



November 21, 2007

1516 Ninth Street
Hearing Room A, First Floor
Sacramento, California 95814

10 a.m.

(Wheelchair Accessible)

THE COMMISSION WILL CONSIDER THE FOLLOWING ITEMS:

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. FASTER FREIGHT, CLEANER AIR 2008 CONFERENCE. Possible approval of \$4,950, staff time and use of the Energy Commission's name to co-sponsor the Faster Freight, Cleaner Air 2008 Conference in Los Angeles, February 25-27, 2008. Contact: Asish Gautam.
 - b. HORIZON WIND ENERGY. Possible approval of Contract 500-07-021 with Horizon Wind Energy for a no-cost agreement to operate and collect wind data from four meteorological towers currently owned by the Energy Commission for the useful life of the towers, not to exceed three years. Ownership and responsibility for the towers will be transferred to Horizon Wind Energy and Horizon will assume responsibility for decommissioning in accordance with industry standards and Bureau of Land Management requirements. Contact: Michael Kane.
 - c. BRAND IDENTITY, INC. Possible approval of Amendment 1 to Contract 150-06-014 with Brand Identity, Inc. to add \$6,110 for additional color concepts, design alterations (Task 1) and as many as 60 more graphs (Task 2) not currently part of the original contract. The schedule is being revised to reflect alterations to the proceeding schedule and availability of materials to the designer. (ERPA funding.) Contact: Lorraine White.
2. PALOMAR ENERGY PROJECT (01-AFC-24C). Possible approval of a petition to install and operate a gas turbine inlet air chiller and add a water storage tank for the Palomar Energy Project. The chiller will replace the existing evaporative chiller system, adding up to 40 MW of available electrical output by summer 2008. Contact: Paula David. (10 minutes)

3. KINGS RIVER CONSERVATION DISTRICT COMMUNITY POWER PROJECT (07-AFC-7). Contact: Che McFarlin. (10 minutes)
 - a. Possible adoption of the Executive Director's data adequacy recommendation for the Kings River Conservation District Community Power Project.
 - b. Possible appointment of a siting committee for the Kings River Community Power Project.
4. SOUTH BAY REPLACEMENT PROJECT (06-AFC-3). Possible adoption of the Committee Order Terminating Proceedings in the South Bay Replacement Project. Contact: Kenneth Celli. (5 minutes)
5. VALERO COGENERATION PROJECT (01-AFC-5). Possible adoption of Order Terminating Certification for Phase II of the Valero Cogeneration Project. Contact: Kevin W. Bell. (5 minutes)
6. CONTRA COSTA COUNTY. Possible approval of a \$3 million loan to Contra Costa County to install a 255kW cogeneration system at Contra Costa Regional Medical Center and a 170 kW cogeneration system at the county juvenile hall. These two cogeneration projects are estimated to save \$383,000 annually and have a simple payback of 7.9 years. (ECAA and/or bond funding.) Contact: Joseph Wang. (5 minutes)
7. MARKETPOINT, INC. Possible approval of Purchase Order 07-445.01-012 for \$27,000 to MarketPoint, Inc. to renew the Energy Commission's North American Regional Gas model license agreement and associated software packages. (ERPA funding.) Contact: Ruben Tavares/Nancy Tronaas. (5 minutes)
8. RC CONSULTING. Possible approval of Purchase Order 07-409.00-007 for \$240,000 to RC Consulting to analyze the October 2007, April 2007, October 2008 and April 2009 Vehicle Registration Databases from the Department of Motor Vehicles to support Energy Commission transportation activities. (ERPA funding.) Contact: Gene Strecker. (5 minutes)
9. UNIVERSITY OF CALIFORNIA, DAVIS. Possible approval of Amendment 11 to Contract 300-97-009 with the Regents of the University of California, Davis to add \$50,000 and extend for one year the existing Interagency Agreement for student interns to provide support for electric and natural gas forecasting, demand analysis and impacts of energy efficiency programs, and legal support for power plant licensing cases, contracts, loans, grants and Public Records Act requests. (ERPA funding.) Contact: Belen Valencia. (5 minutes.)
10. UNIVERSITY OF CALIFORNIA, DAVIS. Possible approval of PIER Work Authorization MRA-02-077 for \$402,269 with The Regents of the University of California, Davis, for the California Wind Energy Collaborative. MRA-02-077 is under the UC Master Research Agreement Number 500-02-004 with The Regents of the University of California – Office of the President/CIEE. This project will provide organizational and research capabilities to benefit development of wind energy systems in California's unique physical and regulatory environment. (PIER electricity funding.) Contact: Dora Yen-Nakafuji. (5 minutes)

