

**DOCKETED**

<b>Docket Number:</b>	23-BUSMTG-01
<b>Project Title:</b>	Business Meeting Agendas, Transcripts, Minutes, and Public Comments
<b>TN #:</b>	250749
<b>Document Title:</b>	Transcript of the June 16, 2023 Business Meeting
<b>Description:</b>	N/A
<b>Filer:</b>	Chester Hong
<b>Organization:</b>	California Energy Commission
<b>Submitter Role:</b>	Commission Staff
<b>Submission Date:</b>	6/27/2023 10:48:33 AM
<b>Docketed Date:</b>	6/27/2023



APPEARANCES (\*Present via Zoom)

Commissioners

David Hochschild, Chair  
Siva Gunda, Vice Chair  
Andrew McAllister  
Noemi Gallardo  
Patty Monahan

Staff Present:

Drew Bohan, Executive Director  
Linda Spiegel, Chief Deputy Director  
Linda Barrera, Chief Counsel  
Mona Badie, Public Advisor

	Agenda Item
Dustin Schell	3f
Michael Gravely	4
Yahui Yang	5
Jorge Quintero, California Department of Water Resources (DWR)	6, 7
Jared Babula	8
Justin Scaccianoce	9
Jonathan Bobadilla	10
Valeria Bernal	12
Liz Gill	12

Also Present:

Speakers:

Andrew Alejandre, Paskenta Band of Nomlaki Indians	4
Jim Harris, Redflow Ltd.	4
Erich Hans, Viejas Tribe	4
Michael Firenze, Viejas Tribe	4
Jorge Quintero, California Department of Water Resources (DWR)	6, 7
Delphine Hou, DWR	7

APPEARANCES (Cont.)

<u>Public Comment:</u> (*Present via Zoom)	Agenda Item
Steve Uhler	1, 3f
Sofi Magallon, Central Coast Alliance United for a Sustainable Economy, CAUSE	7
Teresa Cheng, Sierra Club	7
Lucia Marquez, Central Coast Alliance United for a Sustainable Economy, CAUSE	7
Mari Rose Taruc, California Environmental Justice Alliance, CEJA	7
Tyler Valdes, California Environmental Justice Alliance, CEJA	7 7
Scott Lipton, Enchanted Rock	7
Anne Hoskins, Generac Power Systems	7
Kim Delfino, Earth Advocacy Consulting on behalf of the Defenders of Wildlife, the California Native Plant Society, the Center for Biological Diversity, the Nature Conservancy	8
Matt Miyasoto, FirstElement fuel, Inc.	10
Vera Neinken, Moxion Power	10
Alex Meek, Moxion Power	10

I N D E X

	Page
Proceedings	7
Items	
1. Public Comment	9, 13, 40, 82, 110, 126
2. Agency Announcements	7
3. Consent Calendar	12
a. Cerritos Community College District (Cerritos College).	
b. Alliance for Sustainable Energy, LLC (Alliance).	
c. Herter Energy Research Solutions.	
d. Energy Conservation Assistance Act (ECAA) Loan Program.	
i. Parlier Unified School District.	
ii. Campbell Union High School District.	
e. Family Health Centers of San Diego, Inc (Family Health Centers).	
f. The Regents of the University of California, on behalf of the Davis Campus.	
g. Food Production Investment Program. GFO-22-303.	
i. Los Gatos Tomato Products, LLC.	
ii. WWF Operating Company, LLC.	
iii. OWB Packers, LLC.	
iv. Pacific Coast Producers.	

I N D E X (Cont.)

	Page
3. Consent Calendar (Cont.)	12
h. Local Ordinances for the City of Solana Beach and the County of Los Angeles.	
i. City of Solana Beach.	
ii. County of Los Angeles.	
i. Updated 2022 Alternative Calculation Method (ACM) Reference Manuals, and California Building Energy Code Compliance Software (CBECC-Res 2022.3.0 and CBECC 2022.3.0).	
i. Proposed resolution certifying the updated 2022 Single-Family Residential ACM Reference Manual and Nonresidential and Multifamily ACM Reference Manual.	
ii. Proposed resolution approving the updated 2022 public domain residential, nonresidential, and multifamily software, CBECC-Res 2022.3.0 and CBECC 2022.3.0.	
j. Resource Systems Group, Inc.	
4. Information item on Current Activities of the Long Duration Energy Storage (LDES) Program.	28
5. Form Energy, Inc.	59
6. Information item on Update on Electricity Supply Strategic Reliability Reserve Investments.	64
7. DWR Investment Plan.	72
8. Small Power Plant Exemption Rulemaking.	108

I N D E X (Cont.)

	Page
9. LICAP Technologies, Inc.	117
10. Zero Emission Transportation Manufacturing - GFO-21-605.	123
a. Moxion Power Co.	
b. FirstElement Fuel, Inc.	
11. Minutes.	135
12. Lead Commissioner or Presiding Member Reports	137
13. Executive Director's Report.	155
14. Public Advisor's Report	159
15. Chief Counsel's Report	159
a. Pursuant to Government Code Section 11126(e)(1), the CEC may adjourn to closed session with its legal counsel to discuss the following matter to which the CEC is a party:	
i. <i>Interlink Products International, Inc. v.            Xavier Becerra, Drew Bohan, Melissa Rae King            (United States District Court for the Eastern            District of California, Case No. 2:20-cv-02283)</i>	
Adjournment	160
Reporter's Certificate	161
Transcriber's Certificate	162

1 P R O C E E D I N G S

2 JUNE 17, 2023

10:04 a.m.

3 CHAIR HOCHSCHILD: Well, good morning friends,  
4 and welcome. My name is David Hochschild. I'm Chair of  
5 the California Energy Commission. Today is Friday, June  
6 16th. I call this meeting to order. Joining me here in  
7 the room are Commissioner McAllister and Commissioner  
8 Gallardo. Vice Chair Gunda is on travel and is joining  
9 remotely, as is Commissioner Monahan. Let's begin by  
10 standing for the Pledge of Allegiance led by Commissioner  
11 Gallardo.

12 (Whereupon the Pledge of Allegiance was recited.)

13 CHAIR HOCHSCHILD: Thank you.

14 So before we move on to the agenda just to note  
15 on Item 7 we're going to take that up today as an  
16 informational item. No vote will be taken on that item,  
17 and we will be doing public comment on that item when we  
18 get there.

19 So moving now to agency announcements, it is  
20 Pride Month, so happy Pride Month to everyone.

21 We're also going to be seeking to approve over  
22 \$38 million in investments today, contributing to  
23 California's economic recovery. And I wanted to say[ just  
24 on a personal note that I did something I've never done in  
25 my life before, is I took a 10-day silent retreat, which



1 ended last Sunday. And I'm turning 52 this week, and I've  
2 been in this job now for just over 10 years. You know,  
3 I've never worked harder in my life, especially as Chair.  
4 I really felt I needed that and it was incredibly  
5 restorative and healthy for me, and just a chance to  
6 reflect on what we've all done together.

7           And I really just want to ask, you know,  
8 particularly Energy Commission staff and my fellow  
9 Commissioners to just take in the enormity of what we have  
10 accomplished. This agency is punching well above its  
11 weight class. You know our budget has increased ninefold.  
12 We are changing the country and changing the world for the  
13 better. Everything from electric vehicles to offshore  
14 wind, to energy efficiency, to water efficiency, to energy  
15 storage, tribal energy sovereignty, and so much more. And  
16 it's something I really feel we should all be deeply,  
17 deeply proud of.

18           And I think one of my main reflections over that  
19 time was just the importance of taking care of each other  
20 and taking care of ourselves and our health, so that we can  
21 all sustain. And this really goes, you know, not just to  
22 Energy Commission staff, but to all of our amazing  
23 stakeholders that we work with on all of these issues. You  
24 know, climate is -- obviously, it's the biggest challenge I  
25 think we face as a world. But there's a lot of when you're

1 working on these issues there's a lot of very deep urgency  
2 that we all feel, and that is warranted. But equally  
3 warranted is getting into a cadence that's sustainable  
4 where we can not burn out as we work on building a healthy,  
5 sustainable future.

6 So I just want to stress how important I think  
7 that is, and taking care of each other as we go forward.  
8 And how incredibly proud I am, and I think we all should  
9 be, of the amazing work to date. I just couldn't feel  
10 happier about that.

11 So thank you for hearing me out on that and let  
12 me just see if there's any other discussion from  
13 Commissioners or agency announcements before we move on.

14 COMMISSIONER GALLARDO: This is Commissioner  
15 Gallardo. I have an announcement. We are having the Clean  
16 Energy Hall of Fame Awards December 7th. Today is the last  
17 day that you can nominate someone for those awards, so we  
18 will share the link for you to submit a nomination.

19 And this is a great opportunity to be able to  
20 uplift local leaders who are contributing to helping us get  
21 to 100 percent clean energy future. So if anyone here in  
22 the room, anyone in our Zoom space, would like to nominate  
23 someone please do so. And we will share the link with you  
24 in the chat shortly.

25 CHAIR HOCHSCHILD: Great, thank you. Unless

1 there's other announcements, we'll turn to the Consent  
2 Calendar, Item 3. What we'll do is take up Items 3a through  
3 e.

4 MS. BADIE: Sorry, Chair?

5 CHAIR HOCHSCHILD: Yes?

6 MS. BADIE: I wanted to do the general public  
7 comment Commission item.

8 CHAIR HOCHSCHILD: Sorry, did I pass that over?  
9 Yeah, sorry, my mistake. Let's go to public comment.  
10 Sorry, Mona.

11 MS. BADIE: All right, good morning. This is  
12 Mona Badie, the Public Advisor for the California Energy  
13 Commission. This is the public comment period for general  
14 public comment, so it's any informational items or other  
15 public comment. And just to note, although Item 7 will be  
16 taken up as informational item, there will be a dedicated  
17 public comment period for Item 7.

18 So first, I will check for folks in the room.  
19 (No audible response.) Okay, and next I will look at Zoom.

20 All right, we have one raised hand on Zoom.  
21 Call-in User 2, please state and spell your name for the  
22 record. We're asking commenters to limit their comment to  
23 two minutes and there will be a timer on the screen. I'm  
24 going to open your line now.

25 MR. UHLER: Hello, Commissioners. This is Steve

1 Uhler. That's U-H-L-E-R.

2           Recently the Commission approved some Load  
3 Management Standards, but to go along with the Load  
4 Management Standards are some rules for accessing MIDAS.  
5 These have not been approved by the Commission according to  
6 the docket, the documents in the docket.

7           Also, the staff appear to be changing the rules  
8 for MIDAS without putting anything in writing anywhere, in  
9 any of the software control or whatever. So I would hope  
10 that you could see that they get those rules approved by  
11 you and that they keep all registered users of MIDAS up to  
12 date on where those rules are at.

13           Another item is I recently put in a petition for  
14 rulemaking where the Executive Director appears to want to  
15 deny the rulemaking without you making a decision to  
16 approve or deny. The rulemaking is on approving an order  
17 for a rulemaking. The rules haven't been changed since the  
18 mid-eighties, and haven't kept up with bills and statutes  
19 such that it now appears that the Commission can deny a  
20 request for a rulemaking. And you need to pay quite  
21 attention to that you have a definition of what a hearing -  
22 - a petition for a hearing for a rulemaking. And you have  
23 a definition for a hearing as such. The Executive Director  
24 knows about this.

25           And it appears I'm now approaching the end of my

1 time. But please see that the MIDAS rules are approved.  
2 Please see that you get to approve or deny my rulemaking  
3 petition. Thank you.

4 MS. BADIE: Thank you.

5 And I neglected to mention if you are in the room  
6 we're asking you to sign up for public comment using the QR  
7 code in the back of the room. And we've got Alejandra at  
8 the table to assist. And then if you're on Zoom, we'll ask  
9 that you use the raise hand feature. It that open palm  
10 icon on your screen. And if you're on the phone you'll  
11 press \*9 to raise your hand.

12 And just doing another quick check. All right,  
13 those are all the hands for this public comment period.  
14 Back to you, Chair.

15 CHAIR HOCHSCHILD: Okay, thank you.

16 Now to Item 3, the Consent Calendar. We'll take  
17 up Items 3a through e, and 3g through i (sic) as a group.  
18 And then Item 3f will move to discussion, so we'll hear  
19 that separately afterwards. So let's see if there's any  
20 public comment on those first items first. Do we have  
21 public comment? (Pause.)

22 MS. BADIE: Sorry, Chair.

23 This is Mona Badie, the Public Advisor with the  
24 California Energy Commission. We will now take public  
25 comment on Items 3a through e and 3g through j. If you're

12

1 in the room you can use the QR code. And if you are on  
2 Zoom, please use the raise hand feature on the screen, or  
3 \*9 if you're joining Zoom by phone.

4 I see one raised hand. Call-in User 2, please  
5 state and spell your name for the record. We ask that  
6 commenters limit their comments to two minutes. I'm going  
7 to open your line now.

8 MR. UHLER: Hello, Commissioners. This is Steve  
9 Uhler, U-H-L-E-R. I'm a commenting on 3c, the Herter  
10 Research Solutions contract. In talking with or emailing  
11 to the staff my concern was, are these costs -- were these  
12 costs considered during the load management rulemaking?  
13 Staff currently say no. Now, the load management  
14 rulemaking clearly says it's critical for flexible demand  
15 appliance standards. And this apparently -- they have told  
16 me that this contract is for that.

17 I'm hoping that the public will be able to see an  
18 accounting for everything that is required to make load  
19 management standards functional. So yeah, please see this.  
20 You might even want to pull this off of the Consent  
21 Calendar to get further discussion about what I'm talking  
22 about. But in your Final Statement of Reasons, in other  
23 reports, it states that flexible demand standards are  
24 critical. And these costs, I am told, are not captured in  
25 the estimate for the economic and financial impact. Thank

13

1 you.

2 MS. BADIE: Thank you for that comment.

3 That is all the public comments for this item.

4 Back to you, Chair.

5 CHAIR HOCHSCHILD: Okay, is there a motion from  
6 Commissioner McAllister for Items 3a through 3e and 3g  
7 through j?

8 COMMISSIONER MCALLISTER: I move items 3a to e  
9 and g through j?

10 CHAIR HOCHSCHILD: Is there a second from  
11 Commissioner Gallardo?

12 COMMISSIONER GALLARDO: I second Item 3.

13 CHAIR HOCHSCHILD: All in favor say aye.  
14 Commissioner McAllister?

15 COMMISSIONER MCALLISTER: Aye.

16 CHAIR HOCHSCHILD: Commissioner Gallardo?

17 COMMISSIONER GALLARDO: Aye.

18 CHAIR HOCHSCHILD: Vice Chair Gunda.

19 VICE CHAIR GUNDA: Aye.

20 CHAIR HOCHSCHILD: And Commissioner Monahan?

21 COMMISSIONER MONAHAN: Aye.

22 CHAIR HOCHSCHILD: Okay, those items pass  
23 unanimously. We'll turn now to Item 3f and take public  
24 comment on Item 3f.

25 MS. BARERRA: Chair, if I may?

1 MS. BADIE: Sorry, thank you.

2 MS. BARERRA: Yeah, this is Linda Barrera, Chief  
3 Council. I believe that Commissioner Monahan is going to  
4 recuse herself from this item and (indiscernible) message.

5 CHAIR HOCHSCHILD: Oh, sorry. Commissioner  
6 Monahan, did you want to make an announcement? And you're  
7 on mute there still.

8 COMMISSIONER MONAHAN: Sorry, just give me a  
9 second to get the specific -- oh, here we go.

10 On this item I will recuse myself from any  
11 discussion, consideration, and vote on the proposed  
12 contract to the University of California Regents on behalf  
13 of the Davis Campus for a \$953,168 contract for UCD's Plug-  
14 In Hybrid & Electric Vehicle Research Center.

15 The scope of work for the contract proposes to  
16 fund the work of a principal investigator currently  
17 employed by the UC Davis Institute for Transportation  
18 Studies. I currently serve as a member on the Board of  
19 Advisors for the UC Davis Institute of Transportation  
20 Studies. In that role I do not make governance decisions  
21 on behalf of the Institute, but the Board exists to provide  
22 guidance and oversight to the UC Davis's transportation  
23 research projects. Additionally, I did not receive any  
24 compensation in any form, including reimbursements or per  
25 diem for expenses. So there's no financial interest in

15



1 which there would be a conflict of interest under the  
2 Political Reform Act or Government Code Section 1090.

3           However, in an abundance of caution, I will  
4 recuse myself in order to avoid any perception of a  
5 conflict of interest.

6           CHAIR HOCHSCHILD: Okay, thank you, Commissioner.  
7 With that there will be a brief presentation, then we'll  
8 take public comment.

9           MR. SCHELL: So good morning, Chair, Vice Chair,  
10 and Commissioners. My name is Dustin Schell. I'm an Air  
11 Resources Engineer in the Light-Duty Electric Vehicle  
12 Infrastructure and Analysis Branch. Today I'll be  
13 presenting on EV charger reliability as well as a specific  
14 proposal for the Commission to adopt an agreement with UC  
15 Davis to conduct field testing of EV chargers operating in  
16 California. And I believe I have a slide deck?

17           CHAIR HOCHSCHILD: Oh, can we put up the slides?

18           MR. SCHELL: So that would be Item 3f.

19           CHAIR HOCHSCHILD: Item 3f, Jerome. Thanks.

20           (Colloquy re: setting up the slide deck.)

21           CHAIR HOCHSCHILD: Dustin, why don't you go ahead  
22 and start, and the slides will catch up.

23           MR. SCHELL: Okay, great. So the CEC is aware  
24 that there are reliability challenges with publicly  
25 available EV chargers. There has been a steady stream of

1 reporting on challenges in EV charging reliability since  
2 approximately 2021.

3 Staff have been actively working to understand  
4 and implement solutions. However, there is insufficient  
5 data to fully characterize the scope and the specifics of  
6 the problem.

7 Regardless of the availability of empirical data,  
8 the perception that public charging is unreliable  
9 undermines public confidence and presents a barrier to EV  
10 adoption and to California's goals to transition to zero-  
11 emission transportation.

12 So when we talk about EV charger reliability, one  
13 of the big questions is "What should we Measure"? Charger  
14 uptime is the most talked about metric for determining the  
15 reliability of chargers. And with some exceptions, uptime  
16 is the percentage of time that the is operational and  
17 available to deliver electricity upon customer request.

18 Although limited, the existing body of empirical  
19 research into charger reliability clearly indicates that  
20 this is only part of the problem.

21 A large number of documented failures to charge  
22 occur when the charger is in an apparent operational state.  
23 CEC staff believe that these failed charges can be  
24 attributed to one of two categories broadly. The first are  
25 payment systems. And the second is interoperability

1 failures, which are failures in communication between the  
2 EV and the charger itself, or the charger and the EV  
3 itself, excuse me.

4           Although it has not been formally defined, staff  
5 believe that reliability is a customer's ability to charge.  
6 And in that view both uptime and failed charges are  
7 included.

8           So in terms of what the CEC has done so far,  
9 staff have done extensive stakeholder engagement including  
10 holding workshops, attending conferences, and surveying  
11 industry stakeholders. CEC staff have also included  
12 reliability requirements in all light-duty EV charger  
13 solicitations and block grants released since late 2021.

14           Those requirements have evolved over time and  
15 strengthened as well. Our most recent solicitations  
16 include minimum reliability performance standards, which  
17 includes a minimum uptime of 97 percent and data collection  
18 requirements to better characterize failed charging  
19 sessions.

20           They've also included recordkeeping and reporting  
21 requirements and maintenance requirements.

22           The CEC has also funded two main projects to  
23 address interoperability. These are the ViGIL solicitation  
24 which funded a conformance testing lab in Northern  
25 California. And the VOLTS testing symposium, which was an

1 interoperability conference and testing event.

2 Staff are currently also exploring ways to  
3 investigate and address payment system failures, although  
4 we are not as far along in that space. Next slide, please.

5 So in terms of what others are doing, the federal  
6 government in February of 2023, released its final  
7 rulemaking that set minimum standards and requirements for  
8 projects funded under the NEVI Formula Program.

9 Staff have aligned requirements for grant funding  
10 opportunities with federal rulemaking since its release.  
11 In general, our requirements add to the federal  
12 requirements but do not alter or conflict with them.

13 There's also the Charge-X -- we probably need to  
14 advance one slide, please. So the Charge-X Consortium is a  
15 Joint Office of Energy and Transportation funded consortium  
16 led by the National Labs. It is focused on improving the  
17 user experience in EV charging and the CEC is participating  
18 in this consortium.

19 Finally, the SAE is in the process of developing  
20 a set of best practices to monitor charger health. This  
21 will provide industry and public agencies a standard model  
22 to track charger health. Next slide, please.

23 So moving forward the CEC is taking a number of  
24 actions to improve the reliability of EV chargers.  
25 Pursuant to AB 2061, staff are currently finalizing draft

1 regulatory language that sets recordkeeping and reporting  
2 requirements for all publicly funded chargers in  
3 California. We expect to publish draft language this  
4 summer.

5           Staff are also considering requiring chargers  
6 funded by the CEC to be certified to conform with a number  
7 of standards. This will help to drive a more interoperable  
8 network of chargers and vehicles in the long term. And  
9 given the lack of data, today we are proposing the  
10 Commission adopt an agreement with UC Davis to conduct  
11 field testing of chargers operating in California. And I  
12 will go into more detail in the next couple of slides.  
13 Next slide, please.

14           So this agreement proposes that the contractor  
15 develop an open-source, standardized protocol for testing  
16 the reliability of EV chargers in the field. This will be  
17 done in coordination with industry stakeholders and will  
18 ultimately be published to provide a framework for other  
19 states, researchers, etcetera to test chargers in a way  
20 that makes data sets comparable.

21           It proposes the contractor develop a sampling  
22 methodology that tests a significant of chargers in low-  
23 income and disadvantaged communities, non-low-income and  
24 disadvantaged communities, urban communities, and rural  
25 communities.

1           Finally, it proposes that the contractor conduct  
2 a data analysis and make a final report to the CEC.  
3 Additionally, the contractor will also make annual interim  
4 data reports and we are committed to updating the  
5 Commission as these interim reports are made.

6           As proposed, this study will be the largest  
7 single attempt to understand the reliability of the public  
8 charging network that CEC staff are aware of. Next slide,  
9 please.

10           In terms of the benefits to Californians, as  
11 proposed this agreement will help to fill a major gap in  
12 our understanding of the actual reliability of EV chargers  
13 operating in California. It will provide us with a robust,  
14 empirical data set that will ground truth anecdotal  
15 reporting about poor charger reliability. And allow us to  
16 address negative perception about public charging in  
17 systematic way.

18           It will also provide a systematic and empirical  
19 understanding of the various challenges in this space.  
20 These in turn will help inform both public and private  
21 investment decisions.

22           And then finally, as an aside it will develop a  
23 standardized test protocol that can be used in future  
24 studies. Overall, we believe that this agreement will  
25 ultimately aid in reducing a significant barrier to EV

1 adoption. Next slide, please.

2 So in closing, staff recommend the Commission  
3 adopt our proposal to approve this agreement with UC Davis,  
4 as well as adopt staff's determination that this action is  
5 CEQA-exempt. Thank you and I'm happy to take any questions.

6 CHAIR HOCHSCHILD: Great. Thank you.

7 Let's go to public comment.

8 MS. BADIE: Thank you. If the screen share can  
9 please share one of the previous public comment slides for  
10 two minutes?

11 Okay, we will now take public comment for Item  
12 3f. If you are in the room we ask that you use the QR code  
13 to notify us if you'd like to make a comment in the room.  
14 And if you are on Zoom please use the raise hand feature on  
15 your screen, or \*9 if you're joining us by phone to let us  
16 know you'd like to make a public comment.

17 Okay, and this is for Item 3f. (No audible  
18 response.)

19 Okay. Not seeing anyone in the room, we will now  
20 go to the Zoom. I'm not seeing any raised hands on Zoom.  
21 Back to you, Chair.

