



December 10, 2014

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

10 a.m.

(Wheelchair Accessible)

THE COMMISSION WILL CONSIDER AND MAY TAKE ACTION ON 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. DEPARTMENT OF PARKS AND RECREATION. Proposed resolution approving Reimbursement Agreement C14V0029/RMB800-14-002 to receive \$237,000 from the Department of Parks and Recreation over five fiscal years. The Energy Commission will provide the Department of Parks and Recreation vehicle count reports for four-wheel-drive and off-highway vehicles, which will be used for off-highway transportation planning purposes at state-owned parks and to support the Department's work on SB 853. Contact: Ryan Eggers.
 - b. WASTE HEAT AND CARBON EMISSIONS REDUCTION ACT (08-WHCE-1). Possible adoption of revisions to the Guidelines for Certification of Combined Heat and Power Systems according to the Waste Heat and Carbon Emissions Reduction Act, Public Utilities Code, Section 2840 et seq. as enacted in AB 1613 (Blakeslee, Chapter 713, Statutes of 2007) and amended in AB 2791 (Blakeslee, Chapter 253, Statutes of 2008). The proposed revisions will correct several small typographical, language, and calculation errors, as well as improve form instructions to increase clarity and address common points of confusion. Contact: Jason Harville.
2. ENERGY COMMISSION COMMITTEE APPOINTMENTS. Possible approval of appointments to the Energy Commission's Standing Committees and Siting Case Committees. Contact: Kevin Barker.
3. ENERGY COMMISSION TRIBAL CONSULTATION POLICY. Possible adoption of Energy Commission Tribal Consultation Policy. Staff has prepared the Energy Commission Tribal Consultation policy after preparing a draft for public comment and meetings with tribes. The purpose of this policy is to fulfill Governor Brown's Executive Order B-10-11 and the California Natural Resources Agency tribal consultation policy to ensure effective government-to-government consultation between the Energy Commission and tribal entities to further the Energy Commission's mission and to provide meaningful tribal input into the development of Energy Commission activities

that may affect tribal communities. Contact: Thomas Gates. (Staff presentation: 5 minutes)

4. CARLSBAD ENERGY CENTER PROJECT (07-AFC-06C). Decision of the appeal filed by Robert Sarvey of the Carlsbad Amendments Committee's October 31, 2014, order granting his petition to intervene in the proceeding. Mr. Sarvey is appealing the portion of the order which limits his participation as an Intervenor to the topic areas of Air Quality, Greenhouse Gases, Public Health, and Alternatives. The Carlsbad Energy Center, if amended as proposed, would be a 632 MW power generation facility, located on the eastern portion of the Encina Power Station (EPS), west of Interstate 5 and south of the Agua Hedionda Lagoon, in the City of Carlsbad in San Diego County. Contact: Paul Kramer. (Staff presentation: 5 minutes)
5. BLACK ROCK 1, 2, AND 3 GEOTHERMAL POWER PLANT PROJECT (02-AFC-2C). Possible approval of the petition to extend the Deadline for commencement of construction for the Black Rock 1, 2, and 3 Geothermal Power Project from December 18, 2014 to December 18, 2019. Contact: Dale Rundquist. (Staff presentation: 10 minutes)
6. AVENAL ENERGY CENTER (08-AFC-1C). Possible approval of a Petition to Amend the California Energy Commission Decision to allow the project to extend the deadline to commence construction by nine months from December 16, 2014, to September 16, 2015. Contact: Camille Remy Obad. (Staff presentation: 10 minutes)
7. ENERGY PRO VERSION 6.2. Proposed order to approve an alternative protocol and Energy Pro Version 6.2 for Nonresidential Buildings, by EnergySoft, as 2013 Nonresidential Compliance Software (also known as an alternative calculation method). The proposed order would approve through 5:00 PM on March 31, 2015, an alternative protocol and software tool, EnergyPro Version 6.2, pursuant to the same alternative protocol, to demonstrate compliance with the performance approach (i.e. energy budgets) of the nonresidential provisions of the 2013 Building Energy Efficiency Standards. (Public Resources Code, § 25402.1(a); Cal. Code Regs., pt. 1, ch. 10, § 10-109(h).) Contact: Todd Ferris. (Staff presentation: 10 minutes)
8. CALIFORNIA CLEAN ENERGY JOBS ACT 2015 IMPLEMENTATION GUIDELINES. Possible approval of substantive changes to the *Proposition 39: California Clean Energy Jobs Act 2015 Program Implementation Guidelines*. The Guidelines govern the Energy Commission's implementation of the Clean Energy Jobs Act program and provide direction to potential applicants on their participation in the program. Contact: Elizabeth Shirakh. (Staff presentation: 10 minutes)
9. VOLUNTARY CALIFORNIA QUALITY LED LAMP SPECIFICATION 2.0. Possible approval of a resolution adopting proposed updates to the Energy Commission's voluntary California quality Light Emitting Diode (LED) lamp specifications. The original voluntary LED specification was published in December 2012 and was based upon a draft ENERGY STAR specification for LEDs and CFLs. Since that time, the ENERGY STAR specification was finalized to version 1.0 and revised to version 1.1. The Commission proposes to better align the voluntary LED specification with the latest version of ENERGY STAR version 1.1. Contact: Ken Rider. (Staff presentation: 10 minutes)
10. ELECTRICITY DEMAND FORECASTS. Possible approval of *Forms and Instructions for Electricity Demand Forecasts* prepared in support of the *2015 Integrated Energy Policy Report*. These forms ask load-serving entities to provide the Energy Commission with load data, economic/demographic information, demand-side management impacts,

