

DOCKETED

Docket Number:	25-BUSMTG-01
Project Title:	2025 Business Meeting Agendas, Transcripts, and Public Comments
TN #:	268356
Document Title:	Transcript of the September 9, 2025 Business Meeting Final
Description:	N/A
Filer:	Kim Todd
Organization:	California Energy Commission
Submitter Role:	Commission Staff
Submission Date:	1/29/2026 11:34:19 AM
Docketed Date:	1/29/2026

CALIFORNIA ENERGY COMMISSION

In the matter of:

)	
Business Meeting)	Docket No. 25-BUSMTG-01
_____)	

WEDNESDAY, SEPTEMBER 10, 2025

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

In-person at:

CALIFORNIA NATURAL RESOURCES AGENCY BUILDING
715 P STREET
FIRST FLOOR AUDITORIUM
SACRAMENTO, CALIFORNIA 95814
(Wheelchair Accessible)

The California Energy Commission (CEC) aims to begin the business meeting promptly at the start time and the end time is an estimate based on the agenda proposed. The meeting may end sooner or later than the time indicated depending on various factors. Commissioners may attend remotely in accordance with Government Code section 11123.2(j).

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

Please visit the CEC Business Meeting web page for more information and materials at
<https://www.energy.ca.gov/proceedings/business-meetings>.

Reported by:
Martha Nelson

APPEARANCESCOMMISSIONERS

David Hochschild, Chair

Siva Gunda, Vice Chair

Andrew McAllister, Commissioner

Noemi Gallardo, Commissioner

Nancy Skinner, Commissioner

STAFF

Drew Bohan, Executive Director

Jennifer Martin-Gallardo, Deputy Executive Director

Sanjay Ranchod, Chief Counsel

Julia Hatton, Chair CEC-CPUC Disadvantaged Communities
Advisory Group

Sean Simon, Acting Director, Siting, Transmission, and
Environmental Protection Division

Anthony Ng, Branch Manager Technology Innovation &
Entrepreneurship Branch Energy Research and Development
Division

Cammy Peterson, Deputy Director, Energy Systems,
Innovation, and Strategy, Research and Development
Division

Christina Evola, Assistant Chief Counsel

Antonio Gomez, Mechanical Engineer Energy Research and
Development Division Energy Systems and Transportation
Branch

APPEARANCESSTAFF (cont'd)

Katherine Greenwald, Renewable Generation Specialist Energy
Research and Development Division, Renewable Generation
Unit

Jeff Fletcher, Energy Commission Specialist II Fuels and
Transportation Division

Mark Johnson, Air Pollution Specialist Fuels and
Transportation Division, Commercial and Industrial ZEV
Technologies and Infrastructure Branch

PUBLIC ADVISOR

Mona Badie

ALSO PRESENT

Melanie Frye, President and CEO, Western Electricity
Coordinating Council

Jeffrey Droubay, Western Electricity Coordinating Council

Kris Raper, Western Electricity Coordinating Council

PUBLIC COMMENT

Rayan Bhargava, United Autoworkers

Josh Harmon, Pacific Gas & Electric

Barry Broome, Greater Sacramento Economic Council

Brenna Teigler, Electrochemistry Foundry, Inc.
Stephen Rosenblum, Climate Action California

Suma Jothibas, Electric Power Research Institute

APPEARANCESPUBLIC COMMENT (cont'd)

Shannon Dulaney, It's Electric

Anna Bella Korbato, Nuvve Holding Corporation

Kori Groenveld, National Offshore Wind Research and
Development Consortium

Nancy Kirshner-Rodriguez, Oceanic Network

Jason Cotrell, Sperra

Julia Chunn-Heer, California Coastal Protection Network

Matt Miyasato, FirstElement Fuel, Inc.

Jennifer Hamilton, Hydrogen Fuel Cell Partnership

INDEX		<u>PAGE</u>
1.	Public Comment	7
2.	Agency Announcements	13
3.	Consent Calendar	20
4.	Information Item - Disadvantaged Communities Advisory Group (DACAG) 2024 Annual Report and Updated Equity Framework	21
5.	Information Item - Western Renewable Energy Generation Information System (WREGIS) Update	46
6.	Electrochemistry Foundry, Inc.	71
7.	Enabling Electric Vehicles as Distributed Energy Resources - GFO-24-302	92
	Closed Session	115
8.	National Offshore Wind Research and Development Consortium	115
9.	Ecology Action of Santa Cruz	134
10.	FirstElement Fuel Inc.	140
11.	Lead Commissioner or Presiding Member Reports	149

INDEX	<u>PAGE</u>
12. Executive Director's Report	162
13. Public Advisor's Report	162
14. Chief Counsel's Report	163
Adjournment	163

P R O C E E D I N G S

10:03 a.m.

WEDNESDAY, AUGUST 13, 2025

(Whereupon an introduction video is played and not
transcribed.)

CHAIR HOCHSCHILD: Good morning, friends. I'm
David Hochschild, Chair of the California Energy
Commission. Today is September 10th. I call this meeting
to order.

Joining me are Vice Chair Gunda, Commissioner
Gallardo, Commissioner Skinner is with us remotely, and
Commissioner McAllister will be here in person momentarily.

Let's begin by standing for the Pledge of
Allegiance.

(The Pledge of Allegiance is recited in unison)

CHAIR HOCHSCHILD: Before we begin, Commissioner
Skinner would like to make a statement.

COMMISSIONER SKINNER: Thank you, Chair. I am
participating remotely today and, as required by the
Bagley-Keene Open Meeting Act, I can confirm that there is
no one 18 years of age or older in the room with me today.

CHAIR HOCHSCHILD: Thank you.

We'll begin with Public Comment and then move on
to Agency Announcements.

A reminder, if you're here to comment on a

1 specific item, please hold your comments until that item on
2 the agenda. This is for general public comment and our
3 Public Advisor will provide the instructions.

4 MS. BADIE: Thank you, Chair.

5 Good morning. My name is Nona Badie. I'm the
6 Public Advisor for the California Energy Commission.

7 This is the open Public Comment period. If you
8 are here to comment on an action item, we ask that you wait
9 for the dedicated public comment period. If you're here
10 for an info item, so that's items four and five, you can
11 use this comment period to make comments or other items
12 that are not on the agenda.

13 And we have a few ways you can let us know you
14 would like to comment. If you're in the room with us,
15 we're asking folks to visit the Public Advisor's table in
16 the back of the room. Dorothy Murimi is there. And we
17 have a QR code, or she can support you to sign up for
18 public comment in the room with us. And then if you're
19 joining by Zoom, you'll use the raise-hand feature on your
20 screen, it looks like an open palm, or star nine if joining
21 by phone. That's going to let us know you would like to
22 comment at this time.

23 And let me just check our in-room queue. Sorry,
24 one moment. We're getting our timer queued up. All right.
25 And in the room with us, we have Mo Tao (phonetic).

1 Mo, if you could please approach the podium to
2 make your comment in the room? Are you still in the room
3 with us? All right, that comment is holding for now.

4 And we do have a raised hand on Zoom.

5 Ryan Bhargava, I'm going to open your line.
6 We're asking for comments to be two minutes or less. I'm
7 not sure if we'll get our timer to work, but if we can get
8 it queued up, there will be a timer on your screen. And
9 I'm going to open your line and then you'll unmute on your
10 end and then you can begin.

11 MR. BHARGAVA: Yes. This is Ryan Bargaba. My
12 name is spelled R-A-Y-A-N B-H-A-R-G-A-V-A. I'm affiliated
13 with the United Auto Workers. I'm a strategic researcher
14 there with the Center for Manufacturing Green Economy.

15 We were requested today by UAW to make a comment
16 on their behalf. UAW and CMG are very committed to the
17 success of the Power Forward program and we're happy to
18 support a number of Power Forward applications, issuing
19 letters of support, discussing labor commitments, and
20 building relationships. We're happy to be seeing a
21 successful award go out today. The UAW and CMG plan to
22 continue to support the program as a salience of industrial
23 climate action in the green economy creates only increases
24 across our organization.

25 In order to ensure both a green and just

1 transition, we would like to make the following comments
2 regarding the next steps to the Power Forward awarding
3 process.

4 The first is that in order to achieve the goal of
5 the high road jobs and meaningful community benefits that
6 the CEC has envisioned, intermittent funding tranches
7 awarded by Power Forward must be closely tied to
8 recipients' demonstrated progress on community benefits
9 agreements, CBAs, labor agreements, and compliance with
10 workforce standards.

11 The second is that critical milestones and later
12 stages of funding must be conditional upon companies living
13 up to the commitments made in the RFP process and to the
14 high road jobs and community benefit goals of the program
15 as a whole.

16 Thirdly, interim funding amounts related to
17 community benefits, job quality, and labor agreements
18 should reflect the weight of these goals in the Power
19 Forward scoring framework.

20 And then finally, this conditionality is the best
21 way to ensure that projects decarbonize California while
22 ensuring its citizens feel the material benefits of this
23 decarbonization in the form of high quality, family-
24 sustaining jobs, and benefits to local communities.

25 Thank you for your time.

1 MS. BADIE: Thank you.

2 And in the room with us, we also have Josh
3 Harmon.

4 And then just a reminder, Josh, if you could
5 please spell your name for our current reporter as well.
6 Thank you.

7 MR. HARMON: Sure. Good morning. My name is
8 Josh Harmon. J-O-S-H H-A-R-M-O-N. I'm here on behalf of
9 Pacific Gas & Electric Company. Good morning,
10 Commissioners. I'm commenting on Item 5.

11 The role WREGIS plays is crucial to the
12 operations of the RFP.

13 CHAIR HOCHSCHILD: Sorry.

14 MR. HARMON: Yes?

15 CHAIR HOCHSCHILD: If you're commenting on a
16 particular item, let's hold that until the item.

17 MS. BADIE: We won't have a comment period for
18 that item. It's an info item.

19 CHAIR HOCHSCHILD: Oh, information item. I
20 missed that.

21 MS. BADIE: Four and five. Thank you.

22 CHAIR HOCHSCHILD: I see. Yeah, yeah, please go
23 ahead. Sorry.

24 MR. HARMON: I thought I was waiting
25 (indiscernible).

1 CHAIR HOCHSCHILD: Yes. Yes. Sorry. No, you're
2 doing it right. My apologies.

3 MR. HARMON: Thank you.

4 The role that WREGIS is playing is crucial to the
5 operations of the RPS market in California, as well as
6 several other states in the western interconnection. As
7 the CEC underscored in its August 29th letter to WECC
8 leadership, the CEC has a statutory mandate to ensure
9 there's a WECC tracking system which accurately measures
10 the state's progress towards its climate goals.

11 As stakeholders and PG&E staff well know, WREGIS
12 has suffered outages, gaps in functionality, and delays in
13 recent years. WECC leadership has been instrumental to the
14 resolution of these issues. While PG&E acknowledges WEC's
15 desire to minimize its own risk, we are concerned about the
16 prospect of an independent WREGIS.

17 Specifically, the independent structure
18 contemplated by WECC does not provide confidence that an
19 independent -- that a new standalone organization will be
20 well positioned to successfully carry out the mission of
21 WREGIS without historical challenges reemerging. This
22 approach would create real risks for stakeholders who rely
23 on WREGIS to fulfill both regulatory and voluntary
24 renewable energy commitments.

25 Moving forward, PG&E recommends the CEC further

1 analyze costs, risks, and benefits of an independent
2 WREGIS, as well as consider alternatives to the system
3 altogether. Whatever assistance PG&E might be able to
4 provide in this effort, just know that we are ready and
5 willing.

6 Thank you.

7 MS. BADIE: Thank you for your comment.

8 All right, and that's all the raised hands for
9 Item 1. Back to you, Chair.

10 CHAIR HOCHSCHILD: Okay. Thank you for those
11 comments.

12 Today, the Commission seeks to approve just over
13 \$57 million of investments contributing to California's
14 economy.

15 I also want to highlight that the 11th Annual
16 EPIC Symposium is coming up. It will be Tuesday, October
17 7th, about a month from now. It will be free and here.
18 And it's going to highlight innovations, research, and new
19 technology. We'll be having a wealth of clean energy
20 leaders and researchers, entrepreneurs, and other
21 stakeholders joining us. So please register in advance,
22 and you can find the links on the Energy Commission
23 website.

24 I also wanted to just offer a reflection because
25 seven years ago today, Governor Brown signed SB 100 into

1 law, in September of 2018. This was a huge milestone on
2 our journey to a clean energy future. The first 100
3 percent clean energy law had actually been passed in Hawaii
4 in 2015. It didn't get much attention. But when
5 California, you know, takes a step that bold, it gets a lot
6 of attention. And now, in the United States, about half of
7 all the states have 100 percent clean energy standard of
8 some form or another. And we're -- over two-thirds of our
9 electricity today is coming from clean resources.

10 And I want to highlight this because this is
11 happening concurrently with what I think is one of the
12 great hidden success stories, which is really strengthening
13 the grid as we're cleaning it. And thanks to the
14 incredible leadership of Vice Chair Gunda and all the good
15 folks on the team here in our agency and at the PUC and
16 CAISO and the Governor's Office and Legislature, you know,
17 our grid is stronger than it's ever been.

18 Last summer, we had the highest temperatures in
19 the history of the state of California, highest load in the
20 history of the state of California. Not only did we not
21 have any rotating outages, we didn't have any Flex Alerts,
22 you know, which is just an important milestone to note.
23 This is happening in a grid that's more than two-thirds
24 clean power. And we're getting a colossal amount of new
25 capacity added.

1 I mean, since electricity came to California 146
2 years ago, it was in San Francisco, until now, we only have
3 104 gigawatts of capacity on the utility side of the meter,
4 you know, and about 30 of that has been deployed just since
5 Gavin Newsom became governor. And that is an incredible
6 story. And, you know, just looking at our siting portfolio
7 that's, you know, coming to us with the leadership of
8 Commissioner Gallardo, it's almost entirely solar and
9 storage, and it's coming on quickly.

10 And so I just wanted to highlight this moment,
11 because at the time SB 100 was passed, there were a lot of
12 people that I think were skeptical we could even be where
13 we're at right now. And we're still early in the game.
14 There's a lot more innovation to come, a lot more cost
15 reduction to come. And I think we're getting a lot smarter
16 on demand side with the load flexibility goal and so on.
17 But I did want to just highlight this important anniversary
18 of that momentous step.

19 With that, I'll turn it over to my colleagues for
20 any other announcements or comments.

21 Commissioner Gallardo, please.

22 COMMISSIONER GALLARDO: All right. So buenos
23 dias. Good morning. I do think that deserves a round of
24 applause; right? Go, California, go.

25 So I also wanted to share a milestone, which is

1 that the Energy Commission turned 50 this year, and we are
2 celebrating our 50th year anniversary next week on
3 September 19th. We have a symposium happening in this
4 auditorium, along with a morning reception and an afternoon
5 reception. So we're ready to celebrate all these wins,
6 including our anniversary. We invite everyone to attend.
7 So just want to make sure everybody knows.

8 CHAIR HOCHSCHILD: Thank you, Commissioner.

9 Commissioner McAllister, please.

10 COMMISSIONER MCALLISTER: So I just want to make
11 an additional reflection, building on the Chair's comments
12 just now. SB 100 was sort of one, I think, big step in
13 this direction that we've moved. But I think in my tenure,
14 like sort of the first year, I think Commissioner Douglas
15 was kind of the focus of this when she was Chair.

16 And sort of there was a realization in the
17 legislature, and I think really driven by then California
18 State Senator Padilla, who was Chair of the Senate Energy
19 Committee, and, you know, now obviously are one of our
20 senators in Washington, always a big champion, super
21 knowledgeable about energy, always a big champion of the
22 direction, but in a responsible way. And I think he really
23 stepped up and said, okay, agencies, you've got to, you
24 know, sort of dust yourselves off and get together and
25 start talking and start really coordinating and rowing in

1 the same direction very explicitly and intentionally. And
2 that was, you know, 12 or so years ago, 12, 13 years ago.

3 And I think the agencies really took that
4 seriously and, you know, really responded in a bunch of
5 ways over the next couple of years to really coordinate
6 most closely around the forecasting efforts. And that's
7 the CAISO and the PUC, and then with SB 100, the Air
8 Resources Board.

9 And I think, you know, just the Lead Commissioner
10 on that, much of the time since then, and certainly in the
11 sort of production mode of the forecast, both as staff and
12 as Vice Chair, I just want to sort of recognize Vice Chair
13 Genda for your leadership on making sure that that
14 interagency coordination is as close and sort of
15 intentional and public, actually, as possible.

16 And just also kudos to senior staff for the DAWG
17 and all the coordination, just really nuts and bolts across
18 all the agencies on, you know, making sure that as we push
19 forward on the transition, that it's done in a way that
20 preserves and enhances reliability and brings all the right
21 technologies to the fore in a very intentional way in the
22 planning framework.

23 So I just wanted to kind of acknowledge a little
24 bit more of the institutional progress that really
25 underpins the reliability that we have today.

1 CHAIR HOCHSCHILD: Thank you.

2 Vice Chair?

3 VICE CHAIR GUNDA: Thank you. Just, you know,
4 kind of seeing colleagues from the WECC in the front here,
5 I just want to extend, you know, the kind of the, you know,
6 thanks and gratitude to the broader partnerships in the
7 West.

8 I just want to recognize Commissioner McAllister
9 for the incredible work on WIEB and all the work in NASEO
10 that you've done in cultivating the partnerships.

11 And to my colleagues, and I would say friend, you
12 know, Kris and Jeff and Melanie, thanks, you know, for
13 being here. I think, you know, the momentum of success
14 that we're beginning to see, you know, we're all great
15 together in the West, whether it's, you know, electricity,
16 natural gas, petroleum, and as an energy as a whole, we
17 share and work together.

18 So I just want to say thanks to everybody and
19 we'll keep at it. Thanks.

20 CHAIR HOCHSCHILD: Thank you, Vice Chair.

21 I will turn now to Item 3, Consent Calendar.
22 Before we begin, I want to announce that Item 3a will not
23 be heard at today's meeting. We will just consider Items
24 3B through 3D.

25 With that, let's go to public comment on Item 3.

1 Yeah, let's go to public comment first and then we'll --
2 oh, is there an announcement? No, I think she's going to
3 make comments once public comment's done.

4 COMMISSIONER SKINNER: I don't know why I
5 added --

6 CHAIR HOCHSCHILD: Let's do public comment first.
7 Nancy, we'll go to you right after; right? Nancy, did you
8 have a comment on the --

9 COMMISSIONER SKINNER: It was an announcement.

10 CHAIR HOCHSCHILD: Oh, it was an announcement.
11 I'm sorry. Okay.

12 COMMISSIONER SKINNER: I want to express my
13 appreciation, Chair, for your noting these accomplishments
14 and what the state has achieved since the passage of SB 100
15 and our other Commissioners for their role in this and
16 their comments on it.

17 Interestingly enough, yesterday was World
18 Electric Vehicle Day, EV Day. I didn't even know there was
19 a World EV Day, but it was. And I bring it up only in the
20 context of these accomplishments on our clean energy goals
21 because there would not have been the same motivation to
22 turn to electric vehicles in California were we not moving
23 towards 100 percent renewable energy. I mean, you don't --
24 why you would go to the trouble of replacing fossil fuels
25 in one case if you are still generating the electricity

1 with fossil fuels?

2 So the fact that we are making such progress on
3 our 100 percent renewable energy goals completely supports
4 and reinforces our goals around electric vehicles. And
5 while we cannot make this announcement today, very soon
6 everyone in California will hear about some great
7 advancements we've made in the installation of electric
8 vehicle charging infrastructure.

9 And that's my announcement and thanks.

10 CHAIR HOCHSCHILD: Thank you, Commissioner. Well
11 said.

12 We'll turn now to public comment on Item 3.

13 MS. BADIE: The Commission welcomes public
14 comment on Item 3 at this time. This is the Consent
15 Calendar. And did we -- I think, Chair, did you announce
16 that we're not going to hear Item 3A?

17 CHAIR HOCHSCHILD: Yes, I did.

18 MS. BADIE: Oh, I'm so sorry.

19 So if you would like to comment on Item 3 and
20 you're in the room with us, we ask that you use the QR
21 code. And if you are on Zoom, you'll use the raise-hand
22 feature, or star nine if joining by phone.

23 All right, we do not have any raised hands for
24 Item 3. Back to you, Chair.

25 CHAIR HOCHSCHILD: All right, any Commissioner

1 discussion on Item 3? Hearing none, is there a motion from
2 Commissioner Gallardo on Item 3?

3 COMMISSIONER GALLARDO: Yes, I move to approve
4 Item 3.

5 CHAIR HOCHSCHILD: Is there a second from the
6 Vice Chair?

7 VICE CHAIR GUNDA: Second Item 3.

8 CHAIR HOCHSCHILD: All in favor, say aye.
9 Commissioner Gallardo?

10 COMMISSIONER GALLARDO: Aye.

11 CHAIR HOCHSCHILD: Vice Chair Gunda?

12 VICE CHAIR GUNDA: Aye.

13 CHAIR HOCHSCHILD: Commissioner McAllister?

14 COMMISSIONER MCALLISTER: Aye.

15 CHAIR HOCHSCHILD: Commissioner Skinner?

16 COMMISSIONER SKINNER: Apologies. Aye.

17 CHAIR HOCHSCHILD: And that's -- I vote aye as
18 well. Item 3 passes unanimously.

19 We'll turn now to Item 4, Information Item -
20 Disadvantaged Communities Advisory Group 2024 Annual Report
21 and Updated Equity Framework.

22 MS. HATTON: Hello, everybody. Good morning.
23 I'm Julia Hatton. I'm the Vice Chair of the CEC-CPUC
24 Disadvantaged Communities Advisory Group, and I'm here to
25 present the DACAG's 2024 Annual Report, as well as our 2024

1 updates to the DACAG's Equity Framework. Congratulations
2 on all the milestones you recognized today. It's exciting
3 to hear.

4 So the CEC-CPUC Disadvantaged Communities
5 Advisory Group -- if you could go to the next slide,
6 please -- or the DACAG, is an advisory body that was
7 established under SB 350 with 11 members from or
8 representing disadvantaged communities across California.
9 The DACAG was established to provide -- to advise the CEC
10 and the CPUC regarding the development, implementation, and
11 impacts of proposed programs related to SB 350 and other
12 relevant clean energy programs and policies.

13 Our purpose is to ensure that disadvantaged
14 communities, including tribal and rural communities,
15 benefit from proposed clean energy and pollution reduction
16 programs. And our members have diverse community,
17 regional, and technical expertise and dedicate many
18 volunteered hours each month serving on the DACAG. And
19 this slide here shows the composition of the DACAG in 2024.
20 Jana Ganion, Adrian Martinez, Andres Ramirez, Sahara
21 Huazano, and Roger Lin ended their service on the DACAG in
22 2024. And we had Abimael Chavez-Hernandez, Sunait Forthal,
23 Chelsea Kirk, and Sarah Sharpe all join the DACAG in 2024.
24 So just to give you a little bit about that background.

