The meeting was called to order by Chair Hochschild. The Pledge of Allegiance was led by Commissioner McAllister.

Present:

David Hochschild, Chair Siva Gunda, Vice Chair Noemí Gallardo, Commissioner Patricia Monahan, Commissioner Andrew McAllister, Commissioner

Please note that the California Energy Commission (CEC) aims to begin the business meeting promptly at the start time and the end time is an estimate based on the agenda. The meeting may end sooner or later than the time indicated depending on various factors.

Pursuant to the California Code of Regulations (CCR), title 20, section 1104(e), any person may make an oral comment on any agenda item. To ensure the orderly conduct of business, such comments will be limited to two minutes or less per person.

# THE CEC WILL CONSIDER AND MAY TAKE ACTION ON THE FOLLOWING:

#### 1. Public Comment.

Any person wishing to comment on information items (non-voting items) shall provide comments during this period.

#### Public Comment:

Steve Uhler made a comment about Lows Management Standard/Midas.

*Item 7 will be taken up as an information Item, no vote will be taken. Public comment will be taken on Item 7.* 

## 2. Agency Announcements.

The Chair may announce relevant matters to the public and the CEC, including agency updates, events, and other opportunities. Discussion may follow.

## 3. Consent Calendar.

Items 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. Cerritos Community College District (Cerritos College). Proposed resolution approving amendment number 2 to agreement 600-18-006 with Cerritos College to add \$1 million to the budget, extend the agreement by 24 months, update the scope of work, add special terms and conditions, and adopting staff's determination that this action is exempt from the California Environmental Quality Act (CEQA). These changes will support the Electric School Bus Training Project with Cerritos College to provide training for more schools, develop additional training modules, and increase the frequency of training. (Clean Transportation Program (CTP) Funding) Contact: Larry Rillera

- b. Alliance for Sustainable Energy, LLC (Alliance). Proposed resolution approving agreement 600-22-008 with Alliance, manager and operator of the U.S. Department of Energy's National Renewable Energy Laboratory, for a \$375,000 contract to provide modeling support for the CTP, and adopting staff's determination that this action is exempt from CEQA. Alliance will prepare a benefits assessment report and develop additional model runs for the Electric Vehicle Infrastructure-Pro model to support the Assembly Bill 2127 (Ting, Chapter 365, Statutes of 2018) charging infrastructure assessment. (CTP Funding) Contact: Susan Ejlalmaneshan
- c. Herter Energy Research Solutions. Proposed resolution approving agreement 400-22-002 with Herter Energy Research Solutions for a \$1,200,000 contract to lead a team of professional architectural and engineering consultants to provide technical support for developing, updating, and maintaining regulatory standards for flexible demand features and technologies in consumer and commercial appliances. (COIA Funding) Contact: Elizabeth Butler
- d. Energy Conservation Assistance Act (ECAA) Loan Program. ECAA-Ed loans at zero percent interest totaling \$5,559,623. (ECAA-Ed Funding) Contact: Sean Lockwood
  - Parlier Unified School District. Proposed resolution approving agreement 009-22-ECG with the Parlier Unified School District, in Fresno County, for a \$3,000,000 loan at zero-percent interest to install three carport solar photovoltaic (PV) arrays totaling 525.4 kW at three district sites, and adopting staff's determination that this action is exempt from CEQA. Upon project completion, it is estimated to reduce about 849,486 kWh of grid electricity consumption in the first year of solar production, saving approximately \$201,750 in utility costs per year. The simple payback period is approximately 14.9 years.
  - ii. Campbell Union High School District. Proposed resolution approving agreement 008-22-ECG with Campbell Union High School District, in Santa Clara County, for a \$2,559,623 loan at zero-percent interest to retrofit existing lighting to LED lighting at seven sites, and adopting staff's determination that this action is exempt from CEQA. Upon project completion, it is estimated to save 903,653 kwh annually, saving approximately \$196,638 in utility costs per year. The simple payback period is approximately 13 years.
- e. Family Health Centers of San Diego, Inc (Family Health Centers). Proposed resolution approving a mutual termination for agreement EPC-21-025 with Family Health Centers. The grant was to design a replicable, low-income, multifamily development in an economically distressed and polluted area of San Diego. The CEC awarded \$1,000,000, and dispensed \$18,199 of the grant amount. Family Health Centers could not fulfil their obligations under the agreement due to high inflationary costs and insufficient access to funds. (EPIC funding) Contact: Michael Ferreira
- f. The Regents of the University of California, on behalf of the Davis Campus. Proposed resolution approving agreement 600-22-009 with the Regents of the

