

<b>DOCKETED</b>	
<b>Docket Number:</b>	25-BUSMTG-01
<b>Project Title:</b>	2025 Business Meeting Agendas, Transcripts, and Public Comments
<b>TN #:</b>	261440
<b>Document Title:</b>	Transcript of the January 21, 2025 Business Meeting
<b>Description:</b>	N/A
<b>Filer:</b>	Kristine Banaag
<b>Organization:</b>	California Energy Commission
<b>Submitter Role:</b>	Commission Staff
<b>Submission Date:</b>	1/29/2025 3:40:39 PM
<b>Docketed Date:</b>	1/29/2025

BUSINESS MEETING  
BEFORE THE  
CALIFORNIA ENERGY COMMISSION

In the matter of:

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

TUESDAY, JANUARY 21, 2025

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

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Reported by:  
Martha Nelson

APPEARANCESCOMMISSIONERS

David Hochschild, Chair

Siva Gunda, Vice Chair

Andrew McAllister, Commissioner

Noemi Gallardo, Commissioner

Nancy Skinner, Commissioner

STAFF

Jennifer Martin-Gallardo, Deputy Executive Director

Allan Ward, Chief Counsel

Nick Fugate, Lead Forecaster, Energy Assessments Division,  
Demand Analysis Branch

Elizabeth Butler, Contract and Grant Manager, Efficiency  
Division, Administration

Jason Tancher, Energy Efficiency Research Division,  
Technology Innovation & Entrepreneurship Branch

Lin Planchard, Utilities Engineer, Energy Research and  
Development Division, Energy Storage & Integration

Mike Gravely, Energy Systems & Transportation Branch

Sarah Sweet, CFI Agreement Manager Fuels and Transportation  
Division Federal Opportunities and Investments Unit

PUBLIC ADVISOR

Mona Badie

APPEARANCESALSO PRESENT

Wade Crowfoot

Delphine Hou, Deputy Director, Statewide Energy Office,  
California Department of Water Resources

Molly Sterkel, California Public Utilities Commission

Mark Rothleder, California Independent System Operators

Cristy Sanada, California Independent System Operator

Jimmy O'Dea, Caltrans

PUBLIC COMMENT

George Lee, IXP

Somasundaram Essakiappan, Trane Technologies

Omkar Ghatpande, National Renewable Energy Laboratory

Mark Olson, Pacific Steel

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P R O C E E D I N G S

10:06 a.m.

TUESDAY, JANUARY 21, 2025

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

CHAIR HOCHSCHILD: Well, good morning and welcome  
friends. I'm David Hochschild, Chair of the California  
Energy Commission. Today is January 21. I call this  
meeting to order.

Joining me are Vice Chair Gunda, Commissioner  
McAllister, Commissioner Gallardo, and Commissioner  
Skinner. We have a quorum.

Let's please stand for the Pledge of Allegiance.

(The Pledge of Allegiance is read.)

CHAIR HOCHSCHILD: Thank you.

We will begin by taking public comment and then  
move on to agency announcements.

MS. BADIE: Good morning, everyone. My name is  
Mona Badie. I'm the Public Advisor for the California  
Energy Commission.

The Commission welcomes public comment at its  
business meetings. There will be multiple opportunities  
for public comment today.

This initial public comment period is open for  
any items on the agenda, including informational or non-

1 voting items. Each voting item on the agenda will have its  
2 own dedicated public comment period as well.

3 And now for the instructions of how to notify us  
4 if you'd like to comment. If you're joining us in the  
5 room, we're asking folks to use the QR codes. They're  
6 posted in the back of the room. You can also visit Dorothy  
7 at the public advisors table in the back for assistance  
8 with that. And if you're joining us on Zoom, you're going  
9 to use the raise hand feature on your screen. It looks  
10 like an open palm. And if you're joining by phone, you're  
11 going to press star nine. That'll let us know you'd like  
12 to comment.

13 And I'm just giving that a moment to see if we've  
14 got any raised hands.

15 Alright. I'm not seeing any raised hands for  
16 Item 1.

17 Back to you, Chair.

18 CHAIR HOCHSCHILD: Thank you, Mona.

19 I just wanted to begin by extending our thoughts  
20 and sympathies to the good people of Los Angeles who have  
21 been dealing with a devastating fire this last week, and  
22 yet another indication of the climate challenge that we  
23 face and the importance of our work to advance climate  
24 solutions and resiliency. You know, well over 10,000 homes  
25 have been lost, and so we're going to be dealing with a



1 number of ripple effects with that as the city tries to  
2 rebuild, including for these big events, the upcoming  
3 Olympics and the World Cup and so forth.

4           And so this is going to be a major, major focus  
5 for the state in supporting Southern California and making  
6 the rest of the state more resilient from these types of  
7 events as we press forward with our climate agenda. So I  
8 wanted to begin with that.

9           And then secondly, I wanted to just take a moment  
10 to personally acknowledge the extraordinary leadership of  
11 Commissioner Monahan whose term ended last week. You know,  
12 this job is something like a relay race and you pass the  
13 baton, and she passed it at full speed. What she was able  
14 to get done during her tenure is remarkable, including  
15 supporting the extension for another billion dollars for  
16 all the ZEV infrastructure that we're doing and a number of  
17 the efficiency standards and charger reliability work and  
18 any number of other engagements, including the focus on  
19 equity. We have, I think somewhere in the neighborhood of  
20 60 percent of our investments in EV charging infrastructure  
21 are in disadvantaged communities, and we did the first ever  
22 funding for tribal EV charging.

23           You know, her work has had an incredible impact  
24 and she's been a delightful colleague and she's hired  
25 amazing people.

1           I want to especially thank her staff, Jeffrey  
2   Liu, Sarah Lim, Patricia Carlos, and everyone else on her  
3   team.

4           And so Commissioner Skinner, you're inheriting an  
5   office and a shop that's in excellent shape because of her,  
6   and really excited to see what you do to build on that  
7   foundation and bring all the talents you have.

8           And maybe I just would pause here and just offer  
9   an opportunity for any further comments about Patty.  
10   Anything else you would say?

11           Yeah, Commissioner McAllister?

12           COMMISSIONER MCALLISTER: Yeah, I just really  
13   appreciate your thoughtful words for Commissioner Monahan,  
14   and I couldn't agree more. And I learned a ton from her,  
15   and just as much -- I mean, obviously a lot about  
16   transportation as subject matter because she is such a  
17   knowledgeable, just one of the most knowledgeable people in  
18   that area, just accomplished a ton, as you say.

19           But even more so, just her way of leading and  
20   just her thoughtfulness and kindness and support,  
21   particularly for staff, just -- she always found a way to  
22   spread credit around and acknowledge staff, and encourage  
23   and support staff, and particularly women staff, who I just  
24   think, you know, face unique challenges. And she was just  
25   such a lodestone for them, you know, for all the staff.

1           And I saw her as that as well, just learned so  
2 much, just her comportment and the way that she exists in  
3 the world. I just really have so much respect and love for  
4 her. And I've told her that many times, as I'm sure that  
5 you all have too as well.

6           So anyway, we'll miss her, but also already  
7 working very closely with Commissioner Skinner. So the LA  
8 fires, you know, are just tragic and heartbreaking in a lot  
9 of ways, and we just want to be there and make sure that  
10 we're supporting those communities.

11           So it's a long haul. I've run programs to  
12 support fire victims, you know, folks who've been burned  
13 out in the past, and it really is a marathon. And so we  
14 just have to be there at every turn, you know, at every  
15 street crossing to help them get across.

16           So really, yeah, just want to express that  
17 commitment as well.

18           Thanks.

19           CHAIR HOCHSCHILD: Vice Chair?

20           VICE CHAIR GUNDA: Thank you, Chair.

21           I also want to just take a moment to just share  
22 my gratitude to Commissioner Monahan. I think, you know,  
23 both you and Commissioner McAllister and Secretary Crowfoot  
24 have captured some of her legacy, but I just want to share  
25 from my perspective, just, you know, uplift, you know, her

1 ability to bring competence with care and grace, and her  
2 ability to kind of bring all of us together in some  
3 difficult conversations we've had, and just want to send  
4 her love and send her gratitude for all that she has done  
5 for our agency and for the state.

6 And again, I agree with you, she has a tremendous  
7 team assembled under her. So I look forward to working  
8 with them.

9 And want to take a minute and say, Commissioner  
10 Skinner, welcome. It will be hard for me to not say  
11 Senator Skinner in all the hearings, but just welcome on  
12 board and look forward to working with you.

13 And as the Chair mentioned, I had the opportunity  
14 to work with you before at UC Davis, and it was an absolute  
15 honor, and I look forward to supporting you and learning  
16 from you on this job.

17 And finally, on just the LA fires, just want to  
18 uplift, you know, the sacrifices of the frontline workers,  
19 you know, the firefighters who are putting their life, you  
20 know, up there to help people -- which they do so often do  
21 in California -- and, you know, just remind our agency on  
22 the incredible task we have and the work and the importance  
23 of work we have to do.

24 So with that, happy New Year and welcome  
25 everybody back to the first business meeting of the year.

1 Chair, back to you.

2 CHAIR HOCHSCHILD: Commissioner Gallardo?

3 COMMISSIONER GALLARDO: Buenos dias, good  
4 morning, everyone. So I won't talk too long because I'll  
5 get sentimental really quickly when I'm talking about  
6 Commissioner Monahan.

7 Really grateful to her for not just being such a  
8 great mentor to so many of us, I think she empowered --  
9 I'll say women, and others, but I have heard from a lot of  
10 women here at the Energy Commission who gained so much from  
11 watching Patty work, and watching how Patty interacted, and  
12 watching how Patty led. And so I am one of those people  
13 who will be eternally grateful to Patty for all that she  
14 did as a mentor, and then also for just being such a great  
15 friend. I think I also learned how to be a better human  
16 being, having Patty around. And so I am feeling sad at  
17 losing Patty.

18 And at the same time, I'm very excited and eager  
19 to gain (audio cuts out) -- sorry, so I'm just saying I'm  
20 excited to gain a new mentor and colleague and peer in  
21 Nancy Skinner. I too will struggle with not saying Senator  
22 Skinner, you've been such a great leader. But Commissioner  
23 Skinner, I'm excited for you to be with us, and then to  
24 have you at my side, and I will do my best to try to be a  
25 mentor to you as best as I can.

1           Thank you.

2           CHAIR HOCHSCHILD:   Okay, before we go to you for  
3   some opening remarks, Commissioner Skinner, I wanted to  
4   just share with the Commission meeting what we just shared  
5   at your swearing in a few moments ago.

6           We are thrilled to have you and your enormous  
7   suite of talents and experience join the CEC family.

8           Commissioner Skinner has authored over 130 laws  
9   for the State of California, which is everything from our  
10   Prop 39 enabling legislation that let us give out one and a  
11   half billion dollars in grants for energy efficiency  
12   upgrades to schools, to the SB-49 load flex, to the energy  
13   storage landmark law, to the Carbon Capture Market Creation  
14   law, to all sorts of other things that are good for the  
15   state, including letting student athletes finally get paid  
16   and allowing for two free meals for public school students.  
17   Her career has reached, you know, everywhere from the  
18   Berkeley City Council to working with cities and states and  
19   countries all over the world on climate solutions, and then  
20   to the State Assembly and the State Senate, and now finally  
21   here after her term ended just recently in the State  
22   Senate.

23           So we are thrilled to welcome you.   You have  
24   already sort of been an honorary commissioner for a long  
25   time, so now it's official, and just overjoyed to welcome

1 you.

2 So with that, we'd welcome a few remarks.

3 COMMISSIONER SKINNER: Thank you very much,  
4 Chair, and thank you fellow commissioners for your warm,  
5 warm welcomes.

6 And if I may, I would like to add my thanks to  
7 Commissioner Monahan for her service at the CEC for the  
8 past five years. And Commissioner Monahan, as the Chair  
9 and other of my colleagues noted, she accomplished much  
10 during her tenure, and I especially want to thank her for  
11 her efforts to advocate and support and implement  
12 consistent funding for clean transportation in California  
13 and the strong programs that were developed under her  
14 leadership that will continue and will help ensure that  
15 California moves equitably to the zero-emission  
16 transportation future that our state has embarked upon.

17 And, you know, there -- I think the Chair  
18 mentioned in my swearing-in comments about her role in  
19 advancing transformative zero-emission infrastructure  
20 through the Ports Collaborative, and of course helping to  
21 facilitate the opening of the Tesla Charger Network to all  
22 EVs. And so as I begin to dive into my duties as a  
23 Commissioner, I look forward to building on those  
24 accomplishments, as well as bringing my own expertise to  
25 further advance zero-emission, clean transportation, and

1 clean, renewable energy in California so that we can, as we  
2 have set ourselves to -- and when I say we, I mean the  
3 entire state of California -- we have set ourselves on the  
4 path to be, and we are, but to continue to be the leaders  
5 in tackling this climate crisis.

6 And as I mentioned earlier, we just experienced  
7 the hottest year on record. And back when I was doing work  
8 in leading the Cities for Climate Protection campaign -- so  
9 we're talking the mid-90s -- we would talk to the cities  
10 and say, you know, this X year -- it's in the 90s -- had  
11 just beat records, and then the following year would beat  
12 records, and then the following year would beat records.  
13 Then there might be one or two years that didn't.

14 But since that time, every year almost has beaten  
15 records until we're in the place now where we are  
16 experiencing some of the most serious and deleterious  
17 impacts of this climate being hotter. And while, you know,  
18 the difficulty of this issue is you cannot point to any  
19 particular single event, you can certainly point to that  
20 the conditions that a hotter climate create lend themselves  
21 to, whether it's droughts or the type of heat that causes -  
22 - the Santa Ana winds don't happen on cold days.

23 I grew up in SoCal. The Santa Ana winds are a  
24 feature of heat causing those updrafts. So to experience  
25 what we just did -- and they're not over in the fires in



1 LA, and we, without rain in the forecast, and with winds  
2 continuing, we could see more. I hope not. But we have an  
3 obligation to do our very best, even though we know that  
4 California is a drop in the bucket globally in terms of  
5 emissions, but our -- the work that we do sets the stage  
6 and sets the market signals and demonstrates that these  
7 things are achievable, and others then can follow. So  
8 that's really what I take as our mantra.

9 And I mentioned in the swearing in, I also will  
10 constantly be thinking about what my mentor, Art Rosenfeld,  
11 Former Commissioner, what would he do and how would he  
12 approach this? So I want to give my thanks to the  
13 excellent onboarding that I've received from the Human  
14 Resources Office, the Executive Office, IT, the Fuels and  
15 Transportation Division, Commissioner Monahan's staff,  
16 who've been supporting me fully. I so appreciate the warm  
17 welcome from the whole CEC family.

