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BUSINESS MEETING  
BEFORE THE  
CALIFORNIA ENERGY COMMISSION

In the Matter of: )  
 )  
 *Business Meeting* )  
 \_\_\_\_\_ )

CALIFORNIA ENERGY COMMISSION  
THE WARREN-ALQUIST STATE ENERGY BUILDING  
ART ROSENFELD HEARING ROOM - FIRST FLOOR  
1516 NINTH STREET  
SACRAMENTO, CALIFORNIA 95814

WEDNESDAY, NOVEMBER 16, 2022  
10:00 A.M

Reported by:  
M. Nelson

## APPEARANCES

### **CEC**

#### Commissioners

David Hochschild, Chair  
Siva Gunda, Vice Chair  
J. Andrew McAllister, Commissioner  
Patty Monahan, Commissioner  
Kourtney Vaccaro, Commissioner

#### Staff Present:

Dorothy Murimi, Public Advisor

### **Presenters:**

Jorge Quintero, Department of Water Resources  
David Erne, Energy Assessment Division, CEC  
Dorothy Murimi, CEC  
Alejandro Galdamez, Efficiency Division Appliances Branch  
David Wensil, Fuels and Transportation Division  
Thanh Lopez, Fuels and Transportation Division

### **Public Comment:**

Daniel Drazan, Enchanted Rock  
Sofia Magollon, CAUSE  
Claire Warshaw  
Gordon Dash, Dash Two Energy  
Michael Ivanovich, Air Movement and Control Assoc. Inc.  
Mary Anderson, Pacific Gas and Electric  
Courtney Cucchissi, EVgo  
Charlotte Goodrich, ChargePoint

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## P R O C E E D I N G

(Start of introductory video)

MS. MURIMI: Welcome to the California Energy Commission Business Meeting. Zoom's closed-captioning feature has been enabled to make Energy Commission business meetings more accessible. Attendees can use this feature by clicking on the "Live Transcript" icon and then selecting either "Show Subtitle" or "View Full Transcript." Closed captioning can be stopped by closing out of the Live Transcript or selecting "Hide Subtitle." Those participating solely by phone do not have the option for closed captioning.

The Energy Commission will continue to post a recording of this business meeting on the Business Meeting webpage in addition to posting a transcript of this business meeting rendered by a professional court reporter in the docket system on the business meeting webpage.

To increase access to the California Energy Commission's proceedings, this meeting is being held in-person and is also available for remote participation.

The public can participate in the business meeting consistent with the instructions for remote participation found in the notice for this meeting, and as set forth on the agenda posted to the Energy Commission's

1 website. Pursuant to California Code of Regulations Title  
2 20, section 1104(e) any person may make oral comments on  
3 any agenda item.

4           Once the public comment period begins, to  
5 indicate you would like to give a comment in-person please  
6 use the QR codes shown in the room and fill out the form.

7           For remote participants, please raise your hand  
8 by clicking on the "Raise Hand" icon at the bottom of your  
9 screen. If you are joining by phone, press star nine to  
10 raise your hand and star six to unmute.

11           To ensure the orderly and fair conduct of  
12 business, public comments will be limited to three minutes  
13 or less per person for each agenda item voted on today.

14           Any person wishing to comment on information  
15 items or reports which are non-voting items shall reserve  
16 their comment for the general public comment portion of the  
17 meeting and shall have a total of three minutes or less to  
18 state all remaining comments. After the Public Advisor  
19 calls on you to speak, spell your name and state your  
20 affiliation, if any.

21           Welcome to the California Energy Commission's  
22 business meeting. The meeting will now begin.

23           (End of Introductory Video)

24           CHAIRMAN HOCHSCHILD: Good morning, friends. I'm  
25 David Hochschild, Chair of the Energy Commission. Today is

5

1 Wednesday, November 16<sup>th</sup>, and I call the meeting to order.  
2 With me are Vice Chair Gunda, Commissioner Vaccaro,  
3 Commissioner McAllister and Commissioner Monahan. We have  
4 a quorum. Let's begin with the pledge of allegiance led by  
5 Commissioner Vaccaro.

6 (Pledge of allegiance recited.)

7 CHAIRMAN HOCHSCHILD: Thank you, Commissioner.

8 So, to begin with I want to recognize the winners  
9 of 2022 Clean Energy Hall of Fame awards which will happen  
10 next month.

11 We're going to be recognizing Dr. Carol Zabin,  
12 founder of the University of California Berkeley Labor  
13 Center for the Green Economy, and she is the winner of our  
14 Lifetime Achievement award; Kelly Tung, president and  
15 executive director of the Youth Environmental Power  
16 Initiative who wins the Youth Game Changer Award; Tishmall  
17 Turner, vice chair of the Rincon Tribal Council of the  
18 Rincon Band of the Seminole Indians, you are tribal  
19 champion; Sean Armstrong, managing principal of Redwood  
20 Energy is the Fan Energy Champion; Nalleli Cobo, cofounder  
21 of People Not Pozos and South Central Youth Leadership  
22 Coalition is a Clean Energy Champion, and Dr. Martinrex  
23 Kedziora, a superintendent of the Moreno Valley Unified  
24 School District is a Clean Energy Champion.

25 Congratulations of all of you. These leaders

1 were chosen out of over 240 nominees and are doing  
2 absolutely tremendous work on the cutting edge of front  
3 lines of building a clean energy future for our state.

4 So, please join us in celebrating them at our  
5 ceremony which will be in person, as well as on Zoom,  
6 December 8<sup>th</sup> from 2:00 to 4:00 p.m. in our beautiful new  
7 Natural Resources Agency auditorium here in Sacramento.  
8 So, look forward to seeing you all there.

9 And today we're going to be seeking approval of  
10 nearly \$8,000,000 in investments contributing to  
11 California's economic growth recovery.

12 We'll turn now to Consent Calendar item 2A  
13 through E. I should mention at the outset as well, we're  
14 going to hold Item 7 until our meeting next month.

15 So, with that, let's turn to the Consent Calendar  
16 item 2A through E. Do we have any public comment, Dorothy,  
17 on Items A through E?

18 MS. MURIMI: Thank you, Chair. So, instructions  
19 for attendees. For those who would like to make public  
20 comment, if you're calling in, press star nine to raise  
21 your hand and star six to unmute on your end. If you are  
22 on Zoom, use the raise hand feature, looks like an open  
23 palm at the bottom of your screen. We'll give that one  
24 moment. Seeing no comments, back to you, Chair.

25 CHAIRMAN HOCHSCHILD: Thank you. Unless there's



1 Commissioner discussion, I'd welcome a motion from  
2 Commissioner Vaccaro on Items A through E.

3 COMMISSIONER VACCARO: Yes. I move approval of  
4 Items 1A through 1E.

5 CHAIRMAN HOCHSCHILD: Vice Chair Gunda, would you  
6 be willing to second?

7 VICE CHAIR GUNDA: Second items A through E.

8 CHAIRMAN HOCHSCHILD: All in favor say "aye."  
9 Commissioner Vaccaro.

10 COMMISSIONER VACCARO: Aye.

11 CHAIRMAN HOCHSCHILD: Vice Chair Gunda.

12 VICE CHAIR GUNDA: Aye.

13 CHAIRMAN HOCHSCHILD: Commissioner Monahan.

14 COMMISSIONER MONAHAN: Aye.

15 CHAIRMAN HOCHSCHILD: Commissioner McAllister.

16 COMMISSIONER McALLISTER: Aye.

17 CHAIRMAN HOCHSCHILD: And I vote aye as well.

18 Those items pass unanimously.

19 We'll turn out Item 3, information item on the  
20 Department of Water Resources Electricity Supply Strategic  
21 Reliability Reserve Agreements. Welcome to Jorge Luis  
22 Quintero.

23 MR. QUINTERO: Hello. Can you hear me?

24 CHAIRMAN HOCHSCHILD: Yeah, we can hear you.

25 Good morning.

1 MR. QUINTERO: Good morning. Good morning,  
2 Chair, Vice Chair, Commissioners.

3 I am Jorge Quintero with the Department of  
4 Resources, serving as a engineer in the Electricity Supply  
5 and Strategic Reserve Office.

6 This is the first quarterly update to the  
7 Commission regarding current and planned --

8 MS. MURIMI: Apologies, Jorge. If you could turn  
9 on your video. There you go. Sorry.

10 MR. QUINTERO: My apologies for that. I thought  
11 it did it automatically.

12 This is the first quarterly update to the  
13 Commission regarding current and planned investments for  
14 California's newly created Electricity Supply Strategic  
15 Reliability Reserve Program.