University of California, on behalf of the Davis Campus (UCD) for a \$953,168 contract for UCD's Plug-In Hybrid & Electric Vehicle Research Center to research electric vehicle charger reliability through field testing chargers operating in California, and adopting staff's determination that this action is exempt from CEQA. This contract will focus on characterizing the extent to which chargers in California are able to successfully charge consumers' electric vehicles as well as the failure modes that lead to unsuccessful charges. (CTP Funding) Contact: Dustin Schell

#### **Public Comment:**

#### None.

*Commissioner McAllister moved to approve Item 3f Commissioner Gallardo seconded. The vote was Yes (4-0) with Commissioner Monahan abstaining.* 

- g. Food Production Investment Program. GFO-22-303. This solicitation sought proposals to accelerate the adoption of advanced energy efficiency and renewable energy technologies at California food processing plants, demonstrate their reliability and effectiveness, help California food processors work toward a low-carbon future, and benefit priority populations. The technologies funded in the three agreements below totaling \$6,824,799 will reduce energy use and greenhouse gas (GHG) emissions associated with food production. (FPIP Funding) Contact: Matthew Stevens
  - i. Los Gatos Tomato Productos, LLC. Proposed resolution approving agreement FPI-22-007 with Los Gatos Tomato Products, LLC for a \$4,601,285 grant to fund an upgrade of the existing evaporator system with advanced multi-effect evaporation and mechanical vapor recompression technology at Los Gatos Tomato Products' tomato processing facility in Huron, California. This upgraded evaporation system will significantly reduce the overall natural gas usage, GHG emissions, and water use at the existing facility.
  - ii. WWF Operating Company, LLC. Proposed resolution approving agreement FPI-22-005 with WWF Operating Company, LLC for a \$704,264 grant to install and operate two heat recovery systems to reduce GHG emissions at WWF Operating Company's dairy processing facility in the City of Industry, and adopting staff's determination that this action is exempt from CEQA. One system will repurpose waste steam condensate created during the direct contact sterilization stage while the other system captures flue-gas heat from the boiler. This project will demonstrate the potential of heat recovery systems to reduce GHG emissions, gas use, water consumption, and operating costs. This project is also expected to provide benefits to priority populations through criteria pollutant emission reductions.
- iii. OWB Packers, LLC. Proposed resolution approving agreement FPI-22-006 with OWB Packers, LLC for a \$1,100,000 grant to install and operate energy efficient boiler feed water pumps, controls, packaging shrink tunnels and vacuum, hydraulic, and air handling systems to reduce GHG emissions at OWB Packers, LLC's meat processing facility in Brawley, and adopting staff's

determination that this action is exempt from CEQA. This project will demonstrate the potential of energy efficient upgrades to reduce GHG emissions, gas use, water consumption and operating costs.

- iv. Pacific Coast Producers. Proposed resolution approving agreement FPI-22-009 with Pacific Coast Producers for a \$419,250 grant to implement a project to capture and use waste steam condensate to reduce process energy at Pacific Coast Producers' fruit processing facility in Oroville, and adopting staff's determination that this action is exempt from CEQA. This project will demonstrate the potential of the condensate recovery system to reduce GHG emissions, gas use, water consumption, and operating costs at the food processing facility. This project is also expected to provide benefits to priority populations through criteria pollutant emission reductions.
- Local Ordinances for the City of Solana Beach and the County of Los Angeles. These applications were submitted by local jurisdictions for findings pursuant to Public Resources Code (PRC) section 25402.1(h)(2). Contact: Danuta Drozdowicz
  - City of Solana Beach. Proposed resolution making findings pursuant to PRC section 25402.1(h)(2) concerning the City of Solana Beach's local ordinance, which contains requirements that solar photovoltaic systems are installed on all newly constructed high-rise residential, nonresidential, and hotel/motel buildings.
  - ii. County of Los Angeles. Proposed resolution making findings pursuant to PRC section 25402.1(h)(2) concerning the County of Los Angeles' local ordinance, which contains requirements that cool roofing materials be installed on new nonresidential, and on low-rise and high-rise residential buildings. Cool roofing materials are also required on some existing building additions and alterations.
- i. Updated 2022 Alternative Calculation Method (ACM) Reference Manuals, and California Building Energy Code Compliance Software (CBECC-Res 2022.3.0 and CBECC 2022.3.0). Contact: Haile Bucaneg
  - i. Proposed resolution certifying the updated 2022 Single-Family Residential ACM Reference Manual and Nonresidential and Multifamily ACM Reference Manual, which were previously certified pursuant to PRC section 25402.1(e), and adopting staff's finding that this action is not a project under CEQA or, in the alternative, is exempt from CEQA. The ACM Reference Manuals document the modeling methods used in 2022 CEC-approved Energy Code compliance software.
  - Proposed resolution approving the updated 2022 public domain residential, nonresidential, and multifamily software, CBECC-Res 2022.3.0 and CBECC 2022.3.0, which were previously approved pursuant to PRC section 25402.1(a), and adopting staff's finding that this action is not a project under CEQA or, in the alternative, is exempt from CEQA. The public domain software is used by designers, builders, and engineers to demonstrate performance compliance with the 2022 Energy Code.

