DOCKETED	
Docket Number:	21-BUSMTG-01
Project Title:	Business Meeting Agendas, Transcripts, Minutes, and Public Comments
TN #:	240144
Document Title:	Transcript 10-13-21 for Business Meeting
Description:	N/A
Filer:	Liza Lopez
Organization:	California Energy Commission
Submitter Role:	Commission Staff
Submission Date:	10/25/2021 10:50:35 AM
Docketed Date:	10/25/2021

BUSINESS MEETING

BEFORE THE

CALIFORNIA ENERGY COMMISSION

Ιn	the	Matter	of:)
)21-BUSMTG-01
	Ві	ısiness	Meeting)
)

REMOTE ACCESS ONLY

Public comment is accepted solely through the Zoom platform.

The California Energy Commission's (CEC) October 13, 2021 Business Meeting will be held remotely, consistent with Assembly Bill 361 (Rivas, Chapter 165, Statutes of 2021) to improve and enhance public access to state meetings during the COVID-19 pandemic and future emergencies by allowing broader access through teleconferencing options. The public can participate in the business meeting consistent with the direction provided below.

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

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.

WEDNESDAY, October 13, 2021

10:00 A.M.

Reported by: Peter Petty

APPEARANCES

Commissioners (Via Remote)

David Hochschild, Chair Siva Gunda, Vice Chair Karen Douglas Andrew McAllister (Absent - comments read into the record.) Patricia Monahan

Staff Present: (Via Remote)

Drew Bohan, Executive Director Linda Barrera, Chief Counsel Noemi Gallardo, Public Advisor Kerry Willis, Assistant Chief Counsel Nick Oliver, Chief Counsel's Office Justin Delacruz, Chief Counsel's Office John Heiser, Compliance Project Manager

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18.	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:									

- Chief Counsel's Report (Cont.) 18.
 - 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. 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)
 - b. Pursuant to Government Code, section 11126, subdivisions (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 constitute a significant exposure to litigation against the CEC, which might include personnel matters.

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- 2 OCTOBER 13, 2021 10:00 a.m.
- 3 MS. MURIMI: The California Energy Commission's
- 4 Business Meeting will begin shortly. Thank you for your
- 5 patience.
- 6 (Start of Introductory Video.)
- 7 Today's Business Meeting is being held remotely.
- 8 Please note the public comment will now be conducted via
- 9 Zoom. When the public comment period is announced press
- 10 the raise-hand feature to indicate you would like to make a
- 11 comment.
- 12 If you are participating by phone to indicate
- 13 you'd like to make a comment please raise your hand by
- 14 pressing *9 and then press *6 to unmute. Again, that is *9
- 15 to raise your hand and *6 to unmute.
- 16 For public comment please note that comments are
- 17 limited to three minutes or less per person and one
- 18 representative per organization. Depending on the number
- 19 of commenters we may adjust the time for public comment to
- 20 be fair to everyone who'd like to speak.
- 21 After you raise your hand the Public Advisor will
- 22 announce you using the listed Zoom name or with the last
- 23 three digits of the phone number used to call in to the
- 24 meeting. The Public Advisor will then open your line.
- 25 Before making your comment state and spell your name and

- 1 indicate your affiliation, if any.
- Finally, to help ensure you're heard clearly
- 3 speak closely and clearly into the device, do not use the
- 4 speakerphone feature.
- 5 To make California Energy Commission business
- 6 meetings more accessible the live-transcript feature that
- 7 shows closed captioning has been enabled in Zoom.
- 8 Attendees who are using an electronic device and would like
- 9 to see the live transcript must click on the "Live
- 10 Transcript" icon and then choose either "Show Subtitle" or
- 11 "View Full Transcript." You can also choose to hide
- 12 subtitle or you can exit out of the live full transcript.
- 13 Though helpful, the service may not capture everything
- 14 precisely. Attendees coming in via phone only will not
- 15 have access to this feature.
- 16 As usual, court-reported transcripts will be made
- 17 available after California Energy Commission business
- 18 meetings.
- 19 Welcome to the California Energy Commission
- 20 Business Meeting. The meeting will now begin.
- 21 (End of Introductory Video.)
- 22 CHAIR HOCHSCHILD: Well, good morning friends and
- 23 welcome to the Energy Commission's October 13th business
- 24 meeting. I'm David Hochschild, and if we could begin with
- 25 Commissioner Monahan leading us in the Pledge of

1	Allegiance?
2	(Whereupon the Pledge of Allegiance was recited.)
3	CHAIR HOCHSCHILD: Thank you, Commissioner.
4	Before turning to our business items, I want to
5	acknowledge we are still in the middle of the COVID
6	pandemic and the Delta variant. And so we want to keep
7	everyone healthy and have everyone do their part, so please
8	take precautions, consider getting vaccinated, and continue
9	wearing masks.
10	Per instructions, today's business meeting is
11	being held remotely consistent with Assembly Bill 361 to
12	improve and enhance public access to state meetings during
13	the COVID-19 pandemic and future emergencies by allowing
14	broader access through teleconferencing options.
15	The public can participate in the business
16	meeting consistent with the instructions for remote
17	participation found in the notice for this meeting and as

19 Please note that Zoom's closed captioning feature

set forth on the agenda posted on the Commission's website.

20 has been enabled to make our business meetings more

18

21 accessible. Attendees using an electronic device can

22 enable this feature by clicking the "Live Transcript" icon

23 and then selecting either "Show Subtitle" or "View Full

24 Transcript." You can stop closed captioning by exiting out

25 of the "Live Transcript" or selecting "Hide the Subtitle."

- 1 Those using a phone do not have this option of exiting out
- 2 of closed captioning.
- 3 The Commission will continue to post a transcript
- 4 of this business meeting rendered by a professional court
- 5 reporter in the docket system and on the business meeting
- 6 webpage.
- 7 Please note that if Zoom were to shut down we
- 8 would switch to the Verizon phone line at 888-823-5065, the
- 9 pass code is "Business Meeting." Public comment would then
- 10 be accepted through Verizon.
- 11 Pursuant to California Code of Regulations Title
- 12 20, section 1104(e) any person may make oral comments on
- 13 any agenda item. To ensure the orderly conduct of
- 14 business, public comments will be limited to three minutes
- 15 or less per person for each agenda item voted on today.
- 16 Any person wishing to comment on information
- 17 items or reports, which are non-voting items, shall reserve
- 18 their comment for the general public comment portion of the
- 19 meeting agenda and shall have a total of three minutes or
- 20 less to state all remaining comments. We are now solely
- 21 using Zoom for public comments.
- 22 Once the public comment period begins if you'd
- 23 like to speak please raise your hand by clicking the hand
- 24 icon at the bottom of your screen. If you're joining by
- 25 phone press 9 to raise your hand and 6 to unmute. After

- 1 the Public Advisor calls on you to speak remember to spell
- 2 your name and state your affiliation, if any.
- Before turning to the agenda items today I'm
- 4 excited to announce that during today's business meeting,
- 5 the Commission seeks to approve nearly \$24 million in
- 6 grants, which is going to help stimulate our state's
- 7 economic recovery.
- 8 And before we get to the Consent Calendar I just
- 9 wanted to offer congratulations again to two folks that we
- 10 swore in on Monday: Vice Chair Gunda, who's now officially
- 11 been sworn in as Vice Chair, and what a blessing he's been
- 12 to the whole Commission family. And Katrina Leni-Honiq,
- 13 who is now Deputy Public Advisor and Tribal Liaison.
- 14 Congratulations again to both of you. We're so excited for
- 15 each of you with your new roles and look forward to
- 16 partnering with you on a lot of success in the months and
- 17 years ahead.
- 18 So with that let's turn now to Item 1, the
- 19 Consent Calendar. We do have recusals for this item, so
- 20 we'll take them up one at a time starting with Item 1a,
- 21 which is me. I'm going to recuse myself from any
- 22 discussion, consideration and vote on the proposed
- 23 resolution for \$100,000 membership fees to Veloz. I am
- 24 currently a member of the Public Policy Board of Veloz,
- 25 representing the Energy Commission. In that role, I do not

- 1 make decisions on behalf of Veloz. Together with my
- 2 colleagues on the non-voting Public Policy Board, we lend
- 3 policy guidance and support to the Board of Directors of
- 4 Veloz.
- 5 Additionally, I do not receive any compensation
- 6 in any form including reimbursements or per diem for
- 7 expenses, so there's no financial interest in which there
- 8 would be a conflict of interest under the Political Reform
- 9 Act or the Warren-Alguist Act. However, in an abundance of
- 10 caution I'm going to recuse myself from the discussion and
- 11 vote on this item, to avoid any perception of a conflict of
- 12 interest.
- Vice Chair Gunda will lead this item. After I
- 14 leave, I will mute and keep my video on, step away from my
- 15 chair, and I'll return when the Public Advisor informs me
- 16 that the item has been completed. So let me just go on
- 17 mute and then --
- 18 VICE CHAIR GUNDA: Thank you, Chair. Good
- 19 morning Noemi. Let's begin with this item. Is there any
- 20 public comment for this item Madam Public Advisor?
- 21 MS. GALLARDO: Yeah, thank you Vice Chair Gunda.
- 22 This is Noemi the Public Advisor. I just want to give a
- 23 reminder to our attendees if you would like to make a
- 24 comment please use the raise hand feature on the screen.
- 25 If you are on by phone press *9 to raise your hand, *6 to

- 1 unmute.
- I do not see any hands raised. Vice Chair, we
- 3 can now proceed.
- 4 VICE CHAIR GUNDA: Thank you so much. Is there
- 5 any Commissioner discussion? So I don't see any, with that
- 6 I'll move to the vote. Commissioner Monahan, would you
- 7 want to make the motion?
- 8 COMMISSIONER MONAHAN: I move to approve Item 1a.
- 9 VICE CHAIR GUNDA: Commissioner Douglas, would
- 10 you second?
- 11 COMMISSIONER DOUGLAS: Yes, I will second.
- 12 VICE CHAIR GUNDA: Thank you. With that, all in
- 13 favor please vote aye. Commissioner Monahan?
- 14 COMMISSIONER MONAHAN: Aye.
- 15 VICE CHAIR GUNDA: Commissioner Douglas?
- 16 COMMISSIONER DOUGLAS: Aye.
- 17 VICE CHAIR GUNDA: I vote age as well. With the
- 18 Chair recusing himself and Commissioner McAllister absent
- 19 the vote count is 3-0. The motion passes. Thank you.
- 20 CHAIR HOCHSCHILD: Thank you, Vice Chair Gunda.
- 21 So that was Item 1a.
- Item 1b Commissioner Monahan is going to recuse
- 23 herself, so I'll let her speak.
- 24 COMMISSIONER MONAHAN: So on Item 1b, I will
- 25 recuse myself from any discussion, consideration and vote

- 1 on the proposed contract to the University of the
- 2 California Regents on behalf of the Davis campus for
- 3 \$160,000 per membership in the Sustainable Transportation
- 4 and Energy Pathways Consortium. This is a consortium
- 5 administered by the UC Davis Institute for Transportation
- 6 Studies, which I currently serve as a member on the Board
- 7 of Advisors. In that role I do not make governance
- 8 decisions on behalf of the Institute, but the Board exists
- 9 to provide guidance and oversight to the UC Davis ITS
- 10 programs.
- 11 Additionally, I don't receive any compensation in
- 12 any form including reimbursements or per diem for expenses,
- 13 so there's no financial interest in which there would be a
- 14 conflict of interest under the Political Reform Act or
- 15 Government Code section 1090.
- 16 However, in an abundance of caution I will recuse
- 17 myself to avoid any perception of a conflict of interest.
- 18 I will mute and step away from my chair, but I'm going to
- 19 keep my video on and I'll return when the Public Advisor
- 20 informs me the item is completed.
- 21 CHAIR HOCHSCHILD: Thank you, Commissioner.
- 22 Madam Public Advisor, are there any public
- 23 comments on Item 1b?
- MS. GALLARDO: This is Noemi, the Public Advisor.
- 25 A reminder to attendees if you'd like to make a comment

- 1 please use the raise-hand icon. If you are on by phone
- 2 press *9 and *6 to unmute.
- I do not see any hands raised, Chair. We may
- 4 proceed.
- 5 CHAIR HOCHSCHILD: Thank you.
- 6 Commissioner Douglas, would you be willing to
- 7 move Item 1b?
- 8 COMMISSIONER DOUGLAS: Yes, I move Item 1b.
- 9 CHAIR HOCHSCHILD: Vice Chair Gunda, would you be
- 10 willing to second?
- 11 VICE CHAIR GUNDA: Yes, I second Item 1b.
- 12 CHAIR HOCHSCHILD: All in favor say aye,
- 13 Commissioner Douglas?
- 14 COMMISSIONER DOUGLAS: Aye.
- 15 CHAIR HOCHSCHILD: Vice Chair Gunda?
- 16 VICE CHAIR GUNDA: Aye.
- 17 CHAIR HOCHSCHILD: And I vote age as well. That
- 18 item passes 3-0 with Commissioner Monahan abstaining.
- 19 Turning now to Item 2, New Solar Homes
- 20 Partnership Informational Update, let's have Geoff Dodson
- 21 present. Welcome, Geoff.
- MR. DODSON: Good morning Chair Hochschild and
- 23 Commissioners. My name is Geoffrey Dodson with the
- 24 Renewable Energy Division and I am here to provide an
- 25 informational update on the New Solar Homes Partnership

- 1 program and its impact. Next slide, please.
- 2 So I want to start by providing a brief overview
- 3 of the New Solar Homes Partnership, or NSHP. The NSHP
- program traces back to the Million Solar Roofs Initiative, 4
- 5 signed as SB 1 in 2006 by Governor Schwarzenegger.
- 6 funded the California Solar Initiative and was an ambitious
- 7 effort to expand solar energy capacity in California. NSHP
- 8 is one component of the California Solar Initiative, with a
- 9 focus on new construction homes in investor owned utility
- 10 territory, including Pacific Gas & Electric, Southern
- 11 California Edison, and San Diego Gas & Electric.
- 12 Other components of the California Solar
- 13 Initiative were administered outside the CEC and targeted
- 14 existing buildings as well as new homes in publicly owned
- 15 utility territory, such as Los Angeles Department of Water
- 16 and Power and Sacramento Municipal Utility District.
- 17 The NSHP program was created with some specific
- 18 goals, including driving the adoption of solar on at least
- 19 50 percent of new homes by the end of the program. At the
- 20 time of creation, solar hardware was still relatively
- 21 expensive, so the incentive programs that California
- 22 offered were very much the critical boost that interested
- 23 parties needed to adopt this technology.
- 24 In 2019, California celebrated the achievement of
- 25 1 million solar roofs, of which NSHP contributed by funding

15

- 1 the installation of solar on tens of thousands of new
- 2 single-family homes as well as thousands more affordable
- 3 housing dwelling units.
- 4 The NSHP incentive structure was designed to
- 5 create an increasingly self-sustaining solar market, so
- 6 that incentive programs like NSHP would no longer be
- 7 necessary for a homeowner to choose to install solar. The
- 8 program included higher incentives for affordable housing
- 9 projects, ensuring equity so all Californians could share
- 10 in the benefits provided from solar energy including
- 11 reduced energy bills and cleaner energy generation.
- 12 The ramping up of solar also provided a bridge to
- 13 help achieve California's goal for zero-net energy homes.
- 14 This ultimately came to fruition through the adoption of
- 15 the 2019 Building Energy Efficiency Standards requiring the
- 16 installation of solar on nearly all new homes. Next slide,
- 17 please.
- 18 So I want to take a moment now to highlight a few
- 19 notable projects funded by NSHP. Spring Lake is a success
- 20 story not just for NSHP but nationally as well, as this was
- 21 the country's first zero-net-energy rental community. The
- 22 Applicant, Spring Lake Housing Associates, built a 62-unit
- 23 affordable housing community, located down the highway in
- 24 Woodland, California. This was constructed in 2016 with a
- 25 184-kilowatt solar energy system resulting in a \$346,000

- 1 incentive paid from NSHP. The onsite energy generation
- 2 helps avoid CO2 emissions equivalent to consuming over
- 3 26,000 gallons of gasoline. Next slide, please.
- 4 Heritage Commons is another success story for
- 5 NSHP. This community is comprised of 60 affordable
- 6 residential units and a community center located down the
- 7 highway in Dixon, California. This was constructed in 2016
- 8 by Heritage Commons, LP with a 39-kilowatt solar energy
- 9 system resulting in a \$36,000 incentive paid from NSHP.
- 10 This project helps avoid the same amount of carbon
- 11 emissions that would be sequestered by planting nearly
- 12 1,000 trees. Next slide, please.
- NSHP served as a crucial tool to encourage the
- 14 integration of rooftop solar into new housing and to bridge
- 15 the financial gap in installation costs before it
- 16 eventually became cost-effective and required by the 2019
- 17 Building Energy Efficiency Standards. As the program
- 18 concludes, the CEC paid nearly \$241 million to support the
- 19 installation of solar on tens of thousands of new homes in
- 20 California, collectively adding nearly 233 megawatts of new
- 21 solar energy capacity spread among new homes throughout the
- 22 state. This new capacity is enough to offset the need for
- 23 a new small natural gas power plant, or produce the same
- 24 energy generated by dozens of average-size utility-scale
- 25 solar farms.

