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BUSINESS MEETING

BEFORE THE

CALIFORNIA ENERGY COMMISSION

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In the Matter of:

Business Meeting

)23-BUSMTG-01

WEDNESDAY, JULY 26, 2023

10:00 A.M. - 3:30 P.M.

In-person at: Warren-Alquist State Energy Building 1516 Ninth Street Art Rosenfeld Hearing Room Sacramento, California 95814 (Wheelchair Accessible)

Remote Access via Zoom[™]

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

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

Reported by: C. Caplan Commissioners

Andrew McAllister Noemi Gallardo Patty Monahan

Staff Present:

Linda Barrera, Chief Counsel Mona Badie, Public Advisor Elizabeth Huber, Director, Siting, Transmission, and Environmental Protection Division Joseph Hughes, Acting Engineering Branch Manager Andres Perez, Air Resources Engineer Tanner Kelsey, Lead Counsel Erik Lyon, Advisor to Vice Chair Gunda Lisa DeCarlo, Chief Counsel's Office Kari Anderson, Chief Counsel's Office Camden Burke, Shultz Energy Fellow

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Jeanie Mar	9
Mark Danielson	10, 11

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Also Present: Speakers:

Elizabeth Huber, Director, Siting, Transmission, and Environmental Protection Division, CEC 4 Erik Lyon, Advisor to Vice Chair Gunda 5 Jimmy O'Dea, Caltrans 6 Camden Burke, Shultz Energy Fellow

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Transcriber's Certificate

1		PROCEDINGS	
2	JULY 26,	2023	10:00 a.m.
3		COMMISSIONER MCALLISTER: Good morning,	everyone.
4	My name :	is Andrew McAllister, a Commissioner here	e at the

5 California Energy Commission. Today is July 26, 2023, and
6 I call this meeting to order. Joining me are Commissioners
7 Monahan and Gallardo. Chair Hochschild and Vice Chair
8 Gunda are absent, but we do have a quorum.

9 First, let us stand for the Pledge of Allegiance.
10 (Whereupon the Pledge of Allegiance was recited.)
11 COMMISSIONER MCALLISTER: We will first take
12 public comment and then move on to agency announcements.
13 Our Public Advisor will provide instructions for public
14 comment.

15 MS. BADIE: Good morning. This is Mona Badie, 16 the Energy Commission's Public Advisor. The Commission 17 welcomes public comment at its business meetings. There 18 will be multiple opportunities to make comments today. 19 This initial public comment period is for any item 20 including informational or non-voting items on the agenda. 21 If you want to comment on a voting item, we ask that you 22 wait for the dedicated public comment period for that item 23 to make your comment.

Now for a few instructions. If you're in the

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1 room, we ask that you use the QR code to notify us you'd 2 like to make a comment. They are posted around the room. 3 If you're on Zoom, we ask that you use the raise hand 4 feature on your screen if you're online. And if you're 5 joining by phone, press *9 to raise your hand.

I'm going to do a quick check. Okay, we have one
raised hand on Zoom, Nikola Lakic. I'm going to open your
line. Please spell your name for the record and any
affiliation that you have, and you may begin. We do ask
that comments be limited to two minutes or less.

11 MR. LAKIC: Hello, can you hear me?12 MS. BADIE: Yes.

MR. LAKIC: Yeah, thank you. Thank you very much 13 14 for this opportunity to say a few words. My name is Nikola 15 Lakic. I'm a graduate engineer architect. I make quite a 16 few common statements in many years actually on -- I would 17 like to emphasize again the meeting in Calexico a month 18 ago. And I said a few words, I made a public comment, and 19 I'd like to emphasize a few things. That there is a little 20 bit of a problem in the process for funding.

I'm proposing that California Natural Resources
Agency and California Energy Commission and EPA get
together somehow and make some mechanisms and committees,
and commission that will take care of our Salton Sea.
Something similar, like Salton Sea Authority, but this time

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functional. I'm sorry to say, but the Salton Sea Authority
 does not function at this time. They openly are against
 restoring the Salton Sea. That's documented, that's in
 record.

5 The thing is I'm author of several proposals -- I 6 mean, I'm author of the proposal for the restoration of the 7 Salton Sea that includes several breakthrough technologies, 8 including geothermal. And the subject at this time, it 9 looks like it is funding for geothermal and solar, also 10 solar, and also hydro energy. It's something that has to 11 be united.

12 I understand everybody is pushing for their 13 projects, and the government is pretty much generous. But 14 it is missing that unity and missing architectural planning 15 and to be following it. And my proposal is under review by 16 the US Army Corps of Engineers at this very moment. I 17 don't know where they stand yet on that. But look, I am an 18 engineer. I worked on this 10 years. I have over 40 19 patents on this subject. I know if something works or not 20 and those who challenge it, talk to me.

21 MS. BADIE: Nikola, if you could please wrap up 22 your comment.

23 MR. LAKIC: Oh, my time expires. I'm sorry.
24 Okay. Well maybe later on I will continue a few things
25 just to clarify, but thank you very much for this

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1 opportunity.

2 MS. BADIE: No more comments. Back to you,
3 Commissioner.

4 COMMISSIONER MCALLISTER: Okay, great. Well,
5 thank you, Public Advisor.

6 So moving to Item 2, Agency Announcements. 7 Today, the Commission seeks to approve over 55 million in 8 investments contributing to our state's economy. Any 9 Commissioner discussion for Item 2, Agency Announcements? 10 Hearing none, seeing none, so we will move on.

11 Yeah, okay. Commissioner Gallardo, go ahead. 12 COMMISSIONER GALLARDO: Buenos Dias, good 13 This is Commissioner Gallardo. I just wanted to morning. 14 inform you that I will not be attending the next business 15 meeting. So I know there's some really important items on 16 that agenda, but I had planned a vacation to celebrate my 17 10-year anniversary with my partner. So that's the only 18 reason why I'm missing it. It's the first meeting I'm 19 missing, so I feel bad about it but I wanted to let folks 20 know why I'll be out.

And just for fun, we commemorated our 10-year anniversary with a tattoo, so I have my first tattoo. (Laughter.) Anyway so I just wanted to share with my CEC family what's going on, also the public on why I won't be there.

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COMMISSIONER MCALLISTER: Oh, well that's great.
 Well, priorities. Tattoos and partnership, that's great.
 So we'll give you a pass on that one and appreciate that
 announcement.

5 So without further ado, moving on to Item 3. 6 This is the Consent Calendar. Before we move to public 7 comment, I'd like to note for the record that the 8 individual ECCA loan amounts under Item 3h are accurate. 9 But the record should reflect that the total amount for all 10 six loans should be 11,967,769 instead of the number 11 listed, 10,077,989. So that correction should be noted for 12 the record.

Is there any public comment on the Consent?
MS. BADIE: Hello again, this is Mona Badie, the
Public Advisor. If you'd like to make a public comment on
Item 3, we ask that you use the QR code. If you're on the
room, if you're on Zoom, please use the raise hand feature.
And if you're on the phone, please press *9.

19 Doing a quick check. Okay, I'm not seeing anyone20 for Item 3. Back to you.

21 COMMISSIONER MCALLISTER: Okay, great. Thank22 you.

23 So we are going to have a slight change in the 24 voting here on the Consent. Oh --

25 MS. BARRERA: Excuse me, Chair, if I have a

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1 minute.

2 COMMISSIONER MCALLISTER: Go ahead, Chief Counsel 3 Barrera.

4 MS. BARRERA: This is for Commissioner Monahan. 5 Commissioner Monahan, I looked again at that Item 3f, and I 6 talked to our conflict of interest attorney and you 7 actually can go ahead and vote on that item. We did do the 8 conflict of interest check, so you can go ahead and just 9 vote on the item. 10 COMMISSIONER MCALLISTER: Great. 11 COMMISSIONER MONAHAN: So I do not have a 12 conflict of interest for that one? 13 MS. GALLARDO: Yeah. You do not need to recuse 14 yourself. 15 COMMISSIONER MONAHAN: Okay. Thank you. 16 COMMISSIONER MCALLISTER: Okay, great. 17 MS. BADIE: Sorry, I -- Commissioner. There was 18 one comment for Item 3 that I missed. 19 COMMISSINGER MCALLISTER: Okay. 20 MS. BADIE: If that's okay, we can go back to 21 public comments. 22 COMMISSIONER MCALLISTER: Yeah, go ahead with 23 public comment. Thank you, Madam Public Advisor. 24 MS. BADIE: Thank you. We have Jon Trujillo in 25 person. Hi, John. Please turn on the mic and spell your 13

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1 name for the record, and you may begin.

2 MR. TRUJILLO: Sure thing. Jon, J-O-N, Trujillo, 3 T-R-U-J-I-L-L-O. Good morning, Buenos Dias. 4 I am here representing BHE Renewables, the parent 5 that sends over submitted applications for 3b, c, and d, 6 the Blackrock, Elmore North and Moreton Bay geothermal 7 projects. And I just wanted to thank the Commission for 8 the consideration today on data adequacy, as well, and I'd 9 say almost more so, the staff for their continued 10 (indiscernible). Thank you very much. 11 COMMISSIONER MCALLISTER: Thanks for your 12 comment. 13 With that so it appears we do not have a change 14 to the voting on Item 3. We do not have any conflict of 15 interest from any Commissioner. So let's -- do I hear a 16 motion on Item 3, Consent Calendar? 17 COMMISSIONER MONAHAN: I move to approve Item 3. 18 COMMISSIONER GALLARDO: I second. 19 COMMISSIONER MCALLISTER: All those in favor say 20 aye. COMMISSIONER MONAHAN: Aye. 21 22 COMMISSIONER MCALLISTER: Oh, I guess we need a 23 call out, sorry. Sorry, we're running on inexperience 24 here. 25 Commissioner Monahan.

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1 COMMISSIONER MONAHAN: Aye.

COMMISSIONER MCALLISTER: Commissioner Gallardo.
COMMISSIONER GALLARDO: Aye.
COMMISSIONER MCALLISTER: And I vote aye as well.
So Item 3 passes, 3-0.
Moving on to Item 4. Huntington Beach Energy

Moving on to Item 4, Huntington Beach Energy
Project. I welcome Joseph Douglas to present.

8 MR. DOUGLAS: Good morning, Chair, Vice Chair, 9 and Commissioners. My name is Joseph Douglas. I am a 10 Compliance Project Manager in the Compliance Monitoring & 11 Enforcement Unit of the Safety & Reliability Branch of the 12 Siting, Transmission, and Environmental Protection 13 Division. With me this morning is Acting Engineering 14 Branch Manager, Joseph Hughes; Air Resources Engineer 15 Andres Perez, and Lead Counsel, Tanner Kelsey.

I am here to present on the Huntington Beach Energy Project's petition to amend their final Decision to increase the annual combined cycle gas turbine operating hours.

It is important to note that the proposed Department of Water Resources strategic reliability reserve implementation plan that includes contracting with the adjacent Huntington Beach Generating Station's once-through cooling facility is not part of this petition, and its operational jurisdiction is under the California Public

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1 Utilities Commission. Next slide, please.

The current petition requests that the CEC approve an increase of 1,000 hours to the existing annual operating hours of the facility from 6,640 hours per year to 7,640 hours per year.

6 The proposed changes will help to meet the 7 projected increased electrical demand in the Los Angeles 8 Basin with the most efficient delivery of non-renewable 9 energy. Next slide, please.

10 The Huntington Beach Energy Project is a 644-11 megawatt combined-cycle power plant located in Orange 12 County. The power plant was certified by the CEC in May 13 2017 as an 844-megawatt power plant project, with a 644-14 megawatt combined-cycle, natural gas-fired power block, and 15 two simple cycle gas-fired turbines that would produce 200 16 megawatts. To date, the simple cycle turbines have not 17 been built, but the combined cycle power plant began 18 operation in June of 2020.

In December 2021, the owner filed an application with the South Coast Air Quality Management District to modify the air district's operating permit to increase the annual operating hours of the power plant and amend relevant permit conditions to reflect the change. On March 14th, 2023, the Air District provided evaluations and proposed operating permits incorporating

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1 the proposed changes for review.

2 CEC staff incorporated the Air District's 3 evaluations in its final environmental analysis, which was 4 docketed on June 12th, 2023. And an errata was posted on 5 July 10, 2023 to correct an administrative error in the AQ-6 1 condition of certification. To date, no comments have 7 been received.

8 As discussed in the final environmental analysis, 9 there are no proposed changes to any short-term emission 10 limits. The proposed petition would only increase annual 11 base load operations and associated emissions. The 12 increase in annual emissions will be mitigated using the 13 Regional Clean Air Incentives Market or RECLAIM, Trading 14 Credits and the Air District's internal offset program. 15 Next slide, please.

16 This concludes our presentation, and we request 17 your approval of the Order to modify the existing Air 18 Quality Conditions of Certification and allow an increase 19 in annual operation to support grid reliability. Thank 20 you.

21 COMMISSIONER MCALLISTER: Thank you, Mr. Douglas.
22 Do we have any public comment on this item?
23 MS. BADIE: Thank you. This is Mona Badie, the
24 Public Advisor. The Commission now welcomes public comment
25 on Item 4. If you are in the room please use the QR code

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1 to notify if you'd like to make a comment. And if you're 2 on Zoom, you can use the raise hand feature. And if 3 joining us by phone, please press *9 to raise your hand. 4 And again this is for Item 4.

5 I'm not seeing any comments in the room or on 6 Zoom. Oh sorry, I see one raised hand. Nikola Lakic, I'm 7 going to unmute your line. Please state your name and your 8 affiliation for the record. And we ask that comments be 9 limited to two minutes.

10 MR. LAKIC: My name is Nikola Lakic. I am with 11 Geothermal Worldwide. I would like just to add that all 12 those problems with air and improvements if we are 13 synchronized -- if you're synchronized, if we really follow 14 architectural planning we would not have these kinds of 15 problems.

16 And I might comment later on again to emphasize 17 the importance of the acceptance of the master plan for the 18 restoration of the Salton Sea, which includes many 19 geothermal power plants and solar power plants and 20 hydropower plants. So we will be dealing with clean air, 21 with clean water, and all those things. But again, this is 22 small projects. It's missing unity. It's missing some 23 Authority to put together all those projects and that's 24 what I'm trying to emphasize.

25

But again, I just want to mention -- because the 18 CALIFORNIA REPORTING, LLC

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1 gentleman asking for money for some projects it would have 2 be synchronized. But again, I yield my time. So thank you very much for the opportunity (indiscernible). Thank you. 3 4 MS. BADIE: Thank you. 5 There are no further comments. Back to you, 6 Commissioner. 7 COMMISSIONER MCALLISTER: Okay. Thank you, Madam 8 Public Advisor. 9 Any Commissioner comments? 10 COMMISSIONER GALLARDO: Yes. 11 COMMISSIONER MCALLISTER: Yeah, please. 12 Commissioner Gallardo. 13 COMMISSIONER GALLARDO: Thank you. Joseph, thank you so much for a wonderful presentation. I wondered if 14 15 you could clarify whether this Huntington Beach project is 16 associated with the DWR Investment Plan that we talked 17 about in a prior business meeting, and that might be on the 18 agenda coming up for the next meeting? 19 MR. DOUGLAS: You're speaking of the NG project 20 or the generating station? 21 COMMISSIONER GALLARDO: The station. 22 MR. DOUGLAS: I'm not aware of that. And I might 23 defer to the Project Owner, because they have more 24 information. 25 COMMISSIONER MCALLISTER: My understanding of --

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1 maybe I'll just jump in -- my understanding is we're
2 talking about it. So Elizabeth, if you want to chime in
3 that'd be great.

4 COMMISSIONER GALLARDO: Yeah, I think there were 5 some questions, confusion of whether it was related. So 6 any clarification I think would be helpful for the public. 7 (Indiscernible)

8 COMMISSIONER MCALLISTER: Yeah. Go ahead. 9 MS. HUBER: Oh, absolutely. So for the record my 10 name is Elizabeth Huber. I'm the Director of the Siting, 11 Transmission, and Environmental Protection Division. And 12 so as you know we have jurisdiction over two of the AES 13 Huntington Beach power plants. But the one that you are 14 asking about, which is a once-through cooling facility that 15 was built in the 1960s is not in our jurisdiction and is 16 not part of this project in front of you this morning. 17 COMMISSIONER GALLARDO: Thank you, Elizabeth,

18 very helpful.

19 COMMISSIONER MCALLISTER: No other comments? 20 I'll just jump in. I was on a committee for the 21 new plant on Huntington Beach. And I think that's what 22 we're talking about, the one that was recently built and 23 commissioned and is under operation and not the old one 24 that is under now DWR. So, with that I'd ask for a motion 25 for this item.

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1 COMMISSIONER GALLARDO: Yeah, this is 2 Commissioner Gallardo again. So just to clarify, this will 3 have a minimal environmental impact. There's mitigations 4 in place. So I do support the petition to modify the 5 Huntington Beach power plants air quality conditions of 6 their Energy Commission license, just to clarify. 7 So I moved to approve Item number 4. 8 COMMISSIONER MONAHAN: I second. 9 COMMISSIONER MCALLISTER: All right. Now we'll 10 go to the vote. Commissioner Gallardo. 11 COMMISSIONER GALLARDO: Aye. 12 COMMISSIONER MCALLISTER: Commissioner Monahan. 13 COMMISSIONER MONAHAN: Aye. 14 COMMISSIONER MCALLISTER: And I vote aye, as 15 well. This motion passes 3-0. Thank you, Joseph. 16 Move on to Item 5. Okay, Item 5 Demand Side Grid 17 Support, DSGS Program. And I'll invite Ashley Emery to 18 present. Ashley. 19 MS. EMERY: Good morning, Commissioners. My name 20 is Ashley Emery, and I am the Manager of the Reliability 21 Reserve Incentives Branch, which is implementing two 22 programs under the Strategic Reliability Reserve 23 established in last year's budget. 24 With me is Lisa DeCarlo and Kari Anderson from 25 the Chief Counsel's Office; and my colleague, Erik Lyon, to 21

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1 help respond to any questions.

