

ITEM 11

State of California

California Energy Commission

Minutes of the August 14, 2019, Energy Commission Business Meeting

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

Present:

David Hochschild, Chair

J. Andrew McAllister, Commissioner

Janea A. Scott, Vice Chair

Patricia Monahan, Commissioner

Karen Douglas, Commissioner

THE COMMISSION 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. **LOCALLY ADOPTED ENERGY STANDARDS.** Possible approval of two local ordinance applications submitted by the City of Carlsbad and the City of Davis for local energy ordinances that exceed the energy efficiency requirements of the 2019 Energy Code (Title 24, Part 6). Contact: Peter Strait.
 - i. **CITY OF CARLSBAD.** Proposed resolution approving the City of Carlsbad's adopted local ordinance requiring installation of solar photovoltaic (PV) systems as a mandatory requirement for newly constructed nonresidential buildings; installation of 240-volt electrical sockets and condensate drains as a mandatory requirement for domestic hot water systems using gas equipment and serving individual dwelling units; and installation of electric or renewable water heating equipment as a prescriptive requirement for systems serving individual dwelling units and nonresidential occupancies.
 - ii. **CITY OF DAVIS.** Proposed resolution approving the City of Davis' adopted local ordinance requiring CALGreen Tier 1 efficiency levels as a mandatory requirement for newly constructed nonresidential and high-rise residential buildings; installation of solar PV systems as a mandatory requirement for newly constructed nonresidential and high-rise residential buildings; and installation of 120-volt electrical sockets under specified sinks in single-family residences to accommodate the future installation of an on-demand hot water recirculation pump.
 - b. **ESNA EXPO, LLC.** Proposed resolution approving a purchase order with ESNA Expo, LLC, for a \$5,000 co-sponsorship of the 2019 Energy Storage North America Conference hosted by the California Energy Storage Alliance and approving use of the California Energy Commission logo in co-sponsorship advertisements. This conference is unique as it brings together the investment community, end users, and energy storage technology providers from inside and outside California who are actively working on field projects in

California. Additionally, Energy Commission staff will host a half-day workshop to review the energy storage research activities at the Energy Commission over the last five years. (EPIC funding) Contact: Mike Gravely.

- c. **WEST COAST CODE CONSULTANTS, INC.** Proposed resolution approving Agreement 700-19-002 with West Coast Code Consultants, Inc. (WC3, Inc.) for a \$0 contract to provide delegate chief building official (DCBO) services for the Carlsbad Energy Center Project (07-AFC-06C) in regards to the demolition of the Encina Power Station. WC3, Inc. will carry out demolition plan review and the inspection of demolition activities to ensure compliance with reasonable demolition practices and safety requirements on behalf of the Energy Commission. WC3, Inc. will be compensated by the project owner of the Carlsbad Energy Center Project for the DCBO services. Contact: Anwar Ali.

Commissioner McAllister moved Item 1 and Commissioner Scott seconded. The vote was unanimous (5-0).

2. **California Independent System Operator (ISO).** Presentation by the ISO on becoming the official reliability coordinator (RC) of record for 16 electricity balancing authorities and transmission operators primarily in California, and one in Mexico. An RC has the highest level of authority and responsibility for the reliable operation of power grids, and has wide visibility of bulk electric systems. With this new service, the California ISO Reliability Coordinator West (RC West) will monitor the interconnected power grids in the West for compliance with federal and regional grid standards, authorize measures to prevent or mitigate system emergencies in day-ahead or real-time operations, and lead system restoration following major incidents. Contact: Drew Bohan. (Guest presentation: 10 minutes)

Nancy Traweek, from the California Independent System Operator presented Informational Item 2.

3. **Discussion of Energy Commission Progress on Joint Agency Report, Charting a Path to a 100% Clean Electricity Future, Senate Bill 100 (2018).** Staff presentation on the clean energy goals established by Senate Bill 100, and a discussion of its requirement to issue a joint agency report due to the Legislature by January 1, 2021. Staff will also provide an update of the report development process, including the planned scope and public engagement process. Contact: Terra Weeks. (Staff presentation: 5 minutes)

Staff presented Informational Item 3.

4. **Adopting Energy Commission Determination the Finding Pasadena Water and Power Integrated Resource Plan Consistent with the Requirements of Senate Bill 350 (2015).** Proposed resolution adopting Energy Commission's determination finding the Pasadena Water and Power Integrated Resource Plan (IRP) filing consistent with requirements of SB 350. Contact: Paul Deaver. (Staff presentation: 10 minutes).