1 Th€	NSHP	program	provided	significant	benefits	to

- 2 Californians over the last 15 years as well as co-benefits
- 3 that supported clean-energy jobs, grid resiliency, and
- 4 reduced utility costs for the residents of these new homes.
- 5 Additionally, the program supported affordable housing
- 6 projects and ensured equity across all housing types.
- 7 The NSHP program design and administration led to
- 8 its success and is recognized as a model for new funding
- 9 programs, such as the Building Initiative for Low Emissions
- 10 Development Program, known as BUILD, which uses incentive
- 11 funding to encourage full electrification of new homes.
- 12 And this concludes my presentation. And I am
- 13 available for any questions.
- 14 CHAIR HOCHSCHILD: Thank you, Geoff. And great
- 15 job on that presentation and on the program and I really
- 16 appreciate your contributions as well. You did a terrific
- 17 job with the REAP program, the Renewable Energy Ag Program
- 18 as well, so terrific work.
- 19 Let's see if we have -- and so this is not a
- 20 voting item, so there is no public comment on this -- but
- 21 let's go to Commissioner discussion. Do you have any
- 22 remarks, Commissioner Douglas?
- COMMISSIONER DOUGLAS: Yeah, just to say that
- 24 this has been a great program. I appreciated the
- 25 presentation. It's always good to just take a pause and

- 1 sort of reflect on the impact of some of these programs, so
- 2 I appreciate it.
- 3 CHAIR HOCHSCHILD: Any other Commissioners
- 4 wishing to make a comment?
- I will just close by saying that I really feel
- 6 California policy was absolutely instrumental in bringing
- 7 solar energy mainstream. And the technology was born here,
- 8 but really was scaled here, both through utility scale and
- 9 now with the new solar homes mandate. And that's been
- 10 incredibly important to bring the cost down too. Those
- 11 policy commitments leverage a lot of investment that
- 12 wouldn't have otherwise occurred. And we've seen in the
- 13 last 20 years solar going from \$10.00 a watt to 30 cents a
- 14 watt per panel costs, and still going down in price.
- 15 And just our mandates alone for solar homes today
- 16 -- and by the way, the solar homes mandate we did wouldn't
- 17 have been possible without the incentive program. The
- 18 mandates alone, in a normal market it's about 200 megawatts
- 19 a year for new homes and about 280 megawatts a year for
- 20 nonresidential and commercial that we approved in August,
- 21 so it's almost half a gig a year of rooftop solar.
- 22 And Commissioner Douglas does a terrific job on
- 23 our siting side. But it is hard and increasingly tougher
- 24 to site renewable projects. And so rooftops are an
- 25 outstanding location for solar and we got 1.3 million solar

- 1 roofs in the state. We want to have a lot more. And I
- 2 just want to pay tribute to this program and all the staff
- 3 who worked on it, so thank you for that update and I
- 4 appreciate that.
- 5 Oh yeah, Commissioner Monahan and Vice Chair
- 6 Gunda, let's go to Commissioner Monahan first.
- 7 COMMISSIONER MONAHAN: Yeah, I'll be brief. I
- 8 just want to thank Geoff and actually just say I really
- 9 appreciate being able to see the arc of history here in
- 10 terms of, and as the Chair highlighted, just incentives
- 11 play such an important role in the early stage of a market.
- 12 And then we move to a place where we don't need incentives
- 13 or we need to tailor them really specifically for
- 14 accelerating a market scale-up. And I think we're already
- 15 there with solar, so it's just wonderful to see how all the
- 16 pieces fit together and the critical importance in early
- 17 stage that incentives play.
- 18 CHAIR HOCHSCHILD: Yeah, well said.
- 19 Vice Chair Gunda?
- VICE CHAIR GUNDA: Yeah, thank you, Chair. I
- 21 just also wanted to just extend my thanks to Geoff and the
- 22 entire Renewables team. I think just as a part of CEC's
- 23 work we have been really at the forefront of R&D and D&D in
- 24 a variety of different sectors. And I think it's just an
- 25 important element for CEC has been able to do over the last

- 1 ten years, specifically under your leadership Chair, over
- 2 the last two years or so.
- I just want to say this is an important
- 4 operational capacity that was built in CEC to be able to
- 5 process these kinds of projects and move those incentive
- 6 programs forward. I just want to congratulate the
- 7 Renewables team too, for taking the time to really build
- 8 that capacity and kind of having this work that's done so
- 9 seamlessly. So congratulations and from a policy-wise I
- 10 thank you have done really well. And I appreciate Geoff's
- 11 cat as well. (Laughter.) And I'm giving him a high-five.
- 12 COMMISSIONER MONAHAN: The cat really likes him
- 13 as well.
- 14 CHAIR HOCHSCHILD: Your cat is making a cameo
- 15 appearance. We've all had little kids and pets running in
- 16 the background.
- 17 And one other closing thought to add to the Vice
- 18 Chair Gunda's comments and Commissioner Monahan's, I think
- 19 rooftop solar is a great sort of gateway drug to get
- 20 customers to do the next thing, which is energy storage in
- 21 electric vehicles. And I certainly think the anecdotal
- 22 evidence is very strong that once people get a rooftop
- 23 solar system they pay a lot more attention to energy bills
- 24 and they want to do the next thing. And so you're seeing
- 25 in California today about 20 percent of solar projects

- 1 people are also getting energy storage, which is great for
- 2 grid resilience. And I think that percentage is going up
- 3 over time. And certainly in Hawaii it's the vast majority
- 4 of rooftop solar customers are also getting energy storage.
- 5 And the same for electric vehicles. And so this is really
- 6 a sort of momentum builder for those other technology
- 7 upgrades, so great work to Geoff and Geoff's cat.
- 8 Let's move on now to Item 3, Order Instituting
- 9 Rulemaking Proceeding. And I'll turn it over to Jessica
- 10 Lopez.
- MS. LOPEZ: Good Morning, Chair and
- 12 Commissioners. My name is Jessica Lopez with the
- 13 Appliances Office in the Efficiency Division. Also joining
- 14 me is Josey Crosby from the Chief Counsel's office.
- Today we are seeking approval for an Order
- 16 Instituting Rulemaking or OIR to initiate a rulemaking to
- 17 propose efficiency regulations for dipper wells. Next
- 18 slide, please.
- 19 The goal of this rulemaking is to reduce water
- 20 and energy consumption in the State of California. Current
- 21 and past state administrations have directed state agencies
- 22 to prepare and respond to drought conditions. Some of the
- 23 initiatives had directed the Energy Commission to establish
- 24 water efficiency standards for indoor and outdoor
- 25 appliances. In the response, the Energy Commission has

- 1 adopted water efficiency regulations for toilets, urinals,
- 2 faucets, spray sprinkler bodies, and other appliances.
- 3 Staff has identified dipper wells as an
- 4 opportunity to continue our efforts in water efficiency and
- 5 water conservation. Next slide, please.
- 6 As shown in Figure 1 dipper wells are continuous
- 7 flow sinks, hot or cold, used to rinse serving utensils in
- 8 the food service industry such as ice cream stores, coffee
- 9 shops, juice spots, and full-service restaurants. The
- 10 water consumption for dipper wells varies from 0.2 gallons
- 11 per minute to 1 gallon per minute, operating continuously
- 12 during business hours. Just to give you a sense of the
- 13 magnitude of this appliance, over a period of 14 hours per
- 14 day one dipper well can consume between 168 gallons per day
- 15 to 840 gallons per day. That's enough to fill 4 to 20
- 16 bathtubs in a day. Next slide, please.
- 17 In our preliminary assessment staff determined
- 18 that this rulemaking is technically feasible, and cost-
- 19 effective to business owners and the State of California.
- 20 The potential water savings are 5.5 billion gallons per
- 21 year, 19.6 gigawatt hours per year of embedded energy, and
- 22 25 million therms per year of natural gas from the use of
- 23 hot water. These are estimates are based on early
- 24 assumptions and may change when an appropriate standard is
- 25 determined.

- 1 Alternatives include reducing the flow rate,
- 2 pressure rinsing, automatic or manual refilling, and in
- 3 combination with a heating component, as shown in Figure 2.
- 4 Next slide, please.
- 5 The purpose of this new rulemaking will be to
- 6 gather additional information and to propose appropriate
- 7 efficiency regulations for dipper wells in compliance with
- 8 the rulemaking process set forth in California's
- 9 Administrative Procedure Act.
- In conclusion, we ask that the Commission approve
- 11 the OIR for dipper wells. And that concludes my
- 12 presentation and I'm happy to answer any questions at this
- 13 time.
- 14 CHAIR HOCHSCHILD: Thank you, Jessica.
- 15 Let's go to public comment on Item 3.
- MS. GALLARDO: This is Noemi, the Public Advisor.
- 17 A reminder to attendees if you'd like to make a public
- 18 comment for this item please use the raise-hand feature on
- 19 the screen. If you are on by phone you can press *9 to
- 20 raise your hand and then *6 to unmute.
- I do not see any hands raised, Chair. We may
- 22 proceed.
- 23 CHAIR HOCHSCHILD: Okay, what I'd like to do if
- 24 it's all right is just begin with some comments from
- 25 Commissioner McAllister who is on travel back east today

- 1 and can't join. So here's what he says. "Thanks to
- 2 Jessica and the entire Appliances team for identifying this
- 3 compelling source of water savings and developing the
- 4 analysis behind this OIR. In a time when California is
- 5 facing prolonged accelerating water scarcity it makes no
- 6 sense to have single-use water running through hundreds of
- 7 thousands of dipper wells all day, every day, when there
- 8 are functional and affordable alternatives available. This
- 9 OIR will no doubt dial in the best solutions and produce an
- 10 outcome that saves precious water and money and serves the
- 11 needs of California's food service industry." So that's
- 12 from Commissioner McAllister.
- 13 Any comments from Vice Chair Gunda, Commissioner
- 14 Monahan or Commissioner Douglas? Yeah, Vice Chair?
- 15 VICE CHAIR GUNDA: Yeah, thank you, Chair. And I
- 16 think Commission McAllister's comments really sets up the
- 17 stage. I think as we move forward the energy/water nexus
- 18 is an important element to continue to focus on. And
- 19 obviously this OIR will kind of help delve into the
- 20 opportunities for water savings in this particular
- 21 application.
- I appreciated Jessica's briefing yesterday and
- 23 very much look forward to ongoing work on this. And just
- 24 want to wish the team luck and a good public process in
- 25 gathering input on this. Thank you.

CHAIR HOCHSCHILD:	Thank you.
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- 2 Commissioner Douglas, were you wishing to make a
- 3 comment?
- 4 COMMISSIONER DOUGLAS: Yeah, I just wanted to say
- 5 that this is really important work. And, of course, our
- 6 standards processes achieves significant, cost-effective
- 7 savings. I'm really looking forward to seeing this move
- 8 forward, thank Commissioner McAllister in advance for all
- 9 the work he'll be doing on this, and the staff as well.
- 10 CHAIR HOCHSCHILD: I would just like to say I'm
- 11 very encouraged we're doing this now. I really feel the
- 12 smart mindset to have right now is to go into this
- 13 expecting worst-case conditions for a long time. With the
- 14 drought we know that's certainly possible.
- 15 Australia had a 14-year drought. And by the way,
- 16 they're way, way ahead of us on water conservation as is
- 17 Israel. We want to be catching up to those guys in terms
- 18 of what they're doing. So really encouraged by this, and I
- 19 look forward to other standards as well on toilets and
- 20 whatever other appliances we can find water savings.
- 21 And I really wanted to just especially
- 22 acknowledge Jessica for your hard work on this. And I know
- 23 you've been putting in a lot of time and effort and the
- 24 rest of the Appliance team, Efficiency team. Mike Sokol,
- 25 thank you for all your work. And we're eager to get this

- 1 moving, because it's one of the things that we -- I always
- 2 like to think like, go out a couple years what are we going
- 3 to look back at 2021 and wish we had done. And so getting
- 4 this moving now is very encouraging, so it's got my full
- 5 support.
- 6 With that let's see, I guess we are going to go
- 7 ahead and take a vote unless there's other Commissioner
- 8 comments. So let's see, Vice Chair Gunda would you be
- 9 willing to move the item?
- 10 VICE CHAIR GUNDA: Yeah, I move Item 3.
- 11 CHAIR HOCHSCHILD: Okay.
- 12 Commissioner Monahan, would you be willing to
- 13 second?
- 14 COMMISSIONER MONAHAN: I second this item.
- 15 CHAIR HOCHSCHILD: Okay, all in favor say aye.
- 16 Vice Chair Gunda?
- 17 VICE CHAIR GUNDA: Aye.
- 18 CHAIR HOCHSCHILD: Commissioner Monahan?
- 19 COMMISSIONER MONAHAN: Aye.
- 20 CHAIR HOCHSCHILD: Commissioner Douglas? (No
- 21 audible response.) You're muted.
- 22 COMMISSIONER DOUGLAS: Sorry, aye.
- 23 CHAIR HOCHSCHILD: And I vote age as well. That
- 24 item passes 4-0. Thank you, Jessica and team, for that.
- Let's turn now to Item 4, Petition To Amend

- 1 Certification Of Solar Energies Generating System IX and X.
- MS. GALLARDO: Chair Hochschild, we have a
- 3 possible transition to Item 5 instead of Item 4.
- 4 CHAIR HOCHSCHILD: Oh, correct. There was a
- 5 request to do that, to move Item 4 to the end of the
- 6 agenda, was that the request?
- 7 MS. GALLARDO: That's correct.
- 8 CHAIR HOCHSCHILD: Yeah. Okay, thank you for
- 9 that reminder. I'm happy to do that. We'll come back to
- 10 Item 4 at the end of the agenda.
- 11 Let's turn now to Item 5, Phase II Data
- 12 Collection Regulations, Ryan Eggers.
- MR. EGGERS: Good morning Chair, Commissioners.
- 14 I am Ryan Eggers of the Energy Assessments Division and I
- 15 am joined by Nick Oliver and Justin Delacruz of the Chief
- 16 Counsel's Office. I'm here today seeking approval of a
- 17 proposed resolution to adopt amendments to Title 20,
- 18 Chapters 3 and 7 regarding Energy Commission data
- 19 collection and confidentiality regulations. Next slide,
- 20 please.
- 21 To reacquaint you with this work, staff undertook
- 22 this effort to improve the Energy Commission's forecast and
- 23 assessments. Specifically, to improve our work in ensuring
- 24 energy reliability for all Californians, as well as
- 25 advancing our state's energy goals.

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- 2 being performed by and required of the Energy Commission
- 3 every year, staff needs new and exceedingly granular
- 4 information to provide the Energy Commission with the best
- 5 analysis possible. Thus, Energy Commission data
- 6 regulations need to change and be modified to meet the
- 7 analytical requirements of the people of California. Next
- 8 slide, please.
- 9 For this phase of data regulation changes, this
- 10 rulemaking package can be broken down into two types of
- 11 changes: collecting and tracking new data, which there are
- 12 three new asks, and cleanup of general language.
- 13 For new data items staff is proposing the
- 14 collection of first, hydrogen, biodiesel, and renewable
- 15 diesel production data, which includes inventory and
- 16 feedstock data as well. This information is needed for
- 17 fuel supply energy balance accounting, which relates
- 18 directly to state energy goal tracking. And fuel
- 19 availability assessments for informing reliability
- 20 assessment work.
- 21 The second, Property Assessed Clean Energy data,
- 22 also known as PACE data, will give information on clean
- 23 energy retrofits projects allowing for more concise
- 24 tracking of energy efficiency improvements throughout the
- 25 state.

