

**State of California**  
California Energy Commission  
Minutes of the August 11, 2021, Energy Commission Business Meeting

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

Present:

David Hochschild, Chair  
Karen Douglas, Commissioner  
Siva Gunda, Commissioner

Patricia Monahan, Commissioner  
J. Andrew McAllister, Commissioner

The California Energy Commission's (CEC) August 11, 2021 Business Meeting will be held remotely, consistent with Executive Order N-08-21 to continue to help California respond to, recover from, and mitigate the impacts of the COVID-19 pandemic. The public may participate consistent with the direction in the Executive Order.

Pursuant to California Code of Regulations Title 20 section 1104(e), any person may make oral comment on any agenda item. To ensure the orderly conduct of business, such comments will be limited to three minutes or less per person. Any person wishing to comment on information items or reports (non-voting items) shall speak during the general public comment portion of the meeting and have three minutes or less to address all remaining comments.

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

**1. 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. California Clean Energy Fund dba CalCEF Ventures. Proposed resolution approving a change of recipient for a California Sustainable Energy Entrepreneur Development (CalSEED) small grant award issued under Agreement 300-15-007 at the CEC's August 14, 2019 Business Meeting, and adopting staff's determination that this action is exempt from the California Environmental Quality Act (CEQA). The \$150,000 award for "Prefabricated Affordable Renewable Energy Housing" will be transferred from Arvind Simhadri, an individual, to MOBI Homes Inc. The goal of this project is to explore and validate the concept for prefabricated housing that includes solar, storage, and community energy management. All aspects of the project, including the project team, technology under development, scope of work, and terms and conditions will remain the same. (EPIC funding) Contact: Joshua Croft
- b. Huntington Beach Energy Project (12-AFC-02C). Possible approval of proposed order modifying Air Quality Conditions of Certification of the Huntington Beach Energy Project to better reflect project operations by changing the definition of a non-cold start up related to the expected demand by the electrical system. Other

changes include conforming air quality conditions of certification to current language in the air district permit. Staff concludes that the modifications to the Air Quality Conditions of Certification meet the requirements of section 1769.1(a), and would not result in a significant impact on the environment, nor cause the project to fail to comply with applicable laws, ordinances, regulations, and standards. Contact: Joseph Douglas

- c. California Schools Healthy Air, Plumbing, and Efficiency Program (CalSHAPE) (20-RENEW-01). Proposed resolution adopting revised guidelines for both CalSHAPE grant programs--the CalSHAPE Ventilation Program and CalSHAPE Plumbing Program--and adopting staff's determination that this action is exempt from CEQA. The guidelines provide the requirements for applicant and project eligibility and describe the application process and award distribution. The revised guidelines include an update to the definition of local educational agency (LEA). Contact: Jonathan Fong

*Commissioner McAllister moved to approve Item 1. Commissioner Monahan seconded. The vote was (5-0).*

## **2. Update on the Russell City Energy Center.**

Staff will provide an update on the collaboration between the CEC, City of Hayward, Hayward City Fire Department, California Public Utilities Commissioner (CPUC), and the Certified Unified Program Authority (CUPA) to discuss issues related to the operating procedures of the Russell City Energy Center. Contact: Elizabeth Huber (Staff Presentation: 5 minutes)

*Office Manager, Elizabeth Huber, and Hayward City Manager, Kelly McAdoo, presented an update on Russell City Energy Center. Informational item only, no vote was taken.*

## **3. Update on Short-Term Reliability Activities.**

Staff will provide an overview of coordination efforts of the CEC, CPUC, and California Independent System Operator to assess and respond to short-term reliability issues in the state. Staff will also present the net short outlook for summer 2022. This outlook includes an hourly stack of available supply given projected demand for the peak day of each month, July 2022 through September 2022, under average and extreme weather conditions. Contact: Angela Tanghetti (Staff Presentation: 15 minutes)