18 It has been wonderful to meet so many of you  
19 already, and I look forward to meeting all of you and all  
20 the stakeholders involved, which of course, that's  
21 impossible, but I do my best, and working with all of you.  
22 So I appreciate this. Thank you.

23 CHAIR HOCHSCHILD: Let's give her a warm welcome.

24 So we will be considering for approval today over  
25 \$22 million in grants and investments.

1           And before we move on to the agenda, are there  
2 any other agency announcements?

3           Commissioner Gallardo? Yeah.

4           COMMISSIONER GALLARDO: I do have a fun  
5 announcement. If we can go to that slide.

6           So every year, we celebrate the Clean Energy Hall  
7 of Fame Awards. Commissioner Skinner has been a part of  
8 them. If you recall, Commissioner, it's a great way, the  
9 awards are a great way for us to acknowledge our other  
10 partners working throughout the state who are at the local  
11 level doing this work to get to an 100 percent clean energy  
12 future. And it is a wonderful event, so even though it's  
13 in December, I'm letting you know now so you can put it on  
14 your calendar that it is happening. December 4th is the  
15 date of this year's Clean Energy Hall of Fame Awards.

16           And we are also letting you know early that this  
17 is happening because we are opening nominations sooner than  
18 we usually do. So nominations are going to be due by April  
19 4th. They are opening February 3rd, I believe, and that --  
20 more information will be on our website. So I will keep  
21 reminding everybody to submit nominations and also to put  
22 the event on their calendar.

23           That's all. Thank you.

24           CHAIR HOCHSCHILD: Right. Any other questions?

25           Commissioner McAllister, please.

1           COMMISSIONER MCALLISTER: Just again, I'm going  
2 to do this each month until March. March 11th and 12th is  
3 the California Electrification Summit. So put that on your  
4 calendars. It will be in this room and a couple of rooms  
5 upstairs. And registration, I believe, is open. The  
6 agenda is fantastic. Two days.

7           I want to just give kudos to my Chief of Staff,  
8 Brian Early, for running a herd on all of those -- all the  
9 details that come with building an event of this magnitude.  
10 So thanks to him. And yeah, really looking forward to the  
11 second iteration of the Electrification Summit. The first  
12 one back in October of 23 was a huge success, and we're  
13 really going to stand on those successes to go even higher.

14           So really appreciate everyone for your attention.  
15 Hopefully we can see you there.

16           Thanks.

17           CHAIR HOCHSCHILD: Any other announcements?

18           Okay. With that, we'll move to the consent item  
19 number three.

20           Are there any public comments on Item 3?

21           MS. BADIE: Thank you, Chair. The Commission  
22 welcomes public comment on Item 3 at this time. This is  
23 our consent agenda. If you're in the room with us, we're  
24 asking folks to use the QR code to let us know. And if  
25 you're on Zoom, you'll use the raise hand feature on your

1 screen or star nine if joining by phone. That'll let us  
2 know you'd like to comment on this item.

3           Alright. I'm not seeing anyone in the room, so  
4 I'm going to transition to Zoom.

5           George Lee, I'm going to open your line. You'll  
6 unmute on your end. We're asking for comments to be two  
7 minutes or less, and there'll be a timer on your screen.

8           And just a quick reminder: it helps us if you can  
9 please spell your name before you begin your remarks.

10           MR. LEE: My name is George Lee, G-E-O-R-G-E  
11 L-E-E, and I'm here representing IXP. Good morning,  
12 commissioners and staff. IXP is a California-based  
13 technology company specializing in innovative mobile and  
14 semi-permanent charging solutions that bridge the gap  
15 between today's infrastructure limitations and the growing  
16 demand for EV adoption.

17           We are deeply honored to be selected as a  
18 proposed awardee for the CEC grid-supportive transportation  
19 electrification grant, Item 3J, on today's consent  
20 calendar. This opportunity will allow us to deliver  
21 scalable, flexible, and impactful charging solutions to  
22 meet California's ambitious goals for EV adoption and  
23 equitable access to clean energy. Our project focuses on  
24 deploying mobile charging sites across diverse locations,  
25 including disadvantaged communities where permanent EV

1 infrastructure is challenging due to grid constraints,  
2 cost, or site limitations.

3 By enabling level 2 and DC fast chargers in these  
4 areas, we aim to support EV adoption while deferring costly  
5 grid upgrades. We are especially proud that this  
6 initiative aligns with the state's broader goals, including  
7 vehicle grid integration, renewable energy utilization, and  
8 fostering equity in transportation electrification.

9 Through partnerships with organizations like County of Los  
10 Angeles, UC San Diego, and local utilities, we aim to  
11 create a lasting impact that serves both the underserved  
12 communities and California's climate objectives.

13 We commend CEC staff for designing a grant  
14 program that truly supports innovative solutions for  
15 sustainable mobility.

16 Thank you for this incredible opportunity to  
17 contribute to a cleaner, greener future.

18 MS. BADIE: Thank you for your comment, and that  
19 concludes public comment for Item 3.

20 Back to you, Chair.

21 CHAIR HOCHSCHILD: Okay. I believe we have some  
22 recusals from Commissioner McAllister and Commissioner  
23 Gallardo.

24 Would you like to go first, Commissioner  
25 Gallardo?

1 COMMISSIONER GALLARDO: Absolutely.

2 So on Item 3C, I will recuse myself from any  
3 discussion, consideration, or vote on the proposed  
4 resolution approving a sponsorship agreement that provides  
5 membership for staff, plus other benefits with women of  
6 renewable industries and sustainable energy.

7 I serve on the Board of Women of Renewable  
8 Industries and Sustainable Energy. In that role, I do not  
9 receive any compensation in any form, including  
10 reimbursements or per diem for expenses. So there is no  
11 financial interest in which there would be a conflict of  
12 interest under the Political Reform Act or Government Code  
13 Section 1090.

14 However, in an abundance of caution, I will  
15 recuse myself to avoid any perception of a conflict of  
16 interest.

17 COMMISSIONER MCALLISTER: Alright.

18 On Item 3F, I will recuse myself from any  
19 discussion, consideration, or vote on the proposed  
20 resolution approving a membership agreement with the  
21 Western Interstate Energy Board.

22 I currently chair the board of the Western  
23 Interstate Energy Board and am reimbursed for travel  
24 expenses related to some travel associated with  
25 participating on the board.

1           Pursuant to the Government Code, I'm disclosing  
2 this conflict and recuse myself from the discussion and  
3 vote on this item so that a quorum of Commission may  
4 deliberate and decide in my absence.

5           CHAIR HOCHSCHILD: Okay, do you leave the room?  
6 Yeah, or --

7           MS. BADIE: If you'd want to vote on all the  
8 items with the complete dais, and then we'll have  
9 Commissioner Gallardo leave, and you'll vote on 3C, and  
10 then she'll return, and then you'll have Commissioner  
11 McAllister leave.

12          CHAIR HOCHSCHILD: Just for expediency's sake,  
13 would it be okay to just have both of them leave? We'll  
14 just vote on the complete -- it will be fine?

15          Okay. Do you mind just stepping out for entirety  
16 of Item 3? Okay, so why don't we take up item -- once  
17 they're out of the room, why don't we take up Item 3 in its  
18 entirety.

19          (Commissioners Gallardo and McAllister exit the  
20 hearing room.)

21          CHAIR HOCHSCHILD: If there's -- unless there's  
22 any Commissioner discussion, I'd entertain a motion from  
23 Vice Chair Gunda.

24          VICE CHAIR GUNDA: I move Item 3.

25          CHAIR HOCHSCHILD: Is there a second from

1 Commissioner Skinner?

2 COMMISSIONER SKINNER: Second.

3 CHAIR HOCHSCHILD: All in favor say aye.

4 Vice Chair Gunda?

5 VICE CHAIR GUNDA: Aye.

6 CHAIR HOCHSCHILD: Vice Chair Skinner?

7 COMMISSIONER SKINNER: Aye.

8 CHAIR HOCHSCHILD: And I vote aye as well.

9 Item 3 passes 3-0 with Commissioner McAllister  
10 and Commissioner Gallardo abstaining.

11 You can notify them.

12 Thank you. Next, we will turn to Item 4, which  
13 is the information item, Department of Water Resources, an  
14 update on strategic reliability reserve investments.

15 And welcome to Delphine. Good to see you again.

16 MS. HOU: Thank you very much.

17 CHAIR HOCHSCHILD: Good morning.

18 Happy New Year.

19 MS. HOU: Good morning. Good morning, Chair,  
20 Vice Chair, Commissioners. Welcome, Commissioner Skinner.  
21 Happy New Year. Thank you for welcoming me back.

22 My name is Delphine Hou, the Deputy Director for  
23 Statewide Energy in the Department of Water Resources, and  
24 I'm here to provide an update on the Electricity Supplies  
25 Strategic Reliability Reserve Program that we lovingly call



1 ESSRRP.

2 Next slide, please.

3 Alright. As background, Assembly Bill 205  
4 created the state's strategic reliability reserve, and of  
5 the three parts of the reserve, the CEC oversees two,  
6 focused on demand response and distributed resources, while  
7 the Department of Water Resources Program is focused on  
8 grid-connected resources. So ESSRRP acts as an insurance  
9 policy and safeguards the statewide electric grid during  
10 extreme and or combined events, such as heat events,  
11 wildfires, droughts, all the things that we're very  
12 unfortunately seeing in Southern California driven by  
13 climate change. And the program also supports California's  
14 transition to a clean energy future.

15 And I know we've struggled through a couple of  
16 difficult years on the electricity side, so I know we're  
17 glad we're able to provide the support that we have in the  
18 past.

19 Next slide, please.

20 So per AB 205, DWR is required to provide regular  
21 updates at the Energy Commission meeting for investments  
22 made and under consideration. Moreover, the legislation  
23 requires the attendance of the California Public Utilities  
24 Commission and the California Independent System Operator.

25 And I do believe a representative from both is

1 logged on here online today. So thank you for your  
2 participation as well.

3 Today is the 10th update presented to the Energy  
4 Commission, and we expect the next update to occur in the  
5 second quarter of 2025.

6 Next slide, please.

7 Also, as a reminder, there are five distinct  
8 types of projects that we invest in. So the first one is  
9 the extension of the operating life of generating  
10 facilities planned for retirement. So that was the ability  
11 to contract with those resources so that we can populate  
12 the reserve quickly.

13 But also, we do have the ability to actually  
14 construct new temporary emergency generators of five  
15 megawatts or more. We have been doing that. It's a  
16 slightly longer, slower pathway, but that is also in the  
17 program as well.

18 And moving on, kind of looking at our future, the  
19 third is generation facilities using clean, zero emission  
20 fuel technology of any size.

21 And then the fourth is new energy storage systems  
22 of 20 megawatts or more that are capable of discharging for  
23 at least two hours.

24 And lastly, the fifth is to reimburse electrical  
25 corporations for the value of imports that were produced

1 above market costs and in excess of procurement  
2 authorizations and requirements that were already in place.

3 So those are the five main eligible types of  
4 projects.

5 Next slide, please.

6 So this investment table we've shown before,  
7 these are the total investments that DWR has, including the  
8 investments under the ESSERT program starting for 2022.

9 And you can really see the evolution here in the  
10 table. We started off very small with the emergency and  
11 temporary gas fired generators. And then in order to fill  
12 the program very quickly, we relied on a lot of firm energy  
13 imports. And then in the emergency days of 2022, when we  
14 had that massive heat wave in September, we did have  
15 temporary diesel generators that were relied on for that  
16 summer. We very quickly sunset that program. So even  
17 though we could have had it in 2023, DWR declined. We were  
18 trying to push towards cleaner resources. So we started  
19 building out more of the emergency and temporary natural  
20 gas fired resources, continued to lean on foreign imports.

21 But as you can see, by 2024, we've transitioned  
22 away from diesel and imports and now are relying on in-  
23 state temporary and emergency natural gas fired generators  
24 and or contracts.

25 So in that 24, 25 time span in 2024, we did have

1 up to 3,100 megawatts. And the reason it's an up to is  
2 that there were some ups and downs in the program. So we  
3 had new generators coming online, finally completed  
4 construction and getting their online dates coming out of  
5 the long, tail of the pandemic and various delays. But we  
6 also had some downs. We had, for example, an expiration of  
7 a waiver that would have allowed us to use an  
8 interconnection at a higher level.

9 So there were some ups and downs in 2024, but we  
10 had up to 3,100 last year.

11 Starting in 2025, we are steady state at 3,079.  
12 So those are both emergency temporary generators that are  
13 short-start and long-start resources that are available to  
14 respond to the California Independent System Operator and  
15 other balancing authorities as needed.

16 I do want to highlight that with all of these  
17 resources, they're operated on an emergency basis, which  
18 means the default for these resources is off. They're not  
19 running 24/7. They're not available 24/7, the way a  
20 resource under resource adequacy would be required to have  
21 that must rougher obligation.

22 So these resources are turned on in response to  
23 extreme events or required maintenance and testing. And  
24 for short start units, they have kind of an automatic  
25 trigger that if one of the major California balancing

1 authorities has an energy emergency alert watch or higher,  
2 these resources automatically deploy onto the grid to help  
3 the system.

4 For long start resources, because they are longer  
5 start, they need operator direction. That lies with the  
6 California Independent System Operator to direct their  
7 response. So the operators there are in charge of the  
8 longer start units.

9 So looking forward, DWR currently doesn't have  
10 any new resources under contract, but we remain open to  
11 opportunities. I think we're finally coming out, as I  
12 said, the long tail of the pandemic. And like the rest of  
13 the industry, we've found it difficult to move forward with  
14 some projects due to increased costs, lack of  
15 interconnection, very high demand for non-emitting  
16 technologies like battery storage. But we also wanted to  
17 prioritize our investments that don't compete with  
18 facilities that load serving entities have already planned  
19 for.

20 Lastly, I want to thank and acknowledge the  
21 considerable cooperation and coordination with the Energy  
22 Commission, your staff, the amazing folks at the Public  
23 Utilities Commission, California Independent System  
24 Operator. As always, very, very strong partners in  
25 developing and maintaining the state's strategic

1 reliability reserve. I appreciate all of the efforts that  
2 have gone in over the years for this to be a successful  
3 joint effort.

4 And lastly, I do want to show my appreciation for  
5 Commissioner Monahan, who I've worked with ever since I was  
6 at the California Independent System Operator for many  
7 years, and then at DWR. So we will definitely miss her  
8 presence, but we're thrilled to have Commissioner Skinner  
9 with us.