1	And	finally	natural	qas	storage	e s	ystem	data	will

- 2 give information on operational activities of natural gas
- 3 storage facilities. This will further the work of the
- 4 Energy Commission's Natural Gas Team in their efforts in
- 5 hydraulic modeling that is being undertaken for contingency
- 6 planning activities and analysis of natural gas system
- 7 vulnerabilities.
- For regulation cleanup, for which there were
- 9 numerous changes, they can be broken into the following
- 10 categories:
- 11 The first is data submission procedural changes.
- 12 Changes here are being made to make it easier to submit
- 13 data in lieu of filings by data reporters.
- 14 Our next category is general language
- 15 modernization. Here we are moving wind reporting
- 16 requirements to the code sections that contain all other
- 17 generation reporting requirements, as well as standardizing
- 18 water usage data for generators. Additionally, changes are
- 19 being made to update other data elements, as increased
- 20 understanding of the required information has been
- 21 obtained.
- 22 Finally, the last category is confidentiality
- 23 process changes. For this work, changes are being
- 24 undertaken to streamline confidentiality processes,
- 25 establish end-dates for certain categories of confidential

- 1 data that have lost their eligibility for confidential
- 2 status over time, and make code changes consistent with
- 3 statutory requirements within the California Public Records
- 4 Act. Next slide, please.
- 5 The Notice of Proposed Action for this proceeding
- 6 was posted on June 17th and published in the "California
- 7 Regulatory Notice Register" on June 18th, which opened the
- 8 45-day comment period. During that time, 5 written comment
- 9 letters were received. Additionally, public comment was
- 10 received from the August 6th public hearing. Over this
- 11 full comment period, no comments in opposition to the
- 12 proposed changes were received.
- 13 After reviewing the comments, staff proposes no
- 14 changes to the current posted express terms and Initial
- 15 Statement of Reasons. Therefore, we submit these changes
- 16 to the Commissioners for approval. Next slide.
- With this pending approval, the work plan for
- 18 this project currently stands with three items yet for us
- 19 to achieve, one of them hopefully taken care of today. The
- 20 target for staff hit on this project was to have these
- 21 regulations in effect January 1st, 2022, and we are still
- 22 on target for that.
- 23 While our first event in socializing these
- 24 proposals was in October of the 2020, many of the staff
- 25 involved in this project have been working with

- 1 stakeholders on these items since the beginning of 2019.
- 2 It was much of this preplanning and initial outreach, which
- 3 have allowed this project to reach its target successfully.
- 4 And I will discuss the last three to-do items on the next
- 5 slide. Next slide, please.
- In the event of approval, staff's next step is to
- 7 finalize the rulemaking package and to send it to the
- 8 Office of Administrative Law with the goal of having it
- 9 sent before the end of October. Under this schedule, as I
- 10 mentioned earlier, staff seek to have these regulations
- 11 take effect on January 1st, 2022. With those items
- 12 completed, staff will close Docket 18-OIR-01 and finish
- 13 this phase of data modifications.
- 14 That concludes my presentations, and we are
- 15 available to answer any questions you may have. Thank you
- 16 for your consideration.
- 17 CHAIR HOCHSCHILD: Thank you, Ryan, appreciate
- 18 that.
- 19 Let's turn now to public comment on Item 5.
- MS. GALLARDO: This is Noemi, the Public Advisor,
- 21 reminding attendees if you would like to make a public
- 22 comment please use the raise-hand feature, the icon that
- 23 looks like a high-five on the screen. If you're on by
- 24 phone press *9 and then *6 to unmute.
- 25 All right, I do not see any hands raised, Chair,

- 1 we may proceed.
- 2 CHAIR HOCHSCHILD: Okay, let's go to Commissioner
- 3 discussion starting with Vice Chair Gunda.
- 4 VICE CHAIR GUNDA: Thank you, Chair, so much. I
- 5 just want to begin by thanking Ryan, his manager Amanda
- 6 Poletti, the EAD team, the CCO team and the entire -- the
- 7 different divisions that worked on it including FTD,
- 8 Efficiency Division, as well as the Siting team to really
- 9 help craft the necessary language for this rulemaking.
- 10 So I want to kind of really recognize what Ryan
- 11 mentioned most of the work for this rulemaking had started
- 12 in 2019 and we are almost at the end of 2021. So we had
- 13 almost three years of staff work going into this process.
- 14 And I appreciate Ryan's comment on the staff efforts in
- 15 socializing some of these and taking the comments and
- 16 revising them along the process to make it as seamless and
- 17 collaborative with the stakeholders as possible. So I just
- 18 really want to express my gratitude for all the work that
- 19 went into making this happen.
- 20 Just noting the importance of this rulemaking, as
- 21 again Ryan noted, we as a data-gathering agency, one of the
- 22 four critical functions that CEC serves is being the data
- 23 repository for the state on all matters energy. And more
- 24 and more we have this energy/water nexus, and then
- 25 emergency issues that are all coming together.

1 So I think the CEC has this important oblique

- 2 of gathering the data and making it accessible and trying
- 3 some insights from that to really improve situational
- 4 awareness for the decision makers and, more broadly, the
- 5 State of California and everybody who lives here. So I
- 6 think it is an important step in gathering that
- 7 information.
- 8 Specifically as kind of my work constitutes, I
- 9 obviously have an interest in the natural gas data and the
- 10 data on the emergency on the fuels. Both of them will be
- 11 extremely important for planning purposes that Ryan
- 12 mentioned. As we move forward and think through the
- 13 transition of the fossil gas and how do we think through
- 14 the long-term gas project, it's really important to
- 15 understand the storage information. So I'm really glad
- 16 that we're gathering that and then making it a part of our
- 17 very important inputs for our analytical work. So I just
- 18 really want to thank everybody who's been a part of this.
- 19 I also have a comment from Commissioner
- 20 McAllister, Chair, if I can just read it?
- 21 CHAIR HOCHSCHILD: Please, yeah.
- 22 VICE CHAIR GUNDA: And so just wanted to
- 23 recognize that Commissioner McAllister and I are BK buddies
- 24 on this, the Bagley-Keene part, so we've been closely
- 25 discussing a number of those things along the way. But

- 1 here's his comment.
- 2 He says, "Thanks to Ryan and the EAD and the CCO
- 3 teams for their sustained efforts to develop these updates
- 4 and bring them to the Commission for adoption. Data is
- 5 essential for understanding, where we have been, where we
- 6 are and for mindfully planning, where we must go. This
- 7 Phase II update builds on the Phase I rehab of CEC's data
- 8 collection regs by further modernizing the kind of
- 9 information and detail we'll receive on transportation
- 10 fuels, pipeline gas, and electricity consumption.
- 11 "Notably, it also includes new information about
- 12 California PACE program, which continues to be a
- 13 significant source of resources for upgrades for existing
- 14 buildings.
- 15 "This outcome is the fruition of many detailed
- 16 interactions with a wide swath of CEC's diverse
- 17 stakeholders. And both staff and stakeholders deserve
- 18 great kudos for diligence and persistence along with
- 19 interval meta-data that is now available as the Phase I
- 20 update is fully implemented.
- 21 "This Phase II data will open critical analytical
- 22 pathways and perspectives for understanding California's
- 23 evolving energy-use patterns and to advise the
- 24 Administration and the Legislature regarding promising
- 25 approaches for meeting our state's climate and energy goals

- 1 onward."
- 2 CHAIR HOCHSCHILD: Thank you.
- 3 Other Commissioners wishing to make a comment,
- 4 Commissioner Monahan?
- 5 COMMISSIONER MONAHAN: Well, building on what
- 6 Vice Chair Gunda said I just really have appreciated this
- 7 process with Ryan. The relationship between EAD, FTD and
- 8 CCO on this has been a long process in trying to figure out
- 9 what's the right data that we need, but isn't overly
- 10 burdensome to the industry itself, and in order to provide
- 11 it, so there has been a lot of iterations. And I just
- 12 appreciate everybody's work. There were lots of folks in
- 13 FTD in particular that are really trying to figure out what
- 14 do we need from the industry? And so there's been changes
- 15 along the way.
- I am particularly interested in some of the
- 17 hydrogen plant data that we don't have a good handle on.
- 18 And this information will give us more data on what's being
- 19 used in petroleum refineries, what's being used, what's
- 20 being delivered to hydrogen stations, what's in that
- 21 hydrogen? The low-carbon fuel standard provides data but
- 22 this will give us actually more data on that, so I'm really
- 23 excited to see that. I think that'll help inform our
- 24 decision-making.
- 25 And as we move forward in the Clean

- 1 Transportation program to incentivize the production of
- 2 electrolytic hydrogen, green hydrogen for the future this
- 3 kind of data will, I think, actually support our grant-
- 4 making efforts as well.
- 5 CHAIR HOCHSCHILD: Great, and thank you for
- 6 sharing that.
- 7 Any other comments, Commissioner Douglas.
- 8 COMMISSIONER DOUGLAS: You know, just strong
- 9 support for this item. As Commissioner Gunda said, having
- $10\,$ good data is the foundation of our analytical work. And I
- 11 think this is going to give us a lot to build on as we move
- 12 forward with our analytical work.
- 13 CHAIR HOCHSCHILD: Great, thank you. I concur on
- 14 all of those. And with that Vice Chair Gunda would you be
- 15 willing to move this item?
- VICE CHAIR GUNDA: Yes, I will move Item 5.
- 17 CHAIR HOCHSCHILD: Okay. Commissioner Douglas,
- 18 would you be willing to second?
- 19 COMMISSIONER DOUGLAS: Second.
- 20 CHAIR HOCHSCHILD: All in favor say aye.
- Vice Chair Gunda?
- VICE CHAIR GUNDA: Aye.
- 23 CHAIR HOCHSCHILD: Commissioner Douglas?
- 24 COMMISSIONER DOUGLAS: Aye.
- 25 CHAIR HOCHSCHILD: Commissioner Monahan?

- 1 COMMISSIONER MONAHAN: Aye.
- 2 CHAIR HOCHSCHILD: And I vote age as well. That
- 3 item passes 4-0.
- 4 Let's turn now to Item 6 Stratosfuel.
- 5 MR. HOM: Good morning, Chair and Commissioners.
- 6 My name is Andrew Hom, Air Resources Engineer with the
- 7 Fuels and Transportation Division. Today, staff is seeking
- 8 approval on two items for this project: Item 6a to adopt
- 9 CEQA findings for the project site in the City of
- 10 Victorville and Item 6b to approve Amendment No. 1 to a
- 11 grant agreement with Stratosfuel, Incorporated. This
- 12 amendment includes changing the project site location from
- 13 the City of Moreno Valley to the City of Victorville, a
- 14 budget reallocation, and a 17 -month no-cost time
- 15 extension.
- 16 This project was previously awarded nearly \$4
- 17 million in Clean Transportation program funding to design,
- 18 construct and operate a 5000 kilogram-per-day, 100 percent
- 19 renewable hydrogen production facility. Next slide,
- 20 please.
- 21 The map on the left illustrates the project site
- 22 location, marked with a yellow star in the top right
- 23 corner, in relation to the potential customers of hydrogen
- 24 refueling stations that Stratosfuel has identified, which
- 25 are marked by all of the red stars. The production

- 1 facility is strategically located with less than a 75-mile
- 2 radius of about 90 percent of the open or planned hydrogen
- 3 stations in Southern California.
- 4 Benefits of this project include the increase of
- 5 in-state production of 100 percent renewable hydrogen
- 6 through electrolysis with wind and solar electricity. This
- 7 increase in production aims to help alleviate some of the
- 8 issues that the state's hydrogen refueling station network
- 9 has experienced with fuel shortages, and providing greater
- 10 reliability in the fuel supply. Annual emission reductions
- of nearly 24,000 tons of carbon dioxide equivalent and also
- 12 contributing to another step leading us towards a zero-
- 13 carbon hydrogen future as we increase the production and
- 14 utilization of green hydrogen. Next slide, please.
- 15 Stratosfuel was working towards, and making
- 16 progress at the original facility site in the city of
- 17 Moreno Valley, which included engineering, permitting, and
- 18 requests for substation power upgrades. And after lengthy
- 19 discussions the local utility company indicated that they
- 20 would not be able to meet the power supply requirements of
- 21 the project. Rather than scale down the project's
- 22 production due to the reduced power available, Stratosfuel
- 23 began investigating and identified a suitable project site
- 24 about 40 miles north of the original location.
- 25 The City of Victorville completed their CEQA

- 1 review in March of this year, and approved a conditional
- 2 use permit for this project last month. This amendment
- 3 would allow Stratosfuel to proceed with the project in the
- 4 city of Victorville, reallocate the budget, and extend the
- 5 grant agreement out until June 30, 2023. Next slide,
- 6 please.
- 7 The current estimated fuel cell electric vehicle
- 8 population on the road is nearly 9,000 vehicles, equating
- 9 to a fuel demand of roughly 6,250 kilograms per day. This
- 10 project's production capacity of 5,000 kilograms per day of
- 11 100 percent renewable hydrogen could serve a large portion
- 12 of the current demand. And with estimates that the demand
- 13 for hydrogen fuel reaching around 21,000 kilograms per day
- 14 by 2024, we will need more production projects like this
- 15 one in order keep us moving towards a zero-carbon hydrogen
- 16 future. Next slide, please.
- 17 A breakdown of the project's current and
- 18 potential customers is depicted here. Stratosfuel plans
- 19 and expects 90 percent of their customers to be from the
- 20 hydrogen refueling station market, 5 percent of customers,
- 21 which will use the fuel for heavy-duty or off-road
- 22 purposes, and 5 percent would be available for green
- 23 industrial customers. There seems to remain a significant
- 24 potential for growth in these last two markets. Next
- 25 slide, please.

1	Stratosfuel's	renewable h	nvdrogen	production

- 2 facility was evaluated by the lead agency, the City of
- 3 Victorville, which adopted a Mitigated Negative
- 4 Declaration, a Mitigation Monitoring Program, and
- 5 resolutions approving a Site Plan and Conditional Use
- 6 Permit. Commission staff have reviewed and considered
- 7 these documents in their own analysis and determined that
- 8 this project presents no new significant or substantially
- 9 more severe environmental impacts beyond those already
- 10 considered and mitigated by the lead agency.
- 11 For this agreement staff is seeking your adoption
- 12 of the CEQA findings and approval of Amendment No. 1 for
- 13 Item 6.
- 14 Thank you for your consideration, this concludes
- 15 my presentation. Jonathan Palacios-Avila with Stratosfuel
- 16 is here and would like to provide a comment and can answer
- 17 any questions. Thank you.
- 18 CHAIR HOCHSCHILD: Thank you, Andrew.
- 19 Let's go now to public comment on Item 6.
- MS. GALLARDO: This is Noemi the Public Advisor.
- 21 A reminder to attendees to raise your hand using the high-
- 22 five icon on the screen if you would like to make a public
- 23 comment. If you're on by phone press *9 and then *6 to
- 24 unmute.
- I do see a couple of hands raised. We will

- 1 start with Jonathan Avila. A reminder to please state your
- 2 name, spell your name, indicate your affiliation if any.
- 3 Jonathan, your line is open. You may begin.
- 4 MR. PALACIOS-AVILA: Excellent, thank you so
- 5 much. My name is Jonathan Palacios-Avila. That's spelled
- 6 J-o-n-a-t-h-a-n. Last name is P-a-l-a-c-i-o-s-hyphen-A-v-
- 7 i-l-a.
- 8 Commissioners, thank you for taking the time to
- 9 hear our project, and to Andrew for preparing a thorough
- 10 presentation.
- 11 Stratosfuel is a hydrogen infrastructure provider
- 12 that is focused on providing solutions to seamlessly
- 13 transition hydrogen fuel cell vehicles to market. It is
- 14 our mission to make hydrogen an everyday fuel and we are
- 15 doing so by making hydrogen more accessible and renewable
- 16 and affordable.
- 17 To date we have been involved in numerous
- 18 projects with the California Energy Commission to develop
- 19 hydrogen stations, production facilities, and deploy shared
- 20 vehicles. All of our projects have been centered around
- 21 hydrogen fuel cell technology.
- To add context to our renewable hydrogen projects
- 23 the State of California has a zero-emission vehicle mandate
- 24 to have all new vehicles sold within the state of
- 25 California to be zero emissions by 2035. Hydrogen fuel