j. Resource Systems Group, Inc. Proposed resolution approving agreement 800-22-009 with Resource Systems Group, Inc. for \$1,179,768 contract to conduct a survey of residential and commercial light duty vehicle buyers in California. The survey data is used to build vehicle choice models that assess consumer response to different policy incentives, as well as consumer preferences for different vehicle technologies, including autonomous vehicles. The survey will also seek consumer feedback on vehicle-to-grid technologies. (CTP, COIA, and Caltrans Funding) Contact: Aniss Bahreinian

## **Public Comment**

#### Steve Uhler: Commented on item 3c.

Commissioner McAllister moved to approve Items 03a – 03f & 03gi – 03j Commissioner Gallardo seconded. The vote was Yes (5-0).

# 4. Information item on Current Activities of the Long Duration Energy Storage (LDES) Program.

In the Fiscal Year 2022/2023 State Budget, the CEC received \$140 million in funding to demonstrate and advance the commercial state of non-lithium-ion LDES technologies. Staff will provide an overview of LDES activities the CEC has completed since receiving these funds and the plans the CEC has for implementing the LDES Program funding proposed for the next State Budget. Contact: Michael Gravely (Staff Presentation: 10 minutes)

#### Presenters:

Andrew Alejandro, Chairperson of the Paskenta Band of Nomlaki Indians

Tim Harris, CEO for Redflow

Erich Hans, Director of Treasury/CFO for the Viejas Band of Kumeyaay Indians

Michael Firenze, from the Viejas Band of Kumeyaay Indians

# 5. Form Energy, Inc.

Proposed resolution approving agreement LDS-22-004 with Form Energy, Inc. for a \$79,600 grant to conduct a use case and market analytics assessment and prepare for commercial deployment of a 5 MW (500 MWh), non-lithium-ion, LDES, and adopting staff's determination that this action is exempt from CEQA. This project will assess the capability of an iron-air, multi-day storage system to both support the integration of intermittent renewable resources and provide multiple days of continuous, zero-carbon power to the grid. (LDES Funding) Contact: Yahui Yang (Staff Presentation: 5 minutes)

Public Comment:

None.

*Commissioner Vice Chair Gunda moved to approve Item 5. Commissioner McAllister seconded. The vote was Yes (5-0).* 

# 6. Information item on Update on Electricity Supply Strategic Reliability Reserve Investments.

In accordance with Assembly Bill (AB) 205 (Stats. 2022, ch. 61), the Department of Water Resources (DWR) is required to provide a quarterly update regarding current and planned investments being considered for California's Electricity Supply Strategic Reliability Reserve Program. DWR will present the status of its efforts in response to the legislation and the activities taken to help the state ensure it can meet future summer peak demand. Contact: Jorge Luis Quintero (Staff Presentation: 5 minutes)

#### 7. DWR Investment Plan.

Proposed resolution approving DWR investment plan. In accordance with AB 205, DWR is required to notify the CEC of the terms, costs, and scope of contracts DWR entered into after October 31, 2022 pursuant to its Electricity Supply Strategic Reliability Reserve Program. DWR requests the CEC approve the investment plan consistent with Water Code section 80710(i). Contact: Jorge Luis Quintero (Staff Presentation: 10 minutes)

#### Public Comment:

Sofie Magallon, with Central Coast Alliance United for a Sustainable Economy, CAUSE, commented on Item 7.

Theresa Chang, with Sierra Club commented on Item 7.

Lucia Marquez, Central Coast Alliance United for a Sustainable Economy, CAUSE, commented on Item 7.

Marie Rose Turc, California Energy Justice Alliance, CEJA, commented on item 7.

Tyler Valdez, California Energy Justice Alliance, CEJA, commented on Item 7.

