

State of California
California Energy Commission
Minutes of the February 21, 2018, 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 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. INTERNATIONAL CODE COUNCIL. Proposed resolution approving Agreement MOU-17-005 with the International Code Council (ICC) for a \$0 Memorandum of Understanding (MOU) to co-produce a training guidebook entitled "Significant Changes to the California Energy Code - 2019 Edition." The guidebook would be part of ICC's series of Title 24 code compliance publications, and coincide with the 2019 Energy Standards implementation. Contact: Paula David.
 - b. THE GOVERNMENT OF DENMARK. Proposed resolution approving Agreement MOU-17-006 with the Government of Denmark to share knowledge, experiences, data, and best practices relevant to the development of offshore wind energy. Contact: Jennifer Nelson.
 - c. UNIVERSITY OF CALIFORNIA, LOS ANGELES. Proposed resolution approving Amendment 1 to Grant Agreement EPC-14-003 with the Regents of the University of California, on behalf of the Los Angeles campus, for a budget reallocation, no-cost time extension, and demonstration site change. The budget reallocation will move \$256,250 in equipment costs to direct labor, fringe benefits, indirect overhead, and subcontractor costs, and the project term will increase by 9 months. (EPIC funding) Contact: Kevin Uy.
 - d. UNIVERSITY OF CALIFORNIA, IRVINE. Proposed resolution approving a \$4,999 purchase order with The Regents of the University of California, on behalf of UC Irvine's Advanced Power and Energy Program, to co-sponsor the 2018 International Colloquium on Environmentally Preferred Advanced Power Generation (ICEPAG), and to approve use of the California Energy Commission logo in co-sponsorship advertisements. The ICEPAG Microgrid Global Summit will take place March 27-29, 2018 at the UC Irvine campus. The co-sponsorship was approved in the Research & Development Division's 2017-18 workplans. (EPIC funding) Contact: Mike Gravely.
 - e. GLINT PHOTONICS, INC. Proposed resolution approving Amendment 2 to Grant Agreement EPC-14-040 with Glint Photonics, Inc. for a budget

reallocation. The cumulative budget reallocation is \$259,198, and approximately 26 percent of the overall budget. This budget reallocation is necessary to reflect the current technology development strategy and update the distribution of expenses between the Energy Commission funding total and match funds. The project increased the match share by 150 percent, for a total match contribution of \$2,500,000. (EPIC funding) Contact: Silvia Palma-Rojas.

- f. ALLIANCE TO SAVE ENERGY. Proposed resolution approving Agreement 150-17-009 with Alliance to Save Energy for a \$25,000 contract to renew the Energy Commission's membership for one year. Membership allows Energy Commission staff to meet with key policy and decision makers and officials from over 100 organizations to advance energy efficiency through unique and effective policy, market transformation, education, communications, and research and technology initiatives. These meetings provide a forum for exchanging information, ideas, and resources. (ERPA funding) Contact: Rachel Grant Kiley.

Commissioner McAllister announced that he is recusing himself from Item 1f because he is on the board of Alliance to Save Energy. Commissioner McAllister moved Items 1a – 1e and Commissioner Douglas seconded. The vote was unanimous (5-0). Commissioner McAllister left the room. Commissioner Douglas moved Item 1f and Commissioner Scott seconded. The vote was 4-0.

2. ENERGY COMMISSION COMMITTEE APPOINTMENTS. Possible approval of appointments to the Energy Commission's Standing Committees. Contact: Kourtney Vaccaro. (Staff Presentation: 5 minutes)

- a. COMPLAINT AGAINST THE STOCKTON PORT DISTRICT FOR NONCOMPLIANCE WITH THE RENEWABLES PORTFOLIO STANDARD (18-RPS-01). Consideration and possible adoption of an order establishing a committee to preside over the Complaint by the Energy Commission Executive Director against the Stockton Port District for noncompliance with the RPS Program proceeding.