2 Today we are proposing the modified guidelines 3 for the Demand Side Grid Support Program, also known by the 4 acronym DSGS, for your consideration for approval. Next 5 slide, please.

6 The effects of climate change including extreme 7 heat, drought, and wildfires, coupled with supply chain 8 delays, have challenged the state's ability to plan and 9 maintain grid reliability.

10 So, as part of last year's budget, through the 11 passage of AB 205, the Legislature and Governor created a 12 Strategic Reliability Reserve to help meet our emergency 13 grid needs outside of our normal planning standards.

14 The Strategic Reliability Reserve provides for 15 the creation and funding of multiple programs designed to 16 address energy reliability over the next several years, 17 including the DSGS Program and the Distributed Electricity 18 Backup Assets, or DEBA program.

19 The DSGS and DEBA programs serve as complementary 20 programs to help meet grid needs during extreme events.

DEBA incentivizes the purchase of cleaner and more efficient distributed energy assets that will serve as on-call emergency supply or load reduction during extreme events, whereas DSGS incentivizes the use of load reduction resources during extreme events. Next slide, please.

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1 As part of the Strategic Reliability Reserve, the 2 DSGS Program serves as one of the state's tools in 3 responding to unplanned extreme events taxing California's 4 electrical grid.

5 As established by AB 205, the program seeks to 6 achieve the following goals: Support grid reliability by 7 enhancing load capacity during extreme events, increase 8 visibility into resource capacity, and prioritize dispatch 9 of clean resources in times of need.

10 These goals benefit Californians by supporting 11 the reliability of our electrical grid providing 12 electricity to all Californians including our most 13 vulnerable. Next slide, please.

14 AB 205 was signed at the end of June 2022, and at 15 our August 10th Business Meeting, the CEC approved the 16 first edition of the DSGS Program guidelines launching the 17 first phase of the DSGS Program.

18 The first provider application was approved on 19 August 31st, the first day of the September heatwave. 20 Assembly Bill 209 also passed during this time, providing 21 for the DSGS Program to customers in investor owned utility 22 territories, as AB 205 originally limited the program to 23 publicly owned utility territory.

24 We worked hard to meet grid needs during the 25 September heat event, ultimately enrolling 315 megawatts to **CALIFORNIA REPORTING, LLC**

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be available during the extreme event. Resources were
 predominantly backup generation resources, but also
 included some demand response with the help from water
 agencies, universities, and other commercial customers.
 Next slide, please.

6 This year we have been working closely with a 7 wide array of stakeholders to identify lessons learned from 8 program implementation last year. We organized and 9 facilitated a workshop in January to get initial feedback 10 from stakeholders on summer 2022 implementation. And based 11 on that initial feedback, staff prepared draft modified 12 quidelines that were released for public comment and 13 discussed at a workshop in April.

14 We were very responsive to the extensive feedback 15 received from stakeholders, and so staff prepared revised 16 draft modified quidelines that were released for public 17 comment in June. The final proposed guidelines were posted 18 on July 21st ahead of today's business meeting. And if the 19 Energy Commission approves the guidelines, staff will 20 immediately launch phase 2 of the program's implementation. 21 Next slide, please.

There were many lessons learned from our summer 23 2022 launch and areas for strategic growth, which staff has 24 been working closely with stakeholders to incorporate into 25 revised guidelines.

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1 Staff recognizes the need to grow participation 2 from cleaner resources and that the program needs 3 flexibility to respond to unanticipated emergency events. 4 And given the speed at which we launched this program, our 5 administrative processes and communication were manual and 6 can be improved.

7 Additionally, the California ISO and California's
8 other balancing authorities and host utilities need
9 visibility into the anticipated load reduction. Next
10 slide, please.

11 To that end, the proposed modified guidelines 12 seek to bring on more clean resources with expanded 13 participation and streamlined processes. To help bring on 14 more cleaner resources, the proposed modified guidelines 15 dispatch cleaner resources earlier and expand participation 16 for cleaner resources with a new market-integrated demand 17 response incentive pilot, and a new market-aware battery 18 storage incentive pilot.

19 To limit the runtime of backup generators used in 20 the program, the guidelines also propose a new one-time 21 bonus incentive for remote controllable generation. To 22 expand and streamline participation, we are proposing 23 several changes.

Consistent with AB 209, the proposed guidelines
expand eligibility to certain IOU customers. As I

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1 mentioned previously, the program was initially -- after 2 the program was initially authorized, AB 209 expanded DSGS 3 eligibility to IOU territory with the requirement that 4 customers cannot be dual enrolled in similar programs.

5 CEC staff collaborated with colleagues at the 6 CPUC to identify specific use cases to target, with the 7 goal of bringing on cleaner resources, without 8 unintentional negative impacts to programs under the CPUC 9 jurisdiction.

10 To that end, the proposed guidelines expand 11 eligibility to customers participating with backup 12 generators; water agencies, which include water utilities, 13 wastewater facilities, and irrigation districts; and 14 customers participating in our newly proposed incentive 15 pilots.

16 The proposed guidelines also incorporate 17 aggregators as DSGS providers and allow for direct customer 18 enrollment in limited circumstances to help streamline the 19 process for participation.

20 Separate from the guideline process, we have also 21 contracted with Olivine Inc. as a third-party administrator 22 to help streamline and modernize our processes. Next 23 slide, please.

24 The proposed guidelines include three incentive 25 options. The first is an energy and standby payment option 26 CALIFORNIA REPORTING, LLC

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1 that is dispatched based on energy emergency alerts. This 2 option was available last summer and had 315 megawatts 3 enrolled. The guidelines include clarifying changes to 4 this incentive option, but the main structure and incentive 5 amount remains the same.

6 To help grow participation for clean resources, 7 the proposed modified quidelines also include two new 8 capacity-based incentive pilots. The capacity valuation 9 methods differ between the two options to reflect important 10 differences in the resource types, but the one shared 11 characteristic is in that both cases we are offering financial incentives for what we call "demonstrated 12 13 capacity." There is no upfront capacity payment. 14 Incentives are paid per megawatt after an evaluation of 15 performance.

16 The first pilot is for incremental market-17 integrated demand response, where the incentives would be 18 provided based on demonstrated capacity that is incremental 19 to existing resource adequacy commitments.

The second is for market-aware behind-the-meter battery storage. We are calling this a market-aware pathway, because events are defined by California ISO wholesale market prices but are not actually bid into the market. Next slide, please.

25 Load reduction resources enrolled in Incentive

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Option 1 are dispatched based on Energy Emergency Alerts,
 or EEAs, which are defined in the North American Electric
 Reliability Corporation's Reliability Standard.

4 When a balancing authority issues an EEA 1, it is 5 experiencing conditions where all available generation 6 resources are committed to meet firm load, firm 7 transactions, and reserve commitments, and is concerned 8 about sustaining its required contingency reserves. A 9 balancing authority issues an EEA 2 when it is no longer 10 able to provide its expected energy requirements and is energy deficient. And an energy deficient balancing 11 authority issues an EEA 3 when it is unable to meet minimum 12 13 contingency reserve requirements.

An EEA Watch is another alert used only by the California ISO and is issued when the ISO's analysis shows all available resources are committed or forecasted to be in use, and energy deficiencies are expected.

18 To bring on cleaner resources earlier, the 19 proposed guidelines dispatch non-combustion resources at an 20 EEA Watch level rather than an EEA 1.

The program will continue to dispatch combustion resources at an EEA 2 level, but to be able to accommodate unanticipated needs, the proposed guidelines enable combustion resources to dispatch at a lower EEA level if authorized by an Executive Order from the Governor. Next

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1 slide, please.

This process has truly been a team effort. And I would like to thank staff from the Chief Counsel's Office, and the advisors from Vice Chair Gunda's Office for their contributions and guidance. And I would also like to recognize and thank all of the stakeholders that have participated in this process.

8 The staff recommends the Energy Commission 9 approve the Second Edition of the Demand Side Grid Support 10 Program Guidelines and adopt staff's determination that 11 adoption of these guidelines is exempt from CEQA.

12 This concludes the staff's presentation, and I am 13 available to answer any questions you may have.

14 COMMISSIONER MCALLISTER: Thank you very much,15 Ashley. I appreciate that presentation, well done.

Madam Public Advisor, do we have any public comment?

18 MS. BADIE: Good morning. This is Mona Badie 19 again, the Public Advisor for the Energy Commission. We 20 will now take public comment on Item 5.

If you're in the room we ask that you use the QR code. And if you're on Zoom online, use the raise hand feature on your screen. And if you're joining by phone, please press *9 to notify us you'd like to make a comment. We're going to go to folks in the room first.

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I'm going to call your name and then please approach the
 podium. Make sure the green light is on for the mic, and
 state and spell your name for the record and any
 affiliation. Grace Pratt, you can approach the podium.

5 MS. PRATT: Okay, thank you. Sorry. Hi, 6 Commissioners. My name is Grace Pratt, G-R-A-C-E P-R-A-T-7 T, and I am here on behalf of Sunrun, the largest 8 residential solar and storage provider in California and 9 the US.

We are here firstly to thank staff for all their hard work, Ashley, Erik and others. It's been a true pleasure to collaborate with them. And we are really excited to see the CEC embrace new demand response models to unlock particularly the power of virtual power plants through option 3, the market aware option.

16 We also really appreciate that CEC will be 17 crediting full season participation in 2023, given that we 18 are in July. However, we are concerned that the current 19 option through payment levels do not reflect current market 20 conditions or align with other successful grid services 21 programs. In our written comments which we've submitted to 22 the docket, we've outlined the compensation levels that we 23 believe reflect the true costs of participating in the 24 program and those levels that would encourage customers to 25 participate.

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So we hope that the CEC will be able to revisit compensation levels as soon as possible. But generally, we do really thank the CEC for all their hard work and are excited to see these program guidelines get passed today. Thank you.

6 MS. BADIE: Thank you. Next, we have Meredith 7 Alexander. Meredith, when you approach the podium, can you 8 please spell your name for the record and state any 9 affiliation before beginning?

MS. ALEXANDER: Meredith, M-E-R-E-D-I-T-H, Alexander, A-L-E-X-A-N-D-E-R. I'm with Hua Nani Partners on behalf of Generac Power Systems.

13 Good morning, Commissioners. Thank you again for 14 the opportunity to comment on the DSGS modified guidelines, 15 and for all the work done by the staff on program 16 development. Generac really appreciates the significant 17 work and creativity that staff has put into this program 18 and the thoughtful incorporation of our feedback that are 19 reflected in the quidelines you're voting on today. 20 California will be in a stronger position in future grid 21 emergencies, because of the steps taken here to unlock 22 distributed energy resources as a key emergency response 23 solution.

24 Our comments on the proposed guidelines this year 25 include calls for program enhancements to Option 1,

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including expanding eligibility to all IOU customers
 including residential customers. Streamlining Option 2 to
 ensure greater ability to predict the revenue, and
 increased compensation under Option 1 and 3.

5 We see many of our recommendations reflected in 6 the final guidelines. And although our comments supported 7 making additional improvements to DSGS implementation, 8 Generac is pleased to support the program as it has been 9 much improved over the course of this process. And we look 10 forward to enrolling our diverse commercial and residential 11 customers and DSGS immediately to support the grid this 12 summer. Your staff has been extremely responsive to our 13 questions and suggestions.

As the CEC implements this new program, we do urge you to continue working with stakeholders to evolve it following this summer's experience and outcomes. The full potential to ensure grid reliability and resiliency could be realized next summer with continued expansion and consideration of initial program results and stakeholder feedback and ideas.

21 We look forward to continued engagement with the 22 CEC to expand the ability of the DERs to support 23 California's grid and prevent future grid emergencies.

24 Thank you again for your time.

25 MS. BADIE: Thank you.

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Next in the room, we have Erik Lyon.

1

25

2 MR. LYON: Hello, my name is Erik Lyon, E-R-I-K 3 L-Y-O-N, Advisor to Vice Chair Gunda here at the California 4 Energy Commission. We're doing something a little 5 different here today.

I've been working closely with the staff team on
the DSGS Program development and guidelines. And I would
like to read the following statement by the Vice Chair,
because he is unable to attend.

10 "I'm writing to communicate my support for the 11 demand side grid support guidelines considered in today's 12 business meeting. I would like to start by giving a huge 13 thanks to the DSGS Program team in the Reliability, 14 Renewable and Decarbonization Incentives Division as well 15 as the Chief Counsel's Office including Deana Carrillo, 16 Ashley Emery, Payam Narvand, Guadalupe Corona and Erik 17 Lyon; as well as our colleagues from the CPUC and the 18 California ISO for collaborating with us and supporting our 19 efforts.

20 "Maintaining electric system reliability is of 21 critical importance as California transitions to a clean 22 energy future. Demand flexibility has a vital role to play 23 in contributing to grid reliability and reducing both 24 greenhouse gas emissions and local pollution.

> "Last summer, DSGS was stood up in record time CALIFORNIA REPORTING, LLC 229 Napa Street, Rodeo, California 94572 (510) 224-4476

1 and provided hundreds of megawatts in support during the 2 historic September heat wave. While these generators were 3 critical to maintaining reliability last summer, it is 4 essential that the state expand opportunities for clean 5 demand flexibility resources moving forward.

6 "With the guidelines considered for adoption 7 today, we are planning to pilot new programs to increase 8 the impacts of our existing supply side demand response 9 resources and to allow behind- the-meter batteries to 10 participate in a new way that maximizes their contribution 11 to reliability. Following adoption of the updated DSGS 12 quidelines, these resources can begin participating very 13 shortly and will contribute to reliability without 14 increasing pollution over the coming years. Our goal is 15 for these new classes of resources to reduce the reliance 16 on polluting backup generators.

17 "DSGS, and its sister program, the Distributed 18 Electricity Backup Assets Program, represent a downpayment 19 towards meeting our state's load flexibility goal of 7,000 20 megawatts by 2030. The new DSGS guidelines represent an 21 enormous opportunity to contribute to reliability with 22 clean resources in the short term and to test new policies 23 to support those resources in the long term.

24 "I encourage the CEC Commissioners attending25 today's meeting to vote to adopt the DSGS guidelines.

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1 Thank you."

2 COMMISSIONER MCALLISTER: Thanks, Erik.3 Any other comments?

MS. BADIE: Okay, we'll now move to Zoom. And this is the time for public comment for Item 5, the DSGS Program. I'll go to raised hands online. Nikola Lakic, I'm going to open your line. Please announce your name and affiliation and limit your comments to two minutes.

9 MR. LAKIC: Hello again. On Item 5, it's a side 10 grid support -- and we are talking about clean resources. 11 That's great. I just want to remind the Commissioners and 12 all stakeholders that my system for harnessing solar 13 energy, which I'm using into my architectural plan for 14 restoration of the Salton Sea, can be used from San Diego 15 to Vancouver, to all coastal cities. And taking salty 16 water using solar energy, producing electricity and 17 byproduct -- free byproducts, potable water, and 18 concentrated brine that can be collected and used for 19 extraction of lithium.

20 So the same system that I'm using for proposing 21 for Salton Sea also can have many, many different 22 applications. And again, it is reducing a greenhouse 23 effect. It's not combustion at all. It's just a steam. 24 Its system is several times more powerful than 25 photovoltaic, so little bit thicker panels.

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And again, I just want to let Commissioners know that that exists. And it's again -- I'm emphasizing the importance of accepting my proposal for the restoration of the Salton Sea, because it has huge purpose and many applications on different locations. And again, I see there is 20 seconds. But thank you very much.

7 On this item I will maybe comment something. I'm 8 saying this, because I doubt that any of you studied my 9 work. It's a comprehensive design that needs two or three 10 weeks of reading, and if I'm invited, well then maybe a few 11 hours one afternoon. But that didn't happen. So I will 12 use opportunities like these few minutes and things to say. 13 Okay, but thank you very much for this opportunity.

14 MS. BADIE: Thank you.

15 Next, we have Kate Unger. Kate, I'm going to 16 open your line. Please limit your comments to two minutes 17 or less and please spell your name for the record and state 18 any affiliation. You may begin.

MS. UNGER: Yes, thank you. It's Kate Unger, KA-T-E U-N-G-E-R, with the California Solar and Storage
Association. We want to thank the Energy Commission for
your leadership in our efforts toward making the grid of
the future clean, sustainable, reliable, and resilient.
The CEC has embraced an innovative approach to
the Demand Side Grid Support Program by using it to develop
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1 pioneering new pathways that are focused on distributed 2 energy resources including battery energy storage. And we support approval of the guidelines second edition. 3

4 The future grid is going to be more distributed 5 and networked with demand and supply both flexing to meet 6 each other and with control dispersed across the system. 7 Council member companies are committed to being a useful 8 part of the future grid.

9 We submitted a proposal earlier this year for a 10 behind-the-meter storage pathway combining DSGS and the Distributed Electricity Backup Assets Program. And we were 11 12 very happy that the revised guidelines included Option 3 13 for battery virtual power plants. That option has many 14 inventive elements, and we expect it to show that a market 15 aware approach is viable and valuable. We also appreciate 16 refinements to Option 1, work on Option 2, and the ability 17 for aggregators to serve as DSGS providers.