25 And we are required on an annual basis to produce

1 an annual report on our activities. We adopted the 2024
2 Annual Report at our April 16, 2025 meeting. And I want to
3 thank Sarah Sharpe, our DACAG Secretary, for drafting the
4 report for consideration and approval. This report should
5 be available on both the CEC and CPUC websites for folks to
6 review. It includes a list of our 2024 membership, our
7 2024 priorities, and a summary of the actions, and
8 recommendations that the DACAG took.

9 There are three appendices. And one of those,
10 that includes a summary of meeting minutes, of comment
11 letters that we submitted, and an updated DACAG equity
12 framework, which is what I'm going to share a little bit
13 more about in the second half of this presentation.

14 So in 2024, our key recommendations included
15 integrating non-energy benefits and social costs into
16 resource planning and investment decision-making,
17 integrating the DACAG's equity framework into CPUC and CEC
18 decision-making, and protecting programs and resources for
19 priority communities related to Governor Newsom's executive
20 order N-5-24 on energy affordability.

21 And here you can see the priority areas that the
22 DACAG adopted in 2024. And you can also see the number of
23 subject matter expertise meetings, or SME meetings,
24 convened on those topics outside of DACAG meetings. And
25 the number of times those topics appeared on the DACAG

1 meeting agendas just kind of gives you a sense of where our
2 focus has been in the past year. Affordability and long-
3 term planning were the most frequent topics of discussion
4 at the meeting. And decarbonization and transportation
5 electrification were the topics with the most SME requests.

6 And I will say that the CEC staff really does an
7 excellent job of requesting these SME meetings and seeking
8 DACAG advice and input outside of the DACAG meetings, which
9 I think is a really valuable and important piece of this
10 work.

11 Next slide, please.

12 Okay, we got some links up here included. We'll
13 go into the DACAG equity framework. This is, as I
14 mentioned, one of the appendices in the annual report.

15 So a key focus that we had in 2024 was to update
16 this DACAG equity framework, which was originally developed
17 by the founding members of the DACAG back in 2018. I will
18 show more about that next. But it's designed as a tool to
19 guide the DACAG agency staff and decision makers on equity
20 considerations for a variety of topics related to the CPUC
21 and CEC scopes of work.

22 We led an update process to reflect six years of
23 learning and guidance. Agency staff contributed to this.
24 The public was invited to comment. And the updated
25 framework was approved this past summer and can be found on

1 the CEC website on the DACAG homepage under related links
2 and resources.

3 And really what we found is that there are a lot
4 of times when we're getting some of the same questions
5 being brought to the DACAG, which makes sense, which is all
6 well and good. But also, we wanted to provide a resource
7 that could be sort of a first source of information and an
8 ongoing guide when we're not in session and things like
9 that.

10 So the framework's about eight pages long. It
11 includes background on the DACAG, our guiding principles,
12 the purpose of the framework, some key definitions, and
13 then the framework itself, which is equity guidance and
14 considerations on nine topics related to the development,
15 implementation, and impacts of CEC and CPUC work related to
16 clean energy and pollution reduction program and policies.
17 And as compared to the original framework, which folks may
18 be familiar with, this update includes more content and
19 background, four brand new topic areas and more developed
20 guidance, as well as clarity around the purpose and
21 audiences for the framework.

22 Next slide, please.

23 So I will review the purpose of this equity
24 framework. It's to guide and focus the DACAG itself as it
25 engages in discussing and commenting on proceedings and

1 programs. It's there to guide agency staff and
2 Commissioners as you determine how to embed and center
3 equity within your efforts.

4 It's there to prioritize funding and resources
5 for the individuals and communities in California's most --
6 in California that are most impacted by climate change,
7 recognizing that they have been underinvested.

8 It's to guide proceedings and decision-making
9 processes, particularly when those processes are lacking
10 the engagement of individuals and communities most
11 impacted, which is often the case.

12 And it's to guide agency staff and Commissioners
13 on the DACAG's general position on specific equity-related
14 considerations that come up most frequently.

15 Next slide, please.

16 These are the nine topic areas. The italics
17 represent the new areas that were added to this framework.
18 We have nine non-energy benefits, affordability, access,
19 outreach, and education, community engagement, health and
20 safety, financial benefits and economic development,
21 workforce development, consumer protection, and metrics
22 evaluation and accountability.

23 And all of these are provided in the context of
24 the DACAG's advisory function, which includes increasing
25 access to clean energy technologies for disadvantaged

1 communities, maintaining and enhancing the affordability of
2 energy service in these communities, and increasing the
3 benefits of these programs for disadvantaged communities.

4 Next slide, please.

5 So excerpted here is one of the new topics, which
6 is workforce development. This was previously addressed in
7 less detail under economic development in the old
8 framework. Workforce development is my day job, so this is
9 the one that I've chosen to talk about. And our guidance
10 here includes both investing in the training of workers and
11 the types of opportunities available to those workers. And
12 the commenter early in this meeting talked about high road
13 opportunities and the importance of green jobs being good
14 jobs. And a lot of this that you'll see in the framework
15 relates to that.

16 So there's some introductory information in this
17 section on things like: funding for training, including
18 pre-apprenticeship and apprenticeship; supportive services
19 for priority job seekers and workers; mechanisms such as
20 setting hiring goals like local and targeted hire for
21 priority job seekers and workers; the importance of labor
22 standards, which you also heard the commenter mentioned,
23 such as prevailing wage to ensure quality high road jobs
24 and access to those jobs; and support for youth and for
25 justice-system impacted individuals and others who face

1 barriers to employment or who are underrepresented in the
2 clean energy workforce.

3 Next slide, please.

4 Also excerpted in the framework are helpful
5 resources. There's the California Workforce Development
6 Board's High Road Framework. There are the MOUs between
7 the CWDB and the CEC and the CPUC. And then there is the
8 UC Berkeley Labor Center's Jobs and Climate Action Plan for
9 2030, which is my personal favorite.

10 Moving on to next steps with this framework. We
11 really want this to be a working document. We want it to
12 be used to help accomplish and drive our shared equity
13 objectives in clean energy and pollution reduction,
14 including to increase and prioritize access to these
15 programs by disadvantaged communities and the benefit to
16 those communities.

17 So, you know, with the objectives in mind that I
18 mentioned before, the next steps here are really
19 socialization, which part of that is why I'm here today,
20 implementation, making sure that it can more formally and
21 operationally guide proceedings and other decision-making
22 processes, and then iterating over time because these
23 things change and we keep learning and we always want to be
24 incorporating that learning.

25 I've seen the CEC -- the next slide -- use the

1 previous DACAG equity framework in multiple ways over the
2 years. A few that I want to call out and specifically
3 mention here are the EPIC Investment Plan, the Gas Research
4 and Development Program Budget Plan, and the JAEDI
5 framework, the Justice, Access, Equity, Diversity, and
6 Inclusion framework, which is also cross-referenced in the
7 new DACAG equity framework.

8 So we welcome ideas and discussion on how best to
9 keep socializing, implementing, and improving on this
10 framework. And we do really appreciate the CEC's
11 leadership on this to date.

12 I want to quickly go over, introduce you to the
13 2025 DACAG membership. This is the makeup of the DACAG as
14 of July, 2025. This year, we thank longtime members,
15 Stephanie Chen and Curtis Silvers for their service. And
16 we welcome Gem Montes and Chris Walker as our newest
17 members.

18 And I want to share our priority areas for 2025
19 as well on the next slide. They are the same as our 2024
20 priorities, but we've added disconnections to the
21 affordability priority area as something that we heard
22 coming up more from our communities. So this list reflects
23 the programs and policies that the joint agencies projected
24 will be of elevated importance this year, as well as those
25 that the DACAG members noted as of particular importance to

1 our priority communities. And we'll revisit this list
2 going into 2026 and we're almost there.

3 In closing, I want to give a special thanks to
4 Commissioner Gallardo, who shows up at all of our meetings,
5 to Aretha, Dorothy, Ryan, Renee, and all the CEC staff, to
6 Mona. We get a lot of staff support on the DACAG. And
7 that's really important, particularly because we're just
8 doing this as sort of a side thing. So we really
9 appreciate all that additional side support.

10 So I'm happy to answer any questions, either now
11 or going forward. And on behalf of the entire DACAG, thank
12 you for your commitment to and support of this work.

13 CHAIR HOCHSCHILD: Thank you so much.

14 Let's go to Commissioner discussions, starting
15 with Commissioner Gallardo.

16 COMMISSIONER GALLARDO: Yes, thank you, Chair.
17 So first off, I want to say that I've had the honor to be
18 Lead Commissioner on DACAG. It's one of our priority areas
19 here at the Energy Commission. And DACAG was established
20 back in 2015 by SB 350, so that's been 10 years, so another
21 milestone to celebrate since we're on that theme. The
22 group was established in 2018, as you said. So it's still,
23 it's been around a long time and really helping us do
24 better and more.

25 So I also want to thank the PAO Plus (phonetic)

1 team, led by Mona Badie, and in particular, Ryan Young and
2 Dorothy Marini, who provide that additional support to the
3 DACAG. It does take a lot of work. The DACAG invests a
4 lot of time, which means our staff also must invest a lot
5 of time to support you in doing all that good work.

6 So, Julia, I wanted to congratulate you
7 specifically on becoming Chair. You have done an excellent
8 job. Even this presentation is just so thorough and
9 specific. And that's really helpful to us in getting to
10 better understand how the DACAG is doing, what the DACAG is
11 doing for the Energy Commission and the Public Utilities
12 Commission. And also in reverse, what can we do for you?
13 So thank you for that.

14 And I wanted to also point out a couple of things
15 that I noticed from the report.

16 The meetings that you mentioned, the subject --
17 with the subject matter experts, the DACAG being able to
18 get together with staff from both agencies, I think is
19 really important. And when I was supporting DACAG as the
20 former Public Advisor, I thought those meetings added so
21 much value to the work we were doing. So I want to
22 congratulate you on that. And I saw there were 26 of those
23 that were done. And I was curious, do you know the
24 breakdown? Was it how many for CPUC, how many for Energy
25 Commission?

1 MS. HATTON: I don't know the exact breakdown. I
2 would say that the majority are CEC.

3 COMMISSIONER GALLARDO: Okay.

4 MS. HATTON: The large majority.

5 COMMISSIONER GALLARDO: Okay. Excellent.

6 And then I really appreciate also the work on the
7 equity framework. I think you're right, it is an iterative
8 process. And so it was when we were doing our JAEDI
9 framework, we also imagined it the same way, it would be
10 iterative. So now that DACAG has updated their framework,
11 we'll be looking at that too to see how we can update ours
12 in the future.

13 And I wanted to point out for the Commissioners
14 here that there were three principles that you noted in
15 that equity framework, which are access, affordability, and
16 benefits. I think those are three that are very important
17 to us, as well, and so we'll keep prioritizing those.

18 All right, I had a couple of questions and then
19 I'll turn it over to see if my other fellow Commissioners
20 want to speak.

21 I wanted to ask you, Julia, from your
22 perspective, what was the most impactful action that the
23 DACAG took in 2024?

24 MS. HATTON: You know, I think it's hard to pin
25 down one specific thing, but what does really stand out to

1 me, particularly in 2024, was the non-energy benefits work.
2 That has been such a consistent theme coming from us for
3 both agencies. And I've really seen the CEC in particular
4 pick up on that, where there's the, you know, social cost
5 of non-energy impacts proceeding on the docket. And, you
6 know, we can kind of like talk about this stuff all we
7 want, but we need the policy to come along with it and
8 start making change.

9 And I think that, I mean, I think the non-energy
10 benefits are particularly important for everybody. But
11 when you talk about equity communities and priority
12 communities, it's all the more important and it helps us
13 justify, because apparently that's the thing we have to do,
14 why priority communities should get these additional
15 resources. So that's a piece that I feel, you know, I feel
16 happy that we spent a lot of time talking about it and that
17 there was follow-up action around it as well.

18 COMMISSIONER GALLARDO: Thank you. And then one
19 more thing. Is there anything in particular, based on your
20 experience in 2024, that you think the Energy Commission
21 should be focused on?

22 MS. HATTON: Like I said, I think the Energy
23 Commission and staff really truly do an excellent job of
24 putting equity first and really building it into the work
25 that you all do. And when we get a presentation from CEC

1 staff, it's clear that, you know, they've gone through the
2 process of talking to stakeholders, of looking at the
3 framework, at looking at the JAEDI framework and things
4 like that. So it does feel like it's really built into the
5 fabric of the Commission in a lot of ways.

6 You know, I think that there are operational
7 things, like making it easier to participate on the DACAG,
8 making it easier for us to talk to each other. You know,
9 the Bagley-Keene laws are there to protect people, we
10 appreciate that, but it makes it hard to work together, you
11 know, and hard to have conversations and authentic sort of
12 timely conversations that are really important.

13 I think there are things on the CEC side around
14 procurement, contracting, and invoicing, particularly with
15 community-based organizations, nonprofits that could use
16 attention to sort of facilitate participation.

17 I think the CEC does a great job of making it
18 easier to participate in proceedings. There are sort of
19 fewer hoops to jump through, which is great. You can kind
20 of just submit a comment and press enter and it's good to
21 go.

22 But, yeah, I think going forward, we're going to
23 be spending more time talking about things like
24 affordability. I think it's important that we talk about
25 the economic and workforce implications of energy policy

1 and, you know, really putting priority communities first,
2 designing that piece first rather than building then
3 afterwards, I think is really crucial.

4 I'd probably be remiss if I didn't mention the
5 fact that many people would like us to rename the
6 Disadvantaged Communities Advisory Group. So we've had
7 many conversations about that. You'll see us referencing
8 priority communities in the framework. So I'll put in a
9 plug for this as well.

10 COMMISSIONER GALLARDO: Okay. Thank you for
11 being candid about that. I did notice the comments about
12 the hardship with having disadvantaged as a negative term
13 define communities because we know those communities are a
14 lot more than that. They're definitely not solely
15 disadvantaged. So, okay, we'll note that. And we'd be
16 happy to work with you to figure out things on that side.

17 And you did mention that this is kind of a side
18 thing, being on the DACAG, but you do invest a lot of time.
19 And even if it's limited time, it does feel like we're a
20 priority to you all. So really appreciate that and thank
21 you.

22 All right, I'll turn it over to you.

23 CHAIR HOCHSCHILD: Commissioner McAllister, just
24 asking you a question. Is that name in statute?

25 MS. HATTON: I believe so.

1 CHAIR HOCHSCHILD: It is? Okay, so that would
2 require a statutory fix. Okay.

3 Commissioner McAllister?

4 COMMISSIONER MCALLISTER: Well, I just wanted to
5 thank you, Julia and all, and Roman and the whole team,
6 just the leadership that you show is amazing. And a couple
7 comments and a question.

8 Just thank you. You know, we know it's a side
9 gig and, you know, I think we want to support you as best
10 we can. And so just let us know how we can do better. But
11 kudos to Mona and Dorothy and the whole team for
12 supporting, and Commissioner Gallardo for your leadership,
13 and Vice Chair Gunda for your leadership as well.

14 I guess, so you mentioned non-energy benefits. I
15 totally agree. That, you know, that's -- that,
16 historically, has been a very frustrating conversation
17 because there's nothing like putting numbers to something.
18 And these are issues that are really hard to put numbers
19 to. Like what are the actual advantages? And I think
20 we're -- you know, I really, you know, give kudos to
21 everybody thinking about this.

22 And particularly in the health sector, like what
23 are -- and, you know, your knowledge of leadership there --
24 what are the health sector benefits that we could possibly
25 sort of, you know, express in dollar terms? You know,

1 that's kind of what we need to get to so that we can
2 justify like budget and go into those sectors and saying,
3 hey, you should put in some, you know, some real, you know,
4 money into this.

5 So ongoing, you know, fraught in some ways and
6 definitely hard, but I think that we have to go down that
7 road. And I think both we and the PUC will benefit from
8 getting to some grounded understanding of these. So really
9 just want to just encourage us all to keep working on that.

10 So I guess, so I think, you know, I'm a broken
11 record on process. And so I think inclusion is so
12 important to get to better outcomes. And so I just want to
13 challenge us all to keep thinking about this. You know,
14 and the DACAG, I -- so you -- is DACAG the pronunciation
15 that we should all go with? I don't know. Anyway, but I
16 want to just go by the right convention. But we can always
17 do better on process.

18 I mean, I really think we do a good job of
19 listening and getting out. You know, given that we just
20 have the one office here in Sacramento, it's challenging
21 sometimes, but really getting out into the world and like
22 listening to everybody who is impacted, you know, we always
23 want to do better. And we'd just love to hear ongoing, you
24 know, how the DACAG members think we could do better there.

25 I guess I did want to just maybe ask a slightly

1 different question, building on something Commissioner
2 Gallardo asked about, PUC engagement. So how -- so what --
3 could you sort of describe your -- the sort of
4 qualitatively is fine, the kind of types of engagement that
5 you tend to have with the PUC, you know, sort of in
6 contrast to the Energy Commission? Sort of how does that
7 look from the sort of group's point of view? You know,
8 like what topics are they asking you for? What sort of
9 engagement are you trying to move the needle on there?
10 What issues?

11 MS. HATTON: Yeah, I mean, I think that going
12 back to process, and I'll just speak mostly from personal
13 experience, it is really, really hard to engage with the
14 CPUC. And there are reasons for that. They're a different
15 type of entity. I completely understand all of those
16 things. But it is really hard for someone who has time,
17 knowledge, and expertise to do it, let alone someone who
18 like, doesn't even know what these agencies are, which I
19 think most people do know, right, in reality.

20 And so that's hard. It's harder to sort of like,
21 get things on the record. It's harder to make comments.
22 It's more difficult to engage. And that has been the
23 sentiment, I think, of a lot of folks who've tried. And
24 the CPUC itself, I think, would be the first to acknowledge
25 that as well.

1 In terms of the types of issues that we're
2 talking about, you know, I think affordability is one we
3 need to talk more about. You know, rates, our conversation
4 in and how rates work is something we've been talking a lot
5 about, and it's really complex. So it's helpful, I think,
6 for the DACAG to really get a deeper, more granular
7 understanding of how that works, because it's, man, it's
8 complicated.

9 COMMISSIONER MCALLISTER: Would it help to sort
10 of try to have some educational platform to sort of teach
11 the members of the DACAG and maybe even more broadly, just
12 sort of like, okay, rate-making 101 or something like that?

13 MS. HATTON: Yeah, absolutely.

14 COMMISSIONER MCALLISTER: Yeah.

15 MS. HATTON: And we've even asked for things like
16 just a one-on-one on like, what are the departments in
17 these agencies? And like, where do you go to find out more
18 information about this? And who's doing what? And that in
19 itself is very hard to find.

20 COMMISSIONER MCALLISTER: Have you engaged with
21 Cal Advocates?

22 MS. HATTON: Yes.

23 COMMISSIONER MCALLISTER: Okay. I mean, there
24 are rate-payer advocates that could potentially play a role
25 in that conversation. I guess, you know, we'd have to

1 think about it, but --

2 MS. HATTON: Yeah, again, this is me taking off
3 my DACAG hat --

4 COMMISSIONER MCALLISTER: Yeah.

5 MS. HATTON: -- and just putting my personal hat
6 on, I think that the Cal Advocates has had a complicated
7 relationship with equity.

8 COMMISSIONER MCALLISTER: Yeah. Yeah. I mean,
9 and there's TURN (phonetic) and some others. And there's
10 actually a bootcamp that NAROOP (phonetic) puts on.

11 MS. HATTON: Yeah. Yeah.

12 COMMISSIONER MCALLISTER: Yeah. There's also a
13 NAROOP bootcamp on rate-making. Anyway, just throwing out
14 some ideas here.

15 But, I guess, so thanks for that. I really
16 appreciate that candor. And, you know, we do everything we
17 can to maintain great communications with our colleagues at
18 the PUC. And, you know, they have a tough job. And their
19 role is very different, very different than ours, but let's
20 keep working on that.

21 And then, I guess, finally, you know, is there
22 any -- and you don't have to answer this right now, but
23 just anything we could do better to improve sort of
24 groundedness of our process, accountability for outcomes?
25 I mean, I remember when SB 350 was new and, you know, we

1 had a lot of staff that's still here. Mike Sokol played a
2 really key role in that. He's now Deputy of the Efficiency
3 Division. But I know he takes a lot of these issues to
4 heart, you know, all these issues to heart. And many, many
5 people across the Commission have sort of some skin in the
6 game here.

7 And just how can we sort of fulfill the promise
8 of the -- sort of what we've been -- the task and the goal
9 to really be ever better with inclusion and accountability?
10 Just really appreciate you're helping us navigate that path
11 going forward.

12 MS. HATTON: You know, I think it's -- what's
13 nice is that it's a two-way dialogue with the Commission,
14 is it doesn't always feel like us being the advisor or the
15 guy. You know, like I think there's good back and forth
16 there. And we've learned things from agency staff and
17 leadership as well.

18 On the accountability side, we're going to be
19 having more conversations this year and next about how the
20 DACAG wants to set our own type of measurement for how
21 we're doing, you know, and how effective we are being. And
22 like what are we -- what do we want to be tracking at the
23 agencies that will tell us how effective we are being and
24 that you are being. It's always so helpful when we get
25 feedback back about like, hey, you told us this thing and

1 we did this and here's why it matters. sometimes that
2 feedback loop is missing, but it's been a lot better
3 recently. And so we really appreciate that.

4 COMMISSIONER MCALLISTER: Well, thanks very much,
5 Julie. I really appreciate you and the whole membership of
6 the DACAG. Really appreciate it.

7 CHAIR HOCHSCHILD: Thank you, Commissioner.
8 Vice-Chair?

9 VICE CHAIR GUNDA: Thank you, Chair.

10 Chair Hatton, thank you so much for the
11 presentation. I just wanted to kind of note a couple of,
12 you know, thanks. You know, thanks for the discussion
13 today. Watched the Commission's journey positively moving
14 towards, you know, more inclusion and accessibility over
15 the last seven or eight years that I've been here.

16 And I think in no small part, it is, you know,
17 the Advisory Committee's, you know, influence, both
18 intangibles and intangibles;; right? A lot of the
19 inspiration happens in ways that are intangible, really
20 putting the needs of all as a part of the conversation
21 rather than a few, and then making sure the interests are
22 really well understood.

23 So I think on a personal level and professional
24 level, I just want to extend my sincere thanks to you, the
25 Vice Chair, and all the members present and past.

1 And also the Commissioners, you know, I think
2 Commissioner Douglas, former Commissioner Patty Monahan,
3 obviously, you know, our big, you know, influence here,
4 Commissioner Gallardo, for all the tremendous work on, one,
5 embracing the spirit, you know, being open about the
6 shortcomings of what we should be doing, and embracing the
7 advice and recommendations. I just am incredibly grateful
8 to everybody and look forward to continuing working.