- 1 cells will play a critical role in helping the state meet
- 2 this goal. As of now there is close to 10,000 hydrogen
- 3 fuel cell vehicles on the roads in California, with over 44
- 4 hydrogen stations completed and over 100 either funded or
- 5 in development. Therefore, our renewable hydrogen plant
- 6 will serve the fuel cell mobility market, as well as green
- 7 industrial customers.
- 8 Based on this multi-phase buildout we'll be able
- 9 to provide close to 13,000 -- close to fuel the 13,000
- 10 vehicles once it's fully complete. This will have a
- 11 positive impact on the environment and local economy. For
- 12 example, at full capacity the plant would be able to reduce
- 13 close to 200,000 tons of CO2 annually and create high-
- 14 paying jobs in the City of Victorville and San Bernardino
- 15 County.
- In addition to the direct benefits of a planet,
- 17 this facility is also the first of its kind in the State of
- 18 California and we'll set a precedence of how renewable
- 19 hydrogen facilities are to be built.
- 20 Members of the Energy Commission thank you for
- 21 your time.
- MS. GALLARDO: Thank you.
- 23 CHAIR HOCHSCHILD: Thank you.
- MS. GALLARDO: This is Noemi, the Public Advisor.
- 25 I do not see any other hands raised so I think we can

- 1 proceed, Chair.
- 2 CHAIR HOCHSCHILD: Okay, thank you.
- 3 Let's turn now to Commissioner discussion
- 4 starting with Commissioner Monahan.
- 5 COMMISSIONER MONAHAN: Well, I want to commend
- 6 Andrew and the team on this general -- I mean we've
- 7 actually funded several projects by Stratosfuel, not just
- 8 the production side but also they have a car-share, a fuel
- 9 cell car-share program. So they're really trying to
- 10 connect all the dots with production of green hydrogen car-
- 11 sharing, disadvantaged community access, just sort of
- 12 increasing access to mobility more broadly.
- So I feel like the all the funding pieces that we
- 14 have provided to this project really connect the dots and
- 15 they epitomize what we're looking for, zero-carbon
- 16 production of the fuels that are zero carbon used in zero-
- 17 emission vehicles, and helping ensure that all communities
- 18 benefit from the transition to zero-emission
- 19 transportation. So I strongly supportive of these projects
- 20 and the provisions that are proposed here.
- 21 CHAIR HOCHSCHILD: Thank you, Commissioner.
- 22 COMMISSIONER MONAHAN: Also, I want to commend
- 23 Jonathan in particular, who spoke, for his leadership. I
- 24 mean, he's really I think been the visionary behind this
- 25 whole project of Stratosfuel so just commend him for his

- 1 vision and leadership.
- 2 CHAIR HOCHSCHILD: Thank you.
- 3 Any other Commissioners wishing to make a
- 4 comment? If not, Commissioner Monahan, would you be
- 5 willing to move the item?
- 6 COMMISSIONER MONAHAN: I move this item.
- 7 CHAIR HOCHSCHILD: Okay, Commissioner Douglas,
- 8 would you be willing to second?
- 9 COMMISSIONER DOUGLAS: Second.
- 10 CHAIR HOCHSCHILD: All in favor say aye.
- 11 Commissioner Monahan?
- 12 COMMISSIONER MONAHAN: Aye.
- 13 CHAIR HOCHSCHILD: Commissioner Douglas?
- 14 COMMISSIONER DOUGLAS: Aye.
- 15 CHAIR HOCHSCHILD: Commissioner Gunda?
- 16 VICE CHAIR GUNDA: Aye.
- 17 CHAIR HOCHSCHILD: And I vote age as well. That
- 18 item passes 4-0.
- 19 We'll turn now to Item 7, Zero-Emission Transit
- 20 Fleet Infrastructure Deployment. Please note that Item 7a
- 21 was removed from the agenda prior to this meeting, and we
- 22 will solely focus on Item 7b.
- MS. ODUFUWA: Good morning, Chair and
- 24 Commissioners. My name is Esther Odufuwa, Energy
- 25 Commission Specialist 1 with the Fuels and Transportation

1	Division.	Today	we're	seeking	approval	today	for	one

- 2 agreement resulting from the Zero-Emission Transit Fleet
- 3 Infrastructure Deployment Solicitation.
- 4 This solicitation supported deployment of
- 5 electric vehicle charging and hydrogen refueling
- 6 infrastructure that is necessary to reach ambitious targets
- 7 for large-scale conversion of transit bus fleets to zero-
- 8 emission vehicles.
- 9 Seven projects were recommended for award from
- 10 this solicitation, which include three hydrogen refueling
- 11 infrastructure projects and four battery electric
- 12 infrastructure projects. Two of those projects were
- 13 presented at an earlier business meeting and four remaining
- 14 projects will be presented at a future business meeting.
- Today I will present one proposed project that's
- 16 focused on deploying charging infrastructure, renewable
- 17 generation, and stationary storage as part of a microgrid
- 18 to support battery electric bus charging. Next slide,
- 19 please.
- The solicitation and proposed award will bring
- 21 multiple benefits to Californians and their local transit
- 22 agencies that are transitioning to zero-emission
- 23 technologies.
- 24 Investments made through this solicitation will
- 25 provide best practices and key lessons learned to increase

1	replicable	solutions	that	can	help	other	transit	agencies

- 2 across California transition to 100 percent zero-emission
- 3 buses.
- 4 The project proposed today is estimated to reduce
- 5 greenhouse gas emissions by more than 8,000 metric tons CO2
- 6 annually. And this will also help reduce particulate and
- 7 criteria pollutant emissions, leading to air quality and
- 8 health benefits to pollution-burdened communities.
- 9 And last, the project includes distributed energy
- 10 resources and microgrid capabilities to increase site
- 11 resilience and enable continued transit operations even
- 12 during electric grid outages. Next slide.
- 13 The proposed agreement is with the City of Los
- 14 Angeles Department of Transportation which operates routes
- 15 shown here in grey, which are serving many of Los Angeles'
- 16 disadvantaged communities, also highlighted in red. Next
- 17 slide.
- 18 The project will deploy electric bus charging
- 19 infrastructure to support up to 142 battery electric buses.
- 20 And LADOT's Washington Yard Microgrid project is part of
- 21 LADOT's strategy to convert its entire fleet of buses to
- 22 battery electric, zero-emission vehicles. Next slide.
- To support this conversion this project will
- 24 install a solar and a storage microgrid, which will provide
- 25 enough energy to completely charge several buses at the

- 1 yard without any reliance on grid power. Next slide.
- The project will also install 4 Proterra 1.5
- 3 megawatt chargers that can charge up to 40 buses each, and
- 4 install 104 Proterra charging dispensers that use the
- 5 Society of Automotive Engineers, J1772 Combined Charging
- 6 Systems with the CCS 1 plug, which is universally
- 7 compatible with any vehicle that meets this standard, in
- 8 this case, the buses.
- 9 This project will, in addition, install a 4.5
- 10 megawatt-hour of battery energy storage, which can just
- 11 discharge its whole 4.5 megawatt-hours in less than 2
- 12 hours. Next slide, please.
- 13 Transit agencies are required to transition to
- 14 100 percent zero-emission buses in over the coming decades
- 15 in California, which will result in rapid market growth of
- 16 battery electric buses and supporting infrastructure. This
- 17 microgrid technology has the potential to be completely
- 18 replicable for all transit agencies in California,
- 19 regardless of their size.
- 20 Shown on this slide is an aerial view of LADOT
- 21 Washington bus yard with about 104 buses. LADOT is also in
- 22 the planning stage of electrifying four bus yards
- 23 strategically located in the north, south, central, and
- 24 mid-city locations of L.A. to efficiently accommodate an
- 25 electrified public transit fleet.

1	Again.	this	project	deploys	more	than	100	batterv
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- 2 electric buses that each contains a large battery with
- 3 nearly 200 kilowatts of storage capacity, which is
- 4 approximately 20 times larger than an average residential
- 5 storage system.
- 6 Today there are about 11,500 transit buses
- 7 operating across California. Although the electric buses
- 8 deployed in this project are not capable of discharging
- 9 electricity to the electric grid there is potential for
- 10 them to someday be able to provide both mobility and
- 11 electric services.
- Now if all of these transit buses in the state
- 13 were bi-directional, and are capable of discharging through
- 14 a dedicated 60-kilowatt bidirectional charger, combined
- 15 they represent nearly 700 megawatts of flexible capacity
- 16 that could support the grid during times of peak demand.
- 17 This capacity as you see is enough to power approximately
- 18 700,000 California homes. Next slide, please.
- 19 Staff recommends approval of this grant award and
- 20 adoption of staff's determination that this project is
- 21 exempt from CEQA. Thank you all for your time and
- 22 consideration of this item. And that concludes my
- 23 presentation.
- 24 CHAIR HOCHSCHILD: Thank you, Esther.
- Let's see if we have any public comments on Item

- 1 7b.
- MS. GALLARDO: This is Noemi, the Public Advisor.
- 3 A reminder to attendees if you'd like to make a public
- 4 comment for this item please raise your hand using the
- 5 high-five icon on the screen.
- If you're on by phone press *9 to raise your hand
- 7 *6 to unmute.
- I do not see any hands raised, Chair. You may
- 9 proceed.
- 10 CHAIR HOCHSCHILD: Okay, let's turn the
- 11 Commissioner discussion starting with Commissioner Monahan.
- 12 COMMISSIONER MONAHAN: Well, thanks to Esther and
- 13 the Freight and Transit Unit. I really love this project
- 14 and the other ones that will be funded for transit
- 15 districts. So we're trying to support transit districts as
- 16 they zero out emissions. And we wanted to support both
- 17 kind of bigger ones like what we see in LADOT and then
- 18 smaller districts as well, so there will be another one
- 19 coming your way with a smaller district.
- 20 But what I think that this project kind of like
- 21 the Stratosfuel project has it all in terms of not just
- 22 electrifying the buses, but doing it in a way that's
- 23 attentive to the grid. And really looking for those twofer
- 24 opportunities where we get a benefit to the grid and a
- 25 benefit to the transit district.

1	So	one	of	the	things	I	think	Esther	didn'	t
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- 2 mention, but what I found really compelling, is that
- 3 because of the way that they are storing energy the peak
- 4 energy requirements are much lower. So by optimizing
- 5 charging they're finding that peak energy could be reduced
- 6 60 percent, which is just going to require some sort of
- 7 less resources towards charging the vehicles or
- 8 infrastructure requirements, but also just in terms of that
- 9 grid resilience piece.
- 10 So I'm strongly supportive of this. And this
- 11 kind of fits with what we've been told by the Legislature
- 12 in the last budget. We want to electrify a 1,000 transit
- 13 buses, 1,000 school buses and 1,150 drayage trucks, because
- 14 these are vehicles that go through communities often, lower
- 15 income or disadvantaged communities. And so cleaning the
- 16 air as we enhance the mobility experience for a lot of
- 17 residents in California is just a great opportunity.
- 18 CHAIR HOCHSCHILD: I have a question for you or
- 19 for Esther. I just was curious. I see this charger, this
- 20 1.5-megawatt charger, how much charge? Like how long does
- 21 it take using a charger that size to recharge an electric
- 22 bus?
- 23 COMMISSIONER MONAHAN: Esther, do you know that?
- MS. ODUFUWA: For recharging each bus, is that
- 25 the question?

- 1 CHAIR HOCHSCHILD: Yeah, so you plug in a bus to
- 2 one and a -- I know, for example, a 350 kW charger per
- 3 passenger vehicle you get 100 miles of charge every 5
- 4 minutes or 200 miles in 10 minutes. I have never had any
- 5 experience with that 1.5-megawatt charger. I was just
- 6 curious if we knew what the recharge time was for buses,
- 7 using that.
- 8 MS. ODUFUWA: I don't have the exact information
- 9 right now, but I can find out and get back to you.
- 10 CHAIR HOCHSCHILD: Yeah, I'd just be curious to
- 11 find out. Okay.
- MS. ODUFUWA: Good.
- 13 CHAIR HOCHSCHILD: Other Commissioners wishing to
- 14 make a comment on this? Yeah, Vice Chair Gunda please.
- 15 VICE CHAIR GUNDA: Yeah. Thank you, Chair.
- 16 And first of all thank you, Esther, for the
- 17 presentation. I just want to congratulate the FTD team and
- 18 also Commissioner Monahan's leadership, just recognizing
- 19 how important projects like this are. And I really
- 20 appreciate the kind of the blending between the way
- 21 Commissioner Monahan had mentioned, which is improving the
- 22 mobility experience. You know, kind of taking into account
- 23 our climate and air-quality goals, but also being able to
- 24 do it in a way that is supportive of the grid planning and
- 25 reliability planning.

- 1 So I think going back like five, six years when I
- 2 first started the CEC's work in kind of forecasting how
- 3 much the transportation arena has changed and how different
- 4 projects are giving insights into what the future could be
- 5 in developing models on how best we can scale. And every
- 6 one of these kind of projects are just those important
- 7 data-gathering opportunity to think about how do we do our
- 8 electrification goals and then the broader climate goals in
- 9 a way that would ultimately be reliable, safe and then keep
- 10 the grid as affordable as possible.
- 11 And I am particularly appreciative of the
- 12 microgrid planning, being able to bring in the DER element
- 13 into the broader electrification part here. So I really
- 14 congratulate everybody who's involved in this project. I
- 15 thank Commissioner Monahan's leadership and congratulations
- 16 to the City of Los Angeles. And I'm looking forward to
- 17 supporting it.
- 18 CHAIR HOCHSCHILD: Thank you.
- 19 Well, unless there's comments from Commissioner
- 20 Douglas I think we're okay to move ahead with a motion for
- 21 Item 7b. Commissioner Monahan, would you be willing to
- 22 move Item 7b?
- 23 COMMISSIONER MONAHAN: I move Item 7b.
- 24 CHAIR HOCHSCHILD: Okay. Commissioner Douglas,
- 25 would you be willing to second?

DOUGLAS:	Second.
	DOUGLAS:

- 2 CHAIR HOCHSCHILD: Right. All in favor say aye.
- 3 Commissioner Monahan?
- 4 COMMISSIONER MONAHAN: Aye.
- 5 CHAIR HOCHSCHILD: Commissioner Douglas?
- 6 COMMISSIONER DOUGLAS: Aye.
- 7 CHAIR HOCHSCHILD: Vice Chair Gunda?
- 8 VICE CHAIR GUNDA: Aye.
- 9 CHAIR HOCHSCHILD: And I vote age as well. Item
- 10 7b passes 4-0.
- 11 Let's turn now to Item 8, Momentum Dynamics
- 12 Corporation. Kate Reid.
- MS. REID: Good morning, Chair and Commissioners.
- 14 My name is Kate Reid, Air Resources Engineer with the Fuels
- 15 and Transportation Division's Freight and Transit Unit.
- 16 Today I will be presenting Momentum Dynamics Corporation's
- 17 proposed agreement from our BESTFIT Innovative Charging
- 18 Solutions solicitation. Next slide, please.
- 19 The BESTFIT Innovative Charging Solutions
- 20 solicitation sought projects that would develop and
- 21 accelerate the commercialization of truly innovative
- 22 technologies and business models to add to the state's
- 23 portfolio of charging solutions. Momentum Dynamic's
- 24 project will demonstrate a state-of-the-art electric
- 25 vehicle wireless inductive charging system to accelerate

- 1 the commercial deployment of Electric Vehicle charging for
- 2 application in the medium- and heavy-duty vehicle sector
- 3 throughout California. Next slide, please.
- 4 The proposed agreement is with Momentum Dynamics
- 5 Corporation, who will work with Solano Transportation
- 6 Authority to deploy an automated wireless inductive
- 7 charging infrastructure at 7 strategic locations within the
- 8 SolanoExpress service area in order to serve 13 fully
- 9 electric long-haul transit buses. SolanoExpress is a rapid
- 10 transit service operated by and interconnected with Solano
- 11 County Transit and Fairfield Suisun Transit, providing
- 12 express intercity bus service throughout Solano County.
- 13 Next slide, please.
- 14 Staff recommends approval of this grant award and
- 15 adoption of staff's determination that the project is
- 16 exempt from CEQA. That concludes my presentation. And we
- 17 have a comment from the grant recipients Bob Kacergis from
- 18 Momentum Dynamics and also Daryl Halls from Solano
- 19 Transportation District. Thank you for your time and
- 20 consideration of this item.
- 21 CHAIR HOCHSCHILD: Thank you.
- So do we have any public comment?
- 23 MS. GALLARDO: This is Noemi, the Public Advisor.
- 24 I do see a couple of hands raised. A reminder to the
- 25 speakers to please state your name, spell your name, and

- 1 indicate your affiliation if any. We will begin with
- 2 Anthony Adams. Anthony, your line is open and you may
- 3 begin.
- 4 MR. ADAMS: I'd like thank the CEC Commission for
- 5 this opportunity. So my name is Anthony Adams. I'm the
- 6 Project Manager with Solano Transportation Authority.
- 7 So as was mentioned SolanoExpress is an express
- 8 bus that connects in Solano County, but it also connects to
- 9 the larger region. We connect all the way from Sacramento
- 10 down to El Cerrito and Walnut Creek BART Station.
- 11 Furthermore, SolanoExpress connects to the Ferry terminal
- 12 and the Capitol Corridor stations as well.
- So we see this project as integral in order to
- 14 advance our buses to zero emission. Our buses are the
- 15 longest haul buses in all of the Bay Area. One of our
- 16 buses goes 100 miles just one way, connecting from
- 17 Sacramento down to the Bay Area. So this technology was
- 18 essential to allow us to bridge the gaps and the distances
- 19 that we need in order to facilitate these really long-haul
- 20 routes.
- 21 And what's key about this is with these long-haul
- 22 routes with electric buses, these are more miles, this is
- 23 more GHG, this is more VMT that is being reduced off of our
- 24 system. And is going to have a benefit that's really
- 25 broad-ranging.