22 CHAIR HOCHSCHILD: Okay. Well, first of all I  
23 want to say I think this is an incredibly important step.  
24 Charger reliability is fundamental to our strategy, and I  
25 think even the perception of not having a reliable network

22

1 itself is very damaging. I personally have had an electric  
2 vehicle for what, five years now. I've had actually  
3 generally a very, very good experience charging around the  
4 state, but there are definitely areas where we can get  
5 better. And we want to drill down those, I think. You  
6 know what you're doing will be really, really valuable to  
7 that end.

8 I did want to ask you when you mentioned talking  
9 about an open source charger test protocol, by that do you  
10 mean sort of identifying a set of metrics? I mean, what --  
11 can you say a little bit more about what exactly that is?

12 MR. SCHELL: Yeah, absolutely. It would be a  
13 step-by-step manual for testers to physically interact with  
14 the chargers and attempt to charge vehicles.

15 CHAIR HOCHSCHILD: Yes.

16 MR. SCHELL: Taking a user experience approach  
17 and then how they record what they're seeing, what error  
18 codes they're running into, what broken parts they're  
19 running into. And so that everything is very systematic.  
20 And in that way again build comparable data sets as we move  
21 forward, because one study is only one study unfortunately.

22 CHAIR HOCHSCHILD: Yeah, right. I do just want  
23 to say I mean I think for the customer right, the charger  
24 experience is unsuccessful if any part of the chain doesn't  
25 work. Like if the credit card machine is fine and there's



1 electricity, but the cord isn't long enough, right? Which  
2 is the case for some of the early chargers that were  
3 designed for vehicles that have the port in the front, but  
4 not in the middle of the car. That's a failed experience  
5 and so I mean all these metrics, you know, everything needs  
6 to work in order to have a successful charge. So I really  
7 appreciate that.

8 Any other comments? Yeah, go ahead, Commissioner  
9 Gallardo?

10 COMMISSIONER GALLARDO: Great presentation,  
11 Dustin. Thank you. I was just curious if you could talk a  
12 little bit more about why UC Davis and their research  
13 center?

14 CHAIR HOCHSCHILD: Sure, absolutely. So the  
15 public, or I'm sorry, the Plug-In Hybrid Electric Vehicle  
16 Research Center -- I'm sorry, the name, the exact name is  
17 escaping me.

18 COMMISSIONER GALLARDO: Do you want me to help  
19 you out?

20 MR. SCHELL: But they've worked in the space for  
21 a very long time. Obviously, another big part of it for us  
22 was the logistical component where the -- excuse me, the  
23 scope of work includes testing of 3,600 chargers in a  
24 three-year period, which is a pretty sizable task. And  
25 they've done similar studies with the EVMT.

1           What they were testing for and what the results  
2 were are different, but in terms of the logistics involved  
3 they were very analogous. They had to procure vehicles,  
4 rent vehicles, train up staff to actually do the testing,  
5 etcetera, etcetera. So they were just very well poised to  
6 do this.

7           And there is also a time component in working  
8 with D UC's, because we can enter into them contractually  
9 more easily and more quickly. And obviously there's  
10 solicitations and funding for charges going out the door  
11 now, and we wanted to address this as quickly as possible.

12           COMMISSIONER GALLARDO: Fantastic, thank you.

13           MR. SCHELL: Yes, ma'am.

14           CHAIR HOCHSCHILD: Great, unless there's any  
15 other comments?

16           VICE CHAIR GUNDA: Chair?

17           CHAIR HOCHSCHILD: Yeah, sorry. Vice Chair,  
18 please go ahead.

19           VICE CHAIR GUNDA: Yeah, thank you. Just again  
20 Dustin, thank you for the presentation. It was super clear  
21 and helpful.

22           Two quick questions, one is because it's a three-  
23 year period, the contract, are we going to have interim  
24 data that that you'll be tracking and being able to help as  
25 we go?

1           And the second question is around remedial action  
2 and recommendations, is the research and work going to also  
3 suggest some remedial action on existing performance  
4 issues? That specifically, you know, along those lines  
5 like what percentage of public chargers today do we think  
6 have performance issues?

7           MR. SCHELL: Thank you, Vice Chair. Yes. So  
8 there will be date annual interim data reports. And we've  
9 committed to updating the Commission on those as those  
10 reports are made available.

11           And then in terms of recommendations from the  
12 contractor, yes, those would be included in the final  
13 report. And I would just caveat by saying after the first  
14 year of testing we plan to revisit the protocol and see if  
15 there's any tweaking or adjustments that need to be made.  
16 And we can look into what we're seeing at that time as well  
17 to take immediate steps within our solicitations and other  
18 grant funding opportunities.

19           VICE CHAIR GUNDA: Thank you, Justin, that's  
20 great. Just on the general performance metrics today,  
21 anecdotally do we know what percentage of chargers are  
22 problematic today?

23           MR. SCHELL: There was a fairly recent study  
24 released about a year ago that would not be anecdotal. I  
25 would definitely characterize it as empirical, that saw

1 approximately a 22.7 percent failure rate in attempts to  
2 charge across 657 chargers. So that study looked at the  
3 too short of cables, or different sort of user experience  
4 that they added another approximately 4 percent failures to  
5 that 22.7. But sort of excluding those design failures and  
6 only looking at is it operable and capable of charging it  
7 was 22.7 percent.

8 VICE CHAIR GUNDA: Well, thank you so much,  
9 Dustin. That's super helpful. Thank you.

10 MR. SCHELL: Yes, sir. Thank you.

11 CHAIR HOCHSCHILD: With that unless there's --  
12 Commissioner McAllister, do you have a comment? Would you  
13 be willing to move the item?

14 COMMISSIONER MCALLISTER: Yes.

15 CHAIR HOCHSCHILD: Okay.

16 COMMISSIONER MCALLISTER: I will. Let's see,  
17 we're on Item --

18 CHAIR HOCHSCHILD: I believe at 3f.

19 COMMISSIONER MCALLISTER: 3, oh right, 3f right.  
20 I move Item 3f.

21 CHAIR HOCHSCHILD: Thank you.

22 Is there a second from Commissioner Gallardo?

23 COMMISSIONER GALLARDO: I second Item 3f.

24 CHAIR HOCHSCHILD: Okay, all in favor say aye.  
25 Commissioner McAllister?

1 COMMISSIONER MCALLISTER: Aye.

2 CHAIR HOCHSCHILD: Commissioner Gallardo.

3 COMMISSIONER GALLARDO: Aye.

4 CHAIR HOCHSCHILD: Vice Chair Gunda?

5 VICE CHAIR GUNDA: Aye.

6 CHAIR HOCHSCHILD: And I vote aye as well, with  
7 Commissioner Monahan abstaining. Well turn now -- so that  
8 item passes 4-0. And we will turn now to where are we,  
9 Item 4?

10 MR. SCHELL: Thank you.

11 CHAIR HOCHSCHILD: Yeah, thank you so much. Good  
12 work.

13 MR. GRAVELY: Good morning, Chair and  
14 Commissioners. I'm Mike Gravelly from the R&D Division.

15 Last July, the Energy Commission received \$140  
16 million to the advancement of non-lithium-ion technologies.  
17 Leave the first slide on please, for a second?

18 And I want to point out that when we got that the  
19 Chair challenged us to try to do as much as we could, as  
20 fast as we could. So we developed a kind of an early phase  
21 program and then a later phase program. And also under the  
22 current budget, it has not been approved yet, but the  
23 current indications are that in July this year we'll  
24 receive another \$190 million for the program.

25 I provided an update in September last year on

1 the program. And today I will discuss the program for the  
2 entire 330 million, both what we have done and what we plan  
3 on doing in the future. Next chart.

4 As we've discussed many times in this meeting and  
5 other meetings, energy storage just is critical to the  
6 future and us meeting our climate change goal. This  
7 picture actually came out of the Governor's presentation he  
8 gave last week to update on the energy policy. What it  
9 shows is that we currently have about 5,000 megawatts of  
10 energy storage installed, and we see a very rapid growth,  
11 with 19,000 by 2035 and 52,000 megawatts or 52 gigawatts by  
12 2045.

13 It's important to note that the 5,000 megawatts  
14 of storage and most of the storage just planned in the near  
15 future is one technology, lithium-ion. And what we've been  
16 given funding to do is to help expand that and to provide  
17 California new options in the non-lithium-ion arena. Next  
18 chart.

19 So the Energy Commission has a long history of  
20 energy storage. Most of you are familiar with the EPIC  
21 program that has over 10 years. This is just a quick  
22 collage of pictures, but I want to point out the fact that  
23 we have developed many technologies. And some of those  
24 technologies have graduated to a larger scale. On the left  
25 side of the presentation we show on the upper left that

1 we've done residential, commercial, industrial, military  
2 sites, and even large underground sites within utilities.

3           On the right it shows a couple of the projects  
4 that we are currently working in the long-duration stores  
5 program. And the first which is in the center is Redflow.  
6 This is a project that was installed about a year and a  
7 half ago at Ontario. And it's a 2 megawatt hour system  
8 that has been operating very successfully for 18 months.  
9 That technology will be used in one of our upcoming  
10 presentations.

11           And the lower chart there shows Form Energy,  
12 which is a 100-hour system. And this is an artist concept.  
13 And that is one of the new innovative technologies that  
14 we're working. That's another area that we anticipate  
15 awarding grants for, and there is a grant to them that's  
16 the next item.

17           On the other side shows -- and the very first  
18 project we did -- the Vicenza (phonetic) Tribe. We have 25  
19 megawatt hours of batteries on the ground currently being  
20 installed in San Diego. That eventually will be a 35  
21 megawatt hour system and grow to a 60 megawatt hour system  
22 next year.

23           In the lower right, and it's important to  
24 understand one of the things we're doing is we're doing our  
25 own independent testing. We have a test facility on the

1 military base at Miramar. This shows that we're testing  
2 the first two battery systems. The Eos system and the  
3 Infinity system. We're doing extensive testing both on  
4 performance and safety and reliability that we are doing  
5 independent of testing that the company does themselves.  
6 Next chart.

7           So with the \$440 million that we received last  
8 year, we developed three projects that are ongoing. The  
9 first two projects have been awarded. The third project  
10 will receive its first award at this business meeting. And  
11 what I'll do now is just go through briefly. The other  
12 thing is that we do expect 190 million, and I will show  
13 you, as we go forward, how we expect to use it. Next  
14 chart.

15           So the Viejas project was awarded in October, and  
16 we've been working very hard to get the system installed.  
17 As I mentioned, 25 megawatt hours of that system. As the  
18 lower right shows you, it's sitting on the ground waiting  
19 to be installed. We are working on the platform right now,  
20 and they will be installed over the next month or two and  
21 they'll be operational in the late summer, early fall.

22           It also helps us understand how we use long  
23 duration storage. As I mentioned, most of the storage we  
24 have today is four-hour storage. Lithium-ion is four-hour  
25 storage. Lithium-ion as a technology is not classically



1 considered a long duration storage.

2 The picture up in the upper right shows that at  
3 the site there will be the full 60 megawatts of batteries  
4 will be in the upper right. There's 15 megawatts of  
5 storage. And then up also they're putting in 250 charging  
6 stations in their parking garage to allow them to support  
7 EV charging as the tribe continues to grow its operations.  
8 Next chart.

9 The Paskenta Tribe is -- I don't know if we can  
10 get rid of that thing in the center or not, Mona? Can we  
11 get rid of that thing in the center?

12 (Colloquy regarding slide presentation.)

13 MR. GRAVELY: Thank you.

14 So the Paskenta Tribe is a little bit smaller, a  
15 microgrid, 20 megawatt hours. It's in an area that has a  
16 history of reliability issues and wildfires and other types  
17 of disturbances. They've been actively working with FEMA  
18 to develop in that region an emergency service. They also  
19 are intending to provide services not only to their tribe,  
20 but to the local community. So they're going to be using  
21 this for not only tribal, but for the local environment.

22 And also this will show an opportunity for the  
23 tribe to reduce their overall energy expenditures. So  
24 that's good.

25 The chart at the front shows you roughly where it

1 is. It's right off of Highway 5 just south of Redding. And  
2 then the bottom one is an artist's conception. But at the  
3 end of the day those batteries will be looking just about  
4 like that when they're installed in the spring of next  
5 year. Next chart.

6           And the final project that we did in our early  
7 project is in fact the first two were behind-the-meter.  
8 This is a front-of-the-meter. This is Form Energy. This  
9 is a 100-hour 5 megawatt battery. And it will be installed  
10 at a PG&E substation in the Mendocino area.

11           One of the things for us to look at is extremely  
12 long storage. This storage is very inexpensive on a per  
13 hour basis. And then the question is, how do we optimize  
14 that? One of the things I wanted to mention is we have  
15 only purchased 10 percent of the storage we need. The more  
16 we can make decisions and find technologies that are  
17 cheaper or better performing then we can take advantage of  
18 that as we go forward. And as some of these other systems  
19 retire, we can replace them with a better performing lower  
20 cost system. That's the ultimate gold of this project and  
21 the ultimate reason we were given these funds.

22           And also this will be demonstrating and providing  
23 services to the utility into the ISO market. Next chart.

24           So one of our requirements, when we submitted the  
25 request for funding to the Legislature we said that we

1 wanted to advance four to six companies to where they could  
2 compete on a level playing field with lithium-ion.  
3 Currently most non-lithium-ion technologies are about 20 to  
4 50 percent higher than lithium-ion. But as they increase  
5 their sales and prove things we believe in the next two to  
6 five years, many of those will be able to compete on a  
7 level basis. And the work that we're doing is driving that  
8 that ability to reduce cost.

9           So we've done four technologies: a zinc hybrid, a  
10 flow battery based on Vanadium, and a flow battery based on  
11 zinc-bromine and an Iron air battery.

12           As you'll see, we have future projects planned,  
13 and we actually expect to probably get to the point of  
14 eight to ten different technology, different combinations  
15 out there as part of this project. And hopefully many of  
16 those will be able to advance.

17           We are working right now in the range of 20 to 40  
18 megawatts per supplier. And our ultimate goal is to get  
19 them where they can produce 200 to 400 megawatt hours a  
20 year to be able to compete in this market in the future.  
21 Next chart.

22           So if you look at the other thing we're doing is  
23 we awarded two other (indiscernible: overlapping colloquy)  
24 is to look at analysis. There hasn't been a lot of work  
25 done --

1 CHAIR HOCHSCHILD: Do you mind going back one  
2 slide. Just one quick question while we have the  
3 chemistries up there: zinc and vanadium, zinc-bromine. And  
4 I'm just interested in source location of those raw  
5 materials. Those are all domestically available. Are they  
6 all also available in California? I mean, obviously we're  
7 trying to get off, you know, Cobalt coming from the Congo  
8 and so forth. Can you speak to that while we have the  
9 chemistries up?

10 MR. GRAVELY: I can't, so but the Zinc hybrid  
11 technology is 100 percent sourced in the U.S. Both of the  
12 flow batteries are -- a lot of their -- (indiscernible)

13 COURT REPORTER: This is the Court Reporter. I  
14 can no longer hear Mr. Gravely.

15 CHAIR HOCHSCHILD: Speak to the mic, yeah.

16 MR. GRAVELY: Yeah, let me just play it. I've  
17 got a hearing aid on and I'm trying to -- I think this will  
18 work. (Background echo.)

19 So the flow batteries --

20 CHAIR HOCHSCHILD: Mike, stop. Just turn that  
21 off. (indiscernible) stay right there (indiscernible).

22 MR. GRAVELY: Okay, I'll work (indiscernible).

23 Yeah, the problem is I get a double feedback from  
24 the hearing aids.

25 CHAIR HOCHSCHILD: Yeah.

1           MR. GRAVELY: So the hybrid system, the Vanadium,  
2 some of them are produced in the U.S. A lot of their  
3 Vanadium is available (indiscernible) produce the most --  
4 right now the technologies are produced outside. And  
5 you'll hear today from one of our vendors, their goal is to  
6 move to California and support that (indiscernible).

7           And the Iron Air system is a U.S. based system,  
8 but not in California.

9           CHAIR HOCHSCHILD: Okay, thanks.

10          MR. GRAVELY: As we go forward, many of them are  
11 looking as we look at that chart, looking to begin or to  
12 expand operations in California.

13          CHAIR HOCHSCHILD: Great. That's music to our  
14 ears. Thank you for explaining that.

15          MR. GRAVELY: Great, so next chart, please.

16          So the other thing that I wanted to mention is in  
17 addition to projects this year we also were looking at  
18 analysis. So one of the questions that's never really been  
19 addressed is, when you look at this 52,000 megawatts of  
20 storage should it all be four hours? Should it be a  
21 combination?

22          And so looking at the different combinations,  
23 right now the documents imply about 10 percent of that  
24 should be long duration, which is by definition eight hours  
25 or more. And what we're trying to do with our analysis to

1 determine that the other thing is seasonal storage. You  
2 know, what is it and how do we pay for it and how do we use  
3 it?

4           So we're doing this analysis in parallel to help  
5 us understand and the big factor is cost. If you've got a  
6 hundred-hour system can that be equal to three or four  
7 four-hour systems or how does that work and can we do that?  
8 So we're doing that kind of analysis and to my knowledge,  
9 this has not been done anywhere else.

10           The second challenge -- and this actually was  
11 raised by the California Independent System Operator is we  
12 put more and more storage on the grid. If you have 5,000,  
13 if you have 19,000, then you pretty much need it all the  
14 time. When you get to 50,000 megawatts, you only need that  
15 full power maybe 60, 80 hours a year. So the question is  
16 how do we prevent these companies from getting contracts  
17 and then eventually becoming insolvent, because they're not  
18 being paid enough to be used. So we're looking at  
19 different tariffs and opportunities to working with the  
20 ISO, so that if we get more and more storage how do we  
21 ensure that we're not going to pay for something and then  
22 it absolutely in a few years becomes insolvent. And also  
23 developing very specific metrics on performance costs and  
24 safety.

25           Now, the other thing is first responder training.

1 When you have an incident like we've had before and other  
2 cases have had the fire department shows up. They're  
3 expecting a lithium-ion battery, and they have a flow  
4 battery or something else. So we're developing the  
5 training and information, so when they show up they know  
6 what's there. They know how to address it and how to  
7 handle it. Because of batteries and the safety factor, we  
8 don't want them to be injured. And we want them to be able  
9 to do their job. And to do that they need to understand  
10 what technology is in front of them. And that's what we're  
11 developing as part of this project. Next chart.

12           So the other thing is just to summarize. So we  
13 started off with the early success, the other challenge the  
14 Chair gave us with all the federal funding that's out  
15 there. He asked us to do what we could to maximize our  
16 value with those, so we have actually applied to five  
17 different grants for the Federal Government, representing  
18 about \$120 million of our funds. We would save about \$240  
19 million in DOE funds. And when you add in the customers'  
20 contribution we're talking about leveraging that \$120 to  
21 close to \$500 million in value for California.

22           We also have a competitive solicitation plan for  
23 the summer of this year. And an RPF for the fall. We'll  
24 be developing it in the summer and the fall to allow other  
25 companies to participate in this if they haven't already.

1           And then finally one of the successes that was a  
2 surprise to me at least, is -- and these non-lithium-ion  
3 batteries, one of the challenges they have is getting  
4 investors to invest for them a 20-year PPA when they've  
5 only been around five years. So just a little bit  
6 difficult. We have an investor who has determined, and is  
7 ready to fund a hundred 100 megawatt eight-hour system in  
8 California with the lithium-ion technology, Eos Energy.  
9 And they are prepared and 100 percent funded.

10           And so what we're doing now is working with the  
11 ISO, with the utilities. And this would be -- obviously,  
12 this is exactly what we were hoping to achieve, was to get  
13 these technologies to the point where they're competitive.  
14 And we have one who have -- this is actually a technology  
15 that had eight years in EPIC. They hit three EPIC grants,  
16 so this is kind of a graduate from the EPIC program. And  
17 so it a sign of success and a validation that this can  
18 happen. That these companies can bring their costs down  
19 and compete on a level field. Next chart. Oh, okay, we  
20 don't have an (indiscernible), so backup one, if you would?

21           So I do want to point out the same thing I  
22 mentioned last September. We have done a lot of work and  
23 it is a -- this probably represents one of the good  
24 examples of the Commission working together, because it's  
25 not only the R&D Division. There's the Siting Division for



1 CEQA, the Legal Division for CEQA. And for contracts we  
2 have worked with HR to get labor people. We worked with  
3 our Grants and Loans Office. So we have just a large  
4 collage of people that have supported this project. And I  
5 just want to point out that this is a group effort where  
6 the R&D Division has been leading this, we could not be  
7 where we are today without that support that we receive  
8 from everyone else here.

9           And with that I'm going to wrap it up. And we do  
10 have three speakers that are our key partners if you  
11 remember the project. So the first one is in the room  
12 here, and it's Chairperson Alejandre from the Paskenta  
13 Tribe. Also in the room is Tim Harris, the CEO for  
14 Redflow. And we have Erich Hans, who is the CFO and  
15 Director of Treasury for the Viejas Tribe. So I don't know  
16 if you want me to answer questions or have them speak? I'm  
17 ready either way.

18           CHAIR HOCHSCHILD: Let's go ahead and welcome our  
19 speakers and then we'll do questions.

20           MR. GRAVELY: Okay, with that we'll go ahead and  
21 welcome the Chairperson.

22           CHAIR HOCHSCHILD: Great, great job, Mike. Thank  
23 you for the presentation.

24           MR. ALEJANDRE: Good morning, Chairperson and  
25 Commissioners. My name is Andrew Alejandre. I'm the

1 Tribal Chairman for the Paskenta Band of Nomlaki Indians.  
2 And I want to thank you for inviting me here today and  
3 giving me the opportunity to express my gratitude,  
4 recognizing the needs of my people. And giving Paskenta  
5 the opportunity to continue to pursue our vision as a  
6 tribe, which is the ability to improve the lives of our  
7 tribal membership, those who live in our community, and the  
8 future generations.

9           For many years before my time my ancestors  
10 searched for the most efficient ways to live their lives  
11 and leave this world a better place for when generations  
12 like mine came about. Learning to adapt to new  
13 environments and living conditions with everyday evolution.  
14 And it is Paskenta's goal today to do the same. So when my  
15 time is done I know that this place will be left in a way  
16 that helps our people continue to advance and improve their  
17 ways of life.

18           I am proud to say that Paskenta has been a leader  
19 in our community, and surrounding communities, as an  
20 economic driver and major employer. Through this given  
21 opportunity, we will strengthen our leadership and have the  
22 ability to continue to think forward with our long-term  
23 economic development strategy that will only bring more  
24 economic possibilities, and employment opportunities with  
25 an understanding of how fortunate we are as a tribe.

1 Paskenta has made it a core value to help those around us.

2 Like our ancestors, we want to be able to share  
3 the gifts that we've been given, and help make a difference  
4 in lives outside of our tribal nation. And we are honored  
5 to have a blessing like this, that will help continue to  
6 uphold our values as a tribe. Paskenta looks forward to  
7 strengthening our relationship with you, and all the  
8 organizations that are participating.

9 And again, I thank everyone involved from the  
10 bottom of my heart and my people, for helping us continue  
11 to be resilient for the many generations to come. Thank  
12 you.

13

14 CHAIR HOCHSCHILD: Thank you, Mr. Chairman. Just  
15 before you leave if you wouldn't mind just sharing a little  
16 bit more about the tribe, how many tribal members you have,  
17 where you're located, and some of what you're focused on?

18 MR. ALEJANDRE: Absolutely. So we're an hour and  
19 a half north of Sacramento and right along the I5 in  
20 Corning. We have about 300 tribal members and growing. We  
21 are again one of the strongest economic drivers of our  
22 region. We own the Rolling Hills Casino. We have two  
23 health clinics in the area that service our members and the  
24 local community. You know, we're doing -- working through  
25 a lot of economic development opportunities, and this is

42

1 just one thing that's going to help continue that.

2           And as you know, Northern California is home to  
3 many wildfires. So we've been kind of that homebase to the  
4 region, inviting people when they're in need. Even their  
5 animals, you know, we have our equestrian center on the  
6 property. So we house -- you know, it's a lot, a lot of  
7 farming in the area, horse lovers and all kinds of stuff.  
8 So we're happy to take in all the animals and all the  
9 people that we can.

10           We have partnered with FEMA to house people on  
11 our property. You know, like I said it's a value of ours  
12 to help even outside of our tribe. You know, it's just the  
13 value that we've always upheld and want to continue to do,  
14 so.