*Upon Chair Hochschild's proposal, Item 3 and Item 4 were switched given the significant number of people wanting to make public comment, and public comment was shortened to one minute per speaker.*

*Upon Chair Hochschild's proposal, a lunch break was held after Item 4 was voted on, and Item 3 was heard at 2:30 pm.*

*Per the above, Deputy Director, Aleecia Gutierrez, and Lead Modeler, Angela Tanghetti, presented an update on Short-Term Reliability Activities at 2:30 pm. Informational item*

*only, no vote was taken.*

#### **4. Certification of Final Environmental Impact Report and Adoption of the 2022 California Energy Code.**

Consideration and possible adoption of resolutions certifying the Final Environmental Impact Report (EIR) and adopting the amendments to the California Code of Regulations, Title 24, Parts 1 and 6 (2022 Energy Code). Adoption of the 2022 Energy Code is a project under CEQA; an EIR has been prepared. The 2022 Energy Code is essential to California in that it supports the state's clean energy goals, policies, and mandates. The 2022 Energy Code will increase the deployment of on-site renewable energy generation, reduce greenhouse gas (GHG) emissions from new buildings (building decarbonization), reduce growth in energy demand, increase energy demand flexibility, and ensure that California buildings are as energy efficient as technically feasible and cost effective. The CEC has exclusive authority to adopt building energy efficiency standards for the State of California. This action will be taken in two parts. Contact: Will Vicent (Staff Presentation: 15 minutes)

- a. Proposed Resolution Certifying the Final EIR. The CEC prepared an EIR in accordance with CEQA, including the CEQA Guidelines, to evaluate the potential environmental effects of the 2022 Energy Code. Following a 45-day comment period on the Draft EIR and publication of the Final EIR on August 4, 2021, the CEC proposes to make findings and certify that the Final EIR complies with CEQA.
- b. Proposed Resolution Adopting the 2022 Energy Code. Following 45-day and 15-day public comment periods, the CEC proposes to adopt the 2022 Energy Code with an effective date of January 1, 2023. This includes amendments to Title 24, Part 6, associated administrative regulations in Title 24, Part 1, the Alternative Calculation Methods Approval Manual, and Reference Appendices.

*Commissioner McAllister moved to approve Item 4a. Commissioner Gunda seconded. The vote was (5-0).*

*Commissioner McAllister moved to approve Item 4b. Commissioner Douglas seconded. The vote was (5-0).*

#### **5. Final Staff Report: California Building Decarbonization Assessment (CEC-400-2021-006).**

The "California Building Decarbonization Assessment" evaluates the potential, costs, impacts, and barriers of reducing GHG emissions in residential and commercial buildings at least 40 percent below 1990 levels by 2030, as required by Assembly Bill 3232 (Friedman, Chapter 373, Statutes of 2018). The assessment identifies seven decarbonization strategies and several conclusions for what will be needed to achieve this target. Contact: Michael Kenney and Nicholas Janusch (Staff Presentation: 15 minutes)

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

## **6. Equilon Enterprises LLC.**

Proposed resolution approving Agreement ARV-21-023 with Equilon Enterprises LLC dba Shell Oil Products US for a \$4,000,000 grant to develop and demonstrate the first multi-modal hydrogen refueling station in California, and adopting staff's determination that this action is exempt from CEQA. The multi-modal hydrogen refueling station will serve hydrogen fuel cell powered on-road heavy-duty vehicles and locomotives at the Port of West Sacramento and will support the Sierra Northern Hydrogen Locomotive Project resulting from the same solicitation and previously awarded. (Clean Transportation Program funding) Contact: Madison Jarvis (Staff Presentation: 5 minutes)

*Before the vote was taken on Item 6, Chair Hochschild announced he will need to step away and proposed Commissioner Douglas to lead the business meeting. Commissioner Douglas led the remainder of the meeting.*

*Commissioner Monahan moved to approve Item 6. Commissioner McAllister seconded. The vote was (4-0).*