and other data related to energy demand for the historical years 2013-2014 and the forecast years 2015-2026. Contact: Nick Fugate. (Staff presentation: 5 minutes)

11. ELECTRICITY RESOURCE PLANS. Possible approval of *Forms and Instructions for Submitting Electricity Resource Plans* in support of the *2015 Integrated Energy Policy Report*. These forms ask load-serving entities in California to submit plans showing how demand for energy and annual peak load will be met by specific supply resources. Contact: Jim Woodward. (Staff presentation: 5 minutes)
12. CANADIAN STANDARDS ASSOCIATION. Proposed resolution approving Agreement 140-14-001 with Canadian Standards Association, operating as CSA Group, for a \$0 license agreement to use specific portions of Part 6 of Title 24 of the 2013 Building Energy Efficiency Standards and portions of the 2008 Nonresidential Compliance Manual as the basis for CSA Standards intended for resale and distribution to international standards development organizations. Contact: Michael Murza. (Staff presentation: 5 minutes)
13. ADVANCING UTILITY-SCALE CLEAN ENERGY GENERATION GRANTS, PON-13-303. This grant solicitation sought proposals for applied research and development projects that will develop emerging utility-scale renewable energy generation technologies and strategies to improve power plant performance, reduce costs, and expand the resource base. (EPIC funding) Contact: Michael Sokol. (Staff presentation: 10 minutes)
 - a. ITRON, INC., dba IBS. Proposed resolution approving Agreement EPC-14-001 with Itron, Inc. for a \$998,926 grant to use high-fidelity solar forecasting to predict net load impacts on the California electricity grid and reduce operating uncertainty.
 - b. GEYSERS POWER COMPANY, LLC. Proposed resolution approving Agreement EPC-14-002 with Geysers Power Company, LLC for a \$3,000,000 grant to investigate the methods, risks and costs associated with flexibly operating the Geysers geothermal plants to facilitate the integration of other intermittent renewable resources onto the grid in support of California's energy and greenhouse gas reduction goals.
 - c. THE REGENTS OF THE UNIVERSITY OF CALIFORNIA, LOS ANGELES CAMPUS. Proposed resolution approving Agreement EPC-14-003 with the Regents of the University of California, on behalf of the Los Angeles Campus for a \$1,497,024 grant to demonstrate a new approach to utility-scale thermal energy storage that enables low system costs, long lifetime, and scalability for a wide range of concentrating solar power applications in California.
 - d. HALOTECHNICS, INC. Proposed resolution approving Agreement EPC-14-004 with Halotechnics, Inc. for a \$1,500,000 grant to design and test a 75kW, 6-hour, pre-commercial containerized molten salt energy storage system to compliment renewable production.
 - e. THE REGENTS OF THE UNIVERSITY OF CALIFORNIA, SAN DIEGO. Proposed resolution approving Agreement EPC-14-005 with The Regents of the University of California on behalf of the San Diego campus for a \$999,984 grant to optimize energy storage charge/discharge, electric vehicle charging with bi-directional communication, and demand to reduce peak electricity load, increase electricity reliability, reduce ratepayer cost, and increase electricity safety. The goal will be accomplished by developing emerging utility-scale renewable energy

integration technologies and strategies through improving the accuracy of solar forecasting technologies, increasing the value of distributed energy resources (DERs), and achieving near real-time optimal control of DERs.