16 While my focus will be on DWR's activities with  
17 respect to this program, there is considerable coordination  
18 with the California Energy Commission, the California  
19 Public Utilities Commission, and the California Independent  
20 System Operators. This is a team effort.

21 Next slide, please.

22 This all started in 2021 with the Governor's  
23 proclamation issued on July 30, 2021, in response to more  
24 frequent and compounding effects of climate change, such as  
25 continuing wildfires, ongoing drought, and extreme heat

1 conditions facing California. An energy supply shortage of  
2 up to 3,500 megawatts during peak periods was projected  
3 beginning the summer of 2021.

4 DWR was tasked with bringing additional resources  
5 of energy online to address potential grid shortfalls and  
6 to help keep the lights on and air conditioning running so  
7 millions of Californians can stay safe during extreme heat  
8 events.

9 As directed by the proclamation, DWR procured and  
10 installed 120 megawatts of new generation at two locations  
11 within northern California. This is enough electricity to  
12 power up to 120,000 homes.

13 The program was created under Assembly Bill 205  
14 which was signed on June 30 of 2022 and amended by Assembly  
15 Bill 209 which was signed on September 6 of 2022.

16 These bills directed DWR, in consultation with  
17 the Energy Commission and other state agencies, to  
18 implement projects needed to establish an energy  
19 reliability reserve to be available during the most  
20 critical times of the day and year. The funding for this  
21 program was established through Assembly Bill 178 and  
22 Assembly Bill 180.

23 The extension of the Diablo Canyon Nuclear Power  
24 Plant was originally contemplated as part of the  
25 reliability reserve, but was removed by Assembly Bill 209

1 and moved to a separate funding stream by Assembly Bill  
2 846. While technically it's not a part of the reserve, the  
3 Diablo Canyon extension similarly serves grid reliability.

4 Next slide, please.

5 With DWR's successful response to the 2021  
6 proclamation and understanding that potential shortfalls  
7 still exist for future summers, Governor Newsom directed  
8 DWR to use its expertise to deploy and manage additional  
9 energy resources to safeguard the statewide energy grid.

10 DWR, as the fourth largest producer of energy in  
11 California, is now legislatively tasked to establish a more  
12 comprehensive program.

13 The picture shown here displays two of the  
14 temporary emergency generators installed in response to the  
15 2021 Governor's proclamation. These two in particular are  
16 located in Roseville, California and interconnected to the  
17 grid within the jurisdiction of the Roseville Electric  
18 Utility.

19 In total, four temporary emergency generators  
20 powered by natural gas and equipped with emission controls  
21 limiting air quality impacts, were installed providing up  
22 to 120 megawatts of electricity to the statewide power  
23 grid.

24 These generators can be deployed quickly under  
25 emergency declarations by the California ISO. Operators

1 can bring these units on line within five minutes.

2           These generators were first called upon during  
3 the 2022 Labor Day heat wave which was a historic five-day  
4 event.

5           Next slide, please.

6           This program is designed to support California's  
7 transition to a clean energy future and is temporary in  
8 nature.

9           With extreme heat, fires and droughts putting a  
10 strain on the statewide power grid, projects like these are  
11 a critical part of a broader effort across California to  
12 help make sure the lights stay on and air conditioners keep  
13 running.

14           Projects under the program will result in a  
15 diverse set of backup electricity resources acting as an  
16 insurance policy for all utilities and balancing areas in  
17 the state.

18           The program is planning to increase reserve  
19 capacity to over 4,000 megawatts in 2024 and over 5,500  
20 megawatts in 2025.

21           Next slide, please.

22           DWR has been directed to invest over a billion  
23 dollars for securing strategic energy reserves.

24           DWR's investments include a combination of  
25 various projects and tasks that start with project

1 selection all the way through to ensuring additional  
2 megawatts are available to the grid during peak emergency  
3 periods.

4 DWR has been increasing its staff and contracting  
5 additional support to assist with managing and reporting on  
6 the entire portfolio of reliability reserve projects.

7 This is a team effort bringing multiple state  
8 entities together to work to keep electricity flowing to  
9 homes and businesses in California.

10 Not only are we coordinating with our sister  
11 agencies, but we will be regularly reporting status through  
12 meetings like this and to the legislature.

13 Next slide, please.

14 Securing additional power comes from a variety of  
15 sources, including clean energy. The goal is to get the  
16 cleanest energy possible.

17 There are five distinct projects under the  
18 program.

19 The first is related to extending the operating  
20 life of existing generating facilities planned for  
21 retirement.

22 Procurement of replacement megawatts for some of  
23 these more mature plants has been slower than anticipated,  
24 and with the State's accelerated electrification it is  
25 prudent to keep some of these plants on line longer while

1 we make our transition to a cleaner energy future.

2           The second is new and temporary power generators  
3 of five megawatts or more. If a generator is operated  
4 using diesel fuel, the department shall not operate it  
5 after July 31 of 2023.

6           The third is new energy storage systems of 20  
7 megawatts or more that are capable of discharging for at  
8 least two hours. Examples include battery storage.

9           The fourth is generation facilities using clean,  
10 zero-emission fuel technology of any size to produce  
11 electricity. These may include fuel cell technology.

12           The fifth is to reimburse electrical corporations  
13 for the value of imported energy or import capacity  
14 products that were produced above market costs or in excess  
15 of procurement authorizations and requirements.

16           Part of our selection criteria is driven by  
17 bringing available megawatts to the grid in a relatively  
18 brief period of time.

19           Due to supply chain issues with more advanced  
20 technologies, some of the first projects to be implemented  
21 are centered on the first two categories and securing more  
22 imports.

23           Next slide, please.

24           Our 2022 investments include projects within two  
25 of the five categories: emergency and temporary power

1 generators and import energy and import capacity products.  
2 This included diesel fuel generators, aeroderivative gas  
3 turbine generators and securing power imports through  
4 existing transmission corridors.

5 We procured and oversaw the installation of 200  
6 megawatts of natural gas fired and diesel units that were  
7 ready to deploy during an emergency event.

8 The natural gas units have emission controls. In  
9 the future they can be converted to run on a blend of up to  
10 75 percent hydrogen. We are working to keep these units  
11 available for future emergency events.

12 The diesel units were available this year, but  
13 they are not allowed to run under the program after July  
14 31<sup>st</sup> of next year. As such, they have already been  
15 demobilized.

16 In regards to imports, California is not an  
17 electricity independent state. It imports greater than 26  
18 percent of its energy from other states. This program  
19 helped to secure 1,400 megawatts through imported energy  
20 that might not have come into California if left to pure  
21 market forces and regulatory restrictions.

22 The import program is only valid between July 1<sup>st</sup>  
23 and September 30<sup>th</sup> of 2022, so we did not include it in our  
24 future plans. Its impact, as you will see in the next  
25 slide, would be of great benefit for future summer peak



1 needs.

2 Next slide, please.

3 In 2023, our future investments include project  
4 within two of the five categories: emergency and temporary  
5 power generators and extended operations of retiring  
6 facilities.

7 In addition, keeping the natural gas fired units  
8 as assets in the program's portfolio, we have plans to  
9 install several more reliable natural gas turbine  
10 generators with emission control technology.

11 We are also looking to extend operations of  
12 facilities planned for retirement by the end of 2023.  
13 These megawatts are expected to be available for the summer  
14 of 2024.

15 This includes extending the operating life of six  
16 once-through-cooling steam units located in southern  
17 California with a maximum capacity of over 2,800 megawatts.

18 The next slide captures an annual look at our  
19 program's investments over the upcoming years.

20 Next slide, please.

21 In 2022, the assets under the program's portfolio  
22 provided a daily contribution ranging a minimum of 554  
23 megawatts to a maximum of 1,400 megawatts during the 2022  
24 Labor Day heat wave event.

25 Looking forward to 2023, there is an increase in

1 the emergency and temporary generation, but you can notice  
2 the gap without this year's import program.

3 Beginning in 2024, we see the larger contribution  
4 from the facilities that were originally scheduled to  
5 retire.

6 I will make note that this graphic does not  
7 include efforts related to the Diablo Canyon Powerplant  
8 extension which would kick in after 2024.

9 Next slide, please.

10 That conclude DWR's presentation. We are  
11 available for any questions.

12 We also want to let you know that representatives  
13 of the CPUC and California ISO are also in attendance if  
14 there are any questions regarding the forecasted need or  
15 associated regulatory requirements.

16 Thank you. Our next updates are scheduled for  
17 the first quarter of 2023.

18 Next slide, please.

19 If desired, please follow us on social media via  
20 Facebook, Twitter, YouTube and Instagram.

21 Thank you.

22 CHAIRMAN HOCHSCHILD: Thank you so much.  
23 Appreciate that update, and we look forward to continuing  
24 the dialogue. Let's open it up to Commissioner and guest  
25 discussion, maybe beginning with Mark Rothleder.