## **7. H2B2 USA LLC.**

Proposed resolution adopting CEQA Findings and approving the grant agreement for construction of H2B2 USA LLC's (H2B2) solar photovoltaic hydrogen production plant. (Clean Transportation Program funding) Contact: Hieu Nguyen (Staff Presentation: 5 minutes)

- a. CEQA Findings. Proposed resolution finding that based on the lead agency County of Fresno's Mitigated Negative Declaration, Initial Study No. 7943, Mitigated Negative Declaration (MND), Mitigation Monitoring and Reporting Program (MMRP), and County of Fresno's Resolution No. 12883 approving and adopting the MND and MMRP, the proposed project presents no new significant or substantially more severe environmental impacts beyond those already considered and mitigated.
- b. Proposed resolution approving agreement ARV-21-029 with H2B2 for a \$3,965,000 grant to construct a renewable hydrogen production plant in Fresno County, California to produce 1,000 kg per day of hydrogen transportation fuel, using renewable electricity produced by solar energy.

*Commissioner Monahan moved to approve Item 7a. Commissioner McAllister seconded. The vote was (4-0).*

*Commissioner Monahan moved to approve Item 7b. Commissioner McAllister seconded. The vote was (4-0).*

## **8. Blueprints for Medium and Heavy-Duty Zero-Emission Vehicle Infrastructure – GFO-20-601.**

This solicitation sought proposals for planning blueprints to identify actions and milestones needed for implementation of medium- and heavy-duty (MD/HD) zero emission vehicles (ZEVs) and the related electric charging or hydrogen refueling infrastructure. (Clean Transportation Program funding) Contact: Kate Reid (Staff Presentation: 10 minutes)

- a. City of Long Beach. Proposed resolution approving Agreement ARV-21-007 with the City of Long Beach for a \$200,000 grant to develop and implement a replicable strategy for accelerating the planning, adoption, and deployment of MD/HD ZEVs and charging infrastructure that directly targets municipal and private fleets, and adopting staff's determination that this action is exempt from CEQA.
- b. The Regents of the University of California, Irvine. Proposed resolution approving Agreement ARV-21-018 with The Regents of the University of California, Irvine for a \$200,000 grant to develop a comprehensive and replicable blueprint to accelerate the adoption of MD/HD ZEVs within the South Coast Air Basin, and adopting staff's determination that this action is exempt from CEQA.
- c. In-Charge Energy. Proposed resolution approving Agreement ARV-21-019 with In-Charge Energy for a \$200,000 grant to develop a planning blueprint for EV charging infrastructure to facilitate the deployment of MD/HD ZEVs and their charging infrastructure from the Inland Empire (the Riverside–San Bernardino–Ontario metropolitan area) to the Ports of San Pedro along Interstate 710, and adopting staff's determination that this action is exempt from CEQA.
- d. Santa Barbara Metropolitan Transit District. Proposed resolution approving Agreement ARV-21-020 with Santa Barbara Metropolitan Transit District for a \$200,000 grant to develop a blueprint that will enable the adoption of MD/HD EVs for transit and municipal fleets, and adopting staff's determination that this action is exempt from CEQA.
- e. Central Concrete Supply Co., Inc. Proposed resolution approving Agreement ARV-21-021 with Central Concrete Supply Co., Inc. for a \$200,000 grant to develop the blueprint for Zero Emission Concrete Logistics Project with conceptual electric charging and hydrogen fueling infrastructure designs; a comprehensive technology assessment for ZEVs and site infrastructure; detailed energy analyses, a workforce development plan, and actionable strategies to accelerate the deployment of MD/HD ZEVs and ZEV infrastructure, and adopting staff's determination that this action is exempt from CEQA.
- f. The Regents of the University of California, Irvine. Proposed resolution approving Agreement ARV-21-022 with The Regents of the University of California, Irvine for a \$200,000 grant to develop a blueprint that will enable the adoption of

MD/HD battery electric and fuel cell electric vehicles for fleets at a marine terminal, and adopting staff's determination that this action is exempt from CEQA.