15           CHAIR HOCHSCHILD: Well, thank you. We're so  
16 proud to partner with you. Thank you so much for all you  
17 do.

18           MR. ALEJANDRE: Thank you, appreciate it.

19           CHAIR HOCHSCHILD: Who do we have up next, Mike?

20           MR. GRAVELY: Just one second, I just wanted to  
21 make one comment. One of the things I've talked with the  
22 (indiscernible) Division, one of the unique elements in the  
23 future of using the storage is he is correct, they are  
24 literally minutes off of Highway 5 in an area that does  
25 have a lot of support. This is a great area to put

1 charging stations in the future when we want to be able to  
2 drive up and down Highway 5 and exit in charge real quick  
3 and get back on. They are literally an opportunity. So  
4 once these batteries are there, then those batteries can  
5 protect the grid, so you don't have any charges. So that's  
6 one of the future things we see as an opportunity going  
7 there.

8           So what I'd like to do now is just introduce also  
9 from the Paskenta Tribe, Tim Harris for Redflow. They are  
10 the company who's providing the system. And they're one of  
11 the companies that we're trying to encourage to get to the  
12 point where they get their pricing formulas down where  
13 they're competitive with lithium-ion. Thank you.

14           CHAIR HOCHSCHILD: Great, thank you.

15           Yeah, welcome.

16           MR. HARRIS: Good morning, Chairman Hochschild  
17 and Commissioners Gunda, McAllister, Monahan and Gallardo.  
18 I'm delighted to be able to speak to you today as the  
19 Chairman and CEO and representative of Redflow. Redflow,  
20 we are a zinc-bromine based flow battery company  
21 headquartered in Brisbane, Australia, but also with  
22 operations here in California. And we were established in  
23 2008 and we have about 250 active deployments around the  
24 world that at the moment have delivered 3 gigawatt hours of  
25 energy, both for the private and the public sector.

1 Including supporting critical infrastructure in  
2 ways, which is very relevant for California. Most notably  
3 supporting critical telecommunications infrastructure in  
4 Australia in response to the bush fires, we call them bush  
5 fires and not wildfires in Australia, in 2020 that we think  
6 has got direct relevance to California. And we think this  
7 project for us is incredibly important as we seek to  
8 establish ourselves in California and support California's  
9 energy transition goals.

10 As Mike mentioned earlier, we were delighted to  
11 establish our presence here in California in 2021, with the  
12 EPIC grant 2 megawatt hour opportunity that Mike referred  
13 to before. And so that's enabling us to scale further.  
14 And we're delighted and thrilled to be able to go and  
15 support the Paskenta Tribe and the CEC with this new  
16 project that Mike has talked about.

17 I think with a proven technology such as ours,  
18 the long duration energy storage program by the CDC is  
19 incredibly important. It's important across, I think,  
20 three key areas. One, it's enabling us to commercialize and  
21 scale up our technology that has proven to a size and scale  
22 that we think is going to enable us to be competitive on a  
23 California US and global scale. It's also a springboard  
24 for us to further invest into our business driving down  
25 costs, driving up volume, and creating a robust solution

1 that we know can scale to meet the long-term long-duration  
2 energy storage needs of California.

3 But we also think it's very important for us to  
4 reach the goals of the Paskenta Tribe in terms of energy,  
5 resiliency and independence. And we applaud the Chairman  
6 for his comments. And we're very proud to be associated in  
7 partnership with the Paskenta Tribe. But it also allows us  
8 to reach California's long duration and energy transition  
9 goals. But I think also importantly, it enables California  
10 to really establish and further and strengthen its global  
11 leadership in terms of energy transition.

12 And I would note, last month the U.S. President  
13 Joe Biden, and the Australian Prime Minister Albanese  
14 signed a clean energy compact that recognizes clean energy  
15 as a third key pillar, alongside defense and economic of  
16 this very important alliance that actually calls out energy  
17 storage technologies as a key part of that collaboration.  
18 So we can see that we're very delighted to be working on  
19 this project. We're delighted to be working with the CEC,  
20 with our partners, and the Paskenta Tribe. And we look  
21 forward to celebrating the success of it as we execute into  
22 next year.

23 CHAIR HOCHSCHILD: Thank you so much. Great.

24 MR. HARRIS: Sorry, if I could just mention one  
25 other word, Chairman, in terms of the US localization this

1 project is also enabling us to lean into local sources of  
2 our supply. And have already qualified a local supplier  
3 of zinc and our bromine electrolyte from our source in the  
4 south eastern of the U.S. So this program is also enabling  
5 us to lean into local US suppliers to support our strategy  
6 here in the U.S.

7 CHAIR HOCHSCHILD: Great. That's really helpful.

8 MR. HARRIS: Thank you.

9 MR. GRAVELY: Okay, the final speaker we have  
10 from today is from the Viejas Tribe. And so you met him  
11 when we were there for the ribbon cutting ceremony. So  
12 Erich Hans is the CFO and the Director of Treasury. He  
13 just wants to make a few comments on that particular  
14 project and how it's progressing. He's online. I think  
15 you should be able to get him with Mona. I think he's on  
16 the phone though, not video. His name is Erich Hans.

17 MS. BADIE: Erich, if you could raise your hand  
18 on Zoom we can find you more easily. I don't have an Erich  
19 raising his hand. If you have a panelist link, then you  
20 can mute on your -- unmute on your own, Erich, and make  
21 your remarks.

22 (No audible response.)

23 MR. GRAVELY: Well, given time, I guess if we're  
24 not able to then we'll go ahead. I think there are other  
25 people who may want to make public comment. I just wanted



1 to say as far as the presentation, I'm done. I'm happy to  
2 answer any questions or if you want to take public comment  
3 first we can.

4 MR. HANS: (Overlapping colloquy.) Good morning,  
5 this is Erich Hans. Can you hear me?

6 CHAIR HOCHSCHILD: Yes, we can hear you. Yeah,  
7 go ahead, sir.

8 MR. HANS: Sorry for those technical  
9 difficulties.

10 I wanted to provide a brief update of the  
11 project. I know some of you have been able to visit our  
12 site and we are certainly appreciative of that. As Mike  
13 has mentioned, we have over 50 percent of our batteries  
14 that are now on site ready for installation. The actual  
15 site itself has gone through Geotech and will be fully  
16 deployed by midyear next year.

17 Our solar array is being built as we speak, and  
18 that most likely will be completed by June of next year in  
19 regards to the solar array. Our anticipation is that we  
20 will disengage from the grid and be fully self-reliant by  
21 Q4 of next year.

22 One of the things I was asked to speak about is  
23 what this does for the Viejas Tribe. And as the CFO, as  
24 you may guess, I would probably focus on first the  
25 financial impacts, which are significant. If you look at

1 being able to have a reliable pricing model that you can  
2 rely upon particularly in a context of double digit rate  
3 increases each and every year from your local utility  
4 provider, we are looking at probably 24 percent reduction  
5 in our spend year one. But that reduction grows  
6 exponentially over time as we model our power purchase  
7 agreement against future increases from our local with  
8 utility.

9           To put that in perspective, my 30-year or my  
10 guaranteed contract rates 30 years from now is less than my  
11 current pricing per kilowatt hour with our local utility  
12 provider. So the financial impacts are exponential over  
13 time. They are significant day one, but they are far  
14 greater as we move further into the model. But more  
15 importantly than that, it does provide the ability for  
16 Viejas to be self-reliant in regards to how we procure and  
17 use our energy. It does release a large amount of kilowatt  
18 hours back to the grid to be used by others.

19           And really, it takes as I know previous speakers  
20 have mentioned, wildfires. But equally devastating to  
21 Southern California are high winds, which by definition our  
22 utility providers need to disengage certain grids to  
23 prevent wildfires. And we have to be -- we are on kind of  
24 the cutting edge of those grid positions that are typically  
25 shut down even with high wind positions. So it removes all

1 of that from our specter, (phonetic) and provides more ride  
2 reliability to the tribe and to the businesses that the  
3 tribes operate.

4 But most importantly, I think it provides a big  
5 box commercial example of how the State of California and  
6 businesses, not just tribal businesses, but businesses can  
7 work together to solve our collective problems not just for  
8 the benefit of today, but for the greater benefit of  
9 tomorrow. So as Viejas we are extremely prideful in this  
10 relationship with the State of California and how we are  
11 tackling these challenges together.

12 And we certainly look forward to seeing everyone  
13 here on site, when we turn ourselves off from the grid and  
14 turn this new system on. And as I've indicated, that is  
15 not that far away. I'm certainly available to answer your  
16 questions, if there are any.

17 CHAIR HOCHSCHILD: Yeah, I do have one question.  
18 I very much enjoyed my site visit down there some months  
19 ago. But just curious about EV charging on site. What are  
20 you guys planning to do and how much are you providing now?

21 MR. HANS: Parallel to this project, Viejas is  
22 building a 2,500 space seven-story parking garage. And in  
23 that garage will be a minimum of 250 EV chargers that will  
24 be turned on day one. We are also future planning and  
25 building an infrastructure for an additional 250. And

1 we're actually considering a financial model right now,  
2 that would increase our day one positioning to over 400 EV  
3 chargers. And that's something that's going to be in front  
4 of our tribal council next week for consideration. And  
5 we'll be able to provide updates on that soon.

6 But we are very much looking forward to be able  
7 to lead the market in this EV charging. We think this is  
8 the way to best position ourselves, not just for our  
9 business, but as an example for others. And like the  
10 Chairman from Paskenta who indicated their proximity to a  
11 major freeway, Viejas is also located to next to a major  
12 freeway at Interstate 8. So we are very happy to be part  
13 of the future facing solution to the EV charging market.

14 CHAIR HOCHSCHILD: Great, I'm thrilled to hear  
15 that and obviously we want to see you guys go as big as you  
16 possibly can on that charging infrastructure. You know,  
17 with these kind of destination sites like you have, it's  
18 really much my mind. It's like if you build it, they will  
19 come and that can really help advance our electric  
20 transportation goals. So thank you for all your work.

21 Mike, was there any closing comments you wanted  
22 to make? If not, I see a hand from Michael Firenze. I'd  
23 like to take that comment if we could. (Indiscernible.)  
24 Yeah, I do.

25 MS. BADIE: Okay. Michael Firenze, I'm going to

1 open your line.

2 MR. FIRENZE: Yeah, now I'm just here at Viejas  
3 there, Chairman. So I'm here with Erich and he was  
4 actually on my line. So thanks for all the support and as  
5 Erich said, we're working hard to execute.

6 CHAIR HOCHSCHILD: Okay, great. Keep up the good  
7 work, proud of you guys, and look forward to hearing the  
8 results as we move forward.

9 MR. FIRENZE: Thank you.

10 CHAIR HOCHSCHILD: Any other Commissioner  
11 comments from anyone on that? Let's see, Commissioner  
12 Monahan, go ahead.

13 COMMISSIONER MONAHAN: Yeah. Well, first I want  
14 to thank Mike and it's great to be inspired right at the  
15 start of our business meeting. Just to see the progress,  
16 to see the growth, and to have these really flagship  
17 initial investments. Just really, you know, I think it  
18 speaks to the desire by the Energy Commission to really tie  
19 our investments to real improvements to support  
20 communities. And I'm particularly proud about how these  
21 are really good examples of implementation of the Tribal  
22 Energy Sovereignty Resolution that we made earlier this  
23 year. And I just want to thank the Chair for his  
24 leadership and vision and just bringing it, like hitting it  
25 at the ballpark with these investments.

1           So I want to say also to Erich Hans, I have never  
2 heard a Chief Financial Officer speak so persuasively and  
3 cogently about the link between clean energy and community  
4 improvements. And when I met you, I don't know two, three  
5 years ago, I was blown away by your vision. And I thought  
6 how could he do this? He has such a big vision. And then  
7 you're doing it. So it's just amazing to see.

8           And as the Lead for Transportation, I really am  
9 curious what happens as the Chair asked you around EV  
10 charging. So I'm hoping to visit you later this year or  
11 early next and see it, see more on the ground and talk to  
12 you.

13           I also want to thank the Chairman of the Paskenta  
14 Band. I just thought your comments on the link between  
15 long-duration energy storage and stewardship of the land is  
16 really important. And again, building on the Chair's  
17 comments, we need to make sure that these are more  
18 sustainable practices for the constituents of these storage  
19 systems. And it's something we've been investing in and I  
20 think we can do it together. It's just going to take hard  
21 work to ensure that we're really building out a sustainable  
22 energy system for future generations.

23           So just appreciate this update and look forward  
24 to having this regularly. Because I think long-duration  
25 energy storage is something we're all intensely curious

1 about and how our investments are materializing on the  
2 ground.

3 CHAIR HOCHSCHILD: So really, really well said,  
4 Commissioner. And you prompted another comment. First of  
5 all, Commissioner, I hope you can visit as many of these  
6 sites as you're able to. And I think your leadership on EV  
7 charging is really timely with I think, where we see a lot  
8 of the tribes going. But I did want to note that we are  
9 now at I believe 10 tribal energy micro grids that we've  
10 funded in California, which is extraordinary. And I think  
11 that's worth a round of applause. I mean, that's a really  
12 enormous accomplishment.

13 And we are home to 20 percent of the Native  
14 American tribes, federally recognized Native American  
15 tribes in the United States. And what we're doing here is  
16 a national model. And we have a nearly half a billion  
17 dollar application into the Department of Energy to take  
18 this to the next level. If we're fortunate enough to get  
19 that or some part of that, you know, that will really help  
20 supercharge the efforts. But even without that what we've  
21 done is just extraordinary.

22 Mike, for you in particular, your leadership with  
23 the long-duration storage, this has just been absolutely  
24 pathbreaking. And it's going to add so much. And you  
25 think about how do chemistries break through and become

1 mainstream? It's really the seed planting that you're  
2 doing now in partnership with all these tremendous  
3 partners. So think of all the tribes you've been partnered  
4 with and others.

5 With that I think there's a comment from Vice  
6 Chair Gunda.

7 VICE CHAIR GUNDA: Yes. Thank you, Chair. And  
8 thank you, Commissioner Monahan, for your comments. You  
9 know, really Commissioner Monahan and you summarized what I  
10 was going to say, so I just want to associate myself with  
11 your words.

12 Just briefly, Mike, incredible presentation.  
13 Thank you. Thank you for your passion and such an  
14 unwavering commitment to getting these things done. I  
15 think, you know, you're an absolute treasure to the CEC.  
16 So thank you, Mike, for all your work.

17 And to the Chairman from the tribe as well as the  
18 company (indiscernible) I thank you for your leadership on  
19 moving these conversations forward. And, you know, making  
20 California really a clean energy California future for all.  
21 So thank you so much, and I'll leave it there.

22 CHAIR HOCHSCHILD: Commissioner McAllister?

23 COMMISSIONER MCALLISTER: So yeah, I would also  
24 just not reiterate, but just emphasize and highlight my  
25 agreement with all the comments so far. Really congrats on



1 the sort of technology aspect of this, but really the  
2 deployment and rubber hitting the road. It's just amazing  
3 to see. And I think this, the California model is emerging  
4 as something that's viable and really stable for the long  
5 term and supporting all the things we need to do from  
6 equity to reliability and everything in between. So I'm  
7 really, really happy to see this group.

8           And I did want to just acknowledge all the staff  
9 that's involved in this. I mean, getting this program,  
10 these investments just into the pipeline and through and to  
11 the business meeting, just a lot of excitement obviously  
12 with the final product here.

13           But I just wanted to just highlight Siting staff:  
14 Elizabeth Huber, Eric Knight, Steven Kerr, and Ashley  
15 Gutierrez and Ann Crisp, Brett Fooks as well as all the  
16 legal work and the grant and contract processing team, just  
17 immense amount of effort there. Linda and your team at  
18 Chief Counsel's Office. And even Government Affairs, you  
19 know, Lindsay has been very involved in this as well.

20           So I just wanted to just highlight the whole team  
21 and actually we can't leave out the ERDD team with just  
22 like probably a dozen people in the RDD, who have helped  
23 nurture this with your leadership, Mike. So I just really  
24 want to hold up staff for all the amazing work.

25           CHAIR HOCHSCHILD: Really well said. I

1 particularly wanted to just emphasize the legal team,  
2 Christina, and congratulations again on your well-deserved  
3 promotion. And Linda, you too. These are very, very  
4 complex projects to move through our process and to do it  
5 expeditiously. So just a real feat, you guys should really  
6 be proud. Thank you.

7 Go ahead, Commissioner Gallardo.

8 COMMISSIONER GALLARDO: Thank you. I wanted to  
9 highlight how the tribes are leaders, and these  
10 technologies are helping you further strengthen your role  
11 as economic drivers in the area. And I really appreciate  
12 the emphasis that it's not just for the tribe, it's for the  
13 entire community there. And then also serving as a refuge  
14 in times of crisis. So we have seen that with the Blue  
15 Lake Rancheria. And I really appreciated hearing it here  
16 from Andrew Alejandre for the Paskenta Tribe. And then  
17 also, Viejas is similar.

18 I did have a question, Mike. I really  
19 appreciated your emphasis on the team effort as well. And  
20 I also appreciate your leadership and your passion for  
21 moving things forward. And one of the things that stood  
22 out from your presentation was you mentioned there was an  
23 analysis being done, if I understood correctly, by staff  
24 that you don't think is being done anywhere else. Could  
25 you talk a little bit more about that? I didn't catch

57

1 exactly what that was about.

2 MR. GRAVELY: Yeah, so we've talked about that we  
3 are in a process of moving a new way and trying to  
4 commercialize products that aren't there yet. And so we  
5 are looking at that product piece. We're looking at the  
6 analysis piece. And so we're doing work, we want to feed  
7 into SB 100, we want to feed into the ISO, we want to feed  
8 into the PUC. None of them are doing this level of  
9 analysis focused just on energy storage. They're focused  
10 on the big picture, and we're trying to break it apart.

11 And particularly when you look at we have 90  
12 percent to go, the opportunity of cost savings is huge.  
13 Some of these technologies can provide their battery at 10  
14 percent of what we're paying today if they're successful.  
15 And that's what we're looking for, so we're doing some of  
16 this analysis to understand how to use these different  
17 variations. And also how to ensure that we don't  
18 consciously put systems in so fast that there's no work for  
19 them in five years and they end up going insolvent.

20 So I will share one story. I was here for the  
21 ARRA dates. And DOE put \$200 million in storage and we put  
22 \$30 million for storage in about 10 projects. Every  
23 company who received that money is no longer around the  
24 cost, because the market wasn't ready for them. The market  
25 is ready now.

1           These companies that are coming, if they're  
2 willing to meet the market needs not only in California --  
3 but California is leading -- so we're really creating a bow  
4 wave that we hope we'll share. And so that's what this is  
5 all about. But it's important to understand we're not  
6 there yet. And these projects are critical to getting us  
7 there.

8           COMMISSIONER GALLARDO: Thank you, Mike.

9           CHAIR HOCHSCHILD: Well, in closing I do have an  
10 idea, it just occurred to me. I think maybe at some point  
11 when these projects are a little further along we should do  
12 an electric vehicle tour of all these tribal energy  
13 projects and bring some attention to it. Thank you to all  
14 of you, and we'll turn now to Item 5 Form Energy.

15           MR. YANG: Good morning, Chair, Vice Chair, and  
16 Commissioners. My name is Yahui Yang and I work in the  
17 Energy Research and Development Division. Today, I am  
18 presenting a recommended award to Form Energy Incorporated.  
19 So the purpose of this agreement is to perform use case  
20 analysis and site evaluation for commercial demonstration  
21 of a long-duration energy storage system. My colleague,  
22 Mike Gravely, briefly mentioned this agreement a few  
23 minutes ago. Here, I have more details. Next slide,  
24 please.

25           So with more renewable energy penetration in

1 California, the amount of energy curtailment has been  
2 increasing. Throughout the last year, for example, as much  
3 as 2.4 terawatt hour of electricity generated from solar  
4 and wind was curtailed. Energy storage, particularly long-  
5 duration energy storage, can mitigate this issue and  
6 further reduce the cost of renewable energy.

7           The state will need 1 gigawatt of long-duration  
8 energy storage by the year 2032. Form Energy's 100-hour,  
9 iron-air battery system is designed to help California to  
10 address the challenges of energy reliability, resilience,  
11 affordability as well as decarbonization. The long  
12 duration energy storage system has a low-cost battery  
13 chemistry, which is less than one tenth the cost of a  
14 lithium-ion battery when deployed at a large scale. Next  
15 slide, please.

16           Form Energy will design a front-of-the-meter, 5  
17 megawatt/ 500 megawatt hour long-duration energy storage  
18 system, and evaluate what is needed to interconnect and  
19 deploy the system at a potential site.

20           The energy storage system is based on reversible  
21 rust battery technology that uses non-flammable aqueous  
22 electrolyte. Form Energy will be collaborating with PG&E  
23 to evaluate the requirements to interconnect the system at  
24 a potential site. The project team will conduct use case  
25 analysis by creating load, generation, and dispatch

1 profiles to optimize the application of the system. The  
2 project will determine how the commercial deployment of  
3 Form Energy's storage system is expected to perform in the  
4 CAISO market. The project team will also complete site  
5 selection through an evaluation process to determine the  
6 most optimal location for installation of the energy  
7 storage system. Next slide, please.

8           So staff recommends approval of this grant  
9 agreement and the adoption of staff's determination that  
10 the project is exempt from CEQA. I'm available for any  
11 questions. Also Sophie Meyer from Form Energy is in the  
12 room as well to answer any questions. That concludes my  
13 presentation. Thank you for your time.

14           CHAIR HOCHSCHILD: Okay, thank you.

15           Let's go to public comment on Item 5.

16           MS. BADIE: Hello, this is Mona Badie, the Public  
17 Advisor for the Energy Commission. The Energy Commission  
18 now welcomes public comment for Item 5. And if you're in  
19 the room and would like to make a public comment we're  
20 asking folks to use the QR code. And if you're on Zoom,  
21 please use the raise hand feature on your screen. Or if  
22 you're joining us by phone, press \*9 to notify us you'd  
23 like to make a comment.

24           And I'm not seeing any comments in the room or on  
25 Zoom, Chair. Back to you.

1           CHAIR HOCHSCHILD: Yeah, I just wanted to go back  
2 to one thing you noted in the CAISO Report. You said 2.4  
3 terawatt hours were curtailed last year. Okay, that is a  
4 colossal amount of energy. That's enough to light about,  
5 you know, 2 million homes for a year. And this is why we  
6 need storage. It's a great argument for storage.

7           We want the solar we want the wind. But you  
8 know, our position has totally inverted from where we were  
9 10 or 15 years ago where it was like how are we going to  
10 meet the peak demand in at noon in the middle of the day?  
11 And now really because of the success of solar, and it is a  
12 success, we actually have a surplus in that period. So  
13 this is this is why storage is such a central focus for us.  
14 We want to be charging up our storage fleet. And again,  
15 you know, what we've done on storage is amazing, right?  
16 We've gone from 250 megawatts to 5,000 megawatts in a  
17 little over three years. But we have to get to 15,000 by  
18 the end of the year and then much, much more beyond that.

19           And so I mean, you just -- that I want to just  
20 not pass over that point lightly. This is an incredible  
21 opportunity. We've already built and paid for these assets  
22 that are in the ground. And we want to be capturing all  
23 that. You know, we don't want to be wasting any surplus  
24 renewables. We want to be charging not just our fixed  
25 storage fleet, but ultimately electric vehicles, the whole

62

1 concept of electric vehicle happy hour where they're  
2 plugging in at the right time of the day. And so I just  
3 wanted to highlight that.

4 Any other comments on Item 5 before we move to  
5 vote? If not, Commissioner --

6 VICE CHAIR GUNDA: Yeah.

7 CHAIR HOCHSCHILD: Oh, yeah. Vice Chair Gunda,  
8 sorry. I didn't see you. Go ahead, please.

9 VICE CHAIR GUNDA: No, Chair, thank you. Sorry,  
10 I didn't raise my hand.

11 So I just wanted to thank on the presentation.  
12 And then also was just thinking about the same topic that  
13 you raised about energy curtailment, especially clean  
14 energy (indiscernible), right. So I think there's a couple  
15 of elements. One, in that you rightfully, point out the  
16 interest on ensuring that's not curtailed. And then the  
17 energy storage, the role it could play. And then also  
18 want to elevate, you know, during this the opportunity that  
19 some of these curtailments are also because of the load  
20 pockets and congestions and such. So it's really important  
21 to have that holistic view of how do we ensure the energy  
22 storage component is coming along with the necessary  
23 distribution and transmission upgrades and such to really  
24 enhance and take complete opportunity to maximize the  
25 utilization of the clean energy in California.