9 Thank you, also, for putting on your list the
10 broader workforce transition as we manage the decline. You
11 know, of the fossil industry and legacy industry, it's
12 really important more than ever to make sure the
13 communities and the workforce are not left behind and some
14 of the cities that host them. So we'd really like to
15 continue to get your guidance and advice as we move forward
16 in that work.

17 And big thanks to PUC, CEC staff, and
18 specifically on the CEC, Mona Badie, you know, Ryan Young,
19 and Chief Murimi in the back. So just incredible thanks to
20 everybody. Look forward to continuing working with you.

21 Thanks.

22 CHAIR HOCHSCHILD: Well, one of the things about
23 having brilliant colleagues is they say everything that
24 could be said. So I will just say, I second all that
25 thunderously. Thank you for all your work and that of your

1 colleagues. We're really grateful.

2 COMMISSIONER GALLARDO: Before we end, Chair, if
3 I could ask Chief Counsel's Office to look into this
4 question about the DACAG's name, whether that's in statute.
5 I don't recall it saying it has to be the Disadvantaged
6 Communities Advisory Group, but I get why we would have
7 interpreted that way. So that will be on our list of to-
8 dos, if that's okay.

9 CHAIR HOCHSCHILD: Yeah.

10 EXECUTIVE DIRECTOR BOHAN: Thank you. We'll look
11 into that.

12 COMMISSIONER GALLARDO: Thank you.

13 CHAIR HOCHSCHILD: Yeah, I just want to say, you
14 know, for the CEC, for the part we can control, we have a
15 long way to go, and I think we recognize that. But I do
16 want to just highlight, you know, what has happened in the
17 last chapter in our agency's history on these issues, I am
18 really proud of. Okay, we put \$130 million into tribal
19 energy sovereignty projects for 35 tribes in the state of
20 California. We're doing, you know, 60 percent of our
21 charging infrastructures in low-income disadvantaged
22 communities, about 70 percent of our demonstration projects
23 in our clean energy research development program. We're
24 doing 100 percent of the HEEHRA money.

25 So there are some really big milestones and, you

1 know, I don't want to sugar coat at all how much more work
2 we have to do in this area because it's -- we all know how
3 much more we have to do, but those are steps in the right
4 direction.

5 And I really wanted to just highlight, that was
6 really supported, enabled, and brought to fruition in
7 partnership with the DACAG and all of the talent you work
8 with. So thank you for engaging and for all your good
9 work. We look forward to continue working together.

10 MS. HATTON: I hear you. You all are doing the
11 work and it shows. And I wouldn't say that if I didn't
12 mean it. Thank you.

13 CHAIR HOCHSCHILD: Thank you so much, Julia.

14 COMMISSIONER GALLARDO: One last request from the
15 Commissioners. If we do want to support more, we should
16 all try to join at least one of the meetings throughout the
17 year.

18 CHAIR HOCHSCHILD: Yes.

19 COMMISSIONER GALLARDO: So I wanted to make that
20 call out here.

21 CHAIR HOCHSCHILD: Thank you. Thank you.

22 COMMISSIONER MCALLISTER: Totally acknowledged,
23 yes.

24 COMMISSIONER GALLARDO: And then just a big
25 thanks to the staff at the Energy Commission for not just

1 being receptive, but being very proactive and engaging the
2 DACAG. The subject matter expert meetings wouldn't happen
3 unless the staff wanted to get that expertise from the
4 DACAG. So, you know, thank you to the staff.

5 CHAIR HOCHSCHILD: With that, we'll turn to Item
6 5, Information Item, Western Regional Energy Generation
7 Information System, WREGIS. And I welcome Sean Simon.

8 MR. SIMON: Okay. Good morning, Commissioners.
9 My name is Sean Simon. I'm Acting Director of the Siting,
10 Transmission, and Environmental Protection Division.
11 Today, I'm providing an update on the Western Renewable
12 Energy Generation Information System, we know this as
13 WREGIS, the tracking system for renewable energy
14 certificates that supports the Renewable Portfolio Standard
15 Program in California and throughout the West. You can
16 think of WREGIS as a digital accounting system and
17 marketplace.

18 And I'm joined by several executives from the
19 Western Electricity Coordinating Council, commonly known as
20 WECC. They'll introduce themselves shortly. The WREGIS
21 system is housed within WECC and they're managing important
22 developments happening with WREGIS that are ripe for
23 informational update today, as expressed in public comments
24 this morning.

25 And then just to be clear, the issues we're

1 talking about today have no impact on the work that staff
2 is doing to update the RPS Guidebook. That work is ongoing
3 and separate.

4 Next slide, please.

5 Okay, so we use this graphic in a lot of RPS
6 presentations. Today, we want to stay high-level bird's
7 eye view, and just to see how WREGIS fits within the
8 broader RPS market and regulatory activities. And WREGIS
9 is marked on the graphic in a red circle just left of
10 center.

11 And, you know, WREGIS is really the hub for the
12 program. To the left is where the infrastructure,
13 investment, development, and procurement is happening. And
14 then the meters are spinning and reporting to WREGIS and
15 resulting in RECs that are then used for regulatory
16 compliance, which plays out on the right side of the
17 graphic.

18 And fundamentally, WREGIS is the cornerstone of
19 how we ensure that every megawatt hour claimed as renewable
20 is actually renewable and eligible for our programs and
21 upon which market transactions are premised. And this
22 certainty and the credibility of the system provides
23 credibility for our programs.

24 We can go to the next slide, please.

25 Okay, so then with this timeline, I'm just going

1 to briefly touch on the relevant history, and then I'll
2 hand it off to our guests from WECC.

3 Working left to right, the RPS program is now
4 over 20 years up and running. And the Energy Commission
5 established WREGIS, this tracking system, as one of our
6 early steps in implementing the program. In 2008, then, we
7 required that all activities happen within WREGIS if it's
8 going to account for RPS compliance. Since then, over 50
9 gigawatts of capacity has been built and put on the grid
10 throughout the West, really gaining speed in the ramp-up
11 that the Chair mentioned this morning.

12 In 2022, WREGIS onboarded new software. There
13 were some technical difficulties in '23 that were
14 ultimately resolved in the fall of 2024. And I provided an
15 update then, along with WREGIS' director last year. And
16 then this past spring, WREGIS and WECC announced some
17 updates regarding WREGIS that are the focus of today's
18 presentation.

19 And I just want to point out that staff are
20 actively involved in these activities in coordination with
21 Commissioner Gallardo. And I represent the Energy
22 Commission on the WREGIS Committee, representing our
23 agency, as well as other state regulatory bodies that are
24 participating. And the WREGIS Committee also advises and
25 coordinates with WECC management. So that relationship is

1 important as well.

2 And with that, I'd like to invite our WECC guests
3 up to present.

4 Thank you.

5 MS. FRYE: Good morning, Commissioners. I'm
6 Melanie Frey. I'm the President and CEO of WECC. We're
7 pleased to be here with you today. With me is Jeff
8 Droubay, who will speak next. Jeff is our Vice President
9 and General Counsel. And Kris Raper, who is our Vice
10 President of Strategic Engagement and External Affairs. So
11 we'll provide an overview of some of the history and then
12 the current status that Sean mentioned and some of the
13 outreach that we're doing.

14 So we've provided an advanced slide that has a
15 bit of information and background about WECC as it relates
16 to WREGIS. What's important to note, as Sean described,
17 WREGIS initially was housed at WECC in 2006. And that was
18 at the credit of the California Energy Commission. We
19 worked with the California Energy Commission and the Energy
20 Commission provided the initial funding to start up the
21 software. And WREGIS is a program that is primarily
22 software and staff who manage that software and work with
23 all of the stakeholders and users.

24 In about 2012, WREGIS became fully self-
25 sufficient and we no longer required backstop funding from

1 the California Energy Commission. So since that time,
2 WREGIS has been fully self-funded, hosted at WECC as our
3 only, what we call, non-statutory program. So WECC's
4 primary business is as a regional entity focused on the
5 bulk power system reliability and security in the Western
6 interconnection.

7 So WREGIS has been hosted by us and, as I said,
8 funded entirely by the user fees that are paid. And part
9 of those user fees include an indirect allocation of some
10 of the WECC budget toward the administrative and corporate
11 services kinds of support.

12 So with that little bit of background, I'll
13 invite Jeff.

14 MR. DROUBAY: Yeah. Thank you.

15 So we can, I think, we can go ahead and move on
16 to the next slide.

17 In terms of recent developments, as Sean
18 mentioned, we currently have a software partner known as
19 CleanCounts, formerly known as Emirates. We transitioned
20 the program over to them in 2022. That agreement is
21 scheduled to end on December 31st, 2027. So CleanCounts
22 has notified us that they do not wish to move forward with
23 the agreement after that date.

24 So that has obviously given us an opportunity to
25 pause and consider WREGIS. WREGIS has been with WECC since

1 2006, so almost two decades. WECC is a much different
2 organization now, obviously, than it was then. And so,
3 like I said, it's given us a chance to pause, reflect. And
4 there are a couple of developments that we would like to
5 share.

6 So if we can move forward?

7 And those developments essentially fall into two
8 buckets. So the first is as it relates to software, which
9 is obviously the most urgent issue that we're facing. So
10 with the current agreement slated to expire at the end of
11 2027, we need to make sure there's software in place,
12 obviously, to serve the program. And so we are currently
13 in the process of doing a custom software development for
14 the program.

15 And I'm happy to report we're on track so far
16 with that. We've had our RFP issued, as you see there.
17 And our current timeline is that we will have a Phase 1
18 product developed and ready to go online by December 31,
19 2026. And what that means is that will be a product that
20 meets all of the functions necessary to do compliance, REC
21 tracking, everything that's necessary. And from there, we
22 anticipate making further improvements to that product.

23 And I would say it's exciting. I think, as has
24 been noted in this meeting, California has led the way when
25 it comes to renewables. And I think what we're excited

1 about is the prospect of a system in the West that isn't
2 something that's effectively borrowed from another region,
3 but that is catered for the West and really a region of the
4 country that is leading in the renewable space. So I think
5 that's something that is exciting. We're very excited
6 about it.

7 The other thing that we've talked about is, as
8 I've noted, WECC is a much different entity than it was
9 when WREGIS first came to WECC. And so one thing that
10 we're exploring and talking about is a separation of WREGIS
11 from WECC. So I will note we are grateful for the trust
12 that this Commission and other stakeholders in the West
13 have in WECC, that you've seen fit for so long to house
14 this program within WECC.

15 And I think a couple of things.

16 First of all, what WECC brings to the table is
17 that credibility and interconnection-wide view, and I think
18 the confidence that there's neutrality in the way that this
19 system is governed. We do feel that we can replicate all
20 of that. And the thing that we can add by separating WECC
21 from WREGIS is WREGIS would then have a focus solely on
22 this program. So we feel like we could maintain the
23 strengths of what WECC brings, but then add that on to
24 WREGIS.

25 So we've heard feedback. We've heard some

1 feedback today that folks -- that makes, that creates a
2 little bit of angst, that proposed separation. So that's
3 something that we're taking slow. And the one thing I
4 would like to emphasize is we would have no intention of
5 doing the separation until that new software platform is up
6 and running, and that there's confidence in it.

7 The other thing we're planning on doing, and Kris
8 Raper will talk a bit more about this, is we're doing
9 extensive outreach. So we want to understand concerns,
10 make sure all of those are addressed. You know, I think
11 PG&E made some great comments today. And we're committed
12 to addressing those and make sure everyone has confidence
13 in this direction.

14 So with that, I'll turn it over to Kris.

15 MS. RAPER: Good morning. I want to acknowledge
16 Vice Chair Gunda's comments with the opening of the
17 meeting. And we appreciate our strong relationship with
18 California entities and other people within the industry in
19 California. And I greatly appreciate our friendship as
20 well. So thank you, Vice Chair Gunda.

21 And I would be remiss, I think, not to mention
22 Commissioner McAllister. When last we met, we were in
23 adjacent industry positions, but not the ones that we're
24 currently in. So it's nice to see you again, sir.

25 If you'll go to the next slide?

1 So I think that you've probably heard enough in
2 the ether about what's going on here. And we know that
3 people are stressed; right? Change is hard. And so we are
4 trying to do as much outreach as possible from the
5 standpoint of what this transition might look like and
6 where WREGIS is headed.

7 So we've got meetings. There's a Stakeholder
8 Advisory Committee specific to WREGIS that has been meeting
9 at least monthly. There is a WREGIS Committee, which Sean
10 mentioned that he's on and they have been meeting monthly.
11 We've had two town halls, which anyone within the industry
12 can log onto. And, in fact, the SAC and the WREGIS
13 Committee meetings are also public, so we've had additional
14 people log onto those.

15 We do have a frequently asked questions document
16 that we try to update weekly online. So as questions come
17 in, we're updating that to try and help people understand
18 better the actions that we're taking and the questions that
19 we have and answer the questions as they come in in a
20 timely manner.

21 We have a WECC Weekly that goes out, but what
22 we've realized in the last several weeks is that that
23 probably has too much other industry information in it.
24 And we don't want WREGIS users and stakeholders to have to
25 peel through something larger. So we are looking at

1 beginning to put out a newsletter. This is in like the 48-
2 hour stage; right? We've just been talking about it for
3 the last couple of days as we've gotten some feedback on
4 that. And we are going to look at maybe a biweekly, every
5 other week, issuance of a newsletter to those WREGIS users
6 that specifically addresses the WREGIS matters, what's
7 going on. It will have an attachment to that frequently
8 asked questions document. And so we're hoping that that
9 will also assist in getting out the word.

10 We have been putting out information within our
11 LinkedIn profile.

12 And we do have a generic email that is
13 engageatwec.org, which we are trying to -- we have been
14 trying to socialize with the users and stakeholders that
15 are interested so that they can put anything they want to
16 within that engageatwec.org email. And we're responding.
17 We're trying to get those turned around within a 24-hour
18 period to get them answers.

19 So I'm happy to have thoughts and ideas on other
20 things that might be helpful. And we can stand for
21 questions if you have any.

22 CHAIR HOCHSCHILD: Great. Thank you.

23 We'll go to Commissioner discussion, starting
24 with Commissioner Gallardo.

25 COMMISSIONER GALLARDO: Yes. Thank you, Chair.

1 First, I wanted to express my gratitude for
2 everyone who came to listen and learn. Also specifically
3 to PG&E for sharing the concerns and also offering support,
4 you know, on this journey and specifically with that
5 emphasis on analyzing both cost and risk of having an
6 independent WREGIS. So I appreciate people being candid.
7 That's what we need in order to ensure we have a thoughtful
8 process and get to a good outcome for everyone.

9 Second, I did want to express my gratitude to
10 Sean. Sean, you have been a tremendous leader since you
11 got to the Energy Commission, I'm sure before, but this is
12 my experience with you. I think you've done a fantastic
13 job balancing the work on the RPS Guidebook. We haven't
14 had a new addition in years, and so that's really important
15 that we get that done. And I'm glad that this situation
16 isn't impacting that effort. You've also been navigating
17 this scenario, which we weren't expecting. And on top of
18 that, being Interim Director. So I want to acknowledge all
19 that you've been doing has been extremely helpful. I've
20 really enjoyed working with you on all of this.

21 So I also want to thank Melanie, Jeff, Kris for
22 being here in person. I think it's really important that
23 you're able to represent WECC and your specific perspective
24 to the Commissioners so that they can get a better sense of
25 what's happening. And I've so appreciated how much you've

1 engaged with me specifically and my team and Sean.

2 And just overall, I think WECC has shown a
3 commitment to service and to excellence. And I think for
4 the majority of the time that we've had this relationship,
5 things have been smooth. And even when we did experience
6 the problems, we did see how you were invested in getting
7 to solutions. And so we've experienced that with WREGIS as
8 well, so -- but I do have a couple of questions I want to
9 ask you.

10 And specifically this is -- we're doing this
11 informational session for my fellow Commissioners. Sean
12 and I thought it was really important that you know what's
13 happening because of how Sean explained how much we depend
14 on the system, you know, tracking system to ensure the
15 state is meeting its clean energy goals and the market has
16 the confidence, too, to do its transactions, and that we
17 will face significant consequences if the separation of
18 WECC and WREGIS isn't smooth, and if that new vendor, you
19 know, isn't up to par, if the platform doesn't work, et
20 cetera.

21 So with all that in mind, I wanted to first ask
22 you, Kris, you specifically mentioned all the outreach that
23 you have done and that you're planning to do and all these
24 different mechanisms and forums. I'm just curious about
25 what you have learned so far in terms of the engagement

1 you've done that will help you with the decision-making on,
2 you know, with next steps specifically? So is there
3 anything you can share with this specific like what you're
4 hearing that is having you, you know, get to these next
5 steps?

6 MS. RAPER: Sure. Thanks, Commissioner, for the
7 question.

8 I think what we've learned is that at least
9 primarily the majority of stakeholders are also often
10 users, the people who are speaking out. And they're much
11 more concerned about what that software platform might look
12 like than they are the governance and corporate structure,
13 which we've also tried to put documents out on and get some
14 feedback on. And that stands to reason; right? They want
15 to make sure as well as you, as well as us, want to make
16 sure that whatever software platform is built, that that's
17 going to do everything that the current platform does and
18 more and get past some of the hiccups that we've had to
19 present.

20 So I would encourage, based on the question that
21 you asked, right, I would encourage more people to publicly
22 comment, to reach out to us. We've tried different user
23 groups, different stakeholder groups. We've done state
24 agencies and groups like WRAP (phonetic), YRAB (phonetic);
25 right? We've done some of the regional groups. And we

1 have reached out individually to some of the larger users.
2 And as you well know, you know, you do as much as you can
3 to make as much contact, get as much feedback as you can.

4 But I do think that if more people will utilize
5 the opportunity to publicly comment and publicly talk about
6 it, that it will encourage the conversation. I think that
7 it will also provide some comfort as to where things are
8 going, because we're happy to answer any of the questions
9 that we can within the parameters of the contract that we
10 are currently bound by; right? And so as many people as
11 will speak out, we're trying to answer the questions in a
12 timely and appropriate manner and get as much feedback as
13 we can so that we can address it along the way, because
14 this is new and different for us too.

15 COMMISSIONER GALLARDO: Mm-hmm.

16 MS. RAPER: So we just -- that -- the dialogue is
17 developing; right? It's kind of a thing in progress.

18 COMMISSIONER GALLARDO: Okay. Yeah, we
19 completely understand that and really appreciate what an
20 emphasis you're putting on getting more feedback and just,
21 generally, the importance of the participation.

22 My second question, because I do tend to be
23 paranoid and love to have a backup plan to the backup plan,
24 so along those lines, I know the contract doesn't end until
25 2027, but for software development, especially successful

1 software development, that seems like tomorrow, maybe even
2 yesterday. So I'm just curious about what contingency
3 plans you have in case it doesn't work. How do we maintain
4 the level of functionality that we have now or, you know,
5 what other things are you thinking about just in case?

6 MR. DROUBAY: Well, I can go first, then I'll
7 give Melanie a chance to comment on that one.

8 So I do think that the main contingency is in the
9 timeline. And we -- one thing I'll note is that we have
10 high confidence. So we've, you know, I think we've tried
11 to learn from the last software rollout that we did. We've
12 engaged experts to help us there. As we've been talking to
13 developers there really has not been anyone that's blinked
14 as to the timeline that we have. So I think the main
15 contingency we have there is what we built into the
16 timeline to have something functioning by the end of next
17 year when we still have another year on that contract.

18 So I'll let Melanie chime in on anything else.

19 MS. FRYE: No, I'll just emphasize what Jeff
20 said. So the RFP responses were due end of August. And so
21 the last week, we've spent a lot of time with a number of
22 our subject matter experts evaluating those responses. And
23 we received 15 responses, which is a phenomenal response
24 for an RFP. We've been able to narrow that down to the top
25 contenders and we've had executive-level meetings with them

1 as well and we're very confident in their ability and, as
2 Jeff said, the contingency that's built into the timeline.

3 COMMISSIONER GALLARDO: Okay. Thank you.

4 I'll just emphasize, our success on RPS depends
5 on your success in this transition. So we will commit to
6 continuing to work with you and support so that we can get
7 to the best outcome possible for all of us. Thank you.

8 I'll turn it over to my fellow Commissioners.

9 CHAIR HOCHSCHILD: Vice Chair?

10 VICE CHAIR GUNDA: Yeah, Chair.

11 Thank you, Commissioner Gallardo. Thank you for
12 your support, for your leadership on this issue and
13 engagement on this topic.

14 Also want to second thanks to Sean and the entire
15 STEP Team. I know his previous boss was very difficult.
16 You know, Commissioner Rechtschaffen was very hard to work
17 for prior to coming to CEC. So thanks for escaping that
18 and coming here, Sean. We benefit from that.

19 You know, just kind of uplifting, you know, some
20 of our staff, Shannon, you know, Gina, Gregory, and Judy
21 (phonetic). Thank you for all your work. And again,
22 Melanie, Kris, and Jeff, thanks for being here.

23 I think everything that Commissioner Gallardo
24 mentioned, you know, 100 percent, you know, with some of
25 the comments that she made.

1 I wanted to just understand at a high level, and
2 because it's an informational setting, one, on the budgets,
3 just kind of at a very high level, could we just give a
4 high level on how much it takes to run WREGIS today and how
5 it's funded today for that record?

6 MS. FRYE: Well, excuse me, I'll start and then
7 invite either Kris or Jeff.

8 So the budget is a little less than \$4 million
9 annually, and that includes the amount that is direct build
10 from WECC to cover administrative things like Kris's time,
11 my time, Jeff, and all of those corporate services support.
12 That also includes the cost of the software and running the
13 software.

14 All of that has been funded with user fees. And
15 as I mentioned, it's been well over a decade that that
16 program has been fully self-funded, self-sufficient, self-
17 funded, and has built a reserve. And the reserve is an
18 important balance at this time because that affords us to
19 develop the software without any direct impact to users.

20 We are under the -- in the process of identifying
21 what we would see as a year one standalone budget for the
22 program without being part of WECC. And we'll be
23 presenting it to our board and stakeholders next week. But
24 I'll say, it's not significantly different than the budget
25 today because again, it's taking what has been contracting

1 dollars for a vendor and turning those into FTE employees
2 in the program. So once the software is fully developed,
3 which again would be funded through the reserve balance,
4 we're not anticipating a significant change.

5 But I will say, over the years, there has not
6 been a price increase in the 18 years that the WREGIS
7 program has been in place. And, in fact, there've been a
8 couple of occasions where the fees have actually been
9 lowered and they are well below competitive market fees.
10 So, you know, while being very cost conscious, there is, I
11 guess, from a competitive standpoint, some -- perhaps some
12 change that would be needed in the new program.

