a closed session on personnel matters pursuant to Government Code, Section 11126(a).

**Appearances:**

Mr. Scott Galati, Galati Blek LLP

Mr. Mark Krausse, Pacific Gas and Electric Company

Mr. Robert Sarvey

Mr. David Hawkins, California Independent System Operator

Mr. Steven H. Frankel, EnergySense, Inc. and MASCO Corporation

Mr. Brett Dickerson, California Living & Energy and Duct Testers

Mr. Robert Scott, California Home Energy Efficiency Rating System

Respectfully submitted

HARRIET KALLEMEYN  
Secretary to the Commission