1           So, I thank you for elevating those comments and  
2 just wanted to say thanks to the staff for their work.

3           CHAIR HOCHSCHILD: Yeah. Are you enthusiastic  
4 enough to move the item, Vice Chair?

5           VICE CHAIR GUNDA: Absolutely, move the item.

6           CHAIR HOCHSCHILD: A motion by Vice Chair Gunda  
7 for Item 5. Commissioner McAllister, would you be willing  
8 to second?

9           COMMISSIONER MCALLISTER: I second.

10          CHAIR HOCHSCHILD: All in favor say aye, Vice  
11 chair Gunda.

12          VICE CHAIR GUNDA: Aye.

13          CHAIR HOCHSCHILD: Commissioner McAllister.

14          COMMISSIONER MCALLISTER: Aye.

15          CHAIR HOCHSCHILD: Commissioner Gallardo.

16          COMMISSIONER GALLARDO: Aye.

17          CHAIR HOCHSCHILD: Commissioner Monahan.

18          COMMISSIONER MONAHAN: Aye.

19          CHAIR HOCHSCHILD: And I vote aye as well. Item  
20 5 passes unanimously. Thanks for your work on that.

21          We turn now to Item 6.

22          MR. QUINTERO: Vice Chair, and Commissioners, I  
23 am Jorge Quintero with the Department of Water Resources  
24 serving as a principal engineer in the Electricity Supply  
25 and Strategic Reserve Office. While my focus will be on

1 DWR's activities with respect to this program, there is  
2 considerable coordination with the California Energy  
3 Commission, the California Public Utilities Commission, and  
4 the California Independent System Operator. This is a team  
5 effort. Next slide, please.

6 DWR was tasked by the Legislature in Assembly  
7 Bill 205 to establish strategic reliability reserves and  
8 provide quarterly updates at the state CEC business  
9 meetings, among other legislative reporting. This is our  
10 third quarterly update to the Commission regarding current  
11 and planned investments for California's newly created  
12 Electricity Supply Strategic Reliability Reserve Program.  
13 The next update will be provided at a CEC business meeting  
14 in the third quarter of 2023.

15 In addition to this presented update, DWR  
16 recently submitted a separate progress report to the Joint  
17 Legislative Budget Committee detailing the status of  
18 commitments, disbursements, upcoming investments, and  
19 emissions occurring during the January 1<sup>st</sup>, 2023 through  
20 April 30th 2023 reporting period. Next slide, please.  
21 Next one actually.

22 As stated in AB 205 the actions of this program  
23 are for the welfare and benefit of the people of the state,  
24 to protect public peace, health and safety, and constitute  
25 an essential governmental purpose. DWR is to identify,

1 prioritize, and select new generation projects. In order  
2 to establish and oversee these efforts DWR has been  
3 increasing its staff and contracting additional support.  
4 DWR continues to do these efforts in close coordination  
5 with its sister agencies. As previously mentioned, this is  
6 a team effort bringing multiple state entities together.  
7 Next slide, please.

8           Securing additional power comes from a variety of  
9 sources. There are five distinct types of projects under  
10 the program. The first is extension of operating life of  
11 existing generating facilities plan for retirement.

12           The second is new and temporary power generators  
13 of 5 megawatts or more. If a generator is operated using  
14 diesel fuel, the Department shall not operate it after July  
15 31st of 2023.

16           The third is new energy storage systems of 20  
17 megawatts or more that are capable of discharging for at  
18 least two hours.

19           The fourth is generating facilities using clean  
20 zero emission fuel technology of any size to produce  
21 electricity.

22           The fifth is to reimburse electrical corporations  
23 for the value of imported energy or input capacity products  
24 that were produced above market costs, or are in excess of  
25 procurement authorizations and requirements.

1           Part of our project selection's criteria is  
2 driven by bringing available megawatts to the grid as  
3 quickly as possible, and prioritizing investments that do  
4 not compete with generating facilities already planned for  
5 development by load serving entities. Next slide, please.

6           In 2022, the program had 200 megawatts of  
7 emergency temporary power duration and greater than 3,300  
8 megawatts of imports. For calendar year 2023 we're  
9 expecting 263 megawatts of emergency and temporary power  
10 generators using natural gas fired units with the mission  
11 control and 27 megawatts of extended operations over  
12 retiring facilities. This year we are not planning to rely  
13 on any diesel units.

14           Import energy and import capacity products were  
15 only legislatively allowed for summer of 2022. For  
16 calendar year 2024 our portfolio will include extending  
17 operations of the once-through cooling system steam units  
18 located in Southern California, that were scheduled to  
19 retire at the end of 2023 pending the State Water Resources  
20 Control Board's action in fall of 2023. This would retain  
21 up to 2,887 megawatts of capacity (indiscernible) in 2024.

22           DWR is looking at supplementing our emergency  
23 generators with nonemitting resources. However, this has  
24 been challenging, since nonemitting resources are also  
25 heavily sought after by the load serving entities to meet

1 their own resource adequacy obligations. Next slide,  
2 please.

3 The slide here captures an annual look at our  
4 program's investments for the upcoming years in 2022. As I  
5 said the program's portfolio totaled over 3,500 megawatts  
6 in 2023. The value drops at 281 megawatts as there is no  
7 import program. In 2024 we see the large contribution from  
8 extending the operation life existing generating  
9 facilities, resulting in a total of over 3,000 megawatts.  
10 I will make note that this graph does not include efforts  
11 relates to the Diablo Canyon power plant extension, which  
12 would kick in after the current operating licenses expire  
13 in 2024 and 2025.

14 The potential extension of Diablo Canyon under  
15 Senate Bill 846 is administered at the state level by DWR,  
16 but separate from the Strategic Preserve. Next slide,  
17 please.

18 That concludes DWR's presentation. We are  
19 available for any questions. We also want to let you know  
20 that representatives of the CPUC and the California ISO,  
21 Pete Skala and Christy Sanada respectively, are also in  
22 attendance if there are any questions regarding the  
23 forecasted need or associated regulatory requirements.

24 Thank you.

25 Our next update will be the following item of

1 this CEC business meeting, and thereafter at a CEC business  
2 meeting in the third quarter of 2023. Next slide, please.

3 If desired, please follow us on social media via  
4 Facebook, Twitter, YouTube and Instagram. Thank you very  
5 much.

6 CHAIR HOCHSCHILD: Thank you so much. Great  
7 presentation.

8 We'll go to Commissioner discussion starting with  
9 Vice Chair Gunda.

10 VICE CHAIR GUNDA: Thank you. Thank you, Chair.

11 I just want to begin by thanking Jorge and  
12 Delphine and the small but extremely mighty DWR team in  
13 helping us work through a number of key elements as it  
14 pertains to the strategic reserve.

15 I want to take this opportunity to just remind  
16 and frame the conversation on why the Legislature kind of  
17 passed that the strategic reserve conceptual idea and the  
18 reason for that. So just at a very, very high level the  
19 first thing we want to make sure is we understand both from  
20 procurement. So the CPUC is ensuring that they have  
21 resources that you're procuring to meet the projected  
22 demand. So we have that going on.

23 But one of the pieces that we brought to the  
24 Legislature last year is the potential for delays in  
25 realizing that procurement. Last year during the

1 legislative process, we were looking at approximately 40  
2 percent delays in in the new energy resource development  
3 from what we were hoping to have connected due to supply  
4 chain issues, interconnection, challenges and such. So I  
5 just wanted to frame that.

6           So one element of it was just to make sure we are  
7 procuring enough. Second is we are in a once we done the  
8 procurement are we able to build to that level of  
9 procurement. And then finally, and I want to make sure we  
10 are reminded and reiterate this point. That even if we  
11 were to procure to meet the standards of the grid planning,  
12 which is sometimes referred to as the 1 in 10 loss of load  
13 expectation planning, even if we were to meet that given  
14 the wildcard of where we are with climate change we could  
15 see significantly higher demand beyond that point. And  
16 especially if that demand is coincidental with a west-wide  
17 heat that would reduce our resources, which we generally  
18 depend on from an import standpoint, from northwest and  
19 southeast.

20           And also the second element on the top of that is  
21 if we were to have a coincidental fire risk like we had in  
22 July 2021 where we lost 4,000 megawatts of transmission  
23 lines coming into California, that adds incredible amount  
24 of threats to our grid stability.

25           So in looking at that challenge the Legislature,

1 and the support of the Governor, the enactment of one of  
2 the solution says, "Let us create some amount of reserves  
3 that can support us through these grid emergencies in the  
4 short term."

5           And as Jorge really laid out in his presentation,  
6 as we develop those contingencies for the strategic reserve  
7 one of the key principles is to not inadvertently interfere  
8 with the development of the clean energy resources that the  
9 load serving entities are doing, which is to really support  
10 the grid to the maximal amount of time. So for the maximal  
11 amount of time and normal operations, we want to ensure  
12 that the clean energy resources developed through the load  
13 serving entities are maximized. But if we would have an  
14 emergency, we have a set of breakless resources, that would  
15 support those few hours. So it's last on, first off, kinds  
16 of resources.

17           And one of the general agreements and consensus  
18 amongst all the agencies is, these are some of those  
19 resources, which are already there and are going to go  
20 offline. So how about we hold on to them to give ourselves  
21 a little bit of cushion? So I just wanted to frame that,  
22 for all of us.

23           And in the public conversation there was a lot of  
24 interest in this item. And it's important for us to do  
25 this together as one California family. And I wanted to



1 ensure -- I wanted to just lay out the reason behind this  
2 concept. And once the charter was handed off to DWR, DWR  
3 had a bunch of work to do and move this conversation  
4 forward.

5           And I again, want to thank Bazod, (phonetic)  
6 Jorge, Delphine, and a number of number of colleagues from  
7 DWR who are really there to pull together the agreement of  
8 all the agencies together and not singularly doing  
9 something on their own. So I wanted to just thank DWR for  
10 their work. You know, parts of what DWR does, which no  
11 other agencies had expertise, is really operations of this  
12 fleet. But also making sure there are agreements with some  
13 of these generating stations and such, which is not  
14 something CEC or PUC have an expertise.

15           So I wanted to thank that and frame the  
16 conversation again, and then pass it back to the Chair.

17           CHAIR HOCHSCHILD: Okay. Thank you.

18           I suggest we push Commissioner discussion on that  
19 to the next item, which is also you, Jorge, Item 7. If  
20 you'd like to just move to that one and begin.

21           MR. QUINTERO: Thank you. Once again, good  
22 morning Chair, Vice Chair, and Commissioners. I'm Jorge  
23 Quintero with the Department of Water Resources serving as  
24 a principal engineer in the Electric Supply and Strategic  
25 Reliability Reserve Office, or ESSRRP as we like to get

1 known as.

2 I will be presenting the Bureau's Investment Plan  
3 as required by Water Code section 80710. This is an  
4 information only item. Next slide, please.

5 First, I'd like to provide a brief background of  
6 the program that won't go through every point, but --

7 CHAIR HOCHSCHILD: No, I don't think it's -- is  
8 it -- are we taking a vote on this? (Off-mic colloquy.)  
9 No, we're not? It says proposed resolution? No, okay.  
10 This is informational as well. Okay, my mistake.

11 Sorry, go ahead.

12 MR. QUINTERO: No, go ahead. Next slide, please.  
13 Thank you.

14 I'll provide a brief background of the program  
15 that won't go through every point, but the context is  
16 provided in the slides for reference. DWR was tasked by  
17 the Legislature in Assembly Bill 205 to establish a  
18 strategic reliability reserve that acts as a backstop for  
19 the State of California by providing incremental power  
20 during extreme events. DWR's Investment Plan reflects a  
21 critical balance between supporting electric Reliability  
22 while being a prudent steward of state funds, mitigating  
23 project risk, being cognizant of local communities, and  
24 continuing efforts to prioritize zero and low emission  
25 technologies. Next slide, please.

1           For background we listed the main vendors of  
2 DWR's ESSRR Program here on this slide. Next slide,  
3 please.

4           This Investment Plan fulfills the requirements of  
5 Water Code section 80710(h) which directs DWR to prepare  
6 such a plan detailing the terms, costs, and scope of  
7 contracts entered into for the ESSRR Program after October  
8 31<sup>st</sup>, 2022. Next slide, please.

9           The Investment Plan is broken up into two  
10 sections: investments committed to after October 31 2022,  
11 and anticipated future investments. We will start with the  
12 investments committed. Next slide, please.

13           For committed investments DWR entered into one  
14 professional services contract and three capacity contracts  
15 for generation that would have retired but for the ESSRR  
16 Program. Next slide, please.

17           In February of 2023 DWR entered into an agreement  
18 with Bureau Veritas North America, also known as BV, to  
19 secure a professional program and project management,  
20 construction and commissioning expertise, and other related  
21 technical services that are needed to meet the project  
22 deadlines. The BV agreement took effect on February 1<sup>st</sup>,  
23 2023 and runs through February 5<sup>th</sup>, 2026. It has a planned  
24 budget of up to \$6 million. Next slide, please.

25           This slide provides a background of capacity

1 agreements DWR executed. First, AB 180, AB 178, and AB 205  
2 were enacted. These bills allowed DWR to preserve the  
3 option to extend the life of facilities, including the  
4 extension of the operating life of existing general  
5 facilities planned for retirement. AB 209 later added a  
6 provision to the Water Code specifying that DWR strategic  
7 reserve fossil assets may only operate as necessary to  
8 respond to extreme events as defined in the Public  
9 Resources Code.

10 On September 30<sup>th</sup>, 2022, to the State Water  
11 Advisory Committee on cooling water intake structures, also  
12 known as SACCWIS, recommended to the State Water Resources  
13 Control Board to extend the compliance date of a number of  
14 once through cooling facilities from December 31<sup>st</sup>, 2023 to  
15 December 31<sup>st</sup>, 2026. In order to enable these facilities  
16 to be included in the ESSRR Program portfolio, to provide  
17 grid reliability during extreme events.

18 Furthermore, the CAISO, CEC and CPUC clarified  
19 that these resources would not be considered adequacy  
20 resources to reduce the use of once through cooling water  
21 and air emissions, which aligns with AB 205. As a result,  
22 ESSRR Program staff collaborate with CPUC, CEC and CAISO  
23 staff to negotiate three agreements to add the OTC  
24 facilities to the ESSRR Program portfolio for grid  
25 reliability during extreme events.

1 DWR's once through cooling contracts are  
2 explicitly a condition of the State Water Resources Control  
3 Board extension of the OTC compliance policy deadline. The  
4 State Water Board held a public meeting in March and will  
5 hold another in August. Written and oral comment was and  
6 will be provided to the State Water Board process.

7 In addition the SACCWIS is a committee composed  
8 of several state energy agencies including the CEC as well  
9 as California Independent System Operator, whose goal is to  
10 advise the State Water Resource Control Board on the OTC  
11 compliance and its impact to the grid reliability. It also  
12 had a public meeting process in 2022, after which the  
13 SACCWIS recommended the OTC compliance policy deadline be  
14 extended.

15 These resources totaling over 2,800 megawatts of  
16 natural gas fired resources would retire on December 31,  
17 2023 without action by the State Water Resources Control  
18 Board. Next, I'll discuss these agreements. Next slide,  
19 please.

20 DWR has executed three capacity contracts as  
21 recommended by the SACCWIS as listed in the table. For  
22 each agreement the developer will pay a fixed monthly  
23 capacity payment for each unit to maintain the availability  
24 of these resources for use during extreme events. All  
25 three agreements are contingent on the State Water

1 Resources Control Board extending the OTC compliance  
2 deadline. If approved, the agreements commence on January  
3 1, 2024 and run through December 31, 2026.

4 The budget for all three agreements is up to \$1.2  
5 billion. This is a conservative estimate of the  
6 facilities, meeting all of their bonus targets and  
7 incurring no penalties under the terms of the agreements.  
8 Next slide, please.

9 For anticipated future events investments DWR has  
10 issued three requests for information to help prioritize  
11 zero and low-emission resources for the ESSRR Program. DWR  
12 will use the RFIs for insight into viable resources that  
13 can come online by summer 2024 to address extreme events  
14 that negatively impact electric reliability. The aim is to  
15 retrieve sufficient feedback to issue one or more requests  
16 for proposals. I've included in the following slides the  
17 details of each RFI and other activities. Next slide,  
18 please.

19 The program's first RFI is for clean zero  
20 emission generating technology that is proven, can be  
21 quickly deployed, and is reliable to generate during  
22 extreme events which typically occur later in the day.  
23 This RFI is currently active with the submission deadline  
24 of July 14, 2023. Next slide, please.

25 The program's second RFI is for energy storage

1 systems. With this RFI DWR seeks to identify energy  
2 storage systems to assist DWR in determining what is  
3 currently available and in the marketplace that is a proven  
4 and reliable technology. Given the tight supply chain, the  
5 long lead time of the systems within this category, and the  
6 parameters set forth into legislation, DWR will seek to do  
7 such while prioritizing investments that do not compete  
8 with generating facilities already planned for development,  
9 and disclosed by load serving entities or local publicly  
10 owned electric utilities. This RFI is currently active  
11 with a submission deadline of August 7, 2023. Next slide,  
12 please.

13           The program's third RFI is a fossil fuel power  
14 generating technology. With this RFI, DWR seeks to  
15 identify fossil fuel power generating technology that at  
16 minimum, meet the standards similar to CARB's statewide  
17 distributed generation certification program, which  
18 certifies electrical generation technologies that are  
19 exempt from permit requirements of air pollution control or  
20 air quality management districts. This RFI is currently  
21 active with s submission deadline of August 18, 2023. Next  
22 slide, please.

23           Finally, DWR is working to extend existing  
24 agreements with two resources that were constructed  
25 pursuant to the Governor's July 30th, 2021 Executive Order

1 to retain those assets in the ESSRR program.

2 Lastly, DWR has voluntarily declined to pursue  
3 any diesel generation ahead of the Water Code deadline on  
4 July 31st, 2023. Next slide, please.

5 That concludes DWR's presentation of the  
6 Electricity Supply Strategic Reliability Reserves  
7 Investment Plan. Once again, if desired please follow us  
8 on our social media of Facebook, Twitter, YouTube and  
9 Instagram. Thanks very much.

10 CHAIR HOCHSCHILD: Thank you.

11 We will go to comment from the Vice Chair, and  
12 then we'll go to public comment on the item. Vice Chair  
13 Gunda?

14 VICE CHAIR GUNDA: Thank you. Thank you, Chair.  
15 I just wanted to make sure we just set the context on why  
16 we moved this item from voting to information only for  
17 today. Sorry for the scruffiness. I'm traveling today, so  
18 I didn't want to come on video for a while. But it's  
19 important for this one.

20 So specifically on this item, I want to just kind  
21 of re-elevate the words I just said previously. The need  
22 for these resources are really those break-last moments.  
23 You know, last resort resources. But as you know, as DWR  
24 moves towards developing their Investment Plan and  
25 continues to work with the rest of the agencies on



1 considering the existing power plants, OTC power plants,  
2 from day one it was really important for us. Given that,  
3 you know this is an extension of some of the fossil  
4 resources, which we ultimately want to get off. It's  
5 really important for us to make sure that we have enough  
6 time for especially the communities that are burdened by  
7 these power plants, to have a voice at the table.

8           So in just recognizing the importance, and given  
9 that this is their first of a major process, we thought it  
10 would be helpful to just hold off the Board for a couple of  
11 weeks. You know, do the informational today and our  
12 communities have an opportunity to one, digest the  
13 information, but also reach out to the Commissioners if  
14 they have issues and priorities that they would like to  
15 think through as we move forward with this important vote  
16 for the state.

17           Again, two elements. One, the last year when we  
18 had the heatwave the deviation from the forecast, the  
19 normal forecast, was 7,000 megawatts. So we're talking  
20 about something, a resource that is several thousand  
21 megawatts that we can really rely on.

22           Two, we want to be able to rely on that, and  
23 ensure that it actually shows up. So that's another  
24 extremely important element.

25           And finally, the importance of timeliness. You

1 know, building 7,000 megawatts of buffer reserve or several  
2 thousand megawatts of reserve is extremely difficult in a  
3 year or two. And it's important for us to consider some of  
4 these sub-ideal options as an important element of keeping  
5 the lights on, and keeping the lights on as the Chair  
6 mentioned earlier. When we're talking about the electric  
7 chargers this is really about also creating public  
8 confidence that if we have another outage like 2020, much  
9 of our climate agenda including electrification and clean  
10 energy goals, really come into question.

11           So while these are not optimal solutions, and  
12 continue to burden the communities who have really borne  
13 the cost of this, it's really important to have time to  
14 have the dialogue and ensure that questions are answered.  
15 And really thought through what are the alternatives and  
16 why these options are on the table to move forward.

17           So with that, I really want to thank Commissioner  
18 Gallardo, and for the Chair to facilitating and moving this  
19 to the informational. And Commissioner Gallardo to always  
20 ensuring that equity and community voices become an  
21 important part of this dialogue. And I want to thank my  
22 sister agencies, CPUC, CAISO and DWR for being open to the  
23 different timeline that we are putting here.

24           So thank you all so much. And with that I'll pass  
25 it back to you, Chair.

1 CHAIR HOCHSCHILD: Thank you.

2 We'll go to public comment on this item. So  
3 let's do that and then we'll do further Commissioner  
4 discussion.

5 MS. BADIE: Thank you. This is Mona Badie, the  
6 Public Advisor. We will now take public comment on Item 7.  
7 If you're in the room you can use the QR code, you can also  
8 raise your hand. And if you use the QR code, and I don't  
9 call your name, please raise your hand to let me know. And  
10 we don't have anyone in the room. I'm going to go to Zoom  
11 next.

12 Okay, so we've got a few comments on Zoom. I  
13 will call your name and we ask that comments be limited to  
14 two minutes or less, and there will be a timer on the  
15 screen. And when I announce your name, I'll open your  
16 line. Please state and spell your name for the record and  
17 begin your comment.

18 Sofi Magallon, and I'm going to open your line.

19 MS. MAGALLON: Hello, my name is Sofi Magallon,  
20 S-O-F-I M-A-G-A-L-L-O-N. I am a resident of Oxnard,  
21 California and with the organization CAUSE. Thank you for  
22 the opportunity to comment on this item today.

23 I am opposed to the CEC allowing extensions of  
24 Ormond Beach Generating Station, AES Alamitos and AES  
25 Huntington Beach power plants. My community of Oxnard, the

1 Ormond Beach Generating Station is next to the most densely  
2 populated community of color in Ventura County and a census  
3 tract considered more pollution burden the 94 percent of  
4 other communities in the state.

5 In 2017, Oxnard residents advocated to stop the  
6 building of a new 262 megawatt natural gas peaker plant  
7 named Puente and won this victory. Our community has been  
8 fighting for decades to close the Ormond Beach plant and  
9 transition to renewables. And our community was told that  
10 this plant would be shut down in 2023 and now we face yet  
11 another expansion.

12 During the last summer's heatwave and emergency  
13 proclamation, this plant was running at full capacity  
14 emitting an estimated 8 percent more pollution while  
15 failing during peak demand hours. During the heatwave,  
16 Oxnard's Police Department received hundreds of phone calls  
17 from community members about loud noises in the middle of  
18 the night, from neighbors worried that the plant was on the  
19 verge of explosion. We have real concerns about whether  
20 the plant's operators is going to -- is doing needed basic  
21 safety maintenance given that they've been expecting the  
22 plant to retire.