13 But importantly, in the current structure under
14 our WREGIS Committee, we partner with the WREGIS
15 stakeholders in any of those kinds of discussions. And as
16 we propose, once this would be a standalone organization,
17 there would be a hybrid governance and really strong
18 stakeholder engagement in those kinds of decisions as well.

19 VICE CHAIR GUNDA: Thank you, Melanie. Just kind
20 of maybe just follow up on a couple more quick items on
21 that.

22 You know, working, you know, being engaged in the
23 West, you know, in the last four years and benefiting from
24 Kris's guidance on a lot of things over the last couple of
25 years, you know, the thing that's really important that I

1 see in the West because of our common interests around
2 affordability and reliability, but there's also interest in
3 ensuring that we have our independence and in the works we
4 do as states autonomy -- state autonomy, the important
5 piece, I think, the WECC really brings to the table is the
6 trust that you talked about, trust and rigor and security
7 of the system.

8 So as we move forward, you know, as you think
9 about this independent organization, can you share a little
10 bit insights from your conversations and others, what are
11 some insights on future, you know, governance models or
12 other pieces that ensures the trust continues and the rigor
13 in the system is continued?

14 And also, just with that, you know, as you all
15 contemplated internally, the choice of potentially, you
16 know, putting the idea of spinning out a WREGIS, what are
17 some of the pros and cons you've discussed internally? If
18 you could just lay that out, that'd be great.

19 MS. FRYE: Sure. I'll start and again invite
20 Jeff and Kris to jump in. It's a really important
21 question. And thank you for asking. It's not a discussion
22 that we entered into lightly.

23 I will start by saying that WECC is committed to
24 successfully delivering a new software that will support
25 WREGIS. We understand the criticality of that for not only

1 California, but the rest of the interconnection.

2 It's interesting timing. So 2007 is when WREGIS
3 went live in June. And 2007 is also when WECC officially
4 became the regional entity for the Western Interconnection
5 in enforcing the standards that are necessary to run the
6 grid. So it's almost as if we were -- you know, we had two
7 infants growing at the same time. And so over the last 18
8 years, they've both continued to evolve and mature.

9 I will say that WECC itself, when we first
10 undertook WREGIS, we were a trade association. And we have
11 since evolved and, in 2014, became a fully independent
12 organization and have independent governance. And so that
13 statutory mission has continued to grow and be emphasized.

14 So as we think about WREGIS now, you know, 18, an
15 adult and moving into adulthood, it's really critical that
16 it's able to be established with those same principles of
17 independence and stakeholder engagement. We talk about
18 three different things at WECC, independence, perspective,
19 and partnership. You know, that independence and
20 partnership are crucial in the WREGIS world as well.

21 And frankly, WREGIS has grown substantially, you
22 know, in addition to what's gone on at WECC. So we think
23 that it being a standalone organization is the right path
24 forward. We did look at alternatives, including partnering
25 with the current provider of the software. And we

1 conducted about six months of due diligence in looking at
2 that option. And ultimately, we're not recommending that
3 as the preferred path forward.

4 So, again, it's part of why we would not spin
5 this off until the new software is fully up and running,
6 because we recognize that both WECC and WREGIS's
7 reputations are connected in this. And so we want to make
8 sure this is handled in the most appropriate way possible.

9 Jeff, is there anything you would want to add?

10 MR. DROUBAY: Yeah. So that's a great question
11 and one of the most important questions we're addressing.

12 So I do think we tackle some of that just through
13 the governance structures. So, you know, we would envision
14 a standalone WREGIS as a nonprofit. And what we have
15 proposed is that would have a hybrid board. So you would
16 pull in stakeholders from across the West.

17 So, again, you would maintain that
18 interconnection-wide perspective, but you would also have
19 some independent directors, and in that way you would
20 preserve that independence. And then similar to how WREGIS
21 is structured now, you would have that Stakeholder Advisory
22 Committee that advises the board. So the voice of the
23 stakeholder is there. The voice of the various state
24 Commissions is there. And in that way, I think we'd be
25 able to preserve a lot of what we have now. The

1 enhancement would be that you would have an organization
2 solely focused on WREGIS delivering what it needs to
3 deliver for everyone in the West.

4 And so I think that's what we're seeking comment
5 on. And again, just to reiterate, we've heard a lot of
6 comment on that. And I think we have an opportunity to
7 sort of take our time on that one and make sure we get it
8 right and in a way that everyone's comfortable with.

9 MS. RAPER: I will be quick. I just want to add,
10 I support everything, of course, that was just said. I'm
11 not sure if they mentioned also, WECC is a 501(c)(4). We
12 would envision a 501(c)(4) organization, corporate
13 structure withing the organization.

14 And I also think it's important to note that we
15 understand the criticality of what this organization is,
16 what it does, and what it needs to do. And I think part of
17 the conversation that was had before our item came up on
18 the agenda was about how the industry is changing and how
19 the industry has changed over the last 10, 20 years, even
20 100 years, and that's what we're envisioning also.

21 And that was part of the decision that went into
22 looking for a greenfield software developer for this was
23 this is an industry that is moving fast. We've talked
24 about the pace and magnitude of change. And we would be
25 and are looking for a software developer that can envision

1 that with us and become that and stay up to date, up to
2 speed with those things as the industry evolves. And I
3 think that we've got a couple of really good developers
4 that have put in RFPs that can envision those things with
5 us and with you.

6 And we don't take the trust lightly that you all
7 and that stakeholder community has in us. And so it's part
8 of why we're trying to do everything that we can do to make
9 sure to keep everybody in the loop on what's going on and
10 get as much feedback as we can, so thank you.

11 VICE CHAIR GUNDA: Yeah, thank you so much. I
12 think, you know, just recognizing there's a lot of things
13 happening in the West evolving. So I look forward to
14 continuing the collaboration. Thanks.

15 COMMISSIONER MCALLISTER: So I'll be really
16 quick, and I just would emphasize, you know, agree with the
17 dialogue, and thanks for that.

18 And, you know, really, I think we all know that
19 it's a -- you know, there's a -- we're all growing in the
20 same direction and, you know, we acknowledge the good faith
21 effort that you're making to sort of like really chart a
22 future that's robust. And really appreciate the deep
23 knowledge and expertise you're bringing to this. And I'm
24 really glad that you're talking to YRAB and sort of
25 getting, you know, really vetting with the core

1 stakeholders.

2 I do want to sort of like lay out a -- you know,
3 really make an ask sort of for, you know, as -- you know,
4 this is a pretty erudite topic; right? It's pretty not
5 accessible to like the public. But I do think that, you
6 know, that process ought to be as public as reasonably
7 possible. And especially as we move into the, you know, in
8 the context of integrating, you know, the sort of markets
9 discussion across the West, and we're going to have a lot
10 of diversity of stakeholders who really need to lean into
11 this resource and use it, whatever their sort of policy
12 goals at the state level, for example.

13 And, you know, just software as a service has so
14 much creativity that, you know, we can all think about
15 dozens of functionalities that we might want. And so I
16 really agree with your approach to get a quality vendor
17 that can really move forward for the future.

18 I have a little bit of a spinoff, and I just
19 wanted to mention, you know, the Energy Commission has
20 created -- there are a bunch of templates, actually. Like
21 we created the National Fenestration Rating Council, the
22 Cool Roof Rating Council, the Collaborative for High
23 Performance Schools. You know, we created those in-house
24 at the Energy Commission and then spun them off into
25 independent nonprofits. So it is possible and, I think,

1 the creation governance here all focused on the right
2 things.

3 And I would, you know, just really highlight the
4 ongoing linkages between WECC, YRAB, and all the states.
5 Just let's really make sure that that conversation is as
6 robust as possible.

7 We're running really short on time, but I did
8 want to just mention, just sort of not maybe ask a question
9 for an answer here today, but just that we think about --
10 interesting sort of how the timelines match up, like, okay,
11 a spinoff versus the contract term versus sort of the
12 governance discussion. You know, there is time, but like
13 jumping tracks to a new software and then also a new
14 entity, like those need to be staged really well so that
15 there's no, you know, so that we're not getting tied up in
16 knots along the way. So just, I think -- but that's
17 totally doable.

18 So, yeah, I'm going to refrain from asking
19 anything about WECC more broadly. There's a lot going on,
20 but the reliability conversation is so important, as you
21 all know. And I just, I really appreciate the partnership
22 and look forward to interacting at, you know, the upcoming
23 CREBSI meetings or whenever the opportunities are, so
24 thanks. Thanks, Kris. I really appreciate your --

25 MS. RAPER: Can I pop in just very quickly?

1 COMMISSIONER MCALLISTER: Sure, yeah.

2 MS. RAPER: I don't know if I'm outing Vice Chair
3 Gunder or not, but he's our new Vice Chair --

4 COMMISSIONER MCALLISTER: Yeah. Yeah.

5 MS. RAPER: -- of YRAB to the --

6 COMMISSIONER MCALLISTER: Yeah. Yeah.

7 MS. RAPER: -- to WECC.

8 COMMISSIONER MCALLISTER: Yes, exactly.

9 MS. RAPER: So you have -- you have firsthand.

10 COMMISSIONER MCALLISTER: Yeah, we can --

11 CHAIR HOCHSCHILD: Well, double Vice Chair.

12 COMMISSIONER MCALLISTER: That's actually why
13 YRAB -- you know, we have a lot of good public, you know,
14 public servants in this conversation, so thanks all.

15 CHAIR HOCHSCHILD: Thank you all for coming in.
16 Appreciate the presentation and look forward to partnering
17 with you.

18 And, Sean, thank you for the presentation. I
19 just want to compliment your bow tie, by the way. I knew
20 you were smart, but you know, those things are really hard
21 to tie, so that really is proof in the pudding. It looks
22 great. Thank you.

23 With that, we'll turn now to Item 6,
24 Electrochemistry Foundry, and welcome Anthony Ng to
25 present.

1 MR. NG: Good morning, Chair and Commissioners.
2 My name is Anthony Ng, the Branch Manager of the Technology
3 Innovation & Entrepreneurship Branch, part of the Research
4 and Development Division. I'm here today to request
5 approval of a \$28 million grant with the Electrochemistry
6 Foundry for an open access battery pilot manufacturing
7 facility.

8 Next slide, please.

9 So we all know batteries play a critical role in
10 supporting California's clean energy transition, supporting
11 renewable integration and transportation electrification.
12 California is also home to a robust ecosystem of innovators
13 developing advances in battery technologies that can help
14 reduce costs, increase safety and improve performance.

15 However, a significant challenge that many of
16 these innovators face is that these advancements often
17 occur at the battery component level. So these are the
18 anodes, the cathodes, the separators or the electrolytes.
19 However, customers and investors often require fully
20 fabricated battery cells in order to conduct testing and
21 evaluation and to gain commercial traction.

22 For these innovators, investing in manufacturing
23 capacity to produce these cells is both expensive and time
24 consuming. And the overall result is an inefficient
25 allocation of investments and a slower time to market,

1 which hinders commercialization and scaling of the battery
2 technologies in the market.

3 Next slide, please.

4 So to address the challenge, the CEC released an
5 EPIC-funded solicitation, the purpose of which was to
6 establish a battery pilot manufacturing line. This would
7 be a full service battery cell fabrication line to
8 provide -- oh, sorry. This would be a full service battery
9 cell fabrication and testing services for battery
10 innovators in California.

11 The goal of this pilot line is to be an open
12 access facility to allow battery innovators to leverage the
13 pilot lines manufacturing equipment and onsite staff. The
14 goal is to have these innovators come in with their
15 innovative component, leverage the equipment and staff, and
16 walk out with cells and data for testing so that they can
17 either provide the cells to customers or continue
18 technology development.

19 In addition to supporting battery innovators,
20 another goal of the solicitation was to leverage this
21 unique facility to support broad workforce development
22 efforts in the battery industry.

23 Next slide, please.

24 The expected benefits to California of the
25 solicitation include accelerating the commercialization of

1 battery innovations, shortening that time from innovations
2 to actually getting these cells to customers and large
3 OEMs, supporting a robust battery supply chain ecosystem in
4 California, not just in cell production and cell
5 development, but also having the ability to, for example,
6 test the viability of recycled or reused components in
7 earlier stages of the battery manufacturing process, as
8 well as mentioned, yeah, supporting workforce development
9 and the creation of high road jobs in the California
10 battery manufacturing industry.

11 Next slide, please.

12 So the proposed awardee, the Electrochemistry
13 Foundry will establish a 20,000 square foot battery pilot
14 manufacturing line in Hayward, California. Key features of
15 this line include an open access model, as I mentioned,
16 where battery innovators can book time on the line, use the
17 equipment and onsite staff to develop cells.

18 The line will have full cell fabrication
19 capabilities from electrode mixing to electrolyte injection
20 and cell formulation. This will be a state-of-the-art line
21 with the ability to support all current lithium-ion-based
22 technologies, as well as the capability to support emerging
23 technologies and materials such as silicon anodes, emerging
24 cathode chemistries, and even adjacent technologies like
25 sodium and potassium ion batteries.

1 The line will feature extensive performance and
2 abuse testing capabilities, analyzing both performance and
3 failure modes of the produced cells.

4 And lastly, but certainly not least, the project
5 is also partnering with labor unions and academic
6 institutions to develop a robust curriculum, as well as
7 implementing hands-on training and job readiness programs,
8 again, leveraging the unique facility to not only develop
9 the materials, but actually, you know, recruit and put
10 people through hands-on job training, again, leveraging the
11 uniqueness of the facility.

12 Next slide, please.

13 Staff recommends approval of this grant agreement
14 and adoption of staff's recommendation that this project is
15 exempt from CEQA. Happy to take any questions you may have
16 at this time.

17 CHAIR HOCHSCHILD: Great. Thank you, Anthony.

18 Let's go to public comment on Item 6.

19 MS. BADIE: Thank you, Chair. The Commission
20 welcomes public comment on Item 6 at this time. If you're
21 in the room with us, we're asking folks to use the QR code.
22 You can find it in the back of the room. If you need
23 support, Dorothy Murimi from the Public Advisor's Office is
24 there to help you sign up for in-room comment. And then if
25 you're on Zoom, please use the raise-hand feature on your

1 screen. It looks like an open palm. And if joining by a
2 phone, please press star nine. That's going to let us know
3 you would like to comment. So we're asking for folks to
4 join those queues at this time.

5 We're going to start with folks in the room. And
6 first we'll call on Barry Broome. Barry, if you could
7 please approach the podium. It is helpful if you can spell
8 your name for the court reporter. And we are asking for
9 all comments to be two minutes or less. There will be a
10 timer on the screen.

11 MR. BROOME: Thank you, Mr. Chairman. My name is
12 Barry Broome. I'm the President and CEO of the Greater
13 Sacramento Economic Council today. GSEC is the founder of
14 CalEPIC. CalEPIC was the institution that finished second
15 to this award by a little bit over a point. Three out of
16 five judges chose the CalEPIC award over this award.

17 And we've brought to attention a request from our
18 legal counsel to have this item pulled today and have a
19 peer-review audit from the state on the process for the
20 grant. We're not here to make disparaging comments about
21 anybody, but this is a critical asset to our community.
22 We've worked extremely hard about it. We'll let the audit
23 claim stand on its own merit. And, you know, in this era
24 of transparency in government, we're counting on our
25 government to set the tone for that since it's been lost

1 throughout the country.

2 This location has unique advantages that we
3 thought were missed in the scoring. The process overall
4 made us very uncomfortable. I'll leave the audit request
5 to stand on that.

6 And that is our request today, that you pull this
7 item, that you require an outside audit of the process.
8 And once that's completed, we'll accept whatever outcome
9 exists.

10 Thank you.

11 MS. BADIE: Thank you for your comments.

12 Next, we're going to hear from Brenna Teigler.

13 Brenna, if you would like to approach the podium
14 at this time. And just a reminder to please spell your
15 name for our current reporter, who is joining us on Zoom.
16 And a reminder, we are asking for comments to be two
17 minutes or less. There will be a timer on the screen.

18 MS. TEIGLER: Hi. Good morning. My name is
19 Brenna Teigler, B-R-E-N-N-A T-E-I-G-L-E-R.

20 Commissioners, I'm here on behalf of the
21 Electrochemistry Foundry. As the incoming CEO, I'm honored
22 to be considered to lead as California's first pilot
23 battery manufacturing facility.

24 As the co-founder of the Activate Fellowship,
25 I've been helping enable scientists and engineers to take

1 their technology from lab to early phase commercialization
2 to the benefit of California ratepayers for over the past
3 decade. And I've learned that we need technology-specific
4 supports, like that proposed here, to quickly and cost
5 effectively transition innovations into products to help us
6 meet our climate goals.

7 Startups struggle with the long timelines, high
8 costs of commercial prototyping, and access to
9 manufacturing expertise and hiring. And it's doubly true
10 for batteries because they have sophisticated and expensive
11 manufacturing processes required to meet industry
12 standards.

13 I believe the prototyping capability funded
14 through this Item number 6 is the missing puzzle piece in
15 the San Francisco Bay Area innovation ecosystem both to
16 move forward the technology but, importantly, to train the
17 needed workforce. And I hope that we can equitably create
18 opportunities and quickly iterate new innovations for
19 customer validation.

20 I also appreciate the investment you have made
21 across the ecosystem, including in the startups themselves.
22 But I believe California should continue to invest in
23 scaling large-scale battery manufacturing in Sacramento as
24 a compliment to the Electrochemistry Foundry's pilot scale
25 focus in the Bay Area, as well as the materials refinement

1 work in Southern California for a full state ecosystem.

2 I hope this item is approved as recommended to
3 the benefit of the state and the world. Thank you for your
4 time.

5 MS. BADIE: Thank you.

6 And next, we're going to transition over to Zoom.

7 Stephen Rosenblum, I want to open your line. If
8 you could please unmute on your end? And just a reminder
9 that we're going to have a two-minute timer on the screen.

10 MR. ROSENBLUM: Hi. Good morning, Commissioners.
11 My name is Stephen Rosenblum, S-T-E-P-H-E-N
12 R-O-S-E-N-B-L-U-M. I'm calling today representing Climate
13 Action California, a statewide organization dedicated to
14 supporting sound scientific and engineering solutions to
15 preserve our climate.

16 I'd like to congratulate the Commission on 50
17 years of outstanding work in this area and hope that the
18 next 50 will be even more positive.

19 As we all know, storage is the linchpin of a
20 renewables transition. Without storage, the intermittent
21 sources of renewable energy, solar and wind, are not
22 capable of supporting base load capabilities. So we need
23 robust sources of storage and batteries offer one of the
24 easily commercially available kinds.

25 As we all know from the recent fires at Moss

1 Landing, if we have failures of these large-scale battery
2 energy storage facilities, it creates a lot of negative
3 public relations impact and customers and Californians
4 become concerned about the hazard of these facilities in
5 their communities. And we all know that we need facilities
6 spread around. They could be at generation sites, but
7 they're also very useful being located in cities because
8 they can act as emergency backup when the grid goes down.

9 So we support this effort. This facility is a
10 really important step in the right direction of reducing
11 the risk of new battery technologies for large-scale
12 storage. So I really urge you to approve this request and
13 follow the staff recommendation.

14 Thank you.

15 MS. BADIE: Thank you for your comment.

16 And those are all the raised hands for this item.
17 Back to you, Chair.

18 CHAIR HOCHSCHILD: Okay. Thank you for those
19 comments.

20 If I can invite Anthony up to maybe respond to
21 what was said about the process, that would be helpful.

22 MR. NG: Certainly. Thank you, Chair, for the
23 opportunity to respond.

24 So I'd just like to state that, you know, we
25 certainly take inquiries in a competitive funding process

1 quite seriously. You know, we here at R&D and at CEC, we
2 strive to follow a robust and transparent process when we
3 develop solicitations, when we evaluate proposals, and we
4 select post-awardees. And I can confidently say that for
5 this solicitation, you know, we are very confident that we
6 followed a robust and transparent and consistent process in
7 developing a solicitation, evaluating the proposals, and
8 ultimately selecting the award.

9 So, for example, you know, when a solicitation is
10 open, we have established venues to communicate with
11 potential applicants, like the pre-application workshop,
12 question and answer documents, addendums, things like that.
13 This ensures that relevant information on a solicitation is
14 communicated publicly and available to all potential
15 applicants to ensure fairness in the process. Each
16 solicitation manual includes a description of the
17 application requirements and the criteria that each
18 proposal are going to be evaluated against. And an
19 evaluation committee uses these criteria and applies them
20 consistently across all the proposals.

21 And again, I can say that for this instance, for
22 this solicitation, you know, we followed all of these
23 policies and procedures, as we always do for all of our
24 solicitations. So very confident that, you know, a robust,
25 fair, and consistent process was followed in this

1 solicitation.

2 You know, I will say this was a very competitive
3 solicitation. You know, we had a lot of compelling
4 applications to this proposal and it did come down to a lot
5 of the details in kind of the narrow margin. But, you
6 know, we were limited in kind of the funding that we had
7 available, and we had to select an ultimate winner for the
8 award. And we're very confident that the Electrochemistry
9 Foundry has the technical skills, the team, and the know-
10 how and the expertise to carry on a successful project.

11 And, you know, we do hope that in the future, we
12 really want this to be kind of the start of an ongoing
13 effort. So we hope that, you know, looking forward with,
14 for example, the next round of EPIC funding, you know, this
15 might be an opportunity to continue to support broader
16 efforts in this area, but --

17 CHAIR HOCHSCHILD: That's great. Thank you.

18 Is Cammy Peterson online? I'm just wondering,
19 Cammy, if there's anything else you wanted to add from your
20 perspective, having overseen this process as well.

21 MS. PETERSON: Yes. Thank you, Chair. Good
22 morning, Chair, Vice Chair, Commissioners. I'm a Deputy
23 Director with the Research and Development Division, and
24 oversaw this process.

25 I namely, I want to reiterate the comments that

1 Anthony just shared. We feel like this has been a long and
2 a robust and fair process. We were really, you know,
3 pleased to see the competitive and compelling proposals
4 that were put forth. I think it speaks well for the
5 opportunities that we have here in California to really
6 expand the battery ecosystem throughout the state, really
7 be able to touch different regions.

8 We were not prescriptive with where we wanted to
9 see this battery hub built out. We did want to see it
10 located in a disadvantaged or low-income community. We did
11 want to see partnerships across, you know, workforce
12 development, unions, academia, other battery experts, and
13 so on. We did want to see the ability to kind of touch
14 different geographic regions, like Lithium Valley, be able
15 to bring the state together and hopefully build this
16 ecosystem going forward.

17 And, as Anthony mentioned, we are, you know,
18 cautiously optimistic that we'll be able to continue
19 supporting this battery ecosystem and look to expand it,
20 you know, if future funding were to become available. It
21 was a very competitive process, and just unfortunately,
22 we're not able to fund more than one award this go-round.

23 CHAIR HOCHSCHILD: Okay. Thank you both for
24 that. And I'll just share a few comments and open up for
25 any discussion.