18 We know of course that program development 19 involves balancing many considerations and interests and we 20 look forward to keep working together with the CEC and 21 other parties evaluating this summer's outcomes considering 22 program refinements for future guidelines.

23 I want to particularly recognize the CEC staff 24 members who work long and hard on the program design. Erik 25 Lyon was one of them, and he mentioned the others. They

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are all a real pleasure to work with and we're grateful for
 their dedication to making DSGS work well.

Our members are really looking forward to participating, getting started this summer, working together with LSCs to make the program a success and a key part of our state strategy to create a clean and reliable energy system. Thank you.

8 MS. BADIE: Thank you.

9 Next, we have Clark McIsaac. Clark, I'm going to 10 open your line. Please spell your name for the record and 11 state any affiliation. Please limit your comments to two 12 minutes.

MR. MCISAAC: Good morning. My name is Clark
McIsaac. That's C-L-A-R-K M-C-I-S-A-A-C. I'm with the
California Efficiency and Demand Management Council.

16 I'd first like to thank the Energy Commission 17 staff for their thoughtful and diligent efforts in crafting 18 program improvements to better the DSGS and to expand 19 eligibility and access to the program. The Council sees 20 expanding program eligibility and improving participation 21 opportunities as being not only statutory requirements, but 22 also key aspects to the delivery of grid emissions customer 23 and cost benefits from demand side resources through the 24 DSGS. I'd also like to thank the Commissioners for their 25 leadership in this effort.

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1 The Council appreciates the draft revised 2 guidelines and that they incorporate many of our 3 recommendations, be it directly or in spirit. We also see 4 substantial value as others have voiced so far. But in 5 returning to the table, as soon as is reasonable and 6 appropriate following the summer, to continue refining and 7 improving the DSGS.

8 The Council has several specific recommendations 9 we hope to incorporate into that process, but we'll point 10 to our recent comments, rather than run through them here. 11 I'll keep it short and just again, express the Council's 12 appreciation. And we look forward to continue working to 13 improve this program and the benefits that can be delivered 14 towards customers across the state. Thank you.

15 MS. BADIE: Thank you.

Next, we have Cliff Staton. Cliff, I'm going to open your line. Please state and spell your name for the record and state any affiliation you have. Please limit your comments to two minutes or less. I'm going to open your line.

21 MR. STATON: Yeah, hi. It's Cliff Staton, C-L-I22 F-F, last name is S-T-A-T-O-N, and I'm the Head of
23 Government Affairs with OhmConnect.

And I just, really like others, wanted to commend the Commission and especially the staff for running a

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really open and thorough stakeholder process in developing
 these guidelines for the DSGS Program.

We see DSGS as an extremely important program to allow third-party DR to improve grid reliability. And so we just urge the Commission to approve the guidelines today, so that the program can be in place this summer to support grid reliability. So thanks.

8 MS. BADIE: Thank you.

9 Next, we have Andrew Cole. Andrew, I'm going to 10 open your line. Please spell your name for the record, 11 state any affiliation, and limit your comments to two 12 minutes or less.

MR. COLE: Hello, my name is Andrew Cole. That is A-N-D-R-E-W C-O-L-E. I am here speaking on behalf of Leap.

16 Good morning, Commissioners. Thank you again for 17 the opportunity to speak this morning. I'll attempt to 18 keep my comments brief. I'd like to start off much like 19 many others by thanking CEC staff for the work and effort 20 put into developing the proposed guidelines we're reviewing 21 here today. Staff have been very responsive and sought 22 stakeholder feedback throughout the past year for which I'm 23 very thankful.

24 Leap is appreciative of the changes that have 25 been implemented throughout the various iterations of the CALIFORNIA REPORTING, LLC

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1 guidelines and looks forward to engaging with the CEC as 2 soon as it's appropriate on further modifications and 3 expansion of the program for 2024. 4 Leap has been working over the past few months to 5 be prepared to launch the DSGS Program and participate 6 distributed energy resources for summer 2023. 7 Leap strongly encourages the Commissioners to 8 adopt the proposed quidelines today so that we may all 9 begin participating and providing much needed grid support 10 this summer. Thank you. 11 MS. BADIE: Thank you. That concludes public 12 Back to you, Commissioner McAllister. comment. 13 COMMISSIONER MCALLISTER: Great, thank you, Madam 14 Public Advisor. 15 I wanted to open it up to Commissioner 16 discussion, Commissioner Monahan.

17 COMMISSIONER MONAHAN: Well, first, I want to 18 just heap praise on to the team. I mean, this project was 19 -- DSGS was rolled out in record time last summer to help 20 with the crisis that we were facing in terms of energy 21 reliability. So first, the team stepped up in just 22 delivering a program that actually delivered energy when we 23 needed it last summer. And now I just love the fact that 24 you're incorporating lessons learned and really evolving 25 the program to -- now that we have a little more time to

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1 think through what we need.

I actually forgot to ask you a question when you gave the briefing, so I hope this isn't coming out of left field. But I'm wondering if you can talk about your vision for the program in terms of integrating electric vehicles, whether it be through demand response or through actually providing energy back to the grid through V2G.

8 MS. EMERY: Yeah, I might ask Erik if he has any9 comments.

10 MR. LYON: We don't have a specific pathway for 11 electric vehicles or V2G at this point. It's possible that 12 they could participate. Really I mean there's a couple of 13 different pathways they could go through. I think the most 14 likely would be the Option 2 for demand response. At this 15 point, that seems like the most viable pathway. You know, 16 if folks are charging on most days to be able to manage 17 that charging and stop charging on critical event days.

18 That said, there could be ways for them to 19 participate through other pathways in the future. I think 20 we're going to need to kind of dig into that one a little 21 bit more.

COMMISSIONER MONAHAN: Thanks, Erik. And thanks for your leadership role in this, and especially developing all those acronyms and titles that describe everything. I would just encourage the team to use the next

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1 year or so to evaluate more deeply how electric
2 transportation could be incorporated into DSGS. I think
3 there's a lot of opportunity, a lot of obstacles as well.
4 But it's worth thinking through in these early days, so
5 that as we get more and more electric vehicles on the grid,
6 we already have a program kind of ready for that.

7 COMMISSIONER MCALLISTER: Thank you,
8 Commissioner.

9 Commissioner Gallardo.

10 COMMISSIONER GALLARDO: I also want to 11 congratulate both Vice Chair Gunda and Deana Carrillo, for 12 their leadership on this program, and their teamwork. And 13 Ashley, you did a fantastic job presenting, giving us a lot 14 of information here.

I do have a few questions. My first one is, and I apologize, I'm trying to wrap my head around how it all works. But one of the things that is standing out is who does the alerts go to when those EEA, you know, EEA 1, 2, whatever, who are they going to? What's the audience?

20 MS. EMERY: So the California ISO's energy 21 emergency alerts. You can download an app on your phone. 22 You can sign up for emails, it's anyone can do that. But 23 we do have our third-party administrator, Olivine, 24 monitoring that as well. And so when we learn of those 25 alerts then we would send out emails or text messages,

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depending on how they signed up, to our direct participants
 and the providers so that they can know when to dispatch.

3 COMMISSIONER GALLARDO: Okay, thank you for that 4 clarification, so it's voluntary. So if you've volunteered 5 to sign up, then you're getting them. But if not, then 6 you're not aware. I would love for us to get to a point 7 where everybody could be aware of what the situation is, 8 and to be able to have that opportunity to take 9 responsibility and help out as needed. Okay.

10 And then the other thing is I also appreciate how 11 much you worked with the public and participants of the 12 program to improve the program and taking all that into the 13 guidelines. And I'm curious, because I did hear a question 14 from Sunrun about revisiting compensation for Option 3. 15 I'm wondering if you have a plan for assessing again, the 16 program. And I apologize if I missed that. But I would 17 appreciate hearing more about that.

MS. EMERY: Yes, it is in the guidelines that we
will revisit after the end of this season to determine
effectiveness and determine what changes might be needed.
COMMISSIONER GALLARDO: Okay. And what's the end

22 of the season?

MS. EMERY: It goes through October 31st.
 COMMISSIONER GALLARDO: October 31st, okay.
 Great. That's wonderful. So I think it's a great example

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of how public agencies, how we're serving Californians, and
 then enabling Californians to work with us to make things
 better. And so I'm really proud of this program. Thank
 you.

5 COMMISSIONER MCALLISTER: Thank you, 6 Commissioner. I also wanted to heap on the praise. I did 7 have a question first for you, Ashley. Just building on a 8 little bit the last question from Commissioner Gallardo. 9 Could you describe sort of the guidelines update process? 10 And we were hearing sort of, "It's great, but we'd like to 11 see this or that direction." And just there is a formal 12 process and could you just sort of walk us through what 13 that looks like?

MS. EMERY: Yeah. So after we went through last 14 15 summer, we started processing reimbursements for the 16 incentives. We were already getting informal feedback from 17 stakeholders and getting a general idea of lessons learned. 18 And so in January, we held our first public workshop to 19 just get initial thoughts and feedback on potential 20 changes. What went well, what didn't, last year. And we 21 knew launching phase one there were goals that we had such 22 as incorporating aggregators and DSGS providers, expanding 23 participation options for the clean resources.

24 We just didn't have time to think those through 25 and so that was another thing that we sought feedback on.

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1 So we held the workshop and written comment period to get 2 some initial feedback. From there we drafted some revised 3 mock guidelines that went out in April for a public comment 4 period, and we held a workshop on those as well. And so we 5 took into that feedback, and prepared a second draft 6 modified guidelines that went out again for public 7 comments. And so we took in that public comment and have 8 the final guidelines before you.

9 But even then we also were reaching out to 10 stakeholders with questions, and just making sure that 11 we're diving in, understanding the comments and needs. And 12 so yeah, it was a very iterative process.

13 COMMISSIONER MCALLISTER: So going forward, you
14 anticipate doing something similar --

15 MS. EMERY: Yes.

25

16 COMMISSIONER MCALLISTER: -- as the pilots unfold
17 and we get real, more experience with that? Okay, great.

18 MS. EMERY: Absolutely.

19 COMMISSIONER MCALLISTER: Great, well, thanks.
20 Thanks for that detail. I just want to reiterate the
21 thanks to the team. And certainly to the commenters as
22 well for your engagement and your comments today, really
23 appreciate that, that positive feedback and suggestions for
24 how we can keep improving the program.

I want to just really acknowledge leadership of **CALIFORNIA REPORTING, LLC**

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Vice Chair Gunda on this, and Deana Carrillo, leading the
 Division. Just that the openness to new ideas and
 innovation just comes from the top, so I really, really
 appreciate that.

5 This is a big deal. We need all the resources we 6 Last summer we got a few hundred megawatts, which can get. 7 is great, but the potential is so much more. And we've 8 seen that with some of the same team, and with Erik's leadership as well on the development of the load flex 9 10 goal, 7,000 megawatts by 2030. So these programs are going 11 to really inform what that -- the pathway to that much 12 larger goal looks like.

13 And so I think there's just so much value in bringing technology, bringing market awareness. And the 14 15 market aware and market informed pilots, I think are going 16 to really define the pathway forward for a lot of great 17 resources. And just the behind-the-meter engagement, the 18 potential for lots of different distributed energy 19 approaches, really excited about that and seeing where it 20 qoes.

I wanted to also point out that the Commission is doing a lot of sort of infrastructure building and platform building for these kinds of efforts, load management standards, which is not exactly sort of dispatchable DR as much, but is more sort of permanent load shifting

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1 approaches, the flexible demand appliance standards. We
2 can have millions of appliances out there in a few years
3 that have native load flexibility that can be called under
4 one of these programs. For example, behind-the-meter not
5 just batteries.

6 So I think I just would also highlight yesterday 7 we had an EEA Watch. And it was cleared at the end of the 8 evening, but we are in the middle of summer. And we really 9 need these resources quickly. So I just want to highlight 10 the engagement of all of our staff, and really the whole 11 Commission, on bringing new resources to bear to really 12 solve our critical capacity problems in these peak moments.

Also just, I think it's really important, Vice
Chair Gunda's statement highlighted this, but the
collaboration with the PUC on this around ELRP and making
sure we're not duplicating efforts but really complementing
efforts.

And with the CAISO when this plays out, when we do have a really crunch time, the relationships that you've developed and this sort of information exchange in real time is going to help all this happen seamlessly. And that that collaboration and coordination is critical, as they run the grid in real time.

24So with that just thanks to Erik and Ashley, you25both. And I wanted to just thank a few more people here.

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1 Payam Narvand and Guadalupe Corona and Michael Sidhu, and 2 really the whole the rest of the DSGS team who've really 3 been supporting this and working behind the scenes, and 4 under Vice Chair Gunda's direction. So really appreciate 5 everyone's effort on this and I'm looking forward to 6 scaling up these resources. 7 So with that, I'd ask for if no more comments I'd 8 ask for a motion. 9 COMMISSIONER MONAHAN: I move to approve this 10 item. 11 COMMISSIONER GALLARDO: I second. 12 COMMISSIONER MCALLISTER: And I will go for a 13 vote. Commissioner Monahan. 14 COMMISSIONER MONAHAN: Aye. 15 COMMISSIONER MCALLISTER: Commissioner Gallardo. 16 COMMISSIONER GALLARDO: Aye. 17 COMMISSIONER MCALLISTER: And I vote aye, as 18 well. So this Item passes 3-0. Thanks very much. 19 MS. EMERGY Thank you. 20 COMMISSIONER MCALLISTER: I appreciate it. Okay, 21 well moving on to Item 6, California Department of 22 Transportation, Caltrans. 23 MR. DE ALBA: Good morning, Commissioners. My 24 name is Ben De Alba and I work in the Fuels and 25 Transportation Division. And I'm joined by Jimmy O'Dea who 49 **CALIFORNIA REPORTING, LLC**

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is the Assistant Deputy Director for Transportation
 Electrification at Caltrans.

The Item before you pertains to an interagency agreement between Caltrans and the Energy Commission for the implementation of the National Electric Vehicle Infrastructure Program, also referred to as the NEVI Program.

8 I'm pleased to present this agreement to you 9 today for approval, because it officially makes the Energy 10 Commission the administrator of the NEVI Program for 11 California. It also reflects the diligent efforts of 12 individuals at the Commission, Caltrans, and the Federal 13 Highway Administration. A lot of work went into this 14 agreement to get it to here today.

Before I dive into the importance and purpose of this interagency agreement I want to first give a brief overview of the NEVI Program. Next slide, please.

18 The NEVI Program is a \$5 billion formula program 19 that was established under the Infrastructure Investment 20 and Jobs Act of 2021. Through the formula California will 21 receive approximately \$384 million over the course of five 22 years.

23 To maintain eligibility, California must submit a 24 deployment plan to the Federal Highway Administration and 25 the US Joint Office of Energy and Transportation every

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year. We received federal approval for our first plan in
 September 2022. I want to emphasize that our 2022 plan
 received extensive stakeholder input from a wide range of
 interested parties. And the Energy Commission is
 implementing this program in partnership with Caltrans.
 Next slide.

7 The primary objective of the NEVI Program is to 8 deploy a nationwide network of DC fast charging stations. 9 California will use the NEVI Program to deploy DC fast 10 charging stations along approximately 6,600 miles of 11 interstates, US routes, and state routes within the state.

12 The NEVI Program requires that at least four fast 13 chargers be installed every 50 miles or less. Moreover, 14 the NEVI Program emphasizes equity and inclusion. Fifty 15 percent of the chargers must be located in disadvantaged 16 communities or low-income communities, while 40 percent 17 should be situated in Justice40 communities.

18 We expect the first round of NEVI-funded stations 19 to begin construction in late 2024, early 2025. Next 20 slide, please.

The importance and purpose of this agreement can be summed up simply. It formalizes the partnership between Caltrans and the Energy Commission and outlines the roles of each agency in implementing California's NEVI Program. Most importantly, it assigns the responsibility of

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administering NEVI formula funds to the Energy Commission
 throughout the program's duration. Next slide, please.

3 The scope of work outlined in the agreement aims 4 to maintain California's eligibility for NEVI formula funds 5 and ensure the efficient management of those federal 6 dollars.

7 There are four main tasks to do just that. The 8 first task is to annually update the California's NEVI 9 Deployment Plan, as required by the Federal Highway 10 Administration and the US Joint Office of Energy and 11 Transportation in order for the state to receive formula 12 funds. The second is to designate Alternative Fuel 13 Corridors. The third is to develop and oversee NEVI 14 funding opportunities for awarding NEVI formula funds. And 15 finally, the last task is to develop and manage NEVI 16 projects.

While the Energy Commission takes the lead in administering the NEVI Program, the interagency agreement emphasizes close collaboration between Caltrans and the Commission to ensure the program's success.

The estimated cost for the Energy Commission to administer the NEVI Program over the next decade is \$10 million. Approximately 80 percent of these costs are eligible for reimbursement from the NEVI Program. And the Energy Commission will contribute approximately 2 million

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1 to fulfill the 20 percent non-federal match requirement.
2 Next slide.