- g. Oxnard Harbor District. Proposed resolution approving Agreement ARV-21-024 with the Oxnard Harbor District - The Port of Hueneme for a \$200,000 grant to develop a blueprint that will enable the adoption of MD/HD battery electric and fuel cell electric vehicles for fleets at the Port of Hueneme, and adopting staff's determination that this action is exempt from CEQA.
- h. Port of Stockton. Proposed resolution approving Agreement ARV-21-026 with the Port of Stockton for a \$200,000 grant to develop a planning blueprint document that will enhance the transition to zero emission technologies among the port's tenants, Central Valley medium and heavy-duty truck fleets, stevedoring, agriculture and maritime industries, and adopting staff's determination that this action is exempt from CEQA.
- i. The Regents of the University of California, Riverside. Proposed resolution approving Agreement ARV-21-027 with the Regents of the University of California, Riverside for a \$200,000 grant to develop a blueprint that will enable the adoption of MD/HD battery electric and fuel cell electric vehicles for fleets in the South Coast region, and adopting staff's determination that this action is exempt from CEQA.
- j. San Diego Association of Governments (SANDAG). Proposed resolution approving Agreement ARV-21-028 with SANDAG for a \$200,000 grant to develop their MD/HD ZEV blueprint to reduce barriers for to light-duty EV adoption, including a charger needs assessment online mapping tool and EV expert, and adopting staff's determination that this agreement is exempt from CEQA.
- k. San Francisco Bay Area Water Emergency Transportation Authority (WETA). Proposed resolution approving Agreement ARV-21-030 with WETA for a \$200,000 grant to develop a plan of action and milestones for implementation of zero-emission infrastructure to support transition of the WETA ferry fleet to zero-emission electric propulsion systems, and adopting staff's determination that this action is exempt from CEQA.

*Commissioner Monahan moved to approve Item 8. Commissioner Gunda seconded. The vote was (4-0).*

**~~9. Evaluation of Bi-Directional Energy Transfer and Distributed Energy Resource Integration for Medium and Heavy-Duty Fleet Electrification – GFO-20-304.~~**

~~The purpose of this solicitation is to fund technology demonstration research projects that evaluate resilience, renewable integration, and cost management use cases for bi-directional charging technologies and integrated distributed energy~~

resources with MD/HD EV deployments. (EPIC funding) Contact: Ben Wender (Staff Presentation: 5 minutes)

- a. ~~eIQ Mobility, Inc. Proposed resolution approving Agreement EPC-21-007 with eIQ Mobility, Inc. for a \$2,192,175 grant to fund demonstration and deployment of bi-directional charging technologies for electric school buses to minimize charging costs and provide backup power to a bus depot serving the Riverside Unified School District, and adopting staff's determination that this action is exempt from CEQA.~~

*Commissioner Douglas announced Item 9 was removed from the business meeting agenda.*

#### **10. Research and Development of High-Value Recycling Pathways for Lithium-Ion Batteries – GFO-20-308.**

The purpose of this solicitation is to fund applied research and development projects that improve and scale high-value recycling processes for lithium-ion batteries, evaluate the performance of recovered materials compared to mined materials, and conduct environmental and economic analyses of battery recycling processes. (EPIC funding) Contact: Ben Wender (Staff Presentation: 5 minutes)

- a. The Regents of the University of California, San Diego. Proposed resolution approving Agreement EPC-21-008 with The Regents of the University of California, San Diego for a \$1,684,308 grant to improve the technology readiness, commercial scale-up pathways, and environmental benefits of high-value, direct recycling processes for lithium-ion batteries, and adopting staff's determination that this action is exempt from CEQA.
- b. OnTo Technology LLC. Proposed resolution approving Agreement EPC-21-009 with OnTo Technology LLC for a \$1,001,807 grant for research and development of lithium-ion battery recycling processes and manufacturing new batteries made with one hundred percent recycled electrodes, and adopting staff's determination that this action is exempt from CEQA.