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

5. **Adopting Energy Commission Determination Finding the Vernon Public Utilities Integrated Resource Plan Consistent with the Requirements of Senate Bill 350 (2015).** Proposed resolution adopting Energy Commission's determination finding the Vernon Public

Utilities IRP filing consistent with requirements of SB 350. Contact: Julio Gutierrez. (Staff presentation: 5 minutes)

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

6. **Adopting Energy Commission Resolution Finding the Riverside Public Utilities Integrated Resource Plan Consistent with the Requirements of Senate Bill 350 (2015).** Proposed resolution adopting Energy Commission's resolution finding the Riverside Public Utilities 2018 IRP filing consistent with requirements of SB 350. Contact: John Mathias. (Staff presentation: 5 minutes)

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

7. **Appliance Efficiency Regulations Rulemaking for Spray Sprinkler Bodies (Docket Number 19-AAER-01).** Proposed resolution adopting a Negative Declaration, including a finding of No Significant Impact under the California Environmental Quality Act (CEQA), and adopting changes to Title 20, §1601-1607 to incorporate new appliance efficiency regulations for spray sprinkler bodies. Contact: Sean Steffensen. (Staff presentation: 5 minutes)

- a. **NEGATIVE DECLARATION FOR THE PROPOSED APPLIANCE EFFICIENCY REGULATIONS FOR SPRAY SPRINKLER BODIES.** Negative Declaration, which includes a finding of No Significant Impact under CEQA, for the proposed regulations for spray sprinkler bodies. This proposed adoption comes after a 30-day public comment period necessary to comply with CEQA guidelines.
- b. **APPLIANCE EFFICIENCY REGULATIONS FOR SPRAY SPRINKLER BODIES.** Changes to Title 20, §1601-1607 to incorporate new appliance efficiency regulations for spray sprinkler bodies. The changes for spray sprinkler bodies include: new definitions, a minimum efficiency performance standard, and certification requirements. This proposed adoption comes after a 45-day public comment period and public hearing necessary to comply with the California Administrative Procedure Act.

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

8. **City of Gustine.** Proposed resolution approving Agreement 002-19-ECA with the City of Gustine for a \$2,249,604 loan at one percent interest to install various energy efficiency and renewable energy measures at its facilities, and adopting staff's determination that this action is exempt from CEQA. Upon completion, the project will reduce about 877,665 kilowatt hours (kWh) of grid electricity consumption annually saving the City about \$140,320 in utility costs. Based on the loan amount, the simple payback is 16.0 years. (ECAA funding) Contact: Balraj S. Sandhu. (Staff presentation: 5 minutes)

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

9. **County Of Santa Barbara.** Proposed resolution approving Agreement 003-19-ECA with the County of Santa Barbara for a \$2,736,751 loan at one percent interest for two lighting improvement measures and two PV systems totaling 767 kW and adopting staff's determination that this action is exempt from CEQA. The project is estimated to save the

County 1,738,961 kWh of electricity, resulting in annual energy cost savings of \$283,601. Based on the loan amount, the simple payback is 9.7 years. (ECAA Program Funding)
Contact: Gavin Situ. (Staff presentation: 5 minutes)

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

10. **Renewable Energy for Agriculture Program - Lane and Michele Davis Joint Venture.** Proposed resolution approving Agreement REA-19-003 with Lane and Michele Davis Joint Venture for a \$25,733 grant to install an 11.52 kW solar PV system to serve an almond and rice farm in Colusa County, and adopting staff's determination that this action is exempt from CEQA. (GGRF funding) Contact: Geoffrey Dodson. (Staff presentation: 5 minutes)

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

11. **California Clean Energy Fund dba CalCEF Ventures.** Proposed resolution approving 25 grant applications totaling \$3,750,000 from the EPIC California Sustainable Energy Entrepreneur Development (CalSEED) Initiative. These grants were competitively selected. Individual awards are for a maximum of \$150,000. (EPIC funding) Contact: Eleanor Oliver. (Staff presentation: 15 minutes)