10 So thank you very much. That's my presentation.

11 CHAIR HOCHSCHILD: Thank you.

12 Anything else? Okay.

13 I believe we have both Molly Sterkel from PUC and  
14 Mark Rothleder on the line.

15 Do you want to begin, Molly, with any additional  
16 comments?

17 MS. STERKEL: I don't have any further comments.  
18 I'm here for any questions.

19 And thank you very much to Delphine for carrying  
20 the presentation.

21 CHAIR HOCHSCHILD: Okay. And is -- Mona, is Mark  
22 on from CAISO?

23 Yeah, Mark, good morning. Anything else you'd  
24 like to add?

25 MR. ROTHLEDER: No, same here.

1           Just really express appreciation for CDWR's  
2 efforts over the summer. And we're here to answer any  
3 questions.

4           CHAIR HOCHSCHILD: Alright. With that, we'll go  
5 to Commissioner discussions, starting with the Vice Chair.

6           VICE CHAIR GUNDA: Thank you, Chair.

7           Thank you, Director Hou, for your presentation.

8           I don't have any questions for Director Hou, but  
9 I just wanted to take a minute to thank you for your  
10 leadership at DWR with the Strategic Reserve, but also  
11 helping bridge DWR and their competence with the larger  
12 energy community, more so since you started there and not  
13 just with the Strategic Reserve, but also looking into all  
14 the demand flexibility that's possible, load reduction  
15 that's possible with the State Water Project and all those  
16 resources that you're able to so seamlessly bring into the  
17 discussion. So just wanted to thank you and your entire  
18 team for the tremendous work.

19           One of the things that Director Hou kind of  
20 noted, touched on: last year was very hot. And we had not  
21 a single flex alert. And thanks to the tremendous work  
22 that PUC, CAISO, and DWR and CEC colleagues have been able  
23 to do, along with the Governor's Office and the many  
24 resources within the Governor's Office and GO-Biz to keep  
25 the team together, be very proactive, to respond

1 strategically to all these moments.

2           So one thing I'm really grateful for is having  
3 those resources, those \$3,000 resources, to be able to use  
4 them as a backstop when necessary to support the grid.

5           So thanks again for all your work and look  
6 forward to your April 8th.

7           As I was leaving the staff position, I was really  
8 worried that I don't get to see you often at the JASC  
9 meetings, but this is how we make it happen.

10           So thank you.

11           MS. HOU: Thank you, Vice Chair.

12           CHAIR HOCHSCHILD: Thank you, Delphine.

13           Are there any other questions?

14           Yeah, Commissioner Gallardo, please.

15           COMMISSIONER GALLARDO: More of a clarification  
16 than a question.

17           So Delphine, thank you so much for being here. I  
18 had told you I was not going to be at this business meeting  
19 and ask for a briefing. So I really did not think I was  
20 going to be here. So I wanted to clarify that. I didn't  
21 want you to feel misled. And I really appreciate the  
22 briefing.

23           Earlier we acknowledged also the victims and  
24 firefighters that are being impacted by the LA fires and  
25 wanted to acknowledge you too. We talked a little bit



1 about that, how you and your colleagues are being affected.  
2 And so thank you for that work as well and wanted to  
3 acknowledge that and our other state peers who are working  
4 directly on the fire situation.

5 CHAIR HOCHSCHILD: Commissioner Skinner?

6 COMMISSIONER SKINNER: Thank you, Chair.

7 Thank you, Delphine, for the presentation.

8 And perhaps in the next quarterly update, I know  
9 that some of the strategic reserves, what we rely on for  
10 this, are in the LA area and might get an update on whether  
11 any of them were impacted by the fires. So that's one  
12 request.

13 And I also wanted to just thank the fact that we  
14 have such a strategic reserve, because as other  
15 commissioners have referenced, we -- you know, we've had  
16 some very high demand electricity days because of high  
17 heat, and yet we've not experienced the power outages that  
18 one might have expected. And I appreciate that you  
19 specified that these are not -- these reserves are not used  
20 24/7. And that there was a lot of concern, obviously, for  
21 some, since some of them are fossil-based and might have  
22 been retired, that they, you know -- our continued use of  
23 them is impacting communities that disproportionately  
24 experience pollution.

25 But I think that as far as we've observed,

1 they've been being used wisely. And as you pointed out,  
2 they're only utilized when they are needed. So I  
3 appreciate that and hope we get to the point where perhaps  
4 we don't have to be as reliable -- relying on them.

5 MS. HOU: Absolutely.

6 Thank you, Commissioner Skinner.

7 I can report that currently none of our resources  
8 are impacted by the fires, but we will continue to monitor  
9 that in an update again at the next meeting.

10 Thank you.

11 CHAIR HOCHSCHILD: Thank you, Delphine.

12 Unless there's other questions. Thank you so  
13 much.

14 With that, we'll turn to Item 5, resolution  
15 adopting California energy demand 2024 through 2040  
16 forecast.

17 Welcome, Nick Fugate.

18 MR. FUGATE: Good morning, commissioners. I'm  
19 Nick Fugate with the Energy Assessments Division, and I'm  
20 here today to propose adoption of the California Energy  
21 Demand Forecast Update for years 2024 to 2040.

22 This update is specific to end-user electricity  
23 demand. It covers annual electricity consumption, sales,  
24 and peak demand for planning areas across the state, as  
25 well as hourly electricity demand for planning areas within

1 the California ISO balancing area. I have a brief  
2 presentation covering the purpose of this forecast, a recap  
3 of our process this year, notable changes we've made this  
4 cycle, as well as some high-level results.

5 So, next slide.

6 Demand forecasting is one of the Energy  
7 Commission's charter responsibilities. As such, the  
8 forecast has been described in detail within the 2024  
9 integrated energy policy report.

10 Importantly, the forecast is also a critical  
11 planning tool. It lays a foundation for a number of state-  
12 sponsored planning and procurement efforts, including  
13 transmission and distribution planning, integrated resource  
14 planning, resource adequacy, and other activities aimed at  
15 keeping California's energy clean, affordable, and  
16 reliable.

17 There's an agreement between leadership at the  
18 Energy Commission, the Public Utilities Commission, and the  
19 California ISO, referred to as the Single Forecast Set  
20 Agreement, which describes the current commitments at each  
21 organization to use a particular combination of forecast  
22 products for particular planning purposes. And for the  
23 sake of transparency, that agreement is updated every year  
24 and memorialized within the forecast chapter of the IEPR  
25 report.

1           Next slide, please.

2           The CEC seeks input into its forecast development  
3 through multiple venues. In 2024, we held five IEPR  
4 workshops. These workshops focused on areas of significant  
5 load growth, forecast methodology updates, and uses of the  
6 forecast and system planning. We also had a results  
7 workshop specific to our load modifier projections, and  
8 then on December 12th, we had our final workshop covering  
9 the overall forecast results.

10           All the materials presented at these workshops,  
11 as well as event recordings, are available on the IEPR  
12 website.

13           And in addition to workshops, we held four  
14 meetings of the Demand Analysis Working Group, or DAWG, to  
15 review proposed methodological updates, inputs and  
16 assumptions, and preliminary results. The DAWG forum  
17 allows CEC forecast staff to engage with stakeholders in a  
18 less formal setting and something of an ad hoc basis.

19           And these meetings are still public facing,  
20 though, and the materials presented are available on the  
21 Demand Analysis Working Group website.

22           We also routinely engage with the Joint Agency  
23 Steering Committee. This is a working group intended to  
24 promote coordination between the CEC's forecast and its  
25 dependent processes at the CPC and the California ISO. And

1 this collaboration assures that the forecast is continually  
2 evolving to meet emerging planning needs.

3 Next slide, please.

4 So here I'm highlighting just some notable  
5 updates that we made this past year. During the 2024 IEPR  
6 cycle, we refreshed our economic and demographic drivers  
7 with new projections from Moody's Analytics and Department  
8 of Finance. We refreshed our additional achievable fuel  
9 substitution scenarios, improving technology  
10 characterization and updating compliance schedules for  
11 CARB's Zero Emission Appliance Standard.

12 Our transportation electricity demand forecast  
13 also received updates, notably improved characterization of  
14 energy demand through use of a newly developed travel  
15 model.

16 Our PV forecast and generation forecasts -- I'm  
17 sorry, PV capacity forecast and generation forecasts were  
18 also updated -- lowered in response to a staff analysis of  
19 metered system data as well as stakeholder feedback and  
20 additional information related to technology cost and  
21 market potential. We re-estimated our base hourly  
22 consumption profiles incorporating these revised PV  
23 estimates.

24 New this cycle, we have data centers captured as  
25 a distinct load modifier. This analysis was initiated

1 following our IEPR workshop on major load growth areas, and  
2 data centers were featured prominently in that discussion.

3 We relied heavily on data provided voluntarily by  
4 utilities, and so I should thank staff from PG&E, Southern  
5 California Edison, Silicon Valley Power, Palo Alto, SMUD,  
6 and San Jose for providing what information they could  
7 related to known data center projects.

8 And new to this cycle, we have scenarios for both  
9 PV and storage, and so for the first time, our planning  
10 forecast and local reliability scenarios feature different  
11 levels of distributed generation.

12 All of these changes were included in the  
13 forecast results presented at our December 12th workshop,  
14 and since then we have made a few more changes in response  
15 to feedback that we received.

16 So we received some additional information from  
17 PG&E and SCE related to data centers. We incorporated this  
18 additional information into a higher growth scenario, which  
19 is being used now for our local reliability forecasts. We  
20 also reviewed new information on interconnection activity  
21 to date for systems -- behind-the-meter PV systems that  
22 were approved under NEM 2.0, Net Energy Metering 2.0. This  
23 increased the amount of PV we now understand to be  
24 interconnected in 2024, which is the first year of the  
25 forecast.

1           And finally, we corrected an error in our hourly  
2 local reliability forecast, which had not appropriately  
3 reflected the lower PV and storage scenario. The final  
4 forecast forms incorporating even these most recent changes  
5 have all been docketed, as has the notice of availability,  
6 which we included as part of the document materials for  
7 this agenda item.

8           Next slide, please.

9           I have just a couple charts showing high-level  
10 results for the 2024 IEPR forecast. This plot compares our  
11 forecast of statewide electricity sales across two  
12 vintages, the 2023 IEPR versus the 2024 update being  
13 considered today for adoption, and across two scenarios,  
14 the planning forecast and the local reliability scenario.

15           Our scenario framework is similar to last  
16 cycle's, with the planning scenario representing mid-range  
17 assumptions suitable for system planning -- system-level  
18 planning, things like system RA or the CPC's integrated  
19 resource plan. And then the local reliability scenario,  
20 which errs on the side of higher electric load, so less  
21 efficiency, less behind-the-meter PV, more fuel  
22 substitution, and now more data center load. And this is  
23 used for local studies. And again, the use cases are  
24 documented in detail within the text of the IEPR report.

25           Examining this chart, we see that our 2024 IEPR

1 forecast begins from a point just slightly lower than the  
2 previous forecast. Growth over the forecast horizon is  
3 significantly increased over the previous forecast. This  
4 is the result of increased growth in demographic drivers,  
5 less load reduction on account of both the lower PV  
6 adoption forecast and the lower PV generation --

7 CHAIR HOCHSCHILD: I'm sorry, Nick, that 3.2  
8 percent is the average annual growth?

9 MR. FUGATE: It's compound.

10 CHAIR HOCHSCHILD: Compound annual growth from  
11 now to 2040.

12 Just looking back, the (indiscernible) was like  
13 what, probably 1 percent? I mean, there's the looking --

14 MR. FUGATE: Previous forecast?

15 CHAIR HOCHSCHILD: Yes.

16 MR. FUGATE: Previous forecast was still up -- I  
17 believe it was still up over 2 percent.

18 MR. FUGATE: It's significantly higher, the lower  
19 PV and the higher data center.

20 CHAIR HOCHSCHILD: So it's basically like a 50  
21 percent increase in the forecast. Okay, that's helpful.  
22 Thanks.

23 Well, from 2 percent to 3.2 percent.

24 Am I understanding that right?

25 MR. FUGATE: The growth rate?



1 CHAIR HOCHSCHILD: Yeah.

2 MR. FUGATE: Yeah.

3 CHAIR HOCHSCHILD: Yeah. Okay.

4 MR. FUGATE: In absolute terms, it's not 50  
5 percent, but yeah, but in terms of the growth rates.

6 So the spread between planning and local  
7 reliability scenarios is slightly increased this cycle.  
8 And relative to last, and that's reflecting the lower PV  
9 scenario and the higher data center scenario in the local  
10 reliability scenario.

11 As we just discussed, the planning forecast grows  
12 at 3.2 percent annually, reaching more than 411 terawatt  
13 hours by 2040.

14 Next slide.

15 So this plot shows our annual peak forecast for  
16 the CAISO control area and for the same vintages and  
17 scenarios I discussed on the previous slide. Both the  
18 planning and local reliability scenarios begin from a  
19 weather normalized peak estimate of 2024 peak load, which  
20 is lower than our previous forecast value.

21 And the story is similar to the sales forecast.  
22 The peak forecast is driven by our underlying annual  
23 consumption forecast, which is higher than the last  
24 cycle's, particularly with the new data center load. And  
25 the annual peak grows at 2.3 percent annually in the

1 planning scenario, so not as quite as fast as the sales  
2 forecast. And this is because much of the growth in sales  
3 is coming from transportation electrification, which is  
4 largely assumed to be happening outside the peak window.

5 CAISO peak is projected to reach nearly 67  
6 gigawatts by 2040.

7 And we can move to the final slide.

8 So what I've shown today are high-level results.  
9 I want to reiterate that the various components of the  
10 forecast were presented and discussed in much greater  
11 detail at our various workshops throughout the year, and  
12 are documented within the text of the IEPR.

13 Adoption of the forecast today will ensure that  
14 dependent planning processes can proceed without critical  
15 delays.

16 And so I will recommend adoption of the forecast  
17 today, and also staff's recommendation that the forecast is  
18 not a project under CEQA, or in the alternative if deemed  
19 to be a project that it is exempt.

20 And I would like to pause at this point and  
21 invite -- we have Cristy Sanada from our sister agency from  
22 CAISO here to speak. So I'd like to invite her up to --

23 CHAIR HOCHSCHILD: Great.

24 MR. FUGATE: -- speak at this point.

25 CHAIR HOCHSCHILD: Good morning.

1 MS. SANADA: Hi, good morning, commissioners. So  
2 my name is Cristy Sanada with the California Independent  
3 System Operator or CAISO. I'm here today to speak in  
4 support of the CEC adopting the 2024 California Energy  
5 Demand Forecast Update.