*Chair Hochschild returned to the business meeting before public comment was taken for Item 10. Commissioner Douglas continued to chair the meeting.*

*Commissioner Monahan moved to approve Item 10. Chair Hochschild seconded. The vote was (5-0).*

#### **11. Local Building Energy Efficiency Standards Application (19-BSTD-06).**

Consideration and possible adoption of a resolution regarding an application submitted by a local jurisdiction for an ordinance that contains building energy efficiency standards exceeding the energy efficiency requirements of the 2019 Building Energy Efficiency Standards (Title 24, Part 6).

- a. City of Alameda. New ordinance that requires solar photovoltaic systems on all

new high-rise residential and nonresidential buildings, covering the entire solar zone, with exceptions allowed for shading, overgeneration, or vegetative roofs; and that requires all new construction be all-electric, with some exceptions allowed. Pre-wiring for electric appliances is required where gas appliances are installed. Contact: Danuta Drozdowicz (Staff Presentation: 5 minutes)

*Commissioner McAllister moved to approve Item 11. Commissioner Monahan seconded. The vote was (5-0).*

## **12. Minutes.**

Possible approval of the July 15, 2021 business meeting minutes.

*Commissioner Gunda moved to approve Item 12. Commissioner McAllister seconded. The vote was (5-0).*

## **13. Lead Commissioner or Presiding Member Reports.**

*The Commissioners reported on their recent activities.*

## **14. Executive Director's Report.**

*The Executive Director gave a report.*

## **15. Public Advisor's Report.**

*The Public Advisor gave a report.*

## **16. Public Comment.**

*None.*

## **17. Chief Counsel's Report.**

- a. Pursuant to Government Code section 11126(e), the CEC may adjourn to closed session with its legal counsel to discuss any of the following matters to which the CEC is a party:
  - i. *In the Matter of U.S. Department of Energy (High Level Waste Repository), (Atomic Safety Licensing Board, CAB-04, 63-001-HLW); State of California v. United States Department of Energy (9th Cir. Docket, Case No. 09-71014).*
  - ii. *State Energy Resources Conservation and Development Commission v. HyGen Industries, Inc (Sacramento County Superior Court, Case No. 34-2019-00252543-CU-BC-GDS).*
  - iii. *Interlink Products International, Inc. v. Xavier Becerra, Drew Bohan, Melissa Rae King (United States District Court for the Eastern District of California, Case No. 2:20-cv-02283).*
  - iv. *Southern California Gas Company v. California State Energy Resources Conservation and Development Commission (Sacramento County Superior Court, Case No. 34-2021-80003576-CU-WM-GDS).*

v. *Certification of Final Environmental Impact Report and Adoption of the 2022 California Energy Code (Docket # 21-BSTD-02 and Docket # 21-BSTD-01).*

- b. Pursuant to Government Code sections 11126 (a) and (e), the CEC 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 CEC, which might include personnel matters.

*The Chief Counsel had nothing to report, but recommended the Commissioners break for a brief closed session to discuss agenda Item 17(a)(iv).*

*Commissioner Douglas announced they will go into closed session and return to provide a report, if any. No report out.*

Appearances:

Rick Brown, TerraVerde Energy, LLC

Courtney Corda, Self

Nicole Kemeny, 350 Silicon Valley

Al Rich, ACR Solar

Mark Roest, Sustainable Energy, Inc.

Gary Gerber, Sun Light & Power

Gina Rodda, Gabel Energy, Energy Code Ace, CABEC

Igor Tregub, Self

Brian Ballek, Invinity Energy Systems, PLC

Matthew Vasilakis, Climate Action Campaign

Genesis Tang, CPUC

Stacey Reineccius, Powertree Services Inc.