1 So first of all, this is not the last grant we're
2 going to be doing in battery innovation. The State of
3 California is fully committed to storage. I believe
4 storage is the single most important energy industry for
5 the next decade. We have deployed 16 gigawatts the last
6 six and a half years, and that's just for stationary
7 storage. We have about three times more capacity on four
8 wheels. We're adding 1,300 EVs a day in the state. And
9 the stationary storage goal for the state is 50 gigs by
10 mid-century, okay?

11 So we're feeling a lot of urgency to advance
12 battery technology, to improve energy density, to lower
13 costs, to improve manufacturability, to improve fire
14 safety. I think there is, you know, just being honest
15 about the state of the world right now, China is dominating
16 in the battery space, but there is a lot of innovation and
17 talent and capability that our state has. And we want to
18 make use of that to advance the field.

19 So this solicitation really was born out of a
20 gathering we all had about a year and a half ago, organized
21 by my former Advisor, the wonderful Lorraine Gonzalez, who
22 pulled together the Battery Summit. And after dialogue
23 with a bunch of stakeholders, this concept kind of emerged
24 out of that.

25 I have watched as it's unfolded. I've been

1 really impressed by the professionalism the staff has
2 displayed in developing the solicitation, doing the
3 outreach and coming up with a recommendation. I have faith
4 and confidence in how you've executed your
5 responsibilities.

6 And I think, you know, it's a good thing to have
7 multiple applications that are really, really strong. It's
8 unfortunate not everything can be funded, but at this
9 juncture, I would like to move forward. I'm feeling
10 personally a lot of urgency on the need to advance battery
11 technology and to invest in California.

12 And I'll just stress, this is one step in the
13 journey. There are more steps and more funding coming down
14 the line. This is something that I think all of us feel
15 really strongly about. Energy storage is helping
16 decarbonize the grid, support reliability. And there's --
17 you know, having been in the R&D space for a while, I mean,
18 the talent we have in our state, is second to none. So I'm
19 eager to move forward with this.

20 And with that, I open up to my colleagues.

21 Let's see, Commissioner Gallardo, do you want to
22 begin?

23 COMMISSIONER GALLARDO: Thank you, Chair.

24 So, Anthony, really appreciate the presentation,
25 also the briefing that you and your team gave to my team.

1 That was really helpful in understanding everything.

2 I've been excited about this grant and all the
3 types of opportunities that it will produce. I do
4 appreciate folks providing us additional information and
5 their concerns, just as we said earlier. I feel like we
6 haven't had enough time to process those concerns. And so
7 I'm just wondering if I could get some help from Chief
8 Counsel's Office on the request for an audit. Could that
9 be something that's done afterward or does that -- would
10 that have to be done, decided on today? If we postpone the
11 decision to be able to do the audit, is that possible to
12 get a response?

13 MS. EVOLA: Christina Evola, Assistant Chief
14 Counsel of Transactions at the Energy Commission. Do you
15 need me to spell that, Mona? Okay. Thank you.

16 My understanding is that on September 9th, that
17 the Greater Sacramento Economic Council did submit a
18 request for an audit. So --

19 CHAIR HOCHSCHILD: Can you speak a little closer
20 to the mic?

21 MS. EVOLA: Is that --

22 CHAIR HOCHSCHILD: Yeah.

23 MS. EVOLA: But we did submit a request for an
24 audit to the California State Auditor. So we do have --
25 that process has already been initiated and we are in the

1 process of evaluating those statements. Would you like me
2 to talk to the substance of those?

3 COMMISSIONER GALLARDO: No, not necessarily the
4 substance. I'm just more focused on the process. So if
5 that was submitted yesterday, how would that impact us if
6 we're making -- if we were to take the vote today?

7 MS. EVOLA: I'm not aware of this process
8 limiting the ability to go forward.

9 CHAIR HOCHSCHILD: I think anyone at any time on
10 any issue can write a letter to the State Auditor
11 requesting an audit. And that's an independent process
12 from our votes, yeah.

13 COMMISSIONER GALLARDO: Yeah, I guess that's what
14 I'm wondering, if we could just --

15 MS. EVOLA: Yeah, this is an independent process
16 that the Greater Sacramento Economic Council has initiated.

17 COMMISSIONER GALLARDO: Okay. Thank you.

18 And then, Anthony, just curious, how would that
19 impact timing for you if we weren't to take a vote today?

20 and Well, I think, you know, the -- kind of
21 speaking to the Chair's point about urgency, you know, we
22 are eager to get this project started. You know, we're
23 the -- we've been working with Electrochemistry Boundary to
24 get the facility in line, to get things like equipment kind
25 of ready on order. Those do have long lead times

1 sometimes. And so I would guess any delay in approval
2 would just further delay, you know, the ultimate
3 establishment and opening of the facility, which, you know,
4 would impact just the ability for this facility to support
5 a greater battery innovator space in the state.

6 COMMISSIONER GALLARDO: All right. Thank you.
7 That helps just weighing all of the issues and being able
8 to make a vote with more information.

9 CHAIR HOCHSCHILD: Commissioner Mcallister yeah.

10 COMMISSIONER MCALLISTER: Yeah. Great. So just
11 to be clear, that process will move forward no matter what
12 we do today. And then -- and so whatever it turns up, you
13 know, obviously it may or may not be relevant to any
14 adjustments going forward. So I feel just an emergency to
15 move forward today.

16 And I would request, I mean, this is super
17 important. This is, you know, a large grant. And I would
18 request, you know, certainly in the Lead Commissioner
19 meetings of EPIC to just keep a tight, you know, read on
20 kind of progress. And then maybe a year from now, or at
21 some point, some relevant moment, we can have an
22 informational item about this at a business meeting. And,
23 you know, if the audit turns anything up, obviously, we'll
24 deal with that when the time comes.

25 But I, you know, agree that we really need -- I

1 mean, we have so many proliferating use cases for batteries
2 and all sorts of different, you know, needs and performance
3 requirements and everything. And we just have to be able
4 to roll with the developments, which are incredibly
5 exciting, as the Chair said. So, you know, performance
6 enhancements for different applications, just really the
7 state's got to be pushing on all of that and working with
8 industry to make progress more quickly.

9 So thanks for all the diligence. Appreciate you
10 and Cammy and Jonah and the whole team. I mean, I would
11 just agree with the Chair, also, that we have incredible
12 technical expertise and market knowledge at the Commission
13 on the battery team, on the batteries team. And I just
14 have a lot of faith in the soundness of the decision-making
15 sort of coming up in the California context and all the
16 input the staff provides on direction, so thanks.

17 CHAIR HOCHSCHILD: Thank you, Commissioner.
18 Vice Chair?

19 VICE CHAIR GUNDA: Thank you, Chair.

20 Commissioner Gallardo, thank you for raising
21 those questions. And thanks Chair and Commissioner
22 McAllister for your confirmation.

23 And I just wanted to like recognize the comments
24 that were made. So I just wanting to look at the Chief
25 Counsel and make sure I understand. So the process for,

1 you know, the auditing has already started?

2 MS. EVOLA: That is correct.

3 So as we move forward, you know, the audit
4 reports are typically done How? You know, what's the
5 typical process? We hear back from --

6 MR. RANCHOD: Vice Chair, good question. So our
7 understanding is that the request for the audit has been
8 submitted to the State Auditor's Office, but I'm not aware
9 of the timeline for them acting on that and what the
10 timeline would be for conducting an audit and preparing a
11 report. At a minimum, months.

12 VICE CHAIR GUNDA: Okay. I think, you know, just
13 the comments that were made, really important for the CEC,
14 you know, to have the transparency and the credibility of
15 being an agency that pushes out a lot of money for a clean
16 energy transition. So I think, you know, look forward to
17 tracking the audit process closely and, you know, want to
18 make sure that we publicly comment on that when that is
19 done.

20 So with that, I'll move to support.

21 CHAIR HOCHSCHILD: Okay. Commissioner Skinner,
22 anything from your side? Okay, thanks.

23 I have a statement to read here.

24 So prior to voting on Item 6, a proposed
25 resolution to approve a grant agreement of which UC

1 Berkeley is a sub-recipient, I note for the record pursuant
2 to a Government Code section 1091.5(a)(9) that I've just
3 started teaching a course on climate at the UC Berkeley
4 Goldman School of Public Policy. This is considered a non-
5 interest under conflict of interest law because the grant
6 agreement does not involve the department at UC Berkeley
7 where I'm teaching my course. I have no direct or indirect
8 financial interest in the grant agreement. With this
9 disclosure, I am able to vote on this item.

10 Thank you, Chief Counsel's Office, for preparing
11 that statement.

12 With that, I would welcome a motion from
13 Commissioner McAllister on Item 6.

14 COMMISSIONER MCALLISTER: I'll move Item 6.

15 CHAIR HOCHSCHILD: Is there a second from the
16 Vice Chair?

17 VICE CHAIR GUNDA: Second the item.

18 CHAIR HOCHSCHILD: All in favor say aye.

19 Commissioner McAllister?

20 COMMISSIONER MCALLISTER: Aye.

21 CHAIR HOCHSCHILD: Vice Chair Gunda?

22 VICE CHAIR GUNDA: Aye.

23 CHAIR HOCHSCHILD: Commissioner Gallardo?

24 COMMISSIONER GALLARDO: Yeah, I just want to make
25 a comment. Just thinking about all the information that

1 came up here and knowing how diligent the staff is on the
2 processes to review all applications, I want to say on
3 balance, and given also the fact that the audit requests
4 can continue regardless of our vote, I will vote in
5 support.

6 CHAIR HOCHSCHILD: Thank you.

7 CHAIR HOCHSCHILD: Commissioner Skinner?

8 COMMISSIONER SKINNER: Aye.

9 CHAIR HOCHSCHILD: And I vote aye as well. Item
10 6 passes unanimously. Thank you.

11 We'll turn now to Item 7. And after Item 7, I'd
12 like to break for lunch and go to closed session. So let's
13 just plan on that. Enabling Electric Vehicles as
14 Distributed Energy Resources. I welcome Antonio Gomez.

15 MR. GOMEZ: Good morning, Chair, Vice Chair,
16 Commissioners. My name is Antonio Gomez. I'm a Mechanical
17 Engineer on the transportation team within the Energy
18 Research and Development Division. Today, I'm here to
19 present nine proposed awards from this GFO Enabling
20 Electric Vehicles as Distributed Energy Resources.

21 Next slide, please.

22 So California's transportation sector is
23 undergoing rapid electrification. The figure on the left
24 here shows the light-duty battery-electric vehicle
25 population in California today. As the number of EVs

1 increases, so does the additional load on California's
2 already constrained and aging electric grid. This is where
3 vehicle grid integration, or VGI, can play a key role. VGI
4 is any method of altering the time, charging level or
5 location at which EVs can charge and discharge with the
6 goal of reducing or shifting loads in ways that benefit the
7 grid and rate payers. Through VGI, EVs can become mobile
8 grid resources rather than just another load.

9 Next slide, please.

10 A study by the Union of Concerned Scientists
11 recently analyzed the potential value of VGI for the grid
12 in California. They assumed roughly 30 million EVs on the
13 road in 2045. And if just half of the load from those EVs
14 participated in VGI, it would result in California energy
15 system savings of \$4 billion to \$10 billion per year.

16 The columns represent different proportions of
17 managed charging and bidirectional charging, or V1G and
18 V2G. And as you move from the left to the right, the
19 proportion of V2G increases. These findings highlight the
20 importance of VGI for rate affordability and grid
21 reliability. However, reaching this level of VGI by 2045
22 requires investments in research and development today.

23 Next slide, please.

24 Luckily, that's exactly what we're here to
25 discuss. This EPIC-funded solicitation was targeted at

1 accelerating the use of EVs as DERs in California, and it
2 was split into three groups.

3 Group one was for studies meant to address
4 existing VGI knowledge gaps and explore specific mechanisms
5 that could help the state achieve its electrification
6 goals.

7 Group two was for applied R&D aiming to reduce
8 the cost of customers adopting vehicle to everything or V2X
9 through avenues like improved system efficiency, reducing
10 component cost, and reducing total cost of ownership.

11 And group three was for applied R&D aimed at
12 developing innovative, accurate, and cost-effective
13 submetering solutions that allow customers to separate
14 their EV loads from other site loads in order to facilitate
15 VGI adoption.

16 Next slide, please.

17 Starting with group one, one of the potential
18 value streams for VGI is its role in solving distribution
19 grid needs and avoiding or deferring traditional grid
20 upgrades. While some studies have attempted to quantify
21 this value at scale, gaps remain on understanding the role
22 of various specific mechanisms that could be used to
23 realize this value.

24 This project with EPRI will model real-world
25 California IOU distribution feeders, project the impact of

1 future EV load growth, and apply practical mechanisms being
2 explored today, including flexible connections,
3 distribution grid services, time-varying pricing, and
4 hybrid strategies to assess their potential benefits.

5 EPRI will develop methods to infer statewide
6 insights from this feeder-level analysis.

7 And EPRI will also collaborate with community-
8 based organizations to identify barriers and strategies for
9 ensuring equitable access to VGI and its benefits.

10 Next slide, please.

11 Another key challenge for VGI and demand
12 flexibility in California is the complexity of realizing
13 the full benefit stack for unbundled customers that receive
14 generation from community-choice aggregators, or CCAs, and
15 distribution services from an IOU.

16 This project with San Diego Community Power will
17 collaborate with Pacific Northwest National Lab and
18 Optiwatt to analyze data from an ongoing managed charging
19 pilot and assess the bulk grid benefits of reducing
20 procurement costs in our California's recently adopted
21 slice-of-day resource adequacy framework.

22 SDCP will also collaborate with San Diego Gas &
23 Electric to determine the value of managed charging for
24 addressing operational constraints on the distribution
25 grid, like local congestion and power quality.

1 The project will provide insights into how EV
2 load management can optimize in situations where CCAs
3 provide customers with unbundled service, which represents
4 over 30 percent of load in IOU territories.

5 Next slide, please.

6 Moving on to group two, this project with Rivian
7 will develop a bidirectional charging system comprised of
8 two parts, an AC bidirectional EVSE and an automatic
9 islanding device with load-shedding capabilities that will
10 enable vehicle-to-grid and vehicle-to-home use cases.

11 Rivian estimates their total installed cost will
12 be 35 to 65 percent less than currently available DC VDEX
13 offerings. This is because their AC VDEX solution carries
14 out the power conversion with the vehicle's onboard
15 charger, reducing the amount of required off-board
16 equipment.

17 Additionally, Rivian will pursue open industry
18 standards, ensuring that these products will enable
19 interoperable bidirectional AC charging with compatible EV
20 models from any manufacturer.

21 Next slide, please.

22 This project with Lucid aims to develop a cost-
23 effective bidirectional onboard charger, or OBC, with
24 advanced V2X capabilities. This OBC will implement an
25 industry-first single DC-to-AC power conversion stage using

1 gallium nitride semiconductors instead of the industry-
2 standard silicon carbide. According to Lucid, this change
3 alone can reduce the OBC cost by 54 percent and size by 20
4 percent.

5 This will be the first single stage OBC that is
6 designed to efficiently perform V2X through DC or AC
7 pathways without substantially increasing the cost of the
8 vehicle. Lucid plans to integrate this technology into
9 their next-generation vehicles, ensuring that it's ready
10 for widespread adoption and can deliver tangible benefits
11 to users at scale.

12 Additionally, Lucid plans to license this
13 technology to other interested OEMs, allowing the benefits
14 of this project to reach even more potential customers.

15 Next slide.

16 This project with Nuvve will develop an energy
17 management kit, or EMK, that serves as a home energy hub
18 and supports bidirectional charging, dynamic load
19 management, and energy orchestration with any brand of
20 solar, storage, and EV charging equipment.

21 Additionally, the EMK will optimize cost savings
22 and offer automated demand response, virtual power plant,
23 and islanding capabilities, transforming homes into
24 resilient grid-responsive assets.

25 The EMK will be designed to mitigate capacity

1 limitations at the point of common coupling, enabling the
2 addition of EV chargers without upgrading utility services.

3 The EMK will be developed in collaboration with
4 UC Davis and UC Irvine and will be demonstrated in at least
5 five single-family homes in California in partnership with
6 Kia and Wallbox.

7 Next slide, please.

8 One of the opportunities for V2G going forward is
9 realizing its location-specific value as a DER. Medium-
10 and heavy-duty fleets that rely on return-to-base charging
11 are especially interesting from a V2G perspective because
12 of their predictable operations.

13 This project with UC Riverside will develop
14 technologies and strategies to maximize revenue and
15 benefits from various V2G services and electric trucks can
16 deliver and minimize the negative effects of battery
17 degradation brought on by V2G participation.

18 They will also demonstrate V2G at an SBR Express
19 warehouse in Ontario, California, with medium-duty box
20 trucks in partnership with EVO Electric and Tellus Power.
21 This warehouse is located near the end of an SCE
22 distribution feeder, which is often the weak point of a
23 circuit, making an ideal location for understanding the
24 local value of using V2G for distribution grid services
25 such as voltage support.

1 Next slide.

2 It's Electric is already addressing the lack of
3 urban charging accessibility with their curbside bring-
4 your-own-cable charging system. Drivers sign up for the
5 service and receive a charging cable that allows them to
6 connect their EVs to its electric charging pedestals.
7 These pedestals are connected to host buildings with
8 existing spare capacity and each one includes a sub-meter
9 for accurate billing.

10 This project builds on their current model by
11 making their charging pedestal and cable capable of
12 bidirectional charging, so drivers can either charge or
13 discharge depending on the vehicle and grid needs.

14 The project demonstration will take place at the
15 UC Berkeley-Richmond Field Station using a grid simulator
16 to show how this technology can support grid stability.

17 At scale, this model will expand access to
18 vehicle-to-grid and multi-unit housing in urban
19 neighborhoods while creating thousands of flexible loads to
20 reduce peak demand and increase resiliency.

21 Next slide.

22 Now I'm moving on to group three. So submetering
23 is allowed today but it can be expensive and very
24 administratively burdensome. This project with NeoCharge
25 aims to tackle these issues with their submetering

1 ecosystem called Fusion that will enable customers to
2 participate in residential EV submetering without requiring
3 electrical panel upgrades, a network DVSE or a separate
4 utility meter.

5 Fusion uses multiple low-cost data sources
6 including a circuit pauser, CT clamp meters, EV telematics
7 and EVSE data streams. With this solution, if one data
8 stream is disrupted, revenue-grade accuracy is preserved
9 through redundant measurement pathways.

10 NeoCharge will also develop a Meter Data
11 Management Agent, or MDMA, platform that will embed all of
12 the CPUC-mandated MDMA functions into the NeoCharge app.
13 Together, the measurement framework and app will allow
14 NeoCharge customers to participate in EV submetering for
15 roughly 30 percent of what it costs to sub-meter through an
16 EVSE today.

17 This project will conclude with the demonstration
18 of Fusion at 75 single-family homes across California, at
19 least half of which will be in disadvantaged or low-income
20 communities.

21 Next slide, please.

22 Submetering in commercial and multi-unit dwelling
23 settings come with additional set of challenges. And in
24 this project, UC Davis in collaboration with PowerFlex will
25 address these by developing a submetering platform that

1 uses EVSE embedded meters and low-cost external meters to
2 enable commercial submetering use cases.

3 The first use case is submetering by EVSE group.
4 This could look like grouping the submeters in the yellow
5 box on the right, one, two, three, and four, so that they
6 get built automatically to separate entities or in this
7 case, departments.

8 Submetering could also be done at the circuit
9 level, which could enable a fleet with existing non-
10 networked EVSE to sub-meter an entire circuit through a
11 low-cost external meter.

12 Lastly, user-based submetering. Now this is a
13 stretch goal for this project, but it would enable cost
14 allocation without fixed EVSE assignments, which could
15 enable submetering for residents and multi-unit dwellings.
16 The PowerFlex platform would reduce the administrative
17 overhead for site hosts by automatically attributing costs
18 to the correct party and would enable them to access lower
19 electricity rates for EV charging.

20 This technology will be demonstrated at the
21 County of Santa Barbara administrative parking lot pictured
22 on the slide that houses 30 level two EVSE. Once proven,
23 UC Davis and PowerFlex will publish recommendations for
24 other EV service providers to follow if they would like to
25 implement virtual submetering.

1 Next slide, please.

2 Staff recommends the approval of these nine
3 agreements and adoption of staff's determination that these
4 projects are exempt from CEQA.

5 That concludes my presentation. I'm happy to
6 take any questions. We also have representatives from the
7 project teams online and in person if you have any
8 additional questions.

9 Thank you.

10 CHAIR HOCHSCHILD: Thank you.

11 Let's go to public comment on Item 7.

12 MS. BADIE: Thank you, Chair.

13 The Commission welcomes public comment on Item 7
14 at this time. If you're with us in the room, we're asking
15 folks to use the QR code in the back of the room. And if
16 you're on Zoom, you'll use the raise-hand feature, or star
17 nine if joining by phone.

18 And I'm not seeing anyone in the room for this
19 item. So I want to transition over to Zoom.

20 First, we'll hear from Suma. Suma, I'm going to
21 open your line. You'll unmute on your end. We are asking
22 for comments to be two minutes or less. There will be a
23 timer on the screen.

24 MS. JOTHIBASU: Yeah. Can you hear me?

25 MS. BADIE: Yes.

1 MS. JOTHIBASU: Yeah, this is Suma Jothibasu.
2 I'll spell my name. S-U-M-A J-O-T-H-I-B-A-S-U. And I'm
3 affiliated with Electric Power Research Institute, EPRI.

4 So EPRI is very honored to receive this award in
5 group one, which is addressing knowledge gaps hindering VGA
6 adoption, so we are very honored.

7 And EPRI is a nonprofit organization with a
8 mission to help ensure public have access to clean and
9 safe, reliable and affordable electricity. This award will
10 help in this objective of our company. The project is
11 focused on evaluating technical and economic merits of VGI
12 through detailed analysis on over 100-plus California IOU
13 feeders.

14 Yes, as the project briefing, we plan to engage
15 with the TAC members to identify scalable and practical VGI
16 strategies, which is feasible in representative IOU
17 territories.

18 So very happy to receive or have this
19 opportunity. And I would like to thank CEC for making this
20 research possibility.

21 Thank you.

22 MS. BADIE: Thank you.

23 Next, we're going to hear from Stephen Rosenblum.
24 Stephen, I'm going to open your line and just a reminder to
25 spell your name for our court reporter. And there will be

1 a timer on the screen. We're asking for comments to be two
2 minutes or less.

3 MR. ROSENBLUM: Hello, Commissioners. This is
4 Stephen Rosenblum, S-T-E-P-H-E-N R-O-S-E-N-B-L-U-M, from
5 Climate Action California.