- 1 So these seven locations are regional in aspect.
- 2 They are all shared in some way by other transit providers,
- 3 so the locations are BART stations. They're the Ferry
- 4 Building, the Capitol Corridor, and also some other
- 5 regional transit locations where we share service with
- 6 other transit operators such as Napa Valley Transit
- 7 Authority, Contra Costa Transportation Authority and
- 8 WestCAT.
- 9 So we do hope to be able to share these chargers.
- 10 SolanoExpress and our 13 buses, which we've initially
- 11 committed to, will be using these chargers, but we're also
- 12 working with other transit operators to see if we can share
- 13 these chargers. And the idea is to have us do the work on
- 14 the front end, so they can test them. They can see how it
- 15 works for them, and then they can transition themselves
- 16 without this huge initial investment.
- 17 And I do want to highlight that the grant that
- 18 will hopefully be approved today is a match to an existing
- 19 TIRCP grant. We've got a Cap and Trade grant to put five
- 20 in. With this new grant, we're going to be able to add two
- 21 new locations in addition to one that we've also funded by
- 22 ourselves, so this will be a total of eight inductive
- 23 charging locations in Solano County or right outside of
- 24 Solano County in regionally significant transit locations
- 25 with other transit operators.

1	And	also	to	be	perfectly	honest,	other	truckina

- 2 operators could be able to use, pilot, and help advance
- 3 their technology. So we really do support this effort. We
- 4 appreciate you putting it out. And we appreciate our
- 5 partnership with Momentum Dynamics. Thank you so much.
- 6 MS. GALLARDO: Thank you.
- 7 All right, the next speaker is Bob Kacergis, and
- 8 Bob apologies if I mispronounced your name. A reminder to
- 9 please state your name, and spell it, and then indicate
- 10 your affiliation if any. Bob, your line is open and you
- 11 may begin.
- MR. KACERGIS: Hi, good morning my name is Bob
- 13 Kacergis, K-a-c-e-r-g-i-s. And I am the Chief Commercial
- 14 Officer of Momentum Dynamics and we've partnered with STA
- 15 on this grant application. Momentum is a Pennsylvania-
- 16 based company where we employ nearly 100 engineers and
- 17 software designers to build world-class, automatic wireless
- 18 charging for electric vehicles of all shapes and sizes.
- 19 We could not be prouder to be part of the team
- 20 that will deploy the first-ever interagency wireless
- 21 charging network anywhere in the United States, and we
- 22 believe anywhere in the world. This project will be the
- 23 first where a distributed network of high-powered
- 24 commercial charters will be operated for the mutual benefit
- 25 of multiple transit agencies that will accelerate the

- 1 electrification of transit in the Northern California
- 2 Corridor between Sacramento and San Francisco as Anthony
- 3 has outlined. We believe this project is well aligned with
- 4 Governor Newsom's recent proposal to replace 1,000 transit
- 5 buses with electric models in the state of California as
- 6 well as President Biden's push to accelerate
- 7 electrification of U.S. fleets.
- 8 At a time when there's a great focus on the
- 9 combined priorities of improving U.S. infrastructure, as
- 10 well as the need to replace harmful greenhouse gases caused
- 11 by fossil fuels we believe this project can serve as a
- 12 model for public transit systems throughout California,
- 13 across the country, and throughout the world.
- 14 It is well known that battery electric processes
- 15 work well, but they have range limitations. By using on-
- 16 route wireless charging the driving range issue is
- 17 eliminated and these buses effectively have unlimited
- 18 driving range. Wireless charging for electric vehicles
- 19 allows automatic charging during regular operation while in
- 20 service, such as during the loading and unloading of
- 21 passengers. An equipped vehicle simply parks over the
- 22 charging pads that are equipped and charging is automatic.
- 23 It requires no action or supervision by the driver who's
- 24 free to continue their primary duties, such as vehicle
- 25 loading or attending to passengers.

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- 2 unaffected by rain, snow or ice, which is a big issue in
- 3 many parts of the country including the east coast where I
- 4 live.
- 5 The Momentum solution is currently available as a
- 6 factory-installed option on buses from GILLIG, BYD and
- 7 GreenPower who provide small-format buses and we are
- 8 actively working with four additional bus OEMs to ensure
- 9 that transit agencies have multiple options for wirelessly
- 10 charged buses. This will allow for even more buses to take
- 11 advantage of the benefits of automatic high-power wireless
- 12 charging.
- In closing, on behalf of our workforce here in
- 14 Pennsylvania I'd like to thank the CEC for having the
- 15 vision to create the BESTFIT Innovation Charging Solutions
- 16 Program. And I'd also like to thank the team at STA for
- 17 their outstanding work in helping bring all of this
- 18 together. Without the vision and innovation brought by the
- 19 leadership of the California Energy Commission and the
- 20 Solano Transportation Authority projects like this simply
- 21 do not move forward. Thank you very much for sharing your
- 22 time and giving me the opportunity to talk to you today.
- MS. GALLARDO: Thank you.
- 24 All right, just one last reminder to attendees if
- 25 you'd like to make a comment on this item please use the

- 1 raise-hand feature to indicate you would like to comment.
- 2 If you're on by phone press *9 to raise your hand, *6 to
- 3 unmute.
- I do not see any other hands, Chair. We may
- 5 proceed.
- 6 CHAIR HOCHSCHILD: Okay, thank you for those
- 7 public comments and congrats for all the partners. Really
- 8 encouraging frankly to hear about this momentum here,
- 9 momentum for Momentum.
- 10 So let's turn now to Commissioner discussion,
- 11 starting with Commissioner Monahan.
- 12 COMMISSIONER MONAHAN: Well, I want to thank Kate
- 13 who's kind of a regular here. She'll be presenting on
- 14 another item. She's the Blueprints Lead, so I don't know
- 15 Kate when you sleep, but you do manage a lot of these
- 16 important projects.
- 17 So I love BESTFIT. It really kind of sits at the
- 18 intersection of research and development and deployment.
- 19 So it's not pure R&DI. That's why it's not funded by ERDD,
- 20 but there's some aspect of we don't have all of our
- 21 charging needs figured out. And BESTFIT recognizes that
- 22 okay, we have these programs like CALeVIP where there's
- 23 mass deployment of light-duty chargers. But we recognize,
- 24 and especially in this medium- and heavy-duty space that we
- 25 need innovation. And battery electric vehicles that I

- 1 think we all know, there is range limitations and it can
- 2 take a long time to charge the vehicle. So these
- 3 innovative solutions that really support transit districts
- 4 for doing their best to meet state goals and investing in
- 5 these innovative solutions.
- I really actually appreciate what Anthony Adams
- 7 of Solano Transportation said about sharing this, the
- 8 technology with others. And a willingness to share it with
- 9 other transit districts and maybe even other medium- and
- 10 heavy-duty applications. So if we can solve this challenge
- 11 of battery electric vehicles need to be refueled on a
- 12 pretty frequent basis, at least now with the current
- 13 battery technology, by having inductive charging
- 14 strategically located to allow these vehicles to go the
- 15 long routes that they need to that would solve a really
- 16 important challenge that we currently face. So I'm
- 17 strongly supportive of this project. Again, it connects
- 18 the dots with transit and zero-emission mobility so looking
- 19 forward to supporting it.
- 20 Also Momentum, I would like to say that we have a
- 21 new grant program that we'll be kicking off to bring more
- 22 manufacturing of ZEV components and vehicles to California,
- 23 so maybe one day you'll be located in California. That's
- 24 what we're hoping for.
- 25 CHAIR HOCHSCHILD: Well said.

- 1 Other Commissioners wishing to make a comment?
- 2 Seeing none, Commissioner Monahan, would you be willing to
- 3 move this item?
- 4 COMMISSIONER MONAHAN: I move Item 8.
- 5 CHAIR HOCHSCHILD: Okay. Vice Chair Gunda, would
- 6 you be willing to second?
- 7 VICE CHAIR GUNDA: I second Item 8
- 8 CHAIR HOCHSCHILD: All in favor say aye.
- 9 Commissioner Monahan?
- 10 COMMISSIONER MONAHAN: Aye.
- 11 CHAIR HOCHSCHILD: Commissioner Gunda?
- 12 VICE CHAIR GUNDA: Aye.
- 13 CHAIR HOCHSCHILD: Commissioner Douglas?
- 14 COMMISSIONER DOUGLAS: Aye.
- 15 CHAIR HOCHSCHILD: And I vote age as well. Item
- 16 8 passes 4-0. Let me just say congratulations again to all
- 17 the stakeholders involved this. It's really, really
- 18 encouraging to see this progress, so good work to
- 19 everybody.
- Let's turn now to Item 9, Blueprints for Medium
- 21 and Heavy-Duty Zero-Emission Vehicle Infrastructure.
- MS. REID: Okay. Good morning again, Chair and
- 23 Commissioners. My name is Kate Reid, Air Resources
- 24 Engineer with the Fuels and Transportation Division's
- 25 Freight and Transit Unit.

1	We're seeking approval today for two agreements
2	resulting from the Blueprints for Medium- and Heavy-Duty
3	Zero-Emission Vehicle Infrastructure solicitation. This
4	solicitation was released in July of 2020. \$3 million was
5	available to fund planning blueprints to identify actions
6	and milestones needed for implementation of medium- and
7	heavy-duty zero-emission vehicles and the related electric
8	charging and/or hydrogen refueling infrastructure.
9	A minimum of \$1 million of total funds was set-
10	aside for public entities. Subsequently, the Energy
11	Commission increased the total funding to approximately \$8
12	million, which allowed all applicants with a passing score
13	to be funded.
14	Under this solicitation, 40 projects were
15	proposed for award. The majority of those projects were
16	presented and awarded at previous business meetings. And
17	today I will be presenting 2 more. The remaining will be
18	presented at later business meetings. Next slide, please.
19	The proposed projects will create roadmaps for
20	large-scale infrastructure projects, plan for resiliency,
21	and provide best practices and key lessons learned for
22	future replicability at other private and public agencies.
23	These blueprints will also help other agencies
24	and fleets understand, which technology may work best for
25	their applications, routes, and driving environments, which 64

- 1 will ultimately accelerate meeting California's goal of
- 2 transitioning medium- and heavy-duty trucks and buses to
- 3 zero-emission by 2045.
- 4 Finally, the majority of these projects, once
- 5 implemented, will benefit low-income communities,
- 6 disadvantaged communities, and/or tribal lands. Next
- 7 slide, please.
- 8 Forty agreements were selected for approval and
- 9 award and the breakdown of vehicle sector is shown on this
- 10 slide. Most of the projects will address fleets, goods
- 11 movement, and transit. And the remainder will seek to
- 12 address smaller sectors such as school buses, port
- 13 equipment. And the other category shown here, which is
- 14 comprised of airport ground support, ferries, and refuse
- 15 collection. Next slide, please.
- The first proposed agreement is with Los Angeles
- 17 Cleantech Incubator. This project is to develop a
- 18 blueprint to help the greater Los Angeles area identify,
- 19 assess, and integrate zero emissions, medium-duty and
- 20 heavy-duty transportation solutions into the 2028 Olympic
- 21 and Paralympic Games by catalyzing investment in charging
- 22 infrastructure that will benefit the region before, during,
- 23 and long after the Games. Next slide, please.
- The next proposed agreement is with the San
- 25 Joaquin Regional Transit District. The proposed

- 1 grant will develop a blueprint planning document that will
- 2 identify the actions and milestones necessary for RTD to
- 3 implement medium- and heavy-duty, zero-emission vehicles
- 4 with an emphasis placed on hydrogen fuel cell vehicles and
- 5 refueling infrastructure. This replicable plan is intended
- 6 to support the transition of RTD's entire fleet to all
- 7 zero-emission. Next slide, please.
- 8 Staff recommends approval of these two grant
- 9 agreements and adoption of staff's determination that the
- 10 projects are exempt from CEQA. And that concludes my
- 11 presentation. Thank you for your time and consideration of
- 12 these items.
- 13 CHAIR HOCHSCHILD: Thank you.
- 14 Any public comment on Item 9?
- MS. GALLARDO: This is Noemi, the Public Advisor.
- 16 A reminder to attendees to use the raise-hand icon to
- 17 indicate if you'd like to make public comment. If you're
- 18 on by phone press *9 to raise your hand, *6 to unmute.
- 19 And I do see one hand raised, so that's Jack
- 20 Symington. Jack, apologies if I mispronounced your name.
- 21 A reminder to please state your name, spell it, and
- 22 indicate your affiliation if any. Your line is open and
- 23 you may begin.
- MR. SYMINGTON: Hi. Yes, my name is Jack
- 25 Symington with the Los Angeles Cleantech Incubator, J-a-c-k

- 1 S-y-m-i-n-g-t-o-n, thank you.
- 2 The Los Angeles Cleantech Incubator would like to
- 3 thank the Energy Commission for funding this blueprint to
- 4 assess how the L.A. 2028 Olympic and Paralympic Games can
- 5 catalyze investments in zero-emission transportation
- 6 infrastructure in the Los Angeles region.
- 7 LACI look forward to working with LA28, the
- 8 nonprofit organizing committee, regional transit agencies,
- 9 and other transportation stakeholders to understand where
- 10 the region can accelerate the deployment of infrastructure
- 11 to benefit the county before, during, and long after the
- 12 Games. This will help reach the region and the state's
- 13 critical zero-emission's medium- and heavy-duty
- 14 transportation goals. So thank you.
- MS. GALLARDO: Thank you.
- 16 All right, I do not see any other hands raised,
- 17 Chair. We may proceed.
- 18 CHAIR HOCHSCHILD: Thank you. Let's go to
- 19 Commissioner discussion, Commissioner Monahan?
- 20 COMMISSIONER MONAHAN: Well, you guys are old
- 21 hats on this, these blueprints now. I think this is maybe
- 22 the fourth or fifth business meeting where we've talked
- 23 about them.
- 24 But I wanted to highlight, so first on the Los
- 25 Angeles Cleantech Incubator, Jack Symington didn't mention

- 1 the goals, but they're very strong. They have aggressive
- 2 goals. They want to get 100 -- by 2028 they want to have
- 3 100 percent of metro and LADOT buses to be electric, they
- 4 want 60 percent of medium-duty delivery vehicles to be
- 5 electric, and 40 percent of drayage and short-haul to be
- 6 electric. So they were kind of out there I would say in
- 7 some of the most aggressive goals in the country.
- 8 Now, I don't know, because the other
- 9 municipalities are following suit, but I think helping LACI
- 10 achieve those goals and really with an eye towards the 2028
- 11 Olympics will be really impactful.
- 12 And similarly, the San Joaquin Regional Transit
- 13 District, they're evaluating battery electric and/or
- 14 hydrogen fuel cell electric. There's a lot of decisions
- 15 that have to be made to make sure that they can meet the
- 16 demands of their roots and have good plans in place. So
- 17 both of these I think are just critical to supporting our
- 18 pathway to a zero-emission transportation future.
- 19 CHAIR HOCHSCHILD: All right, thank you.
- 20 Unless there's other Commissioner comments are
- 21 you willing to move the item?
- 22 COMMISSIONER MONAHAN: I move Item 9.
- 23 CHAIR HOCHSCHILD: Okay. Vice Chair Gunda, would
- 24 you be willing to second?
- VICE CHAIR GUNDA: Yeah, I second Item 9.