The Chair proposed that Commissioner Douglas will be the Presiding Member and Commissioner Hochschild will be the Associate Member of the Committee. Commissioner Hochschild moved Item 2 per the Chair's proposal and Commissioner Scott seconded. The vote was unanimous (5-0).

3. CALIFORNIA ENERGY DEMAND 2018-2030, REVISED ELECTRICITY FORECAST. Proposed resolution approving California Energy Demand 2018-2030, Revised Forecast. The staff report presents baseline forecasts of natural gas and electricity consumption and peak demand for California and for utility planning areas within the state. The report also includes estimates of additional achievable energy efficiency savings and photovoltaic adoption and provides options for managed electricity forecasts for resource planning. The adopted forecast will be used in a number of planning proceedings, including the California Independent System Operator's transmission planning and the California Public Utilities Commission's integrated resource and distributed resource planning. Contact: Chris Kavalec. (Staff presentation: 15 minutes)

Commissioner McAllister moved the California Energy Demand 2018 to 2030 Revised Forecast, supporting forms and spreadsheets that contain the calculations that underlie the numbers that are in the forecast and the errata and Commissioner Douglas seconded. The vote was unanimous (5-0).

4. 2017 INTEGRATED ENERGY POLICY REPORT. Proposed resolution approving the "2017 Integrated Energy Policy Report" (CEC-100-2017-001-CMF). Senate Bill 1389 (Bowen, Chapter 568, Statutes of 2002) requires the Energy Commission to prepare a biennial integrated energy policy report that assesses major energy trends and issues facing the state's electricity, natural gas, and transportation fuel sectors, and provides

policy recommendations to conserve resources; protect the environment; ensure reliable, secure, and diverse energy supplies; enhance the state's economy; and protect public health and safety (Public Resources Code § 25301(a)). The Energy Commission prepares these assessments and associated policy recommendations every two years, with updates in alternate years, as part of the Integrated Energy Policy Report. Contact: Heather Raitt. (Staff Presentation: 15 minutes)

Commissioner Hochschild moved Item 4 and Commissioner Scott seconded. The vote was unanimous (5-0).

5. APPROVAL OF DISADVANTAGED COMMUNITY ADVISORY GROUP (DACAG) MEMBERSHIP. Proposed resolution approving membership in the DACAG. Senate Bill 350 (SB 350) (De León, Chapter 547, Statutes of 2015) requires the California Public Utilities Commission and the Energy Commission to establish a disadvantaged community advisory group consisting of representatives from disadvantaged communities identified pursuant to Section 39711 of the Health and Safety Code. The DACAG will review and provide advice on proposed clean energy and pollution reduction programs and determine whether those proposed programs will be effective and useful in disadvantaged communities. The DACAG will be comprised of 10 members selected jointly by two Commissioners from the Energy Commission and two commissioners from the California Public Utilities Commission. Contact: Alana Mathews. (Staff Presentation: 5 minutes)

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

6. PROPOSED ADOPTION OF ADDITIONS TO AND MODIFICATIONS OF TITLE 20 DATA COLLECTION REGULATIONS. Proposed resolution adopting regulations to implement data collection and designation of confidential information found in California Code of Regulations, Title 20, Sections 1302, 1304, 1306, 1308, 1314, 1344, 1353, and 2505. The proposed action would clarify existing regulations, require collection of natural gas, interconnection, electricity and natural gas consumption data, and provide for designation of automatically confidential data. Contact: Malachi Weng-Gutierrez. (Staff presentation: 10 minutes)

Commissioner McAllister moved Item 6 and Commissioner Douglas seconded. The vote was unanimous (5-0).