1 MR. ROTHLEDER: Yes. Thank you, Chair, and,  
2 Jorge, thank you to the DWR team. It really was important  
3 to be able to ride through and get through this summer in a  
4 reliable way. We look forward to working with you and your  
5 team in the future years.

6 I think it's important to also mention that this  
7 is a program that is complementary and in addition to the  
8 Resource Adequacy Program, and that is the primary focus of  
9 -- primary approach of meeting reliability needs, but this  
10 is an approach that really takes it to a next level to be  
11 able to ride through those more extreme events, whether it  
12 be weather events, fire events and so forth that are being  
13 driven by climate change. So, we really appreciate DWR's  
14 engagement and, again, looking forward to working with you  
15 in the future on development of this to help the  
16 reliability of the system. Thank you.

17 CHAIRMAN HOCHSCHILD: Okay. Anyone else wishing  
18 to comment, Colin Wood, Vice Chair Gunda?

19 MR. WOOD: Chair Hochschild, I'm here to support  
20 Mr. Quintero, but I don't have any comments myself.

21 CHAIRMAN HOCHSCHILD: Okay. Any other reaction?  
22 Yeah, go ahead.

23 VICE CHAIR GUNDA: Thank you, Chair. Just want  
24 to take a moment to thank the DWR team and really great  
25 work, as Mark Rothleder just said. And I want to comment

1 specifically, Bazad (phonetic), Ted, Tony and Jorge for  
2 that excellent work this summer to rapidly deploy the  
3 resources to help this summer.

4 I think there's an opportunity here to just lay a  
5 few things together and also thank our CEC team  
6 specifically, both the siting team as well as the AD who  
7 has been working with DWR and Commissioner Vaccaro whose  
8 office has been supporting on the permitting side and  
9 stuff. So, just wanted to say a big thanks to everybody  
10 who has been working on this, CAISO for your consultation,  
11 and Pete and the CEC team.

12 So, in terms of 30,000 foot level, we just came  
13 out of a hearing, oversight hearing, on Monday, just about  
14 there will likely be status, and rightfully so, while we  
15 have the opportunity to build a strategic reserve, given  
16 the time sensitivity and given the resources available to  
17 build a strategic reserve, there is a reliance on fossil  
18 fuels, and it has been a strong request from the  
19 legislature, the communities, to decarbonize the strategic  
20 reserve to the extent that we can, and I just wanted to  
21 acknowledge the comments from both the leadership at the  
22 legislature as well as the communities who have raised  
23 those concerns.

24 It's important to note that as we think through  
25 building the strategic reserve our hope is to decarbonize

1 it as we move forward. Apart from DWR's funding, there's  
2 also funding for CEC through the Distributed Generations  
3 Assets Program and then also the DSCS program which is the  
4 Demand Side Load Reduction Program at CEC. Both of them  
5 are hoped to be cleaner, and we're working together to  
6 figure out kind of a stacking order on how to deploy the  
7 cleanest of the emergency sources first before going into  
8 resources that are move harmful.

9 Just wanted to note that as an important element  
10 both on the recognition that these are break glass measures  
11 that we are relying on, not necessarily measures that we  
12 want to rely on, but we're in the situation where we have  
13 to hold on to some of these assets for the reliability  
14 concerns, and as we move forward, I think agencies together  
15 will work together as well as we can to make sure we  
16 decarbonize the assets that we have to get through the  
17 emergencies.

18 And overall, you know, once we get past the 2026  
19 timeframe through 2030 timeframe. As the discussions on  
20 Diablo continue, we have to figure out a strategy on how to  
21 tackle both the tail ends of the demand, chart these middle  
22 peaks that we're going to continue to see because of  
23 climate change, but also the risk from fire and drought.  
24 So, it's an important element for all of us to work  
25 together, not just the agencies, but the stakeholders, to

20

1 figure out solutions. And I think the next item, Item  
2 number 4, that David Erne is going to speak is going to go  
3 to some of that, so hopefully, you know, we continue our  
4 path towards clean transition, but also clean emergency  
5 resources.

6 So, with that, I just want to thank again, Jorge,  
7 thank you for your presentation. It was very clear. I  
8 look forward to continue to work with everybody.

9 CHAIRMAN HOCHSCHILD: Thank you, Vice Chair.  
10 That was really well said.

11 Let me just see if Pete Skala or any of the  
12 Commissioners, is there anything else you'd like to add or  
13 contribute? Go ahead, Pete.

14 MR. SKALA: My name is Pete Skala. I'm director  
15 of electricity procurement, supply and costs at the PUC in  
16 the Energy Division. I'm here representing for President  
17 Reynolds who couldn't be in today because she's at the COPS  
18 and may be traveling today. So, she didn't have any  
19 prepared remarks, but I just want to echo everything that  
20 Vice Chair Gunda said and Bart Rothleder said. It's been  
21 -- this is a great resource to have in the toolbox, not  
22 compete with the RA programs, but to complement them and  
23 provide those break the glass resources when we need them  
24 in times of great demand that are outside of our  
25 traditional planning reserve margins. So, it's -- and it's

21

1 been great working with DWR.

2 CHAIRMAN HOCHSCHILD: Great. Commissioner  
3 Vaccaro, please.

4 COMMISSIONER VACCARO: Thank you so much. So,  
5 thank you for the presentation and just appreciate all of  
6 the comments so far.

7 I kind of wanted to go backwards a little bit to  
8 that 2021 emergency proclamation that was mentioned in the  
9 presentation because I think that was really the beginning,  
10 I think, of some very just tremendous teamwork. CEC, our  
11 Siting Division, DWR team. We also had partners with PUC,  
12 California Air Resources Board, local air districts,  
13 developers like generating partners as well as utilities  
14 really, you know, worked shoulder to shoulder to figure out  
15 how to get this work done. And it's carried through to  
16 today, and I think it's just really, for me, important to  
17 recognize how much nonpublic facing organization  
18 coordination was required.

19 And, you know, DWR really sets a high bar for  
20 project management. I think Vice Chair Gunda name checked  
21 a few people. There is a tremendous team involved, but a  
22 really high bar for project management that I think our  
23 team at the CEC has been able to learn from and implement  
24 as well.

25 I've been following this since I was an advisor

1 to Karen Douglas and in my role as Commissioner and am just  
2 so proud of the outcomes, proud of what the teams have done  
3 together and what I think we're going to be able to do to  
4 ensure liability moving forward.

5 So, really, thank you for the presentation and  
6 everyone for the hard work.

7 CHAIRMAN HOCHSCHILD: Really well said. Thank  
8 you, Commissioner. Anyone else wishing to make a comment?  
9 If not, thank you all and thanks for the presentation. I'm  
10 glad we're on a regular quarterly schedule for these check-  
11 ins, so look forward to continuing the dialogue. All  
12 right. Thanks, everyone.

13 We'll turn now to Item 4, information item on the  
14 Request for Information on Investments in Clean Energy  
15 Resources. Welcome, David Erne.

16 MR. ERNE: Good morning, Chair, Vice Chair and  
17 Commissioners, can you hear me all right?

18 CHAIRMAN HOCHSCHILD: Yes.

19 MR. ERNE: Okay. I'm going to give you an  
20 overview of a request for information that we put out last  
21 week to solicit information on clean energy resources to  
22 address a number of different requirements that we have.

23 We can go to the next slide.

24 So, as Jorge mentioned, there are a number of  
25 legislative -- a number of bills that were passed this last



1 summer that affected or addressed reliability. And he  
2 mentioned some of them in his overview. There are a number  
3 more that are impacting or provide requirements for CEC,  
4 and we're going to go through some of those today and talk  
5 about the need for those.

6 We held a workshop on October 28 with the CPUC,  
7 CAISO and DWR to cover these legislative requirements and  
8 talk about the activities that need to occur to address  
9 them.

10 The key theme across all of these requirements is  
11 the need to evaluate potential clean energy resources to  
12 support reliability between now and 2035. So, that's the  
13 general theme.

14 Most of these assets that we're going to look at  
15 are assets that would be available all the time, not  
16 necessarily just during emergencies, just differentiating  
17 that from some of the requirements of the strategic  
18 reserve.

19 Next slide.

20 As I mentioned, there are multiple requirements  
21 for CEC that are established this summer, and actually one  
22 last year, that are requiring us to take a look at and  
23 compare different clean energy resources and how they might  
24 be providing a value to the grid as well as customers.

25 Two of the key ones under SB 846 are to develop a

1 clean energy reliability investment plan. This plan will  
2 be provided to the legislature by March and would be in  
3 forming potential funding of up to one billion dollars for  
4 clean energy resource deployment in the state.