- 1 CHAIR HOCHSCHILD: All in favor say aye.
- 2 Commissioner Monahan?
- 3 COMMISSIONER MONAHAN: Aye.
- 4 CHAIR HOCHSCHILD: Commissioner Gunda?
- 5 VICE CHAIR GUNDA: Aye.
- 6 CHAIR HOCHSCHILD: Commissioner Douglas?
- 7 COMMISSIONER DOUGLAS: Aye.
- 8 CHAIR HOCHSCHILD: And I vote age as well. Item
- 9 passes 4-0.
- 10 Let's turn to Item 10, Pleasant Valley Recreation
- 11 and Park District.
- MR. LOCKWOOD: Yes, good morning, Chair and
- 13 Commissioners. My name is Sean Lockwood and I am a team
- 14 member in the Renewable Energy Division. I'm here to
- 15 request your approval of an Energy Conservation Assistance
- 16 Act Loan Agreement with the Pleasant Valley Recreation and
- 17 Park District. Please note that the Energy Conservation
- 18 Assistance Act is commonly known by the acronym ECAA and
- 19 that is how I'll refer to it for this presentation. Next
- 20 slide, please.
- 21 The ECAA program provides low-interest or zero-
- 22 interest loans for energy efficiency and energy generation
- 23 projects. Benefits to California from ECAA Loan funded
- 24 projects include helping improve health outcomes in
- 25 respective communities, the creation of green jobs, lower

- 1 utility bills for municipalities and schools, and increased
- 2 energy efficiency.
- 3 The Pleasant Valley Recreation and Park District
- 4 is located in and around the City of Camarillo on the
- 5 Central Coast. The district serves a population of over
- 6 70,000 and covers an area of about 45 square miles. Next
- 7 slide, please.
- 8 The Pleasant Valley Recreation and Park District
- 9 is proposing to finance an energy project using an ECAA 1
- 10 percent interest loan in the amount of approximately
- 11 \$192,000. The project involves installing various energy
- 12 efficiency measures such as LED lighting and lighting
- 13 controls at the district's community center, nine parks and
- 14 one athletic field. The district will also conduct
- 15 thermostat upgrades at the community center. Next slide,
- 16 please.
- 17 Staff has reviewed this project and determined it
- 18 is technically sound. The project meets the ECAA financial
- 19 cost-effectiveness and loan repayment term requirements.
- 20 As you can see in this chart, the project is estimated to
- 21 save almost 300,000 kilowatt hours annually, resulting in
- 22 energy cost savings projected at over \$32,000. Next slide,
- 23 please.
- Legal staff found this project to be exempt from
- 25 the California Environmental Quality Act. Staff recommends

- 1 approval of this loan. Thank you for your consideration.
- 2 This concludes my presentation. If you have any questions,
- 3 I would be happy to answer them.
- 4 CHAIR HOCHSCHILD: Thank you.
- 5 Any public comments?
- 6 MS. GALLARDO: This is Noemi, the Public Advisor.
- 7 A reminder to attendees if you'd like to make a comment
- 8 please raise your hand using the raise-hand icon on the
- 9 screen. If you're on by phone press *9 to raise your hand,
- 10 *6 to unmute.
- I do not see any hands raised, Chair. We may
- 12 proceed.
- 13 CHAIR HOCHSCHILD: Thank you.
- 14 Let's go to Commissioner discussion, starting
- 15 with Commissioner Douglas.
- 16 COMMISSIONER DOUGLAS: I just wanted to again
- 17 frame up my support for this item and recommend it to the
- 18 approval of the Commission.
- 19 CHAIR HOCHSCHILD: Okay. Unless there is
- 20 discussion, are you willing to move Item 10?
- 21 COMMISSIONER DOUGLAS: Absolutely. I move
- 22 approval of Item 10.
- 23 CHAIR HOCHSCHILD: Okay. Commissioner Monahan,
- 24 would you be willing to second?
- 25 COMMISSIONER MONAHAN: I second.

- 1 CHAIR HOCHSCHILD: All in favor say aye.
- 2 Commissioner Douglas?
- 3 COMMISSIONER DOUGLAS: Aye.
- 4 CHAIR HOCHSCHILD: Commissioner Monahan?
- 5 COMMISSIONER MONAHAN: Aye.
- 6 CHAIR HOCHSCHILD: Commissioner Gunda?
- 7 VICE CHAIR GUNDA: Aye.
- 8 CHAIR HOCHSCHILD: And I vote aye as well.
- 9 Let's turn now to Item 11, Electric Power
- 10 Research Institute, Liet Le.
- 11 MR. LE: Good morning, Chair and Commissioners.
- 12 My name is Liet Le. I'm an Electric Generation System
- 13 Specialist in the Energy Research and Development Division.
- 14 Today we are seeking approval for an agreement to establish
- 15 a California research hub focused on accelerating
- 16 technologies and deployment of heavy-duty battery electric
- 17 drayage trucks in heavily trafficked freight corridors.
- 18 Next slide.
- 19 The proposed agreement will bring multiple
- 20 benefits to Californians. The research hub will engage a
- 21 broad network of researchers, communities, and commercial
- 22 stakeholders, many of which are shown here to improve
- 23 coordination, planning, and deployment of public high-power
- 24 chargers along key drayage corridors.
- The project will advance emerging high-power

- 1 charging technologies that improve the operational
- 2 flexibility of heavy-duty electric vehicles while improving
- 3 the efficiency of power delivery.
- 4 Lastly, this project will target emission
- 5 reduction and health benefits in the South Coast Air Basin
- 6 shown in this photo. The South Coast Air Basin is
- 7 currently not in attainment of federal air quality
- 8 standards for ozone and particulate matter stemming largely
- 9 from fossil fuel-powered drayage trucks serving the ports.
- 10 Next slide.
- 11 Through this agreement Electric Power Research
- 12 Institute, also known as EPRI, and its partners will assess
- 13 freight routes and operational conditions for which battery
- 14 electric drayage trucks need access to public charging
- 15 infrastructure. The project will deploy two innovative
- 16 high-power public charging sites for drayage trucks
- 17 operating in the South Coast Air Basin. Shown here are two
- 18 sites, both are located in the disadvantaged communities
- 19 according to CalEnviroScreen 3.0. They will support
- 20 battery electric drayage trucks near ports and along a
- 21 major inland freight route. Both sites will also use
- 22 distributed energy resources including stationary storage
- 23 and solar photovoltaics to limit the grid impacts of the
- 24 high-power chargers deployed.
- 25 The project team is also actively discussing

- 1 other pilot demonstration sites as part of a larger
- 2 regional and statewide planning to support California's
- 3 targets of 100 percent zero-emission drayage operations by
- 4 2035. Next slide.
- 5 Currently there are more than 23,000 registered
- 6 drayage trucks with access to California's ports, over
- 7 18,000 of which are located in the South Coast Air Basin
- 8 region. Meeting state policy targets for zero-emission
- 9 vehicles will require all of these vehicles to become zero-
- 10 emission in the next two decades as shown here. If all of
- 11 the 23,000 drayage trucks are zero-emission the potential
- 12 annual emissions reduction is approximately 3,700 tons of
- 13 nitrogen oxide and 20 tons of particulate matter. Next
- 14 slide.
- 15 In summary, staff recommends approval of this
- 16 grant with EPRI and adoption of staff's determination that
- 17 this action is exempt from CEQA. I'm available for any
- 18 questions as are representatives from EPRI. Thank you, and
- 19 that concludes the presentation.
- 20 CHAIR HOCHSCHILD: Thank you. Any public
- 21 comments on Item 11?
- MS. GALLARDO: This is Noemi, the Public Advisor.
- 23 A reminder to attendees if you'd like to make a comment,
- 24 please raise your hand using the high-five icon on the
- 25 screen. If you're on by phone press *9 to raise your hand,

- 1 *6 to unmute.
- I do see a couple of hands. A reminder to the
- 3 speakers to please state your name, spell your name and
- 4 indicate your affiliation if any. We will begin with Mark
- 5 Duvall. Mark, your line is open and you may begin.
- 6 MR. DUVALL: Okay, thank you. Mark Duvall, M-a-
- 7 r-k D-u-v-a-l-l with the Electric Power Research Institute.
- 8 I would just like briefly to state that EPRI,
- 9 with our partner CALSTART and the 11 other organizations
- 10 that comprise our team for this project deeply, deeply
- 11 appreciates the opportunity to lead this research hub for
- 12 the Energy Commission. Fleet electrification, particularly
- 13 of larger vehicles and particularly in a public setting
- 14 like this one, is a really urgent challenge. And
- 15 furthering the development and demonstration of the next
- 16 generation of charging infrastructure for medium- and
- 17 heavy-duty fleets is one of EPRI's highest priorities.
- 18 Thank you and we look forward to working with CEC staff on
- 19 this.
- I would also like to add that while we always had
- 21 a great experience with running and operating these
- 22 projects that this, that the team at CEC has been
- 23 extraordinarily helpful in helping to get this very large
- 24 and complex project ready for this meeting. And we really
- 25 appreciate those efforts, thank you.

- 1 MS. GALLARDO: Thank you.
- 2 CHAIR HOCHSCHILD: Thank you for sharing that.
- 3 Do we show any other comments?
- 4 MS. GALLARDO: Yes, we do have one other hand,
- 5 Jasna Tomic. Apologies if I mispronounced your name.
- 6 Please restate your name, spell it and indicate your
- 7 affiliation if any. Your line is open and you may begin.
- 8 MS. TOMIC: Yes, good morning. This is Jasna
- 9 Tomic with CALSTART, that's J-a-s-n-a, last name T-o-m-i-c.
- 10 I'm Vice President at CALSTART and happy to be able to say
- 11 a few comments regarding this important project.
- We wanted to thank you for the opportunity,
- 13 because we think high-power charging for medium-duty and
- 14 heavy-duty vehicles is a critical step in transportation
- 15 electrification. We want to recognize the Energy
- 16 Commission's leadership and commitment to driving this
- 17 important change and I'm really proud of the great
- 18 partnership that we have with EPRI and the team to move
- 19 this important critical element.
- 20 So with that, thank you very much and we're happy
- 21 to answer any questions.
- MS. GALLARDO: Thank you.
- 23 All right, I do not see any other hands raised.
- 24 Chair, we may proceed.
- 25 CHAIR HOCHSCHILD: Yeah, well I'll just say this

- 1 is terrific and part of a very successful ongoing
- 2 collaboration we've had with EPRI over the years, really
- 3 encouraged to see this and happy to see it move forward. I
- 4 have no other comments, unless other Commissioners would
- 5 like to -- yeah, Vice Chair Gunda?
- 6 VICE CHAIR GUNDA: Thank you, Chair. I have been
- 7 kind of starving myself from commenting on all of the
- 8 items, because so much of the focus is on transportation
- 9 and I didn't want to repeat myself.
- 10 But I think it's important to note that, first of
- 11 all, the contribution of the staff members at CEC for the
- 12 incredible work that they do, day in and day out, to carry
- 13 out the mission of the Energy Commission in pulling
- 14 together these complex MO (phonetic) agreements together
- 15 and ideas together. So I just want to congratulate the
- 16 team and the leadership of FTD, Hannon and everybody, the
- 17 legal team, and particularly Commissioner Monahan's
- 18 leadership on this overall arena. I think I also want to
- 19 just thank Kate on that couple of presentations previously.
- 20 I just wanted to say that, but then I'm like, "Okay, I'm
- 21 going to hold off," for my common one.
- But I think this is -- we've just heard four or
- 23 five agreements and then we're going to have one more after
- 24 this on transportation, they're all incredibly innovative
- 25 and timely. They touch upon air quality impacts, they

- 1 touch upon equity, they touch upon immediate planning and
- 2 long-term pathways for a clean and affordable and equitable
- 3 future. So I think I can reiterate my support of all the
- 4 agreements today. And I'm just looking forward to
- 5 supporting the entire agenda that's been put forth for our
- 6 consideration today, so just thank all the staff.
- 7 CHAIR HOCHSCHILD: Great. Thank you.
- 8 Commissioner Monahan, yes.
- 9 COMMISSIONER MONAHAN: Well, I am really excited
- 10 as you would guess for this project. Drayage trucks,
- 11 they're major polluters. They go through communities that
- 12 are disproportionately impacted. We need to solve the
- 13 problem. But it also brings together high-powered
- 14 charging, which doesn't really exist right now.
- 15 Standardization, we're looking for opportunities to
- 16 standardize to be able to avoid some of the problems we've
- 17 encountered in the light-duty world.
- 18 And the number of project partners, I mean, I
- 19 just want to congratulate you, Mark and Jasna, in terms of
- 20 just that's a big list of partners that are engaged. And
- 21 they have a number of advisory committees that are really
- 22 trying to be very attentive to community impacts and
- 23 community engagement. So I just strongly encourage that
- 24 engagement with the communities that are going to be
- 25 impacted, both from hopefully having cleaner air, but also

- 1 having these high-powered chargers in their neighborhood.
- 2 So just really appreciative of the thoughtfulness that went
- 3 into the community engagement piece of this project.
- 4 CHAIR HOCHSCHILD: Thank you, well said.
- With that let's see, Commissioner Monahan, would
- 6 you be willing to move the item?
- 7 COMMISSIONER MONAHAN: I move this item.
- 8 CHAIR HOCHSCHILD: Okay, would you be willing to
- 9 second Item 11, Vice Chair Gunda?
- 10 VICE CHAIR GUNDA: Yeah, second Item 11.
- 11 CHAIR HOCHSCHILD: Okay, all in favor.
- 12 Commissioner Monahan?
- 13 COMMISSIONER MONAHAN: Aye.
- 14 CHAIR HOCHSCHILD: Vice Chair Gunda?
- 15 VICE CHAIR GUNDA: Aye.
- 16 CHAIR HOCHSCHILD: Commissioner Douglas?
- 17 COMMISSIONER DOUGLAS: Aye.
- 18 CHAIR HOCHSCHILD: And I vote age as well.
- 19 Congratulations to the whole team for all of your work,
- 20 look forward to seeing the results of this.
- 21 Let's turn now to Item 12, EIQ Mobility.
- MR. WENDER: Hello, Chair and Commissioners. My
- 23 name is Ben Wender, and I'm an Electric Generation System
- 24 Program Specialist in the Energy Research and Development
- 25 Division. Today, we are recommending one award from a

- 1 recent EPIC solicitation focused on developing and
- 2 deploying advanced charging technologies and distributed
- 3 energy resources to support fleets of medium- and heavy-
- 4 duty electric vehicles. Five other projects from this
- 5 solicitation were approved at previous business meetings,
- 6 and this is the final proposed award from this
- 7 solicitation. Next slide, please.
- 8 The proposed award will bring multiple benefits
- 9 to Californians. The technologies advanced will facilitate
- 10 charging of large electric vehicles like school buses in
- 11 ways that reduce stress on the electric grid and reduce the
- 12 cost of charging fleets transitioning to electric vehicles.
- 13 The proposed project will also advance and
- 14 demonstrate bi-directional charging technologies, which
- 15 allow controlled charging and discharging of vehicles to
- 16 provide electric services. Bidirectional charging
- 17 technologies can enable vehicles to potentially provide
- 18 resilience and other benefits for sites and communities
- 19 where they are deployed while maximizing emissions
- 20 reductions from both the electric and transportation
- 21 sectors. Next slide, please.
- This project is located in the City of Richmond,
- 23 which is in the Bay Area. Richmond is considered a
- 24 disadvantaged community affected by economic and health
- 25 disparities. The figure on the screen shows the

- 1 CalEnviroScreen 3.0 score for the demonstration site, which
- 2 ranks between the 9th and 95th percentile for pollution
- 3 vulnerability and burden. Projects like these contribute
- 4 to economic development and improved health outcomes needed
- 5 in these communities. Next slide, please.
- In the proposed project, eIQ will partner with
- 7 educational transportation service provider First Student
- 8 to deploy 20 battery electric school buses and 21
- 9 bidirectional chargers at a school bus depot in Richmond.
- 10 The integrated fleet monitoring, scheduling, and charging
- 11 management software will minimize school bus charging costs
- 12 while meeting all the fleet's operational needs.
- 13 The project will also validate the performance of
- 14 bi-directional charging equipment capable of using the
- 15 energy stored in parked electric buses to power onsite
- 16 loads or for export to the grid during times of peak
- 17 demand.
- 18 The project includes partnerships with two
- 19 regional chapters of Breathe California to support
- 20 educational and other community outreach events in Richmond
- 21 and other pollution burdened communities throughout the
- 22 state. Next slide, please.
- Now as more electric school buses with
- 24 bidirectional capabilities are deployed, the scale of this
- 25 potential resource for grid applications will become