23 This shows these plants are both harmful to  
24 community health and unreliable. Our climate and continued  
25 community can't wait any longer. The CEC has the power and

1 responsibility to create the path to zero emissions, to  
2 stop the environmental injustice is ongoing in our state,  
3 and for the health of both our people and our planet. I am  
4 asking the Energy Commission to reject the proposal for the  
5 Department of Water Resources to contract with once through  
6 cooling plants for another three years. To plan for the  
7 original timeline of retirement by December 31, 2023. And  
8 to invest in distributed solar and storage, micro grids,  
9 demand response, and energy efficiency as a priority  
10 instead of depending on these outdated and dangerous  
11 resources. Thank you very much for your time.

12 MS. BADIE: Thank you for your comment.

13 Next we'll hear from Teresa Cheng. Teresa, I'm  
14 going to open your line. Please limit your comment to two  
15 minutes or less. And please spell your name for the record  
16 as well.

17 MS. CHENG: Hi, my name is Teresa Cheng, T-E-R-E-  
18 S-A C-H-E-N-G and I'm speaking on behalf of the Sierra  
19 Club, which is a partner (indiscernible) Regenerate  
20 California Coalition.

21 I am speaking today respectfully asking the  
22 Energy Commission to reject the DWR proposal to contract  
23 with Ormond Beach, Alamitos and Huntington Beach gas plants  
24 for another three years. And instead look at clean  
25 alternatives, to stop certifying new gas plants in Lodi,

1 Turlock, and Modesto. And to plan for an orderly  
2 retirement of California's gas fleet to meet SB 100  
3 mandates and to prioritize retirements in EJ communities  
4 specifically, consistent with SB 887.

5 I'm calling on the Commission to do this today,  
6 because gas plants and especially the OTC plants, failed to  
7 deliver promised power during last year's heatwave. In  
8 fact, the gas fleet suffered curtailments and derates  
9 (phonetic) averaging 5,000 megawatts during peak demand  
10 when we needed that reliable energy the most. We narrowly  
11 averted blackouts thanks to additional energy storage on  
12 the system, and only when Californians responded to a text  
13 alert from California's Office of Emergency Services  
14 voluntarily reducing energy demand by 2,600 megawatts  
15 within 45 minutes.

16 I'm really encouraged to see CECs clean energy  
17 RFI, and applaud CEC's efforts to procure and encourage  
18 more clean energy alternatives. We need to invest in clean  
19 energy alternatives like demand response, and more storage  
20 and other load shifting programs, not investing billions of  
21 dollars in polluting fossil fuel infrastructure that  
22 perpetuates environmental racism. Thank you so much for  
23 your time today.

24 MS. BADIE: Thank you, Teresa.

25 Next, we have Lucia Marquez. Lucia, I'm going to

1 open your line. Please spell your name and state any  
2 affiliation, and limit your comment to two minutes or less.

3 MS. MARQUEZ: Hello, Commissioners. My name is  
4 Lucia Marquez. I'm the Associate Policy Director for  
5 CAUSE. My name is L-U-C-I-A M-A-R-Q-U-E-Z. We are a  
6 cross-grassroots community organization that represents  
7 environmental justice communities in Ventura and Santa  
8 Barbara Counties, including the City of Oxnard.

9 I'm speaking on this item being opposed to the  
10 Commission allowing the extension of all plants including  
11 in the package especially Ormond Beach generating -- the  
12 Ormond Beach Generation Station. You know, as mentioned by  
13 my colleague earlier, Oxnard has a long history of fighting  
14 for clean air. In 2017 when this Commission made the  
15 decision to reject the Puente Power Plant it really felt  
16 like a light at the end of the tunnel where our community  
17 had a glimpse of hope that regulators like this Commission  
18 were on a path to break the cycle paid by the fossil fuel  
19 energy economy that targets, extracts resources, and  
20 pollutes the state's most vulnerable populations.

21 Extending and extending the life of these power  
22 plants is putting the health and safety of our communities  
23 at risk. It's like during the heatwave last year, one of  
24 the state's most pressing grid crises, the Ormond Beach was  
25 failing. If this is a decision about energy reliability,

1 we need to read the CAISO reports. These plants are  
2 clearly not reliable. When energy is at peak demand, not  
3 only are they polluting at astronomical levels, they are  
4 also breaking down.

5 EJ communities have had enough. Oxnard has been  
6 through enough. We're tired of these empty pinky promises  
7 that only lead to extension after extension. I'm asking  
8 you that you reject this proposal for the Department of  
9 Water Resources to conduct once through cooling plants for  
10 another three years, which was originally supposed to be  
11 phased out in 2020. This is lining us up to be extended  
12 for another six years. But that's losing lives in our  
13 community. That's what that truly means.

14 We need you to plan for retirement of all toxic,  
15 polluting unreliable gas plants, prioritizing environmental  
16 justice communities. California cannot afford to spend  
17 over a billion dollars keeping these old fossil fuel plants  
18 online. We need instead to invest in distributed solar and  
19 storage, micro grids, demand response, energy efficiency  
20 and a priority instead of depending on these outdated and  
21 dangerous resources. Thank you so much for your  
22 consideration.

23 MS. BADIE: Thank you for your comment.

24 And next we have Mari Rose Taruc. I'm going to  
25 open your line. Please state any affiliation and spell



1 your name before beginning your comment.

2 MS. TARUC: Hello, Commissioners. My name is  
3 Mari Rose Taruc, M-A-R-I R-O-S-E T-A-R-U-C. I'm with the  
4 California Environmental Justice Alliance. I'm the Energy  
5 Director and it's an honor to represent our over 10,000  
6 members through CEJA, the 10 biggest environmental justice  
7 organizations in California.

8 I am calling in to oppose this DWR Investment  
9 Plan contract that includes keeping three dirty power  
10 plants open, when we have fought hard. As you've heard  
11 folks from Oxnard and the organization CAUSE, that they've  
12 been fighting to keep our community safe and to close these  
13 -- the dirtiest power plants in in the state. Ormond power  
14 plant in the Central Coast, and Alamitos in Long Beach-  
15 Wilmington area where our member organizations, CVE  
16 Communities for a Better Environment, has been fighting to  
17 close those down.

18 We have seen Governor Newsom's Emergency  
19 Declaration during the heat waves have a big impact on  
20 environmental justice communities. Vice Chair Gunda, when  
21 you said you know these decisions have burdens on  
22 communities that's exactly who we're representing here are  
23 the folks who are burdened by these decisions. And we  
24 don't agree with what Governor Newsom has done to keep  
25 polluting power plants open when we really have

1 alternatives.

2           You know, I want to see the CEC be the Clean  
3 Energy Commission, right. We want clean energy to be  
4 experienced by the most burden communities. And so CEJA  
5 alongside with Sierra Club has had a partnership campaign  
6 called Regenerate California to team up to see the  
7 retirement of these 200 power plants across -- these dirty  
8 power plants across our state.

9           We were able to win that through the CARB Scoping  
10 Plan, that commitment for no new gas power plants. And we  
11 want to discuss these alternatives with you. You have a  
12 billion dollars on the table for this investment, and we  
13 want to have conversations about the alternatives with you.  
14 Thank you.

15           MS. BADIE: Thank you.

16           Next we have Tyler Valdes. I'm going to open  
17 your line. Please unmute on your end, state any  
18 affiliation, and make your comment.

19           MR. VALDES: Hello, my name is Tyler Valdes, T-Y-  
20 L-E-R V-A-L-D-E-S. And I'm an Energy Equity Manager with  
21 the California Environmental Justice Alliance or CEJA and  
22 the Regenerate Coalition in partnership with the Sierra  
23 Club. And I'm speaking on Agenda Item Number 7. And thank  
24 you so much for the opportunity to speak on this item. And  
25 thank you especially to Commissioner Gallardo for allowing

89

1 more time for communities to engage on this issue.

2 I am opposed to the CEC allowing extensions of  
3 Ormond Beach Generating Station, AES Alamitos and AES  
4 Huntington Beach, on behalf of the environmental justice  
5 communities who have long been overburdened by this  
6 industrial pollution. I'm asking the Energy Commission to  
7 reject the proposal for DWR to contract with OTC plants for  
8 another three years and instead focus on all the clean  
9 alternatives that exist, commit to the original timeline of  
10 retirement by December 31 2023, which was supposed to be  
11 earlier. And EJ communities have long fought for this.

12 And it's also my birthday, so please gift me with  
13 this lovely gift of having these plants retired by then.  
14 Stop certifying new gas plants and plan for the retirement  
15 of all gas plants that have been proven to be toxic,  
16 polluting, and unreliable with the prioritization for EJ  
17 communities. California should not be spending over a  
18 billion dollars to keep these old inefficient fossil fuel  
19 plants online. Instead, we should invest in the  
20 alternative solutions that EJ communities advocates have  
21 long been fighting for, and continue to fight for,  
22 including distributed solar and storage, micro grids,  
23 demand response, and energy efficiency.

24 We must stop depending on outdated and dangerous  
25 energy resources, especially OTC plants. Everyone,

1 especially the families and individuals who live on the  
2 fence line of these unreliable polluting plants have a  
3 right to clean air and healthy lungs and should not be  
4 sacrificed for the sake of quote unquote, "reliability."  
5 Please help make the health of our communities your top  
6 priority by ending our reliance on fossil fuels and helping  
7 move California toward a clean adjust energy future. Thank  
8 you very much.

9 MS. BADIE: Thank you.

10 Next we have Scott Lipton. Scott, I'm going to  
11 open your line. Please spell your name and announce any  
12 affiliation.

13 MR. LIPTON: Good afternoon, Commissioners.  
14 Scott Lipton with Enchanted Rock, S-C-O-T-T L-I-P-T-O-N.

15 I first want to speak directly to the DWR  
16 proposal. And it's specifically on its agreement and  
17 pursuit of not reauthorizing any additional diesel  
18 procurements beyond last year. I think this is an  
19 important first step. During the three years of energy  
20 unreliability we've had, in the three primary air pollution  
21 control districts we cite 300 percent increase in diesel,  
22 behind-the-meter diesel generation permitting. We think  
23 this is completely avoidable. We think DWR's focus on the  
24 utilization of CARB DG certified generation technologies is  
25 appropriate, especially as we think about those frontline

91

1 communities. And the harmful community and public health  
2 impacts that diesel generation has in those communities,  
3 while still ensuring that those communities also have the  
4 reliable and available electricity that they need for  
5 public services.

6 We hope that DWR continues to work as they are,  
7 through the RFIs that they identified that close later this  
8 summer. To identify a myriad of technologies from across  
9 the board that can meet the immediate and medium term needs  
10 of the state, as Commissioner Gunda identified, this almost  
11 7 gigawatt deficit that the state will be facing between  
12 now in 2040. Thank you for your time and have a good  
13 afternoon.

14 MS. BADIE: Thank you. We had one additional  
15 hand raise with a first name Anne, but that hand was  
16 lowered. Thank you, Anne. Okay, Anne Hoskins, I'm going  
17 to open your line. Please state any affiliation and we ask  
18 that comments be limited to two minutes or less. Anne,  
19 please unmute on your end and begin.

20 MS. HOSKINS: Sorry about that. Thank you,  
21 everyone. Thank you, Commissioners. I hadn't actually  
22 planned to speak. I was just listening in today. But I  
23 just wanted to raise the fact that, you know, you're all  
24 aware that there are many distributed energy companies --  
25 oh, by the way I'm with Generac, so apologies for that,

1 Generac Power Systems and Eco-bee. (phonetic)

2 Many distributed energy companies had been at  
3 actively working with staff for the last, I'd say nine  
4 months on the DSJS and DEBA programs. And it seems to me  
5 that consideration of these proposals on this extension for  
6 three years should go hand in hand with consideration of  
7 that work. And really assessing the opportunities that we  
8 have, many industry players to help be part of the  
9 solution, particularly when you're looking at a three-year  
10 time period.

11 So I just suggest that I know that we're all  
12 anxiously awaiting -- I know there's a lot of work being  
13 done in preparing some guidance on DSJs. I think there's a  
14 lot more probably that needs to be done on DEBA. But  
15 certainly, you know, Generac, you know, we have many  
16 solutions to bring to the table that we've proposed, but  
17 there are many other parties as well.

18 So really offering the opportunity if the  
19 Commission thinks there's more needed, more input needed  
20 from the distributed energy communities. I know, we'd all  
21 like to be part of this reliability solution. So thank you  
22 very much.

23 MS. BADIE: Thank you for your comment.

24 That concludes public comment. Back to you,  
25 Chair.

1 CHAIR HOCHSCHILD: Well, thank you all for  
2 providing those comments.

3 We'll turn to Commissioner discussion. Any  
4 Commissioners, yeah go ahead, Commissioner McAlister.

5 COMMISSIONER MCALLISTER: Yeah, excuse me.

6 So I just want to acknowledge all those comments,  
7 and really, you know, take those to heart. I think Vice  
8 Chair Gunda laid out I think, his deeply held concern. And  
9 I think we share that, all of us. That we need to get away  
10 from these resources, as soon as we can for all the reasons  
11 folks have specified, and more. Our long-term goal to land  
12 in 100 percent clean energy future depends on it. And so  
13 the question isn't whether, I think, it's sort of how do we  
14 navigate between here and there?

15 And I think the numbers that Vice Chair Gunda  
16 laid out, kind of mean that in the very near term, the  
17 immediate term, we're in a better shape than we were last  
18 year. But we still have this sort of structural deficit  
19 that we need to manage around. And that requires us to  
20 sort of really have all the options on the table. And so I  
21 wanted to just acknowledged the sort of complexity, and the  
22 lack of a perfect solution in the near-term planning here.

23 And then I wanted to just thank Jorge. I really  
24 enjoyed the presentation, and the briefing yesterday that  
25 you and Delphine gave me. I really appreciate that and

1 helpful to have the additional context.

2           And also, maybe just one question. Could you  
3 just talk about how the proposed trajectory -- I know this  
4 is there's an informational item right, but how the  
5 proposed trajectory does actually open up the door to  
6 vastly reducing the number of hours these plants might run.  
7 Just in terms of taking them off of reliability must-run  
8 kind of status, or just how really one way to manage down  
9 the emissions is to manage them, really focus them on the  
10 critical hours. Maybe you could just give us a little more  
11 color on that piece?

12           MR. QUINTERO: Of course. I'll refer back a  
13 little bit, I think, to the slides that were noted. But  
14 specifically, the legislation that passed AB 209 states  
15 that DWR strategic reserve fossil fuels will only operate  
16 in preparation for or during extreme events. That would  
17 mean that relative to how the plants are operating right  
18 now as resource adequacy assets that run as the market  
19 calls upon them, and much more frequently. They would only  
20 run me if we have an extreme event. So if there is no  
21 extreme event, there will be zero hours on all these  
22 assets.

23           COMMISSIONER MCALLISTER: Okay, thanks. So  
24 pulling them out of RA really opens up that possibility is  
25 the point. Thank you very much.



1 CHAIR HOCHSCHILD: Great. Other Commissioners  
2 wishing to make a comment? Let's go, Vice Chair Gunda.

3 VICE CHAIR GUNDA: Chair, I think Commissioner  
4 Monahan had her hand before me, so I'll give her -- and  
5 then I'll just kind of close.

6 COMMISSIONER MONAHAN: Well, actually I'd rather,  
7 Vice Chair, you go first.

8 VICE CHAIR GUNDA: Okay, thank you.

9 And I just want to also recognize the comments,  
10 the passionate comments from the partners in the area. I  
11 had a chance to travel to Ormond, meet with CAUSE, meet  
12 with Lucia. We had chances to meet with a number of  
13 colleagues that made comments today.

14 I think I want to continue to offer the  
15 opportunity for us to kind of think this through. As  
16 Commissioner McAllister mentioned that the perfect solution  
17 right now is incredibly hard in the near term. And I think  
18 I want to offer, and put it on the table for a good faith  
19 discussion, and an opportunity to have a dialogue on, we  
20 have multiple planks happening here.

21 One, we're trying to rapidly electrify the state.  
22 And as we rapidly electrify the state, if we look at some  
23 parts of the state, we would incredibly benefit from  
24 electrification, even if the electrons are not coming  
25 necessarily from the greenest of resources. So let's take

1 just like looking at ports, for example, in the LA area.  
2 You have, if you were able to really electrify the port,  
3 and even if we move towards electrons that are sometimes on  
4 the grid suboptimal, we have this humongous opportunity to  
5 really clear the air. And have good health outcomes in  
6 that area. But again, could we do it today full bore with  
7 the resources we have is a question.

8           And so I think, you know, when we talk about  
9 demand response, for example, the last year we've pulled in  
10 a lot of resources into demand response. Some of them  
11 performed, and some of them did not. And in a week, we  
12 need to really take into account if there are large amounts  
13 of incentives, and the demand is not reducing to the  
14 incentives, it's an important element for us to  
15 collectively take into consideration.

16           And third, you know, just thinking this through  
17 let's assume for a moment that the lights went off. The  
18 amount of diesel gensets that will run around, the  
19 temporary diesel gensets that will run around the state to  
20 keep the lights on for examples in data centers, critical  
21 facilities, and such will be enormous. So the  
22 counterfactual could be enormously bad as well.

23           So I think what I'm trying to offer here is I  
24 want to be personally humble that we don't have all the  
25 answers. I want to recognize that we are continuing to

1 burden the communities. And I would personally pledge to  
2 move forward in the most optimal solution in making sure  
3 the lights are on, the community benefits are maximized,  
4 and the affordability is maximized. And at this point I  
5 would like to just say sorry to the communities that we  
6 have had such a high historical burden. And we continue to  
7 ask for your help as we move towards this near-term  
8 transition.

9           So with that I just want to conclude by saying  
10 thank you for the comments. Thank you again for asking us  
11 and suggesting that we have a conversation on this before  
12 we actually take a vote. So with that, I respectfully  
13 submit that over the next couple of weeks we hopefully have  
14 conversations that we are able to share with you where  
15 we're coming from. And learn what your perspectives are  
16 and the alternatives. And to make sure that the OTC  
17 powerplants as they're kept and run, are minimized as much  
18 as possible. And I'm all ears to hear if there are other  
19 options that we completely missed.

20           So, thank you. And with that back to the Chair.

21           CHAIR HOCHSCHILD: Thank you.

22           Commissioner Monahan?

23

24           COMMISSIONER MONAHAN: Well, I accompanied Vice  
25 Chair Gunda and then Public Advisor Gallardo, now our

1 fellow Commissioner, on that trip. And visited with CAUSE  
2 and saw the Ormond power plant, at least from the distance.  
3 And it really had, I think, a great discussion about  
4 community concerns writ large in an area around pollution  
5 and truck travel.

6           And I'm also reminded, Vice Chair, that you  
7 actually got pulled away in the middle of that IEPR  
8 workshop, because there was an emergency on the on the grid  
9 side in terms of we were having a heatwave. There were  
10 concerns about reliability. You had to go back to  
11 Sacramento to deal with that emergency. And I think that  
12 really kind of highlights this tension that we are  
13 experiencing in real time, between our commitment as a  
14 state to move to a 100 percent clean energy system, and the  
15 urgency of keeping the lights on that saves lives. And  
16 also, as you pointed out, it prevents use of diesel  
17 generators, which are just proliferating across the state  
18 as a reliability interim solution.

19           And I too am grateful that there is a  
20 conversation that is going to follow up. And I'm seeing  
21 Vice Chair Gunda nod in terms of a conversation with the  
22 community groups, and the interests that are opposing this  
23 continuation of these of these plants. And we do have to  
24 have honest conversations. We are faced with hard  
25 tradeoffs over the next several years until we can get long

1 duration storage up and running. Until we can really speed  
2 deployment of clean energy resources on the grid, which is  
3 the topic of this year's Integrated Energy Policy Report.  
4 And I think we all feel that responsibility to move more  
5 swiftly to protect communities that are disproportionately  
6 impacted by pollution. And to keep the lights on it.  
7 Those are hard. We're faced with really hard decisions.

8           So just appreciate all the groups coming and  
9 presenting. I appreciate actually, the further  
10 conversation that's going to ensue. And recognize that we  
11 still need to move swiftly to keep the lights on this  
12 summer.

13           CHAIR HOCHSCHILD: Okay, thanks.

14           Commissioner Gallardo, go ahead.

15           COMMISSIONER GALLARDO: Right, so I needed a  
16 little bit of time to collect my thoughts. Because I  
17 should disclose that I'm actually from Ventura County, and  
18 lived with my family in Oxnard right near the power plant  
19 that we're talking about, Ormond. So this hits close to my  
20 heart. And it is one of the reasons why I pursued a career  
21 in policy was to change things that impact families like  
22 mine that were mixed immigrant status. You know, parents  
23 who were working in agriculture. Parents who had limited  
24 English proficiency, and needed help from me to get them  
25 through things. And a lot of the families there are like

1 that, so I really understand what the speakers were talking  
2 about it. Having this, you know, big structure there  
3 that's harmful to their health, is an impediment for them  
4 to live a life of dignity, and to achieve the prosperity  
5 that they need. Because you can't do any of that without  
6 human health.

7           And so I think this is a really important matter.  
8 And I'm grateful to the Commissioners, and our Executive  
9 Director, our Chief Counsel for being willing to -- and DWR  
10 as well for being willing to postpone a vote here, so that  
11 we could have an additional discussion with the folks who  
12 have called in to comment and with others.

13           And so I wanted to highlight, I wanted to  
14 disclose that connection that I have. And I also want to  
15 make sure that, you know, I work with Vice Chair Gunda and  
16 the rest of the Commissioners to determine how do we keep  
17 the lights on so all Californians can live with dignity,  
18 achieve prosperity, because we need that yet have health.  
19 And we do have to make a lot of hard decisions. But that's  
20 why I'm glad I'm here, so I can contribute to that.

21           So here is where I'm trying to go. I'm wondering  
22 if DWR is willing to have additional conversations with  
23 folks. And can you talk about any type of process that you  
24 have to be able to do that? Or if there are specific ways  
25 that the people who are interested in discussing this issue

1 further and also maybe trying to figure out some potential  
2 alternatives, as they mentioned in their conversation, is  
3 there a way for them to be able to connect with you to do  
4 that? Or is there a particular process that you would  
5 prefer they go through? Can we talk about that a little  
6 bit?

7 MR. QUINTERO: Sure, I would go back to the fact  
8 that these agreements are contingent upon the State Water  
9 Resources Control Board passing. And that that public  
10 process is still ongoing with them, so we'd recommend that  
11 be the process be taken since we are only doing this as  
12 recommended by the SACCWIS for grid reliability. And as  
13 permitted by the State Water Resources Control Board.

14 COMMISSIONER GALLARDO: Okay, so going to the  
15 Water Resources Control Board?

16 MR. QUINTERO: Yes.

17 COMMISSIONER GALLARDO: Okay.

18 VICE CHAIR GUNDA: Commissioner?

19 COMMISSIONER GALLARDO: Vice Chair Gunda?

20 VICE CHAIR GUNDA: Yeah, Commissioner Gallardo.

21 I just want to make sure I kind of understand the question.  
22 If you're thinking around really understanding what the DWR  
23 Investment Plan is, and the choices, what I was thinking is  
24 as we engage over the next couple of weeks that the  
25 meetings will include DWR experts in it. So we have an

1 opportunity to think it through. So yeah, absolutely I  
2 think DWR will be a part of that conversation.

3 COMMISSIONER GALLARDO: Excellent. Okay. I just  
4 wanted to make sure that the folks who called in, and who  
5 are interested, to gauge further -- you know, how we'll be  
6 able to do that. And that we're all committed to doing  
7 that. So thank you for that.

8 Jorge, was there anything you wanted to add or  
9 anything you wanted to respond to the comments that you  
10 heard? I just want to make sure you had a chance as well,  
11 and not just us as the Commissioners.

12 MR. QUINTERO: No, I just want to highlight that  
13 I appreciate the comments, appreciate the Commission and  
14 all your efforts to allow this to be presented. And once  
15 again, highlight that these resources would only operate  
16 during extreme events. So as they currently stand right  
17 now they're a resource adequacy, and they are operating as  
18 we speak.

19 But once they would enter the (indiscernible)  
20 reserve, their limitation would only be during extreme  
21 events. So when it's already a, you know, break the glass,  
22 pull the lever situation would these resources really be  
23 called upon. And so if we don't enter a scenario like that  
24 we wouldn't need these resources. But if we do, then as  
25 Vice Chair Gunda mentioned it could possibly be the



1 difference between this or a bunch of diesels.