5 The next one is comparison to Diablo Canyon. So,  
6 another requirement we have is to provide a recommendation  
7 or provide an analysis to the legislature by next September  
8 that looks at resource alternatives that could be deployed  
9 that as compared to extending Diablo Canyon.

10 We also have a requirement -- ongoing requirement  
11 to consider clean energy resources in our reliability  
12 analyses. We have another requirement in the SB 8 --  
13 excuse me, SB 423 to cover firm resources and provide that  
14 to the legislature next year. And, of course, information  
15 that we gather will be utilized for our SB 100 report which  
16 is due in January. So, multiple legislative requirements,  
17 all asking us to take a look at and compare different clean  
18 energy resources to support grid reliability.

19 As part of the RFI that we put out to collect  
20 information we provided a preliminary list of resources and  
21 asked questions about whether those are the right resources  
22 we should be considering, whether there are ones we should  
23 add or ones we should take away.

24 We also asked for information about the  
25 attributes for evaluations or how we can evaluate and

1 compare these different resources against each other.

2 We also asked for information on costs and the  
3 availability of the resources.

4 And, lastly, we included some information or some  
5 questions to help inform the development of those strategic  
6 electricity backup assets or DEBA program.

7 Next slide.

8 I'll just quickly go through a number of slides  
9 just to show the kinds of resources that we've identified  
10 thus far. We separated them into supply resources, demand  
11 resources, and those resources that are both supply and  
12 demand, depending upon how they're used.

13 So, we're asking for information from the public  
14 about these resources, are there ones that we should be  
15 adding as well as any that we should be taking away, and  
16 also information on their performance. So, this was supply  
17 analysis.

18 Next slide.

19 Next is the demand resources, number of controls,  
20 demand response to Anflex thermal storage, et cetera,  
21 including efficiency.

22 And the next slide, slide six, covers those that are  
23 both supply and demand. So, depending upon how these are  
24 utilized, distributed technologies could be applied as both  
25 a demand resource, or they could provide supply depending

1 on how they're hooked in.

2 Next slide.

3 We also asked for feedback on the attributes, so  
4 we want to be able to qualify each of the attributes of  
5 these technologies and to be able to compare them.

6 We created a list of attributes that we want to  
7 consider and we think are appropriate to consider. The  
8 first five we refer to as our achievability factors, so  
9 it's really the ability to get these resources on the grid  
10 and provide support now or in the future. So, some  
11 technologies may be available now; some might be available  
12 in the next five or ten years. We're considering out to  
13 2035. So, we want to be able to capture to both those that  
14 are commercially available now and those that might be  
15 commercially available within that timeframe and understand  
16 how those can be deployed.

17 We're also looking for attributes to help us  
18 understand the cleanliness, how easily they can be  
19 dispatched and how they can provide support to equity  
20 communities.

21 Next slide.

22 This just gives a list of the description of the  
23 definitions of each of these attributes, so these are the  
24 ones that I refer to as achievability.

25 Next slide.

1           These are the ones, remaining attributes that we  
2 are going to be evaluating we put out.

3           And, lastly, next slide.

4           We'll be considering the qualitative analysis of  
5 these technologies. So, we'll be considering, as I  
6 mentioned, availability and when we can get these  
7 technologies on the grid. So, we'll have something like an  
8 X or check mark to identify how readily available they are.  
9 And we might use something like the Harvey Ball approach  
10 you've probably seen in "Consumer Reports" to qualify each  
11 of these other attributes to be able to compare the  
12 technologies.

13           Part of what we're also required to do is  
14 identify the barriers and provide recommendations on  
15 overcoming barriers. So, just because something shows an  
16 empty Harvey Ball doesn't necessarily mean that it is a  
17 problem or is a resource that we don't want to deploy. It  
18 might mean that we have to identify ways to overcome  
19 barriers to get that technology on grid and providing value  
20 quickly.

21           Next slide.

22           We also provide a list of questions for  
23 quantitative analysis of the technologies, essentially  
24 looking at cost and availability of these technologies for  
25 deployment between now and 2035 and recommended that

1 individuals can provide information in different ranges of  
2 information such as low, medium or high costs and  
3 availability, so you get some perspective on how quickly we  
4 can get these technologies out and what they might cost to  
5 do a cost comparison.

6 We also included some questions about the  
7 development of the DEBA program so that we can help inform  
8 the development of guidelines for that program which is  
9 part of the strategic reserve.

10 Next slide.

11 The RFI went out last Monday. Response are due  
12 by the 30<sup>th</sup>. Anyone who is interested, provide input to us.  
13 Please refer to our docket, our reliability docket, which  
14 is on the slide here, where you can see our RFI and you can  
15 also provide your information back to us that we can  
16 utilize in our analysis.

17 Next slide.

18 We will be taking other information, conducting a  
19 review of all the public information and the information  
20 that we're gathering along with our consulting firm,  
21 Guidehouse. To conduct the analysis, we anticipate having  
22 a preliminary review in December in a workshop to give an  
23 overview and solicit additional feedback, and we will be  
24 having more public opportunities for feedback on these  
25 resources as we move forward for different purposes.

1           As I mentioned, we have multiple deliverables.  
2 The Clean Energy Reliability Investment Plan is due in  
3 March, and the comparison to Diablo Canyon is due in  
4 September, so those are two key ones that this will all  
5 inform.

6           So, with that, I'll finish with my overview and  
7 I'm open to any questions if you have any.

8           CHAIRMAN HOCHSCHILD: Thank you so much, David.  
9 That was tremendous. Thank you so much. That was  
10 terrific.

11           I'm not sure where that background noise is  
12 coming from.

13           So, both Items 3 and 4 are nonvoting information  
14 items. We don't typically take public comment on the  
15 nonvoting items, but Vice Chair Gunda has requested we open  
16 that up. Let's do that at this time. We'll open up for  
17 public comment both on Items 3 and 4, so anything related  
18 to the strategic reliability reserve and procurement of  
19 clean energy resources for reliability. Dorothy, if you  
20 open up the line, that would be great.

21           MS. MURIMI: Thank you, Chair. For individuals  
22 that would like to make a comment, if you are on Zoom use  
23 the raised hand feature which is an open palm at the bottom  
24 of your screen. And for those calling in on Zoom, go ahead  
25 and press star nine to raise your hand and star six to

1 unmute. We will unmute your line on our end. And please  
2 state, spell your name, give your affiliation, if any for  
3 the record.

4 We're going to give that one moment. All right.  
5 I see Claire Warshaw. Please state, spell your name, give  
6 your affiliation, and you may begin.

7 Claire Warshaw, we cannot hear you on our end.  
8 All right. We'll hold there and we'll move to Daniel  
9 Drazan. Apologies if I've misstated your name. Please  
10 state, spell your name, give your affiliation. You may  
11 begin your comments.

12 MR. DRAZAN: Yes, thank you. Can you hear me?

13 MS. MURIMI: Yes, we can.

14 MR. DRAZAN: Okay, great. My name is Daniel  
15 Drazan. I'm with Enchanted Rock. We are a microgrid  
16 developer.

17 I just had a question for Mr. Quintero concerning  
18 if you could maybe explain under the Emergency Temporary  
19 Power Generation Program involving five megawatts or more,  
20 I believe you said at the end of 2023 that diesel backup  
21 generators would no longer be permissible under the  
22 program. I was wondering if you could explain if that's  
23 the case or not.

24 MR. QUINTERO: That is correct. The legislation  
25 states that the availability to do diesels ends in 2023,

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1 July 31<sup>st</sup>. So, thereafter the field of choice for the  
2 program would have to be anything besides diesel, so,  
3 looking at cleaner fuel.

4 MR. DRAZAN: Okay. And just real quickly, what  
5 legislation did you say that was?

6 MR. QUINTERO: That's within AB 205 and --

7 MR. DRAZAN: 305. Got you. Well, thank you very  
8 much. Appreciate it.

9 MR. QUINTERO: You're welcome.

10 CHAIRMAN HOCHSCHILD: Dorothy, do you want to see  
11 if Claire is still trying to speak.

12 MS. MURIMI: My apologies. I was speaking while  
13 muted. Next is Sofia Magallon. Apologies if I've  
14 misstated your name. Please state, spell your name and  
15 give your affiliation.

16 MS. MAGALLON: Hi. My name is Sofia Magallon,  
17 and I am a resident of Oxnard, California in Ventura  
18 County, and I am here as a policy advocate with the  
19 nonprofit organization Cause, otherwise known as Central  
20 Post United for a Sustainable Economy. And we are located  
21 in the central coast of California, and I will be  
22 commenting on Item number 3.