6 I want to start by expressing CAISO's thanks to  
7 CEC staff that works on the forecast year round. I said  
8 this last year, but the demand forecast is becoming  
9 increasingly complex. At that point, I didn't quite have  
10 data centers on my mind yet. So I just want to reemphasize  
11 the increasing complexity of the demand forecast.

12 And over the years, the CEC has incorporated the  
13 impacts of electrification of various sectors of the  
14 economy, the impacts of behind the meter resources. And  
15 this year, there was a focus on the impacts of large loads  
16 with a focus on data centers. To tackle these challenges,  
17 the CAISO is ever appreciative that we have such capable  
18 and easy to work with staff at the CEC working on this very  
19 important product year round.

20 The CEC's forecast is a critical input into state  
21 electric system planning processes, including the CAISO's  
22 annual transmission planning process. Our transmission  
23 planning process relies on the CEC's forecast and local  
24 regulatory authority resource plans to identify both  
25 transmission and non-transmission solutions required to

1 reliably connect new loads and generation. To support the  
2 timely development of new grid infrastructure, the CAISO  
3 must have sufficient lead time to study and identify  
4 solutions that can support these new loads and generation.

5 So the CAISO really appreciates and supports  
6 several new elements and enhancements to the forecast this  
7 cycle, and that includes updating behind-the-meter storage  
8 and solar assumptions based on new data from utilities and  
9 the CPUC; enhancements to the hourly model, which address  
10 feedback and questions from last year's forecast where the  
11 CEC made some pretty significant updates to its hourly  
12 model; and incorporating new loads into the forecast, in  
13 particular with a focus on data centers.

14 Regarding the data center forecast, the CAISO  
15 supports the balance that the CEC struck this cycle,  
16 ensuring that these data center loads are captured in the  
17 forecast so that the downstream planning processes have  
18 ample time to plan for this new load growth while  
19 reflecting some uncertainty to account for risks that load  
20 may not materialize as stated.

21 So in closing, the CAISO supports the CEC  
22 adopting the 2024 demand forecast update, and we look  
23 forward to getting right into the next forecast cycle in  
24 our continued collaboration with the CEC.

25 Thank you.

1 CHAIR HOCHSCHILD: Thank you, Cristy.

2 With that, let's go to public comment on Item 5.

3 MS. BADIE: Thank you, Chair.

4 The Commission welcomes public comment on Item 5  
5 at this time.

6 If you're joining us in the room, we're asking  
7 folks to use the QR code or visit the public advisor table.  
8 If you're joining on Zoom, please use the raise hand  
9 feature on your screen, or star nine if joining us by  
10 phone. That'll let us know you'd like to comment on this  
11 item.

12 And I'm just giving that a moment.

13 Alright, we do not have any raised hands for this  
14 item.

15 Back to you, Chair.

16 CHAIR HOCHSCHILD: Alright. Let's go to  
17 commissioner discussion, starting with the Vice Chair.

18 VICE CHAIR GUNDA: Thank you, Chair.

19 I just want to use up my in a comment for the  
20 whole year. It's going to be a long one.

21 But I just want to start with just thanking the  
22 fellow commissioners who spent a lot of time this year  
23 working with the staff on making sure the forecast is  
24 updated and reflects some of the policy goals of the state.

25 I cannot extend more gratitude to the IEPR team

1 for their continued work, and just want to take a minute to  
2 give a big thanks to the entire forecast team who  
3 contributed to the work. I cannot name every single person  
4 here, but definitely want to acknowledge some of the, you  
5 know, leadership, beginning with Nick Fugate, Lynn  
6 Marshall, Matthew Cooper, Chris Kowalik, Anne Fisher, Alex  
7 Lonsdale, and the entire DG forecasting team.

8 Also want to give a shout out to Jenny Chan on  
9 the sector modeling team, Quintin Gee, Andrew Freeman, and  
10 the transportation electrification team, Nick Janisch and  
11 the building electrification team, and as well as Nancy  
12 Tran, Julianne Alontave, and then Cam Nguyen, who prepared  
13 many of the data sets that go into the forecast.

14 Also want to extend my thanks to CAISO -- thanks,  
15 Cristy, for being here today -- CPUC colleagues, CARB and  
16 the IOUs and other stakeholders have provided critical  
17 feedback throughout the year.

18 CARB has taken time to review the updated fuel  
19 substitution scenarios, which is important so they can  
20 reflect some of the goals and the climate policies that  
21 CARB is pursuing and working on.

22 A big thanks to CPUC for their increased  
23 collaboration across all forecast aspects, but especially  
24 on reviewing the PV and storage assumptions and results of  
25 the hourly forecast.

1           I want to thank and reiterate the thanks to the  
2 five utilities who provided data center information: PG&E,  
3 Southern California Edison, Silicon Valley Power, Palo  
4 Alto, and City of San Jose. Their contribution in  
5 providing data sets is really, really important as we think  
6 through how to forecast data center load in the state.  
7 Every one of them was extremely generous on the time and  
8 huge help in updating the forecast component.

9           CAISO and other stakeholders who have provided  
10 critical feedback throughout the year, and finally the  
11 utilities who take time to review and provide their  
12 feedback on the updated assumptions.

13           So again, a lot of thanks that go here, but I  
14 just want to close by saying this forecast cycle, we  
15 started off by thinking it's going to be a few updates.  
16 You know, these years have become every year is a full  
17 update.

18           And Nick, I cannot overstate the thanks to you  
19 for the tremendous work you've been doing in making sure  
20 all the input, but also the feedback that we get from the  
21 stakeholders is continually reflected in the forecast.

22           This is going to be really hard to get it right  
23 with the number of policy variations and uncertainties. As  
24 we think about clean electrons, clean molecules, and the  
25 electrification, it's just going to be really hard to get

1 this right. And it's important to have a coordinated view  
2 across all the agencies on how best to, you know, complete  
3 the forecast, because it has direct downstream impacts on  
4 the IRP process, the transmission planning process, the  
5 distribution planning process, and so many other processes.

6 So I cannot overstate the importance of the  
7 forecast and the tremendous work and contribution to the  
8 forecasting team.

9 With that gratitude, I look forward to voting for  
10 adoption of the forecast.

11 CHAIR HOCHSCHILD: Great.

12 Other -- Commissioner McAllister?

13 COMMISSIONER MCALLISTER: Yeah, so Nick, I've  
14 appreciated the team's just updates regularly on the  
15 forecast and your openness to input and just really feel  
16 like I've been taken care of. It's a really, really  
17 important topic to keep track of. And I know Vice Chair  
18 Gunda does a great job of directing all your work, but just  
19 wanted to say thanks to you and the staff.

20 I mean, especially when dealing, sort of pivoting  
21 around, updating the analyses when necessary and doing  
22 that, in addition to trying to capture these new trends and  
23 data centers, there's so much volatility in the evolving  
24 load. And just to Delphine's point, just to -- and to  
25 Christy's point, it's a lot. It's complex and it gets more



1 complex every year. And just really, every year you seem  
2 to rise to the occasion.

3 So I really appreciate the whole team.

4 Thanks.

5 CHAIR HOCHSCHILD: Any other comments?

6 Commissioner Gallardo?

7 COMMISSIONER GALLARDO: Nick, thank you so much  
8 for the presentation. Really appreciate it.

9 And I also want to thank you for all you've done.  
10 And you're such a tremendous leader here. You have so much  
11 institutional knowledge.

12 I'm hoping you're not planning on leaving the  
13 Energy Commission anytime soon. We would lose so much.

14 During our briefing, we mentioned that at the  
15 Energy Commission, we do the siting of power plants. We've  
16 been working on small power plant exemptions. A lot of  
17 those have been data centers, and so we have information  
18 internally that you may be able to use. So I know we  
19 talked about it, but it's just for visibility of fellow  
20 commissioners wanted to mention it here.

21 No question, just a big thank you.

22 CHAIR HOCHSCHILD: Vice Chair -- sorry,  
23 Commissioner Skinner please.

24 COMMISSIONER SKINNER: Thank you.

25 And appreciate the work that went into this. I

1 can only imagine it's very, very detailed to be able to  
2 project, especially when we have these changes, like the  
3 growth in data centers.

4 I wondered, we obviously made adjustments for  
5 growth, not only in load, but also in peak, and I wondered  
6 how much of the growth in peak was due to data centers?

7 Do we have it broken down like that, or --

8 MR. FUGATE: Yes, we do. So I apologize I don't  
9 have the exact number handy. I can pull that up.

10 COMMISSIONER SKINNER: In a way, I should have  
11 worded the question a bit differently. It was more -- is  
12 it our data centers going to greatly affect our peak? I  
13 mean, I appreciate that they do with load, but --

14 MR. FUGATE: Yes.

15 So a significant amount of the peak growth is  
16 coming from the additional data center load that we have  
17 added this cycle.

18 Profile is relatively flat over the course of the  
19 day. So we're just expecting that once these data centers  
20 are online and fully operational, they could just be  
21 running.

22 There's a bit of a temperature sensitivity, but  
23 it's slight. So they will just be running during the peak  
24 window as well.

25 COMMISSIONER SKINNER: Okay.

1 VICE CHAIR GUNDA: Yes.

2 Thanks, Commissioner Skinner. Thank you for that  
3 question.

4 I think a part of the work that we'll have to do  
5 this year is to continue to think about both in terms of  
6 the total capacity we anticipate reasonably in California,  
7 but to your point, the load shape, but also how we expect  
8 that to load to manifest over time.

9 You know, even for a single data center, what  
10 staff have done this year through discussions with some of  
11 the participating utilities assumed the load to come over  
12 time. Even for a single data center, that was one. And  
13 some of the information that went into the forecast was  
14 known load information from the utilities, and even for  
15 that, there has to be some judgment done based on  
16 historical precedent on how much haircut should we give  
17 that.

18 But the overall point though is, it's a really  
19 big unknown. But what the joint agency team has settled on  
20 is that given the electrification load that we anticipate,  
21 even if we plan for a slightly higher data center growth,  
22 it would be okay given that those electrons will be used  
23 because it is about a downstream process.

24 One thing I just wanted to say, I just skipped on  
25 one line. You know, just want to thank the leadership,

1 Alicia, who's here of EAD, but also Heidi Javanbakht and  
2 Jeremy Smith, who have been tremendous leadership addition  
3 in EAD, and to President Reynolds and Commissioner Houk,  
4 who have spent a lot of time this year on the forecast.

5 CHAIR HOCHSCHILD: I had one just higher level  
6 question.

7 I had just asked the Vice Chair, looking back at  
8 our previous forecasts, how accurate have we been? He said  
9 roughly in the three to 4 percent band, which is pretty  
10 good.

11 And obviously there's a lot you can't forecast,  
12 who saw COVID coming, recession and so on.

13 But just in terms of our own learning curve about  
14 taking lessons learned and our ability to get as accurate  
15 as possible, I wonder if you could just speak to how we  
16 approach that, and refining and trying to improve the  
17 forecast and just the level of confidence we're -- it's a  
18 little bit like predicting the weather, you know?

19 You're never going to have total visibility, but  
20 we have gotten actually a lot better about that.

21 So I just wonder if you could speak to a little  
22 bit how we're approaching improving the forecast accuracy.

23 MR. FUGATE: Sure.

24 So it's a little tricky to think about forecast  
25 accuracy when you're thinking about a 20-year outlook.

1           So I don't have any plans to leave anytime soon,  
2 but I hope to be gone by the time we get to the end of this  
3 forecast horizon that we're talking about here.

4           So when you're looking at that sort of timescale,  
5 the best we can do is we're trying to build in our best  
6 estimates of what the -- we're sort of blending a few  
7 different approaches here, right? We develop a kind of  
8 baseline forecast that sort of takes what we know about  
9 consumer behavior right now, right? Load responses to  
10 things like the weather, things like demographic and  
11 economic changes in demographic and economic activity.

12           So we can estimate those pretty well, right? And  
13 so our near-term projections are usually pretty reasonable  
14 and we can really try to dial that in.

15           But then once we are trying to anticipate 20  
16 years out what fuel substitution impacts are going to be,  
17 there's a lot of uncertainties there. And so a lot of that  
18 process, we are, you know, constantly talking with the  
19 users of our forecast. That's an important part of our  
20 process to understand what sort of assumptions are we all  
21 comfortable planning to, what are the risks that we want to  
22 try to mitigate, right?

23           So sometimes when we're building these scenarios,  
24 we are thinking about, well, what assumptions -- if we plan  
25 to a certain set of assumptions, we are running less risk

1    than if we plan to these sets of assumptions.  So we're  
2    always kind of thinking about it in terms of risks, right?

3               And then as we sort of, you know, update or  
4    forecast or recycle, we're constantly going back and  
5    revisiting, well, this is -- this is what we were assuming  
6    how this might play out.  This is what is actually  
7    happening.  We kind of reiterate or iterate on that.

8               And with data center load, for example, this is a  
9    new thing.  So that is going to be a big one for us to look  
10   at next year.  We're examining all these -- all the data  
11   that these utilities are giving us, making some discounts  
12   that we think are reasonable in terms of realization rates.  
13   And as we sort of progress to the next cycle, we will go  
14   back and look at what actually materialized relative to  
15   what we were projecting and sort of revisit those  
16   assumptions.

17              CHAIR HOCHSCHILD:  Yeah.

18              Vice Chair?

19              VICE CHAIR GUNDA:  Thank you, Chair, for that  
20   question.

21              I think, you know, kind of couple of pieces that  
22   I think about in terms of the needs of the forecast to be  
23   accurate, and then what we have going for us in terms of  
24   the quality of the forecast.

25              And the first thing is kind of, do we have a good

1 methodological approach to doing the forecast? And I think  
2 given how much stakeholder participation we have, I think  
3 the methodologies we use are generally pretty good and  
4 pretty state of the art, and they're constantly kind of  
5 being changed.

6           The difficulty though is the inputs. For  
7 example, one of the things that, you know, we changed this  
8 year was staff purchased this behind-the-PV, you know,  
9 generation data set. For a long time, we had to use  
10 simulation data. And then you're kind of baking that into  
11 the forecast.

12           And I think this is the hidden cost of the  
13 forecast in terms of some of the dollars we need really  
14 comes from those data sets and importance of some of the  
15 research staff that we need to increase, to improve the  
16 overall methodology. I just want to frame that.

17           So what's going for us is really the stakeholder  
18 input. Between CAISO, PUC, and us, we all have some level  
19 of modeling expertise, and also the IOUs.