6 I'd like to applaud this, your support for this
7 proposal. As was pointed out by, I think, Chair
8 Hochschild, there are a lot of -- there are almost 2
9 million or maybe more than 2 million BEVs on the road
10 today. Each one has about 60 gigawatt hours of storage,
11 which could really help with our storage capabilities if
12 they were bidirectional. And they're much larger than home
13 units, which are typically a sixth of that size. So this
14 is technology that really needs development.

15 When Commissioner Skinner was a senator, she
16 introduced SB 233 to try and catalyze this development.
17 And I hope that the Commission will try and move this
18 forward today. I think this is a huge step in the right
19 direction.

20 Thank you.

21 MS. BADIE: Thank you.

22 Next, we're going to hear from Shannon. Shannon,
23 I'm going to open your line. You'll unmute on your end.
24 It is helpful if you can state and spell your name for a
25 current reporter. And there will be a timer on the screen

1 for two minutes. Shannon, hold on. I think I lost your
2 hand. Hold on one moment. All right, Shannon, I think
3 your line is open.

4 MS. DULANEY: Hi, thank you so much. My name is
5 Shannon Delaney, and that's spelled S-H-A-N-N-O-N
6 D-U-L-A-N-E-Y. And I'm Director of Public Affairs for It's
7 Electric.

8 I just wanted to also thank the Commission for
9 their vote on this today. It's Electric is a curbside EV
10 charging provider, and we are -- we have our two chargers
11 live in San Francisco with more coming in Alameda this
12 month. And I'm really excited to be able to work with UC
13 Berkeley to develop this bi-directional curbside charger.
14 And just wanted to thank you for your support, so thank you
15 so much.

16 MS. BADIE: Thank you.

17 And next, we're going to hear from Anna Bella
18 Korbatov. I'm going to open your line.

19 MS. KORBATOV: Thank you. That's A-N-N-A
20 B-E-L-L-A K-O-R-B-A-T-O-V. And I'm with Nuvve Holding
21 Corporation. I represent Nuvve Holding Corporation, where
22 I serve as Vice President of regulatory affairs for Fermata
23 Energy, a Nuvve company.

24 Founded in 2010 and headquartered in San Diego,
25 Nuvve is a global leader in vehicle-to-grid technology and

1 intelligent energy services. Thank you for the opportunity
2 to speak today regarding our award under CEC GFO-24-302 for
3 our project titled BRIDGE, which stands for bi-directional
4 residential integration for a dispatchable grid.

5 This project addresses critical barriers to
6 residential V2X adoption by developing an affordable plug-
7 and-play energy management kit, EMK, that integrates
8 electric vehicles, rooftop solar, and battery storage into
9 a single grid interactive solution.

10 And on behalf of Nuvve and our project partners,
11 New Sun Road, Kia, UC Davis, UC Irvine, and the Climate
12 Center, I'd like to extend our sincere thanks to the
13 Commissioners and CEC staff for issuing this important
14 funding opportunity and for recognizing the role that bi-
15 directional charging and microgrid solutions play in
16 advancing California's goals for transportation
17 electrification, resilience, and decarbonization.

18 I'd also like to acknowledge and thank our
19 Commission agreement manager, Ron Leviev (phonetic), for
20 his dedicated support and guidance during the post-award
21 process.

22 The EMK energy management kit will help reduce
23 household energy costs, provide backup power during grid
24 outages, and enable residential participation and demand
25 response in virtual power plant programs, ultimately

1 strengthening grid resilience. And as mentioned -- Anna,
2 I'm so sorry, Anna. We're losing some of your audio.

3 MS. KORBATOV: -- in its pilot phase, the EMK
4 will be deployed in five California homes, demonstrating
5 how this integrates -- can you all hear me again?

6 MS. BADIE: Sorry, Anna, your audio is cutting in
7 and out. If you want to --

8 MS. KORBATOV: Yeah.

9 MS. BADIE: -- wrap up?

10 MS. KORBATOV: Sure. I just want to say we're
11 excited to collaborate with our partners to implement these
12 solutions and share best practices from this project. And
13 we hope the lessons learned from BRIDGE will pave the way
14 for more households across the country and throughout the
15 state to adopt affordable, accessible residential V2G
16 solutions.

17 Thank you.

18 MS. BADIE: Thank you so much.

19 All right, that is all the raised hands for this
20 item. Back to you, Chair.

21 CHAIR HOCHSCHILD: Thank you.

22 Let's go to Commissioner discussions, starting
23 with Commissioner McAllister.

24 COMMISSIONER MCALLISTER: Well, great. I think
25 this is an amazing set of projects. Really appreciate

1 bringing it forward. And we just know how much capacity is
2 rolling around out there, and we need to mobilize it. And
3 we have a big, you know, goal of 7,000 megawatts of load
4 flex. And the vehicle population out there is a really key
5 resource to make that happen.

6 And I love the diversity, EPRI, universities,
7 CCA, private industry partners, and also the coverage
8 across all the state and lots of different sort of
9 approaches, business models, niches. So this is going to
10 provide a massive amount of learning. And we need this,
11 you know, for not just sort of, you know, the resiliency
12 impacts broadly but, you know, specifically like reducing
13 peaks, you know, filling valleys, decarbonization benefits,
14 and in particular, downward pressure on rates, which is an
15 absolute possibility that we just have to harvest in the
16 next few years. And EVs are right at our doorstep waiting
17 to help with that challenge.

18 And so I think two years from now, three years
19 from now, we're going to be in a very different place with
20 respect to how we're managing the grid and vehicles are
21 right in the middle of that evolution. So I just
22 appreciate all the grantees and commenters and very much in
23 support of this item.

24 CHAIR HOCHSCHILD: Thank you.

25 Commissioner Skinner?

1 COMMISSIONER SKINNER: Thanks so much, Chair.
2 And thank you -- let me lower my hand -- Commissioner
3 McAllister for your comments. I feel similarly. I'm
4 really pleased. And thank you for your leadership in this.

5 I'm very pleased that EPIC developed this
6 solicitation to support V2G integration, and to also
7 explore the barriers that are creating these high costs of
8 bidirectional charging and supporting research and
9 demonstration projects.

10 I think those of us on the Commission know this,
11 but maybe some of the observers of our business meeting
12 today don't realize, that EVs are mini power plants. Their
13 batteries, as someone in the public just commented, have
14 five to eight times the power storage capacity of that
15 typical home battery pack. And as such, they are ideal
16 potentially at some point when we really unleash this to
17 provide backup power for our grid, to provide power, say,
18 to buildings in our homes, all of that.

19 And I authored SB 59, which was also mentioned,
20 in order to get California to unleash this potential. So
21 I'm very, very happy, while this EPIC solicitation was not
22 related to that legislation, I'm just very happy that we
23 are funding this range and this diversity of research and
24 pilot projects that demonstrate, once again, California's
25 leadership in investing in technologies and research that

1 will completely unleash the types of innovations that we
2 need to both move us off fossil fuels, to get us the
3 resiliency that we need, to address the affordability so
4 that as we electrify, we can utilize all of the different
5 tools at our disposal and also enable Californians to take
6 advantage of the economic and other benefits of this V2G
7 technology.

8 So really appreciative. Very happy. I'm very
9 thankful to staff for their work on it and the development
10 of this and proud to be an energy Commissioner backing this
11 type of funding.

12 Thank you.

13 CHAIR HOCHSCHILD: Thank you so much.

14 Let's go to Vice Chair Gunda.

15 VICE CHAIR GUNDA: Thank you, Chair.

16 Antonio, thank you so much for the presentation.
17 Just wanted to say a great set of projects.

18 You know, one, I appreciate the coordination
19 amongst different divisions. I know these kind of
20 solicitations don't come together easily and I agree with
21 Commissioner McAllister on the load flexibility opportunity
22 here. I appreciate the three broad tracks of the
23 solicitations. Looking forward to following up the work.

24 Thank you.

25 CHAIR HOCHSCHILD: Commissioner Gallardo?

1 COMMISSIONER GALLARDO: Yeah, thank you, Antonio,
2 to you and your team for the briefing and the wonderful
3 presentation, all the work that went into this selection.

4 I, too, am excited for all the reasons mentioned
5 and also the outcomes that will result for the communities,
6 and neighborhoods where these projects will be aside from
7 the entire state. So I wanted to also uplift that piece.

8 And that's it. Thank you.

9 CHAIR HOCHSCHILD: Well, thank you.

10 Look, this is a terrific set of projects. For
11 me, this ties many different strands together.

12 I want to say in one sense, this is what
13 environmental justice looks like, actually, here making use
14 of clean battery power in electric vehicles to reduce
15 energy demand at critical places, which reduces pollution.
16 You know, we've had a lot of talk about the aging,
17 polluting gas peaker fleet in the state. And this is
18 really part of the way we move beyond that.

19 I would highlight, one thing that's interesting
20 to track in the electric vehicle space is that the range of
21 the vehicles is getting longer every single year. So we're
22 now at 282 miles as the average range of EV. Five years
23 ago, that was probably closer to 180 miles. So we're
24 actually just improving pretty rapidly and that's more
25 battery capacity to help serve the needs of the grid.

1 You know, I have been especially inspired by what
2 Oakland has done. The \$28 million project converting with
3 the leadership of Zoom, you know, 28 -- I'm sorry, 74
4 electric buses, the entire school bus fleet in the City of
5 Oakland, and now that's the largest vehicle-to-grid project
6 in the United States. And we can do so much more of that.

7 So I'm thrilled to see this constellation of
8 projects. I appreciate the diversity within the portfolio.

9 I do want to invite Drew, you've been talking
10 about this for a long time, as well, anything you wanted to
11 add? You're very passionate, I know, on this topic.

12 EXECUTIVE DIRECTOR BOHAN: No, I would just say
13 these projects look like they're going to make it. The big
14 barrier seems to be it's difficult. You can do it right
15 now with your own vehicle. You can set it up where you can
16 discharge back to the grid, but it's costly and it's
17 difficult. So eager to see the fruits of this research.

18 CHAIR HOCHSCHILD: Okay, and then Commissioner
19 McAllister, your --

20 COMMISSIONER MCALLISTER: Fantastic.

21 CHAIR HOCHSCHILD: -- you were going to make a
22 comment.

23 COMMISSIONER MCALLISTER: I just wanted to
24 take -- to just point out a parallel that we -- it's sort
25 of in our zeitgeist here at the Commission, but it's the

1 refrigerator, the humble refrigerator, okay? So Art
2 Rosenfeld, you know, the sort of mensch of energy
3 efficiency, way back in the day, that one of the, just the
4 poster of energy efficiency and why it's a good thing was
5 the refrigerator.

6 And refrigerators, you know, in the early
7 seventies were incredibly inefficient. The energy
8 consumption was going up. The manufacturers weren't
9 putting much insulation. You know, all the seals were
10 horrible, I mean, and they iced up, people had to defrost
11 them. I mean, they were bad products that used a lot of
12 energy.

13 And then, you know, fast forward, due to
14 standards that California originally developed, but fast
15 forward, the manufacturers figured out how to be much,
16 much, much more efficient. The energy consumption went
17 down by three quarters of a typical refrigerator. The
18 volume went up, the future mix went up, and they got
19 cheaper.

20 So that is a massive success story of just a huge
21 resource that was harvested due to California's
22 initiatives. And there are a lot of parallels with the EV
23 space, as the Chair said; right? The functionality and all
24 the features, feature set and the finish, all the elements
25 that consumers want out of these things, including energy

1 efficiency, are going through the roof and battery costs
2 are coming down, you know, and features are going up.

3 So I feel like there's a real virtuous cycle here
4 that is emblematic of the California approach to working
5 with industry to push innovation and to get it out there in
6 the marketplace so it can scale. And I think this set of
7 projects is absolutely that.

8 And with that, I'll move the item.

9 CHAIR HOCHSCHILD: All right, Commissioner
10 McAllister has moved Item 7.

11 Is there a second from Commissioner Skinner?

12 COMMISSIONER SKINNER: Second.

13 CHAIR HOCHSCHILD: Okay, all in favor, say aye.
14 Commissioner McAllister?

15 COMMISSIONER MCALLISTER: Aye.

16 CHAIR HOCHSCHILD: Commissioner Skinner?

17 COMMISSIONER SKINNER: Aye.

18 CHAIR HOCHSCHILD: Commissioner Gallardo?

19 COMMISSIONER GALLARDO: Aye.

20 CHAIR HOCHSCHILD: Vice Chair Gunda?

21 VICE CHAIR GUNDA: Aye.

22 CHAIR HOCHSCHILD: And I vote aye as well. Item
23 7 passes unanimously.

24 We will go to our Chief Counsel for a brief
25 announcement.

1 MR. RANCHOD: Thank you, Chair. So for closed
2 session, the basis is pursuant to Government Code section
3 11126(a)(1). CEC may adjourn to closed session with its
4 legal counsel to consider the appointment, employment,
5 evaluation of performance or dismissal of a public employee
6 or to hear complaints or charges brought against that
7 employee by another person or employee.

8 And pursuant to Government Code Section
9 11126(e)(1), CEC may adjourn to closed session with its
10 legal counsel to discuss pending litigation. The matters
11 are stated in Item 14B of the agenda.

12 CHAIR HOCHSCHILD: All right, thank you. We'll
13 be back after lunch.

14 COMMISSIONER MCALLISTER: And I just want to make
15 an announcement. I have to head to San Francisco to give a
16 lecture this evening, so I will not be back for the items
17 of the afternoon, but there's still a quorum, so --

18 (The Commission convened closed session from 12:27
19 p.m. until 1:50 p.m.)

20 CHAIR HOCHSCHILD: All right, we're back from
21 closed session. Let's continue with the agenda, and we
22 will move on now to item 8, National Offshore Wind Research
23 and Development Consortium.

24 MS. GREENWALD: Good afternoon, Chair, Vice
25 Chair, and Commissioners. My name is Katherine Greenwald.

1 I'm a Renewable Generation Specialist in the Energy
2 Research and Development Division. I am here seeking your
3 approval for a portfolio of subawards co-funded from CEC's
4 existing Offshore Wind Block Grant Program with the
5 National Offshore Wind Research and Development Consortium,
6 or NOWRDC. CEC is one of seven state members of NOWRDC and
7 regularly participates in its government industry R&D
8 forums.

9 This block grant program provides a unique model
10 that provides a way for states to work together and pool
11 resources, working towards a common goal. While
12 coordination among state entities requires extra effort,
13 with this partnership, we are able to leverage consortium
14 partners as we scale up actions toward full-scale
15 deployment of offshore wind in California.

16 Next slide, please.

17 I'm going to touch on the benefits of offshore
18 wind more generally before moving on to the portfolio of
19 subawards. We recognize that a thriving offshore wind
20 industry will provide economic and environmental benefits,
21 as well as improve grid reliability.

22 California is taking coordinated steps to support
23 offshore wind development, working to advance California's
24 ambitious offshore wind goals and the existing projects in
25 the North and Central Coast, which will drive new jobs and

1 economic opportunities for California and the Pacific West
2 and serve electricity needs while improving air quality.

3 Investing in partnerships that support critical
4 research and development and data sharing are an important
5 step toward reaching these goals.

6 Next slide, please.

7 More specifically to the block grant agreement,
8 the benefits to Californians include leveraging other
9 states' funding to advance technologies to support
10 California's clean energy targets and offshore wind
11 planning goals, 2 to 5 gigawatts by 2030, 25 by 2045.

12 By reducing the time and resources needed for
13 assembly, maintenance, and transportation processes, these
14 R&D efforts can accelerate the deployment for floating
15 offshore wind projects.

16 A focus on modular and adaptable infrastructure
17 aligns with the need for versatility and scalability in the
18 renewable energy sector, ensuring that as the technology
19 and demand for floating offshore wind power grow, the
20 supporting infrastructure can evolve without imposing
21 further significant costs. By assessing and demonstrating
22 the use cases of autonomous monitoring technologies,
23 researchers can find cost-effective ways to assess the
24 environmental impact of floating offshore wind farms. This
25 can fill key knowledge gaps and lead to more streamlined

1 permitting processes, potentially reduce permitting costs,
2 and in turn, lowering energy costs for ratepayers.

3 Next slide.

4 The principal purpose of the CEC NOWRDC block
5 grant program is to advance the state of offshore wind
6 energy technologies that are suited for California's
7 conditions and address various technological,
8 environmental, and cost barriers to help accelerate the
9 deployment of offshore wind in California.

10 The \$5 million grant agreement to initiate the
11 block grant program was approved by the Commission in March
12 of 2023 to co-develop a cost-share solicitation whose
13 subawarded projects advance the 2021-2025 EPIC Investment
14 Plan. NOWRDC is to administer and manage the proposed
15 subaward agreements.

16 Next slide.

17 The NOWRDC Solicitation 4.0 was jointly developed
18 by the NOWRDC leadership team, which included individuals
19 from the U.S. Department of Energy, Bureau of Ocean Energy
20 Management, Carbon Trust, New York State Energy R&D
21 Authority, Massachusetts Clean Energy Center, and the CEC,
22 with funding from New York, Massachusetts, and CEC.

23 The competitive solicitation was open from August
24 through November 2024. There were three available funding
25 categories to select from that aligned with the technical

1 maturity of their proposal. Applicants could select more
2 than one category to receive additional funding. Topic
3 areas of focus included installation improvements through
4 innovation in ports and vessels for floating offshore wind
5 development, floating offshore wind transmission technology
6 advancement, and the evaluation and demonstration of
7 autonomous environmental monitoring technologies for
8 deployment in offshore wind.

9 Next slide, please.

10 NOWRDC managed the application portal, posted an
11 informational webinar, and pulled from their extensive
12 consortium network to assemble over 50 subject matter
13 experts to help score the 32 submitted proposals. They
14 facilitated the scoring meetings and compiled notes to
15 share with the NOWRDC leadership team.

16 The leadership team then met to review the
17 scoring results and entity funding requirements to allocate
18 the most funding across the highest scoring projects. A
19 portfolio that included seven proposed awards were selected
20 to receive over \$7 million in grant funding from the co-
21 funders.

22 Next slide.

23 The seven proposed projects are shown in brief on
24 this slide. You'll see awards ranging from \$225,000 to
25 \$1.1 million. While no CEC funds are directly going to

1 Teledyne Marine, the project is included for approval as
2 its selection resulted from the block grant funded
3 solicitation. CEC staff will attend project updates and
4 maintain oversight of the entire co-funded portfolio.

5 The portfolio skews toward funding demonstration
6 category projects with four of the seven projects,
7 including a demonstration in their scope. The portfolio
8 tilts towards the environmental monitoring topic area with
9 five of seven projects.

10 Next slide, please.

11 Lastly, I'd like to highlight two of the seven
12 proposed projects, one from each of the funded topic areas.
13 The first is Sperra's Project. This project, with \$850,000
14 in CEC funding, aims to address the U.S. offshore wind
15 industry's challenges related to port infrastructure,
16 vessel availability, and supply chain limitations by
17 developing a 3D-printed concrete floating construction
18 station to assist the manufacturing, assembling, launching,
19 and retrieval of concrete floating offshore wind
20 foundations.

21 By leveraging the existing concrete supply chain
22 and their advanced 3D-printing technology developed with
23 previous EPIC funding, the floating construction station
24 enables non-specialized ports to support floating offshore
25 wind deployment, helping to overcome infrastructure

1 bottlenecks. The project will design, fabricate, and
2 demonstrate a scaled prototype at the Port of Los Angeles,
3 advancing the technology readiness level while generating a
4 conceptual design for a full-scale platform.

5 Collaboration with offshore wind developers and
6 integration with Sperra's 3D-printed floating offshore wind
7 foundation model will facilitate knowledge sharing and
8 accelerate commercial adoption.

9 Next slide, please.

10 The Monterey Bay Aquarium Research Institute, or
11 MBARI, with just over \$670,000 in CEC funding, will develop
12 an environmental monitoring system for a floating offshore
13 wind farm that uses autonomous underwater vehicles equipped
14 with sensor packages. The design will be developed with
15 guidance from an advisory board composed of government and
16 industry representatives.

17 A fleet of MBARI's long-range autonomous
18 underwater vehicles will be combined with an underwater
19 docking system that provides power and a communications
20 gateway to realize highly configurable, multi-vehicle
21 observing network capable of multiple modes of sensing and
22 sampling. This system provides a means by which
23 environmental monitoring around floating offshore wind
24 development infrastructure could be accomplished absent
25 sustained crewed vessel support and human in-the-loop

1 intervention.

2 The deployment will be performed in Monterey Bay
3 and will be tailored to include instrumentation,
4 measurements, scheduling, and routing that is more highly
5 aligned with the envisioned immediate needs for wind energy
6 area monitoring offshore California with an objective to
7 help inform regulatory permitting requirements.

8 Next slide, please.

9 The staff recommendation is that the CEC approve
10 the seven subawards from the CEC's Offshore Wind Block
11 Grant Program with the National Offshore Wind Research and
12 Development Consortium and adopting staff's recommendation
13 that this action is exempt from CEQA.

14 We have representatives from NOWRDC here in
15 person and on the phone if there are any questions for
16 them.

17 Thank you, and that concludes my presentation.

18 CHAIR HOCHSCHILD: Thank you so much.

19 Let's go to public comment on Item 8.

20 MS. BADIE: Thank you, Chair. The Commission
21 welcomes public comment on Item 8 at this time. If you are
22 in the room with us, you'll use the QR code or you can
23 visit the Public Advisors table in the back of the room.
24 And if you are on Zoom, please use the raise-hand feature
25 on your screen, or star 9 if you're joining by phone.

1 That's going to let us know you would like to comment.

2 And we don't have anyone in the room with us.

3 I'm going to transition over to Zoom.

4 CHAIR HOCHSCHILD: I think there is someone in
5 the room. Come on up.

6 MS. BADIE: Thank you, Kori. Are you Kori?

7 MS. GROENVELD: Yes.

8 MS. BADIE: Thank you, Kori. Kori Groenveld, go
9 ahead.

10 MS. GROENVELD: Good afternoon, and thank you for
11 this opportunity to provide public comment. I'm Lori
12 Groenveld. Should I spell it for -- K-O-R-I, Groenveld,
13 G-R-O-E-N-V-E-L-D, and I'm a Senior Program Manager at the
14 National Offshore Wind Research and Development Consortium,
15 or NOWRDC for short. I've helped lead this program since
16 its inception.

17 And on behalf of NOWRDC, including our Executive
18 Director, Lindie Hice-Dunton, and Deputy Executive
19 Director, Christine Sloan, who are on the phone, I want to
20 thank you and the CEC for your leadership on this
21 incredible effort, especially some of the staff like Katie
22 and others in the room that have helped work on this.

23 CEC's establishment of this program with NOWRDC
24 in 2023 anchored this mission and catalyzed collaboration,
25 drawing other agencies into a strategic partnership. The

1 resulting collaboration has been extremely fruitful, not
2 only in leveraging funding, but also in strengthening the
3 partnership between East and West Coast floating offshore
4 wind regions. This collaboration is unprecedented.