3 California is poised to enjoy significant 4 advantages from this newly established federal program. 5 The NEVI formula program aims to establish a consistent and 6 dependable network of fast chargers across the state. 7 In the process the program will generate well-8 paying jobs, boost the state's EV charging manufacturing 9 sector, and ultimately facilitate broader adoption of zero 10 emission vehicles by expanding charging infrastructure 11 thereby reducing emissions. Next slide. 12 Staff recommends that the Commission approve the 13 interagency agreement with Caltrans, approve the 2,004,358 14 in match funding for admin expenses, and adopt staff's CEQA 15 findings that this agreement is exempt from CEQA. Thank 16 you. 17 And at this time, I want to ask Jimmy O'Dea to 18 come to the podium. 19 MR. O'DEA: Good morning, Commissioners. Jimmy 20 O'Dea, and it's great to be here representing Caltrans in 21 this interagency agreement. Just three quick points to add 22 on to what Ben said. 23 First, how grateful we are to partner with the

24 Energy Commission on this program. We consider the Energy 25 Commission to be a national and global leader in

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1 administering charging programs and administering these 2 funds. And that leadership has really been evident in the 3 many meetings and documents that we've exchanged back and 4 forth over the last several months in crafting this 5 interagency agreement.

6 Second, to say that at Caltrans we stand 7 committed to share our expertise in administering federal 8 transportation funds as our role in this partnership. 9 There's a lot of nuances and requirements associated with 10 federal funding and that's where our expertise can come in. 11 We're very happy to provide that to this partnership.

12 And third, to say that the relationships that 13 we've developed through this interagency agreement are 14 already bearing fruit in other projects. Namely, an 15 application that Caltrans and Energy Commission submitted 16 to a federal discretionary grant program, alongside Oregon 17 DOT, Washington DOT, for charging for trucks and hydro 18 fueling for trucks in our three states. And I can say 19 without a doubt, that application probably wouldn't have 20 gotten off the ground, let alone be I think, a really 21 strong application, if we didn't have this relationship 22 from the NEVI Program.

23 So we look forward to working together, to the 24 success of this program. And continue to work together 25 outside of NEVI, because there's a lot of work where we

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1 overlap. Thanks for having me.

2 COMMISSIONER MCALLISTER: Thanks very much for 3 your comment. Appreciate your being here, and the 4 partnership.

5 Any other -- any public comment, Madam Advisor? 6 MS. BADIE: Yes. Hello. This is Mona Badie, the 7 Public Advisor. The Commission now welcomes public comment 8 on Item 6. This is only for Item 6, so if you have 9 comments for informational or items not on the agenda, we 10 ask that you use the public comment period at the next 11 business meeting. That would be the next open public 12 comment period.

All right, and for folks in the room we're asking you to use the QR code. And if you're on Zoom, please use the raise hand feature or *9 via phone. There's no one in the room. Now moving on to Zoom. Nicola Lakic. I'm going to open your line, please limit your comments to two minutes or less. And please limit your comment to items related to this NEVI Program, Item 6 on the agenda.

20 MR. LAKIC: Thank you very much for this, another 21 opportunity to say a few words. Regarding Item number 6, 22 Department of Transportation, Caltrans.

23 Today, the argument against electric car charging 24 stations was, well we're going to review it while you're 25 using at your home again, or stations, you're using burning 55

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power plant, nuclear power plant, coal burning power plant, energy produced. Well not anymore. With implementation of my system for harnessing solar energy, that argument is not going to be valid anymore.

5 I can produce a substantial amount of energy from 6 the sun, and we can use any recharging stations with the 7 panels. Again, they are like posts like when you see those 8 reflector lights at a baseball game. You know, each corner 9 has five at night, on night games, something similar. I**′**m 10 using concentrated solar energy and I'm using (indiscernible) system. It's several times more powerful 11 12 than photovoltaic, so that can be incorporated in every

13 station 50 miles apart.

14 Again, this is a system that I'm using Salton Sea 15 for a decent organization of the Salton Sea. But again, it 16 has multi, multi applications. So I just want to emphasize 17 the importance of the project for restoration of the Salton 18 Sea that can be used in many, many different applications. 19 And again, thank you very much. I just want to tell the 20 Commissioners to be aware of it, and all stakeholders. I 21 could be reached by my -- well 22 nlakic@geothermalworldwide.com. And please read my

23 proposal, it's substantial material. Thank you.

24 MS. BADIE: Thank you.

25 That concludes public comment for Item 6. Back

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1 to you, Commissioner McAllister.

2 COMMISSIONER MCALLISTER: Thank you, Madam Public
3 Advisor.

So we'll open it up for Commissioner comments,starting with Commissioner Monahan.

6 COMMISSIONER MONAHAN: Well first, I want to 7 congratulate Ben for his leadership. He really has taken 8 this by the mantle. And it's been complicated. So I mean, 9 this is the first time ever that there has been this kind 10 of relationship between Caltrans and the Energy Commission. 11 And the first time we've had the Department of

12 Transportation providing money for infrastructure.

13 So there's been sort of transformational changes 14 happening at the national level that has led to, I think, 15 transformational changes here at the local level. And it's 16 been, I would just say, hard I know, for both agencies to 17 kind of figure out, how do we do this? How do we make it 18 legally circumspect? How do we make it so that it works? 19 We can actually, like, run with this money.

And I just want to say, you know, both Ben, and I mean the leadership at Caltrans has just been extraordinary. Jimmy and Tony, the Director. And so just it's amazing to see how far we've come.

I also want to put -- I put a list of all the folks that have been involved in the federal application.

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And you could see there's just too many names to read. So
 I would just say, you know, it's taken cross a cross departmental engagement. Mostly it's the Fuels and
 Transportation Division, but others have been involved.
 CCO has been really critical in many aspects of this, my
 team has gotten engaged, it's just been kind of an all
 hands on deck.

8 And this charging and fueling infrastructure, 9 from what I've been hearing is like that one was crazy. 10 Like the turnaround was crazy. The teams had to work 11 really hard. It's cross state. That takes a lot of work 12 to pull together this application. And so just whatever 13 happens with that I just want to acknowledge that it was a 14 ton of work, and took a lot of leadership and creativity to 15 make this happen.

16 So this project is really focusing on light duty. 17 The charging and fueling infrastructure project is focusing 18 on medium and heavy duty of both charging and hydrogen 19 infrastructure. So just really a lot of creativity has 20 gone into this. And I just want to thank all the folks at 21 the Energy Commission that have taken a leadership role in 22 this. And as well as our Deputy Executive Director, even 23 though she doesn't like to take any credit for anything. 24 So yeah, I strongly support this and look forward 25 to the monies rolling in over the next five years. It's a

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1 five-year program. And so we're going to be going through 2 some iteration every year.

3 COMMISSIONER MCALLISTER: Great, thank you.4 Commissioner Gallardo.

5 COMMISSIONER GALLARDO: Thank you. I want to say 6 congratulations to Commissioner Monahan too, for her 7 inspiration and commitment to always do things well and 8 better and for our California communities.

9 And on that note, Ben, thank you so much for the 10 great presentation. I was curious about the public 11 engagement process. And I know that we talked to the 12 Disadvantaged Communities Advisory Group early on about the 13 NEVI possibility. And I was just curious, you know, what 14 else has been done and what you're thinking about for 15 moving forward? And then I have a second question, too. 16 I'll let you tackle that one first.

17 MR. DE ALBA: Yeah, no, great, thank you. So as I mentioned in my remarks we had our first deployment plan 18 19 that was approved by the federal government last year. And 20 through that process, we're required to do a public 21 engagement sort of plan. And through that plan we worked 22 with DACAG, as you pointed out. And we have since -- and 23 we're going to do that every year as part of developing the 24 deployment plan. In fact, just recently we went back to 25 the DACAG last week and brought this update plan before

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them and including the continued dialogue on the
 discretionary grant application that we put forward.

3 So we have a plan to continue to engage the 4 public. We're going to do that through our usual means of 5 Zoom and make it accessible for anybody who wants to attend 6 and incorporate the public feedback into the deployment 7 plan every year.

8 Now, as far as the solicitations go, we're going 9 to use the energy Commission's public engagement process 10 for developing those solicitations where we see input on 11 the draft sort of framework of the solicitation, and then 12 continuing to engage the public through our open dockets 13 and receive comments that way, as well.

14 COMMISSIONER GALLARDO: All right, thank you for 15 that. And then you also mentioned -- well, one I'm really 16 excited about this for myself. But I also think it's 17 really great that there's a focus on low-income 18 communities, disadvantaged communities, justice 19 communities. And you mentioned that 50 percent will be 20 located in disadvantaged communities in low-income 21 communities. So that's kind of like a California 22 designation. Whereas 40 percent will be in Justice40 23 communities, which is a federal designation. Can you 24 explain what the difference is if there's a lot of variance 25 there?

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1 MR. DE ALBA: Yeah. So it's really exciting that 2 we're, as a state we're able to use our own policies and sort of meld that into a federal program. And like you 3 4 mentioned the 40 percent for the Justice40 communities is a 5 federal requirement of the program. And then we're laying 6 on top our own clean transportation program policy of 7 deploying our infrastructure to benefit at least 50percent 8 of the communities in the state.

9 And while it's the terms of benefit differs from 10 the federal and the state, we are certainly going to make 11 sure that we fulfill the requirements of the federal 12 government, which has still yet to be fully defined of how 13 to benefit a Justice40 community with an EV charging 14 station. But we look forward to more quidance from the 15 federal government on that going forward. And yeah, so 16 it's going to be a requirement in our application process, 17 for applicants to explain how they're going to benefit, 18 reach those goals, and we will score appropriately.

COMMISSIONER GALLARDO: Okay, thank you. I would
 love to learn more. So maybe I can connect with you after.
 MR. DE ALBA: Yeah, absolutely.

COMMISSIONER MCALLISTER: Great. Well, thank you. I will just pile on and say thanks, Ben and the whole team. And Commissioner Monahan, for all of your leadership on all things transportation, but certainly how best to

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utilize federal monies. And we're really looking forward
 to seeing the impact of these monies.

3 And I know that in conversations with the other 4 states about all the IIJ and IRA monies that are going to 5 be coming to the states, that NEVI is really front and 6 center. It's a huge -- making a huge splash really 7 nationwide. And it's great that we can provide this 8 leadership, and a model for some of the other states 9 potentially, on interagency collaboration. So with that, 10 can I ask for a motion? 11 COMMISSIONER MONAHAN: I move to approve this 12 item. 13 COMMISSIONER GALLARDO: I second. 14 COMMISSIONER MCALLISTER: All in favor. 15 Commissioner Monahan. 16 COMMISSIONER MONAHAN: Aye. 17 COMMISSIONER MCALLISTER: Commissioner Gallardo. 18 COMMISSIONER GALLARDO: Aye. 19 COMMISSIONER MCALLISTER: And I vote aye, as 20 well, on this item. The item passes 3-0. Thank you very much, Ben. 21 22 Okay, moving on to Item 7. 23 MR. NGUYEN: Hello. 24 COMMISSIONER MCALLISTER: Hold on. Oh, sorry. 25 Let me just read the item, GILLIG LLC. All right, Hieu.

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1 MR. NGUYEN: Good morning, Commissioners. My 2 name is Hieu Nguyen, Staff with the Fields and 3 Transportation Division. Staff is seeking approval for our 4 project with GILLIG LLC in Livermore, California, which is 5 being proposed for funding under the Zero Emission 6 Transportation Manufacturing Solicitation. Next slide. 7 As of the March 2023 Notice of Proposed Awards, 8 13 projects are recommended for funding under this 9 solicitation for a total of \$198 million. This is the 11th

10 of 13 projects being proposed for funding under this 11 solicitation, with the last 2 to be proposed at future 12 meetings.

13Today's proposal award up for your approval for14\$29 million represents the second largest award15recommendation from this solicitation. Next slide.

16 The proposed agreement is with GILLIG LLC. 17 GILLIG is proposing to expand manufacturing and assembly of 18 their zero-emission bus in Livermore, California. As part 19 of this expansion, GILLIG will design and construct an on-20 site battery storage facility, expand existing office 21 spaces, and update on-site zero emission vehicle bus 22 testing equipment.

23 This agreement will enable GILLIG, with support 24 from the CEC, to procure the advanced manufacturing 25 equipment and resources necessary to expand zero emission CALIFORNIA REPORTING, LLC

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1 bus manufacturing to 15 buses a week. The proposed award 2 for this project is nearly \$30 million with match funds 3 of over \$35 million. Next slide.

4 If the GILLIG agreement is approved, the project 5 will achieve GILLIG's goal to retain and expand in-state 6 manufacturing of ZEV buses in California. This project 7 will directly support pre-production of GILLIG's third 8 generation battery electric bus.

9 When fully operational, this project will 10 manufacture 780 buses a year by 2026. That willhelp 11 displace over 80,000 tons of Greenhouse Gas emissions 12 annually, while creating approximately 29 high-quality 13 manufacturing jobs in Livermore and the surrounding areas. 14 Next slide.

15 Today staff is seeking your approval for this 16 agreement as well as adoption of staff's CEQA findings for 17 this project. Findings that were based on the lead agency 18 City of Livermore's Environmental Impact Report, which 19 included mitigation measures which was adopted and filed by 20 the City on March 23, 2004. And the City's subsequent 21 Conditional Use Permit 14-006 and Site Plan Design Review 22 14-018 adopted and filed on March 10, 2015. Add the City's 23 Site Plan Design Review Modification 23-015 adopted and 24 filed on June 2nd, 2023, that work under the project 25 presents not new or substantially more severe environmental

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1 impacts beyond those already considered and mitigated

2 We have Derek Maunus from GILLIG in attendance 3 via Zoom who will be happy to answer any questions. This 4 is the end of my presentation, and I am happy to answer any 5 guestions you may have. Thank you.

6 COMMISSIONER MCALLISTER: Thank you, Hieu. 7 Let's hear from the representative online. 8 MS. BADIE: I think the recipient's there to 9 answer questions, but I can move to public comment next. 10 COMMSSIONER MCALLISTER: Okay, public comment. 11 MS. BADIE: Great. Now's the time where if 12 there's anyone interested in making public comment for Item 13 7 we welcome you to notify us. If you are in the room, 14 please use the QR code. If you're on Zoom please use the 15 raise hand feature. And if you're joining us by phone 16 please press *9 to let us know that you'd like to make a 17 comment on this item.

18 There is no one in the room. So I'm going to 19 move on to Zoom. We have Derek M, please state your full 20 name. Spell your full name for the record and state any 21 affiliation. I'm going to unmute your line. Please limit 22 your comments to two minutes or less. You may unmute and 23 begin, Derek.

24 MR. MAUNUS: Derek Maunus, D-E-R-E-K M-A-U-N-U-S, 25 and I'm the CEO of GILLIG. On behalf of GILLIG and our

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1,000 employees I want to thank the opportunity to be
 considered for this grant. In 2017 GILLIG made a huge
 investment in our employees, in the state of California,
 building a 640,000 square foot manufacturing plant in
 Livermore.

6 So we appreciate the CEC considering a 7 significant investment back into GILLIG, really our 8 employees and zero mission transit. This investment is 9 going to help us scale the e-bus capacity from 150 today to 10 750 buses a year. Not only 120,000 tons of greenhouse gas 11 emission, but it's going to help our customers meet CARB's 12 innovation clean transit rules.

It also helps GILLIG, who's a top paying 13 14 manufacturer in California for success. We compete against 15 manufacturers outside the state that have lower cost of 16 labor and who received considerable incentives from their 17 home countries and other states. These jobs, our GILLIG jobs are represented by the International Brotherhood of 18 19 Teamsters 853, Automotive and Marine and Specialty Painters 20 1176.

This is an investment in transit, who's leading the commercial vehicle transition to zero emission and thousands of well-paying jobs. We have 500 suppliers that have tens of thousands of jobs that supply GILLIG. We reinvest \$240 million annually into these other

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1 manufacturers a year.

Steve Back, the Principal Officer and Secretary
Treasurer of International Brotherhood of Teamsters, asked
me to read a quick snippet of a letter that's in the file,
if it's okay.

6 "I'm writing to support GILLIG's Zero Emission 7 Bus Manufacturing Ramp-Up in the State of California grant 8 award. GILLIG's Zero Emission Bus Manufacturing Ramp-Up in 9 the State of California focuses on expanding the company's electric bus manufacturing. While GILLIG has demonstrated 10 11 its capabilities in producing electric buses additional 12 investment is required to expand the company's capacity to 13 meet growing demand. The Teamsters organized the facility 14 in 1976 and now represents over 500 manufacturing workers 15 at the Livermore facility in the Hayward Parks Division. 16 Over the past half a century Local 850 threes collaboration 17 with GILLIG has gone well beyond the typical labor 18 management contractual relationships, though it has been 19 that as well.

20 "GILLIG prides itself on being a family centric 21 company that values the contributions of its team members. 22 The diverse unionized workforce makes excellent wages, has 23 the best teamsters benefits and pension packages, and has 24 very low attrition rate. The vast majority of our workers 25 have been with the company for more than 10 years --

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MS. BADIE: (Indiscernible)

1

2 COMMISSIONER MCALLISTER: Let's give him time to
3 finish, since he's also reading a comment from another.
4 MR. MAUNUS: Thank you.

5 "Teamsters benefits and pension packages and has 6 a very low attrition rate. The vast majority of workers 7 have been with the company for more than 10 years with many 8 surpassing 20 and 30 years. We greatly appreciate this 9 award granted GILLIG. The company competes primarily 10 against foreign-owned nonunion represented companies. This 11 grant strengthens the company's ability to develop and 12 deliver zero emission buses and further secure union jobs. 13 The Teamsters fully support this program and thank the 14 Commissioners for their support."