Scott Lipton, with Enchanted Rock, commented on item 7.

Delphine Hou, California Department of Water Resources, commented on item 7.

After public comment was taken, Jorge Luis Quintero made a statement on this item.

#### 8. Small Power Plant Exemption Rulemaking.

Proposed resolution readopting amendments to California Code of Regulations, title 20, Appendix B, previously adopted on October 12, 2022, and making a finding that readoption of the regulations is not a project under CEQA. This action comes after a 15-day public comment period on the supplemental initial statement of reasons which includes revised necessity sections supporting the previously adopted amendments to Appendix B. Contact Jared Babula (Staff Presentation: 5 minutes)

Public Comment:

Kim Delfino on the behalf of Defenders of Wildlife, CA Native Plant Society, Center for

Biological Diversity and The Nature Conservancy, commented on item 8.

After public comment was taken, Jared Babula made a statement on this item.

Commissioner Gallardo moved to approve Item 8. Commissioner McAllister seconded. The vote was Yes (5-0).

#### 9. LICAP Technologies, Inc.

Proposed resolution approving agreement EPC-22-016 with LICAP Technologies, Inc. for a \$2,927,155 grant to fund the build-out of a low-rate initial production pilot line in Sacramento for battery electrode production using LICAP's innovative Activated Dry Electrode process and adopting staff's determination that this action is exempt from CEQA. LICAP Technologies, Inc.'s patented electrode production process offers significant advantages over the traditional "wet coating" process including lower energy consumption, reduced amount of CO2 emissions, lower manufacturing footprint, improved battery performance, and elimination of toxic solvents from electrode manufacturing. (EPIC Funding) Contact: Justin Scaccianoce (Staff Presentation: 5 minute)

#### Public Comment:

Martin Zia no audio POA suggested written comment be submitted in item 9.

Commissioner McAllister moved to approve Item 8. Commissioner Monaghan seconded. The vote was Yes (5-0).

### 10. Zero Emission Transportation Manufacturing – GFO-21-605.

This solicitation sought proposals for projects that will increase in-state manufacturing of ZEVs, ZEV components and batteries, and ZEV charging or refueling equipment. This item includes two projects totaling \$22,747,737. (General Fund Funding) Contact: Jonathan Bobadilla (Staff Presentation: 10 minutes)

- a. Moxion Power Co. Proposed resolution approving agreement ZVI-22-039 with Moxion Power Co. for a \$14,999,997 grant to expand battery module manufacturing operations in Richmond, and adopting staff's determination that this action is exempt from CEQA. Upon completion, the battery modules will be integrated into a mobile charging system that is capable of charging battery electric vehicles.
- b. FirstElement Fuel, Inc. Proposed resolution approving agreement ZVI-22-038 with FirstElement Fuel, Inc. for a \$7,747,740 grant to expand manufacturing of hydrogen refueling station (HRS) modules and cryogenic hydrogen pumps in Santa Ana and expand testing capabilities of the HRS equipment in Livermore, and adopting staff's determination that this action is exempt from CEQA. This project will create a new manufacturing line for light-duty vehicle HRS equipment that will achieve an annual production capacity of 100 light-duty vehicle modules or 10 heavy-duty vehicle modules.

Presenters:

*Matt Miyasato - Vice President, Strategic Growth and Government Affairs at FirstElement Fuels, Inc.* 

Vera Neinken - Director of Finance at Moxion Power, Co.

Alex Meek – Cofounder and President at Moxion Power, Co.

Public Comment:

None.

#### 11. Minutes.

Possible approval of the May 10, 2023, May 11-12, 2023, and May 31, 2023, Business Meeting minutes.

## Public Comment

None.

# 12. Lead Commissioner or Presiding Member Reports.

A lead commissioner on a policy matter and a presiding member on a delegated committee may report to the CEC on relevant matters and discussion may follow.

# 13. Executive Director's Report.

The Executive Director gave a report.

# 14. Public Advisor's Report.

The Public Advisor had nothing to report.

## 15. Chief Counsel's Report.

The Chief Counsel gave a report.

- a. Pursuant to Government Code section 11126(e)(1), the CEC may adjourn to closed session with its legal counsel to discuss the following matter to which the CEC is a party:
  - *i.* Interlink Products International, Inc. v. Drew Bohan, Maunee Berenstein (United States District Court for the Eastern District of California, Case No. 2:20-cv-02277).

There being no further business the meeting was adjourned.

Respectfully submitted,

Blanca Camberos

Secretariat