- a. Takachar, Decentralized, Rural Co-production of Filtration Precursor Chemical and Industrial Power, Kung, Kevin, \$150,000. The goal of this project is to design and demonstrate a prototype of a portable, low-cost technology that processes crop and forest residues into precursors that can be used for water and air filtration media. This innovation will reduce energy consumption in rural areas and will also generate power from process heat that can be used for local agricultural and industrial applications.
- b. P-Kap Systems LLC, Bi-facial, Low-profile, Solar Rooftop Tracking, Kapur, Pawan, \$150,000. The goal of this project is to design and demonstrate a low-profile, lightweight, laminate PV tracking system that has the potential to increase energy output per unit area by 25 percent and specific energy yield by 50 percent without increasing cost for a rooftop system. By using components that are easy to transport, assemble, and install, the added cost of the tracker system is offset.
- c. RAF Electronics Corp., Advanced Solid State Lighting for Better Performance, Flasck, Richard, \$150,000. The goal of this project is to develop an ecosystem of efficient and compact solid-state lighting fixtures that has the potential to increase safety and reduce electrical costs in theatrical and agriculture buildings. Using a combination of non-imaging optics and imaging optics, these fixtures will have superior optical and chromatic performance, higher efficiency and efficacy, longer life, and lower initial and operating cost compared to competitors.
- d. DAE Technologies Inc., Rechargeable CFx Battery, Lipka, Stephen, \$150,000. The goal of this project is to research and develop a low-cost rechargeable lithium carbon fluoride (LiCFx) battery that surpasses the current state-of-the-art energy density of lithium-ion (Li-ion) and lithium sulfur batteries. In addition, it is expected to be lower cost than today's lithium-ion technology as it will not use metal oxides. LiCFx batteries have higher energy density but have had issues with rechargeability – DAE's technology addresses this barrier.

- e. RePurpose Energy, Inc., Lithium Ion Battery Fire Suppression System, Park, Jae Wan, \$150,000. The goal of this project is to design and demonstrate a lithium-ion battery fire suppression system that combats fires and thermal runaway without internal short-circuiting of the battery cells. The proposed innovation injects non-conductive liquid into the battery enclosure in a way that does not damage control electronics or additional battery cells.
- f. SierraCrete LLC, Sierra Wall System, McGrath, David, \$150,000. The goal of this project is to improve the design of the highly insulating Green Energy Brick that has the potential to achieve insulating values that allow for the construction of zero net energy homes without the additional cost burden required for traditional wall framing systems. The breakthrough technology of ceramic binders adhering to cellulose base materials provides for high tensile strength in the vertical plane, and air gap spacing in the horizontal plane.
- g. ZYD Energy, Inc., Heat Pump Water Heating Optimization Using Hot Water Storage Management, Zhang, Yanda, \$150,000. The goal of this project is to develop an optimized electric water heating solution by integrating heat pump water heaters with a hot water storage management technology to achieve high efficiency operation and lower operational cost, and provide energy storage services. An Internet of Things (IoT)-based controller will be developed to optimize system operation according to hot water demand projection, electricity prices, demand response signals, and renewable energy availability.
- h. Ivy Energy, Ivy Energy Software – Enabling Multi-Unit Shared Solar, Dover, Janis, \$150,000. The goal of this project is to design and demonstrate a software platform that enables multi-unit building owners to install a shared solar system that equitably rewards residents for using energy when it is cheap or provided by the solar system. The Ivy platform will have a 15-minute interval load algorithm that can identify each housing unit’s “true” solar energy and electric vehicle (EV) charging usage considering real time-of-use.
- i. Icarus RT, Inc., Icarus Hybrid Energy Storage and Power Boost for Photovoltaic Systems, Anderson, Mark, \$150,000. The goal of this project is to design and demonstrate a low-cost hybrid solar PV/thermal system co-located with commercial and larger solar PV arrays that has the potential to increase power availability 25 percent, and reduce costs by more than 50 percent over current systems. The system will recover heat from PV panels, store energy, and generate power from the stored energy after sunset or when needed by extracting heat and thereby cooling PV panels while charging batteries.
- j. GreenTech Motors Corp., High-Efficiency Density Variable HP Integrated Motor and Drive, Brown, Burnet, \$150,000. The goal of this project is to design and demonstrate a high-efficiency density (HED) motor that has the potential to dramatically reduce end-use industrial electricity consumption through reduced efficiency losses, size, and weight of the electric motor. The HED motors will be compact enough to fit existing smaller frame sizes while achieving IE7 or higher motor efficiency by employing a slotless, ironless, coreless, wireless, and brushless design to produce extremely high energy efficiency packed in an extremely compact electric motor package.