7. EXECUTIVE DIRECTOR AUTHORITY TO APPROVE BUDGET REALLOCATIONS. Proposed resolution that supersedes Resolution No. 13-1219-1a to add authority for the Executive Director or his or her designee to approve budget reallocations. Contact: Rachel Grant Kiley. (Staff Presentation: 5 minutes)

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

8. CITY OF BAKERSFIELD. Proposed resolution approving Agreement 004-17-ECD with the City of Bakersfield for a \$3,000,000 loan at one percent interest to upgrade 15,573 high pressure sodium light fixtures to light emitting diode fixtures city-wide. The project will save the city approximately 4,647,953 kWh of electricity, and approximately \$665,514 in utility costs annually. Total project cost is estimated to be \$4,405,075. The simple payback of the loan is 4.5 years. (ECAA funded) Contact: David Michel. (Staff presentation: 5 minutes)

Commissioner McAllister moved Item 8 and Commissioner Hochschild seconded. The vote was unanimous (5-0).

9. MERCED COMMUNITY COLLEGE DISTRICT. Proposed resolution approving Agreement 004-17-ECG with Merced Community College District for a \$1,627,600 loan at zero percent interest to construct a ground-mounted/parking lot canopy solar photovoltaic (PV) electric system at its Los Banos campus. The installed PV panels will total 525.1 DCkW and will generate approximately 668,000 kWh of electricity per year. This system will save the district \$88,006 per year. The simple payback period of the loan is 18.5 years. The total cost for the project is \$1,627,600. (ECAA-Ed funded) Contact: Barry McLeod. (Staff Presentation: 5 minutes)

Commissioner McAllister moved Item 9 and Commissioner Hochschild seconded. The vote was unanimous (5-0).

10. LIGHT DUTY VEHICLE HYDROGEN REFUELING INFRASTRUCTURE OPERATIONS AND MAINTENANCE SUPPORT, GFO-17-601. This solicitation sought proposals to provide Operations and Maintenance (O&M) support funding for publicly accessible hydrogen refueling stations that did not receive O&M support or received a portion of the potential \$300,000 in O&M support funding under PON-13-607, Hydrogen Refueling Infrastructure. Funding recipients will collect and report data on station equipment, operations, and utilization. Stations will serve the growing number of fuel cell electric vehicles deployed in California. (ARFVTP funding) Contact: Christopher Jenks. (Staff presentation: 5 minutes)
- a. ONTARIO CNG STATION, INC. Proposed resolution approving Agreement ARV-17-020 with Ontario CNG Station, Inc., for a \$300,000 grant to cover operation and maintenance costs of the existing hydrogen refueling station located at 1850 East Holt Blvd, Ontario, CA 91761.
 - b. AIR LIQUIDE ADVANCED TECHNOLOGIES U.S. LLC. Proposed resolution approving Agreement ARV-17-021 with Air Liquide Advanced Technologies U.S. LLC for a \$165,000 grant to cover operation and maintenance costs of the existing hydrogen refueling station located at 3731 East La Palma Avenue, Anaheim, CA 92806.
 - c. FIRSTELEMENT FUEL, INC. Proposed resolution approving Agreement ARV-17-022 with FirstElement Fuel Inc. for an \$80,000 grant to cover operation and maintenance costs of the existing hydrogen refueling station located at 2855 Winchester Blvd., Campbell, CA 95008.
 - d. FIRSTELEMENT FUEL, INC. Proposed resolution approving Agreement ARV-17-023 with FirstElement Fuel Inc. for a \$66,667 grant to cover operation and maintenance costs of the existing hydrogen refueling station located at 2050 Harbor Blvd., Costa Mesa, CA 92627.
 - e. FIRSTELEMENT FUEL, INC. Proposed resolution approving Agreement ARV-17-024 with FirstElement Fuel Inc. for an \$80,000 grant to cover operation and maintenance costs of the existing hydrogen refueling station located at 391 West A Street, Hayward, CA 94541.
 - f. FIRSTELEMENT FUEL, INC. Proposed resolution approving Agreement ARV-17-025 with FirstElement Fuel Inc. for a \$170,000 grant to cover operation and maintenance costs of the existing hydrogen refueling station located at 3060 Carmel Valley Road, San Diego, CA 92130 (known as the Del Mar station).
 - g. FIRSTELEMENT FUEL, INC. Proposed resolution approving Agreement ARV-17-026 with FirstElement Fuel Inc. for a \$300,000 grant to cover operation and maintenance costs of the existing hydrogen refueling station located at 41700 Grimmer Blvd., Fremont, CA 94538.