20           So one of the critical parts of the forecast is  
21 the DAWG process, or the Demand Analysis Working Group,  
22 where those results are constantly shared and worked on.  
23 So I think that kind of gives us good, you know, quality of  
24 results at the end.

25           What I do want to say is that, as Nick pointed

1 out, the near-term, given how much focus goes on into some  
2 of the assumptions, the near-term plans are pretty -- it's  
3 not a big difference. So year-to-year, when we plan for  
4 resource adequacy and reliability, we are pretty much  
5 pretty good.

6 But when you're thinking about 10, 20 years out,  
7 these uncertainties around electrification growth or, you  
8 know, clean hydrogen or whatever that might be really  
9 depends on what assumptions we're making. And every year,  
10 you know, we try our best to have an agreement amongst  
11 stakeholders about something we need to watch, given the  
12 uncertainties.

13 CHAIR HOCHSCHILD: Helpful.

14 Unless there's other comments or questions, I  
15 would entertain a motion from the Vice Chair on Item 5.

16 VICE CHAIR GUNDA: I move Item 5.

17 CHAIR HOCHSCHILD: Is there a second from  
18 Commissioner Skinner?

19 All in favor, say aye.

20 Vice Chair Gunda?

21 VICE CHAIR GUNDA: Aye.

22 CHAIR HOCHSCHILD: Commissioner Skinner?

23 COMMISSIONER SKINNER: Aye.

24 CHAIR HOCHSCHILD: Commissioner Gallardo?

25 COMMISSIONER GALLARDO: Aye.



1 CHAIR HOCHSCHILD: And Commissioner McAllister?

2 COMMISSIONER MCALLISTER: Aye.

3 CHAIR HOCHSCHILD: And I vote aye as well.

4 Item 5 passes unanimously.

5 We'll turn now to Item 6, ADM Associates

6 Incorporated.

7 Good morning.

8 MS. BUTLER: Good morning. Good morning, Chair,  
9 Vice Chair, and Commissioners. My name is Elizabeth  
10 Butler, and I am the Contracting Grant Manager for the  
11 Efficiency Division.

12 Today, I will be presenting Item 6.

13 This is a request to approve a \$5.5 million  
14 contract with ADM Associates Incorporated to provide  
15 technical support services for both the CEC's existing  
16 benchmarking program and the implementation proceeding in  
17 Senate Bill 48, also known as SB-48.

18 Next slide, please.

19 This two-year agreement will provide the  
20 following benefits to Californians: support for climate,  
21 equity, and energy goals, reduced carbon emissions,  
22 improved energy efficiency, and increased stakeholder  
23 involvement.

24 Next slide, please.

25 California Public Resources Code Section 25402.10

1 authorizes the Building Energy Benchmarking Program, which  
2 requires the owners of commercial and multifamily  
3 residential buildings meeting certain parameters to report  
4 energy usage and building characteristic information  
5 annually to the state.

6 SB-48 requires the CEC, in consultation with the  
7 California Air Resources Board, the California Public  
8 Utilities Commission, and the Department of Housing and  
9 Community Development to develop a strategy for using  
10 benchmarking data to track and manage the energy usage and  
11 emissions of greenhouse gases of covered buildings in order  
12 to achieve the state's goals, targets, and standards.

13 To implement SB-48, the CEC plans to undertake a  
14 comprehensive process, including a series of public  
15 workshops and meetings to engage a range of stakeholders  
16 and provide opportunities for both interactive and written  
17 comments. The CEC will produce at least one draft building  
18 performance strategy report and will consider additional  
19 stakeholder input and feedback to generate a final version.  
20 The CEC must adopt the final report on or before July 1st  
21 of 2026 and then submit it to the legislature on or before  
22 August 1st of 2026.

23 Next slide, please.

24 The \$5.5 million in funding for this contract was  
25 authorized for this purpose in Assembly Bill 102, also

1 known as AB-102, or the Budget Act of 2023.

2 ADM Associates Incorporated has committed \$30,000  
3 in match funds for this agreement. Work on this agreement  
4 will provide technical support services for the CEC's  
5 existing benchmarking program and the implementation  
6 proceeding in SB-48.

7 Benchmarking support will focus -- will focus on  
8 -- sorry -- process and compliance improvements, while SB-  
9 48 implementation support will focus on stakeholder  
10 engagement and practical demonstration analyses of real  
11 building performance.

12 Next slide, please.

13 Staff recommends approval of the agreement with  
14 ADM Associates Incorporated, as well as adoption of staff  
15 determination that this action is exempt from CEQA.

16 Thank you for your consideration. I am available  
17 for questions.

18 CHAIR HOCHSCHILD: Thank you, Elizabeth.

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

20 MS. BADIE: Thank you.

21 The Commission welcomes public comment on Item 6  
22 at this time.

23 If you're joining us in the room, we're asking  
24 folks to use the QR code or to visit the public advisor  
25 table in the back of the room. And if you're joining on

1 Zoom, you'll use the raised hand feature on your screen.  
2 It looks like an open palm or star nine if you're joining  
3 by phone.

4 And I'm just giving that a moment.

5 Alright. I'm not seeing any raised hands for this  
6 item.

7 Back to you, Chair.

8 CHAIR HOCHSCHILD: Alright.

9 Let's go to Commission discussions, starting with  
10 Commissioner McAllister.

11 COMMISSIONER MCALLISTER: Well, thanks.

12 I really appreciate the presentation and very  
13 much support this item.

14 The combination of benchmarking and road  
15 management standards -- I mean, I'm sorry, and building  
16 performance standards is sort of a very natural dovetail.

17 And we've had the benchmarking program for a  
18 number of years, working on sort of getting compliance with  
19 that, you know, up to be very high to create a good data  
20 foundation for building performance work. The building  
21 performance work, I think, is a real generational kind of  
22 shift. It's like a really moving from sort of data  
23 collection in the form of benchmarking analysis that, you  
24 know, the building stock, et cetera, into actually, you  
25 know, building specific recommendations for how to improve

1 performance to reduce emissions in line with our state  
2 goals.

3           You know, so that's a decadal effort.

4           And so, Senator Becker, I think, really hit the  
5 mark. The process, the development of the bill was, I  
6 think, really exemplary and it landed in a place to ask us  
7 to do a considered assessment of what building performance  
8 standards -- or what a building performance program ought  
9 to look like, and how we can ensure that it works well with  
10 local governments, with building owners, building  
11 operators, you know, tenants in those largely commercial,  
12 also multifamily buildings. So giving us a little runway  
13 to convene and to develop a good plan for building  
14 performance standards, I think, is really, I think, the  
15 right first step.

16           And, you know, we have been very engaged with the  
17 national conversation. You know, the White House convened  
18 the Building Performance Standard Coalition. And, you  
19 know, probably that goes on hiatus for a few years here,  
20 but I think the local governments -- cities largely, but  
21 also a few states -- are going to really help each other  
22 learn how to do building performance standards.

23           And so, I think the report, the development of  
24 the plan, I think, is a good platform for incorporating  
25 learning from other jurisdictions.

1           And so, this is really a good long-term effort.  
2   And I'm super supportive of this contract, obviously, to  
3   get the benchmarking data sort of really assembled and in  
4   shape to support a very substantive building performance  
5   effort over the coming, you know, years and decades,  
6   because that's what's going to take a lot of money to pump  
7   into existing buildings to make sure that their performance  
8   -- that's the hardest part of the whole buildings, you  
9   know, emissions reduction enterprise.

10           And so, this is really an essential step to move,  
11   you know, boldly in that direction. And I think we're up  
12   to the task.

13           So, I really appreciate this.

14           CHAIR HOCHSCHILD: Great.

15           Unless there's other discussion, I would welcome  
16   a motion on Item 6 or -- anything else you want to add?  
17   Okay.

18           I welcome a motion on Item 6 from Commissioner  
19   McAllister.

20           COMMISSIONER MCALLISTER: I move Item 6.

21           CHAIR HOCHSCHILD: Is there a second from the  
22   Vice Chair?

23           VICE CHAIR GUNDA: Second.

24           CHAIR HOCHSCHILD: All in favor say aye.

25           Commissioner McAllister?

1 COMMISSIONER MCALLISTER: Aye.

2 CHAIR HOCHSCHILD: Vice Chair Gunda?

3 VICE CHAIR GUNDA: Aye.

4 CHAIR HOCHSCHILD: Commissioner Gallardo?

5 COMMISSIONER GALLARDO: Aye.

6 CHAIR HOCHSCHILD: Commissioner Skinner?

7 CHAIR HOCHSCHILD: And I vote aye as well.

8 Item 6 passes unanimously. Thank you, Elizabeth.

9 COMMISSIONER MCALLISTER: Thanks Elizabeth.

10 CHAIR HOCHSCHILD: We'll turn now to Item 7,  
11 Lincus, and I welcome Jason Tancher to present.

12 MR. TANCHER: Good morning, Chair, Vice Chair,  
13 Commissioners, and welcome, Commissioner Skinner. My name  
14 is Jason Tancher, and I work in the Energy Research and  
15 Development Division. Today, I'm presenting one  
16 recommended award from the DC HVAC Nanogrid Module  
17 Development Demonstration Solicitation.

18 Next slide.

19 The purpose of this solicitation was to develop  
20 and demonstrate a self-contained DC-powered HVAC heat pump  
21 module that integrates solar PV and energy storage. The  
22 anticipated outcomes include reducing building dependency  
23 on grid electricity, enhancing the energy efficiency of  
24 HVAC equipment operating on DC power, lowering barriers and  
25 expanding access to solar and heat pump technologies, and

1 generating new business and manufacturing opportunities.

2           If successful, this effort has the potential to  
3 transform energy use in California by delivering modular,  
4 highly efficient HVAC systems tailored for decentralized  
5 energy networks.

6           A total of four projects were potentially awarded  
7 funding, and three of these are expected to be discussed at  
8 a future business meeting.

9           Next slide, please.

10           These projects aim to significantly reduce  
11 greenhouse gas emissions and air pollutants by reducing  
12 peak summer electricity consumption and replacing fossil  
13 fuel consumption for space heating. This project's  
14 outcomes could establish a replicable framework catalyzing  
15 widespread adoption of advanced efficient energy systems.  
16 There's a large California market for commercial rooftop  
17 units and for residential units that use packaged HVAC  
18 systems.

19           Next slide, please.

20           The proposed agreement with Lincus, an energy  
21 consultant firm practicing California in Arizona since  
22 2003, focuses on developing an innovative DC-powered HVAC  
23 system that connects directly to a DC bus, integrates  
24 seamlessly with solar PV and battery storage, and  
25 eliminates conversion losses and expensive electrical



1 service panel upgrades. The system also incorporates  
2 thermal energy storage to efficiently utilize excess solar  
3 PV.

4 The project will include both laboratory testing  
5 and field demonstrations, simulating diverse climate zones,  
6 grid conditions, storage configurations, and PV scenarios.

7 By replicating real-world operations, this  
8 approach ensures the collection of comprehensive data on  
9 cost, energy savings, return on investment, and additional  
10 non-energy benefits, all under both controlled and  
11 practical conditions.

12 Lincus has also partnered with the National  
13 Renewable Energy Laboratory that is providing \$600,000 in  
14 DOE funds; Trane, the HVAC equipment manufacturer, also  
15 providing \$244,000 match for developing the technology.

16 Next slide, please.

17 Staff recommends approval of this grant agreement  
18 and adoption of staff's determination that the project is  
19 exempt from CEQA. Several of the project partners are  
20 interested in making public comment.

21 Thank you for your consideration. I'm available  
22 for any questions.

23 CHAIR HOCHSCHILD: Thank you, Jason.

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

25 MS. BADIE: Thank you, Chair.

1           The Commission welcomes public comment on Item 7  
2 at this time.

3           If you're joining us in the room, you're going to  
4 use the QR code posted in the back of the room or visit the  
5 public advisor table. And if you're joining on Zoom,  
6 you're going to use the raise hand feature that's on your  
7 screen or star 9 if joining by phone.

8           Sorry for the light disruption.

9           CHAIR HOCHSCHILD: The mood lighting for comment  
10 on Item 7 is fantastic.

11          COMMISSIONER MCALLISTER: Yeah. Yeah.

12          MS. BADIE: Alright. Let me check the room.

13          Okay, we don't have anyone in the room, so I'm  
14 going to transition to Zoom.

15          Alright Somasundaram Essakiappan, I'm apologies  
16 if I pronounced your name incorrectly, I'm going to open  
17 your line for public comment at this time. And if you  
18 could please spell your name for the record.

19          We're asking for comments to be two minutes or  
20 less. There's going to be a timer on the screen.

21          MR. ESSAKIAPPAN: Hello. Good morning.

22          Can you hear me?

23          MS. BADIE: Yes.

24          MR. ESSAKIAPPAN: My name is Somasundaram  
25 Essakiappan.

1           And was there a request to spell my name?

2           MS. BADIE: Yes, please, for the record, for the  
3 court record.

4           Thank you.

5           MR. ESSAKIAPPAN: Yes. Okay.

6           S-O-M-A-S-U-N-D-A-R-A-M is my first name.

7           E-S-S-A-K-I-A-P-P-A-N is my last name.

8           Yes. I wanted to say a quick couple of words to  
9 thank the Commission for considering this effort. And we  
10 have, as Jason mentioned, partnered with Lincus on this  
11 effort.

12           As a company, Trane is very much interested in DC  
13 integrated systems and combining the thermal energy storage  
14 capability that we have in our product portfolio.

15           And thanks to the Commission for considering this  
16 project. And also, thanks to the DC colleagues, Jason  
17 Tancher and Arun Suleman, for assisting us in shepherding  
18 this proposal in front of the Commission.

19           Thank you very much, and I give back the time.

20           MS. BADIE: Thank you.

21           And next we're going to hear from Omkar  
22 Ghatpande. Apologies if I've mispronounced your name. If  
23 you could please open your line, and we're asking for folks  
24 to spell their name for our court reporter. And then your  
25 time will begin on the screen. We're asking for comments

1 to be two minutes or less. Hello. My name is Omkar  
2 Ghatpande. I hope you all can hear me.

3 I'll spell my name. It's O-M-K-A-R. That's my  
4 first name, Omkar. Last name is Ghatpande, G-H-A-T-P-A-N-  
5 D-E.

6 My name is Omkar Ghatpande, and I'm a research  
7 engineer at the National Renewable Energy Laboratory, or  
8 NREL, in Golden, Colorado. First, I would like to thank  
9 Jason and others, along with all the commissioners, for  
10 giving me an opportunity to speak on this project.