11. SCRIPPS INSTITUTION OF OCEANOGRAPHY. Possible approval of Contract 500-07-017 with the University of San Diego, Scripps Institution of Oceanography for \$2,300,000 to continue core climate change research. Under this proposal, Scripps will install and run meteorological and hydrological stations in key areas in the state, enhance the available climatic and hydrologic records, investigate climate extremes and lead the preparation of the 2008 Scenarios Study for the Climate Action Team. (PIER electricity funding.) Contact: Guido Franco. (5 minutes)
12. PACIFIC NORTHWEST NATIONAL LABORATORY Possible approval of PIER Work Authorization MR-076 for \$1,160,000 with the U. S. Department of Energy-Pacific Northwest National Laboratory for Extreme Event Research to understand large cascading blackout propagation. MR-076 is under the UC Master Research Agreement Number 500-02-004 with The Regents of the University of California – Office of the President/CIEE. (PIER electricity funding.) Contact: Jamie Patterson. (5 minutes)
13. ALTERNATIVE ENERGY SYSTEMS CONSULTING. Possible approval of Contract 500-07-020 with Alternative Energy Systems Consulting for \$1,150,000 to apply and demonstrate intelligent agent technology that can successfully coordinate energy production and delivery from wind generation resources and storage. (PIER electricity funding.) Contact: Jamie Patterson. (5 minutes)
14. ASSOCIATION OF CALIFORNIA WATER AGENCIES. Possible approval of Contract 500-07-022 for \$399,286 with the Association of California Water Agencies for the assessment and field demonstration of the ability to obtain electrical peak load reductions and water conservation by shifting end use customers from volumetric water meters to time of use water meters. (PIER electricity funding.) Contact: Mike Gravely. (5 minutes)
15. UNIVERSITY OF CALIFORNIA, OFFICE OF THE PRESIDENT. Possible approval of Amendment 3 to Contract 500-01-043 with the University of California, Office of the President to add \$2,405,863, expand the scope of work and extend the contract by six months. This amendment will continue long-term research into demand response enabling technologies, rename the project *Enabling Technologies Development Program*, and allow research in enabling technologies to improve utility distribution system automation and end use devices in buildings. (PIER electricity funding). Contact: Kristy Chew. (5 minutes)
16. UNIVERSITY OF CALIFORNIA OFFICE OF THE PRESIDENT. Possible approval of two grants for proposals that were competitively selected in response to the 2007 Research Opportunity Notice for the Enabling Technology Development Program. (PIER electricity funding.) Contact: Kristy Chew. (5 minutes)
 - a. EPRI, Palo Alto, CA: *Decision Support Tool for Demand Response Trigger System to Connect Retail to Wholesale Electricity Markets*, \$250,000.
 - b. EnerNex Corporation, Knoxville, TN: *Requirements, Architecture and Tools for Implementing Reliable Command and Control for a Demand Responsive Energy Grid*, \$250,000.