23 The community in Oxnard has long been  
24 overburdened by pollution and has fought hard to shut down  
25 the Ormond Beach generating plant. Initially the plan was

1 to shut it down in 2023. And the community of Oxnard has  
2 85 percent people of color with three power plants and is  
3 located in a census tract in the 94 percentile for  
4 pollution burden under a Cal EnviroScreen in the middle of  
5 California's largest wetlands restoration project called  
6 OBRAP that would end up with opening up green space and  
7 coastal access for the community.

8           And if this plan was to be extended the people of  
9 Oxnard deserve a community benefits agreement from the  
10 state to acknowledge that Oxnard residents are bearing a  
11 burden for all of California's energy reliability here in  
12 the central coast.

13           And recently GenOn, the operator of the plant,  
14 has agreed to put five to ten million dollars into  
15 community benefit agreements with the city for the eventual  
16 clean up and restoration of the plant with these  
17 negotiations with the city. And here the community is  
18 asking and proposing to the State of California that they  
19 match that commitment and do a similar one here with  
20 stakeholders and community members.

21           And thank you for your time.

22           MS. MURIMI: Thank you Sofie. We do have -- one  
23 more time I'm going to see if there are other callers, and  
24 if you are calling in and would like to make a comment,  
25 press star nine. And if you are on Zoom, go ahead and use

1 the raised hand feature.

2 All right. We see Claire. Let's see if you're  
3 --

4 MS. WARSHAW: Can you hear me now?

5 MS. MURIMI: Yes, we can.

6 MS. WARSHAW: All right. My name is Claire  
7 Warshaw. I'm a member of the public. Sorry about before.  
8 I had entered Zoom without turning on my microphone and  
9 camera in the privacy settings on my Macbook, and so it  
10 won't work unless I completely go out and back in.

11 But quickly, Item 4, I think there is enough  
12 potential promise in wave energy. I don't know for  
13 certain, but I do know that in southern California there is  
14 a test project going on with Eco Wave Power, and I've been  
15 reading about it on LinkedIn. Just knowing that is a  
16 potential, it really does seem like that could be added to  
17 the list of things that get investigated under Item 4 for  
18 potential generation.

19 California has a long coast. It's not anything I  
20 would expect to generate a lot of electricity compared to  
21 like wind. I don't think it's anything like that from what  
22 I've read. It's probably closer to something more like  
23 solar energy or something. But for businesses along the  
24 coast, and pier businesses, and things that operate off the  
25 coast it does seem like it's potentially something that is

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1 of value, especially because you can maintain it from the  
2 coast. It does look like something that isn't quite as  
3 scary to operate and potentially could provide some  
4 generation if that would be useful for California. So, I  
5 do think that could be investigated.

6 Thank you.

7 MS. MURIMI: Thank you, Claire, and that  
8 concludes public -- no, apologies. We have G. Dash, and  
9 afterwards we have Ravi Menon.

10 Please state, spell your name, give your  
11 affiliation. You may begin.

12 MR. DASH: Yes, good morning. My name is Gordon  
13 Dash, founder of Dash Two Energy. We are a renewable  
14 hydrogen development company, focus on building zero  
15 emission fuel cell peak power plants.

16 And I just wanted to bring to the Commission's  
17 attention that, you know, our company is currently working  
18 under a Epic grant, Epic grant 19305. We're actually  
19 building a demand-based renewable hydrogen-based project.  
20 And the project is actually going to start going live in  
21 January when we're going to start testing our fuel cell  
22 system, and our electrolyze and storage system will begin  
23 testing in April.

24 So, we look forward to, you know, really getting  
25 this project going, providing some results to the

1 Commission, getting feedback from the Commission in regard  
2 to the work that we are doing. We have, you know, a lot of  
3 effort in front of us, but we truly appreciate the Energy  
4 Commission providing us this grant, and we look forward to,  
5 you know, providing results and trying to move this project  
6 faster because we see the great need for peak power,  
7 particularly zero emission peak power, in the state.

8           And, you know, we're also actively working on a  
9 number of projects that, you know, this grant has been able  
10 to kind of help us, you know, build our business on, and we  
11 look forward to that and we appreciate it.

12           Thank you.

13           MS. MURIMI: Thank you. Next, we have Ravi  
14 Menon. Apologies if I have misstated your name. Please  
15 spell your name, give your affiliation. You may begin your  
16 comments.

17           MR. MENON: No, you pronounced it right. Yeah,  
18 thank you for allowing me to speak today.

19           My question was about the qualification of fuel  
20 cells under DEBA, which is both these supply sources. So,  
21 it states that fuel cells -- it also states that the  
22 limitation on the amount of power that can be exported to  
23 the grid would be one megawatt. Maybe I'm misunderstanding  
24 that.

25           The reason I'm asking that is because we have

1 globally systems that are 30 megawatts, going up to 50  
2 megawatts of hydrogen fuel cells at the same time, natural  
3 gas based, low emission fuel cells, anywhere from, say,  
4 under a megawatt to 40 megawatts.

5           So, my question is are we allowed to bid on  
6 projects that are DEBA or the first class of station where  
7 you have 30 megawatts and about four (indiscernible)  
8 megawatts or something?

9           MR. ENGE: Would you like me to take that, Vice  
10 Chair?

11           So, I don't recall a one-megawatt limit, but we  
12 are also in the process of developing the guidelines for  
13 the program. So, I recommend providing your comments  
14 through the RFI, your technology and what you think that it  
15 could deliver, and actually if you can provide it year by  
16 year that would be great so we know what your manufacturing  
17 capability is like and we can understand that in our  
18 analysis. That would be helpful.

19           MS. MURIMI: Thank you. That concludes public  
20 comment. Chair, I hand the mike back to you.

21           CHAIRMAN HOCHSCHILD: Thank you, everybody. I'll  
22 just speak very quickly to the question about wave power.

23           We have actually funded some demonstrations of  
24 wave power, but of the three marine energy technologies,  
25 tidal power, wave power and offshore wind, offshore wind is

1 by far the most mature of those and offers the greatest  
2 benefit which is why we've been focusing on that the most.  
3 But not to say that somebody will eventually crack the code  
4 with wind power, and we hope that's the case. So, thank  
5 you for raising that.

6 Let's turn now to Commissioner discussion,  
7 beginning with Vice Chair Gunda.

8 VICE CHAIR GUNDA: Thank you, Chair. I just want  
9 to begin by thanking David Erne, Pat, Dina, Elizabeth,  
10 Alicia and anybody who has been involved in daily working  
11 on the broad scope of 846, 205, 209 and the many bills that  
12 David just mentioned which are all intersecting on the  
13 reliability and the investment strategy.

14 Also, Chair, thank you for opening it up to the  
15 public comment. I think it was important to hear public's  
16 comments on these two items as we continue to very rapidly  
17 deploy and deploy a strategy on this one, so thank you.

18 A couple of high-level framing things. I think  
19 it's important to be on the record, I think as we  
20 mentioned, on item number three, we are in a situation of  
21 making sure we have our clean energy conversation and  
22 actually bid completed as quickly as we can with some  
23 levels of insurance on the side to ensure that we can  
24 tackle climate-driven volatile conditions on the grid. So,  
25 that's really what 205, 209 and 846 are attempting to do.

1 And there's a number of statutory requirements that CEC in  
2 consultation with DWR, CAISO and CPUC, but all of  
3 independently also have.

4 And I want to just highlight and elevate what  
5 Commissioner Vaccaro mentioned. There has been deep  
6 coordination between all four agencies, and we are working  
7 together both in front of the scenes, behind the scenes to  
8 double up a robust strategy on ensuring some of these  
9 principles, which is reliability, safety, affordability, as  
10 well as equity.

11 So, we're working on all those four framings, but  
12 it has been a difficulty in the short timeframe to have  
13 robust public discussions, and we both appreciate the  
14 voices that are from these public meetings, but also taking  
15 the time to providing us regular feedback.

16 So, just want to give a big thank you for your  
17 time in constantly helping keep us accountable, but also  
18 shaping this important program that's essential for the  
19 broad transition of California's climate goals.

20 I think it's important to note that at the end of  
21 the day, at least for me personally, if we can't keep the  
22 lights on during this transition, our entire climate agenda  
23 will be undermined, which is predicated on large swaths of  
24 the economy being electrified. So, it's extremely  
25 important to keep the lights on and keep the system



1 reliable, but having said that, it is important for us to  
2 maintain the principles of equity which we are short on.  
3 And we have to continue to move forward to ensure that  
4 equity becomes a foundation.

5           But I want to be both acknowledging the full  
6 reality right now that we are relying on fossil generation,  
7 especially in communities of concern, and we hear your  
8 voices and we -- and I think Sofie from CAUSE mentioned  
9 about, you know, supporting the communities, and thank you  
10 for your advisement and guidance, and we'll take that into  
11 consideration as we continue to think through how best to  
12 deploy the funds.