11 This CEC proposed funding will greatly impact the  
12 development of this innovative technology -- development  
13 and demonstration of the innovative technology of using  
14 native direct current heating and ventilation systems units  
15 for commercial buildings.

16 This technology is proposed to maximize the  
17 efficiency of on-site distributed energy resources, thereby  
18 reducing the reliance on the grid supply power to run the  
19 critical HVAC system in buildings, especially during the  
20 grid peak operations. By reducing this reliance on the  
21 peak grid supply power, this project is also directly  
22 contributing to improving resilience and reliability of the  
23 grid.

24 Along with this, I would like to thank U.S.  
25 Department of Energy's Building Technology Office for

1 funding the development and laboratory evaluation at NREL's  
2 Commercial Building Research Infrastructure, or CBRI, at  
3 the Energy Systems Integration Facility, or ESIF.

4 Thank you. I would like to yield the rest of my  
5 time.

6 MS. BADIE: Thank you for your comment.

7 And those are all the raised hands for this item.

8 Back to you, Chair.

9 CHAIR HOCHSCHILD: Okay.

10 Thank you for the presentation.

11 Let's go to commissioner discussions, starting  
12 with Commissioner McAllister.

13 COMMISSIONER MCALLISTER: Great.

14 Well, thanks, Jason. This is really cool  
15 technology with a lot of great potential, and I won't  
16 repeat what the speakers have said, but it's great to have  
17 the support of Trane and NREL, and I think it's an example  
18 of a technology that's sort of inherently flexible or  
19 improving the flexibility of end-use, and so efficient,  
20 distributed, flexible, and that all supports the resilience  
21 of the grid and helps buttress reliability. It just really  
22 provides a bunch of benefits all rolled up into one, and  
23 D.C. technology has really helped that take place -- and  
24 easier to control, and just all sorts of benefits.

25 So it could be a really interesting addition to

1 the marketplace, and I think will help, you know,  
2 buildings, building owners and operators, and just -- and  
3 grid operators, too. So really good stuff.

4 CHAIR HOCHSCHILD: Vice Chair?

5 VICE CHAIR GUNDA: Yeah. Thanks, Chair.

6 Jason, thank you for your presentation, and to  
7 the commentators for kind of talking about the technology.  
8 Just wanted to uplift a couple of things.

9 The peak sharing ability of the project, you  
10 know, anything to do help with the reliability and general  
11 grid harmonization of the loads is, you know, always  
12 excellent, and also the plug-and-play nature of the  
13 technology seems extremely beneficial. So look forward to  
14 supporting it, and thank you for bringing the item.

15 CHAIR HOCHSCHILD: Okay.

16 Unless there's further discussion, I'd welcome a  
17 motion on Item 7 from the Vice Chair.

18 VICE CHAIR GUNDA: I move Item 7.

19 CHAIR HOCHSCHILD: Is there a second from  
20 Commissioner McAllister?

21 COMMISSIONER MCALLISTER: Second.

22 CHAIR HOCHSCHILD: All in favor say aye.

23 VICE CHAIR GUNDA: Vice Chair Gunda?

24 VICE CHAIR GUNDA: Aye.

25 CHAIR HOCHSCHILD: Commissioner McAllister?

1 COMMISSIONER MCALLISTER: Aye.

2 CHAIR HOCHSCHILD: Commissioner Gallardo?

3 COMMISSIONER GALLARDO: Aye.

4 CHAIR HOCHSCHILD: Commissioner Skinner?

5 COMMISSIONER SKINNER: Aye.

6 CHAIR HOCHSCHILD: And I vote aye as well.

7 Item 7 passes unanimously.

8 We will turn now to Item 8, PSGM3, LLC. That's a  
9 lot of letters.

10 And I welcome Lin Planchard to present.

11 MS. PLANCHARD: Greetings, Chair and  
12 Commissioners, and a warm welcome to you, Commissioner  
13 Skinner. I'm Lin Planchard. I'm a Utilities Engineer in  
14 the Energy Research and Development Division. Today, I  
15 will be presenting to you a \$14 million agreement with  
16 PSGM3, LLC, otherwise known as Pacific Steel Group, to  
17 deploy a long-duration energy storage system on-site at  
18 their planned electrified steel plant.

19 Next slide, please.

20 Pacific Steel Group is a California company  
21 currently working to construct the Mojave Micromill  
22 Project, an ambitious, first-of-a-kind, innovative clean  
23 energy project to build a \$630 million zero-process  
24 emission rebar steel mill, which, as illustrated in these  
25 mock-ups, will have an impressive 276 acres dedicated to

1 generating solar energy.

2           What makes this project truly unique is that  
3 while electrified steel plants do already exist, this will  
4 be the world's first 100 percent electric zero-carbon  
5 emission steel production facility. Emissions will be  
6 controlled with an industry-leading carbon capture system,  
7 and all of the heat and energy-intensive processes of the  
8 steel mill will be solely powered by electricity from on-  
9 site renewables and the grid.

10           Sited in Mojave, California, this will be the  
11 first steel mill built in California in over 50 years, and  
12 when active will be the only currently operational steel  
13 mill in California. The successful operation of the steel  
14 mill will be a huge accomplishment for California and the  
15 state's SP-100 goals, as well as set a global precedent for  
16 innovative clean energy technology.

17           Next slide, please.

18           Pacific Steel Group's electrified steel plant  
19 will significantly reduce the emissions caused by  
20 transporting the heavy and dense rebar steel that  
21 California needs for all types of construction. Since  
22 California currently has no rebar steel production  
23 capabilities, our scrap metal is transported out of state  
24 to be melted and recycled by other steel mills, which would  
25 then be transported all the way back to California as



1 rebar.

2 By building a new rebar mill, California can fill  
3 this gap in the market by localizing our scrap recycling  
4 and rebar production and thereby reducing emissions from  
5 transporting steel by approximately 118,000 tons per year.

6 Next slide, please.

7 To support Pacific Steel Group's electrified  
8 steel mill project, CEC will be contributing \$14 million of  
9 funding to deploy a 32-megawatt-hour long-duration energy  
10 storage system that will support the plant's on-site  
11 microgrid and renewables.

12 The scope of the project is sectioned into two  
13 phases, the first of which is a small-scale 8-megawatt-hour  
14 deployment that will serve to initially gather insights for  
15 the full deployment and support the commissioning of the  
16 steel mill.

17 Phase two is the deployment of the full 32-  
18 megawatt-hour system. This system will be installed  
19 amongst the solar PV surrounding the facility and will be  
20 integrated into the plant's microgrid and energy  
21 infrastructure to support the 50 megawatts of solar PV on-  
22 site.

23 The energy storage system will provide enhanced  
24 reliability and function as backup power for critical  
25 operations during outages, as well as help to optimize the

1 daily operational load and demand management of the plant.

2 Phase one is expected to be online January 2027,  
3 and phase two is expected to be online April 2027.

4 Next slide please.

5 Lead agency Kern County certified an  
6 environmental impact report and mitigation monitoring and  
7 reporting program on March 19, 2024 for Pacific Steel  
8 Group's Mojave Micromill project. The EIR identified  
9 unavoidable and cumulative significant impacts to  
10 aesthetics, air quality, and noise, and significant  
11 cumulative impacts for biological resources and wildfire  
12 for the Mojave Micromill project.

13 CEC staff reviewed and considered the county's  
14 documentation and prepared an addendum to the certified EIR  
15 and a statement of overriding considerations specific to  
16 the scope of the CEC LDS deployment project. It was  
17 determined that work under the proposed project presents no  
18 new or substantially more severe environmental impacts  
19 beyond those already considered and mitigated under Kern  
20 County.

21 The information presented in the EIR addendum  
22 demonstrates the mitigation requirements identified in the  
23 EIR remain substantively unchanged by the addition of the  
24 LDS system to the Mojave Micromill project.

25 Next slide please.

1           This project will directly support California's  
2 SB-100 and clean energy goals by deploying an energy  
3 storage system that will relieve stress off the grid and  
4 optimize the use of available renewable energy. Given the  
5 scale and variety of energy intensive processes in a steel  
6 mill, steel mills are characterized by very high and  
7 rapidly fluctuating energy demand loads, and as such this  
8 project will give impactful insights on the application of  
9 long-duration energy storage in meeting the unique and  
10 demanding power needs of industrial facilities such as  
11 steel mills.

12           Pacific Steel Group's Mojave Micromill project is  
13 an exemplary case of electrification in industrial  
14 applications and overall will set a precedent for  
15 innovative clean energy solutions. This project will  
16 showcase what is possible for long-duration energy storage  
17 and is a vital role in the electrification of California's  
18 grid and the industrial sector.

19           Next slide please.

20           Staff recommends CEC adoption of the staff CEQA  
21 findings that work under the project presents no new or  
22 substantially more severe environmental impacts beyond  
23 those already considered and mitigated in the statement of  
24 overriding considerations, and staff recommends CEC  
25 approval of this agreement with PSGM3 LLC.

1           That concludes my presentation. Thank you all  
2           for your time and I'm happy to answer any questions.

3           CHAIR HOCHSCHILD: Thank you so much. Let's turn  
4           to public comment on Item 8.

5           MS. BADIE: Thank you, Chair.

6           The Commission welcomes public comment on Item 8  
7           at this time.

8           If you're in the room with us we're asking folks  
9           to use the QR code or visit the public advisor table on the  
10          back of the room and if you're joining on zoom you'll use  
11          the raise hand feature on your screen. It looks like an  
12          open palm or star nine if joining by phone.

13          And we do not have anyone in the room so I'm  
14          going to transition over to zoom.

15          Mark Olson, I'm going to open your line if you  
16          could please unmute on your end. We're asking folks to  
17          spell their name for the court reporter and we're also  
18          asking for comments to be two minutes or less. There'll be  
19          a timer on the screen.

20          MR. OLSON: Hello. Can you hear me?

21          MS. BADIE: Yes.

22          MR. OLSON: Very good. My name is Mark Olson,  
23          O-L-S-O-N, and good morning Chair Hochschild and CEC  
24          commissioners. I am the Vice President of Mill Operations  
25          for Pacific Steel Group, and responsible for leading this

1 project to bring green steel manufacturing to California.  
2 I would like certainly to thank all of you for  
3 consideration today for this grant.

4 I'd like to extend my heartfelt thanks to the  
5 team with the CEC that supported us and guided us through  
6 this process. Mike Gravely, Lin, and John Carrier. We are  
7 certainly grateful. We're thrilled to introduce green  
8 rebar to California, a crucial step for climate resilience  
9 and infrastructure advancement. Our steel recycling  
10 facility aims to set global standards for emission  
11 reduction, particularly in carbon emissions.

12 This project involves the transition of  
13 traditional natural gas processes to electrification, and,  
14 supported by this grant, would facilitate the adoption of  
15 new long-duration energy storage. This innovation promises  
16 significantly lower scope to emissions and positions PSG to  
17 compete more effectively with out-of-state producers.

18 Thank you again for your time today and your  
19 consideration.

20 MS. BADIE: Thank you.

21 And there are no further raised hands on this  
22 item.

23 Back to you Chair.

24 CHAIR HOCHSCHILD: I love this project. This  
25 marries many of the things that we're trying to do

1 together. Industrial decarbonization, new manufacturing  
2 assembly, and recycling facilities, and cutting-edge clean  
3 energy technologies, and grid reliability.

4 So I know it's a lot of work to get to this point  
5 from all sides.

6 I did want to ask a little bit about the  
7 chemistry we plan to use in this application and some of  
8 its capabilities. I mean, I imagine the sort of load  
9 profile is pretty spiky with this kind of project, and, you  
10 know, if you can sort of speak to the long duration  
11 storage's ability to meet that, and anything else you want  
12 to share on the characteristics of the chemistry.

13 MS. PLANCHARD: Yes, certainly.

14 Like our other long duration energy storage  
15 projects, we're looking at electrochemical batteries, EOS  
16 being the prime suspect here for what battery that PSG will  
17 be going with.

18 As far as speaking to EOS's or other  
19 electrochemical batteries' ability to deal with these  
20 really high intensive load profiles, I'm not sure we have  
21 specific -- this will be a brand new use case as far as I'm  
22 aware.

23 I don't know if Mike, if you have any more  
24 experience with how well the batteries handle these use  
25 cases.

1 MR. GRAVELY: Real quick, this one is a perfect  
2 example of using non-lithium batteries in this environment.

3 This is a very peaky environment. In my past  
4 history, I worked with steel mills in South Africa. They  
5 create harmonics on the line and stuff. The storage will  
6 allow them. In fact, they're going to be using it so  
7 large, they'll be using both some lithium-ion and non-  
8 lithium-ion together, and will be able to evaluate the  
9 performance costs and longevity of the different  
10 technologies.

11 Right now, they've been going through an internal  
12 evaluation, and they're leaning towards EOS but they  
13 haven't made a final decision, and that technology can  
14 literally be used rapidly every day and not have the  
15 degradation that you would have with lithium-ion, for  
16 example. So it becomes a very good demonstration for the  
17 industrial market for long-duration storage.

18 You know, we've come here with eight projects.  
19 This is the eighth project, where once they had 10 under  
20 the long duration storage planning we received two years  
21 ago. And this one is one that shows us the industrial  
22 operation, and also allows us to evaluate the performance  
23 and from an independent perspective.

24 CHAIR HOCHSCHILD: Thank you.

25 This is eight-hour zinc chemistry, right?

1 MR. GRAVELY: Yeah.

2 CHAIR HOCHSCHILD: Yeah. Great.

3 Other comments?

4 Yeah. Commissioner McAlister, please.

5 COMMISSIONER MCALLISTER: Yeah. Just broadly, I  
6 want to give kudos to Pacific Steel. I don't remember  
7 exactly when our first meeting about this was but it was a  
8 long time ago. I really appreciate the persistence and  
9 also the commitment to doing it in a way that's consistent  
10 with California's policy direction and just doing the right  
11 thing environmentally.

12 And so just overall the project, including the  
13 energy storage element, I think it really demonstrates not  
14 just responsible development on the energy side and the  
15 grid, but also, you know, a cradle-to-cradle approach,  
16 industrial ecology, recycling. A lot of the inputs to  
17 this, I think maybe 100 percent, are going to be recycled  
18 steel. I think rebar doesn't require primary steel. This  
19 is a really great way to bring the steel industry into  
20 California in a way that really fits our overall goals. I  
21 just really appreciate that.

22 And kudos again to Pacific Steel for going  
23 through all the process, which I imagine lots of agencies  
24 involved in just a lot of effort and expense and  
25 investment. I really appreciate that commitment.