Paul Wermer

Bob Raymer, CBIA

Lauren Weston, Acterra: Action for a Healthy Planet

John Brooks, Self

Lauren Cullum, Sierra Club, California

Leah Pressman, Self

Amy Wong, Active San Gabriel Valley

David Asti, Southern California Edison

Maren Mahoney, Ceres

David Moller, Climate Reality Project Bay Area Chapter and Marin-Sonoma Building Electrification Squad

Sara Greenwald, Self

Jonny Kocher, RMI

Robert Whitehair, Sustainable San Mateo County

Jenny Green, Mothers Out Front

Laura Petrillo-Groh, AHRI

Ann Harvey, Climate Health Now

Sasan Saadat, Earthjustice

Dennis Peters, SMUD

Catherine Von Burg, Simpliphi Power

Dan Brotman, Council Member, City of Glendale

Jennifer Elwell, BAAQMD

Michael Rochmes, 350 Southland Legislative Alliance & Climate Reality Los Angeles

Laura Neish, 350 Bay Area

Sean Armstrong, Redwood Energy

Beckie Menten, East Bay Community Energy

Braxton Bridgers, AEA

Woody Hastings, The Climate Center

Allison Hilliard, Reimagine Power/Ivy Energy

Jackie Garcia, 350 Contra Costa

Aaron Gunzner, AMCA International

Nehemiah Stone, Stone Energy Associates

Alex Deeter, SunRing Systems, Inc.

Pete Marsh, Self

Karyn Boenker, Sunrun

Heidi Werner, CASE Team

Alex Bosenberg, NEMA

Tara Hammond, Hammond Climate Solutions

Robert Haw, Habitable Designs, Inc.

Marc Monbouquette, NLX

Pierre Delforge, NRDC  
Eddie Ahn, Brightline Defense  
Jeff Parr, Solar Technologies  
Suzanne Leta, SunPower  
Brandon Carlson, Self  
Lisa Saponaro, Vertiv Corporation  
Luke Morton, CABEC  
Brenna Shafizadeh, Self  
Linda Hutchins-Knowles, Mothers Out Front  
Shelah Ott, San Diego Building Electrification Association  
Karinna Gonzalez, San Diego Green New Deal Alliance  
Joe Cain, SEIA  
Alfred Sattler, Self  
David McCoard, Self  
Joan Taylor, Self  
Vanessa Warheit, Self  
Charles Eley, Architecture 2030  
Licha Lopez, PG&E  
Leane Eberhart, Self  
Dr. Robert Gould, Physicians for Social Responsibility  
Susanne Emerson, Emerson Environmental, LLC  
Brianna Duarte, Acterra  
Janny Zhang, Self  
Dr. Cynthia Mahoney, Self  
Jamie Jang, Sunrise Sacramento  
John Grose, Sensible Technologies, Inc.  
Dana Smith, SolarCraft  
Blake Herrschaft, Self  
Laura Rosenberger-Haider, Fresnans Against Fracking  
Benjamin Davis, California Solar & Storage Association  
Andrew Tanner, Yotta Energy

Jon McHugh, Self

Brian Barnacle, Council Member, City of Petaluma

Diane Bailey, Menlo Spark

Panama Bartholomy, Building Decarbonization Coalition

Colleen Fitzsimons, San Diego Green Building Council

Alice Sung, Self

Carmelita Miller, Greenlining Institute (Written testimony.)

Jim Wilson, National Electric Contractors Association (Written testimony.)

Susan Butler-Graham, Mothers Out Front, Silicon Valley

Jan Warren, 350 Contra Costa

Sven Thesen, Self

Aaron Reaven, 350 East Bay

Jose Torres, Building Decarbonization Coalition

Sean Soni, Southern California Gas Company

Arun, Self

Lauren Goulart, Water Emergency Transportation Authority, WETA (Written testimony.)

There being no further business the meeting was adjourned.

Respectfully submitted,

LIZA LOPEZ

Secretariat