15 MS. BADIE: Thank you.

16 That is the final comment for this item. Back to 17 you, Commissioner.

18 COMMISSIONER MCALLISTER: Okay, great. Well, 19 let's move on to Commissioner comments starting with

20 Commissioner Monahan.
21 COMMISSIONER MONAHAN: Yeah well, we keep
22 bringing these ones, the ZEV manufacturer discussion items,
23 just because they're big grants, it's exciting, it's about
24 California keeping good jobs here in state. And as you
25 heard from Derek reading the comment letter from Teamsters,

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1 like these are good union jobs. And we want to keep these 2 companies here in California, creating the vehicles that we 3 need to meet our transit bus requirements and other zero 4 emission vehicle requirements that the Air Resources Board 5 is passing.

6 So I just want to thank you, and Jonathan 7 Bobadilla, who has been sort of the father of the whole 8 process of all these manufacturing grants. And, you know, 9 they are all -- I would say we're taking risks at the State 10 of California and providing big grants to help support 11 these manufacturers to stay in California. And there are 12 barriers to staying in California. So we just recognize 13 that commitment to the state. And we want to make sure 14 that we're supporting companies that are trying to do the 15 right thing.

16 And I just did have a quick question for Derek, 17 who I hope is still available online. Public Advisor, is 18 that --

MS. BADIE: Derek, if you raise your hand I canopen your line. Your line is open, Derek.

21 MR. MAUNUS: Okay.

COMMISSIONER MONAHAN: Okay. Well, Derek, first, congratulations on securing this. Well, we'll see. We'll see what the vote is. I was curious if you could tell us just a few sentences on how you ended up in Livermore?

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1 MR. MAUNUS: Yeah, so GILLIG began in actually 2 1890 in San Francisco. We moved to Hayward. We were in Hayward for 60 years. We were growing the business, we ran 3 4 out of space and were trying to figure out where our next 5 move was. And we went through a very thorough process to 6 evaluate where our next home was going to be. And frankly, 7 there was a lot of offers from outside of the State of 8 California that were very enticing.

9 The reality is, is that our employees at GILLIG 10 is what helped us make the decision to keep this business 11 in California. And that's the reality. Our employees made 12 this company, helped make this company successful and we 13 weren't going to reward them by moving their jobs out of 14 state. And Livermore location-wise is really central to 15 where all of our employees live. We have a lot of 16 employees coming over from over the Altamont Pass. And we 17 had still a lot of employees over the Hayward and Newark 18 area. And as well, this was central to where they were. А 19 little bit of higher cost of construction and to build a 20 facility out here, but it really improved the lives of our 21 employees who, frankly, are the lifeblood of this company. 22 Thanks, Derek. I also COMMISSIONER MONAHAN: 23 want to say, you know, my Advisor Patricia Carlos is 24 organizing together with the Governor's Office of Business 25 and Economic Development virtual tours of these ZEV

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1 manufacturing facilities. We're going to be opening it up 2 to cross-agency participation to be able to remotely visit 3 facilities. So Derek, I'm hoping that you'll be open to us 4 having one of these remote visits because we do -- I think 5 there's a lot of curiosity about things ZEV manufacturing 6 in real time happening here in California. So just I want 7 to put that out there that you'll be, if you haven't 8 already, be contacted by my Advisor around this.

9 MR. MAUNUS: Absolutely.

10 COMMISSIONER MONAHAN: And just one last thing I 11 want to say is, just yesterday, we had Bloomberg New Energy 12 Finance give a briefing to all of us on their electric 13 vehicle outlook, which they published every year. And one 14 of the things they said, which really stuck with me is that 15 buses have already sort of reached that point of like 16 massive commercialization. Other heavy-duty vehicles, not 17 so much. But on the bus side, we are seeing sort of a 18 dominance of electric technology over internal combustion, 19 and it's happening at a global scale.

20 COMMISSIONER MCALLISTER: Thank you,

21 Commissioner.

22 Commissioner Gallardo, any comment?

23 COMMISSIONER GALLARDO: Yes. I just wanted to
 24 say first, congratulations to Hugh and Jonathan, great work
 25 on this.

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1 And to Derek, really appreciate how much you 2 emphasized your employees and that workers' perspective, I 3 think that's really important. Not just being located in 4 California, but that sense of taking care of the people who 5 work with you for you. And I really appreciate that. So 6 congratulations to you as well.

7 COMMISSIONER MCALLISTER: Well, great. And I 8 couldn't agree more myself. Just this is a significant 9 amount of money, and really just does all the right things 10 for California, and growing our green energy economy and 11 doing it in a way that really benefits everyone and creates 12 good lasting jobs.

And it's amazing, the trajectory of -- from the 14 1800s, all the way to today and the continuity there is 15 just really beautiful to see. So I think it's an example 16 for many, many sectors that we're trying to grow in the 17 state, in our transition, and sort of a bright light. So 18 thanks you for the presentation, and Mr. Maunus for being 19 with us.

20 With that, I would entertain a motion.

21 COMMISSIONER MONAHAN: I move to approve Item 7.

22 COMMISSIONER GALLARDO: I second.

23 COMMISSIONER MCALLISTER: All in favor.

24 Commissioner Monahan.

25 COMMISSIONER MONAHAN: Aye.

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COMMISSIONER MCALLISTER: Commissioner Gallardo.
 COMMISSIONER GALLARDO: Aye.

COMMISSIONER MCALLISTER: And I vote aye, as
well. So this agenda Item passes 3-0. Thank you.

5 Okay, let's move on to Item 8, Assessing the Role
6 of Hydrogen in California's Decarbonizing Electric System.
7 Jeffrey Sunquist.

8 MR. SUNQUIST: Hello Commissioners. My name is 9 Jeffrey Sunquist. I am a Mechanical Engineer in the Energy 10 Research and Development Division. I am presenting the two 11 proposed awards that resulted from the EPIC solicitation: 12 Assessing the Role of Hydrogen in California's 13 Decarbonizing Electric System. Next slide. 14 Hydrogen produced from renewable electricity has 15 the potential to support grid reliability and

16 decarbonization. However, hydrogen's electric sector

17 applications such as providing long-duration energy storage 18 and zero carbon firm dispatchable generation remain nascent 19 and economically challenging.

The role of hydrogen in California's decarbonizing electric sector will depend on sustained technology advances, cost reductions, and development of new planning tools tailored to California's mix of energy resources. Additionally, there's a need to understand cross-sector impacts and benefits of potential hydrogen

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1 demand in other sectors such as transportation and 2 industrial processes.

These proposed projects will identify cost effective hydrogen use cases that will provide the greatest environmental, economic, and reliability benefits to the electric sector. The projects will inform policy measures and help prioritize future research, demonstration, and deployment investments to accelerate these beneficial use cases. Next slide.

10 The first proposed award with RAND Corporation 11 will conduct a literature review and engage subject matter 12 experts to evaluate current hydrogen production, storage, 13 delivery, and electric sector end use technologies as well 14 as prospects for fundamental innovations and cost 15 improvements.

16 RAND will identify targeted use cases and develop 17 technology performance metrics and cost models to guide 18 future state research priorities. The project will also 19 assess potential environmental impacts and mitigation 20 measures of candidate technologies including water 21 consumption, emissions, and hydrogen leakage to ensure 22 benefits to California's communities.

The project will combine these technology
assessments with an evaluation of existing programs,
legislation, and rulemakings related to hydrogen

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technologies for the electric sector to provide actionable
 recommendations for future investments. Next slide.

3 The second proposed award with Energy and 4 Environmental Economics, E3, will develop a Hydrogen Fuels 5 Optimization modeling tool to assess hydrogen 6 infrastructure and fuel consumption. The tool will be 7 integrated with existing models including PATHWAYS, an 8 economywide energy demand, emissions, and cost accounting 9 model; RESOLVE, an energy supply optimization and capacity 10 expansion model; and RECAP, an electric sector resource 11 adequacy model.

12 Together, this will provide an integrated 13 modeling framework to study the cost competitiveness of 14 hydrogen in California's electric sector and develop least 15 cost hydrogen production, storage, delivery, and end use 16 scenarios.

17 E3 will also assess the feasibility and value 18 proposition of storing hydrogen in geologic formations 19 compared to other forms of hydrogen storage, which can play 20 a key role in meeting time-varying hydrogen demand across 21 sectors. E3 will examine sensitivities around future 22 research and development improvements to equipment cost, 23 performance, and total resource potential. Project results 24 will inform policy and R&D measures that can drive 25 beneficial use of hydrogen to decarbonize the electric

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1 sector. Next slide.

2 Staff recommends approval of these grant agreements with RAND and E3, and adoption of staff's 3 4 determination that this action is exempt from CEQA. That 5 concludes my presentation. I am available for questions. 6 COMMISSIONER MCALLISTER: Thank you very much, 7 Jeffrey. 8 Madam Public Advisor, do we have any public 9 comments? 10 MS. BADIE: Hello, this Mona again, the Public 11 Advisor at the California Energy Commission. The 12 Commission now welcomes public comment on Item 8 on the 13 agenda. If you're in the room, we ask that you use the QR 14 code to notify us you'd like to make a comment. And if 15 you're on Zoom, please use the raise hand feature, or press 16 *9 if you're joining us by phone. 17 Checking the room and on the line. There are no 18 comments for this item. Back to you, Commissioner. 19 COMMISSIONER MCALLISTER: Okay. Well, we're a 20 little bit short handed up here on the dais. So normally, 21 I would call on somebody, but I guess maybe I'll just kick 22 it off here. 23 So thanks, Jeffrey, for the presentation. Really 24 good stuff. And I just want to commend the whole EPIC team 25 for moving forward on this topic. I would also wear the

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hat of the chair of the Western Green Hydrogen Initiative,
 which is a joint discussion really among the states
 convened by the Western Interstate Energy Board and NASEO,
 the National Association of State Energy officials.

5 And the states are at very different places about 6 hydrogen, there's a lot of -- Even here in California, you 7 know, there's a lot of different sort of views and 8 understandings of hydrogen. And we are going to -- we're 9 beginning to invest more heavily to figure all this out. 10 And I think this work is going to be critical for 11 understanding on the electric sector side. And just really 12 appreciate the proactive nature of the EPIC teams, the 13 research and development visions' approach, thoughtful approach to hydrogen overall and as reflected in this 14 15 particular solicitation.

16 And most of us remember about the sort of first 17 round of SB 100, where we were left with some questions 18 about that last bit of the Clean Energy Transition. The 19 last 5 or 10 percent like could we confirm and kind of what 20 the role, what technologies were going to sort of step into 21 that breach. And hydrogen being one of them that 22 stakeholders have told us they'd like to see us look at. 23 So I think this overall trajectory is served well 24 by this particular solicitation and these two awards. So 25 looking forward to seeing what they produce, and looks like 77 **CALIFORNIA REPORTING, LLC**

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1 a couple of good contractors. So I'm in support. And I'll
2 ask if other -- Commissioner Monahan, any comment?

3 COMMISSIONER MONAHAN: Just quickly, I want to just build on what you said in terms of I feel like we as a 4 5 state, we've really focused on hydrogen and fuel cells for 6 transportation. And now we're looking more broadly at well 7 what other potential uses could hydrogen play in helping us 8 meet our clean energy goals? And I think on the grid side, 9 that's sort of "under" understood. We need a deeper 10 understanding of the potential for hydrogen to support I 11 think, especially in the resilience category.

And so this analysis, I think, is going to be really foundational to that. And what we had talked about when I was briefed was just to have periodic updates on what the research is finding rather than waiting until the end, if there's any interim results. I think there's curiosity by all of us in terms of what the role hydrogen could play on producing clean electricity.

19 COMMISSIONER MCALLISTER: Do you want to comment? 20 COMMISSIONER GALLARDO: Yeah, just a quick 21 comment. Thank you, Jeffrey, for the presentation. You 22 did a wonderful job. I also appreciated the thorough 23 briefing you gave to my team earlier.

I am also excited about this, just learning more about the possibilities and impacts of hydrogen. I have

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heard from environmental justice experts who expressed
 concerns and also have curiosities about it and what we
 could do better. So I think this is going to be fantastic.
 So thank you for moving it forward.

5 COMMISSIONER MCALLISTER: Great. With that, I
6 would entertain a motion for this item, for Item 8.

COMMISSIONER MONAHAN: I move to approve Item 8.
COMMISSIONER GALLARDO: I second.

9 COMMISSIONER MCALLISTER: Okay. All those in 10 favor. Commissioner Gallardo.

11 COMMISSIONER GALLARDO: Aye.

COMMISSIONER MCALLISTER: Commissioner Monahan.
 COMMISSIONER MONAHAN: Aye.

14 COMMISSIONER MCALLISTER: And I vote aye, as 15 well. So this motion passes 3-0. Thank you very much, 16 Jeffrey.

17 MR. SUNQUIST: Thank you.

18 COMMISSIONER MCALLISTER: Moving on to Item 9, 19 Advancing Window Retrofits and Reducing Fireplace Air 20 Leakage to Increase Existing Building Energy Efficiency. 21 Jeanie Mar, good morning. Is the green light on? 22 MS. MAR: Good morning, Commissioners. 23 COMMISSIONER MCALLISTER: Good morning. 24 MS. MAR: My name is Jeanie Mar and I am with the 25 Energy Efficiency Research branch of the Energy Research

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1 and Development Division.

I will be presenting three awards for approval resulting from the advancing window retrofits and reducing fireplace air leaks to improve energy efficiency in sexisting buildings. Next slide, please.

6 This solicitation funds energy efficiency 7 research for the two groups listed totaling more than \$2.6 8 million. The goals for these two groups are to advance 9 high performance windows in existing commercial buildings 10 and reduce air and energy leakage in existing residential 11 wood burning and gas fireplaces.

12 This solicitation addresses envelope retrofits in 13 existing buildings to improve energy efficiency and reduce 14 greenhouse gases through reducing energy use in heating, 15 ventilation, and air conditioning. There are two proposed 16 awards for Group 1 and one proposed award for Group 2. 17 Next slide, please.

18 Some of the benefits for these projects include a 19 reduction in heating and cooling loads, greenhouse gas 20 emissions, lower energy bills, improved occupant, comfort 21 and the results could inform future codes and standards or 22 energy efficiency programs. Next slide, please.

23 The first proposed award is with Electric Power
24 Research Institute, also known as EPRI, for over \$1.5
25 million. It will be a whole building demonstration located
80

CALIFORNIA REPORTING, LLC 229 Napa Street, Rodeo, California 94572 (510) 224-4476 in Bakersfield in two elementary school sites in low-income
 disadvantaged communities.

This agreement will demonstrate and evaluate an interior mounted secondary window system technology called WindowSkin. The school sites were built in the 1950s, and conventional whole window upgrades have been passed over multiple times due to the expense and asbestos and lead remediation concerns.

9 The technology is a panel that snaps into the 10 corners of a windowpane adding an extra layer of insulation 11 to the window. It is flexible, lightweight, easier and 12 quicker to install, is less intrusive to occupants and less 13 costly than conventional windows replacements. Next slide, 14 please.

15 The second proposed agreement is with DNV Energy 16 Insights for over \$230,000.

17 DNV will conduct a preliminary study to 18 characterize California's residential building stock with 19 gas and wood burning fireplaces. This will include an 20 investigation and evaluation of cost effective strategies to reduce fireplace air and energy losses, monitoring air 21 22 quality and pollutant infiltration and exfiltration to 23 better understand how this affects energy and the potential 24 health impacts.

The research will use commercially available

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1 technology, including chimney balloons, dampers and glass 2 doors, to test air leakage and monitor air 3 infiltration/exfiltration in 20 homes. The project will 4 provide an educational package to help California 5 ratepayers and other stakeholders reduce air and energy 6 losses resulting from their fireplaces. Next slide, 7 please.

8 The third and final proposed agreement is with 9 GTI Energy for over \$860,000. This demonstration will be 10 located a in a large hotel located in Indian Wells. This 11 agreement will develop, demonstrate, and evaluate three 12 secondary window system technologies that are lighter, 13 easier, and quicker to install, is less disruptive to 14 occupants, and will be less costly than traditional windows 15 replacements.

16 The first technology is a thin glass triple pane 17 secondary window system that will be merging two 18 commercially available Alpen product lines, a double pane 19 secondary window system, and a thin-glass triple-pane 20 window. This secondary window system will be paid with CEC 21 funds.

The other two novel secondary window systems will be using aerogel and vacuum insulated glass technologies and will be paid with match funds. Next slide, please. Staff recommends adopting staff's determination

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that these actions are exempt from CEQA and approval of
 these three grant agreements. Thank you for your
 consideration, and this concludes my presentation.

4 Sara Beaini is on the line from EPRI and would 5 like to make a comment. And staff from GTI are available 6 for questions.

COMMISSIONER MCALLISTER: Great. Thank you,
8 Jeanie. Really appreciate the presentation. Very clear,
9 so thank you.

10 Madam Public Advisor, do we have public comment? 11 MS. BADIE: Hello again, this is Mona Badie, the 12 Public Advisor with the California Energy Commission. The 13 Commission now welcomes public comment on Item 9.

If you're in the room, we ask that you use the QR code to notify us you'd like to make a comment. And if you're joining by Zoom, please use the raise hand feature or *9 if you're joining by phone. We don't have any commenters in the room.

19 And I'm going to move to Zoom now. Sara Beaini,
20 I'm going to open your line. Please spell your name for
21 the record, state any affiliation. We ask that comments be
22 limited to two minutes or less. Thank you.

23 Sara, your line is open. Sara, we're not hearing24 any audio on your end.

25 COMMISSIONER MCALLISTER: Do we have any other

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1 public comment?

2 MS. BADIE: There are no other public comments 3 for this item.

4 COMMISSIONER MCALLISTER: Let's just give, maybe
5 -- Are there any instructions to Sara, to help her unmute?
6 Is she on Zoom?