- h. FIRSTELEMENT FUEL, INC. Proposed resolution approving Agreement ARV-17-027 with FirstElement Fuel Inc. for a \$145,000 grant to cover operation and maintenance costs of the existing hydrogen refueling station located at 5700 Hollywood Blvd, Los Angeles, CA 90028.
- i. FIRSTELEMENT FUEL, INC. Proposed resolution approving Agreement ARV-17-028 with FirstElement Fuel Inc. for a \$66,667 grant to cover operation and maintenance costs of the existing hydrogen refueling station located at 550 Foothill Blvd., La Canada Flintridge, CA 91011.
- j. FIRSTELEMENT FUEL, INC. Proposed resolution approving Agreement ARV-17-029 with FirstElement Fuel Inc. for an \$80,000 grant to cover operation and maintenance costs of the existing hydrogen refueling station located at 20731 Lake Forest Drive, Lake Forest, CA 92630.
- k. FIRSTELEMENT FUEL, INC. Proposed resolution approving Agreement ARV-17-030 with FirstElement Fuel Inc. for a \$145,000 grant to cover operation and maintenance costs of the existing hydrogen refueling station located at 570 Redwood Highway, Mill Valley, CA 94941.
- l. FIRSTELEMENT FUEL, INC. Proposed resolution approving Agreement ARV-17-031 with FirstElement Fuel Inc. for a \$155,000 grant to cover operation and maintenance costs of the existing hydrogen refueling station located at 8126 Lincoln Blvd., Los Angeles, CA 90045 (known as the Playa del Rey station).
- m. FIRSTELEMENT FUEL, INC. Proposed resolution approving Agreement ARV-17-032 with FirstElement Fuel Inc. for an \$80,000 grant to cover operation and maintenance costs of the existing hydrogen refueling station located at 150 South La Cumbre Road, Santa Barbara, CA 93105.
- n. FIRSTELEMENT FUEL, INC. Proposed resolution approving Agreement ARV-17-033 with FirstElement Fuel Inc. for an \$80,000 grant to cover operation and maintenance costs of the existing hydrogen refueling station located at 12600 Saratoga Avenue, Saratoga, CA 95070.
- o. FIRSTELEMENT FUEL, INC. Proposed resolution approving Agreement ARV-17-034 with FirstElement Fuel Inc. for a \$300,000 grant to cover operation and maintenance costs of the existing hydrogen refueling station located at 1200 Fair Oaks Avenue, South Pasadena, CA 91030.
- p. FIRSTELEMENT FUEL, INC. Proposed resolution approving Agreement ARV-17-035 with FirstElement Fuel Inc. for a \$145,000 grant to cover operation and maintenance costs of the existing hydrogen refueling station located at 12105 Donner Pass Road, Truckee, CA 96161.

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

- 11. BIOGAS ENERGY INC. Proposed resolution approving Agreement FRD-17-001 with Biogas Energy Inc. for a \$5,700,000 grant to install and demonstrate an innovative fast pyrolysis technology to produce bio-oil from wood waste at pilot scale. The Biogas Energy pyrolysis technology aims to establish a new bio-oil industry in California by making small, midsize, and large bio-oil production possible in a distributed or centralized design. Research will also verify the economic scale-up feasibility for the modular system and determine the effectiveness of the production facility to be located near the feedstock source. (CCTRD funding) Contact: Pilar Magana. (Staff presentation: 5 minutes)

Commissioner Scott moved Item 11 and Commissioner Hochschild seconded. The vote was unanimous (5-0).