- 1 significant. Shown here is an aerial view of project
- 2 partner First Student's bus yard in Richmond with nearly
- 3 100 buses, and statewide First Student operates more than
- 4 3,500 buses that could all someday help support the
- 5 electric system.
- 6 In California today there are approximately
- 7 25,000 school buses powered predominantly by fossil fuels.
- 8 If each of these 25,000 buses had its own 60-kilowatt bi-
- 9 directional charger, combined they represent approximately
- 10 1.5 gigawatts of electric capacity, enough to power
- 11 potentially more than a million California homes. Next
- 12 slide, please.
- 13 Staff recommends approval of this grant award and
- 14 adoption of staff's determination that this project is
- 15 exempt from CEQA. I'm available for any questions. Thank
- 16 you and that concludes my presentation.
- 17 CHAIR HOCHSCHILD: Thank you.
- 18 Any public comment on Item 12?
- MS. GALLARDO: This is Noemi, the Public Advisor.
- 20 A reminder to attendees if you'd like to make public
- 21 comment, please use the raise-hand icon. If you are on by
- 22 phone press *9 to raise your hand, *6 to unmute.
- I do not see any hands raised, Chair. We may
- 24 proceed.
- 25 CHAIR HOCHSCHILD: Okay. Well, let me just thank

- 1 staff again for this super-encouraged item. The school
- 2 buses have a very special place in my heart. And it's one
- 3 of the most exciting developments. There's obviously a
- 4 health issue there with the students, which we should never
- 5 forget. So I'm just really encouraged by the momentum
- 6 here, and I want to thank all the staff for the hard work
- 7 throughout the years. And the great collaboration with FTD
- 8 and the momentum that we're building.
- 9 It is my hope long-term that we get an electric
- 10 school bus factory in California and it's definitely
- 11 something I want to work to support in my other role as a
- 12 board member at CAEATFA so thank you to everyone.
- 13 Commissioner Monahan did you want to say something -- yes,
- 14 go ahead.
- 15 COMMISSIONER MONAHAN: Yeah, I've got to say a
- 16 few words --
- 17 CHAIR HOCHSCHILD: Yes, by all means.
- 18 COMMISSIONER MONAHAN: -- (indiscernible) applaud
- 19 this, because it's exciting. And I want to thank Ben
- 20 Wender, not just on this project but broadly Ben has been a
- 21 thought partner on this intersection of electric vehicles
- 22 and the grid, and the relationship between ERDD and FTD as
- 23 they flesh out these proposals and ideas and I just
- 24 encourage, and am encouraged, by the collaboration that's
- 25 happening across divisions. Everybody with an eye towards,

- 1 "How do we electrify transportation and how do we make the
- 2 grid more resilient?" And in this case, "How do we help
- 3 cash-strapped school districts get money by providing
- 4 energy back to the grid when we need it?"
- 5 I would say unlike transit buses, school buses
- 6 are just really optimal for giving energy back to the grid.
- 7 They'll take students to school, they'll bring them back
- 8 from school, they'll often sit idle at the times when we
- 9 need energy to go back to the grid including during the
- 10 summer. So just figuring out how to unlock that economic
- 11 potential, but also how to unlock the potential to make our
- 12 grid more resilient is a huge opportunity.
- So just thanks to all the project partners on
- 14 this I understand they're working really closely with PG&E
- 15 on this as well, so we need these scalable models that can
- 16 then -- hopefully all the school buses in the state that
- 17 are ETD can capitalize on this.
- 18 CHAIR HOCHSCHILD: Well said. And I would just
- 19 add to that. When you look at the duty cycle over the
- 20 course of a day of a school bus it's typically not in use
- 21 and could be plugged in during the middle of the day when
- 22 we have a lot of surplus renewable energy on the grid. And
- 23 then back and plugged in, in that late afternoon 5:00 to
- 24 9:00 period that where our greatest concern is about
- 25 supporting the grid. And so it's a tremendous asset.

- 1 Unless there is other -- yes, Vice Chair Gunda,
- 2 please.
- 3 VICE CHAIR GUNDA: Yeah, thank you, Chair. I
- 4 think I just wanted to kind of reiterate some of the points
- 5 that Commissioner Monahan mentioned, but I want to start
- 6 off by thanking Ben. I really, really enjoyed Ben's
- 7 presentation, the kind of clarity of it and just kind of
- 8 laying that out.
- 9 I think, for me, from the grid reliability
- 10 standpoint and the broader system planning the
- 11 bidirectional nature of electric vehicles is of extreme
- 12 interest. So I was really thrilled to see this or kind of
- 13 come to us for a decision today and looking forward to
- 14 learning from this.
- 15 Also, as Chair you noted, it's the children's
- 16 health, the future of the planet. It's very special, so
- 17 I'm glad that that we are doing this for the school buses.
- 18 But also trying to continue to foster and move forward with
- 19 our collective ambition in making sure equity is an
- 20 important element of what we do here. So I'm really glad
- 21 that we're kind of proposing this project and looking
- 22 forward to supporting it and learning from this project.
- Ben, again, thank you to you and the R&D team.
- 24 This is pretty important.
- 25 CHAIR HOCHSCHILD: Thank you. And are you

- 1 enthusiastic enough about it to move the item?
- 2 VICE CHAIR GUNDA: I would be thrilled to move
- 3 Item 12.
- 4 CHAIR HOCHSCHILD: Okay, thank you.
- 5 Commissioner Monahan, would you be willing to
- 6 second?
- 7 COMMISSIONER MONAHAN: I'm equally thrilled to
- 8 second.
- 9 CHAIR HOCHSCHILD: All right, all in favor say
- 10 aye. Vice Chair Gunda?
- 11 VICE CHAIR GUNDA: Aye.
- 12 CHAIR HOCHSCHILD: Commissioner Monahan?
- 13 COMMISSIONER MONAHAN: Aye.
- 14 CHAIR HOCHSCHILD: Commissioner Douglas?
- 15 COMMISSIONER DOUGLAS: Aye.
- 16 CHAIR HOCHSCHILD: And I vote age as well. That
- 17 item passes 4-0.
- 18 We'll now turn back to Item 4 on the agenda, so
- 19 if we could take up Item 4 at this time.
- MS. HUBER: Absolutely, good morning, Chair and
- 21 Commissioners. My name is Elizabeth Huber and I manage the
- 22 Office of Compliance and Monitoring and Enforcement in the
- 23 Siting, Transmission, and Environmental Protection
- 24 Division. With me today from my office is Compliance
- 25 Project Manager, John Heiser, and from Legal is Assistant

- 1 Chief Counsel, Kerry Willis. Also with us today,
- 2 representing the current project owner Terra-Gen, are Kevin
- 3 Butler, Amy Fuller, and Amanda Johnson.
- We're here to present on the project owner's
- 5 petition to amend their CEC license of the Solar Energy
- 6 Generating System, also referred as SEGS X and IX site by
- 7 reconfiguring the site boundary to exclude SEGS X, while
- 8 SEGS IX would remain under CEC jurisdiction. Next slide,
- 9 please.
- 10 The SEGS' nine independent power producer
- 11 parabolic solar trough plants were constructed at the
- 12 beginning of California's renewable energy movement in the
- 13 late 1980s. Built in the Mojave Desert these nine
- 14 independent plants established an excellent track record
- 15 for their solar technology. Thirty years later, the SEGS
- 16 IX facility continues to operate providing 80 megawatts to
- 17 the electric grid. However, it's companion site, SEGS X,
- 18 was never constructed as intended, a solar thermal
- 19 facility.
- The current owner, Terra-Gen, would like to
- 21 develop this site with renewable energy projects generating
- 22 up to 150 megawatts of clean energy, including 4-gigawatt
- 23 hours of battery storage capacity assisting both the county
- 24 and the state in complying with the Renewables Portfolio
- 25 Standard under Senate Bill 350. Which requires 50 percent

- 1 of all electricity sold in California shall be generated
- 2 from renewable energy sources by December 31st, 2030. Next
- 3 slide, please.
- 4 Located in San Bernardino County, SEGS X was
- 5 approved by the CEC in February of 1990 as part of a joint
- 6 license with SEGS IX, known as the SEGS IX-X Harper Dry
- 7 Lake Solar Thermal Project.
- 8 By October 1990, SEGS IX was fully operational
- 9 providing electricity under a power purchase agreement with
- 10 Southern California Edison, which remains in place to this
- 11 day. During the first quarter of 1991, however, then-owner
- 12 Luz Solar Partners made the decision to stop construction
- 13 on the SEGS X site, citing both financial and regulatory
- 14 constraints. With minimal land disturbed, the site has
- 15 remained idle for over three decades. Next slide, please.
- The CEC technical and legal staff have reviewed
- 17 the order before you and conclude that the relocation of
- 18 the project boundary removing SEGS X from the CEC license
- 19 will not have a significant effect on the environment, nor
- 20 cause the SEGS IX project to be out of compliance with all
- 21 applicable laws, ordinances, regulations, and standards.
- 22 Therefore, staff recommends your approval of this petition.
- 23 Thank you.
- 24 CHAIR HOCHSCHILD: Thank you, Elizabeth. Let's
- 25 turn now to any public comment on Item 4.

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- 1 MS. GALLARDO: This is Noemi, the Public Advisor.
- 2 And I want to remind attendees if you'd like to make a
- 3 public comment please use the raise-hand icon. If you're
- 4 on by phone press *9 to raise your hand, *6 to unmute.
- I do not see any hands raised. Chair, we may
- 6 proceed.
- 7 CHAIR HOCHSCHILD: Okay let's go to Commissioner
- 8 discussion starting with Commissioner Douglas.
- 9 COMMISSIONER DOUGLAS: All right, thank you,
- 10 Chair. I received a briefing on this item. I strongly
- 11 support this item, it provides an opportunity for this
- 12 site, which hasn't been developed, to move forward and help
- 13 support our clean energy goals. And clearly there's no
- 14 environmental benefit in readjusting the property boundary
- 15 and ensuring that that site that hasn't been built is not
- 16 covered by our license. So I support this item and look
- 17 forward to hopefully seeing a project there in the
- 18 relatively near future that continues to build us towards
- 19 meeting our climate goals.
- 20 CHAIR HOCHSCHILD: Thank you, Commissioner.
- 21 I would just add it's when we talk about SEGS
- 22 it's just important to remember what an amazing place in
- 23 history this project has. I mean when the history of
- 24 renewable energy is written with projects like SEGS and
- 25 Altamont. I mean, they go down in history as the landmark

- 1 projects, because they're really, at the time they were
- 2 constructed nobody had done anything anywhere close to that
- 3 large anywhere in the world. And it was a real testimony I
- 4 think both to the scale and the durability.
- 5 And so just I always feel enormously grateful to
- 6 the early pioneers who thought that big and aimed high.
- 7 And the whole evolution of the technology that's happened
- 8 since then, the cost reduction, really started because of
- 9 that early leadership. So just a tribute to those early
- 10 days, the pioneers getting renewables going. And I'm happy
- 11 to support this item.
- 12 Unless there is other comments from
- 13 Commissioners, Commissioner Douglas, would you be willing
- 14 to move Item 4?
- 15 COMMISSIONER DOUGLAS: Yes, I move Item 4.
- 16 CHAIR HOCHSCHILD: Vice Chair Gunda, would you be
- 17 willing to second?
- 18 VICE CHAIR GUNDA: Second.
- 19 CHAIR HOCHSCHILD: All in favor say aye.
- 20 Commissioner Douglas?
- 21 COMMISSIONER DOUGLAS: Aye.
- 22 CHAIR HOCHSCHILD: Vice Chair Gunda?
- VICE CHAIR GUNDA: Aye.
- 24 CHAIR HOCHSCHILD: Commissioner Monahan?
- 25 COMMISSIONER MONAHAN: Aye.

- 1 CHAIR HOCHSCHILD: And I vote age as well on
- 2 that. And that is a 4-0 approval of Item 4, so thank you to
- 3 everyone for that.
- 4 Let's get back on track and take up Item 13,
- 5 Approval of the Minutes from the September 8th and the
- 6 September 30th business meetings. Any public comments on
- 7 that, Noemi?
- 8 MS. GALLARDO: This is Noemi, the Public Advisor.
- 9 A reminder to attendees if you'd like to make a comment on
- 10 Item 13 please use the raise-hand icon. If you are on by
- 11 phone please press *9 to raise your hand, *6 to unmute.
- MS. GALLARDO: I do not see any hands raised.
- 13 Chair, you may proceed.
- 14 CHAIR HOCHSCHILD: Thank you. Let's see if
- 15 Commissioner Douglas, could you move Item 13?
- 16 COMMISSIONER DOUGLAS: Yes, I move Item 13.
- 17 CHAIR HOCHSCHILD: And Vice Chair Gunda, could
- 18 you second?
- 19 VICE CHAIR GUNDA: Second Item 13.
- 20 CHAIR HOCHSCHILD: All in favor say aye.
- 21 Commissioner Douglas?
- 22 COMMISSIONER DOUGLAS: Aye.
- 23 CHAIR HOCHSCHILD: Vice Chair Gunda?
- 24 VICE CHAIR GUNDA: Aye.
- 25 CHAIR HOCHSCHILD: Commissioner Monahan?

1	COMMISSIONER	MONAHAN:	Ave.

- 2 CHAIR HOCHSCHILD: And I vote age as well. That
- 3 item passes 4-0.
- 4 Let's go to Item 14, Lead Commissioner or
- 5 Presiding Member Report, starting with Vice Chair Gunda.
- 6 VICE CHAIR GUNDA: And thank you Chair. In some
- 7 ways I'm excited that we are meeting a couple times this
- 8 last couple of months on business meetings, it's just nice
- 9 to see everybody on the dais. But they're also going to
- 10 reduce the number of reports.
- 11 But I'm just going to highlight a couple of high-
- 12 level things. I've been trying to focus on reliability.
- 13 As you all know, over the last seven months we're in the
- 14 middle of October, short of some extraordinary event I
- 15 think we've gone through this year with a lot of
- 16 collaboration between CPUC, CEC, CAISO. And within CEC
- 17 multiple teams have come together to really move things
- 18 forward and keep our system reliable.
- 19 A name that's not very often mentioned is Justin
- 20 Cochran, who is also in the background and who kind of
- 21 works on our relationship at Cal OES and more broadly, all
- 22 emergency issues. I just want to note a special
- 23 recognition for him. He's somebody who texts you in the
- 24 middle of the night if there is something going on, it
- 25 doesn't really matter. He really takes the 24/7 idea of

- 1 public service to another level, so I just want to thank
- 2 Justin for his work.
- I also want to recognize kind of a stress that
- 4 all this work could have induced our staff. It's been
- 5 roughly 14-15 months. It's the same 30-40 staff that have
- 6 been doing SB 100, reliability planning, this year
- 7 reliability analysis, and kind of going through our work on
- 8 the Emergency Proclamation. I think it's important to note
- 9 that the staff are kind of burning on both ends. And I
- 10 just want to encourage staff to really find some time to
- 11 take a break, if possible, and take care of yourself. And
- 12 just want to, from the bottom of my heart, thank you. It's
- 13 just kind of a role I was entrusted with to kind of work on
- 14 the reliability aspects. And I could not have done any of
- 15 this without all of your support and all of your commitment
- 16 and dedication, so thank you so much.
- 17 This obviously doesn't stop at the reliability
- 18 story. We're going into winter, with the natural gas
- 19 issues it's kind of another framing of our energy
- 20 reliability. So we're looking toward thinking through the
- 21 gas line, gas pipeline integrity, the storage issues. So
- 22 something that we're pivoting to is thinking through the
- 23 winter reliability. And again want to thank CPUC staff for
- 24 collaborating closely with our gas team.
- 25 And also just to look ahead into 2022, now that

- 1 we're done with '21 hopefully at 2022 we have, as the staff
- 2 indicated, there is under extreme conditions I know there
- 3 is a pretty humungous shortfall in November.
- 4 And also staff have completed the more
- 5 traditional industry standard of load expectations, which
- $6\,$ also shows some shortfall. We know that CPUC is taking the
- 7 number of steps to do some additional procurement and shore
- 8 up some resources for next summer. But I think just kind
- 9 of flagging that 2022 is our (indiscernible) that will be
- 10 tight and then we have to plan. And I think this is going
- 11 to continue to '26, especially given that we are going to
- 12 have huge retirements, almost 5,000 megawatts of
- 13 retirement that we've kind of depended on for a very long
- 14 time.
- Before I add a couple other issues, and before I
- 16 close the reliability topic, I want to really thank
- 17 Commissioner Douglas. Commissioner Douglas and I have had
- 18 the opportunity to work together on a number of different
- 19 elements this year. We both recognize and have come to the
- 20 understanding that we both like to roll up our sleeves and
- 21 to get into things and work together. I could not have
- 22 asked for a better partner. And I think Commissioner
- 23 Douglas brings in a very unique perspective. And also her
- 24 years of experience in the siting issues and, more broadly,
- 25 the thermal generation. I think work like this cannot be

- 1 done without that level of experience and the ability to be
- 2 balanced and not panic in the moment. So I just want to
- 3 say Commissioner Douglas thank you so much for your
- 4 friendship and work on those issues
- 5 And finally, Chair Hochschild you, Elliot Mainzer
- 6 and President Batjer have really set up at the very high,
- 7 at the top of our organizations, a sense of collaboration
- 8 and urgency on these issues. Thank you for your continued
- 9 leadership. And I think any success as a state we have is
- 10 a collective work. And I know that and I think you are a
- 11 critical element of all that, so thank you so much for your
- 12 work on reliability.
- 13 As I move towards (indiscernible) --
- 14 CHAIR HOCHSCHILD: Yes, let's move to -- oh
- 15 sorry, did you have more?
- VICE CHAIR GUNDA: Yes, just a couple of things.
- 17 I've been meaning, as I mentioned in the last business
- 18 meeting, I'm really trying to delve into DERs a little bit
- 19 more. So I had a follow-up meeting with Tesla, SunPower
- 20 and Sunrun specifically relating to NEM 3.0, the Building
- 21 Standards, the DER integration issues, but also the CSL
- 22 Decision, I think which is now on a stay. But just
- 23 generally appreciate the engagement of the DRPs at large in
- 24 kind of educating me and becoming more knowledgeable about
- 25 those issues as we move forward.