MS. BADIE: Yeah, she's on Zoom, the line is open. Sara, I don't know what's happening on your end. One option we can do is Sara, if you want to call in using the call-in number that's on the agenda we can take your public comment at the next item.

12 COMMISSIONER MCALLISTER: We'll continue on and 13 hopefully you can get her online, and she can chime in when 14 possible.

15 So we'll move to Commissioner discussion. And I 16 guess I'll just kick off since I am partnered with the 17 Chair on the RDD Division Oversight and also on Efficiency. 18 So these three topics are near and dear to my heart and 19 anything that helps improve the building shell is awesome 20 for efficiency.

In particular, we need solutions for existing buildings. And windows are a big part of that. And fireplaces are -- they don't get all that much attention. So it's great to see that this is happening. And I remember now Senator Nancy Skinner, did an energy audit,

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1 had an energy audit done in her house in Berkeley. And was 2 basically like it was a huge revelation to her that her chimney was by far the biggest loss of conditioned air. 3 4 It's like having a gaping hole in the wall, you just don't 5 see it. And I don't know how many of you have gotten your 6 hands covered with soot trying to close that little iron 7 gate in your fireplaces. But the technology is, let's say 8 it's a little bit outdated for sealing up fireplaces when 9 they're not in use and using them properly when they are in 10 use.

So really excited to see all three of these items, and also to see our sort of skinny triple work come to fruition in a retrofit situation.

14 So have we been able to get Sara online?

MS. BADIE: There is a call-in number. I'm going to try to open both lines for Sara. I'm going to open your line that you're joining online, and then there's a phone number ending in 754. I'm going to open that line as well. I'm assuming that's Sara Beaini.

20 MS. BEAINI: Can you hear me?

21 COMMISSIONER MCALLISTER: Hey, there you are.

22 Yes, we can hear you.

23 MS. BEAINI: Perfect, thank you.

24 COMMISSIONER MCALLISTER: Go ahead.

25 MS. BADIE: Sara, I think you've muted yourself

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1 again.

2

25

MS. BEAINI: Sara Beaini.

3 COMMISSIONER MCALLISTER: Right. We can hear4 you, go ahead.

5 MS. BEAINI: S-A-R-A B-E-A-I-N-I, with EPRI. 6 Good morning and good afternoon, Commissioners, and thank 7 you so much for this opportunity of this project award. On 8 behalf of EPRI, Wex Energy, Clear Result, Intertech, and 9 the Bakersfield City School District, we're very excited 10 and grateful for the opportunity to reduce costs and 11 greenhouse gas emissions in existing and aging elementary 12 school buildings that are located in the San Joaquin 13 Valley.

14 This is a disadvantaged community in a region 15 that has the poorest air quality in California due to its 16 topography, and climate and geography.

17 One of the unique features of the WEX energy 18 window insert technology is that you don't have to modify 19 the existing frame or window. This has multiple benefits 20 to lower the installation costs, have faster installation 21 time, and not to deal with lead or asbestos removal. And 22 it can also maintain historical building attributes if 23 that's applicable. We thank you again and look forward to 24 a successful project.

COMMISSIONER MCALLISTER: Thank you for your

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1 comment for being here. And if you could stay on the line, 2 Commissioner Gallardo I think has a question for you, Sara. 3 I think no other public comment, correct?

4 MS. BADIE: Correct.

5 COMMISSIONER MCALLISTER: Okay, great.

6 Commissioner Gallardo.

7 COMMISSIONER GALLARDO: All right. Well, thank 8 you so much Jeanie, for the wonderful presentation. Also 9 the thorough briefing. I am really impressed with this and 10 really excited to see what comes about.

And, Sara, one of the questions I had that I
wanted to hear more if you're able to share is how the two
schools in Bakersfield were chosen?

MS. BEAINI: Thank you for the question. My colleague and the co-PI on the grant, Agatha Caston, has worked with various school districts in California through her prior experiences and was able to connect us with the school district.

19 COMMISSIONER GALLARDO: Okay, fantastic. And I 20 did hear that those facilities are very old. So and that 21 this type of technology won't be disruptive in terms of 22 asbestos and the lead. So I think it's a fantastic 23 opportunity for these schools that are in an area with poor 24 air quality and also impacted by poverty that are going to 25 have this benefit. So thank you for that, Sara, I really

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1 appreciate that.

2 MS. BEAINI: Likewise. Thank you, everyone. 3 COMMISSIONER MCALLISTER: Thank you for being 4 here. 5 Commissioner Monahan, any comment? 6 I think just to point out that we've invested a 7 lot in Prop 39 in schools and in the CALSHAPE program we 8 are still investing in schools. And projects like this 9 really compliment that work quite well, so it's really 10 great to see this moving forward. 11 So with that I'd entertain a motion. 12 COMMISSIONER GALLARDO: I move to approve Item 9. 13 COMMISSIONER MONAHAN: I second. 14 COMMISSIONER MCALLISTER: All right, all in 15 favor. Commissioner Gallardo. 16 COMMISSIONER GALLARDO: Aye. 17 COMMISSIONER MCALLISTER: Commissioner Monahan. 18 COMMISSIONER MONAHAN: Aye. 19 COMMISSIONER MCALLISTER: And I vote aye, as 20 well. And this item passes 3-0. Thank you, Jeanie. I 21 appreciate the presentation. Well done. 22 Let's move on to Item 10. Let me go to the page 23 here, Advancing Environmental Monitoring Technologies for 24 Floating Offshore Wind. Mr. Danielson. 25 MR. DANIELSON: Hi, hello. Can you hear me okay? 88

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COMMISSIONER MCALLISTER: We can.

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2 MR. DANIELSON: Hello, Commissioners. My name is Mark Danielson. I am a Senior Environmental Scientist in 3 4 the Energy Research and Development Division. I am 5 presenting the three proposed awards that resulted from our 6 recent EPIC solicitation: Advancing Environmental 7 Monitoring Technologies for Floating Offshore Wind. Next 8 slide, please.

9 The anticipated deployment of Floating Offshore 10 Wind off the California coast will require evaluation of a 11 diverse array of potential environmental impacts such as 12 changes to marine life populations, oceanic processes such 13 as upwelling, and wildlife collision and entanglement 14 risks. Current environmental monitoring technologies are 15 limited in temporal and spatial resolution, accuracy, and 16 durability in California's offshore environment.

17 Additionally, the need for continuous monitoring 18 will require managing extremely large datasets. The 19 proposed projects from this solicitation will reduce risks 20 and uncertainty relating to the environmental impacts of 21 offshore wind, improve the operational durability to 22 withstand California ocean conditions, advance the use of 23 artificial intelligence in processing and managing large 24 datasets, and reduce costs associated with permitting and 25 monitoring. Next slide, please.

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This solicitation was designed, so that each
 project will integrate at least two separate but
 complimentary monitoring technologies to adequately detect
 and validate environmental risk factors associated with
 floating offshore wind deployment in California.

6 Additionally, the integrated sensor package must 7 be durable enough to withstand ocean conditions in the 8 Humboldt and Morro Bay Wind Energy Areas and must be 9 validated in a laboratory environment. None of these 10 projects propose field testing in California waters. The 11 following proposed awards represent all the projects we 12 plan to award from this solicitation. Next slide please.

13 The first proposed award is with Integral 14 Consulting to design a continuous, real-time, automated 15 detection and identification system to inform seabird risk 16 models and potentially, mitigation measures. The proposed 17 monitoring system will integrate three existing sensor 18 technologies: radar, 3D thermal imaging, and blade-mounted 19 vibration sensors, to detect seabird movement and behavior 20 patterns at the far, medium, and short ranges respectively.

In addition, the recipient will be integrating artificial intelligence to help characterize the data into information that can be easily interpreted for decision makers and enable more automated monitoring, thereby reducing in person environmental monitoring requirements.

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The results of this project will be increased
 understanding of potential risks to seabirds and inform
 seabird strike models. Next slide please.

4 The next proposed award is with Lawrence Berkeley 5 National Laboratory, or LBNL. LBNL is proposing a sensing 6 package using multiple advanced fiber optic sensing 7 technologies, including distributed acoustic, temperature, 8 and strain sensing, which can be integrated into a braided mooring line. Combining these technologies will allow for 9 10 concurrent monitoring of marine mammal movement and 11 vocalization, marine debris entanglement, wind farm 12 operational noise, ocean water column profiling, as well as 13 ocean floor sediment movement and earthquakes.

Anticipated benefits from this project include increasing resiliency and reliability for floating offshore wind infrastructure by providing real-time continuous monitoring data on environmental conditions and potential issues such as marine mammal entanglement and collision. Next slide, please.

The third proposed project is with the Humboldt State University Sponsored Programs Foundation, led by the Schatz Energy Research Center, and it will address a critical concern of floating offshore wind stakeholders by designing a system that detects secondary entanglement hazards from marine debris and wildlife interactions with

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1 mooring lines.

The system will include stress and strain sensor and a remotely operated vehicle, or ROV, to identify and validate the source of the strain. A simulation of a floating offshore wind farm will be used to model what normal strain on mooring lines looks like to a sensor and then compare that with strain from a marine mammal collision or entangled marine debris.

9 This model, the data from this model will be used 10 to detect these strain signals and signal an ROV to 11 validate the source and location of the strain. The 12 project will address environmental, technical, and safety 13 challenges and anticipated benefits will include a better 14 understanding of marine debris entanglement risks and how 15 mooring lines behave when these events occur. This could 16 lead to increased safety and reliability with remote 17 monitoring and environmental benefits by reducing risks to 18 marine wildlife. Next slide please.

19 Staff recommends the Commission approve the three 20 proposed awards under this solicitation and adopt staff's 21 determination that action is exempt from CEQA. That 22 concludes my presentation, and I would be happy to answer 23 any questions that I can.

24 COMMISSIONER MCALLISTER: Thank you very much for 25 that presentation.

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Madam Public Advisor, any public comment?

2 MS. BADIE: Hello, this is Mona Badie, the Public 3 Advisor at the California Energy Commission. The 4 Commission now welcomes public comment on Item 10.

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5 If you're in the room we ask that you use the QR 6 code to notify us you'd like to make a comment. And if 7 you're on Zoom, please use the raise hand feature. And if 8 you're joining us by phone press *9 to let us know you'd 9 like to make a comment.

We don't have any in room comments, so I'll move to Zoom. There is a phone number ending in 754. I'm going to open your line. If you could please state and spell your name for the record, any affiliation, and you may begin your comment. (No audible response.)

15 All right, I think this one might be left over 16 from the last item. So I'm going to move on to Kelly Boyd. 17 Kelly Boyd, I'm going to open your line. If you could 18 spell your name for the record, state any affiliation, and 19 begin your comment. We are asking for comments to be 20 limited to two minutes or less. I'm going to open your 21 line now. (No audible response.) Kelly, please unmute on 22 your end and begin your comment. Kelly, your line is open. 23 We don't hear any audio on your end. Okay, I'm going to 24 move on to the next commenter, and I can come back to you 25 Kelly, if you adjust your audio settings.

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1 So the next commenter is Nikola Lakic. Please 2 state your affiliation and limit your comments to two 3 minutes or less. I'm going to open your line. Again, this 4 is for Item 10. 5 MR. LAKIC: Can you hear me? 6 MS. BADIE: Yes. 7 MR. LAKIC: Thank you. Just my name is Nikola, 8 N-I-K-O-L-A, same like Nikola Tesla, Lakic, L-A-K-I-C, from 9 Geothermal Worldwide. 10 A question for gentleman Mark Danielson, this is 11 regarding Item 10. What's the ratio of the production that 12 you expect from wind and maintenance? Can you give any 13 info about that? Can you elaborate on that a little bit? 14 COMMISSIONER MCALLISTER: Mr. Lakic, this is a 15 comment period. So we'll take that comment under 16 consideration. 17 MR. LAKIC: Oh, I thought that he's asking for question, somebody to ask a question. Okay, I'm sorry. 18 In 19 that case, sorry. 20 COMMISSIONER MCALLISTER: No worries. Thank you. 21 MS. BADIE: Thank you. 22 Next, we'll move on to Kelly, I'm going to try to 23 open your line again. 24 MS. BOYD: Thank you. 25 COMMISSIONER MCALLISTER: And I would encourage

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1 anyone who does have questions about anything we vote on to 2 submit a question to the Public Advisor and we can channel 3 it through to staff, so that we can get an answer. 4 MS. BOYD: Thank you. Are you able to hear me 5 this time? This is Kelly. 6 MS. BADIE: Yes. 7 COMMISSIONER MCALLISTER: Yes, we can. 8 MS. BOYD: Thank you. Kelly Boyd, K-E-L-L-Y B-O-9 Y-D, with Equinor, the Director of Policy Development and 10 Regulatory for the West Coast. I just wanted to advise Equinor supports the funding of these grants under Item 10 11 12 to develop additional monitoring technologies, including an 13 environmental monitoring sensor package, study of avian 14 marine mammal and ocean environmental impacts, and 15 interaction with floating offshore wind technologies and 16 operation -- great opportunity to expand upon ongoing 17 monitoring capabilities and durability. Thanks very much. 18 MS. BADIE: Thank you. 19 Next, we have Scott Morgan. I'm going to open 20 your line, Scott. Please spell your name for the record, 21 state any affiliation, and you may begin. Scott, your line 22 is open. Scott, we're not hearing any audio on your end, 23 but your line is open and I don't believe you're muted. 24 Okay, we have one more commenter, Marcus C. 25 Scott, if you want to adjust your audio settings we'll move

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1 on to the next comment and I'll try you again.

2 Marcus C, I'm going to open your line if you 3 could state and spell your full name for the record, any 4 affiliation, and you may begin your comment.

5 MR. CHEVITARESE: Hello, my name is Marcus 6 Chevitarese. That's M-A-R-C-U-S C-H-E-V-I-T-A-R-E-S-E. 7 I'm with Sightir, Inc. and we are on one of the teams. So 8 I'm calling to express my support for this item, and say 9 that the technology that we're developing is sought after 10 from developers and people around the world. There's a lot 11 of interest in what we're doing. And California is really 12 putting itself in a place to have the most advanced 13 environmental monitoring system, and this is a great 14 opportunity. And so I just want to say thank you, and 15 encourage approval. Thank You.

16 MS. BADIE: Thank you.

Scott, let's try your line again. I'm going to open your line up, if you unmute on your end, then you can begin your comment.

20 MR. MORGAN: Can you hear me now?

21 MS. BADIE: Yes.

22 MR. MORGAN: It's Scott Morgan, S-C-O-T-T M-O-R-23 G-A-N, with Golden State Wind. I just want to voice our 24 support of these items, and looking forward to seeing the 25 research projects move forward. Thank you.

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MS. BADIE: Thank you.

2 That concludes public comment. Back to you, 3 Commissioner.

4 COMMISSIONER MCALLISTER: Great. Well, thanks to 5 all the commenters on these items.

6 We'll move to Commissioner discussion. And let's 7 see, I quess maybe I'll just jump in quickly that our bet 8 on offshore wind, and our goals for offshore wind are 9 humongous. And these are significant infrastructure 10 investments that we're looking at. And I just want to 11 support birds and sea mammals and debris entrainment, is 12 all our key issues we've heard from stakeholders that are 13 important. And good to see our team developing solutions. 14 Commissioner Gallardo.

15 COMMISSIONER GALLARDO: Yes. Well, thank you so 16 much, Mark, for your presentation. Also, the briefing. 17 And I'm fascinated by offshore wind and the possibilities 18 it has for our state to move us off fossil fuels. And I 19 think as we take steps forward, we need to be very careful 20 about the impacts, including to the environment, to animals 21 to people.

22 So I'm excited about this. And as one of the 23 commenters said potentially these monitoring technologies 24 can make us a leader again. And I love that California has 25 that opportunity in with these investments that we're

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making here. So I support this item for those reasons.
 COMMISSIONER MCALLSITER: Thank you.
 Commissioner Monahan.

4 COMMISSIONER MONAHAN: Well, I also think 5 building on what you both have said, that we do have these 6 really ambitious goals for offshore wind. And we're 7 cognizant that we're breaking new ground in terms of 8 deepwater offshore wind. There's a lot of technical 9 questions. There's a lot of questions about the impact to the environment. I think there's as your briefing 10 11 highlighted to me earlier, we have information on sort of 12 avian impacts from offshore wind and other locations, but 13 some of this deep sea implications of having these deep sea 14 floating offshore wind turbines, we don't understand.

15 And so that idea of we want to make sure, as we 16 move forward with this clean energy economy, that we're 17 doing all we can to protect against the negative impacts of 18 these technologies. They all have negative impacts. And 19 we're trying to do it in a way that's going to be most 20 protective of the environment. And I think especially as 21 we think about large sea mammals, and migration patterns, 22 just really understanding implications and doing all we can 23 to protect the environment as we build out a clean energy 24 economy is critical.