- k. Luciant Inc., High Thermal Conductivity, Broadband Emitting Nitride Ceramic Downconverters for Lighting Applications, Conde Perez, Alejandro, \$150,000. The goal of this project is to further the development of a ceramic downconverter for LED/laser driven lighting that eliminates the need for color mixing and has the potential to dramatically improve thermal management that will provide significant improvements in temperature variation and energy efficiency. This cerium doped aluminum nitride based downconverter is ideal for high-powered lighting applications over traditional phosphor-converted white light emitting diodes, which are fundamentally limited by intense temperature variations.
- l. EndLis Energy, Lithium-Carbon Based Rechargeable Batteries, Griffiths, Mark, \$150,000. The goal of this project is to design and demonstrate low-cost, environmentally-sustainable, lithium-carbon-based rechargeable batteries for EV and grid storage applications that has the potential to double EV range capacity and decrease grid energy storage costs. The innovation is in the manufacturing of electrode nanostructures, which will enable the efficient use of lithium-carbon batteries.
- m. Optec LED, Inc., Third Generation LED with Diffusion Lens, Ferreira, Jennifer, \$150,000. The goal of this project is to design and demonstrate LED street lights and parking lot lights that have the potential to reduce energy consumption by 70 to 90 percent while also reducing maintenance costs. A unique slim-line housing with specialized heat sinks will eliminate the need for integrated cooling fans and will provide 100,000 hours of use before chips will need to be changed.
- n. T2M Global, LLC, Thermal Energy Storage using Ultra-High Osmotic Pressure Polymers, Patel, Niraj, \$150,000. The goal of this project is to develop thermal energy storage in osmotic polymers (TESOP), which stores low-temperature (less than 200 degrees Celsius) thermal energy indirectly through thermo-chemical reactions. The solar thermal energy will be utilized to re-form concentrated osmotic polymers – with the reverse reaction re-creating the energy. This innovation can enhance the value proposition of renewable energy technologies such as solar, geothermal, and industrial waste heat to provide high performance microgrids.
- o. NanoDian, Inc., Low-Cost, Safer, Cobalt-free, Nanostructured Lithium Ion Battery Cathode Material, Boehm, Michael, \$150,000. The goal of this project is to develop prototype Li-ion battery packs that replace the cobalt in the cathode portion of the battery with nanostructured lithium manganese oxide – a safer, cheaper, and non-toxic chemistry. The nano-fabrication technology has a low internal resistance that will provide very high power and fast charging capabilities without considerable heat generation and similar functional energy density.
- p. Nrgtek Inc., Energy Storage with NaFe Flow Batteries, Iyer, Subramanian, \$150,000. The goal of this project is to develop a small-scale prototype sodium-iron flow battery with significantly better power density while maintaining excellent cycle life and low cost. If successful, this flow battery will provide cost-effective energy storage for both residential and grid-level renewable energy balancing.
- q. Luminescent Energy, High Efficiency, Scalable Power Generating Windows for Urban Centers, Needell, David, \$150,000. The goal of this project is to create a small prototype power-generating window that uses microscale PV cells and quantum dot

technology to produce electricity. The windows can be tuned to specific colors or remain up to 70 percent transparent and can be integrated seamlessly into current building designs.