1 CHAIR HOCHSCHILD: Yeah, Vice Chair, please.

2 VICE CHAIR GUNDA: Thank you, Chair.

3 Thanks, Lin, for your presentation.

4 Just want to extend, thanks to Simi, Cody, and  
5 obviously Mike, always your expertise. And of course,  
6 Angie, Cami, and Jonah's leadership on this.

7 Again, I don't have to repeat this. The Chair  
8 mentioned it really well. I think this project brings  
9 together a lot of different things focused on a very hard  
10 to decarbonize sector, so it's all great.

11 I wanted to just kind of note, you know, the  
12 procurement to the central procurement decision that CPUC  
13 has made on the long-duration storage, recognizing the  
14 importance of that on the grid. So projects like this will  
15 help with scaling, understanding the performance issues,  
16 but also understanding the affordability issues in this  
17 technology.

18 So one question on this, are we currently -- how  
19 are we planning to work with the utility on this? Given  
20 that this is probably going to be behind the meter storage,  
21 any opportunity we have in terms of both data collection on  
22 its kind of generation profile, but also affordability and  
23 how pricing might happen on these kind of projects?

24 Anything that you have, if not, we can follow up  
25 separately.

1           Thank you.

2           MS. PLANCHARD: Yeah, certainly.

3           As a part of our project, we will be doing data  
4 collection, especially because this is such a unique use  
5 case. We really want to see how these batteries can be  
6 used as a blueprint for more industrial applications.

7           So certainly, we will be recording how the  
8 battery economically works and how the -- excuse me. The  
9 plant will be using grid and solar, and how the battery can  
10 really help optimize the use of onsite solar so they don't  
11 rely so much on the grid and become very reliable and self-  
12 sufficient that way.

13           So we'll be working with PSG to take notes and  
14 try to have lessons learned on how we can apply this type  
15 of formula in the future.

16           CHAIR HOCHSCHILD: Commissioner Gallardo?

17           COMMISSIONER GALLARDO: Fantastic presentation,  
18 Lin, and great work team.

19           I also think this is a very cool project and very  
20 excited about what we can potentially learn here for our  
21 efforts in Lithium Valley, out in the Salton Sea region and  
22 so I do have a couple questions.

23           I didn't get to do a briefing, so I'd love to do  
24 something separate to get more in-depth, but just a couple  
25 of the ones I want to ask here.

1           One, could you talk about the potential for jobs,  
2 given that this seems like a big project? And I apologize  
3 if I missed it earlier. Do you have a sense of that?

4           I'm not sure if that would be a better question  
5 for the rep who called in.

6           MS. PLANCHARD: Yeah, I definitely would be  
7 closer to home with the PSG folks about the impact on jobs.  
8 Certainly, you can imagine with how huge a construction and  
9 project this is that there will be jobs for the people near  
10 Mojave.

11           I don't know if we are allowed to talk to Mark  
12 Olson, who's still on the line?

13           He would probably be able to answer that.

14           CHAIR HOCHSCHILD: Yeah, I had the same question.  
15 Can you open up Mark's line and have him speak to  
16 the jobs question?

17           MR. OLSON: Can you hear me?

18           MS. BADIE: Yes, Mark.

19           CHAIR HOCHSCHILD: Yes. Okay.

20           Yeah, no, great. Thank you. That's a very good  
21 point and something that I think we're very proud of as  
22 well.

23           So, this project will bring 400 jobs to the  
24 Mojave area. These are going to be family sustaining jobs  
25 in an area in eastern Kern County that certainly would

1 benefit from it.

2 And the steel industry also has a significant  
3 multiplier. So, for every steel worker job, we produce a  
4 multiple of jobs. So, we expect to bring about 1,100 jobs  
5 to the region through this project.

6 COMMISSIONER GALLARDO: Could you clarify, Mark?  
7 You mentioned 400 jobs, I think, in Kern County.

8 Are those permanent or are those construction?  
9 And I think I heard 1,100 at the end.

10 MR. OLSON: Yeah.

11 So, direct jobs will be 400 permanent jobs in  
12 Mojave.

13 If you want to look at construction, we'll  
14 average 515 construction jobs over a two-year period, 24-  
15 month construction.

16 The 1,100 is the direct plus the indirect jobs  
17 that a steel manufacturing facility brings to the region.

18 COMMISSIONER GALLARDO: Thank you so much for  
19 that. I appreciate it.

20 I have one more question, please.

21 CHAIR HOCHSCHILD: Please.

22 COMMISSIONER GALLARDO: So, not related to that,  
23 something separate.

24 And Mark, you might be better suited to answer  
25 this.

1 I'm just curious if there was any engagement,  
2 interaction with the tribes in the local area?

3 MR. OLSON: Yes. Yeah, absolutely. And we'll be  
4 in lockstep with tribal monitors throughout the  
5 construction.

6 We have, through the CEQA process, spent time  
7 working with the tribes. So, yes.

8 COMMISSIONER GALLARDO: Okay. Thank you.

9 MR. OLSON: You're welcome.

10 CHAIR HOCHSCHILD: Okay.

11 Before I go to Commissioner Skinner, I did want  
12 to just share, I have asked her to take on this assignment  
13 on industrial decarbonization with Commissioner McAllister  
14 to assume the portfolio which Commissioner Monahan had had,  
15 and she's accepted. So, she's going to be leaning into  
16 this whole issue.

17 And I did want to just say, Commissioner  
18 McAllister, you made a really good point about how  
19 strategic, you know, decarbonizing steel is together with  
20 cement. I mean, those two things, if we can do that right,  
21 it really is meaningful.

22 And I just want to name how hard this is to do.  
23 It's really hard.

24 And so, progress like this and projects like this  
25 are really significant steps forward.

1           So, with that, Commissioner Skinner.

2           COMMISSIONER SKINNER: Thank you, Chair. And  
3 thank you all for the presentation.

4           And Mr. Huber, I think his name was, from the  
5 company for, also, your comments.

6           Yeah, I love this project. Not only is  
7 industrial projects like this difficult to decarbonize,  
8 they're -- we don't see much steel manufactured in the U.S.  
9 anymore. And yet, we're dependent on it. We need steel.

10          I had a steel factory near my home. So, when I  
11 was on the Berkeley City Council, we still had an operating  
12 steel mill, which ended up -- it was still operating when  
13 the reconstruction of the East Bay Bridge, and produced  
14 good portions of it. It is no longer operating. And that  
15 -- if we look across the country, we would see very few  
16 steel mills left in the U.S.

17          And when steel mills leave here, most places  
18 where they are, most everywhere else, we get steel. That  
19 steel, if we're looking at it from an environmental, from  
20 air pollution emissions, from all sorts of emissions -- and  
21 as we know, emissions come over from Asia to California and  
22 all the West Coast. They do not have to meet our kinds of  
23 standards. So, this is beyond just carbon.

24          So, this -- the fact that we would -- the state  
25 of California would have a state-of-the-art steel mill to

1 produce a product that we know we are dependent on is just,  
2 it's phenomenal, and that it would be all-electric and that  
3 it would have long-duration storage -- and we're really,  
4 we're rooting for all of this working as intended and as  
5 planned.

6 It's just -- it's phenomenal. That's all you can  
7 really say.

8 And of course, we know that, as has been  
9 commented by my colleagues, that this kind of industrial  
10 operation is the most difficult to decarbonize. So, it's  
11 going to be real interesting to see how it all proceeds.

12 And finally, you know, we're not, the perception  
13 about California is that we're not a manufacturing state.  
14 We are. We are the number one manufacturing state in the  
15 country. So, the more that we can do our manufacturing in  
16 a way that meets our other goals, all the better, and  
17 again, a signal to the rest, not only of this country, but  
18 the world.

19 So, I'm really looking forward to working on this  
20 and with you all about it.

21 CHAIR HOCHSCHILD: Thank you.

22 Any other comments?

23 With that, I would welcome motion from  
24 Commissioner McAllister on Item 8.

25 COMMISSIONER MCALLISTER: Move Item 8.

1           CHAIR HOCHSCHILD: Is there a second from  
2 Commissioner Skinner?

3           All in favor say aye.

4           Commissioner McAllister?

5           COMMISSIONER MCALLISTER: Aye.

6           CHAIR HOCHSCHILD: Commissioner Skinner?

7           COMMISSIONER SKINNER: Aye.

8           CHAIR HOCHSCHILD: Commissioner Gallardo?

9           COMMISSIONER GALLARDO: Aye.

10          CHAIR HOCHSCHILD: Vice Chair Gunda?

11          VICE CHAIR GUNDA: Aye.

12          CHAIR HOCHSCHILD: And I vote aye as well.

13          Congratulations.

14          With that, we'll go to California -- Item 9,  
15 California Department of Transportation, Caltrans.

16          Welcome, Sarah Sweet.

17          MS. SWEET: Good morning, Chair, Vice Chair, and  
18 Commissioners. My name is Sarah Sweet, and I work in the  
19 Fuels and Transportation Division. I'm joined by Jimmy  
20 O'Dea, the Assistant Deputy Director for Transportation  
21 Electrification Caltrans.

22          Item number four pertains to an interagency  
23 agreement between Caltrans and the Energy Commission for  
24 implementing the awarded Charging and Fueling  
25 Infrastructure, or CFI, grant. I'm pleased to present this



1 agreement to you today for approval because it officially  
2 makes CEC the implementer for this award in California and  
3 formalizes yet another partnership with Caltrans to  
4 implement federal funding for ZEV infrastructure.

5 Before I dive into the importance and purpose of  
6 this interagency agreement, I first want to give you a  
7 brief overview of the CFI program.

8 Next slide.

9 CFI is a \$2.5 billion program that uses funding  
10 established under the Infrastructure and Investments Jobs  
11 Act of 2021. Caltrans, in partnership with the Energy  
12 Commission, the Oregon Department of Transportation, and  
13 the Washington State Department of Transportation, applied  
14 for CFI funding in June of 2023 and was subsequently  
15 awarded \$102 million in one-time funding in August of 2024  
16 for the West Coast Truck Charging and Fueling Corridor  
17 Project. The purpose of this program is to install  
18 publicly accessible, sustainable charging and fueling  
19 infrastructure along alternative fuel corridors.

20 Next slide.

21 The primary objective of the West Coast Truck  
22 Charging and Fueling Corridor Project is to support West  
23 Coast freight routes and to enable goods movements with  
24 ZEVs. California, Oregon, and Washington will use the  
25 federal CFI grant for this project, for this project -- for

1 this project to deploy charging and hydrogen fueling  
2 stations for medium- and heavy-duty vehicles along I-5 and  
3 key freight routes in California.

4 Next slide.

5 The importance and purpose of this agreement can  
6 be summed up simply. It formalizes the partnership between  
7 Caltrans and the Energy Commission and outlines the roles  
8 of each agency in implementing California's CFI program.

9 Most importantly, it assigns the responsibility of  
10 administering CFI Round 1B award to the Energy Commission.  
11 This includes developing and managing the CFI funding  
12 opportunity as well as the resulting agreements. While the  
13 Energy Commission takes the lead in implementing this  
14 program, the interagency agreement emphasizes close  
15 collaboration between Caltrans and the Energy Commission to  
16 ensure the program's success.

17 Next slide.

18 California is poised to enjoy significant  
19 advantages from this newly established federal program.  
20 The CFI program aims to support medium- and heavy-duty ZEV  
21 transition by installing public charging and hydrogen  
22 fueling infrastructure along key freight routes. In the  
23 process, the program will generate good-paying jobs and  
24 reduce diesel emissions.

25 Next slide.

1           Staff recommends the Energy Commission approve  
2 the interagency agreement with Caltrans to administer CFI  
3 funds, the \$252,000 in match funding for administrative  
4 expenses, and adopt the staff determination that this is an  
5 administrative action and, therefore, exempt from CEQA.

6           Thank you.

7           CHAIR HOCHSCHILD: Great. Thank you.

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

9           MS. BADIE: Thank you, Chair.

10          The Commission welcomes public comment on Item 9  
11 at this time.

12          If you're joining us in the room, you'll use the  
13 QR code to visit the public advisor table, and if you're  
14 joining by Zoom, you'll use the raise hand feature on your  
15 screen or star 9 if joining by phone.

16          I'm not seeing any public comment in the room or  
17 on Zoom, so I'll turn it back to you, Chair.

18          MS. SWEET: Apologies.

19          I have Jimmy O'Dea from Caltrans first to say a  
20 few words.

21          CHAIR HOCHSCHILD: Oh, yeah. Great.

22          MR. O'DEA: Hi. Good morning, Chair. Good  
23 morning, Commissioners. Congrats, Commissioner --  
24 Commissioner Skinner, on your appointment. Jimmy O'Dea at  
25 Caltrans.

1           We're just so excited about this partnership with  
2 CEC. It builds on our other two partnerships with other  
3 federal funding programs. We have a great team with our  
4 Washington and Oregon DOT colleagues.

5           This is the single largest award made under the  
6 Federal Charging and Fueling Infrastructure Program, \$102  
7 million. We're just so proud of it. It's a really big  
8 priority for Caltrans and our ZEV portfolio. The team at  
9 CEC, we couldn't ask for better partners. Ben, Sarah,  
10 Jonathan, the whole team, and thank you for all of your  
11 support.

12           Obviously, I'm sure you saw federal news  
13 yesterday and this morning of an executive order on federal  
14 funds putting a pause on disbursement of funding like this  
15 under NEVI and the CFI program. I've been on the phone all  
16 morning about what this means.

17           We have done a lot of work leading up to the  
18 administration change at the federal level to shore up all  
19 our federal funds. Kudos to all of our staff at Caltrans  
20 CEC.

21           There's some uncertainty, and we're going to work  
22 through that, but we think we've done everything we can,  
23 and we're going to be partners and make sure this money  
24 gets to California.

25           CHAIR HOCHSCHILD: Great. Thank you.

1           I just really want to express my appreciation for  
2 Secretary Omishakin, who's been a wonderful partner in all  
3 this. From our early conversations, it's just great to see  
4 this come to fruition. We look forward to getting more of  
5 this stuff deployed.

6           I'll be going down tomorrow to Long Beach for the  
7 dedication of four new mobilities, heavy duty truck  
8 charging in Long Beach and hopefully we can be doing a lot  
9 more of that.

10           So thank you for all your work with that.

11           Let's go to Commissioner Skinner.

12           COMMISSIONER SKINNER: Thank you, Chair. And  
13 thank you, our fuels and transportation division for the  
14 excellent work on this, of course our partners in Caltrans,  
15 and our partners in the states of Oregon and Washington.

16           On the uncertainty that you mentioned, Mr. O'Dea,  
17 from the recent federal change, hopefully, our other states  
18 are just as excited as we are and will help to -- will work  
19 just as hard as we will to try to secure those funds and  
20 not see them go because it is part of the goods corridor,  
21 and it's so important.