So, I just strongly support these and recognize
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1 there's a lot of unanswered questions that we are trying to 2 answer quickly before we actually start constructing these. 3 COMMISSIONER MCALLISTER: Great, well, thanks for 4 that. I can't quite get my head around the breaking new 5 ground in offshore wind. I'm not sure when --6 COMMISSIONER MONAHAN: Oh my gosh, my metaphors 7 are terrible. 8 COMMISSIONER MCALLISTER: But very exciting. 9 Very exciting to be moving ahead with this. So I would 10 entertain a motion. 11 COMMISSIONER GALLARDO: I move to approve Item 12 Number 10. 13 COMMISSIONER MONAHAN: I second. 14 COMMISSIONER MCALLISTER: All in --15 COMMISSIONER MONAHAN: Oh wait is it 10 or 11? 16 COMMISSIONER MCALLSITER: I think it's --17 COMMISSIONER MONAHAN: Did I mess up? 18 COMMISSIONER MCALLISTER: No, it's 10. It's 10. 19 (Off-mic colloguy.) 20 COMMISSIONER MCALLISTER: But we'll hear more 21 about offshore wind in a bit. So I have a motion and a 22 second. All in favor. Commissioner Gallardo. 23 COMMISSIONER GALLARDO: Aye. 24 COMMISSIONER MCALLISTER: Commissioner Monahan. 25 COMMISSIONER MONAHAN: Aye.

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COMMISSIONER MCALLISTER: And I vote age as well.
 This item passes 3-0. Mark, thanks very much, really great
 presentation. Really appreciate it, exciting.

And we will move now to Item 11, Advancing
Designs for Floating Offshore Wind Mooring Lines and
Anchors. So Mark Danielson again, please.

7 MR. DANIELSON: Hello, again, Commissioners. My 8 name is Mark Danielson. I am a Senior Environmental 9 Scientist in the Energy Research and Development Division. 10 I am presenting three out of the four proposed awards from 11 our recent EPIC solicitation: Advancing Designs for 12 Floating Offshore Wind Mooring Lines and Anchors. The 13 fourth, and final proposed award will be presented at the 14 August Business Meeting. Next slide, please.

15 Floating offshore wind deployments in current 16 California Wind Energy Areas are expected to be in waters 17 as deep as 1,300 meters, which is far deeper than existing 18 floating offshore wind deployments in other countries. 19 Future Wind Energy Areas may be identified in even deeper 20 waters, so more research is needed to better address unique 21 design challenges to account for these depths.

The proposed projects from this solicitation will advance new designs and technology specifically for the deep waters, and also address the weather and seismicity in the California Wind Energy Areas. These projects will also 100

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focus on the local workforce and supply chain constraints
 in California by reducing fabrication and installation
 costs, and designs were selected to minimize potential
 environmental impacts associated with mooring and anchoring
 floating offshore wind turbines. Next slide, please.

Each project from this solicitation will advance
the design of either mooring lines, anchors, or shared
mooring and anchor configurations for floating offshore
wind turbines.

10 Additionally, the proposed designs must be 11 validated in a laboratory environment to provide a level of 12 confidence for the offshore wind and maritime industries. 13 None of these projects propose field testing in California 14 waters. The following proposed awards represent three of 15 the four projects we plan to award from this solicitation. 16 Next slide, please.

17 The first proposed award is with the University 18 of Maine to develop a deep-water mooring line system using 19 synthetic materials which will focus on reducing hardware 20 and connections to increase ease of installation of 21 floating offshore wind turbines.

The project plans on customizing the mooring system to seafloor conditions found in the Humboldt Wind Energy Area and will address utility scale life cycle and supply chain constraints through the use of alternative

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1 mooring materials, load reduction devices, and potential 2 use of shared anchors. The recipient also plans to work 3 with a third-party verification agency on their final 4 design to streamline industry acceptance.

5 Anticipated benefits of this project include the 6 estimated reduction in capital expenditure costs of 7 floating offshore wind deployments by up to 50 percent 8 through replacing chain mooring line components with 9 synthetic materials. Next slide, please.

10 The next proposed award from this solicitation is 11 with RCAM Technologies and will focus on the design and 12 development of two anchor types: a concrete suction anchor 13 and torpedo anchor, both using low-cost 3D concrete printing methods. The suction anchor is essentially an 14 15 inverted bucket that is dropped into the sediment and 16 creates negative pressure in the anchor by pumping out 17 water.

18 The torpedo anchor is a steel pile that is 19 installed by free fall through the water before penetrating 20 the seabed. Currently both these anchor types are 21 typically made of steel and are some the most expensive 22 anchors to manufacture. They have a very large carbon 23 footprint, and are often imported, which increases 24 transport costs.

25

This project would work to solve those issues
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1 through using locally available and sustainably sourced 2 concrete materials and reducing costs with a 3D concrete 3 printing method that has been advanced by RCAM through a 4 current agreement with the CEC, thereby bringing local 5 supply chain and workforce benefits, as well as economic 6 and environmental benefits. Next slide, please.

7 The final proposed award I am presenting today is 8 with the Alliance for Sustainable Energy, the entity that 9 manages and operates the National Renewable Energy 10 Laboratory, or NREL. They will develop comprehensive 11 shared mooring and anchor system solutions, such as the 12 hybrid design shown in the diagram here, which minimize the 13 costs, failure risks, and environmental impacts of gigawatt 14 scale floating wind farms in California site conditions.

15 The approach combines state of the art techniques 16 for sharing mooring lines and anchors with installation and 17 maintenance innovations that bring additional cost 18 reductions and reliability improvements.

Anticipated benefits for this project include minimizing costs through smaller components and reducing the number of required installations, an estimated 40 to 50 percent cost reduction, as well as increased safety by designing the mooring system for redundancy in case one mooring line fails, others can provide stability. Next slide, please.

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1 Staff recommends the Commission approve the three 2 proposed awards under this solicitation and adopt staff's determination that action is exempt from CEQA. That 3 4 concludes my presentation, and I'd be happy to answer any 5 questions from the Commissioners that I can. 6 COMMISSIONER MCALLISTER: Great. Thank you, 7 Mark.

8 Madam Public Advisor.

9 MS. BADIE: Yes. The Commission now welcomes public comment on Item 11. If you're in the room please 10 11 use the QR code. And if you are joining us by Zoom, please use the raise hand feature, or *9 if you are on the phone. 12 13 We don't have any in-room commenters, so I'm 14 going to move to Zoom. Molly Croll I'm going to open your 15 line. If you can spell your name for the record, state any 16 affiliation. We're asking comments to be limited to two 17 minutes or less. You may begin.

18 CROLL: Hi, my name is Molly Croll, M-O-L-L-MS. 19 Y C-R-O-L-L, with the American Clean Power Association. 20 ACP California is a clean energy trade association 21 representing utility scale developers of clean energy in 22 the state including all five offshore wind leaseholders. 23 We support the CEC's proposed awards under both 24 Item 10, just discussed, and this Item 11. The CEC has 25 demonstrated ongoing commitment to advance science and

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technological innovation, which will help position
 California as a global leader in the development of a
 robust, sustainable floating offshore wind industry.

4 The proposed awards for environmental monitoring 5 and mooring and anchoring design serve this goal and we 6 respectfully ask for the Commission's approval. Thank you. 7 MS. BADIE: Thank you. Next, we have Jason 8 Cotrell. Jason, if you can spell your name for the record 9 and open your line, - I mean, unmute your line, you may 10 begin.

MR. COTRELL: Yes, this is Jason Cotrell. I'm the Founder and CEO of RCAM Technologies. My first name is spelled Jason, J-A-S-O-N, and Cotrell is spelled C-O-T-R-E-L-L.

15 So, yes, I'd like to thank the Commission for its 16 support, hopefully on this award, and certainly on past 17 projects. I wanted to take this opportunity, in addition 18 to expressing our appreciation, to reiterate how important 19 the Commission's support has been for what has essentially 20 been the creation of an entire new industry of using 3D concrete printing technologies for renewable energy 21 22 applications.

You may recall, after working at Enron for 20 years, I left to start RCAM Technologies. And the first grant that I received was a CEC award that allowed us to CALIFORNIA REPORTING, LLC

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explore the use for the concrete wind turbine towers and
 foundations. That funding was, I believe, still today, the
 first ever public funding for these technologies to be
 applied to renewable energy.

5 And today, you may not be aware that we have 6 expanded our portfolio of products to about 10 different 7 products in various stages of development that include 8 anchors, potentially foundations, subsea energy storage for 9 multiple industries, including land based and offshore 10 wind, land based and offshore solar, and also wave energy.

11 And there's some additional products on the way 12 that are still confidential, that would help cover 13 California Solar canals, parking lots, and also potential 14 installation, hydropower reservoirs. And hopefully I'll be 15 able to share that with you soon.

And just to finally cap this off, you know, we are doing most of this work in the Port of Los Angeles. We've hosted tours for over 1,000 different community members, and we hope to see you there sometime in the near future. Thank you.

21 MS. BADIE: Thank you. Next, we have Kelly Boyd. 22 I'm going to open your line, Kelly. Please state your name 23 and affiliation, and you may begin.

24MS. BOYD: Thank you. Can you hear me?25MS. BADIE: Yes.

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MS. BOYD: Thank you. Kelly Boyd, K-E-L-L-Y B-O-Y-D, again, with Equinor, also supporting Item 11. We support the funding of these grants to allow exploration of innovative technologies, provide opportunity for commercial contribution from developers toward those solutions.

6 We hope the final scoped programs under these 7 grants will provide more focused development of localized 8 supply chain and job creation, in addition to more 9 innovative, lower environmental profile technologies 10 associated with floating offshore wind development and 11 operation in California. Thank you.

12 MS. BADIE: Thank you.

Next, we have Scott Morgan. Scott, I'm going to open your line. Please unmute on your end and you may begin. Scott, your line is open. Scott, I'm showing your line as unmuted. I'm going to move on to the next caller if you want to adjust your audio settings.

18 The next caller has a phone number ending in 031. 19 I'm going to open your line. You'll press star six to 20 unmute. Please state and spell your name for the record. 21 State any affiliation as well and then you may begin your 22 comment. Phone number ending in 031, please press *6 to 23 unmute.

24 MS. KESTER: Good afternoon, Commissioners. This 25 is Aaron Kester with RWE Renewables. Can you hear me?

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1

MS. BADIE: Yes.

2 MS. KESTER: Thank you so much. Again, my name 3 is Aaron Kester, E-R-I-N K-E-S-T-E-R, and I work for RWE 4 Renewables as Director of Government Relations.

5 RWE is one of the companies who was recently 6 awarded an offshore wind lease in federal waters. Ours is 7 located off the coast of Humboldt County. RWE would like 8 to express support for both Items 10 and 11.

9 On today's agenda, I first would like to express 10 appreciation to the Commission on their great work to 11 advance offshore wind in the state through AB 525, and 12 through these important proposed research and development 13 projects for offshore wind.

14 RWE is proud to serve on the advisory board for 15 all of the projects related to Item 11. And we look 16 forward to seeing innovative technology proposals, and to 17 provide our company's subject matter expertise if and when 18 appropriate in the advisory capacity.

19 These projects, as mentioned earlier, will help 20 position California as a leader in the development of 21 floating offshore wind, globally. And we look forward to 22 seeing the results of these investments. Thank you so 23 much. I appreciate this opportunity to provide support. 24 MS. BADIE: Thank you.

25 Scott Morgan, I'm going to try to open your line 108

again. Please unmute on your end, and you may begin
 making your comment.

3 MR. MORGAN: Scott Morgan, can you hear me?
4 MS. BADIE: Yes.

5 MR. MORGAN: Yes. Scott Morgan, S-C-O-T-T M-O-R-6 G-A-N, with Golden State Wind. And I echo both the 7 comments of Molly, Kelly and Erin. We are supportive of 8 the research items under Item 11 and look forward to seeing 9 how this research turns out. Thank you very much.

MS. BADIE: Thank you. That concludes public
comment for Item 11. Back to you, Commissioner. Great.
Thank you, Mona, I appreciate that.

And thank you all to the commenters, Molly and Jason, Kelly, Scott, Erin, really appreciate your presence, and all you're doing as well as partners.

16 Let's see, I quess, I -- Offshore Wind, obviously 17 this is the second of a two part series here in this 18 meeting. And the moorings is a huge problem, or a huge 19 question really in terms of how we go about it in such deep 20 water, and the anchoring, disruption of marine life, all 21 the issues that talked about in the last item. But the 22 technical challenges, we just can't underestimate them. So 23 I'm really glad to see us investing in solutions. 24 We need to be able to industrialize this as

 $25\,$ quickly as possible if we're going to meet 25 gigawatts of $$109\,$

1 offshore wind in the next couple of decades. So it's hard 2 to overestimate the lift. And really, we need all those 3 solutions to get into industrialization and production 4 mode. So, very supportive of these items. Any other 5 comments?

6 COMMISSIONER GALLARDO: Just that how important 7 it is to focus on the durability of this equipment. And I 8 think this is one of the things that does keep me up at 9 night when I think about offshore wind. So I'm glad that 10 we're also investing in these types of studies and technologies. And I just want to say that this proves that 11 this work is groundbreaking. Right, Commissioner Monahan? 12 13 Thank you again, Mark, for a great presentation and all the information you provided during the briefing as 14 15 well.

16 COMMISSIONER MCALLISTER: Commissioner Monahan? 17 No?

I will just inject an anecdote here. Back in the day back when I was a project engineer, I installed a few small wind systems in coastal environments and it is brutal. Just the wear and tear of that sailing environment on equipment is just -- it eats it in very short order, if you're not designed for it.

24 And so your moorings are going to take a lot of 25 beating. And as we know, the weather off the coast can be 110 CALIFORNIA REPORTING, LLC

1 pretty brutal as well. So these solutions are critical. 2 So I don't have any further questions. And 3 thanks again, mark for the presentation. And I would 4 entertain a motion. 5 COMMISSIONER GALLARDO: I move to approve Item 6 11. 7 COMMISSIONER MONAHAN: I second. 8 COMMISSIONER MCALLISTER: All those in favor. 9 Commissioner Gallardo. 10 COMMISSIONER GALLARDO: Aye. 11 COMMISSIONER MCALLISTER: Commissioner Monahan. 12 COMMISSIONER MONAHAN: Aye. 13 COMMISSIONER MCALLISTER: And I vote aye as well. 14 So this item passes 3-0. Thank you very much. 15 All right. Well, thanks to all the presenters 16 from staff, we really appreciate your work today. 17 Moving on to Item 12, the minutes. I think all 18 three of us were at the last meeting. So I would entertain 19 a motion to --20 MS. BADIE: Commissioner, I want to do public 21 comment first, if that's okay. 22 COMMISSIONER MCALLISTER: Oh, I'm sorry. I'm 23 sorry. Yeah, go ahead. 24 MS. BADIE: The Commission now welcomes the 25 public comments for Item 12, minutes from the last business 111 **CALIFORNIA REPORTING, LLC**

1 meeting. If you'd like to make a comment and you're in the 2 room, we ask that you use the QR code. If you're on Zoom, please use the raise hand feature. And if you're joining 3 4 by phone, press *9 to let us know I'd like to make a 5 comment. 6 I'm not seeing any raised hands. Back to you, 7 Commissioner. 8 COMMISSIONER MCALLISTER: Great. Thank you, 9 Public Advisor. 10 I'll entertain a motion to -- or any comments? 11 And if not then a motion to adopt the minutes. 12 COMMISSIONER GALLARDO: I move to approve Item 13 12. 14 COMMISSIONER MONAHAN: I second. 15 COMMISSIONER MCALLISTER: All right, all those in favor. Commissioner Gallardo. 16 17 COMMISSIONER GALLARDO: Aye. 18 COMMISSIONER MCALLISTER: Commissioner Monahan. 19 COMMISSIONER MONAHAN: Aye. 20 COMMISSIONER MCALLISTER: And I vote ave as well. 21 So minutes are adopted. Thank you. 22 And we'll move on to Lead Commissioner or 23 Presiding Member Reports. Commissioner Monahan, would you 24 be okay starting? Great. 25 COMMISSIONER MONAHAN: Yeah, so, it's been a busy 112 **CALIFORNIA REPORTING, LLC**

1 time of travel. But actually, before I talk about what 2 I've been doing I want to introduce our newest team member. So Ethan, do you want to stand up? This is Ethan. 3 4 I'm going to embarrass him. He's a senior at Stanford and 5 he's majoring in chemical engineering. He also plays the 6 saxophone. And he's helping us on a variety of things, 7 including the Energy Policy Report that Ben Wender from my 8 office is helping shepherd with me. And he's really diving 9 deep into all the comments that we've gotten on how do we 10 speed interconnection of clean energy resources on the 11 grid. And Ethan is really interested in this intersection 12 of translating science and communicating it.

So we're putting him right to work, hard at work.
And you know, he follows in the footsteps of some great
CECers, including Terra Weeks who also came from this
program. So we're just grateful to have him in our office.

17 And you can sit down, sorry to embarrass you.18 Well, not actually, I'm not really sorry.

So on the life-work front, I've been doing as I said a lot of traveling. So most recently I was in Buffalo, New York, visiting a tire manufacturer. As you all know, we're working on tire efficiency for replacement tires, and really trying to understand the industry, understand how we can work with the industry to improve the efficiency of tires, replacement tires.

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1 We got to visit the Sumitomo tire facility, which 2 was awesome. And it had 1,500 employees at the facility. They're all union labor and it was pretty cool. Some of 3 4 the equipment had been around since the 1950s and then some 5 was brand new. So just pretty interesting to see how 6 scientific the tire manufacturing process is. So that was 7 a fun trip to Buffalo. We also got to go to Niagara Falls, 8 which I had never seen before.

9 Last week we had our first ever ports 10 collaborative meeting in person. It was at the Oakland 11 Port. And Patricia Carlos was the lead for pulling that 12 together and everybody loved it, got a lot of positive 13 feedback. And we also got participation from Tony Tavares 14 who had Caltrans, and Giles -- I'm going to mess up his 15 last name -- who's the Chief of Staff for Secretary 16 Omashakan. And so we were -- and we had participation with 17 GoBiz.