2           So, I just want to highlight that. And once  
3 again, thank everybody. Thank you to the commenters. We  
4 really appreciate it. Thanks for your time.

5           CHAIR HOCHSCHILD: Great, thank you so much.  
6 Appreciate it.

7           VICE CHAIR GUNDA: Chair?

8           CHAIR HOCHSCHILD: Yes?

9           VICE CHAIR GUNDA: Chair?

10          CHAIR HOCHSCHILD: Go ahead.

11          VICE CHAIR GUNDA: Sorry, I just wanted to make  
12 sure if I know Delphine, Director Delphine Hou is in the  
13 room as well. And if she might want to add anything, but  
14 just stating that one of the concerns that was raised was  
15 just the performance of the resources and the safety of the  
16 resources. And I think it's important to recognize, I  
17 think, a little bit at the amount of time that would be  
18 required to ensure that there is a decent amount of  
19 planning time for those power plants to do the investments,  
20 right. So if you did it like six months or a year, they  
21 will not be able to make those planned investments.

22          So I believe Director Hou spent a lot of time in  
23 making sure this is optimized to a level of from the  
24 perspective of cost, reliability and safety, and really  
25 working with the rest of the agency. So I just wanted to

1 welcome her to see if she wanted to add anything before we  
2 move.

3 CHAIR HOCHSCHILD: Great, yeah. Delphine,  
4 please.

5 MS. HOU: Thank you very much. Delphine Hou,  
6 Deputy Director with the Department of Water Resources.  
7 Commissioner Gallardo, I really appreciate your comments.  
8 And absolutely DWR will be here to coordinate and answer  
9 any questions that the public may have.

10 We're also very grateful for the Energy  
11 Commission to have this forum today. The opportunity to be  
12 able to discuss it fully and have additional engagement  
13 before there is any vote.

14 To Vice Chair Gunda's point, we do want to  
15 clarify that one of the things that the DWR has done,  
16 because we have all of that operational experience with  
17 Jorge and his team, all the engineers that we have on  
18 staff. One of the reasons that we have been engaged in  
19 this process is the ability to do inspections with the  
20 power plant to make sure that their staff are retained or  
21 knowledgeable, and able to run the power plant, and can do  
22 so competently. So that these resources can be used for an  
23 extreme event.

24 So we take that job very seriously for the  
25 reliability that we're looking for, for the state. As well

1 as the recommendation for SACCWIS to retain these assets,  
2 as we are going through our energy transition and looking  
3 for better alternatives. So we do see this role as simply  
4 a backstop for the state's goals to achieve what we're  
5 actually trying to go for in our clean energy future. But  
6 having said that, I also do want to recognize what Vice  
7 Chair Gunda has said, which is the timing of this has been  
8 delicate. Part of it is because these plants were slated  
9 for retirement, we did want to make sure that we were able  
10 to have those conversations. So that their experience  
11 engineer engineers and operators didn't retire and we were  
12 in a situation where we didn't have an opportunity to  
13 engage.

14 But as with all of this, this is still contingent  
15 upon the State Water Resources Control Board actually  
16 extending those permits. So the contracts were there just  
17 to ensure that we had our ducks in a row, that we're able  
18 to get our foot in the door to go and inspect the units, to  
19 go and look at their maintenance records, to go and talk to  
20 the operators and make sure that they're appropriately  
21 staffed. And those units are well maintained. To do the  
22 vetting that we needed to do to be assured that these were  
23 good counterparties to sign contracts with. To get our  
24 ducks in a row first, before the State Water Resources  
25 Control Board makes their decision.

1           And we've also been partnering with them through  
2 their process as well. For example, we attended their  
3 march informational Board meeting about this topic, which  
4 they also had many public speakers also from the community,  
5 providing various viewpoints. And they will have this as a  
6 voting item later in the summer, or I think they're  
7 targeting August, but we'll have to check the schedule on  
8 that.

9           So we're happy to have continued conversations  
10 here with our colleagues at the CEC to further the  
11 discussion. Thank you.

12           CHAIR HOCHSCHILD: Well, given we're not voting  
13 on the item I suggest we wrap at this point. What I'd like  
14 -- so thank you, Jorge and Delphine, for that presentation.  
15 All the members of the public for your input.

16           What I'd suggest we do is break for lunch. I  
17 have lunch with some tribal leadership, so I think I'll  
18 allow a little time for that. If we could reconvene at  
19 1:30 and we'll take up Item 8 at that time thanks.

20           (Off the record at 12:20 p.m.)

21           (On the record at 1:30 p.m.)

22           CHAIR HOCHSCHILD: We'll take up with Item 8 and  
23 welcome Jared Babula.

24           MR. BABULA: Thank you. Good afternoon,  
25 Commissioners, my name is Jared Babula. I am a Senior

1 Staff Attorney within the California Energy Commission  
2 representing the Siting, Transmission and Environmental  
3 Protection Division. I'm here today to request the  
4 readoption of Appendix B, a portion of the Small Power  
5 Plant Exemption Regulations package.

6 With me today are STEP Manager, or Siting,  
7 Transmission and Environmental Protection Manager Eric  
8 Knight, and representatives from the California Department  
9 of Fish and Wildlife. Let's see if that works. Yep. Next  
10 slide, please.

11 The Small Power Plant Exemption, or SPPE  
12 Regulations Package was previously adopted by the  
13 Commission at the October 12, 2022 Business Meeting. The  
14 package of express terms includes changes to the SPPE  
15 Regulations at California Code of Regulations, Title 20,  
16 sections 1934 through 1947. And Appendix B which provides  
17 a list of data that must be submitted in an application to  
18 the Energy Commission for a power plant certification or  
19 exemption from certification. Appendix B contains a  
20 requirement to submit maps containing the locations of  
21 biological and cultural resources.

22 After the Commission's adoption (off-mic  
23 colloquy.) So let's see, so after the Commission's  
24 adoption of the express terms, the Office of Administrative  
25 Law approved the proposed changes to the SPPE regulations  
26 which took effect in December 2022. However, OAL requested

1 that CEC augment the Initial Statement of Reasons, or ISOR,  
2 to further justify proposed changes to Appendix B. In  
3 response, staff withdrew Appendix B and prepared a  
4 Supplemental ISOR. Next slide, please.

5 Staff published the Supplemental ISOR for a 15-  
6 day comment period, beginning April 26, 2023. Please note  
7 that no substantive changes were made to the actual text of  
8 Appendix B, only to the justification and necessity for the  
9 changes.

10 One comment letter was received from a coalition  
11 of environmental groups objecting to the requirement that  
12 high resolution biological resource maps be submitted under  
13 confidential cover. Next slide, please.

14 Maps presented at high resolution scale are very  
15 detailed and are necessary for CEC's biologists to conduct  
16 their analysis, but the detail may place sensitive  
17 biological resources at risk if made public. CEC Staff met  
18 with commenters, and with the California Department of Fish  
19 and Wildlife representatives, to clarify concerns and  
20 explain the CEC's established confidentiality process which  
21 includes a review and consultation with CDFW on disclosure  
22 of sensitive maps. The fact that a map is submitted under  
23 confidential cover does not mean the map will ultimately be  
24 designated confidential.

25 To ensure a full consideration of the merits of  
26 adopting the proposed changes to Appendix B, staff has

1 filed a preliminary response to the public comment in the  
2 rulemaking docket. Next slide, please.

3 To conclude, program staff and the Chief  
4 Counsel's Office recommend the Commission approve the  
5 proposed resolution readopting Appendix B, directing staff  
6 to file a Supplemental Final Statement of Reasons, and  
7 other rulemaking package documents timely to OAL. And  
8 finding the readoption is not a project or alternatively  
9 exempt from CEQA.

10 Eric Knight, the representatives from CDFW, and I  
11 are available to answer any questions. Thank you.

12 CHAIR HOCHSCHILD: Thank you.

13 We'll go to public comment on Item 8.

14 MS. BADIE: Thank you. This is Mona Badie, the  
15 Public Advisor. We will now take public comment on Item 8.  
16 First, we will go to folks in the room. If you want to  
17 make a comment and you are in the room, you can raise your  
18 hand or use the QR feature to let us know you'd like to  
19 make a comment.

20 And we did receive one comment from Kim Delfino.  
21 Thank you, Kim. Okay, great. And we do ask you to spell  
22 your name for the record, state any affiliation and limit  
23 your comments to two minutes. Thank you.

24 MS. DELFINO: Well, good afternoon. My name is  
25 Kim Delfino, it's D-E-L-F-I-N-O, and I'm here speaking on  
26 the behalf of Defenders of Wildlife, the California Native

1 Plant Society, the Center for Biological Diversity, and the  
2 Nature Conservancy. I just wanted to thank you for the  
3 opportunity to provide public comment on Item 8. Our  
4 organizations have worked very well with CEC staff on many  
5 proceedings and on many issues. So the comments I'm  
6 offering today are in the spirit of trying to find a good  
7 outcome that would work for everyone.

8           The rulemaking package before you, as it was  
9 explained, has essentially resulted in biological data  
10 being held under confidential cover and only released to  
11 the public in the siting proceedings at a scale of 1 to  
12 350,000. And just so you would understand that's  
13 basically, 1 inch equals 20,000 acres, which means that  
14 when you look at the data it essentially is a big blob.  
15 It's here's the site, and there's a big blob and it says  
16 there's species there, but we have no idea where they are  
17 actually.

18           We have outlined that we don't believe that the  
19 CNDDDB, or the California Natural Diversity Database  
20 Guidelines apply to data that's generated by a project  
21 applicant and not pursuant to the CNDD database. So we  
22 have a disagreement on the merits.

23           But I guess what I'm getting to is that -- what  
24 we were told is the CEC staff and the Department of Fish  
25 and Wildlife are going to come up with an agreement on how  
26 they will review data and then release it to the public.



1 The problem is, is that there's nothing written down. We  
2 have no idea what the timeline is. We have no idea what  
3 the requirements are as to what you would release or not  
4 release. And we've been participating in multiple  
5 proceedings, one in particular that's been going on for  
6 more than a year. And we still have not received any of  
7 the data on a scale that's more granular than 1 to 350,000.

8 I would note this is a departure from CEC  
9 proceedings in the past. We've participated in many  
10 proceedings where data has been released at a much more  
11 granular level, even more granular than 1 to 6,000. And I  
12 think all we're asking for is that if you could please  
13 direct the staff to meet with us to put together actual  
14 written guidelines as to what the process is, what's the  
15 timeline and how we should be proceeding, we'd very much  
16 appreciate that. And I would just close by simply asking  
17 that.

18 While we're asking for this meeting to have this  
19 detailed, we do not want to slow down the release of the  
20 data in the proceedings that are already going forward.  
21 And have been going forward for quite a while, because  
22 we've already been fairly hamstrung in our ability to  
23 provide meaningful public comment. So thank you very much.

24 MS. BADIE: Thank you.

25 There are no raised hands on Zoom. Back to you,  
26 Chair.

1 CHAIR HOCHSCHILD: Okay, thank you for those  
2 comments.

3 Let's go to Commissioner discussion, starting  
4 with Commissioner Gallardo.

5 COMMISSIONER GALLARDO: Thank you. So actually I  
6 wanted to give you an opportunity, Jared, if you wanted to  
7 respond to any of the comments that Kim Delfino mentioned  
8 here.

9 MR. BABULA: Sure, thanks. One main point, I  
10 want to remind the Commission is that what's before you is  
11 very narrow. Some of the comments from the Coalition  
12 really go to the designation process of how we designate  
13 something as confidential. And that's a whole separate  
14 section of our regulations that have a whole different  
15 process under 2505 of Title 20.

16 The line at issue here is simply a statement that  
17 says to include a map at a scale of 1 to 6,000 under  
18 confidential cover. And so it's how it comes in to give an  
19 opportunity. But certainly, we're going to be working and  
20 utilize the expert biologists at the Energy Commission, and  
21 at the California Department of Fish and Wildlife, to  
22 ensure that there is not a risk of harm to the biological  
23 resource. But we anticipate that number of maps that might  
24 come in as confidential will not eventually be granted  
25 confidentiality, because it would be appropriate to  
26 release.

1           For example, in the Sutter (phonetic) case we  
2 just -- there was a map that came in under confidential  
3 cover, but it's going to be released publicly. So that's  
4 just a separate process that's not before the Commission  
5 right now.

6           CHAIR HOCHSCHILD: Okay. Yeah, Commissioner  
7 McAllister?

8           COMMISSIONER MCALLISTER: Could you talk about  
9 the timeline for that? There were concerns sort of or the  
10 comments sort of brought up the efficacy of the timeframe.

11          MR. BABULA: Right. Well, so timeline for the --  
12 again, this is the designation process timeline, which is a  
13 separate rulemaking, a separate regulation that's not  
14 noticed in this proceeding here. But it's our regs say 30  
15 days for a decision to be made on an application. And then  
16 within that 30 days we would work with any agency that we  
17 need feedback from. And in this case, it would be to the  
18 California Department of Fish and Wildlife.

19          COMMISSIONER MCALLISTER: Okay. So from your  
20 perspective, there is a process in place that can address  
21 the concern expressed?

22          MR. BABULA: Right. We do have a full -- and  
23 again, Title 20, section 2505 is our confidential  
24 designation process. But in light of the information  
25 that's come out from working on this package, having  
26 meetings with the Coalition, and Fish and Wildlife, we're

1 particularly focusing on the project they're interested in  
2 right now, like the geothermals and the hydro store  
3 projects.

4 COMMISSIONER MCALLISTER: Okay. Thanks for the  
5 clarification. Anyway, slightly side conversation. But  
6 yeah, I support the item, the narrow item we're voting on.

7 CHAIR HOCHSCHILD: Okay. Any other comments? If  
8 not --

9 COMMISSIONER GALLARDO: Thank you. This is  
10 Commissioner Gallardo again. Well, I did want to show some  
11 gratitude, first of all, for the work of the staff from the  
12 Chief Counsel's Office and also staff from the Siting,  
13 Transmission and Environmental Protection Division. And in  
14 particular I wanted to highlight your leadership, Jared,  
15 for doing a good presentation, for meeting with the  
16 Coalition, and also with our partners at CDFW. And just  
17 working tirelessly to address the issues that were raised  
18 by the Office of Administrative Law, which is the reason  
19 why we're here again on this item.

20 I also wanted to thank the staff from the  
21 California Department of Fish and Wildlife for their  
22 cooperation on this effort, including Harllee Branch, Steve  
23 Ingram, Carrie Battistone, Kelley Barker, and Kari Lewis.  
24 And I know they are on the line as well in case there are  
25 other questions from Commissioners.

26 And of course, I wanted to thank the Coalition

1 who reached out to me, including Kim Delfino, to explain  
2 the concerns that you have about the appendix and the  
3 timing that you just shared right now. And I think it was  
4 Defenders of Wildlife, Center for Biological Diversity,  
5 Sierra Club, CNPS, NRDC and Earth Advocacy. So I  
6 appreciate the view that the advocates shared with me and  
7 have talked with staff about. However I do have full  
8 confidence that our Energy Commission staff, who in  
9 consultation with CDFW will ensure the appropriate balance  
10 of that public disclosure of the resource maps while  
11 protecting sensitive biological resources, which is also  
12 the goal of the advocates. And I also encourage staff to  
13 continue working with the Coalition and others.

14           So just as a reminder, the Energy Commission did  
15 adopt the changes to Title 20, Appendix B last October.  
16 That was prior to me being appointed Commissioner, and  
17 there have been no substantive changes since then. So the  
18 ISOR provided a clear rationale and also the necessity for  
19 the regulation changes that the Office of Administrative  
20 Law requested. And there have been many changes to CEQA in  
21 the interim. And this update of Appendix B will ensure  
22 that the Energy Commission receives applications for  
23 certification, including those applications that come  
24 through the opt-in process and for small powerplant  
25 exemptions. So and that contains the information necessary  
26 for the Energy Commission to be able to meet its

1 obligations under the Warren Alquist Act and CEQA. So this  
2 is really important that we move forward.

3 So for those reasons, I am going to recommend the  
4 readoption of the Title 20, Appendix B changes that are  
5 before us.

6 CHAIR HOCHSCHILD: Great. Would you be willing  
7 to move the item, seeing no additional comments from other  
8 Commissioners?

9 COMMISSONER GALLARDO: Move the item.

10 CHAIR HOCHSCHILD: Okay. Is there a second from  
11 Commissioner McAllister?

12 COMMISSIONER MCALLISTER: Second.

13 CHAIR HOCHSCHILD: All in favor, say aye.  
14 Commissioner Gallardo.

15 COMMISSIONER GALLARDO: Aye.

16 CHAIR HOCHSCHILD: Commissioner McAllister.

17 COMMISSIONER MCALLISTER: Aye.

18 CHAIR HOCHSCHILD: Vice Chair Gunda.

19 VICE CHAIR GUNDA: Aye.

20 CHAIR HOCHSCHILD: Commissioner Monahan.

21 COMMISSIONER MONAHAN: Aye.

22 CHAIR HOCHSCHILD: And I vote aye, as well. Item  
23 8 passes unanimously. Thank you, Jared.

24 We'll turn now to Item 9, LICAP Technologies.  
25 Justin, you're going to have to help me with the  
26 pronunciation on your last name, Scaccianoce, am I?

1 MR. SCACCIANOCE: Scaccianoce.

2 CHAIR HOCHSCHILD: Scaccianoce. Okay.

3 MR. SCACCIANOCE: Good afternoon, Chair and  
4 Commissioners. My name is Justin Scaccianoce, a Utilities  
5 Engineer from the Energy Research and Development Division.  
6 Next slide, please.

7 Today I'm requesting approval for a grant  
8 selected from the Realizing Accelerated Manufacturing and  
9 Production for Clean Energy Technology Solicitation, also  
10 known as RAMP.

11 The RAMP Program is the last step in the  
12 entrepreneurial ecosystem developed by the market  
13 facilitation office to propel clean energy entrepreneurs to  
14 the initial production phase for their technology. One  
15 step closer towards commercializing their product at full  
16 rate production and one step closer to supporting  
17 California's energy goals. The RAMP Program provides the  
18 means to guide entrepreneurs from the end of their  
19 prototype phase, to navigating through the world of initial  
20 production, scale up and manufacturing their technology.  
21 Next slide, please.

22 Startups often find it difficult to scale up  
23 production, because of a series of design or economic  
24 issues that can impact an emerging technology's progress  
25 towards commercialization.

26 Some of these challenges in startup space during

1 the transition include securing the necessary funds for  
2 activities like buying equipment, product testing and  
3 certification, adapting their emerging technology to fit  
4 the scope of established manufacturing processes. And  
5 finally, companies may lack the required knowledge and  
6 expertise in the manufacturing field. The purpose of this  
7 solicitation is to help clean energy companies advance  
8 their technology to the low rate initial production stage  
9 known as LRIP.

10           LRIP is the first step in making the transition  
11 from highly customized hand-built prototypes which are used  
12 for performance testing and vetting the production process  
13 to the mass produced end product in the full rate  
14 production phase. In short, transitioning to the LRIP  
15 stage is about maturing a technology to meet the  
16 requirements of potential customers within the technology's  
17 beachhead market. Next slide, please.

18           Today, we are requesting approval for a RAMP  
19 agreement with LICAP Technologies, Inc. to build a pilot  
20 manufacturing line for an innovative new battery electrode  
21 production process.

22           Traditional lithium-ion electrode manufacturing  
23 utilizes wet coding methods in which cathode and anode  
24 materials are mixed with binder and dissolved in a highly  
25 toxic and expensive solvent before they can be coated onto  
26 a metallic current collector foil. The solvent then needs



1 to be removed from the electrodes, which requires long  
2 exposure and energy intensive events. And this process can  
3 account for up to 47 percent of all energy requirements in  
4 a gigafactory.

5 To solve these problems, LICAP has developed  
6 their new activated dry electrode manufacturing process.  
7 This process eliminates the need for toxic solvents and  
8 instead uses a patented binder activation process to coat  
9 the foil. This change alone results in very significant  
10 advantages over the traditional wet coating process  
11 including up to 24 percent reduction in labor, 38 percent  
12 reduction in Capex costs, 78 percent reduction in  
13 manufacturing footprint, 75 percent reduction in energy  
14 consumption, and eliminating toxic solvents from the  
15 process altogether. As much as one gram of solvent per  
16 watt hour of lithium-ion battery produced could be  
17 eliminated from the manufacturing process. Next slide,  
18 please.

19 With this award, LICAP will design and build an  
20 LRIP line here in Sacramento, capable of producing 100  
21 megawatt hours per year of high-energy density lithium-ion  
22 battery electrodes, invalidate quality and efficiency by  
23 producing and testing 100 different battery cells with  
24 various specifications, including those matching EV and ESS  
25 application requirements. Additionally, this project is  
26 expected to create eight to ten new local jobs over the

1 life of the project. Next slide, please.

2 Staff recommends approval of this agreement and  
3 staff's findings that this project is exempt from CEQA.

4 This concludes my presentation. Thank you for your  
5 consideration. Staff is available for questions.

6 CHAIR HOCHSCHILD: Thank you so much.

7 We'll go to public comment on Item 9.

8 MS. BADIE: Thank you. This is Mona Badie, the  
9 Public Advisor for the Energy Commission. The Energy  
10 Commission welcomes public comment on Item 9 at this time.  
11 And if you are in the room, you can use the QR code or  
12 raise your hand at this time. And we'll also go to Zoom.  
13 If you're on Zoom and you'd like to make a comment, I ask  
14 that you use the raise hand feature on your screen if  
15 you're joining us online, and then press \*9 if you're  
16 joining us over the phone.

17 And I have one comment on Zoom, Martin Zia. I'm  
18 going to open your line. Please spell and state your name  
19 for the record, any affiliation that you have. And we're  
20 asking folks to limit their comments to two minutes or  
21 less. I'm going to open your line now.

22 Martin, you may begin your comment. Martin, if  
23 you're speaking, we can't hear you. You need to unmute.  
24 (No audible response.) All right, the audio is not coming  
25 in for Martin. Martin, I encourage you to file a written  
26 comment in the Business Meeting docket, or you can contact

121

1 the Public Advisor's Office.

2 All right, Chair, back to you.

3 CHAIR HOCHSCHILD: Okay. Well, thank you. Great  
4 project. It's really wonderful to see in-state  
5 manufacturing and pilot lines like this with promising new  
6 technologies and process improvements, which benefit both  
7 our energy storage goals and our electric vehicle goals.  
8 So I'm thrilled to see this.

9 Any comments, Commissioner McAllister?

10 COMMISSIONER MCALLISTER: I just think it's  
11 another great example of the ecosystem kind of doing its  
12 job and really moving technologies into sort of production  
13 mode to scale up as fast as possible. And that innovation  
14 is what we're all about promoting. So, very much support.  
15 Thanks for the presentation, that was very clear.

16 CHAIR HOCHSCHILD: Any other Commissioners?  
17 Yeah, Commissioner Gallardo, please.

18 COMMISSIONER GALLARDO: So I was excited when I  
19 heard it was in Sacramento, because you don't hear about  
20 too many projects in Sacramento. So I'm excited to have  
21 the opportunity to go visit. I just wanted to highlight  
22 that.

23 CHAIR HOCHSCHILD: Yeah. Let us know what a good  
24 time would be, we'd love to do that. It's nice and close  
25 by.

26 Okay. I'd welcome a motion on Item 9 from

1 Commissioner McAllister.

2 COMMISSIONER MCALLISTER: Move Item 9.

3 CHAIR HOCHSCHILD: Is there a second from  
4 Commissioner Gallardo?

5 COMMISSIONER GALLARDO: I second.

6 CHAIR HOCHSCHILD: All in favor, say aye.

7 Commissioner McAllister.

8 COMMISSIONER MCALLISTER: Aye.

9 CHAIR HOCHSCHILD: Commissioner Gallardo.

10 COMMISSIONER GALLARDO: Aye.

11 CHAIR HOCHSCHILD: Commissioner Monahan.

12 COMMISSIONER MONAHAN: Aye.

13 CHAIR HOCHSCHILD: Vice Chair Gunda.

14 VICE CHAIR GUNDA: Aye.

15 CHAIR HOCHSCHILD: And I vote aye as well. Item

16 9 passes unanimously. We'll turn now to Item 10, Zero

17 Emission Transportation Manufacturing. Welcome to Jonathan

18 Bobadilla.

19 MR. BOBADILLA: Good afternoon, Chair, Vice Chair

20 and Commissioners. My name is Jonathan Bobadilla with the

21 Fuels and Transportation Division. Staff is seeking

22 approval for two projects that were proposed for funding

23 under the Zero Emission Transportation Manufacturing

24 solicitation. Next slide.