12. DOE-LAWRENCE BERKELEY NATIONAL LABORATORY. Proposed resolution approving Agreement FRD-17-004 with the U.S. Department of Energy's (DOE) Lawrence Berkeley National Laboratory for a \$3,000,000 grant to develop and demonstrate a biomass conversion technology with commercial scale production potential that can efficiently and cost-effectively transform California waste feedstocks into an advanced biofuel and reduce GHG emissions in transportation fuels. The proposed project leverages \$120,000,000 from the DOE. (CCTRD funding) Contact: Pilar Magana. (Staff presentation: 5 minutes)

Commissioner Douglas moved Item 12 and Commissioner McAllister seconded. The vote was unanimous (5-0).

13. WEST BIOFUELS, LLC. Proposed resolution approving Agreement FRD-17-005 with West Biofuels, LLC for a \$3,000,000 grant to conduct research on and demonstrate an advanced thermochemical fast pyrolysis system that will convert biomass to a bio-oil intermediate fuel to produce a minimum of 50,000 gallons of bio-oil that can be upgraded and refined to low-carbon jet fuel. (CCTRD funding) Contact: Pilar Magana. (Staff presentation: 5 minutes)

Commissioner Scott moved Item 13 and Commissioner McAllister seconded. The vote was unanimous (5-0).

14. DISCUSSION OF ENERGY COMMISSION PROGRESS RE: IMPLEMENTATION OF THE CLEAN ENERGY AND POLLUTION REDUCTION ACT OF 2015 (SB 350). Staff presentation regarding progress on implementation of SB 350 requirements, including administration of the California Renewables Portfolio Standard program, review of local publicly owned electric utility integrated resource plans, revision of Commission data collection regulations to improve demand forecasting, identification of progress in meeting the bill's goals of 50% renewables procurement and doubling of energy efficiency, implementation of widespread transportation electrification, and preparation and publication of the study required by Public Resources Code section 25327 regarding barriers for low-income customers to energy efficiency, weatherization, and renewable energy investments. Contact: Michael Sokol. (Staff presentation: 5 minutes)

Staff presented Information Item 14.

15. **Minutes:** Possible approval of the January 17, 2018 Business Meeting minutes.

Commissioner Douglas moved Item 15 and Commissioner McAllister seconded. The vote was unanimous (5-0).

Lead Commissioner or Presiding Member Reports. The Commissioners reported on their recent activities.

16. **Chief Counsel's Report.** The Chief Counsel gave a report. At 11:4 a.m., the Chair announced that the Commission would adjourn to closed session as specified in Agenda Items 17c and e. Specifically, Item 17 provides notice the Commission will adjourn to closed session with its Legal Counsel pursuant to Government Code Section 11126(e)(1) to discuss the following litigation to which the Energy Commission is a party. Item 17c Energy Commission v. Electricore, Inc. and ZeroTruck and Item 17e National Electrical Manufacturers Association v. Energy Commission. The open session resumed at 1:20 p.m., with no report out from the closed session.
17. **Executive Director's Report.** The Executive Director gave a report.

18. **Public Adviser's Report.** The Public Adviser gave a report.

19. **Public Comment.** None.

Appearances:

(*by telephone)

Angela Islas, Disadvantaged Communities Advisory Group, DACAG

Dwight Zuck, Air Liquide Advanced Technologies US, LLC

*Atabak Youssefzadeh, Ontario CNG Station, Inc.

*Stephen Ellis, American Honda Motor Company

*Shane Stephens, FirstElement Fuel

*Joe Gagliano, California Fuel Cell Partnership

Brian Gannon, Biogas Energy

Catherine Hackney, Southern California Edison

Grant Mack, CPUC

Valerie Winn, PG&E

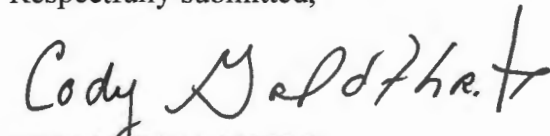
Delphine Hou, CAISO

Erica Jue, Silicon Valley Power, City of Santa Clara

Wm. Spencer Olinek, PG&E

There being no further business, the meeting was adjourned.

Respectfully submitted,



CODY GOLDTHRITE
Secretariat