- r. SolarFlexes LLC, Rapidly Deployable Ground-Mounted Photovoltaic Solar Array, Lutian, David, \$150,000. The goal of this project is to engineer a low- cost, easy-to-assemble ground-mounted PV system that can be stowed flat to withstand winds up to 150 mph. This PV technology is composed of ground-mounted PV solar array that is pre-fabricated in a factory, shipped to a PV project site in standard shipping containers, and rapidly deployed using common hand tools. This innovation minimizes complexity in the design of the technology and enables large projects to be quickly deployed.
- s. ReJoule Incorporated, Impedance-Based Battery Health Management for Large Format Lithium-ion Battery Packs, Chung, Zora, \$150,000. The goal of this project is to develop a portable battery diagnostic system that can be embedded in an EV battery pack management system to continuously monitor battery health while detecting and preventing thermal runaway. This battery diagnostic technology is more accurate and faster than competitors, and will be able to self-calibrate based on the individual battery pack characteristics which vary depending on the EV model and year.
- t. Noon Energy, Inc., Rechargeable Carbon-Oxygen Battery, Graves, Christopher, \$150,000. The goal of this project is to develop and test a closed system, passive-flow prototype battery that uses carbon and oxygen. This technology is expected to provide long duration storage for less than \$50 per kWh at double the energy density of Li-ion batteries. The Noon Energy team expects the battery will add less than 3 cents per kWh to fully balance solar and wind on the grid.
- u. Coreshell Technologies, Inc., Thin-Film Battery Electrode Coating Technology, Tan, Jonathan, \$150,000. The goal of this project is to collect demonstration data on a battery electrode coating technology expected to lower the cost of Li-ion batteries by 35 percent while doubling battery life. This electrode coating can be applied using roll-to-roll deposition instead of the standard vacuum application processes, and can be easily and economically integrated into existing battery manufacturing processes in a non-disruptive fashion that further decreases the cost of the battery.
- v. Antora Energy, Solid State Thermal Battery, Briggs, Justin, \$150,000. The goal of this project is to prototype an inexpensive thermal energy storage system. By storing energy as heat in inexpensive raw materials and converting that heat back to electricity with high-efficiency PV modules exposed to light radiating from the hot storage medium, the technology delivers energy storage for less than \$10/kWh – over an order of magnitude cheaper than Li-ion batteries.
- w. ActiveMEMS LLC, Powering Next-Generation IoT via Advanced Piezoelectric MEMS, Aktakka, Erkan, \$150,000. The goal of this project is to develop high-performance piezoelectric energy harvesters that use tiny machinery vibrations to generate electricity. This technology will enable new IoT sensors to be powered without wiring or batteries resulting in sensors that are an order of magnitude cheaper, and have a higher power density and smaller form factor compared to commercial energy harvesters.

- x. EnZinc Inc., Safe, High Performance Rechargeable Zinc Battery, Burz, Michael, \$150,000. The goal of this project is to validate and prototype an innovative battery chemistry that combines a proprietary zinc sponge anode with nickel, silver, or carbon cathodes for different applications. This battery technology is anticipated to match the performance of Li-ion while achieving the much lower price point of lead-acid batteries and will be safer than both chemistries.
- y. Arvind Simhadri, Prefabricated Affordable Renewable Energy Housing, Simhadri, Arvind, \$150,000. The goal of this project is to explore and validate the concept for prefabricated housing that includes solar, storage, and community energy management. The homes will provide an affordable, quickly deployed renewable energy solution for those that need transitional housing due to disasters such as wildfires and earthquakes.

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

12. **UniEnergy Technologies, LLC.** Proposed resolution approving Agreement EPC-19-001 with UniEnergy Technologies, LLC for a \$2,969,998 grant to demonstrate the third generation flow battery technology at a scale that is 600 percent larger than a previous federally-funded grant project, and adopting staff's determination that this action is exempt from CEQA. The battery system will be deployed at Farm ACW's facility to test the optimal economic use cases for a large solar plus storage system in San Diego Gas & Electric territory. (EPIC funding) Contact: Qing Tian. (Staff presentation: 5 minutes)

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

13. **The Local Government Commission.** Proposed resolution approving Agreement 300-19-001 with the Local Government Commission for a \$26,000 contract to provide a CivicSpark Fellow that will assist staff in collaborating with local governments on approaches to connect stakeholders in underserved regions with clean energy research funding opportunities and projects. (EPIC funding) Contact: Rachel Salazar. (Staff presentation: 5 minutes)

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

14. **DOE-Lawrence Berkeley National Laboratory.** Proposed resolution approving Agreement 600-19-005 with the U.S. Department of Energy's Lawrence Berkeley National Laboratory for a \$400,000 contract to conduct charging infrastructure analyses of plug-in EVs used in medium- and heavy-duty on-road applications. This agreement will analyze the needed charging infrastructure and geographic load impacts of medium- and heavy-duty vehicle charging, and will conduct a scoping analysis to inform potential grid upgrades and on-road fleet load coordination. The findings from this study will be incorporated into the Energy Commission's infrastructure modeling work and infrastructure requirement projections for 2030 pursuant to AB 2127 (Ting, 2018). (Clean Transportation Program funding) Contact: Noel Crisostomo. (Staff presentation: 5 minutes)

Commissioner Monahan moved Item 14 and Commissioner Scott seconded. The vote was unanimous (5-0).