17. RENEWABLES NATURAL GAS REPLACEMENT ALTERNATIVES. Possible approval of four projects totaling \$1,767,302, under the PIER Natural Gas Program Renewables Research, Development and Demonstration Grant Solicitation. (PIER natural gas funding) Contact: Prab Sethi. (5 minutes)
 - a. Gas Technology Institute: *Production and Conditioning of High Sulfur Biogas for Fuel Cell Combined Heat and Power Generation*, \$499,921.
 - b. Lawrence Berkeley National Lab: *Biogas-Powered 100kW Microturbine with Ultra-Low Emission for CHP Applications*, \$500,000.
 - c. Diversified Energy Corporation: *Reducing California Industrial Natural Gas Consumption through Advanced Biomass Gasification*, \$500,000.
 - d. Sacramento Municipal Utility District: *Removal of Siloxane and H₂S from Biogas using Microwave Technology*, \$267,381.
18. TRUSTEES OF THE CALIFORNIA STATE UNIVERSITY. Possible approval of five grant applications, totaling \$474,988, in response to Solicitation Cycle 07-01 of the Energy Innovations Small Grant Program. (PIER funded.) Contact Dave Michel. (5 minutes)
 - a. 07-01-37, CleanEngen Group, LLC, Castro Valley, CA: *Air Independent Internal Oxidation Steam Generator*, \$95,000.
 - b. 07-01-03, Northwestern University, Evanston, IL: *Novel Solid Oxide Fuel Cell Anodes for Use with Coal and Biomass-Derived Syngas*, \$94,993.
 - c. 07-01-01, Texas A&M University, College Station, TX: *Novel Heat Transfer Fluid for Heating, Ventilating, and Air Conditioning (HVAC), and Microelectronics Applications*, \$95,000.
 - d. 07-01-34, C/e-Solutions, Sacramento, CA: *Novel Energy Generation Process For Wastewater Treatment Plant Operations*, \$94,989.
 - e. 07-01-29, University of Arkansas, Little Rock, AR: *Thermo-chemical Process Platforms to Utilize Crude Glycerin for Hydrogen Production and Electricity Generation*, \$95,000.
19. GEOLOGIC CARBON SEQUESTRATION STRATEGIES FOR CALIFORNIA. Possible adoption of *Geologic Carbon Sequestration Strategies for California* in response to AB 1925 (Blakeslee, Chapter 471, Statutes of 2006). This report, produced by the Energy Commission in coordination with the Department of Conservation, is a technical evaluation and assessment of carbon capture and sequestration technologies, and of the economic, statutory and regulatory issues affecting adoption of geologic carbon sequestration in the state. Contact: Kelly Birkinshaw/Elizabeth Burton. (15 minutes)
20. 2007 INTEGRATED ENERGY POLICY REPORT. Possible approval of the *2007 Integrated Energy Policy Report*. Contact: Lorraine White. (30 minutes)

21. **Minutes**

- a. Approval of the October 31, 2007, Business Meeting Minutes.
- b. Approval of the November 7, 2007, Business Meeting Minutes.

22. **Commission Committee Presentations/Discussion**

A discussion by the Commissioners regarding Committee Oversight matters may be held.

23. **Chief Counsel's Report**

The Energy Commission may adjourn to closed session with its legal counsel to determine whether facts and circumstances exist that warrant the initiation of litigation [Government Code Section 11126(e)(3)] or whether facts and circumstances exist that constitute a significant exposure to litigation against the Commission [Government Code Section 11126(e)(2)].

24. **Executive Director's Report**

Closed session may be held on personnel matters. [Government Code, Section 11126(a).]

25. **Legislative Director's Report**

26. **Public Adviser's Report**

27. **Public Comment**

People may speak up to five minutes on any matter concerning the Energy Commission. The Commission may recess the meeting and continue it later for purposes of a general discussion of Commission internal organization and policy. No action will be taken at such a continued session. The Commission will announce whether it plans to continue the meeting in this manner and the time and location at the end of the last regular item.

If you require special accommodations, contact Lourdes Quiroz at 916-654-5146, five days before the meeting.

News media inquiries should be directed to:

Claudia Chandler, Assistant Executive Director - 916-654-4989

Questions about participation in the Business Meeting should be directed to:

Public Adviser's Office - 916-654-4489 or 800-822-6228

Participating by Telephone at a Business Meeting

If you want to participate by telephone, call toll free 1-888-823-5065 on Business Meeting days after 10:01 a.m. (PDT). When asked, please answer "Business Meeting and Mr. Jerome Lee" and the operator will connect you into the meeting. Should you wish to speak on a specific item, please inform the operator and provide the item number.

Please note that while the Energy Commission affords members of the public the opportunity to participate by telephone, the Commission strongly encourages public comments to be made in person because there are occasional technical problems with the Commission's telephone link. The Commission will make every effort to avoid these problems; however, it is the responsibility of the person wishing to make a comment to ensure that such comment is received by the Commission. If you intend to make comments by phone, the Commission recommends that a written comment also be submitted either by facsimile or e-mail to the Public Adviser by 5 p.m. two days before the scheduled business meeting.

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