22           So I really want to -- you deserve huge thanks  
23 and congratulations to the division and to Caltrans for the  
24 work on this.

25           And in addition to the item that we are voting

1 on, there was a recent announcement that we secured an  
2 additional \$55.9 million in round two funding from the  
3 Federal Highway Administration. We will hope that that's  
4 not at risk. And of course, the funds are, as has been  
5 mentioned, from the Biden-Harris Administration's  
6 Bipartisan Infrastructure Investment and Jobs Act which  
7 California has fortunately been a strong beneficiary from.

8 And as your presentation indicated, the funding  
9 is going to support a competitive solicitation to deploy  
10 high-powered public EV chargers across, you know, all those  
11 corridor groups, including heavy traffic routes in  
12 California and between Nevada and the other states to  
13 support zero-emission freight transportation, which we know  
14 is -- while some of our efforts in that are going to be a  
15 little bit halted, the private sector itself has shown  
16 great interest. So that's important, and we need to  
17 respond and support similarly.

18 So I am just thrilled and look forward to working  
19 on it and really give my appreciation and thanks to all of  
20 you who worked on it.

21 CHAIR HOCHSCHILD: Great.

22 Any other comments or discussion on Item 9?

23 Hearing none, I would welcome a motion on Item 9  
24 from Commissioner Skinner.

25 COMMISSIONER SKINNER: I so move to move 9.

1           CHAIR HOCHSCHILD: Is there a second from  
2 Commissioner Gallardo?

3           COMMISSIONER GALLARDO: I second Item 9.

4           CHAIR HOCHSCHILD: All in favor say aye.  
5 Commissioner Skinner?

6           COMMISSIONER SKINNER: Aye.

7           CHAIR HOCHSCHILD: Commissioner Gallardo?

8           COMMISSIONER GALLARDO: Aye.

9           CHAIR HOCHSCHILD: Vice Chair Gunda?

10          VICE CHAIR GUNDA: Aye.

11          CHAIR HOCHSCHILD: Commissioner McAllister?  
12 Aye.

13          CHAIR HOCHSCHILD: And I vote aye as well.

14          That item passes unanimously. Thank you.

15          We'll turn now to Lead Commissioner and Presiding  
16 Member Reports and begin with Commissioner McAllister.

17          COMMISSIONER MCALLISTER: Well, great.

18          Well, really, I just wanted to sort of double  
19 down on thanks to Commissioner Monahan, and really looking  
20 forward to seeing what she does next. She's such a special  
21 person. I think she'll find a lot of demand for her skills  
22 and knowledge.

23          And then also to welcome Commissioner Skinner. I  
24 don't know when we first crossed paths, but it's been a  
25 while. And I really just have enjoyed your collaboration

1 and certainly your leadership in all things energy  
2 efficiency and far beyond in transportation.

3 And I'll just also second your emphasis of, you  
4 know, trying to do our best to channel Art Rosenfeld's  
5 vision. You know, it's really already nice, but it's going  
6 to be, I know, very nice to collaborate on work on  
7 buildings, because it's among the most complex things that  
8 we do at the Energy Commission, and it will just really be  
9 great to have your knowledge and contribution to that.

10 And I think we're entering, you know, some  
11 challenging times and that'll be more important than ever  
12 really. And I really -- I think it's incredibly  
13 advantageous to the Commission to have your skillset, just  
14 connections and just the legislative experience and the  
15 political funny bone that you have that's just so highly  
16 developed. And I think that complements my technical  
17 knowledge very well. So I think Tweedle Dee and Tweedle  
18 Dum, I think we'll be very good. I don't know who's Dee  
19 and who's Dum, but it will be really, I think, very  
20 productive to work together on that. So really looking  
21 forward to it.

22 Let's see. I think I'll just leave it there,  
23 actually. I don't have a lot of news. I know there's a  
24 lot of important work coming out, but I just want us to  
25 focus on that.



1           So thanks.

2           CHAIR HOCHSCHILD: Thank you.

3           Vice Chair?

4           CHAIR HOCHSCHILD: Thank you, Chair.

5           Also just want to, again, second my gratitude to  
6 Commissioner Monahan and wish her all the best and thank  
7 her for the service.

8           And Commissioner Skinner, thank you again for  
9 being here and being a part of the Commission moving  
10 forward.

11           So I just wanted to lay out the next quarter kind  
12 of for our office really will be around the regional grid  
13 and the conversations around regional markets. Thanks to  
14 Commissioner McAllister's partnership on that issue.

15           We have a workshop coming up this Friday to  
16 discuss, you know, the evolution of the regional markets in  
17 the West. So we'll be focusing on that.

18           Another important element for the next three  
19 months would be the implementation of both the tools given  
20 to us, both under ABX 1.2 and SBX 2.1, the petroleum stuff,  
21 which Senator Skinner was intimately involved in. So I  
22 look forward to working on that and look forward,  
23 Commissioner Skinner, specifically for you to get some  
24 briefings on that. You know, we have a lot of work being  
25 done and we have to think about methodically how best to do

1 this.

2 A second part of the petroleum work is to work  
3 with CARB on the transportation fuels assessment. So we  
4 have some community meetings starting next week and look  
5 forward to briefing you all on that and then debriefing and  
6 giving some updates in this venue as well.

7 So that will be our main focus, coming back from  
8 vacation, wishing everybody a wonderful year of work. And  
9 as with any changes, both small and big, hope is the best  
10 thing to have.

11 Thanks.

12 CHAIR HOCHSCHILD: Commissioner Gallardo?

13 COMMISSIONER GALLARDO: Thank you.

14 I have a couple slides. I wanted to focus real  
15 quick -- I'll go briefly -- but on the goals that my team  
16 and I have been working on for 2025. And I thought since  
17 Commissioner Skinner is new, maybe going over that briefly  
18 would be helpful.

19 And I want to give a big thank you to my team. I  
20 see Eric Stokes, who's my chief of staff, Aretha Welsh,  
21 who's one of my advisors in the room. So I really thank  
22 them for being here to support us and to support me in  
23 particular.

24 They wanted to be here, Commissioner Skinner, for  
25 your swearing in ceremony and show you support from our

1 entire team.

2           So I'll go to the next slide.

3           So to start out with, I'm really focused on our  
4 opt-in certification program. That's our new permitting  
5 program to get more clean energy facilities online. Really  
6 excited about it. So it hasn't been around so long, so we  
7 don't have a ton of data and information yet to check out  
8 patterns and trends, but we are noticing that the  
9 applications are taking a bit longer than we would want to  
10 get to a complete state. And so we're going to be focused  
11 on that, reducing the time to get to that completeness of  
12 the application. And that's going to take partnership with  
13 applicants and our peer agencies, et cetera. But that's  
14 something that we want to focus on. It is a bit complex.

15           Fortunately, the step division, which has been an  
16 excellent team -- they've been very diligent -- they're  
17 going to present an informational briefing for us, I  
18 believe, at our next business meeting. I don't want to get  
19 too ahead of them, but I think that'll be really helpful  
20 because we will have some big decisions to make this year  
21 on some of those applications that are coming through.

22           And then additionally, I wanted to say here on  
23 opt-in, one of the things we're noticing is there might be  
24 some missing information, and so we're thinking about  
25 having what we're calling right now an open house on opt-in

1 so that more folks can come and about what's needed and  
2 also present the types of skills, resources, et cetera,  
3 that they have available to also be able to help us with  
4 those applications.

5           Alright. Next up is the Lithium Valley Vision.  
6 So this is a big effort that's being led by my office.  
7 It's not in a policy division, so it's being run a little  
8 bit differently. But we really want to make sure that we  
9 do the Lithium Valley Vision correctly so that the  
10 residents there in that area can benefit as much as  
11 possible from anything that we do there.

12           So we have an informational proceeding that is  
13 active, and we will have several workshops this year. We  
14 invite you all to attend if you have any interest. And  
15 some of the topics that we'll be addressing are, for  
16 example, improving near-term bankability of lithium  
17 projects, so making sure that they are more attractive,  
18 more robust, feasible, et cetera. We also want to reduce  
19 pre-development costs and risks for new geothermal and  
20 lithium projects in that area, and also build up local  
21 capacity and infrastructure to support the area and to  
22 support the developers. And just in general, that area  
23 lacks a lot of infrastructure, even the most basic, and so  
24 I think they will really benefit if we could do this right.

25           We'll go to the next slide.

1           Another big area is the Renewables Portfolio  
2 Standard. So we're going to be doing -- the step division  
3 is leading an update of the guidebook this year, so you'll  
4 be hearing a lot more about that. Vice Chair Gunda is the  
5 associate commissioner on that, so we'll be working  
6 together to bring that forward. But there will be an  
7 expansion of RPS, and so that'll be exciting to see these  
8 new technologies.

9           We're also wanting to do more to support the  
10 public-owned and municipal-owned utilities. They are great  
11 partners to us in achieving our 100 percent clean energy  
12 goals, so we want to make sure that we uplift them, embrace  
13 them, and engage with them in a way that enables them to do  
14 as much as they can. And they've been doing a lot, but I  
15 think we can do more together.

16           So one of the ideas we had is to have a meeting.  
17 We had called it an en banc, but basically have all the  
18 commissioners present to be able to hear from the MOUs and  
19 the POUs, have them talk to us about their opportunities  
20 and the challenges that are coming up for them, and being  
21 able to engage that way. I also am planning to visit all  
22 of the POUs and MOUs, so if anyone else of my colleagues  
23 here want to join me on those visits, we will let you know.

24           And then finally, on our justice, access, equity,  
25 diversity, and inclusion work. So Commissioner Skinner, we

1 use the acronym JAEDI. There are a lot of different  
2 acronyms out there, but we use JAEDI.

3 So we are doing a lot on JAEDI. We have a  
4 framework that we want to implement that was approved  
5 through the 2022 IEPR that Vice Chair Gunda left -- led,  
6 sorry -- and we are excited now to be able to do more. My  
7 advisor Aretha Welsh is leading that effort and really  
8 grateful to her for doing so much. So we're going to  
9 operationalize the JAEDI framework itself, also have  
10 several workshops to be able to hear from the community on  
11 various topics and issues to help us improve our efforts,  
12 which I think are really important given that the new  
13 federal administration isn't so supportive of these types  
14 of efforts. So we'll be doing that.

15 That concludes my update here, unless someone has  
16 questions.

17 CHAIR HOCHSCHILD: Thank you.

18 So Commissioner Skinner, this last item, or this  
19 is just a standing item because of Bagley-Keene  
20 restrictions, this is our time to share out anything you  
21 want to report out to all of us.

22 This is your first day here, so I don't expect  
23 it, but anything else you'd like to add, or ask, or  
24 anything?

25 COMMISSIONER SKINNER: Only that I say my focus

1 is on getting oriented, and it's -- and not only to the  
2 areas that I've been now assigned, obviously in the Fuels  
3 and Transportation, but also Industrial Decarb. And thank  
4 you for the second, for some of the Efficiency work, which  
5 I'm very interested in. And of course our ports.

6 So while I have some knowledge, I do not have the  
7 -- I have a lot to get up to speed. So I would say for  
8 this first period of time, that will really be what I'm  
9 doing and focusing on, is getting up to speed.

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

11 The only thing I'd like to just share out is I  
12 had a quite extraordinary week last week. I was in D.C.  
13 for some meetings with Secretary Granholm and  
14 Undersecretary David Crane, as well as to join President  
15 Biden for the signing of the National Monument. So that  
16 was a little under a million acres that got conserved. And  
17 all of the California tribes that were involved, both for  
18 Satitla and for Chukwala, came and one of the tribal  
19 leaders took the tribal shawl and put it over the  
20 president's neck.

21 And it was a very emotional moment, very special  
22 moment. And it was just extraordinary to be a part of that  
23 and see how much that means to all the tribes, both from  
24 the North and the South that attended. Senator Padilla was  
25 there, Senator Schiff, the California delegation. So

1 really special moment. Just wanted to share that.

2 With that, let's turn now to Item 11, Executive  
3 Director's Report.

4 Jen, anything from Exec Office to share out?

5 DEPUTY EXECUTIVE DIRECTOR MARTIN-GALLARDO: No  
6 updates.

7 CHAIR HOCHSCHILD: Okay.

8 Let's go to Item 12, Public Advisor's Report.

9 MS. BADIE: Thank you, Chair.

10 Mona Badie for the Office of the Public Advisor  
11 on Energy Equity and Tribal Affairs.

12 Just a couple of things.

13 The CEC CPUC Disadvantaged Communities Advisory  
14 Group met on Friday. And among other agenda items, they  
15 received a presentation from CEC staff and provided  
16 feedback on proposed gas research initiatives as part of  
17 the 2025-2026 Gas Research and Development Budget Plan.

18 And I also wanted to mention that the next DCAG  
19 meeting is scheduled for February 21st.

20 Our office wanted to thank Commissioner Monahan  
21 for her leadership. We worked with her on transportation  
22 equity, tribal funding, and also the Disadvantaged  
23 Communities Advisory Group.

24 And we'd also like to welcome Commissioner  
25 Skinner and look forward to working with you.



1           And that's all I have for today.

2           Thank you.

3           CHAIR HOCHSCHILD: Great. Thanks.

4           We'll turn now to Item 13, Chief Counsel's  
5 Report.

6           MR. WARD: Allan?

7           MR. WARD: The only item I have is the readout  
8 necessary for the closed session that you're about to go  
9 into.

10           Pursuant to Government Code Section 1126A1, the  
11 Commission may adjourn to closed session with this legal  
12 counsel to consider the appointment, employment, evaluation  
13 of performance, or dismissal of public employee or to hear  
14 complaints or charges brought against that employee by  
15 another person or employee.

16           Thank you.

17           CHAIR HOCHSCHILD: Okay.

18           At this time, we will adjourn for closed session  
19 and then return to report out when that's done.

20           (Off the record at 12:16 p.m.)

21           (On the record at 12:45 p.m.)

22           CHAIR HOCHSCHILD: We're back from closed  
23 session.

24           I'm joined by Vice Chair Gunda and Commissioner  
25 McAllister, and we'd like to report out that we will be

1 offering the position of Chief Counsel at the California  
2 Energy Commission to Sanjay Ranchod.

3 And with that, we're adjourned.

4 (The meeting adjourned at 12:46 p.m.)  
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## 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 29th day of January, 2025.



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MARTHA L. NELSON, CERT\*\*367

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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.



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MARTHA L. NELSON, CERT\*\*367

January 29, 2025