25 As of March 2023, Revised Notice of Proposed

26 Awards, 13 projects are recommended for funding under this

123

1 solicitation for a total of \$198 million. The two proposed  
2 projects up for approval today represent the ninth and  
3 tenth project, seeking funding under the solicitation. The  
4 three remaining awards will be proposed at future meetings.  
5 Next slide.

6           The first proposed agreement is with Moxion Power  
7 Company, or Moxion, to support a new battery manufacturing  
8 facility adjacent to their existing manufacturing facility  
9 in Richmond, California. At this new facility, Moxion will  
10 be manufacturing battery modules and battery packs used in  
11 their mobile ZEV charging units. Upon completion, Moxion's  
12 new battery manufacturing facility will produce 6 gigawatt  
13 hours' worth of battery modules that will provide energy  
14 storage to approximately 10,000 mobile ZEV charging units.  
15 The proposed award for this project is approximately 50  
16 million with match funds of 27 million. Next slide.

17           If the Moxion agreement is approved, the project  
18 will help expand California's battery manufacturing  
19 capacity, while supporting manufacturing of mobile ZEV  
20 charging solutions. The project will encourage the mass  
21 adoption of ZEVs by enabling EV charging in a broad range  
22 of locations that may not be easily accessible to  
23 stationary chargers.

24           The Moxion chargers supported by this agreement  
25 will help displace 882,500 metric tons of mobile GHG  
26 emissions by providing charging to thousands of battery

1 electric vehicles annually. The agreement will support the  
2 creation of 400 high quality manufacturing jobs in the city  
3 of Richmond, California within a disadvantaged and low-  
4 income community. Next slide.

5           The second proposed agreement is with  
6 FirstElement Fuels Incorporated, or FirstElement.  
7 FirstElement is proposing to expand manufacturing and  
8 assembly of their hydrogen refueling station, or HRS, and  
9 HRS components, which include the hydrogen cryogenic pump  
10 in Santa Ana, California.

11           Currently, FirstElement imports most of the  
12 cryogenic pumps from Europe. This project will enable  
13 FirstElement to build up a strong domestic supply of this  
14 critical HRS component for new HRSs and for field spares  
15 for ongoing HRS maintenance.

16           Additionally, FirstElement proposed to expand  
17 their HRS testing operations at their testing facility  
18 located in Livermore, California. This agreement will  
19 enable FirstElement with support from the CEC to procure  
20 the advanced manufacturing equipment and resources  
21 necessary to expand HRS manufacturing for either 100 light-  
22 duty HRSs or 10 heavy-duty HRSs annually by 2026 when at  
23 full production capacity. The proposed award for this  
24 project is 7.7 million, with match funds of 14.4 million.  
25 Next slide.

26           If the FirstElement agreement is approved, the

1 project will achieve FirstElement's goals to localize,  
2 complete HRS manufacturing and reduce maintenance downtime  
3 for all HRS stations in California by onshoring more of the  
4 supply chain of critical components. When fully  
5 operational, this project will manufacture hundreds of HRSs  
6 that will help displace nearly 600,000 metric tons of GHG  
7 emissions annually, while creating approximately 38 high  
8 quality manufacturing jobs in Santa Ana and the surrounding  
9 areas. Next slide.

10 Staff is seeking your approval for these two  
11 agreements, as well as adoption of staff findings that each  
12 of these projects are exempt from CEQA.

13 We have Matt Miyasoto from FirstElement Fuels who  
14 is attending in person. We also have Vera Neinken from  
15 Moxion attending in person. Both are available to answer  
16 questions. That is the end of my presentation, and I am  
17 happy to answer any questions you may have. Thank you.

18 CHAIR HOCHSCHILD: Great, thank you.

19 Let's go to public comment on Item 10.

20 MS. BADIE: Thank you. This is Mona Badie, the  
21 Public Advisor. The Commission welcomes public comment on  
22 Item 10. And if you're in the room, you can raise your  
23 hand or you can use the QR code. And if you're on Zoom,  
24 please use the raise hand feature on your screen, or press  
25 \*9 if you're joining by phone.

26 We did have someone sign up for the QR code

1 entering FirstElement Fuel, and I'm not sure -- there we  
2 go. Thank you. Please state and spell your name for the  
3 record, and we're asking comments to be limited to two  
4 minutes or less. Thank you.

5 DR. MIYASOTO: Yeah, so thank you. Good to see  
6 you again, Chairman Hochschild, Commissioner McAllister.  
7 And I hear you, Commissioner Monahan. But my name is Dr.  
8 Matt Miyasoto, M-I-Y-A-S-A-T-O. I'm the Vice President for  
9 Strategic Growth and Government Affairs at FirstElement  
10 Fuel.

11 And I just want to say thank you to the  
12 Commission for your continued support and partnership with  
13 a locally grown California business. We're a small company  
14 that originated in Orange County, California. And we've  
15 grown to be the poster child for public- private  
16 partnerships with the State of California. If it were not  
17 for the California Energy Commission, we would not be the  
18 leaders in hydrogen infrastructure today. And that's  
19 really due to the aggressive policies that the state  
20 established, but also the belief by the Energy Commission  
21 in funding the small business to now become the leaders of  
22 ZEV emission hydrogen infrastructure.

23 Let me just say that we thank you for your  
24 continued partnership. And I want to extend the invitation  
25 for any of the Commissioners or the staff to please come to  
26 the Santa Ana facility. You can see the fruits of your



1 investment, the fruits of our labor. And just a few miles  
2 away there's a hydrogen fueling station where we fuel 60  
3 cars a day, close to 500 kilograms a day of hydrogen. So I  
4 just welcome you to come out and see what we're doing on  
5 the ground. Thank you.

6 CHAIR HOCHSCHILD: Thank you.

7 MS. BADIE: Thank you.

8 Next in the room we have Vera Neinken. If you  
9 can approach the podium. Please spell your name for the  
10 record, state any affiliation.

11 MR. BOBADILLA: Mona, actually we have one of the  
12 founders that would like to go first that is attending via  
13 Zoom.

14 MS. BADIE: Okay. If we could just take the  
15 public comment in the room first. I just want to follow  
16 this consistent process. Thank you.

17 Please spell your name for the record, state any  
18 affiliation, and you may begin.

19 MS. NEINKEN: Hi, my name is Vera Neinken, N-E-I-  
20 N-K-E-N, and I'm Head of Finance for Moxion Power. Alex  
21 Meek, one of our cofounders will speak right after me. But  
22 I wanted to thank you all today for this opportunity and to  
23 be here in person to answer any questions. We are very  
24 excited for this consideration that will support our  
25 community directly through job creation. We spoke earlier  
26 as well about the reliability of the EV charging market,

128

1 there was a project going on there. We're excited to be  
2 directly supporting that and enabling more EV charging  
3 opportunities in our local community and beyond and in  
4 California.

5 And indirectly, we are looking forward to help  
6 California achieve their decarbonization of air quality,  
7 emissions, and all the other lofty goals we have in the  
8 state. So once again, thank you for letting us be here.  
9 Alex will share a little more, and we're happy to answer  
10 any questions.

11 MS. BADIE: Thank you.

12 I will now move to Zoom. We have Alex Meek on  
13 the line. Alex, I'm going to open your line. Please state  
14 any affiliation. You may begin your comment. (No audible  
15 response.) Alex, you might have to unmute on your end.

16

17 MR. MEEK: Hi, I'm Alex Meek. I'm the Co-Founder  
18 and President at Moxion. So good afternoon, Chair, Vice  
19 Chair and Commissioners of the CEC. We are thrilled at the  
20 opportunity here as you consider the proposed grant to  
21 expand our battery manufacturing here in Richmond,  
22 California, and scale deployment of mobile energy storage  
23 throughout the State of California.

24 Moxion is a vertically integrated manufacturer of  
25 commercial industrial grade mobile energy storage products.  
26 We enable last-mile electrification supporting resilient

129

1 communities in the state, including the zero emission  
2 vehicle and fleet industries. This funding will enable us  
3 to build our Richmond, California 6 gigawatt hour  
4 manufacturing facility, making us one of the largest  
5 battery module manufacturers in the state outside of  
6 automotive. And create 400 jobs in the Richmond community.

7 This will enable us to support the tremendous  
8 growth of zero emission vehicles in addition to the  
9 temporary power needs of utilities, municipalities, and  
10 agencies in the state. It is funding opportunities like  
11 this grant that afforded us the opportunity to remain and  
12 grow our presence in California. We're here to answer any  
13 questions. We look forward to carrying out a great  
14 project. And we very much welcome the CEC Commissioners  
15 and staff for a factory tour. Thank you.

16 CHAIR HOCHSCHILD: Actually, do you mind if I  
17 asked you a question while we have you on? If you could  
18 give a couple examples of like use cases? What are your  
19 first types of customers that you're serving with your  
20 technology?

21 MR. MEEK: Sure, happy to. So within the ZEV  
22 industry, there is a growing need for not just fixed  
23 infrastructure, but mobile charging to support that  
24 industry. So you have the onslaught of the advanced clean  
25 fleet and the requirement for commercial grade both on or  
26 off-road for charging of those vehicles. So there is a

1 need for whether you have developments that are waiting for  
2 site and power upgrades, where vehicle charging is  
3 supported either onsite or in a mobile fashion where  
4 products like ours can deploy to vehicles in need of  
5 charge. So this is sort of principally how we're aiming  
6 and focused to support the industry.

7 MS. NEINKEN: I think along with the clean fleet  
8 and all the initiatives that Alex mentioned, there's a lot  
9 of industries. We were just actually talking about being  
10 able to rent or rental vehicles on a daily basis, very  
11 difficult to do. A lot of companies that want to offer  
12 electric vehicles they don't know how to build out  
13 necessarily their charging infrastructure, or if the  
14 location they're choosing for their infrastructures  
15 correct. So with mobile powers, they can be able to test  
16 the site before putting in permanent infrastructure and-or  
17 use our infrastructure as permanent. So as this market is  
18 developing and growing -- the use cases -- we have more and  
19 more partners approaching us every day, which is pretty  
20 exciting.

21 CHAIR HOCHSCHILD: Great, thank you.

22 MS. BADIE: There are no more public comments.

23 CHAIR HOCHSCHILD: All right. Let's go to  
24 Commissioner discussions, starting with Commissioner  
25 Monahan.

26 COMMISSIONER MONAHAN: Thank you, Chair.

1           And I want to just mention that Vice Chair Gunda  
2 has direct experience with Moxion since he accompanied the  
3 Governor. When the Governor rolled out his Energy  
4 Transition Plan he did it at Moxion. And so in fact, I was  
5 just looking at a picture of the Governor with Vice Chair  
6 Gunda in the background, smiling at President Reynolds. So  
7 very cool.

8           And it's just Richmond is just I wouldn't say a  
9 stone's throw from my house, but it's pretty close to where  
10 I live. And so it's great to see a community that's really  
11 had its share of struggles just creating good jobs, 400  
12 jobs, which is an impressive number in a community like  
13 Richmond that really needs those jobs.

14           And I want to thank Matt or Dr. Miyasoto, excuse  
15 me, for his comments from FirstEnergy. That we really have  
16 like this company that was kind of homegrown in California  
17 around the ZEV industry, and FirstElement is really been  
18 working hard to get reliable infrastructure for hydrogen.  
19 And it's been a challenge, because in part I mean this is a  
20 new industry, so there's just sort of new industry  
21 challenges. But also the equipment coming from Europe and  
22 other and from Japan, other places, it just has been, like  
23 supply chain challenges. So to have those technologies  
24 here in California, they will ease some of those supply  
25 chain challenges that we faced.

26           So I'm really happy that Jonathan and his team,

1 together with -- I mean, Chief Counsel's Office has been  
2 very involved in these grants, but we want to bring each  
3 one of these manufacturing grants to you because it's just  
4 so important for California to remain, as I like to say,  
5 the Michigan of EVs. We want to be -- we want to continue  
6 to have more EV jobs than any other state. And these  
7 investments are our way that we can stay at the top.

8 CHAIR HOCHSCHILD: Great, thank you,  
9 Commissioner.

10 Vice Chair Gunda.

11 VICE CHAIR GUNDA: Thank you, Chair. Jonathan,  
12 thank you for the presentation. And both representatives  
13 from Moxion. And FirstElement, thank you for your  
14 comments. Alex, it's nice to hear from you again, and see  
15 you.

16 Just as Commissioner Monahan was mentioning, I  
17 had a chance to tour Moxion, and it was just a really  
18 impressive facility. And just being able to talk to a few  
19 of the employees there and getting their stories was  
20 incredibly gratifying.

21 But also I think, purpose built specifically to  
22 have clean backup opportunities for the grid, and clean  
23 backup for charging. And I know like some of the use cases  
24 are concerts right now that I was told, which is instead of  
25 running a diesel generator you could just plug in much of  
26 the equipment for a concert with a backup battery. So this

133

1 is incredible, so I'm just looking forward to that.

2 And also, on the FirstElement side, thank you for  
3 the work in kind of shepherding the overarching hydrogen  
4 opportunity. I also really like the two cool names:  
5 Moxion and FirstElement. Really nerdy, but nice names and  
6 congratulations. I look forward to supporting it.

7 CHAIR HOCHSCHILD: Yeah, great. Any other  
8 Commissioner comments, Commissioner McAllister?

9 I just was going to note the historic  
10 significance of actually Richmond, where the Moxion factory  
11 is. That was Rosie the Riveter was there. And of course,  
12 in World War II we went from building 2,000 airplanes a  
13 year to 50,000 airplanes a year. We did something similar  
14 with ships, and of course with munitions. And that's what  
15 enabled us to win that war. And we need to scale similarly  
16 with climate solutions today. And so great to see this  
17 innovation happen here and in disadvantaged communities  
18 like Richmond.

19 So just and congratulations to FirstElement as  
20 well for your progress and growth and look forward to  
21 personally visiting both sites. Unless there are other --

22 COMMISSIONER MCALLISTER: I just wanted to --

23 CHAIR HOCHSCHILD: Yes, go ahead. Go ahead.

24 COMMISSIONER MCALLISTER: So just building on  
25 that Richmond comment. So, obviously, Richmond is a site  
26 where we have a lot of refineries. And the oil and gas

1 industry is centered, much of it --big chunks of it there.  
2 And it's nice to kind of have that geographic location  
3 begin to reflect the transition as well.

4 CHAIR HOCHSCHILD: Yeah, and very importantly  
5 SunPower really launched that site. That was a big  
6 rebuild, so something of a clean energy hub there.

7 So with that, I'd welcome a motion from  
8 Commissioner Monahan on Item 10.

9 COMMISSIONER MONAHAN: I move to approve Item 10.

10 CHAIR HOCHSCHILD: Is there a second from  
11 Commissioner Gallardo?

12 COMMISSIONER GALLARDO: I second.

13 CHAIR HOCHSCHILD: All in favor, say aye.  
14 Commissioner Monahan.

15 COMMISSIONER MONAHAN: Aye.

16 CHAIR HOCHSCHILD: Commissioner Gallardo.

17 COMMISSIONER GALLARDO: Aye.

18 CHAIR HOCHSCHILD: Commissioner McAllister.

19 COMMISSIONER MCALLISTER: Aye.

20 CHAIR HOCHSCHILD: Vice Chair Gunda.

21 VICE CHAIR GUNDA: Aye.

22 CHAIR HOCHSCHILD: And I vote aye as well. Item  
23 10 passes unanimously. Thank you, Jonathan.

24 MR. BOBADILLA: Yeah.

25 CHAIR HOCHSCHILD: Yeah, good work.

26 All right, we'll turn now to Item 11, the Minutes



1 on May 11th and 12th and May 31st. Do we have any public  
2 comments on Item 11?

3 MS. BADIE: Thank you. This is Mona, the Energy  
4 Commission's Public Advisor. The Energy Commission  
5 welcomes public comment on Item 11 at this time. If you're  
6 in the room, you can raise your hand, you can use the QR  
7 code. And if you're on Zoom, please use the raise hand  
8 feature on your screen, or \*9 if you're joining by phone.  
9 And we don't have any comment in the room or on the phone  
10 back to you -- on Zoom, excuse me, back to you, Chair.

11 CHAIR HOCHSCHILD: Unless there's Commissioner  
12 discussion, I'd welcome a motion from Commissioner  
13 McAllister on Item 11.

14 COMMISSIONER MCALLISTER: Move Item 11.

15 CHAIR HOCHSCHILD: Is there a second from  
16 Commissioner Gallardo?

17 COMMISSIONER GALLARDO: I second.

18 CHAIR HOCHSCHILD: All in favor say aye.  
19 Commissioner McAllister.

20 COMMISSIONER MCALLISTER: Aye.

21 CHAIR HOCHSCHILD: Commissioner Gallardo.

22 COMMISSIONER GALLARDO: Aye.

23 CHAIR HOCHSCHILD: Commissioner Monahan.

24 COMMISSIONER MONAHAN: Aye.

25 CHAIR HOCHSCHILD: And Vice Chair Gunda.

26 VICE CHAIR GUNDA: Aye. Thank you.

1           CHAIR HOCHSCHILD: And I vote aye as well. Item  
2 11 passes unanimously. We will turn now to Item 12, Lead  
3 Commissioner and Presiding Member Reports, starting with  
4 Commissioner McAllister.

5           COMMISSIONER MCALLISTER: Great, I'll just be  
6 brief. We've only had a couple of weeks, it seems like  
7 since our last meeting, right.

8           But I first wanted to just mention we've heard a  
9 couple of meetings now from Mr. Uhler about the Load  
10 Management Standards. And I just wanted to mention, just  
11 let everyone know that staff has addressed his issues and  
12 is fully aware of what the statute and the regulations say  
13 and is to my satisfaction. So we do encourage, if you have  
14 further questions, ask for a briefing or talk to CCO. I  
15 think they can explain some of the context, but no reason  
16 to get into that now. I just wanted to mention that.

17           Really, I just wanted to acknowledge how much  
18 work is going on across all the divisions, certainly the  
19 parts that I oversee. Just in particular sort of RETI on  
20 the program's front and Efficiency Division. And RD&D,  
21 just all hands on deck to do what they do and bring these  
22 amazing items to us in the business meetings and sort of  
23 the workaday stuff that is part of the core competency,  
24 that we all know and love.

25           But also, getting ready for these big investments  
26 in programmatic initiatives that the state budget and

1 Legislature and Governor are asking us to do. And also,  
2 particularly in RETI and the Efficiency Division getting  
3 ready for these big slugs of federal funding that are going  
4 to come at the same time. And I think just acknowledging  
5 how much work, it's sort of an extra layer of programmatic  
6 initiatives in addition to everyone's day job.

7           And so I just want to acknowledge that and just,  
8 we're hiring up and I think Deana, Mike, Jonah, and their  
9 teams are just doing amazing work, the CCO as well. Just  
10 everybody's hands on deck, you know, working super hard and  
11 I just wanted to appreciate everyone's work.

12           And in addition, it's workplan season. And so I  
13 wanted to just elevate Drew as just really running a very  
14 efficient ship. And just sort of consistent, persistent, I  
15 guess overall effort across the Commission to develop  
16 really sound work plans and really be intentional about the  
17 activities, the prioritization, the budgets, and just  
18 really trying to put that in place. I know we  
19 Commissioners, and I think events, sometimes are guilty of  
20 throwing wrenches in the works along the way when work  
21 plans don't actually map to reality. But we know that the  
22 platform of the work plans is just really sound and  
23 appreciate that.

24           So I guess well the last thing I'll say is just  
25 there's just so much work going on in the Efficiency  
26 Division, just the Codes and Standards, the compliance

1 work, a lot of rulemakings moving forward, existing  
2 building shop, just a lot of cross intra-division.

3           And also cross-division collaboration on the  
4 equitable building decarbonization. Deana and Hally and  
5 Diana Maneta are just really doing amazing things. We're  
6 getting great feedback on the draft guidelines for the  
7 equitable building decarb program. It's really well done.  
8 I encourage everyone to have a look at that. And we're  
9 going to be pushing like a billion dollars through that  
10 program over the next few years, and it's really important  
11 to lay a sound foundation.

12           And staff's been doing a series of workshops  
13 across the state, so San Francisco, Santa Rosa, LA, Indio,  
14 next week Fresno. I think I'm probably leaving one out.  
15 Also a couple of tribal consultations so far for a carve-  
16 out for the tribes that are going to focus on equitable  
17 building decarb. So really, really just a super thoughtful,  
18 intentional effort to help these public funds be all they  
19 can be. And really move the needle on building  
20 decarbonization, which is one of the big waves we need of  
21 market development to get to our goals.

22           And then I'll just I think I said this last time,  
23 but we're aiming to have a high level Symposium on building  
24 decarbonization in October, the 10th and 11th, in  
25 partnership with EPRI. Hoping to really be able to elevate  
26 these key issues and sort of articulate the sort of vision

1 to move the needle much more quickly on building  
2 decarbonization investments. So that's all for me. Thank  
3 you.

4 CHAIR HOCHSCHILD: Okay. Commissioner Gallardo.

5 COMMISSIONER GALLARDO: Thank you. So I wanted  
6 to start out by announcing that I have a new member on my  
7 team. She's my first intern, Valeria Bernal. Valeria,  
8 will you come up to introduce yourself? She has a  
9 fascinating story and connection with the Energy  
10 Commission. I thought it'd be fun for her to talk.

11 MS. BERNAL: Thank you, everyone. Yes, I'm  
12 really happy to be here. Hello, Chair, Vice Chair, and  
13 fellow Commissioners here at the California Energy  
14 Commission.

15 So my story begins in Panama. That's where I was  
16 born and raised. And I have had an interest in energy ever  
17 since I was young. And I started taking a bachelor's in  
18 Florida State University in electrical engineering. And  
19 then it was at an internship that I had with a local  
20 organization in Panama called Agrandel, which is pretty  
21 much like the short name of like the "Great Clients  
22 Association" and that's where I was introduced to the world  
23 of energy policy. And that's when I realized that this is a  
24 very crucial spot for innovation for everything that we  
25 want to do for the future.

26 And yeah, that brought me to apply to a

1 Fullbright scholarship through the US Embassy in Panama.  
2 And I'm really happy to say that I was one of the awardees  
3 of it in the 2022 Cohort. And I'm currently pursuing a  
4 master's in Energy Management at the University of San  
5 Francisco.

6 And through connections that I just can't really  
7 get into detail here, because it would be like a way too  
8 long intervention of my time, but things happened that I  
9 was introduced to Counsel Barrera. And then through her  
10 connection I was able to meet with Chair Hochschild, and  
11 then later on now, Commissioner Gallardo. And it's been  
12 amazing here. I've been with the Commission remotely for a  
13 couple of weeks. This was my first week in person.

14 And I'm just really happy to be here and to just  
15 be able to help out with this very important task that we  
16 have within the Energy Commission and just -- pretty much a  
17 responsibility that we have with the entire world. So just  
18 happy to be here. Thank you so much.

19 COURT REPORTER: Sorry, to break in. This is the  
20 Court Reporter. Could Ms. Bernal please just spell her  
21 name please?

22 MS. BERNAL: Yes, V-A-L-E-R-I-A B-E-R-N-A-L,  
23 Valeria Bernal.

24 CHAIR HOCHSCHILD: Well welcome, Valeria. You're  
25 going to fit in great. I can tell you've come home. This  
26 is the right place for energy policy, so great to have you.

1 MS. BERNAL: Thank you so much.

2 CHAIR HOCHSCHILD: Yeah.

3 COMMISSIONER MCALLISTER: I just want to elevate  
4 that program. The UCSF program is great and Jim Williams  
5 and all the stuff that's happening there. And it's just  
6 really I think, maybe we could elevate that program a  
7 little bit more. It's very international and just really  
8 good, so thank you.