- f. THE REGENTS OF THE UNIVERSITY OF CALIFORNIA, DAVIS. Proposed resolution approving Agreement EPC-14-007 with The Regents of the University of California on behalf of the Davis campus for a \$1,000,000 grant to improve the accuracy of short-term forecasting of wind power production ramps in select wind resource area of California.
 - g. THE REGENTS OF THE UNIVERSITY OF CALIFORNIA, SAN DIEGO. Proposed resolution approving Agreement EPC-14-008 with The Regents of the University of California on behalf of the San Diego campus for a \$999,898 grant to address a lack of accurate solar energy forecasting tools for concentrated solar power, concentrated PV and PV tracking technologies by developing solar forecasting and resource-to-power models optimized for direct normal irradiance plane of array irradiance, and solar power generation and validating these models at the utility-scale solar plants including 392 MW Ivanpah Solar and 250 MW California Valley Solar Ranch.
- 14. UNIVERSITY OF CALIFORNIA, IRVINE. Proposed resolution approving a \$4,999 co-sponsorship and use of the Energy Commission's name and logo for the 2015 International Colloquium on Environmentally Preferred Advanced Power Generation Clean Energy Conference hosted by the University of California, Irvine. The conference will provide a venue for Energy Commission-funded advanced generation projects to present their results and leverage reviews from experts in attendance. (EPIC funding) Contact: Kevin Uy. (Staff presentation: 5 minutes)
 - 15. MONTEREY PENINSULA UNIFIED SCHOOL DISTRICT. Proposed resolution approving Agreement 019-14-ECG with Monterey Peninsula Unified School District for a \$3,000,000 loan at zero percent interest to install a total of 820.6 kilowatt of solar photovoltaic (PV) at five sites. The solar PV systems are estimated to produce a total of 1,145,065 kilowatt-hours annually saving approximately \$243,299 for Monterey Peninsula Unified School District. The simple payback period is 12.3 years based on the loan amount. (ECAA-Ed funded) Contact: Cheng Moua. (Staff presentation: 5 minutes)
 - 16. PAULSSON, INC. Proposed resolution approving Agreement GEO-14-001 with Paulsson, Inc. for a \$883,002 grant to build and field test a large aperture borehole seismic vector array that is capable of operating at the high subsurface temperatures and pressures common to geothermal areas, and produce high resolution seismic data, models and maps for two wells at the Geysers geothermal field. The array and the resulting high resolution seismic data and maps will allow for better definition of geothermal subsurface conditions and allow for effective characterization and monitoring of geothermal reservoirs in every phase of field development. (GRDA funding) Contact: Cheryl Closson. (Staff presentation: 5 minutes)
 - 17. AIR PRODUCTS AND CHEMICALS, INC. Proposed resolution approving Agreement ARV-14-030 with Air Products and Chemicals, Inc. for a \$300,000 grant for the location at 21865 E. Copley Drive, Diamond Bar, CA, to cover operation and maintenance costs for the existing hydrogen refueling equipment and gather data about the equipment. (ARFVTP funding) Contact: Sarah Williams. (Staff presentation: 5 minutes)