13           For the record, I just wanted to ask David Erne if he  
14 could just comment on when the RFI results are going to  
15 come back.

16           MR. ERNE: Thanks, Vice Chair. So, the RFI  
17 comments are due by November 30<sup>th</sup>. We also have some  
18 comments coming in from our October 28<sup>th</sup> reliability  
19 workshop, and there's been some question from folks about  
20 whether they can respond to one or the other, or both, and  
21 so we're basically saying one or the other is fine, but  
22 we're gathering that information now from both the workshop  
23 and from the RFI and have them all assembled by the end of  
24 the month.

25           And in conclusion I just want to say, Vice Chair,

1 thank you again for your leadership in this area, for all  
2 of the work that you've done to help keep the lights on our  
3 last few years and in coordination with the other agencies  
4 and leadership has been really phenomenal to work with.

5 VICE CHAIR GUNDA: Thank you. David, thanks for  
6 the kind words. I also want to just elevate the CCO and  
7 our Executive Director who usually doesn't like the  
8 spotlight on him, and for all the work he's doing behind  
9 the scenes to get everything moving forward. And it's --  
10 whether it's visible or not, this is a very integrated work  
11 for reliability, as we mentioned and part of our meetings,  
12 so, Commissioner McAllister, Commissioner Monahan,  
13 Commissioner Vaccaro, all the pieces come together under  
14 the leadership of the Chair, so, thank you so much for all  
15 the work and look forward to continuing the dialogue and  
16 making sure the transition is equitable, and safe, and  
17 reliable. Thank you.

18 CHAIRMAN HOCHSCHILD: Thank you, Vice Chair.  
19 Let's go to Commissioner Vaccaro.

20 COMMISSIONER VACCARO: Thank you. So, David,  
21 thanks so much for the presentation. I just have maybe  
22 just a couple of questions for you.

23 What really caught my attention in the RFI and on  
24 your slide was the part about permitting, and that you put  
25 that in sort of the achievability column. And I'm kind of

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1 curious about the lens through which we will be looking at  
2 the comments that we receive and what we're thinking about  
3 in terms of achievability.

4 I notice on the slide in the parenthetical it  
5 said "local, CEQUA," and I'm just sort of wondering is  
6 there an objective lens, is it a subjective lens. I mean  
7 CEQUA is the law, right. That's just like what you do when  
8 someone comes in to get an entitlement, and if it meets  
9 certain requirements then, of course, you're going to go  
10 through the CEQUA process.

11 So, I'm just curious about what the thinking is  
12 for putting permitting in achievability, why we attach  
13 CEQUA to that, what we mean when we put local in the  
14 parens, if you could just put a little bit of color on  
15 that, and then how we're going to be looking at the  
16 information we get in response to that item, for example.

17 So, if there's anything that you wish to say on  
18 that I'd be really curious. I think you probably know  
19 permitting is an area where I spend a lot of time, and  
20 energy, and thinking and, so, that I'm really intrigued by  
21 what we are hoping to get in terms of information, what we  
22 might be doing with that information.

23 MR. ENGE: Thank you, Commissioner. So, the  
24 intent of that is simply to give reference to the types of  
25 permitting or the drivers for permitting not to undercut

1 CEQUA or any other requirements.

2 But we have noted with a number of new projects  
3 coming on line that the challenge of getting the permitting  
4 in place, getting the permitting done, is very time  
5 consuming for all entities involved, and the recognition is  
6 is there a way that we can help expedite that, is there a  
7 way that the state can make that more efficient in a way  
8 that we don't hinder the development of these technologies  
9 but also don't hinder our environmental situation or  
10 safety.

11 And, so, we know there's an issue. We want  
12 people to talk about that and express their concerns or  
13 their issues, but also understand that we should be looking  
14 at ways that we can make that process more streamlined so  
15 that is not something that's holding up getting megawatts  
16 on line, nor is it something that is affecting safety or  
17 environment.

18 COMMISSIONER VACCARO: Yeah, thank you. And I'll  
19 just sort of put it out there. I think it goes without  
20 saying, but I stand ready, my office stands ready and the  
21 staff team as well to sort of think through some of those  
22 topics related to permitting and where we can find  
23 efficiencies, right, and as you say, without undermining or  
24 bridging in any way things that are also important in terms  
25 of environmental protection.

1           So, thanks for the answer, and please feel free  
2 to look our way if you want our input.

3           MR. ENGE: And I'll just add, if I can, add one  
4 more item, and that is we have the TED task force Tracking  
5 Energy Development Task Force, which is helping overcome  
6 some of these challenges.

7           In some cases, it is simply providing a central  
8 point that talks to the developer, the utility and the  
9 county or the permitting authority to help expedite  
10 communication or help expedite the process and improve  
11 communication among the entities. So, it's not necessarily  
12 a whole new administrative change that has to happen.  
13 Sometimes it structures like the TED task force that can  
14 help just get some of the miscommunications that can happen  
15 during any construction project.

16           COMMISSIONER VACCARO: Thank you. That's a great  
17 example. Appreciate it.

18           CHAIRMAN HOCHSCHILD: Let's go to Commissioner  
19 McAllister.

20           COMMISSIONER McALLISTER: Yeah. Thanks very  
21 much, and also Jorge and team DWR. You know, it takes a  
22 much greater village to get all this done, and, so, just  
23 really appreciate all the collaboration, and second, kudos  
24 to the Chair and Vice Chair again for their leadership on  
25 this.

1           And I'm, you know, obviously and surprisingly  
2 perhaps interested very much in the load shift goal for,  
3 you know, for SB 846, and, you know David, maybe you could  
4 sort of talk about how you're thinking about that piece of  
5 our, you know, new responsibilities on the reliability  
6 front.

7           I think we're all -- you know, it's great to see  
8 this kind of consensus building up about load being -- you  
9 know, with respect to load being part of the solution for  
10 not just reliability, but cost management and  
11 decarbonization over the next couple decades. And, so, I  
12 think there's just so much synergy with this effort with  
13 some of the demand side efforts that we're doing, you know,  
14 with the recently adopted load management standards, and  
15 potential for the building code, and appliance standards,  
16 and just really using technology for good to manage load in  
17 a way that just really has never been done at the kind of  
18 scale we're talking about.

19           So, this seems like a great opportunity to really  
20 knock it out of the park with this report and this planning  
21 around load shift. Kind of wondering what your initial  
22 thoughts on that are.

23           MR. ENGE: Thank you, Commissioner. A little  
24 slow on getting off mute there.

25           So, we are currently conducting some analysis in

1 this area to help inform that, that deliverables for a  
2 while, so we had a lot of time relatively speaking,  
3 although it is a complex topic. And we also are intending  
4 to have a number of workshops associated with this effort.

5 But we're currently taking a look at different  
6 structures for load flex and for load shifting to try to  
7 get some perspective on different opportunities, different  
8 structures, and also then try to understand what might be  
9 raised that would increase or maximize the opportunity for  
10 the state moving forward. So, that analysis is ongoing and  
11 we'll make sure to brief you out on that as we continue to  
12 build that out.

13 COMMISSIONER McALLISTER: Great. And I left  
14 transportation off of my list which arguably is the biggest  
15 wedge for potential for load shift. So, I didn't mean to  
16 do that, Commissioner Monahan.

17 So, definitely, obviously, we want to work  
18 integrally with you and the team on that, and, you know,  
19 really make that wedge be all it can be on the load side.

20 MR. ENGE: And Vice Chair has been working  
21 associated with how we can also consider this for  
22 reliability purposes, so I'm not sure, Vice Chair, if you  
23 have any additional comments you want to make.

24 VICE CHAIR GUNDA: Yeah, thanks, David. I think  
25 you set it up really well, and I think, Commissioner

1 McAllister, to your point, it's really crosscutting,  
2 especially on the load management standards and the  
3 (indiscernible) that you just mentioned that touches both  
4 you and Commissioner Monahan really broadly.

5           So, I think a couple of elements on this. We  
6 have been contemplating, and I think we'll hopefully have a  
7 more public discussion through the workshops, is the way we  
8 want to think about the overarching demand site resources  
9 and the wedge of demand flexibility and load shed within  
10 that, and what are the different measures, right, to kind  
11 of what levels they can support.

12           So, one of thinking that, you know, David and a  
13 bunch of us have been talking through is do we want to kind  
14 of think about some sort of a tiered system, right, so like  
15 a part of demand side resources could easily load follow,  
16 right.