5 NOWRDC has led multiple state and federal
6 agencies in aligning research priorities, merging complex
7 grant processes, and building a shared project management
8 process that maximizes the benefits for all. This
9 extraordinary effort has led to the high-quality projects
10 presented to you today, each focused on improving the
11 state-of-the-art for floating offshore wind development,
12 making it more affordable for ratepayers, accelerating
13 project timelines to deliver benefits sooner, and ensuring
14 greater safety for the workers and the environment.

15 CEC's leadership is charting the course for
16 innovative floating offshore wind research and development,
17 not just in California, but across the nation. We strongly
18 encourage continued public engagement through the NOWRDC
19 website, our annual research and development symposium, and
20 the CEC EPIC innovation site to ensure that the benefits of
21 this program are widely shared and accessible.

22 We extend our sincere thanks to the CEC and the
23 Commissioners for their leadership, and we look forward to
24 delivering lasting benefits for Californians.

25 Thank you.

1 MS. BADIE: Thank you.

2 CHAIR HOCHSCHILD: Before you go, can I just ask
3 one quick question? How many -- can you just walk through
4 the other states that are members of NOWRDC?

5 MS. GROENVELD: Yes. So we have California here
6 on the West Coast, and on the East Coast, Massachusetts,
7 New York, New Jersey, Maryland, and Virginia.

8 CHAIR HOCHSCHILD: Great. Thank you.

9 MS. BADIE: Thank you. Sorry for that mix-up.

10 All right, over to Zoom. First, we'll hear from
11 Nancy Kirshner-Rodriguez. I'm going to open your line,
12 Nancy. It is helpful if you can state and spell your name
13 for a current reporter, and we're asking for comments to be
14 two minutes or less. There will be a time on the screen.

15 MS. KIRSHNER-RODRIGUEZ: Thank you so much. Good
16 to be with you today via Zoom. Nancy Kirshner, N-A-N-C-Y
17 K-I-R-S-H-N-E-R hyphen Rodriguez, R-O-D-R-I-G-U-E-Z. And
18 today, I'm with the Oceanic Network, and I just want to
19 make a brief statement.

20 On behalf of Oceanic Network CEO Liz Burdock, our
21 West Coast Supplier Council, and our broad membership
22 across the supply chain and workforce, I want to commend
23 the CEC Commissioners and staff for your ongoing leadership
24 and commitment to moving floating offshore wind forward as
25 a long-lead time resource for future affordable

1 electricity, for joining NOWRDC in supporting innovation in
2 the offshore wind and ocean renewables industry as we look
3 at a future supply chain and robust monitoring and
4 environmental innovation.

5 I would be remiss if I did not draw attention to
6 the fact that among the funded projects are numerous active
7 members of the Oceanic Network that I learn from every day,
8 and even a few teams that I believe came together through
9 relationships forged at Oceanic Network's gatherings,
10 including our annual International Partnering Forum now in
11 its 12th year. It was very exciting for me to look at the
12 list and see the groups that had come together, the
13 different companies, et cetera.

14 We are excited to support and see the projects
15 proceed, to continue to work collaboratively as we do with
16 NOWRDC and with all of you, and to find ways to support
17 future projects, further projects in the future as we all
18 travel down this path together. And thank you, especially
19 at this time, for your incredible leadership.

20 Thank you.

21 MS. BADIE: Thank you.

22 Next, we're going to hear from Jason Cottrell.
23 Jason, I'm going to open your line.

24 MR. COTRELL: Okay. Yes, this is Jason Cottrell,
25 spelled J-A-S-O-N, Cottrell is C-O-T-R-E-L-L. I'm the

1 Founder and CEO of Arcam Technologies, doing business as
2 Sperra. So we are a climate tech small business based
3 primarily at AltaSea in the Port of Los Angeles, and we
4 focused on both land-based and offshore renewable energy.
5 Our project is the first one that you saw there that we
6 call the Floating Construction Station that will allow us
7 to manufacture, assemble, launch, and deploy floating
8 foundations in California.

9 So I founded this company eight years ago. I'd
10 like to remind the Commission that it's because of the
11 Commission and our first EPIC grant that we are here today,
12 and we are going to continue developing these renewables
13 technologies.

14 So this solution addresses some of the most
15 severe challenges that California faces in floating
16 offshore wind; that's cost, it's building the supply chain,
17 and building port infrastructure. And there's two points
18 that I'd really like to emphasize here about the importance
19 of this award to California's goals.

20 And number one is, is that the floating
21 construction station is needed now more than ever,
22 especially with the recent retraction of the \$670 million
23 of funds for port development for offshore wind. Our
24 technology was invented to provide a capital light quick to
25 manufacture floating dock and manufacturing solution. And

1 as a result, when we develop this technology, we will be in
2 a position to help California build the foundations and
3 turbines to meet its 2030 goals.

4 And finally, this award also comes at a critical
5 time. At the time before receiving the awards, we were
6 considering laying off employees because of some federal
7 challenges with some of our federal grants. And we have
8 not had to lay off any employees. In fact, we're hiring
9 today.

10 So thank you for your continued support.

11 MS. BADIE: Thank you.

12 Next, we're going to hear from Stephen Rosenblum.
13 I want to open your line, Stephen. Just a reminder, we're
14 asking for comments to be two minutes or less.

15 MR. ROSENBLUM: Good afternoon, Commissioners.
16 Thank you again for the opportunity to speak. My name is
17 Stephen Rosenblum, S-T-E-P-H-E-N R-O-S-E-N-B-L-U-M.

18 This is another example of an excellent set of
19 projects by the Commission.

20 You know, as kind of in the background of all
21 this is the rescission by the Trump administration of
22 pretty much all its support nationwide for wind power,
23 which we know is unscientific and uneconomical. Wind and
24 solar are the two cheapest sources of electricity in terms
25 of levelized costs. So if we're talking about helping

1 taxpayers and ratepayers, this is what we should be
2 building, even regardless of climate change. And when you
3 factor in the damage of climate change, it's a no-brainer.
4 So I really appreciate the Commission stepping in to
5 support wind power in this very difficult time.

6 As was alluded to by the previous speaker, the
7 cancellation of the \$679 million of offshore wind funding
8 is particularly difficult in light of the fact that
9 California has already approved plans for floating offshore
10 facilities at Morro Bay and Humboldt Bay. And, of course,
11 the previous speaker also mentioned the issue of port
12 development, which has to precede any deployment. So
13 whatever we can do to facilitate that is a good idea.

14 So I really urge the Commission to approve this
15 proposal.

16 Thank you.

17 MS. BADIE: Thank you.

18 Next, we're going to hear from Julia Chunn-Heer.
19 I'm going to open your line, Julia, and you'll just unmute
20 on your end and then you can begin.

21
22 MS. CHUNN-HEER: Good afternoon. Julia Chun here
23 with the California Coastal Protection Network. It's
24 J-U-L-I-A C-H-U-N-N hyphen H-E-E-R.

25 And CCPN is supportive of the staff

1 recommendation. We believe the information and research to
2 be gained from this group of projects is critical for
3 responsible offshore wind development, including much
4 needed environmental monitoring technology. And we believe
5 that now more than ever, California should keep pursuing
6 our clean energy goals.

7 Thank you for your time today and your
8 leadership.

9 MS. BADIE: Thank you.

10 And that is all the raised hands for this item.
11 Back to you, Chair.

12 CHAIR HOCHSCHILD: Thank you so much. Thanks to
13 all the stakeholders for weighing in.

14 I love this portfolio of projects. And I really
15 want to thank the National Offshore Wind Research and
16 Development Consortium. I remember when that was being put
17 together. And I really think this is a great example of
18 states working together to advance new clean energy
19 innovation. And it's so much more efficient and effective
20 to do that in concert with our sister states. So we're
21 pleased to be a part of this, pleased to be a significant
22 part of it.

23 And it reminds me very much of the innovations in
24 the solar industry, okay, so -- which I was in for a number
25 of years. And, you know, in 2000, a solar panel was \$5.00

1 a watt. Today, it's \$0.16 a watt. The installation, when
2 they were doing those utility-scale projects, you know, we
3 had to grade the entire site. They don't do that anymore.
4 They figured out how to avoid grading. They used to have
5 to do a concrete footer for the posts. They don't do that
6 now. They vibrate in steel. They didn't have these
7 horizontal single-axis ganged trackers.

8 All of this innovation succeeded in taking the
9 solar industry from the most expensive resource in the
10 power market in the world to the cheapest resource in the
11 power market in the world. And I am very excited about
12 what this innovation can and will mean for cost reduction
13 in the offshore wind industry. I really look at these next
14 few years, what we can do to continue to drive that.
15 There's a huge opportunity.

16 I will just mention, you know, it's worth noting
17 what's happening, as well, with the scale of the turbines.
18 So since we began in 2015 at the Energy Commission, it was
19 our first offshore wind research grant, you know, at that
20 time, the largest turbine in the offshore wind market
21 globally was 6 megawatts, last month, China installed the
22 largest in the world, 26.5 megawatts. And, you know, we're
23 not done. So that has huge import in terms of the cost
24 reduction you can achieve.

25 So, you know, all of these things. I mean, this

1 is all about manufacturability. And so, I think it's a
2 very strategic set of investments for us to make here. And
3 I just want to thank, you know, my main partner in this
4 work has been Vice Chair Gunda for when we were tasked with
5 the job of the legislature, you know, from the legislature
6 and the governor to create the Offshore Wind Strategic Plan
7 and the state planning goals and permit roadmap and a
8 number of other elements of that, so really pleased to
9 support this.

10 And with that, I turn it over to the Vice Chair.

11 VICE CHAIR GUNDA: Thank you, Chair. I just want
12 to say first, thank you, Katherine, for the presentation.

13 Chair, I just want to make sure that I recognize
14 your unwavering leadership in the offshore wind area,
15 especially over the last several years, you know, seeing
16 kind of the need for leadership. Again, great opportunity
17 for working across state agencies and scaling the
18 opportunity overall.

19 As Chair mentioned, you know, when we adopted the
20 planning goals for offshore wind, it was always predicated
21 on our SB 100 targets and the opportunity and the
22 importance that offshore wind plays in the portfolio
23 because of its higher capacity factors and generation
24 profile that complement the solar really well. So, looking
25 forward to this next step of work and just really

1 appreciate the broad categories of projects in terms of the
2 port infrastructure, permitting and safety. So, really
3 looking forward to the information and looking forward to
4 supporting this funding.

5 Yeah, NOWRDC, thank you for being here, Kori.
6 Thanks.

7 CHAIR HOCHSCHILD: Commissioner Gallardo, any
8 comments? Yeah.

9 COMMISSIONER GALLARDO: I, too, think this is
10 very exciting. And thank you, Katherine, for the briefing,
11 for the great presentation, all the work that the team
12 invested, including our leadership here.

13 Thank you so much to the Chair and the Vice
14 Chair. I think it's really important that this is
15 continuing to move. And I really appreciate seeing the
16 specific types of projects that this funding could deliver,
17 the Sperra and the MBARI. I think for those of us who
18 aren't in that portfolio of offshore wind, it's helpful to
19 get a better sense of what's actually happening and what
20 could result.

21 So I'm excited about this and, you know, very
22 much support. And thank you so much to all the folks who
23 commented and are here to engage us further on this effort.

24 Thank you.

25 CHAIR HOCHSCHILD: Commissioner Skinner, anything

1 you wanted to add? Okay.

2 CHAIR HOCHSCHILD: With that, Commissioner
3 Gallardo, would you be willing to move Item 8?

4 COMMISSIONER GALLARDO: I move Item 8.

5 CHAIR HOCHSCHILD: Is there a second from the
6 Vice Chair?

7 VICE CHAIR GUNDA: Second for Item 8.

8 CHAIR HOCHSCHILD: All in favor say aye.
9 Commissioner Gallardo?

10 COMMISSIONER GALLARDO: Aye.

11 CHAIR HOCHSCHILD: Vice Chair Gunda?

12 VICE CHAIR GUNDA: Aye.

13 CHAIR HOCHSCHILD: Commissioner Skinner? She
14 smiled.

15 COMMISSIONER SKINNER: Aye.

16 CHAIR HOCHSCHILD: Thank you. And I vote aye as
17 well. And Commissioner McAllister has had to exit the
18 meeting. So Item 8 passes four to nothing.

19 We'll turn now to Item 9, Ecology Action of Santa
20 Cruz.

21 MR. FLETCHER: Good afternoon, Chair, Vice Chair,
22 and Commissioners. I'm Jeff Fletcher from the Fuels and
23 Transportation Division. Today, staff is seeking approval
24 for one project proposed for funding under the Reliable,
25 Equitable, and Accessible Charging for Multifamily Housing

1 3.0 solicitation, also known as REACH 3.0.

2 Next slide, please.

3 We'll start with a brief overview of the REACH
4 3.0 solicitation.

5 REACH 3.0 was released on October 15th, 2024, and
6 the purpose of the solicitation is to fund projects that
7 will provide affordable, reliable, and conveniently
8 accessible charging infrastructure for multifamily housing
9 residents, such as residents in apartment complexes. This
10 investment in electric vehicle, also known as EVs, charging
11 infrastructure will enable greater EV adoption at
12 multifamily housing communities and demonstrate scalable
13 technology and business models that support this unique use
14 case.

15 Staff has proposed nine projects for award for a
16 total of about \$38 million, and the Ecology Action Project
17 that I am presenting today accounts for just under \$6
18 million of the \$38 million proposed for award under this
19 solicitation. The remaining eight projects will be
20 presented at subsequent business meetings.

21 Next slide, please.

22 The proposed REACH 3.0 projects will benefit
23 Californians by providing affordable, reliable, and
24 conveniently accessible charging infrastructure for
25 multifamily housing residents. This part of the market

1 traditionally has more limited access to EV charging
2 infrastructure than single-family housing residents.

3 With this increase in EV charging availability,
4 proposed projects will reduce vehicle emissions and improve
5 air quality in low-income communities and disadvantaged
6 communities, as defined in the solicitation manual, and at
7 affordable housing communities, both at the project sites
8 and in their vicinity.

9 Additionally, projects will improve education and
10 awareness to encourage EV adoption and use by these
11 multifamily housing residents.

12 Next slide, please.

13 The proposed agreement is with Ecology Action of
14 Santa Cruz, a nonprofit focused on equitable community
15 climate solutions. Ecology Action is requesting just under
16 \$6 million and is contributing \$1.5 million in match funds
17 to install at least 480 Level 2 charging ports at
18 approximately 48 multifamily housing communities throughout
19 California. Roughly 80 percent will be installed at
20 affordable housing communities or located in low-income or
21 disadvantaged communities.

22 Next slide, please.

23 Staff's recommendation is to approve the
24 agreement and adopt staff recommendation that these actions
25 are exempt from CEQA.

1 Thank you for your consideration. This concludes
2 my presentation and I'm happy to answer any questions.

3 CHAIR HOCHSCHILD: Thank you.

4 Let's go to public comment on Item 9.

5 MS. BADIE: Thank you, Chair.

6 The Commission welcomes public comment on Item 9
7 at this time. If you're in the room with us, you can use
8 the QR code, and if you're on Zoom, you'll use the raise-
9 hand feature, or star 9 and join in by phone. And I'm just
10 giving that a moment.

11 All right, I am not seeing any raised hands for
12 this item. Back to you, Chair.

13 CHAIR HOCHSCHILD: Okay. And sorry, this is
14 through Ecology Action of Santa Cruz, but it's including
15 many, many counties, including -- so how many of these are
16 in Santa Cruz?

17 MR. FLETCHER: So it's including eight counties
18 throughout California, so the majority are not in Santa
19 Cruz.

20 CHAIR HOCHSCHILD: All right.

21 MR. FLETCHER: Ecology Action operates throughout
22 the entire state.

23 CHAIR HOCHSCHILD: Got it. Okay. All right.
24 Terrific.

25 Let's go to Commissioner Skinner.

1 COMMISSIONER SKINNER: Thank you, Chair, and
2 thank you, Jeff, for that presentation and for overseeing
3 this very important project.

4 As you mentioned, it is an award under REACH, or
5 our Reliable, Equitable, and Accessible Charging for
6 Multifamily Housing. And this is our third solicitation
7 under REACH, and this total awards that will be done in
8 this REACH 3.0 is \$38 million. Ecology Action, which we're
9 dealing with today, is \$6 million. And the result of
10 Ecology Action's work with this one grant will be 480 Level
11 2 charging ports at 48 multifamily housing sites across
12 California.

13 So to the Chair's point, while Ecology Action
14 itself is based in Santa Cruz, the multifamily housing
15 complexes where these chargers will be installed are around
16 the state. And 80 percent of the locations are within our
17 low-income communities or disadvantaged communities
18 designations.

19 Additionally, many are at affordable housing
20 sites. And that's important because we have -- there's a
21 kind of common view that EVs are not accessible for our
22 more moderate income residents. And, of course, there are
23 many more used EVs on the market, so they are becoming more
24 and more accessible to folks, but charging is one of the
25 biggest barriers. And if you live in a multifamily

1 complex, and probably especially a low-income one, meaning
2 one of the subsidized complexes, there's less likely to be
3 this infrastructure. And the lack of at-home charging is
4 one of the biggest obstacles to people going to an EV.

5 So these types of or this type of solicitation
6 that allows us to support not only multifamily, but low-
7 income housing complexes is really, really important and is
8 really going to assist us in the expansion of EV adoption,
9 and especially to those households that a lot of people
10 view this is not accessible to, but we're making it more
11 and more accessible.

12 So I really want to thank Jeff again, thank all
13 the staff that were involved in this. As you know, any
14 solicitation requires a lot of work, getting the word out,
15 getting the applications in, doing the assessments, doing
16 the scoring, and then, of course, negotiating the contracts
17 and, like today, doing the award. So thanks again.

18 And whenever it's appropriate, Chair, I will move
19 the item.

20 CHAIR HOCHSCHILD: Unless there's other comments,
21 I welcome a motion from you, Commissioner.

22 COMMISSIONER SKINNER: I move the item.

23 CHAIR HOCHSCHILD: Okay, is there a second,
24 Commissioner Gallardo?

25 COMMISSIONER GALLARDO: I second.

1 CHAIR HOCHSCHILD: Thank you. All in favor, say
2 aye.

3 Commissioner Skinner?

4 COMMISSIONER SKINNER: Aye.

5 CHAIR HOCHSCHILD: Commissioner Gallardo?

6 COMMISSIONER GALLARDO: Aye.

7 CHAIR HOCHSCHILD: Vice Chair Gunda?

8 VICE CHAIR GUNDA: Aye.

9 CHAIR HOCHSCHILD: And I vote aye as well.

10 Item 9 passes four to zero. Thank you.

11 We'll turn now to Item 10, FirstElement Fuel.

12 MR. JOHNSON: Great. Good afternoon,
13 Commissioners. My name is Mark Johnson from the Fuels and
14 Transportation Division. I'll be presenting Item 10, which
15 is Seeking Approval of One Grant Agreement and the
16 associated CEQA findings for a project that will Deliver
17 Hydrogen Refueling Infrastructure, resulting from the
18 Light-Duty Hydrogen Refueling Infrastructure Build-Out
19 solicitation.

20 Next slide, please.

21 The solicitation, Light-Duty Hydrogen
22 Infrastructure Build-Out, was released in September 2024.
23 The purpose of the solicitation was to develop hydrogen
24 refueling stations in San Francisco County and Sacramento
25 County. It also had a goal of supporting capital

1 expenditures and/or operation and maintenance from planned
2 or temporarily non-operational light-duty hydrogen
3 refueling stations statewide.

4 One project was proposed for award under the
5 solicitation, which I am presenting today. It is to
6 support three planned hydrogen refueling stations capital
7 expenditures.

8 Next slide, please.

9 This solicitation sought projects that would
10 provide new fueling points for fuel cell electric vehicles
11 to further our transportation decarbonization goals. This
12 agreement will broaden the state's hydrogen refueling
13 infrastructure network by providing light-duty stations in
14 areas of the state where there are none today. The
15 stations will also reduce greenhouse gas emissions and
16 local air pollution from the production of hydrogen fuel.

17 Next slide, please.

18 The proposed project will accelerate the
19 development of light-duty hydrogen refueling stations
20 located in San Bernardino, Buena Park, and Riverside with
21 the goal of opening each station within 18 months.

22 Each station will have four fueling positions
23 that are capable of dispensing about 1,600 kilograms of
24 hydrogen per day. The CEC estimates that each station
25 could serve a vehicle population of about 2,300 light-duty

1 fuel cell electric vehicles.

2 The proposed project -- or the proposed award
3 amount is \$1.5 million with another \$7.5 million in match.

4 Next slide, please.

5 Staff recommendation for this project is to adopt
6 staff's recommendation that the project is categorically
7 exempt from CEQA and approve the FirstElement Fuel
8 agreement.

9 This concludes my presentation and I am available
10 to answer any questions that you may have.

11 We also have a representative from FirstElement
12 here in person to provide comment during the public comment
13 period.

14 Thank you.

15 CHAIR HOCHSCHILD: Thank you.

16 Let's go to public comment on item 10.

17 MS. BADIE: Thank you, Chair.

18 The Commission welcomes public comment on item 10
19 at this time. If you're in the room with us, we're asking
20 folks to use the QR code or raise your hand. And if you're
21 on Zoom, you'll use the raise-hand feature on your screen,
22 or star nine if joining by phone.

23 And in the room with us, we have Matt Miyasota
24 [sic].

25 MR. MIYASATO: Miyasato.

1 MS. BADIE: Miyasato, excuse me. Thanks, Matt.
2 And just a reminder for everyone that we're asking for
3 comments to be two minutes or less and there will be a
4 timer on the screen.

5 MR. MIYASATO: Great. Thank you. Dr. Matt
6 Miyasato, M-A-T-T M-I-Y-A-S-A-T-O, Chief Public Policy
7 Officer at FirstElement Fuel.

8 So, Chair Hochschild, Commissioners, thank you
9 for your attention to this matter and consideration.

10 FirstElement is a small local business in
11 Southern California, but we are the largest hydrogen
12 station provider in California, which makes us by default
13 the largest in the United States, North America, and the
14 Western Hemisphere. We would say globally, but we don't
15 know what's happening in China with hydrogen refueling.

16 But all that is to say is we're successful
17 because of the California Energy Commission. We have 39
18 stations up and down the state, and that's due to funding
19 from this body. We also have the largest heavy-duty
20 hydrogen truck refueling station in the Port of Oakland,
21 the first of its kind in the world. That was also funded
22 through the Energy Commission through the NorCAL Zero
23 Project.

24 So we are thankful for your consideration to fund
25 these three additional light-duty stations, two of which

1 are in priority communities. And that is really your
2 recognition that we need assistance until the low-carbon
3 fuel standard comes back, the prices come back up to north
4 of \$60 where they are today.