18. COUNTY OF LOS ANGELES. Proposed resolution approving Agreement ARV-14-031 with the County of Los Angeles for a \$96,307 grant to deploy 16 Level-2 electric vehicle chargers at a county parking garage. (ARFVTP funding) Contact: Jacob Orenberg. (Staff presentation: 5 minutes)
19. COLONY ENERGY PARTNERS – TULARE, LLC. Proposed resolution approving Agreement ARV-14-029 with Colony Energy Partners – Tulare, LLC for a \$5,000,000 grant to construct a digester designed to process locally-collected dairy manure, food and agricultural processing residuals, restaurant and cafeteria food scraps, restaurant grease trap residuals, and organic municipal solid waste. This will result in the production of pipeline-grade biomethane that will be fed into the natural gas grid and marketed as a diesel alternative for on-road trucks. (ARFVTP funding) Contact: Juan Garcia. (Staff presentation: 5 minutes)
20. THE REGENTS OF THE UNIVERSITY OF CALIFORNIA, IRVINE. Proposed resolution approving Amendment 2 to Contract 600-10-002 with The Regents of the University of California on behalf of the Irvine campus to extend the term of the contract for 3 years, revise the scope of work, and augment the budget by \$360,000. This amendment will provide continued technical support to the Alternative and Renewable Fuel and Vehicle Technology Program (ARFVTP) in planning and evaluating the early network of hydrogen refueling stations, other alternative fuels refueling infrastructure, and also develop additional air quality impact analyses. (ARFVTP funding) Contact: Juan Garcia. (Staff presentation: 5 minutes)
21. UNIVERSITY OF CALIFORNIA, BERKELEY. Proposed resolution approving Agreement 800-14-003 with The Regents of the University of California on behalf of the Berkeley Campus, Energy Institute at Haas School of Business, for a \$10,000 contract to co-sponsor the 2015 POWER Conference on Energy Research and Policy scheduled in Berkeley, California on March 20, 2015. The 2015 POWER Conference will be the 20th annual conference focusing on electricity markets and systems. (ERPA funding). Contact: Mike Jaske. (Staff presentation: 5 minutes)
22. **Minutes:** Possible approval of the November 17, 2014, Business Meeting Minutes.
23. **Lead Commissioner or Presiding Member Reports.** A Lead Commissioner on a policy matter may report to the Commission on the matter and discussion may follow. A Presiding Member on a delegated committee may report to the Commission on the matter and discussion may follow.
24. **Chief Counsel's Report:** The Energy Commission may adjourn to closed session with its legal counsel [Government Code Section 11126(e)] to discuss any of the following matters to which the Energy Commission is a party:
 - a. *In the Matter of U.S. Department of Energy (High Level Waste Repository)*, (Atomic Safety Licensing Board, CAB-04, 63-001-HLW).
 - b. *Asphalt Roofing Manufacturers Association v. Energy Commission* (Third District Court of Appeal # C076990).
 - c. *PECG v. Brown* (Alameda County Superior Court # RG10494800 [Furlough Litigation].)
 - d. *Energy Commission v. SoloPower, Inc. and SPower, LLC*. (Sacramento County Superior Court # 34-2013-00154569)
 - e. *Laborers' International Union of North America, Local #1184 v. Energy Commission (Blythe Solar Energy Center)*, (Supreme Court # S220286).

- f. *Communities for a Better Environment and Center for Biological Diversity v. Energy Commission* (Court of Appeal, First Appellate District, # A141299).
- g. *Helping Hand Tools and Rob Simpson v. Energy Commission* (Sacramento County Superior Court # 34-2014-80001904 [Quail Brush].)

The Energy Commission may also discuss any judicial or administrative proceeding that was formally initiated after this agenda was published; or determine whether facts and circumstances exist that warrant the initiation of litigation; or that constitute a significant exposure to litigation against the Commission.

- 25. **Executive Director's Report.**
- 26. **Public Adviser's Report.**
- 27. **Public Comment:** People may speak up to three minutes on any matter concerning the Energy Commission, with the exception of items appearing elsewhere on this agenda or items related to pending adjudicative (certification or enforcement) proceedings.

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

News media inquiries should be directed to:

Media and Public Communications - 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

To participate by telephone, please call toll free 1-888-823-5065 on Business Meeting days after 10:01 a.m. (PDT). The pass code for the meeting is "Business Meeting" and the call leader is Jerome Lee. If you plan to speak about a specific item, please give the operator the item number.

To avoid occasional technical problems with the Commission's telephone link, 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. Fax(916) 654-4493 or e-mail publicadviser@energy.ca.gov.

The Business Meeting is broadcast via WebEx, the Energy Commission's on-line meeting service. To listen to the meeting and view any presentations, please click the following link or paste it into your browser:

<https://energy.webex.com/energy/onstage/g.php?t=a&d=922971230>

You may also go to <https://energy.webex.com/ec> and enter Meeting Number **922 971 230**. The meeting password is **mtg@10am**.

The Energy Commission building has wireless Internet access available in the atrium, coffee shop, and library.

Subscribe to Electronic Mail Lists

To reduce paper and mailing costs, the Energy Commission offers an automated e-mail system for the business meeting agendas. To subscribe, please go to our Business Meetings page www.energy.ca.gov/business_meetings/ and use the form on the right side under 'Subscribe'.

Adjournment of Hearings and Meetings: Depending upon time available and the orderly management of proceedings, the Commission may order adjournment (recess or postponement) of any noticed hearing or meeting, to be continued to the next day, another specific date or time, or to the next business meeting, as appropriate. Any such adjournment will be noticed at the time the order of adjournment is made (Government Code §§11128.5, 11129).