17           So, then we edit through automation, through  
18 other ways we double up incentives to really load follow.

19           Then there are a couple of other tiers which are  
20 extreme buttons, right. Like how do we quantify, you know,  
21 stack them into rates, for example, we've been getting  
22 anecdotally in consumers that currently have, you know,  
23 Tesla wall packs or other behind the meter storage are  
24 generally comfortable to discharge up to 20 percent, if  
25 they have it, and then that's not a big issue.



1           And then you have this tranche of 20 to 50  
2 percent, and below 50 percent people don't want to go. And  
3 how do you take advantage of the different tranches for  
4 different kinds of the reliability and resource planning.

5           So, absolutely important point. Thank you for  
6 your leadership on that but, also, you pushing for the load  
7 flex scenario in SB 100, the first one. So, I think  
8 absolutely included there for our conversation. Thank you.

9           CHAIRMAN HOCHSCHILD: Thank you, Vice Chair. One  
10 final call for comments. Anyone else either on the  
11 Commission or the panel? All right. Hearing none, we'll  
12 turn now to Item 5, Appointment of Disadvantaged  
13 Communities Advisory Group.

14           Thank you to all the folks who joined us for  
15 Items 3 and 4.

16           Dorothy, if you're speaking, you're on mute.  
17 There you go. Yeah, go ahead.

18           MS. MURIMI: Thank you. Thank you. Chair and  
19 Commissioners, my name is Dorothy Murimi. I am before you  
20 today to request approval of the appointments of the Sahara  
21 Huazano to fill a vacancy on the Disadvantaged Communities  
22 Advisory Group, also known as DACAG.

23           Next slide.

24           The DACAG was established pursuant to statute by  
25 the Energy Commission and the Public Utilities Commission

1 and advises our agencies in designing and improving  
2 policies and programs to be more effective on behalf of  
3 disadvantaged communities in the achievement of our clean  
4 energy and pollution reduction goals.

5 The DACAG has also helped both agencies advance  
6 state equity and environmental justice goals.

7 Next slide.

8 The DACAG has 11 seats total. On this slide  
9 you'll see our current DACAG members.

10 To serve on the DACAG, candidates must be from or  
11 represent a disadvantaged community in California. We also  
12 seek out candidates with different backgrounds, expertise  
13 and geographic locations.

14 The vacancy we hope to fill today has a term  
15 ending in -- ending on March 31, 2023. Due to its short  
16 duration, if Huazano is appointed to complete this term, it  
17 would not count against her DACAG term limit under the  
18 DACAG charter.

19 The staff from both agencies had a robust  
20 nomination process that resulted in the selection of  
21 candidate Sahara Huazano who has been approved and  
22 nominated by the Commissioners from both agencies who lead  
23 on DACAG efforts: Vice Chair Gunda, Commissioner Monahan  
24 from the California Energy Commission and Commissioners  
25 Houck and Rechtschaffen from the Public Utilities

1 Commission

2 Next slide.

3 Candidate Sahara Huazano is based in Indio,  
4 California and the Director of Programs for Alianza  
5 Coachella Valley, a sustainability organization which  
6 focuses on pollution, infrastructure, healthcare, and youth  
7 outreach where she has worked since 2014.

8 Huazano is also the Community Appointed Co-Chair  
9 for the California Natural Resource Agency's Salton Sea  
10 Management Program Community Engagement Committee and has  
11 previously served on other environmental boards and  
12 advisory groups.

13 Huazano was born and raised in Mecca in the  
14 Coachella Valley and will increase the geographic diversity  
15 and bring a rural and agricultural community perspective to  
16 the DACAG.

17 Next slide.

18 Based on the joint approval and nomination of  
19 Vice Chair Gunda, Commissioner Monahan from the CEC, and  
20 Commissioners Rechtschaffen and Houck from the CPUC, I'm  
21 requesting the Commission vote to appoint Sahara Huazano to  
22 fill a vacancy on the DACAG.

23 This concludes my presentation. I'm available  
24 for any questions. Thank you.

25 CHAIRMAN HOCHSCHILD: Well, thank you so much,

50

1 Dorothy, and congratulations to Sahara on the nomination.

2 Let's go to Commissioner -- sorry, to public  
3 comment on item five before we do Commissioner discussion.

4 MS. MURIMI: Thank you, Chair. For individuals  
5 that are on Zoom, go ahead and use the raised hand feature.  
6 It looks like an open palm at the bottom of your screen.  
7 And for individuals that are calling in, press star nine to  
8 raise your hand and star six to unmute on your end.

9 We'll give that one moment. Seeing no comments,  
10 Chair, I'll hand the mike back to you.

11 CHAIRMAN HOCHSCHILD: Thank you, Dorothy. Okay.  
12 We'll go to Commissioner discussion starting with Vice  
13 Chair Gunda.

14 VICE CHAIR GUNDA: Yes, thank you, Chair. I just  
15 want to begin by thanking Dorothy for the presentation and  
16 all the work she does behind the scenes on DACAG, and all  
17 the staff at CEC involved in supporting DACAG, including  
18 Noemi and Katrina and everyone. So, thank you so much on  
19 that end.

20 I just want to say how excited I am for this  
21 nomination and look forward to supporting it. Both  
22 Commissioner Monahan and I try not to miss any of the DACAG  
23 meetings because of the value we get from those meetings  
24 and really hearing the perspectives and the guidance from  
25 DACAG members on really making equity foundational and take

1 it to our hearts, and every time we do. So, thank you to  
2 not only the DACAG members but everybody who helped support  
3 the overall DACAG process to help influence our work here  
4 at the agency.

5 I have had the opportunity to go to Mecca this  
6 summer and really appreciate the landscape, the culture and  
7 the uniqueness of the area, and I just am thrilled that  
8 we're going to have a perspective from Mecca and the  
9 broader region there. So, look forward to supporting the  
10 nomination, and congratulations and thank you so much for  
11 your service.

12 CHAIRMAN HOCHSCHILD: Thank you Vice Chair. Yes,  
13 Commissioner Monahan, please.

14 COMMISSIONER MONAHAN: Yeah. I'll be brief, but  
15 I just want to pile on a little to Vice Chair Gunda's  
16 comments in terms of just welcoming Sahara to the DACAG.

17 And as the Vice Chair indicated, we really rely  
18 on the DACAG for giving us feedback on our programs, and we  
19 are committed to doing a better job and making sure that  
20 our policies and our investments support a more equitable  
21 California.

22 And as Vice Chair Gunda said, the fact that  
23 Sahara comes from Coachella Valley and that she -- you  
24 know, her mission is really to help her community, given  
25 the intersection especially with the Salton Sea and the

1 potential for lithium extraction, you know, there's just a  
2 lot of complex issues to be sorted out in that region of  
3 the state. And just having someone with such a deep  
4 commitment to her community I think is going to be really  
5 beneficial for all of us.

6 CHAIRMAN HOCHSCHILD: Thank you. Unless there is  
7 further Commissioner discussion -- I don't see any. I  
8 welcome a motion on Item 5 from Vice Chair Gunda.

9 VICE CHAIR GUNDA: I move Item 5.

10 CHAIRMAN HOCHSCHILD: Commissioner Monahan, would  
11 you be willing to second?

12 COMMISSIONER MONAHAN: I second.

13 CHAIRMAN HOCHSCHILD: All in favor say "aye."  
14 Vice Chair Gunda.

15 VICE CHAIR GUNDA: Aye.

16 CHAIRMAN HOCHSCHILD: Commissioner Monahan.

17 COMMISSIONER MONAHAN: Aye.

18 CHAIRMAN HOCHSCHILD: Commissioner Vaccaro.

19 COMMISSIONER VACCARO: Aye.

20 CHAIRMAN HOCHSCHILD: Commissioner McAllister.

21 COMMISSIONER McALLISTER: Aye.

22 CHAIRMAN HOCHSCHILD: And I vote aye as well.

23 Item 5 passes unanimously. Congratulations, Sahara, from  
24 all of us, and we look forward to your contributions on the  
25 DACAG.

1           We'll turn now to Item 6, Amendments to  
2 Commercial and Industrial Fans and Blowers Standard.

3           MR. GALDAMEZ: Hello Chair, Vice Chair and  
4 Commissioners. I'm Alejandro Galdamez. I'm a chemical  
5 engineer for the Efficiency Division, Appliances Branch.

6           With me today are Matt Chalmers and Jerry Bublea  
7 (phonetic) from the Chief Counsel's Office.

8           I will be presenting for your consideration the  
9 staff's proposed regulations for commercial and industrial  
10 fans and blowers and the CEQA determination.

11           Next slide, please.

12           The proposed commercial and industrial fans and  
13 blowers' regulation benefits consumers by ensuring that  
14 buyers and installers have the information they need to  
15 select fans that will operate at optimal efficiency.