15. **DOE-National Renewable Energy Laboratory.** Proposed resolution approving Amendment 3 to Agreement 600-15-001 with the U.S. Department of Energy's National Renewable Energy Laboratory (NREL) to add two technical tasks, augment the agreement by \$1.2 million, and provide a one-year term extension. Under this amendment, NREL will update the Electric Vehicle Infrastructure Projections model and will collect data and report on historical EV charging stations. (Clean Transportation Program funding) Contact: Patrick Brecht. (Staff presentation: 5 minutes)

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

16. **School Bus Replacement for California Public School Districts, County Offices of Education, and Joint Power Authorities, GFO-17-607.** (Clean Energy Job Creation Fund and Clean Transportation Program funding) Contact: Sarah Williams. (Staff presentation: 5 minutes)
- a. CHULA VISTA ELEMENTARY SCHOOL DISTRICT. Proposed resolution approving Agreement ARV-19-033 with Chula Vista Elementary School District for a \$3,877,270 grant to replace 10 old, diesel-powered school buses with 10 clean, all-electric school buses and install supporting charging infrastructure; and adopting staff's determination that the installation of the charging infrastructure is exempt from CEQA.
 - b. GATEWAY UNIFIED SCHOOL DISTRICT. Proposed resolution approving Agreement ARV-19-058 with Gateway Unified School District for a \$780,218 grant to replace two old, diesel-powered school buses with two clean, all-electric school buses and install supporting charging infrastructure; and adopting staff's determination that the installation of the charging infrastructure is exempt from CEQA.

Commissioner Scott moved Item 16 and Commissioner Monahan seconded. The vote was unanimous (5-0).

17. **Minutes.** Possible approval of the July 15, 2019 Business Meeting minutes.

Commissioner Scott moved Item 17 and Commissioner McAllister seconded. The vote was unanimous (5-0).

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

19. **Executive Director's Report.** The Executive Director gave a report.

20. **Public Adviser's Report.** The Public Advisor gave a report.

21. **Public Comment.** None.

22. **Chief Counsel's Report.** None.

- a. Pursuant to Government Code section 11126(e), the Energy Commission may adjourn to closed session with its legal counsel to discuss any of the following matters to which the Commission 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 No. 09-71014).*

- ii. *Communities for a Better Environment and Center for Biological Diversity v. Energy Resources Conservation and Development Commission, and California State Controller* (Alameda County Superior Court, Case No. RG13681262).
 - iii. *State Energy Resources Conservation and Development Commission v. Electricore, Inc. and ZeroTruck* (Sacramento County Superior Court, Case No. 34-2016-00204586)
 - iv. *Natural Resources Defense Council, Inc., et al. v. United States Department of Energy* (Federal District Court, Northern District of California, Case No. 17-cv-03404).
 - v. *City of Los Angeles, acting by and through, its Department of Water and Power v. California Energy Resources Conservation and Development Commission* (Los Angeles Superior Court, Case No. BS171477).
 - vi. *Helping Hand Tools v. California Energy Commission, and Vantage Data Centers LLC.* (Sacramento Superior Court, Case No. 34-2018-80003026)
 - vii. *In re: PG&E Corporation and In re: Pacific Gas and Electric Company* (United States Bankruptcy Court, Northern District of California, San Francisco Division, Case No. 19-30088)
 - viii. *Chukwuemeka (Emeka) Okemiri v. California Energy Commission, et al.* (Sacramento Superior Court, Case No. 34-2018-00246019).
 - ix. *State Energy Resources Conservation and Development Commission v. HyGen Industries, Inc.* (Sacramento County Superior Court No. 34-2019-00252543).
- b. Pursuant to Government Code section 11126(e), 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, which might include:

Appearances:
(*by telephone)

Nancy Traweek, CAISO

Scott M. Lesch, City of Riverside

Michael Burz, EnZinc, Inc.

Danny Kennedy, California Clean Energy Fund/New Energy Nexus

Ron Wolfarth, Rain Bird

*Daniela Urigwe, Energy Solutions, Inc.

*Edward Osann, Natural Resources Defense Council (NRDC)

There being no further business, the meeting was adjourned.

Respectfully submitted,

CODY GOLDTHRITE
Secretariat