And it was really nice to have this, like, all the ports, many of the many of the major ports there in person, some on the phone, and then to have leadership from the State of California there as well. It was a great, great day, great conversation.

And I think you guys all know, ports are really trying to zero out their missions. They have big equipment, they're critical for goods movement. We've had 114

1 a lot of constraints on the supply chain, so there's a lot 2 of sensitivity there. Communities are impacted that live right near the ports, so they want things to go zero 3 emission as soon as possible. There's a lot of different 4 5 pressures that ports are under to decarbonize and keep 6 goods moving swiftly. So it was a great conversation. The 7 ports really appreciated that conversation. And we do it 8 on a quarterly basis. And we're evaluating how frequently 9 we'll do that in person as well.

10 Just yesterday I was in Long Beach with Chair 11 Randolph from the Air Resources Board doing a ribbon 12 cutting for the biggest truck, public truck charging depot 13 in the country. And we funded it so it was WattEV. And 14 they're doing this innovative trying to do trucking as a 15 service model. So to help smaller truckers who may find it 16 just daunting to electrify. And they provide the trucks, 17 they provide the charging, it's like a one stop shop for 18 all of those services. So that was really cool to be able 19 to commemorate that.

20 Multiple other trips, but I won't go into all of 21 them. The last one I'll talk about though is Sylmar, which 22 is this transportation conference that UC Davis puts on and 23 I'm on the organizing committee. And I've been going since 24 I was a wee little analyst at Lawrence Berkeley National 25 Lab, so for a long time.

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1 And now it's like it was really tiny, and 2 intimate. Now, it's like big and still intimate. It's just a great place. I know you've been there many times 3 4 for efficiency, but it was really fun. And as somebody 5 who's been going for decades, it's just for me it's like an 6 emotional experience too to see how the network has grown 7 and the advocates have grown and how much attention there 8 is on transportation, electrification, and infrastructure.

9 So we did several surveys, everybody agreed 10 infrastructure is the issue. It's not the vehicles 11 anymore. It's the infrastructure. So it just kind of 12 cemented that the work we're doing is so important to be 13 able to reach our goals for clean transportation.

14 On the other work side of the Integrated Energy 15 Policy Report is a big thing. So trying to figure out how 16 to move forward with good recommendations that are coming 17 at it from a cross agency perspective. I can't say enough 18 about my appreciation for Ben Lender who is helping me with 19 this. And for Heather and the team on the IEPR side. 20 We're trying to make it a California energy policy report 21 that requires deep collaboration with our sister agencies. 22 And we need to move forward with recommendations to move 23 more swiftly.

24 The budget process has been somewhat challenging.
25 We had hoped to have ABH reauthorized. And it seemed very
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close, but it didn't happen yet. There's still work to be
 done on that front. So trying to get to the finish line on
 reauthorizing our \$100 million per year program.

You may have heard that, that there was an
announcement about Tesla chargers. This is -- no? What
are you guys reading? Sorry to mock you.

7 COMMISSIONER MCALLISTER: We've been on mute
8 (indiscernible).

9 COMMISSIONER MONAHAN: What's happening? So 10 Tesla has a specific plug that's different than the rest of the industry. And automakers are announcing like GM and 11 12 Ford that they're moving to the Tesla system. That's 13 caused us to rethink what should we do in terms of funding 14 chargers? Should we fund chargers that are just for CCS? 15 Should we fund chargers that are both CCS and NAC? Sorry 16 for all the acronyms. The Tesla charger versus the charger 17 that had been the standard? And basically, we recognize 18 that there needs to be a formal process for the Tesla 19 charger to have standards. It's called the SAE process. 20 And they're going through that right now. So while that's 21 happening we're just waiting to see do they reach the 22 finish line with the SAE process on being able -- so other 23 manufacturers can spec out the build-out of this charger. 24 COMMISSIONER MCALLISTER: Can I ask a question? 25 COMMISSIONER MONAHAN: Yeah.

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1 COMMISSIONER MCALLISTER: So the SAE process can 2 take a long time. Is this kind of being fast tracked? 3 COMMISSIONER MONAHAN: It's fast tracked. 4 COMMISSIONER MCALLISTER: It is, okay. 5 COMMISSIONER MONAHAN: What fast track means 6 remains to be stated, and we'll be engaged in that process. 7 COMMISSIONER MCALLISTER: Okay, great. 8 COMMISSIONER MONAHAN: And I think that's enough 9 of my updates. 10 COMMISSIONER MCALLISTER: All right. Thank you 11 for that. 12 Commissioner Gallardo. 13 COMMISSIONER GALLARDO: Yes, thank you. 14 I wanted to start out with gratitude. So, Linda 15 Barrera and Lisa DeCarlo in particular, you've been helping 16 me navigate some legal questions I've had. So I just 17 wanted to let you know I really appreciate all the time you 18 take to help me. I know that you have a lot on your plates 19 already and adding a little bit more can be challenging. 20 So thank you so much for that. 21 And then I want to move over to thank my team. 22 Andrea McGarry has been my Interim Chief of Staff and is 23 doing wonderful, helping me on all things. So I really 24 appreciate you Andrea. And I introduced my one of my 25 fellows, Valaria. She's been doing a wonderful job

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1 supporting the Clean Energy Hall of Fame awards.

And I also wanted to embarrass my other team member. Camden, would you like to come up to the podium and introduce yourself? He gets nervous and I want him to have practice.

6 COMMISSIONER GALLARDO: I just want to say Ethan,
7 you thought you had it bad.

8 COMMISSIONER GALLARDO: Just make sure it's 9 green.

10 COMMISSIONER MCALLISTER: The green light, you
11 have to push -- there you go.

MR. BURK: I got it. I know technology. My name is Camden Burk, that's C-A-M-D-E-N B-U-R-K, I'll remember, I promise. I'm a Schultz Energy Fellow. I'm a Junior studying at Stanford as well. And I did not know you played saxophone. I played trumpet, so hit me up on that sometime.

18 COMMISSIONER MCALLISTER: All right, we got a 19 Jazz band in the making.

20 COMMISSIONER GALLARDO: Yay.

21 MR. BURK: Anyway, I'm currently an Energy Fellow 22 in Commissioner Gallardo's office. And I came to this 23 space because the CEC is really the tip of the spear in 24 California's climate mitigation efforts. And this is 25 really kind of nation and world leading policy. And it's 119

just such an honor to be able to work in that space. And I
 hope everyone here who kind of engaged in these efforts is
 always aware of how important the work all of you guys do
 is.

5 Just kind of keep that in mind. I won't take too 6 much of your time. But again, I really appreciate you all 7 being here and for letting me speak.

8 COMMISSIONER GALLARDO: Thank you so much Camden. 9 And I really appreciate the spirit you bring to the work 10 and the questions you ask. And I just want you to continue 11 having that curiosity through the program here, even though 12 it's kind of short; too short, right? But thank you, 13 Camden.

14 All right. And then I wanted to show just a 15 couple of images that my team helped me put together. The 16 first one is a photo of me and the Chairman of the Soboba 17 Band of Luiseño Indians you see there. So Katrina Leni-18 Konig who's our Tribal Liaison and Deputy Public Advisor 19 has coordinated a series of visits to various tribes. And 20 basically they're meet and greets. They're relationship 21 building, just wonderful opportunities.

And we were able to visit Soboba. And they're very progressive, have done so much on the reservation to make it as clean as possible. And they have utilized EPIC funds to set up a micro grid for a fire station on their

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site. And this fire station is incredible because it also
 benefits the surrounding community. And the communities
 nearby will call upon the Soboba Fire Department for
 support.

5 So it's just great to see how much of a ripple 6 effect our investments can make. So benefiting the tribe 7 and other communities. I don't know if we have another 8 image here, but that's the fire station in the background 9 there.

10 And then they're also going to be putting, they 11 have solar -- ground mounted solar out there. And they 12 also are going to be putting solar on their casino 13 rooftops. So just really exciting things that the Soboba 14 Tribe is doing. And then I'll update you on the other 15 visits that we have that are coming.

16 Another visit we did in my team, and with 17 Elizabeth Huber and some members of the STEP Division, is 18 to visit California ISO. We went to the facility on 19 Monday. They gave us a tour of the control room and talked 20 to us about what they do, how they do it. And it's 21 exciting to have a partnership with them. And Elliot and 22 Mark were both there, leaders of CAISO. And were just so 23 receptive to building our relationship engaging with us 24 learning from us. And it's -- I don't get to engage with them as often as other of our Commissioners, so I'm not so 25 121

1 focused on reliability. But it was nice to be able to 2 visit. And I encourage other staff members to visit the 3 facility. It's beautiful. And they even said that, you 4 know, they'd be open to having retreats there and things 5 like that.

6 So they have the space at the front, it's very 7 educational. They have photos and graphs and all kinds of 8 things showing the history of the CAISO and then also all 9 kinds of energy information. So for us energy nerds it is 10 a fun place to go. So happy to talk more about those 11 details, if anyone's interested in visiting.

12 And then finally, I think that's the last photo. 13 Correct? Yes, thank you. So after the CAISO visit that 14 was on Monday. And then I went and headed over to Renton, 15 Washington for the Unlocking Pathways Summit. This is an 16 event that's put together by the Department of Education. 17 So at the federal level, the Department of Education, and 18 Department of Transportation.

And they were focused on workforce, and how bringing together folks who are experts in education and folks who are experts in transportation, and what can we do there? How can we connect high schools, the trades, community colleges to figure out pathways for students that are not the traditional, you have to go to a four year college or nothing.

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So it was wonderful to be able to connect with
 all of these federal leaders, and other state
 representatives who went as well including Caltrans folks,
 Labor Workforce Development Agency, California Workforce
 Development Board.

6 And I felt like Patty, you should have been there 7 too, or Commissioner Monahan, excuse me. There's an 8 opportunity that the California Workforce Development Board 9 is setting up to go to Portland and have folks from 10 California, from Oregon and from Washington all go to 11 Portland and talk about what we can do further in the 12 transportation space. So I said definitely include Energy 13 Commission, we're interested. That's probably going to be 14 more suitable for Commissioner Monahan to attend. So I 15 will connect you with them, so we can talk more about that 16 opportunity.

17 And then we also talked about the potential for 18 offshore wind, to do something similar. Apparently, 19 there's high schools that focus on maritime, so I thought 20 that would be a great opportunity to get those high schools 21 connected. Maybe even with our community colleges who are 22 setting up curriculum focused on offshore wind, and seeing 23 what we can do to fill all those positions that offshore 24 wind is going to create. It's like 30,000 or more. So we 25 need to make sure that, you know, we're thinking about

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1 that.

And I also talked to them about Lithium Valley and the opportunities there, so it was fun. I'm going to share more details with the Chair and Vice Chair about, you know, connecting on the offshore wind opportunity. But I'm really happy I was able to represent the Energy Commission and looking forward to more of those types of visits, and engagements. And that's it for me.

9 COMMISSIONER MCALLISTER: Great. Well, thank you 10 very much. And I'm looking forward to going down and 11 visiting some of the sites for geothermal down south at 12 some point with you. I'll be partnering with you and with 13 the Chair coming up in the not too distant future.

Just a few updates. I wanted to just start with just acknowledging a few of the teams that are doing a lot of great work right now. First, the Equitable Building Decarbonization team, which is really a joint effort between Efficiency Division and the READY Division, Deana and her team in REDDI, and Mike Sokol and his team in Efficiency Division.

The guidelines for that program are really shaping up. And I would really recommend everyone to look at them. We're trying to connect a lot of dots with building electrification, building decarbonization. Many of the themes that have come up in this meeting, workforce, 124

1 including things like tenant protections, and really 2 justice issues, broadly beyond what we typically deal with in the energy sphere. And so trying to really create a 3 4 program that can provide a long term platform for scale. 5 So just our team has been working really well together 6 across divisions. And those guidelines are shaping up and 7 they'll be in front of you at some future business meeting 8 in the not too distant future.

9 And along those lines I wanted to just remind 10 folks that we have the Building Electrification Summit, 11 October 10th, and 11th. I want to acknowledge my Chief of 12 Staff, Brian Early for really spearheading that along with 13 Morgan Shepard also in my office. And it's shaping up to 14 be a really a great event partnering with EPRI here in 15 Sacramento at the CNRA headquarters.

And really the goal there is to do with building decarbonization what we have done in other sectors like solar like what's happening with EVs, like what we're trying to do with offshore wind. Really just be very clear and have a long-term vision that we can then execute on and really marshal resources and stakeholders to focus on.

22 And then the finance community to focus on really 23 touching as many buildings as possible in our big state, 24 with 50 million buildings that need some measure of 25 decarbonization upgrades. So trying to really step set the 125 CALIFORNIA REPORTING, LLC

1 stage for a massive effort in the coming years to build on 2 the programs now that we're going to be investing serious 3 money in the near term.

4 So but I also wanted to just highlight the 5 compliance team on the field verification diagnostic 6 testing work, a couple of rulemakings happening there. And 7 also the Building Standards team who's working on the 2025 8 Update for Title 24. So both of those are very large lists 9 and rulemakings that we'll be producing, big innovations 10 for California as well.

11 Let's see. I wanted to -- so the last thing on 12 sort of substantive issues. Just I think the Vice Chair 13 brought this up last business meeting, but we have been 14 having discussions around how to actually create regional 15 energy markets. Resale regional wholesale energy markets.

16 And a letter was sent that was signed by a 17 variety or group of Public Utility Commissioners and Energy 18 Office officials from the clean energy states in the West. 19 And that letter was sent to leadership at the Western 20 Interstate Energy Board and CREPSI, (phonetic) which is a 21 body that we also administer. And that is a group of 22 energy of energy officers and PUC Commissioners from across 23 all the Western interconnect states.

24 So really asking or sort of proposing a path 25 forward for regional energy markets that include

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California. And so it's really an early stage of the
 discussion that is really an invitation to all the states
 that want to participate to participate in fleshing out a
 vision for the west wet market that includes as many
 states, as many consumers as possible. Because that's how
 we all know we get the most benefit to consumers with a
 bigger market.

8 So anyway, just projecting that there will be 9 more discussions coming on that. And we're trying to spark 10 the conversation and I think successfully have done that.

I really want to commend President Reynolds from the PUC for her leadership on this, as well as Vice Chair Gunda for his leadership from our Commission. So exciting step forward, but early days in that conversation.

And then just a few personnel things. First, I Manted to since the last meeting, I believe we've been joined by Scott Blanc in the Efficiency Division. He comes over from SMUD where he's been a leader in the building decarbonization space for a long time, and energy efficiency.

And he is -- so Mike Sokol has done a bit of a -we've done a bit of a reorganization, restructuring a little bit of Efficiency Division with another two deputy directors. And so Scott will be operating as a deputy to Mike Sokol alongside Will Disset. (phonetic) So Scott is 127

the Deputy Director for Existing Buildings and Appliances.
 And then Will is focused more on new construction.

3 So welcome, Scott, really happy to have you in
4 the building.

5 I also wanted to let folks know that my longtime 6 Executive Assistant Laura Castañeda is back after maternity 7 leave and with another baby girl. And actually, you'll see 8 her as Laura Williams going forward since she also got 9 married. So anyway congratulations, Laura, and welcome 10 back. It's really good to have you back in the office.

11 And I wanted to thank Jan Mitchell for holding 12 the fort incredibly, ably, while Laura was out. Really, it 13 was a pleasure to work with Jan, and wish her the best in 14 her now slightly scaled down role, although I think she's 15 moving to the Chair's office so maybe not. But just really 16 grateful to have that administrative support.

17 And then finally I wanted to just wish my Advisor Morgan Shepherd the best. She's in the room here and is 18 19 headed off to graduate school at the Colorado School of 20 Mines. And I think this is her last week. And so I really 21 just want to thank you, Morgan, for all your contributions 22 to just helping keep me prepared for all the different 23 activities and including business meetings. And for your 24 work on the upcoming symposium as well, or the summit 25 rather. So I wish you all the best. And come back and

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visit us and solve our -- any issues that might come up and
 load management standards. We're going to be looking to
 you to solve those analytically with your new training.
 And really just, I wish you all the best going forward.

5 And hopefully in the next business meeting, I'll 6 have an announcement of a new advisor joining our team. So 7 with that I'm going to wrap up my comments. Thanks very 8 much.

9 So we can move on to Item 13, I believe. Oh no,
10 Item 14, sorry, Executive Director's Report.

MS. BADIE: There's nothing to report today.
 COMMISSIONER MCALLISTER: Thank you very much.
 And turning to Item 15, Public Advisor's Report.

14 MS. BADIE: No report today, thank you.

15 COMMISSIONER MCALLISTER: Thank you. And

16 finally, Item 16 Chief Counsel's Report.

17 MS. BARRERA: Nothing to report today.

18 COMMISSIONER MCALLISTER: Okay, well, that was 19 very easy. There we go.

20 So before we adjourn I wanted to -- really at the 21 request of the Chair, but rightly so, wanted to acknowledge 22 on behalf of the Commission that two of the victims in the 23 plane crash two weeks ago in Southern California were doing 24 important lithium work on behalf of CTR in the Salton Sea 25 region.

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Their names were Manny Vargas and Riese Lenders, and they were killed actually in that plane crash. And so we wanted to adjourn the meeting in their memory and for the other victims of the crash, so we'll pause before we adjourn. (A moment of silence was observed.) COMMISSIONER MCALLISTER: We're thinking about Manny and Riese's families and all their colleagues who are mourning them. So with that we will adjourn the meeting. Thank you, everybody. (The Business Meeting adjourned at 12:52 p.m.)