5 I would just finally say we urge you to maintain
6 your leadership in the light-duty and medium-duty fuel cell
7 space. I know that's not in vogue currently, but that's
8 the only way that we get to harden our supply chain, bring
9 down the economies of scale for the price for future
10 stations, in particular, heavy-duty fueling stations.

11 So with that, again, we want to thank the Energy
12 Commission for your consideration and urge your approval.

13 CHAIR HOCHSCHILD: Thank you. I'm sorry.
14 There's more?

15 MS. BADIE: I'm going to transition over to Zoom.
16 There's a couple of comments on Zoom.

17 So first we'll hear from Stephen Rosenblum. I
18 want to open your line, Stephen.

19 MR. ROSENBLUM: Good afternoon, Commissioners.
20 Thank you again for the opportunity. My name is Stephen
21 Rosenblum, S-T-P-H-E-N R-O-S-E-N-B-L-U-M.

22 Unfortunately, I have to strongly oppose this
23 project. I'm here representing Climate Action California.
24 There are 1.9 million battery-electric vehicles in our
25 state, but only 13,000 -- or 15,000 hydrogen fuel cell

1 cars. There are only 50 public hydrogen fueling stations
2 serving in California. In contrast, there are over 180,000
3 public and shared private EV charging stations in the
4 state, not counting home chargers.

5 So I don't think that adding three more fueling
6 stations is going to have any impact at all on the state's
7 clean energy goals, especially in light of the high cost,
8 you know, aa million dollars. It just doesn't make any
9 sense.

10 Efficiency is also an issue. The round-trip
11 efficiency of renewable electricity powering the battery of
12 a vehicle is 73 percent versus 22 percent for a hydrogen
13 fuel cell vehicle. That's because making hydrogen is
14 highly energy intensive.

15 Also, more than 90 percent of the hydrogen is
16 made by steam reforming of methane. This process can be
17 more injurious to the climate than burning the methane
18 directly if as little as 10 percent of the methane leaks
19 during processing. This results from the fact that methane
20 is 25 times more global warming than carbon dioxide over
21 the 100-year lifetime.

22 Hydrogen has a niche in fighting climate change
23 for those applications that cannot be directly electrified.
24 Light-duty fuel cell vehicles is not such a case. I would
25 strongly urge the Commission to not approve this staff

1 proposal.

2 Thank you.

3 MS. BADIE: Thank you for your comment.

4 Next, we're going to hear from Jennifer Hamilton.
5 Jennifer, I'm going to open your line. Just a reminder, it
6 helps if you can state and spell your name for our current
7 reporter, and we're asking for comments to be two minutes
8 or less.

9 MS. HAMILTON: Thank you. Can you hear me all
10 right?

11 MS. BADIE: Yes.

12 MS. HAMILTON: All right. My comment is short.
13 My name is Jennifer Hamilton, J-E-N-N-I-F-E-R, Hamilton,
14 H-A-M-I-L-T-O-N, and I'm with the Hydrogen Fuel Cell
15 Partnership. The H2FCP has been working to help our
16 private and public members build out the hydrogen
17 transportation market in California and beyond.

18 We very much appreciate the Energy Commission for
19 their work and collaboration and anticipate the continued
20 support. The H2FCP will continue to be an available
21 resource as we all strive to meet our common zero-emission
22 goals with both zero-emission vehicle choices.

23 Thank you.

24 MS. BADIE: Thank you.

25 And that concludes public comment. There's no

1 further raised hands. Back to you, Chair.

2 CHAIR HOCHSCHILD: Let's go to Commissioner
3 discussion, starting with Commissioner Skinner.

4 COMMISSIONER SKINNER: Thank you, Chair.

5 Well, first, I want to thank Mark Johnson for the
6 presentation and for, again, FTD staff's good work on this
7 and your leadership in it.

8 You know, the questions around hydrogen, of
9 course, are always before us, and the fact that there are
10 so few light-duty hydrogen vehicles in our state do raise
11 questions about the -- you know, our continued support.
12 However, we've been given mandates by the legislature to,
13 in our -- in certain of our funding, specifically our clean
14 transportation funding, to continue to support hydrogen.
15 And while we've had some, in some of our solicitations,
16 we've had to return funds.

17 In this case, FirstElement is not only -- as was
18 referenced by their representative, they have an active
19 station in Oakland. They, you know, responded to the
20 solicitation and, you know, met all of the requirements.
21 And, of course, staff in vetting and scoring and such found
22 them to meet the requirements. And they are proposing, as
23 was described, these stations in areas. So two of the
24 areas, are near the warehouses, are in that part of
25 California where our interstates are going through.

1 There's lots of warehouses, the air quality is particularly
2 poor, and there are more medium-duty vehicles that are
3 utilizing hydrogen. And, of course, the stations will
4 support more than just light-duty, they will also support
5 medium-duty like delivery vans, step vans, shuttle buses,
6 and things like that.

7 But the other thing I will note is that the
8 hydrogen that these stations will use is a hydrogen from a
9 company called Air Liquide, if I pronounced that correctly,
10 and they are using landfill gas as the feedstock. So it
11 is -- while we do not have a requirement under the
12 statutory authority we have, we do not have a requirement
13 to -- on the carbon coefficient of the hydrogen that we
14 support, this is at least a lower carbon hydrogen than much
15 of the hydrogen that is available today.

16 So with that, I'm going to move the item. And
17 appreciate, again, staff's work.

18 CHAIR HOCHSCHILD: Thank you. Just one question,
19 if I could, for FirstElement.

20 Just, if you can speak to the reliability of the
21 stations? You said you had a fleet of about 40. How are
22 you doing on uptime generally?

23 MR. MIYASATO: Thank you for the question, Chair.
24 It's actually through the funding that the Energy
25 Commission has provided us for two grants, one is in-state

1 manufacturing, and one is the improved grant for improved
2 O&M, that we have increased our reliability and uptime from
3 around, network-wide, 70 percent to over 92 percent. So
4 because we've been able to manufacture in-house and out of
5 Santa Ana facility spare parts and then deploy those spare
6 parts when needed, we have essentially turned the corner
7 and we feel like we're going to, our goal is 97 percent.
8 We're now at 92 percent.

9 CHAIR HOCHSCHILD: Okay. Thank you.

10 Commissioner Skinner has moved the item. Is
11 there a second from you, Vice Chair?

12 VICE CHAIR GUNDA: Move the item.

13 CHAIR HOCHSCHILD: Okay. Seconded from Vice
14 Chair Gunda. All in favor, say aye.

15 Commissioner Skinner?

16 COMMISSIONER SKINNER: Aye.

17 CHAIR HOCHSCHILD: Vice Chair Gunda?

18 VICE CHAIR GUNDA: Aye.

19 CHAIR HOCHSCHILD: Commissioner Gallardo?

20 COMMISSIONER GALLARDO: Aye.

21 CHAIR HOCHSCHILD: And I vote aye as well. Item
22 10 passes four to zero with Commissioner McAllister absent.

23 We'll turn now to Item 11, Lead Commissioner and
24 Presiding Member Reports.

25 Let's start with Commissioner Gallardo.

1 COMMISSIONER GALLARDO: Okay. All right, I have
2 some images here and I'll try to go fast. So we'll go to
3 the next slide, please.

4 So I went on a trip of a lifetime at the
5 beginning of August. The CalSTA Secretary, Toks Omishakin,
6 led a state delegation to Kenya and Nigeria with a focus on
7 developing a climate and economic partnership with each
8 country. His goal is to achieve an MOU between California
9 and an African country, period, because California has a
10 lot of agreements with other countries, but nothing in
11 Africa. So he is trying to get that achieved, possibly
12 even during Climate Week.

13 So, Chair, he wanted me to give you a heads up.
14 He might need you to help out. And then if it doesn't
15 happen during Climate Week, he's hoping by the end of the
16 year.

17 So I just wanted to give a little background.
18 Sam Assefa, who leads LCI, also attended and the Energy
19 Commission was invited because clean energy is one of the
20 six pillars that the Secretary is focused on. The other
21 ones are clean transportation, sustainable agriculture,
22 digital technology, creative economy, and university
23 partnerships. So we touched on all of that while we were
24 on these on these visits to Kenya and Nigeria.

25 CalSTA also partnered with other organizations to

1 make the trip happen, so I wanted to give a shout out to
2 them. The Bay Area Council, who funded the trip, they are
3 a trade association of Bay Area businesses, and so a lot of
4 their members attended. UC Davis was also very helpful at
5 the trip, setting up meetings and even a conference while
6 we were there.

7 So just the images here quickly, a couple are
8 just showing the pride of the community in terms of their
9 culture.

10 And then there's one on top. We went on a safari
11 the first day that we arrived. And I picked this picture
12 because it has a giraffe standing, and then the background
13 is the city of Nairobi. So it's the only city with a
14 national park in the middle of it in the world. And what
15 was interesting is we were going in Jeeps, like Jurassic
16 Park style, very loud and very toxic.

17 And so one of the ideas, even just on the safari
18 alone, was what if we got electric vehicles, you know,
19 here? So there's some conversations going on with some
20 companies on that.

21 And then the other photo I have here is the one
22 below, it's a big group, that was the audience for the
23 energy segment of the conference put on by UC Davis. And I
24 was part of that conversation. It was really helpful to
25 have that at the beginning. Kenya is already at 93 percent

1 renewables and aiming for 100 percent by 2030, so they're
2 ahead of us. They were really proud of that. And at the
3 same time, they know they have a lot of work to do. So
4 that's why I thought I'd bring this up because I think we
5 have some similarities there.

6 And then we'll go to the next slide just to speed
7 up.

8 So next, we went to Nigeria and we started there
9 in the capital city of Abuja. I led a meeting at the
10 Ministry of Power, which is their equivalent of the
11 Department of Energy. Nigeria is a petrol-based country,
12 but even so, they have a very comprehensive energy
13 transition plan right now. And they set a goal of net zero
14 by 2060 and a goal of achieving 80 percent renewables by
15 2050. So a lot of focus on energy, which I was really
16 excited about. So there's potential for us to do more
17 together.

18 And I just wanted to show here, there's a photo
19 on the right of me standing in front of a solar array. And
20 that's at a Catholic university. So there's this
21 partnership with the Catholic Church to put more what they
22 called mini-grids on different campuses to help the
23 community. And it reminded me a lot of our work with the
24 tribes, that they're at the end of the line, underinvested,
25 under-resourced, and so need these types of mini or micro-

1 grids to be able to help them stay connected. So that was
2 exciting to see that.

3 And then the pictures at the bottom are a company
4 we visited called Max E (phonetic). There's a lot of e-
5 mobility focus out there, both in Kenya and Nigeria. But I
6 thought it was interesting. We went to visit the company,
7 and then a little bit later, we actually saw one of the
8 drivers. He has a helmet on.

9 And that's been one of the great things about
10 this company. It's enabling people to have good jobs, and
11 folks are really excited about it. And it's also
12 increasing safety because motorcycle accidents are one of
13 the prime -- I think it's the major reason for deaths in
14 Nigeria, or at least that area where we were. And so the
15 company was telling us about that. And then we see one of
16 the drivers, and a lot of people around him weren't wearing
17 helmets. But he is wearing flip-flops, so, you know,
18 there's some work to do there.

19 And then, so I'll just stop there. But I wanted
20 to thank everybody for enabling me to be able to go on this
21 trip. It was very informative, and I'm hoping that more
22 can come out of it. And I already told Secretary Omishakin
23 that we'll be supportive in what he needs, so we'll see
24 what comes about.

25 And then we'll go to the next slide.

1 As soon as I got back from Africa, I attended the
2 Willow Rock Evidentiary Hearing with Commissioner
3 McAllister, and he's Lead Commissioner on this. He's been
4 doing a tremendous job, so that's why I wanted to highlight
5 it. The team has also been doing a really just superb job
6 on all the proceedings, and so I wanted to highlight this
7 one. This is an AFC, so STEP was involved. Chief
8 Counsel's Office also, they've been collaborating really
9 well.

10 And then on the other picture on the right is the
11 Soda Mountain Solar Project potential site. We did a site
12 visit August 29th there, and also a public meeting for the
13 Soda Mountain project. This is for the Opt-In proceeding.
14 So, again, just really proud of the work that the STEP
15 Division is doing, the Chief Counsel's Office, PAO Plus,
16 MPCO, IT, everyone just coming together to make these
17 workshops happen and are doing a really great job.

18 We'll go to the next slide.

19 So in between those site visits, I also attended,
20 with the Chair, the first convening of our Tribal Affairs
21 Proceeding on Tribal Energy Sovereignty. This was at Tolow
22 Dee-ni' Nation up north on the coast. Sierra Graves and
23 Davina Whitethorne and Kelsey did a tremendous job with
24 this. We had great representation from the tribes. I
25 think there were about nine tribes represented there, so

1 just wanted to highlight those photos and the great work
2 the team did.

3 There's a photo of the Chair there pointing out
4 into the future, just kind of reflecting on all the good
5 stuff that will come about from this work that Sierra is
6 leading. So I want to congratulate her on this.

7 And then we'll go to the next slide.

8 I also visited General Atomics, which is located
9 in Poway near San Diego. So they're celebrating this major
10 component that they just finished manufacturing. It's
11 going to be sent to the south of France, where there's a
12 campus being built for a fusion power plant. And so I've
13 been really excited to learn more about fusion. I know it
14 always seems 20 years away, but there's a lot of
15 investment, interest, and excitement around this. So I'm
16 trying to stay on top of that and wanted to share that with
17 you.

18 Next slide.

19 And then finally, my chief of staff, Eric Stokes,
20 and I visited Kia. And I know the Chair and Commissioner
21 Skinner was told I had visited the headquarters there in
22 Irvine. I thought it was really interesting. My
23 connection here is just trying to help ensure we can get
24 more opportunities for the Lithium Valley. And so I wanted
25 to talk about and share that with Kia. And they were

1 helping us better understand all the things that they're
2 doing, which is really exciting, really beautiful cars that
3 they're creating.

4 And they were also telling us about a partnership
5 they have with IONNA. And so having these Chargers, but
6 also IONNA focusing on improving the Charger experience
7 versus just focusing on the Charger itself. So, anyway,
8 overall, very good visit. Really grateful to Kia for
9 allowing us to do that.

10 And a very busy month, and I think more to come
11 this month, as well, so, yeah, I'll stop there so others
12 can share.

13 Thank you.

14 CHAIR HOCHSCHILD: Thank you.

15 Vice Chair?

16 VICE CHAIR GUNDA: Thank you, Chair.

17 The meeting we had, the last business meeting,
18 was only a couple weeks ago, primarily focusing on just
19 tracking the efforts of the legislature on the various, you
20 know, bills of interest for us, whether it's the Pathways,
21 the petroleum package. And so, and it looks like there's a
22 lot of printing that's happening today. So we're going to
23 try and understand all the legislations. And we'll look
24 forward to supporting all the efforts there.

25 From just high-level kind of insight for the

1 Commissioners, I think you know, we're almost at the tail-
2 end of the electricity reliability season. So, you know,
3 we still have just a little bit of weather coming up, heat
4 coming up later this month. But outside of that, we look
5 pretty good. Our term is cautiously optimistic. So 2025
6 seemed to be pretty well positioned for us.

7 Petroleum, the gasoline prices have been slightly
8 taken up. We're watching also the crude oil prices going
9 up and down a little bit. So overall, you know, we are
10 watching the late summer period on the petroleum front.
11 Typically, this is the time that gasoline prices spike, and
12 so we're watching that. And we'll keep the Commission
13 posted.

14 Thanks.

15 CHAIR HOCHSCHILD: Commissioner Skinner?

16 COMMISSIONER SKINNER: Thank you, Chair.

17 And Commissioner Gallardo, I also always
18 appreciate your visual presentations. Mine I will do, like
19 our Vice Chair, verbally.

20 Similarly, it's been an interesting and busy
21 month. Yesterday was actually World EV Day. I think I
22 mentioned before. And I reference it because coming up to
23 the end of this month, September 30th, is the last day that
24 someone could lease or purchase an EV and be eligible for
25 the federal tax credits. And those federal tax credits are

1 quite significant. And they work for both used and new,
2 and purchase or lease.

3 So our Energy Commission Comms folks, I think a
4 lot of us individually in our social media, and, of course,
5 Veloz, which we've supported, have been actively informing
6 people of this. And we know that the numbers of EVs leased
7 and purchased this month are going way up. In fact, not
8 only this month, but rather this last quarter. And we'll
9 have better numbers, you know, after September 30th. But I
10 was pleased to see that there's this kind of response.

11 And I'll talk about a few visits I made recently.
12 But I'll first mention a visit that I made with the Chair
13 to Antora Energy. And the Chair, I'm sure, will speak a
14 little more about it. But it is these -- they have two
15 facilities. One of them, they are actually manufacturing
16 thermal batteries with a carbon block core that have the
17 ability to convert renewable energy into reliable heat and
18 power to displace natural gas, to displace fossil fuels,
19 and to help us decarbonize industries like cement and
20 others.

21 And it's another great example of the Energy
22 Commission's funding through EPIC and CalSEED that really
23 is launching innovations in new technologies that are going
24 to help us towards, not only help us, really speed that
25 transition to a clean energy and low-carbon future. But

1 I'll let the Chair talk about that more.

2 The other really fun thing, you know, we just
3 talked about hydrogen, but let me give you an example where
4 hydrogen was just such a great event that I attended, and
5 that was right in West Sacramento where Sierra Northern
6 Railway just launched their first hydrogen-powered, zero-
7 emission switching locomotive.

8 Now, that may sound like, oh, so what? But if
9 you live near a rail yard, the switching locomotives are
10 going, like, constantly because they are moving the cargo
11 trains. They are moving them around. And so you might
12 have a main train that comes in, but then they leave
13 various cars in that area, and the switcher locomotive is
14 going back and forth all the time. So it's one of the
15 major sources of emissions, especially locally. And to
16 have a switcher locomotive be powered by hydrogen versus
17 diesel, and the single one that they have now launched is
18 going to replace 50,000 gallons of diesel fuel a year,
19 which is equivalent to taking 20,000 cars off the road.

20 Now, of course, CEC helped fund this. We helped
21 fund the pilot, which is that first vehicle, which was
22 built in California, built right in West Sacramento. And
23 now funding from CalSTA, our transportation agency, and the
24 Sacramento Metro Air Quality District is funding them to
25 produce three more. And the three additional locomotives

1 will also be built in California.

2 And the other good news is that they're in
3 negotiations right now with the company who is going to
4 produce the hydrogen from agricultural waste feedstock in
5 California. So they're bringing it full circle.

6 I also attended a ribbon-cutting of IONNA's very
7 first rechargery station. Now, IONNA is a new consortium
8 that was established by eight of our major auto
9 manufacturers. And they are building out a charging
10 infrastructure across the U.S., But this was the first one
11 in California. And that site was in Vista, California,
12 which is near San Diego. And it's going to have -- not
13 going to have, it has, we cut the ribbon, it has 10 high-
14 powered DC fast charging bays. And it's located adjacent
15 to some retail and restaurants, a gas station, and a car
16 wash. But most importantly, it's adjacent to State Route
17 78, which transverses nearly the width of California and
18 connects I-5 to I-10.

19 Now, IONNA right now has 70 California sites
20 secured and plans to build out over 450 charging bays at
21 those sites. So it's really great news in terms of our ZEV
22 rollout and ZEV commitment.

23 I also, yesterday, went to UC San Diego, which is
24 just brilliantly supporting our zero-emission vehicle
25 efforts. They already have over 600 EV charging stations

1 installed on the campus and will have 1,250 within the
2 year, so maybe not by the end of December, but, you know,
3 before the end of 2026. Many are right now, you know, just
4 being built. We got to see them being built right now.
5 Over 1,000 of that total number are supported by CEC funds
6 through a variety of our different funding solicitations,
7 plus the low-carbon fuel standard credits, the LCFS
8 credits. So they have really benefited from the state's
9 investment.

10 They are doing some brilliant things. UC San
11 Diego has its own microgrid, which is equipped with battery
12 storage and with distributed generation. And they have
13 integrated all of the chargers with that. And many of the
14 chargers have battery storage associated. So they can, in
15 effect, island. If the utility that they're attached to at
16 any time has to go down or do a protective power outage,
17 what, PSPP, they can island and they can still charge
18 people's vehicles. And those chargers are accessible to
19 the public, as well as to students and staff. So it's
20 very, very impressive.

21 I really recommend that everyone go and visit
22 what UC San Diego is doing, because I'm talking mostly
23 about the transportation, but they are innovating in so
24 many other ways. They're just like this mini laboratory of
25 everything that we're trying to do throughout the state.

1 And in addition to the light-duty chargers that I
2 mentioned, they also, and we, the CEC, have helped fund
3 them to do this, are right now in the midst of building a
4 heavy-duty station for their own trucks, their own shuttle
5 buses, which are mostly electric. And they also have a
6 mobile EV charging system that they can move around the
7 campus when needed for their transit buses or their larger
8 trucks.

9 So, again, I really recommend folks to go and
10 visit UC San Diego. Very, very impressive.

11 And that is my report.

12 CHAIR HOCHSCHILD: Great. I'm especially
13 encouraged by what you mentioned about IONNA. That, you
14 know, by my count, they're investing more than Tesla in EV
15 charging this next year. So it's great they got their
16 first site done.

17 In the interest of time, I'm going to skip my
18 update because we're late for a meeting I've got to patch
19 into. But thank you all. We will move on now to,
20 Commissioner McAlister is not on; right? So, okay.

21 Let's move on to Executive Directions Report.

22 DEPUTY EXECUTIVE DIRECTOR MARTIN-GALLARDO: No
23 report.

24 Public Advisors Report.

25 MS. BADIE: I just wanted to mention there's a

1 DACAG meeting next Friday on the 19th, and they're going to
2 get a presentation by CPUC on base service charge. And
3 also they're going to discuss key performance indicators
4 for their priorities.

5 Thank you.

6 CHAIR HOCHSCHILD: Thanks.

7 Chief Counsel's Report.

8 MR. RANCHOD: Very briefly, Chair, I want to
9 welcome the newest member of our legal team, Casey
10 Sinclair. He joined the Chief Counsel's Office several
11 weeks ago as a Senior Legal Analyst in our administrative
12 unit. Casey works as a paralegal for more than 15 years
13 before joining CEC and has hit the ground running, which I
14 appreciate given how fast things are moving.

15 That concludes my report.

16 CHAIR HOCHSCHILD: Thanks. We're adjourned.

17 (The meeting adjourned at 2:55 p.m.)
18
19
20
21
22
23
24
25

CERTIFICATE OF REPORTER

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 9th day of October, 2025.



MARTHA L. NELSON, CERT**367

CERTIFICATE OF TRANSCRIBER

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.

I certify that the foregoing is a correct transcript, to the best of my ability, from the electronic sound recording of the proceedings in the above-entitled matter.



MARTHA L. NELSON, CERT**367

October 9, 2025