9 COMMISSIONER MCALLISTER: Oh, somebody seems to  
10 be needing to mute themselves.

11 Anyway, so big congratulations and welcome.

12 MS. BERNAL: Thank you so much.

13 CHAIR HOCHSCHILD: Commissioner, were you done,  
14 or did you have more? Okay. Yeah, go ahead.

15 COMMISSIONER GALLARDO: All right. So thank you,  
16 Valeria, so much for agreeing to introduce yourself and  
17 also for being in my office. And I'm really excited to  
18 have her support.

19 So just a couple things. I attended a ribbon  
20 cutting for a geothermal project out in Mammoth Lakes. And  
21 it was really exciting, because I'm trying to get more  
22 familiar with the geothermal activity outside of the  
23 Imperial region where we're doing Lithium Valley. So that  
24 was exciting. Ormat, and they worked with a lot of  
25 different partners. And it was exciting to see something  
26 new. And it was painted green, so it kind of blended into

1 the landscape there.

2           And then quickly too I was in Salem, Oregon, the  
3 last couple days attending the West Coast Department of  
4 Defense's working group session focused on renewables. And  
5 that was also fascinating to see the interest, and how  
6 folks are welcoming California and wanting to learn from  
7 California and wanting to partner with California. So I  
8 think there'll be a lot of opportunities that we can  
9 generate from that.

10           And they are very much interested in offshore  
11 wind. So I am thinking we could do a type of tour to visit  
12 the different ports in Oregon, in Washington. They are  
13 really excited to work with us to see how we can make  
14 offshore wind happen. So they want to participate and I'm  
15 hoping for that opportunity.

16           I also want to commend Jim Bartridge for  
17 supporting me on that trip. He helped prepare me. And  
18 he's just doing a great job being our ambassador for the  
19 Energy Commission and for California on the offshore wind  
20 efforts.

21           And that's it. I'll leave it there. Thank you.

22           CHAIR HOCHSCHILD: Great. Let's go to  
23 Commissioner Monahan.

24           COMMISSIONER MONAHAN: Well first, I just want to  
25 comment on something Commissioner McAllister said around  
26 equitable building decarb. I really am impressed with all



1 that the team is doing to go out and do these regional  
2 visits and consult with tribes. And I just feel like  
3 that's an amazing model. So just thanks for sharing that.  
4 And thanks to all the team that's working on that just.

5 And I look to Commissioner Gallardo with all of  
6 the work that she did as Public Advisor, really kind of  
7 teaching us the benefit of going out, talking to people,  
8 listening, and tailoring our programs to really help  
9 people. So just thanks for that.

10 So another thing actually we did, it wasn't a  
11 formal IEPR workshop, but we did sort of like an IEPR  
12 visit. And it was pulled together actually by our new  
13 Public Advisor, Mona Badie, and my advisor, Ben Wender.  
14 And it was just a really great visit. We went actually  
15 with Vice Chair Gunda and his van, the other van, and some  
16 folks from the Fuels and Transportation Division, including  
17 Esther Odufuwa. And we just really had a very interesting  
18 series of visits that kind of blended like community  
19 meetings with EV charging, which is like my dream come  
20 true. Maybe not everybody's.

21 So we went to check out WattEV, which is -- they  
22 received a grant although the project we saw wasn't one  
23 that got our money. They're basically doing this truck as  
24 a service model where they're combining EV charging, our  
25 grant funded solar plus storage. And we got to see a site  
26 that there is just about to be turned on. Hopefully we'll

1 go back for the ribbon cutting for that. And we got to  
2 hear their feedback on challenges they're facing in terms  
3 of speedily getting EV chargers deployed.

4 And then we went and had a site visit with East  
5 Yard Committees for Environmental Justice. And that was  
6 fascinating. We met with their sort of advocate, Jan  
7 Victor, who drove us through communities near the port and  
8 really showed us firsthand how houses are pressed up right  
9 next to the poor rail yards, major truck corridors. And  
10 got to hear some suggestions from that group about what  
11 more we could be doing.

12 We went, I want to say all the site visits, but  
13 we also went to the JETSI Project, which was a big -- they  
14 were doing a big press day where they used our money to  
15 build out 16 350 kilowatt dual core fast chargers. And  
16 there were lots of folks there including Chair Randolph  
17 from the Air Resources Board. It was really just a great  
18 event.

19 We didn't get to test drive, which was kind of a  
20 bummer. But we did get to sit in the trucks and for the  
21 first time I went on the highway, and they went fast. And  
22 I was talking to the driver and I was like, "So what do you  
23 think?" And he's like, "I love these trucks, because I can  
24 accelerate really fast, way faster than the diesel car,  
25 than a diesel truck." And I think that's what we need,  
26 right? We need technologies that are better than the

1 historical technologies to really turn the tide.

2           And the last part I want to talk about is, we did  
3 a tour with the People's Collective for Environmental  
4 Justice. And this was really amazing. It was actually the  
5 first time I went to facilities, these big storage  
6 facilities, like that Amazon and others are using that are  
7 really changing how communities look and feel. So these  
8 big storage areas that are calling this area like an inland  
9 port. So the Inland Empire is becoming a big hub where  
10 there's a lot of goods moving from ports to the Inland  
11 Empire and then out.

12           And the community groups there are really trying  
13 to create like good jobs, healthy communities. And trying  
14 to look at this from a holistic community perspective, not  
15 just like the environment or just jobs, but really trying  
16 to do both. So I felt very impacted. And I would  
17 recommend you guys to check it out, because it's really --  
18 there are a lot of groups. I don't know how many people,  
19 probably 20 people of different groups represented. And  
20 really, they wanted us to see how important it is to think  
21 about communities from a holistic perspective.

22           And then the last -- well, also I just want to  
23 put in a plug. We all know Heather Raitt is amazing, but I  
24 just want to say on this IEPR in particular we're kind of  
25 changing some processes. We've got a lot of different  
26 statutorily required analysis and reports that we have to

1 do. And she's just navigating it with a aplomb and her  
2 usual calm just competence. So just a big thanks to her  
3 and her team.

4 And so two more things, I'm sorry. Also, I was  
5 at the Electric Vehicle, the 36th I think Annual Electric  
6 Vehicle Symposium. It was in Sacramento. And a lot of  
7 folks from Fuels and Transportation Division and other  
8 folks from CEC are there.

9 And I've been going for a long time, like decades  
10 actually, a long time. And this is the biggest one I've  
11 ever been to. They wanted to get like 1,500, I think they  
12 said around 1,500. And instead they got 2,500 people. And  
13 I did -- when I keynoted, when I asked, I did a survey. I  
14 was like, "Hey, so how many people are from other  
15 countries?" And it was like half. I mean it was really  
16 cool to see.

17 I also did a survey on the fly about what the  
18 biggest barrier is, vehicles or infrastructure, when it  
19 comes to zero emission. And you can guess what people  
20 voted for, infrastructure. I don't think I saw one hand on  
21 the vehicle side. So it shows like the work we're doing  
22 here is really central to making sure that we deliver on a  
23 zero emission vehicle future.

24 And the last thing I want to say is it's kind of  
25 go time for reauthorization for AB 8. This is it. Lots of  
26 hope that we'll get to the finish line, but we'll see.

1 That's all, sorry for being so long winded.

2 CHAIR HOCHSCHILD: No, no. Thank you.

3 Vice Chair Gunda.

4 VICE CHAIR GUNDA: Thank you, Chair. It's fun to  
5 hear all the things that are going on. I just wanted to  
6 elevate my gratitude to both Commissioner Gallardo and  
7 Commissioner Monahan for including me on the Southern  
8 California trips. That was really helpful, good  
9 conversations within the communities, largely in Long  
10 Beach. And the advocates that are really putting their  
11 heart out day after day to help shape those communities out  
12 of the current situation, the emissions quality as well as  
13 just safety.

14 So one thing I want to give kudos to Commissioner  
15 Monahan for representing CEC, but the state, and being such  
16 a good ambassador for clean energy, especially in  
17 transportation. The Schneider Electric ribbon cutting.  
18 One piece of note that we both saw there was, right as she  
19 was speaking from her dais, you know, the speaker place  
20 overhead were large transmission lines. And right behind  
21 her were electric trucks and charging stations. And at a  
22 distance on the on the hill was just oil extraction that  
23 you could see. So all of them were right there, and kind  
24 of the opportunity to reflect on the transition. You know,  
25 the opportunity to really think through how are we going to  
26 bring clean energy resources to the grid. Exactly the kind

148

1 of juxtaposing and blending into her work on IEPR this  
2 year. And really good thinking through the barriers for  
3 clean energy development and plugging in the clean  
4 resources on both sides.

5 So I just want to also extend my thanks to  
6 Heather, but also Ben Wender, Commissioner Monahan's staff.  
7 Just incredible work this year on IEPR.

8 Since the last, I mean it's been a couple of  
9 weeks since the last meeting, we are continuing to engage  
10 the West on regional grid and the conversations around the  
11 regional grid. I want to thank Commissioner McAllister for  
12 being a wonderful associate on that and then a partner.  
13 We're just kind of at this point I think both of us are  
14 really engaging on conversations to understand what the  
15 needs are from the West. And how do we maximize the  
16 opportunity for better regional integration and then what  
17 does that look like?

18 So we'll, as the conversations continue to kind  
19 of happen, I'd like to at some point do an informational  
20 here to just provide an overarching update on some of those  
21 conversations.

22 Also continuing our roundtables to set the stage  
23 on SB 100 and just the clean energy transition. Especially  
24 Commissioner Monahan used the word today, the "tradeoffs"  
25 right? Not the tradeoffs of what our end goal is, what our  
26 values are in California, those are fixed. So the end goal

1 is fixed. In 2045 or sooner, the values are fixed. It's  
2 fairness, equality, equity. But as we move forward there  
3 in the interim, especially in the near term in the next  
4 three or four years, we might have to make some twists and  
5 turns that might look lumpy. Whether it's clean energy  
6 transition, whether it's reliability, whether it's  
7 affordability, or petroleum transition, right?

8           So we're just thinking through those elements.  
9 In order to do that we are engaging with a lot of  
10 roundtables, just trying to provide a space for people to  
11 be candid. One thing I observed is a lot of people want to  
12 come and be blunt in a workshop and be on record. So it's  
13 easier sometimes to have conversations and then elevate  
14 them into a workshop through a summary and illuminization  
15 (phonetic) of who said it or what it's reflecting. So  
16 those are some pieces we're working on.

17           Lastly, before I hand it off back to the Chair  
18 I'm currently in Victoria on a vacation with the family,  
19 quasi-vacation. I'm trying to maximize my time here. It's  
20 just a beautiful place. It reminds me of things we can do  
21 in California and also things we're trying to move away  
22 from. Right by me is the Bay, the Inner Harbor. There are  
23 some electric boats and taxis like electric boat taxis.  
24 But there's also a lot of sea planes and vessels coming in,  
25 which are diesel run. And you can smell it. You can smell  
26 it in the Inner Bay. So it's kind of the juxtaposition of

1 the transition that we're observing everywhere.

2           So last piece, Chair, I want to take a minute  
3 here. And maybe you want to jump in and add here too. Ben  
4 Finkelor who has been in our office as our Chief of Staff  
5 is done. So he was on loan from UC Davis for 18 months as  
6 I was starting my work in this role. He was my boss at UC  
7 Davis. He hired me as a student. And as I was jumping  
8 into this role. I really wanted to be around somebody who  
9 does not feel worried about guiding me, mentoring me, and  
10 shaping me. But also giving me the space to make mistakes  
11 and be able to articulate what I'm thinking out loud, and  
12 then know that I have the space to be wrong. So Ben and I  
13 have shared a lifetime together already.

14           But apart from being an incredibly competent,  
15 wonderful human being, he is more than a brother to me.  
16 And I just wanted to give a big shout out to Ben for taking  
17 the time to serve at the Energy Commission and the state.  
18 He was in the middle of the entire 846, 205, 209 (phonetic)  
19 last year, and we could not have done it without him. So I  
20 thank him for that. And as he moves back to UC Davis,  
21 we're hoping to potentially continue to get a little bit of  
22 his time to help some of the working groups that we're  
23 trying to do around the state.

24           So I wanted to just say a big thanks. I think he  
25 is going to present soon in one of the business meetings  
26 about his experience and share his thoughts. But today



1 he's on jury duty, so we had to move that item.

2 I also want to welcome Liz Gill who has been the  
3 advisor in our office now fully transitioning into the  
4 Chief of Staff. So I will summarize Liz just in one word,  
5 she is my blessing. I have all the good things she does I  
6 get credit. And all the bad things she tries to stop me  
7 from she still takes it on her. So Liz, thank you. Thanks  
8 for trusting me as a team member and continuing in our  
9 office.

10 Also, I want to welcome Aria Rosaria Berliner  
11 from FTD, filling behind Liz as an advisor. And she will  
12 be focusing most of her time, if not 100 percent, on the  
13 petroleum transition issues.

14 So a lot of changes. But we have one constant in  
15 our office, Miina. Miina Holloway, who has a wonderful  
16 team that keeps us all together.

17 So thank you, Chair. Thank you for helping me  
18 facilitating Ben coming over on loan, both you and Drew,  
19 and the HR team. It meant a lot to me to really be with  
20 him as a partner as I transitioned into this role. So with  
21 that I'll pass it back to you, Chair.

22 CHAIR HOCHSCHILD: Well, thank you, Vice Chair.  
23 Yeah, and just piling on those comments, you know, great  
24 Commissioners are supported by great advisors here. That's  
25 true across all of Commissioner row. We're just really,  
26 really blessed.

1           And I just wanted to give special thanks on  
2 behalf of all of us to Ben Finkelor for an amazing tour of  
3 duty. I think you came in, Ben, at the critical crunch  
4 time and supported the Vice Chair through every possible  
5 challenge on reliability and everything else. And so thank  
6 you just for your professionalism. And also for supporting  
7 me on various things, including getting prepped for the  
8 Japan trip I did with the Lieutenant Governor and other  
9 things.

10           I just have really appreciated your good  
11 citizenship at the Energy Commission and expertise on so  
12 many levels. And the nice thing is you won't be far being  
13 at UC Davis. And I know we have a long ongoing  
14 relationship with UC Davis on all things efficiency and  
15 renewables, electric vehicles and so on. So I look forward  
16 to continued partnership there.

17           And I also just wanted to welcome Liz Gill as  
18 Chief of Staff. Liz, I've been super impressed with your  
19 professionalism as well and expertise you brought.  
20 Especially on reliability, which is a multi-headed hydra of  
21 an issue. And you've just really helped us get organized  
22 as a state and supported the Vice Chair in his work  
23 beautifully. And just I see that. We all see that. And  
24 your leadership on SB 100 especially now and the close work  
25 you did together with Terra Weeks on that last cycle as  
26 well.

1           So welcome as well to Aria, your new advisor. I  
2 look forward to getting to know you as well.

3           So I have little to report. I was gone all of  
4 last week and this week. But yesterday I spoke at a --

5           COMMISSIONER MCALLISTER: Chair?

6           CHAIR HOCHSCHILD: Yeah?

7           COMISSIONER MCALLISTER: Yeah, I think Vice Chair  
8 Gunda was going to maybe invite Liz to say a couple of  
9 words?

10          CHAIR HOCHSCHILD: Oh, sorry. Did you want to --  
11 did I interrupt you, Siva? Were you done? Did you want to  
12 have additional comments or did you want -- I'm sorry if I  
13 interrupted.

14          VICE CHAIR GUNDA: (Overlapping colloquy.) Yeah.  
15 No, no, I think I'm done with the totality, but I just  
16 wanted to see if Liz wanted to say anything.

17          CHAIR HOCHSCHILD: Oh yeah, please, join. Go  
18 ahead, thank you.

19          VICE CHAIR GUNDA: She loves to be put on the  
20 spot.

21          CHAIR HOCHSCHILD: Okay.

22          VICE CHAIR GUNDA: So Liz, did you want to say  
23 anything?

24          CHAIR HOCHSCHILD: Can you hear us, Liz?

25          VICE CHAIR GUNDA: I think she might be  
26 pretending that she is not able to like unmute.

1 MS. GILL: I'm not going to come on camera,  
2 because I'm actually kind of sick today. But really  
3 appreciate all the kind words and really looking forward to  
4 help keep our office on track with many, many things that  
5 Siva has on his plate. And looking forward to continuing  
6 to work with all of you.

7 CHAIR HOCHSCHILD: Great. Thank you, Liz.

8 Yeah, sorry. Was that everything else, Vice  
9 Chair? Is there anything else you were going to say?

10 VICE CHAIR GUNDA: No, that's all. Thank you so  
11 much, Chair.

12 CHAIR HOCHSCHILD: So yeah, I guess one of the  
13 main topics that came up yesterday at the Offshore Wind  
14 Conference was around transmission strategy, and how do we  
15 actually get sufficient transmission to support 25  
16 gigawatts. Ad particularly like subsea transmission off  
17 the West Coast and going all the way up to Coos Bay and so  
18 on. So that was a big topic for quite some time and an  
19 issue I look forward to a lot more engagement on.

20 Other than that I think I'm going to just wrap  
21 there. And let's turn to Item 13, Executive Director's  
22 Report.

23 MR. BOHAN: Thank you, Chair and Commissioners.  
24 I've just got two announcements I'd like to make.

25 The first is about Senate Bill 2 that the  
26 Governor just signed in March, but a lot has been happening

1 since then and including yesterday, the second workshop  
2 we've hosted. We had over 130 people attend. And the  
3 questions were dominated by the petroleum industry because  
4 our focus right now is on data. We are seeking a lot of  
5 data from industry. The bill goes into effect 90 days  
6 after its signature by the Governor, which is June 26 will  
7 be the 90th day and information will be flowing in  
8 thereafter. So we get a lot of very good questions. But I  
9 have no reason to believe the industry will be any  
10 different than it was for the last bill, SB 1322, when they  
11 responded in good faith, and we look forward to getting  
12 that info.

13 In addition, we're focusing on the three broad  
14 areas, which are the profits and whether a maximum margin  
15 should be set above which there will be some sort of  
16 penalty. This will be your decision to make at some point  
17 in the future.

18 Second, we're looking at whether the market has  
19 any problems. That work will be borne by the new division,  
20 which we stood up here in the Energy Commission soon, and  
21 looking for market manipulation and that sort of thing.

22 And finally we'll be looking at an assessment and  
23 an energy transition plan. The assessment is due at the  
24 end of this year, we're well on track to meet that. And  
25 that will be due every three years thereafter. And then,  
26 at the end of next year, will be the first transition plan

1 for how do we as smoothly as possible move away from  
2 petroleum fuels to electric fuels.

3           And my second announcement and final announcement  
4 is, first to thank Linda Spiegel. This will be a much --  
5 well we're going to go into much more detail. This is not  
6 the proper send off just yet. She is still with us, but  
7 her time is winding down here after 35 years with the  
8 California Energy Commission, which have been excellent.  
9 And I wanted to take this opportunity to announce our new  
10 Deputy Executive Director. And that is a person many of  
11 you know, named Jennifer Martin-Gallardo. I'm very excited  
12 to have her join. I'll be sending around an "all staff"  
13 first thing next week but wanted you all to be the first to  
14 know. Thank you.

15           CHAIR HOCHSCHILD: Great.

16           VICE CHAIR GUNDA: Sorry, Chair?

17           CHAIR HOCHSCHILD: Yeah.

18           VICE CHAIR GUNDA: Can I just note one thing to  
19 Drew? The SBX 1-2 work on SB 2 has been moving at a very  
20 fast pace. I just want to thank Drew for being the center  
21 of pulling all that work together. Aleecia, Ryan Eggers  
22 and his team, as well as CCO and the team for really  
23 helping shape that and be ready for June 26th to really  
24 kick off as the 90-day period ends, and then the bill is in  
25 law.

26           CHAIR HOCHSCHILD: Well, I just wanted to pile on

1 my thanks and congratulations to Linda. After 35 years  
2 what a remarkable career and so grateful to you.

3 And congratulations to Jen. I just wanted to  
4 highlight some of Jen's incredible accomplishments the last  
5 few years, including getting us organized to have a much  
6 more friction free process for our grantees. And the  
7 amount of positive feedback I've gotten from grant  
8 applicants as a result of better processes, which she has  
9 led is just phenomenal. And gotten us organized on our  
10 applications for all this federal money, much needed. And  
11 I -- just especially on this tribal GRIP application, just  
12 pulling that all together. Remarkable work and look  
13 forward to seeing Jen thrive in her new role. Congrats to  
14 you.

15 And sorry, was there a hand from Commissioner  
16 Monahan? Did you want to --

17 COMMISSIONER MONAHAN: Yeah, because I too want  
18 to just say thanks to Linda. I hope there's going to be  
19 major send offs to Linda Spiegel. I mean she deserves it  
20 and she really stepped up when we needed it. And so just  
21 appreciation for all she's done for us. And maybe she  
22 could be a retired annuitant, because she's amazing.

23 And also just congratulations to Jen Martin-  
24 Gallardo. As you said, Chair, she has done amazing things  
25 with GRIP and amazing things with our grantees. She's just  
26 smart and fun to work with, and just really dedicated. And

1 I just am happy for her and for us. So thanks.

2 MR. BOHAN: Let me just say, Linda hates to be  
3 the center of attention. My apologies in advance for  
4 making her squirm a little, but we're not going to spare  
5 her.

6 CHAIR HOCHSCHILD: Okay.

7 All right, let's turn to the Public Advisor's  
8 Report.

9 MS. BADIE: No report. But I'm very excited to  
10 work with Jen in this new role. Thank you.

11 CHAIR HOCHSCHILD: Great.

12 Chief Counsel's Report.

13 MS. BARRERA: Good afternoon, it's fairly quick.

14 First, congratulations to Jennifer Martin-  
15 Gallardo. And I also want to say welcome, and I express my  
16 appreciation for our new Assistant Chief Counsel, Christina  
17 Evola, who will be now running the Transactions Unit. A  
18 big part of what we do at the Commission is issue  
19 contracts, grants, and loans. So Christina is your point  
20 person.

21 That unit is actually growing, it's going to be  
22 at least 14 or 15 attorneys by the end of the year, hiring  
23 about 5 new attorneys in the next few months to support all  
24 of that \$9 billion that we are administering in the next  
25 seven to nine years.

26 And I also want to say welcome to our two



1 interns. One is here, is Maya Benatar. She comes from  
2 Lewis and Clark Law School, which is where I graduated from  
3 law school. And then also a few weeks ago, Yun Yu started.  
4 And she comes from the Boalt Law School. And actually she  
5 hails all the way from China. So thank you so much for  
6 joining our Legal Office.

7           And if you have interns, please let me know. I'd  
8 be happy to schedule lunches, so that they can get to know  
9 each other. That's it.

10           CHAIR HOCHSCHILD: Great, wonderful. And I did  
11 want to thank you, Linda, also. I noticed you've been  
12 sending more of your job postings out by email. I have  
13 circulated those to my legal contacts. And we need help  
14 filling all these amazing positions and bringing top talent  
15 in.

16           MS. BARRERA: Yeah, thank you.

17           CHAIR HOCHSCHILD: Yeah, absolutely. Okay with  
18 that, we are adjourned. Thanks, folks.

19           (The Business Meeting adjourned at 2:45 p.m.)

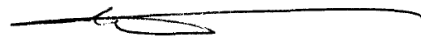
20  
21  
22  
23  
24  
25

**REPORTER'S CERTIFICATE**

I do hereby certify that the testimony in the foregoing hearing was taken at the time and place therein stated; that the testimony of said witnesses were reported by me, a certified electronic court reporter and a disinterested person, and was under my supervision thereafter transcribed into typewriting.

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

IN WITNESS WHEREOF, I have hereunto set my hand this 26th day of June, 2023.



---


PETER PETTY  
CER\*\*D-493  
Notary Public

**TRANSCRIBER'S CERTIFICATE**

I do hereby certify that the testimony in the foregoing hearing was taken at the time and place therein stated; that the testimony of said witnesses were transcribed by me, a certified transcriber and a disinterested person, and was under my supervision thereafter transcribed into typewriting.

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

IN WITNESS WHEREOF, I have hereunto set my hand this 26th day of June, 2023.



---

Myra Severtson  
Certified Transcriber  
AAERT No. CET\*\*D-852