- 1 I also want to thank the EPIC team for the
- 2 incredible en banc we had in the last week, thanks for
- 3 that, really great. And also the town hall this week. It
- 4 was a special moment to see Katrina take her -- both as a
- 5 Deputy Public Advisor -- Katrina, a few kind of meetings we
- 6 were in your passion and your commitment was very evident.
- 7 Congratulations on the appointment and look forward to
- 8 working with you. And really you have a have a great heart
- 9 and you and Noemi will do amazing things.
- 10 From our office, thanks to my office for
- 11 surviving this last eight months, Le-Quyen, Miina,
- 12 Sudhakar. But I just want to recognize Liz Gill. Liz Gill
- 13 has been an exceptional partner in all the work we've done.
- 14 She's finally on her leave and luckily she was able to go
- on a leave before the baby came. And I want to
- 16 congratulate Liz for the beautiful baby and wishing her
- 17 and her family all the luck and the best wishes.
- 18 With that, back to you, Chair.
- 19 CHAIR HOCHSCHILD: Thank you. Yes, we all send
- 20 big congrats to Liz and look forward to baby photos, I can
- 21 never get enough of those. Thank you for those comments,
- 22 Vice Chair Gunda. And I second your comments as well about
- 23 Commissioner Douglas who's been invaluable on so many
- 24 issues. So let's go to her next if we could.
- 25 COMMISSIONER DOUGLAS: Well thank you, Chair

- 1 Hochschild. And for a minute I thought you were going to
- 2 continue embarrassing me and I was going to jump out of the
- 3 screen. But I appreciate your comments and Commissioner
- 4 Gunda's.
- I share his excitement that it's mid-November.
- 6 And so we are through the summer season, barring as he said
- 7 something really remarkable. It's nice and chilly out
- 8 today. It even rained a little bit, so far, so good as
- 9 October goes.
- 10 And I also want to share in his acknowledgement
- 11 of the tremendous work and support that has been provided
- 12 by our staff, particularly in Assessments Division and the
- 13 STEP Division around summer reliability, but also very much
- 14 Chief Counsel's Office. They really stepped up and did
- 15 some very hard work, particularly Linda Barrera personally
- 16 handling DOE waiver issues and also a support team from her
- 17 office that's also very often involved in SPPE proceedings.
- 18 And we've just had a lot going on this summer. I
- 19 And the Executive Office, Drew stepped into a
- 20 very new role with some of the things he was tasked to do
- 21 under the Emergency Proclamation and definitely stepped
- 22 into that very willingly and with diligence. So I very
- 23 much appreciate that, all of that effort.
- 24 And so I think the only thing I'll add is a very
- 25 minor report, which is that I had the opportunity to speak

- 1 at a Geothermal Rising Conference. And I gave one of the
- 2 keynotes and it was nice to do that. It was fun, but it's
- 3 also a really exciting time to be working on geothermal
- 4 issues and helping to move that forward in light of the
- 5 tremendous lithium potential that comes along with that in
- 6 the Imperial Valley. So I think with that I'll pass on the
- 7 reports to others, and thank you.
- 8 CHAIR HOCHSCHILD: Thank you.
- 9 Commissioner Monahan.
- 10 COMMISSIONER MONAHAN: Well we're nearing the
- 11 finish line for the Clean Transportation Program Investment
- 12 Plan, which you will recall includes the \$1.165 billion
- 13 from the latest General Fund budget allocation.
- 14 And we're actually meeting with the DACAG
- 15 tomorrow. I think that'll be sort of the last of our big,
- 16 formal engagements. We met, as I think I mentioned last
- 17 time our Public Advisor Noemi pulled together an
- 18 Environmental Justice Roundtable. So we talked about the
- 19 investment plan as the primary topic in that as well. And
- 20 I'm excited to bring it to you all, I think there's going
- 21 to be -- we're not going to make everybody happy, because
- 22 it's a lot of money to distribute and different folks are
- 23 giving us different advice. So we're taking everything
- 24 seriously under consideration and really thinking through
- 25 what modifications need to be made to put our best foot

- 1 forward on this plan.
- 2 In terms of meetings, so this week -- just was it
- 3 yesterday -- just yesterday we cohosted with the CPUC and
- 4 GO-Biz a workshop on accelerating how can we overcome
- 5 barriers to more rapidly deploy charging infrastructure
- 6 that integrates well into the grid. So it was great to
- 7 have Commissioner Rechtschaffen with me all day yesterday.
- 8 And Tyson Eckerle, the Deputy Director from GO-Biz. And
- 9 just I think we came up with a lot of good ideas from the
- 10 community.
- 11 And Chair Hochschild, as you recall, this
- 12 actually in part was spurred by the meeting that you
- 13 convened around how do we overcome permitting barriers. So
- 14 that was a big topic of discussion. And I think we have a
- 15 lot of good ideas. So now the question is what can we do
- 16 to implement those ideas. And I think we're going to do
- 17 more, we're considering other collaborations with our
- 18 fellow agency partners on different topics on
- 19 transportation. And so perhaps more to come on en bancs
- 20 relating to broader topics and transportation
- 21 electrification with CARB, CPUC, GO-Biz, CAISO.
- The Asilomar Transportation Conference was last
- 23 week, so that was the first in-person conference I've been
- 24 to. And I was on the planning committee, so had a lot of
- 25 responsibilities in terms of pulling all the different

- 1 sessions together. And I added clean-up on these, on the
- 2 sessions around what did we learn, what did we hear. It
- 3 was great. This was Chair Randolph's first time at the
- 4 Asilomar Conference.
- 5 And the only sad part was that none of our
- 6 federal partners could go. So Steve Cliff who is now the
- 7 Head of the National Highway Traffic Safety Administration
- 8 was on it, he was supposed to -- and we had high-level
- 9 people from EPA, and so that was a disappointing thing.
- 10 But so much action is actually happening at the state level
- 11 on transportation electrification that I mean we still had
- 12 a lot to talk about. And I would still argue state
- 13 leadership is critical when it comes to vehicle standards,
- 14 when it comes to infrastructure deployment. So yeah it was
- 15 a great conference
- And also just for future if you need to plan a
- 17 conference Asilomar is a good location for it in COVID
- 18 times, because the rooms are big, big ceilings. And we
- 19 just like lowered the number, so with masks you just felt
- 20 pretty safe. And I think that's kind of it on the big
- 21 items.
- I was sad to miss the swearing in of our Deputy
- 23 Public Advisor and our Vice Chair Gunda. I just wish that
- 24 there was some way with BK rules that we could participate
- 25 in that celebration. So I just congratulate our Vice

- 1 Chair, whose big heart and big brain are really helping us
- 2 think through some problems that we're facing in the State
- 3 of California, but in a way that's kind and thoughtful to
- 4 staff and to everybody around him. So just sorry to miss
- 5 that celebration, and I congratulate both our Deputy Public
- 6 Advisor and our Vice Chair.
- 7 CHAIR HOCHSCHILD: Thank you, Commissioner, well
- 8 said.
- 9 VICE CHAIR GUNDA: Thanks, Commissioner.
- 10 CHAIR HOCHSCHILD: So yeah, I just wanted to
- 11 share this is now almost exactly two-and-a-half years into
- 12 my five-year term as Chair and so it's kind of a good point
- 13 to sort of pause and reflect a little bit. And I guess the
- 14 main thing I feel overwhelming gratitude for this
- 15 opportunity to serve with such incredibly talented fellow
- 16 Commissioners and staff. I'm just enormously blessed. And
- 17 I just want to say I think my main feeling is we are
- 18 punching above our weight class as an agency. And when I
- 19 came in as Chair and we leaned in to a number of key
- 20 priorities and we've thrown everything we have at them and
- 21 we're making a huge impact.
- 22 And so I just want to reflect two-and-a-half
- 23 years in the top goals coming in, we want to get a ten-year
- 24 reauthorization of EPIC. We have done that, that's a
- 25 billion and a half dollars for the leading Clean Energy,

- 1 Research and Development Program in the United States.
- 2 We wanted to lean in heavily on transportation
- 3 electrification, got a billion dollars for that.
- 4 (Indiscernible) promote ZEV manufacturing, supported the
- 5 Governor's Executive Order, which I think has been hugely
- 6 influential. On offshore wind the deal with the Biden
- 7 Administration got done and we're really in implementation,
- 8 amazing work with Commissioner Douglas there.
- 9 You have Lithium Valley as well, incredible
- 10 momentum. We put the first R&D money into lithium recovery
- 11 and we're getting great results. And that has the
- 12 potential to produce a billion dollars a year value for the
- 13 state and then great momentum from the stakeholders there.
- 14 Building decarbonization, we did the boldest energy
- 15 efficiency code in the country in August. And incredibly
- 16 gratified by that progress, as well as the solar mandate on
- 17 commercial and nonresidential buildings.
- 18 And the BUILD program getting launched. And
- 19 there's new money for schools through 841, another half a
- 20 billion dollars on top of the 1.75 billion we did through
- 21 Prop 39.
- 22 And just incredible coordination and
- 23 collaboration from the whole SB 100 team. I really feel
- 24 the agencies have come closer together than certainly I've
- 25 seen them be in the course of my time on the Commission

- 1 this last year or two, especially SB 100 was amazing and
- 2 just really shoring up our reliability.
- 3 And then I'd say leaning into the equity issue
- 4 really strongly. And I just want to especially call out
- 5 Noemi Gallardo for her amazing leadership. In addition to
- 6 just making sure all the communities have access to our
- 7 meetings and workshops on all these different topics, she's
- 8 been proactively organizing these roundtables on different
- 9 subjects with disadvantaged communities, environmental
- 10 justice groups. And it's been really, really fruitful.
- 11 And I'm so happy we're able to formally rename the Public
- 12 Advisors Office, so it will now be known as the Office of
- 13 the Public Advisor Energy, Equity and Tribal Affairs,
- 14 effective this week. And great to have Katrina's
- 15 leadership in there as well.
- 16 And getting the Clean Energy Hall of Fame
- 17 launched and up and running is really exciting as well.
- 18 I'm looking forward to that ceremony in December.
- 19 And then, our communications efforts I think just
- 20 really stepped up. And I'm just incredibly proud of the
- 21 look and the feel of the documents we're producing and the
- 22 strategy behind how we're communicating about all the
- 23 progress, which I think becomes as important as the
- 24 progress itself.
- 25 I'm leaving on Friday to go to Portugal for an

- 1 offshore wind thing and then to the Climate Summit. And
- 2 the eyes of the world are on California on these issues and
- 3 we want to communicate that well and inspire progress in
- 4 other places around the world and partner as best we can.
- 5 And so I just really wanted to thank everybody
- 6 for what has felt like an incredible sprint, but a very
- 7 rewarding set of projects that we're moving the ball
- 8 forward on.
- 9 I'm going to stop there. And I could go on, but
- 10 I think I'll just stop there and turn now to Executive
- 11 Director's Report with Drew.
- MR. BOHAN: Chair, Commissioners, good afternoon.
- 13 I just want to add my congratulations to our two new
- 14 Governor's Appointees: Vice Chair Gunda and Deputy Public
- 15 Advisor Leni-Konig. And I have nothing else to report.
- 16 Thanks very much.
- 17 CHAIR HOCHSCHILD: Thank you. Let's go to Public
- 18 Advisor's Report.
- MS. GALLARDO: Hello there, Chair and
- 20 Commissioners. Thank you so much for the acknowledgments
- 21 earlier, the kudos, it's much appreciated. I feel
- 22 extremely grateful to be part of this Energy Commission
- 23 family, so thank you for that.
- 24 And I am definitely ecstatic about having Katrina
- 25 Leni-Konig join my office as Deputy Public Advisor. She'll

- 1 also be serving as the Energy Commission's Tribal Liaison.
- 2 And I'm also grateful that Tom Gates is continuing in my
- 3 office as a Tribal Advisor, so I think that'll help us
- 4 serve the public even more and better. And also be a
- 5 better partner to staff on all of these matters that we're
- 6 handling here.
- 7 I also want to let the audience know that our
- 8 webpage for the Hall of Fame announcing this year's winners
- 9 has gone live. I'll put that link in the chat and you'll
- 10 hear more about that later on. Thank you so much, that
- 11 ends, my report.
- 12 CHAIR HOCHSCHILD: Thank you.
- 13 Let's go to Item 17, Public Comment.
- MS. GALLARDO: Yes, so that's me again. This is
- 15 Noemi, the Public Advisor. This is the period for any
- 16 person wishing to comment on information items or reports
- 17 of the meeting agenda or any other item.
- 18 Each person has up to three minutes to comment
- 19 and comments are limited to one representative per
- 20 organization. We may reduce the comment time, depending on
- 21 the number of commenters. Use the raise-hand icon to
- 22 indicate your interest in making public comments. If
- 23 you're on the phone press *9 to raise your hand and *6 to
- 24 unmute.
- 25 After you are called on please restate and spell

1 your first and last name, state your affiliation if you're 2 representing a tribe, agency, organization or any other 3 entity. Do not use the speakerphone when talking, because 4 we will not hear you clearly. 5 I will now look for hands. I do not see any 6 hands raised. Chair, we may proceed. 7 CHAIR HOCHSCHILD: Okay, we are adjourned. Thank 8 you everybody, have a good day. 9 COURT REPORTER: So this is Peter Petty. So 10 there's no report from Linda Barrera? 11 MS. GALLARDO: Peter, please hold. I'm checking 12 on that right now, just a minute. 13 COURT REPORTER: Thanks. 14 MS. GALLARDO: All right, this is Noemi Gallardo 15 the Public Advisor at the Energy Commission. There is no 16 report for the Chief Counsel, Item Number 18, so we will be 17 ending the meeting now. Thank you very much. 18 Court Reporter: Okay, and you're very welcome. 19 See you later. 20 (The Business Meeting adjourned at 12:15 p.m.) 21 22

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REPORTER'S CERTIFICATE

I do hereby certify that the testimony in the foregoing hearing was taken at the time and

place therein stated; that the testimony of said witnesses were reported by me, a certified electronic court reporter and a disinterested person, and was under my supervision thereafter transcribed into typewriting.

And I further certify that I am not of counsel or attorney for either or any of the parties to said hearing nor in any way interested in the outcome of the cause named in said caption.

IN WITNESS WHEREOF, I have hereunto set my hand this 25th day of October, 2021.

PETER PETTY CER**D-493 Notary Public

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IN WITNESS WHEREOF, I have hereunto set my hand this 25th day of October, 2021.

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