16           This lowers electrical consumption, saves money  
17 on electricity bills and reduces greenhouse gas emissions  
18 associated with the generation of electricity.

19           The proposed regulation has the potential to  
20 avoid the need to construct new electricity generating  
21 stations. To put it in perspective, the proposed  
22 regulation has a total energy savings of approximately 1.7  
23 terawatt hours per year for the state of California due to  
24 the long life of this commercial equipment.

25           Next slide, please.

1           The proposed regulation will cover fans and  
2 blowers used in commercial and industrial settings that are  
3 sized between one and 150 horsepower.

4           The fans that will be regulated include axial and  
5 centrifugal fans, in form factors that include housed fans,  
6 unhooded fans, and panel fans, to mention a few,  
7 essentially the most common types of fans that are used in  
8 these settings.

9           The proposed regulation requires the use of  
10 ANSI/AMCA 214-21 to determine the fan energy index, or FEI.  
11 Manufacturer must then certify and mark the maximum  
12 airflow, pressure and fan speed that define the conditions  
13 where the fan performs at an FEI of one or greater.

14           This information gives buyers and installers the  
15 information they need to select a fan whose sweet spot  
16 covers the airflow and pressure conditions needed for their  
17 specific commercial and industrial activity.

18           Next slide, please.

19           In addition to the requirements set by the  
20 Administrative Procedural Act, the proposed regulation was  
21 determined to be exempt from the California Environmental  
22 Quality Act because the regulation will result in  
23 environmental benefits through considerable energy savings  
24 which will reduce the corresponding pollution, including  
25 greenhouse gases associated with the generation of



1 electricity.

2           And the proposed regulation for adoption will not  
3 have significant effects on the environment since the  
4 proposed regulation does not provide for any physical  
5 changes to products, increase waste, or dictate the use of  
6 any specific material.

7           Next slide, please.

8           We would like to acknowledge the productive  
9 collaboration we received from the Air Movement and Control  
10 Association International, the Appliances Standard  
11 Awareness Project, the Greenheck Fan Corporation, the  
12 American Council for Energy Efficiency Economy, the Air  
13 Conditioning, Heating and Refrigeration Institute, the  
14 Northwest Energy Efficiency Alliance, and the California  
15 Investors Owned Utilities.

16           We would also like to acknowledge CEC support  
17 staff who always goes above and beyond in supporting the  
18 stakeholders, upholding public trust and generating the  
19 different documents used for the development of this  
20 proposal.

21           To every single person who participated in this  
22 development of these regulations and the test procedure,  
23 thank you so much. It has been an instructional value  
24 creating experience.

25           With that said, we request your vote for the

1 adoption of the proposed regulation and the CEQA  
2 determination for commercial fans and blowers.

3 Thank you, and I'm here for any questions you may  
4 have.

5 CHAIRMAN HOCHSCHILD: Thank you so much,  
6 Alejandro. Let's go to public comment on Item 6.

7 MS. MURIMI: Thank you, Chair. For individuals  
8 that are on a Zoom, go ahead and use the raised hand  
9 feature. For individuals that are calling in, go ahead and  
10 press star nine to raise your hand and star six to unmute  
11 on your end. Once we open your line, go ahead and state,  
12 spell your name and give your affiliation, if any. You'll  
13 have three minutes to give your comments.

14 We'll start with Michael Ivanovich.

15 MR. IVANOVICH: Yes, good morning. Hello. My  
16 name is Michael Ivanovich, spelled I-V, as in Victor, -A-N,  
17 as in Nancy, -O-V, as in Victor, -I-C, as in Charlie, -H.  
18 Michael Ivanovich, and I'm the senior director of global  
19 affairs for the Air Movement and Control Association  
20 International, also known as AMCA International.

21 And for this meeting I'm also speaking on behalf  
22 of Laura Petrillo-Groh. That's Laura, L-A-U-R-A, Petrillo,  
23 P-E-T-R-I-L-L-O, dash Groh, G-R-O-H, who is the senior  
24 regulatory advisor for Air Conditioning, Heating and  
25 Refrigeration Institute, also known as AHRI. She could not

57

1 be here today because of AHRI's annual meeting is taking  
2 place at this time.

3 With all that said, AMCA International and AHRI  
4 wish to thank the California Energy Commission, and  
5 notably, Alejandro Galdamez, PE of the CEC Efficiency  
6 Division of the Appliances Office for completing what was a  
7 long and arduous journey to develop the Title 20  
8 regulations for commercial and industrial fans and blowers.

9 We believe this regulation is fair, achievable  
10 and enforceable, and it will result in substantial energy  
11 and carbon savings as Alejandro has just outlined.

12 And now that the Title 20 regulation is complete,  
13 we thank CEC, California IOUs and other stakeholders on the  
14 collaborative nature of the rulemaking, and best wishes to  
15 you all. Thank you very much.

16 MS. MURIMI: Thank you. Next, we have Mary  
17 Anderson. Please state, spell your name, give your  
18 affiliation, if any. You may begin your comment.

19 MS. ANDERSON: Hi. This is Mary Anderson, M-A-R-  
20 Y, Anderson, A-N-D-E-R-S-O-N. Good morning. This Mary  
21 Anderson from Pacific Gas and Electric representing the  
22 California investor-owned utilities.

23 In response to Agenda Item 6, Amendments to  
24 Commercial and Industrial Fans and Blower Standards, we  
25 would like to thank the CEC and Alejandro Galdamez of the

1 Appliance Standards Office for identifying the opportunity  
2 to include the requirements in Title 20 for testing and  
3 marking of the commercial and industrial fans and blowers.  
4 We were a part of the broad coalition of stakeholders that  
5 collaboratively engaged with the CEC on this rulemaking,  
6 and we feel -- and we support the final proposed regulatory  
7 language. Thank you.

8 MS. MURIMI: Thank you. And with that, I see no  
9 more raised hands there, I hand the mike back to you.

10 CHAIRMAN HOCHSCHILD: Thank you. Let's go to  
11 Commissioner discussion now, beginning with Commissioner  
12 McAllister.

13 COMMISSIONER McALLISTER: Yeah. So, thanks a  
14 lot, Alex, for the presentation. Mr. Ivanovich described  
15 the process as long and arduous. You know I might use some  
16 slightly more positive adjectives, but I think it is a  
17 complex topic, and I think, you know, just gauging from  
18 Alex's presentation, you know, you put up the graph of FEI  
19 and kind of that envelope of design space that really is  
20 all about size, proper sizing of motor fans and blowers.  
21 And, so, moving air, you know, it's a function of -- the  
22 power is a function, the speed and the air flow and, so,  
23 you know, really finding the sweet spot for any given motor  
24 is not kind of for laypeople to do. You really need some  
25 knowledge and, hopefully, we're supporting well with this

1 regulation, the folks who are purchasing, you know,  
2 procuring and specifying replacement fans and blowers.

3           And, so, there was a lot of back and forth to  
4 kind of figure out how to do that best. And I really  
5 commend Alex, and Peter, and the team for managing that  
6 process. You know, I always say our process is our  
7 lifeblood and our credibility depends on it, and this is  
8 absolutely an example of that where, you know, creating a  
9 space for all the stakeholders to come together and, you  
10 know, knowledgeable parties and parties that are going to  
11 be impacted by a potential regulation, and really listening  
12 and ending up with a product that really lands in the right  
13 place.

14           So, thanks to Mary Anderson and PG&E and the  
15 whole CAIS team. I think, you know, your participation is  
16 critical in all of these regs.

17           Mr. Ivanovich, want to appreciate you and AMCA  
18 International, as well as AHRI, Laura Petrillo-Groh, you  
19 know, had also participated very extensively.

20           And, you know, beyond that the ASAP, the  
21 Appliance Standards Awareness Project, MAIS (phonetic) and  
22 Triple E. One or two I'm probably missing there. But, you  
23 know, really it was a great collaboration with a lot of  
24 iteration that put us in a good place. And, so, I think  
25 you heard that in some of the comments just now, and

1 really, Alex, just thanks for your persistence and your  
2 management of the process and your support of all of the  
3 stakeholders so that they can participate in the process  
4 and help shape and guide it so that it lands in a good  
5 place where it's enforceable, as Mr. Ivanovich, and it's  
6 also going to really harvest a lot of energy and carbon  
7 savings.

8           So, I'm super excited about this. This is bread  
9 and butter for the Energy Commission, you know. It's  
10 mechanical equipment out there in the world, millions and  
11 millions of replacement fans and blowers are going to be  
12 influenced, you know, impacted by this, and they're going  
13 to be better, so really happy with this result.

14           CHAIRMAN HOCHSCHILD: Thank you, Commissioner.

15           COMMISSIONER McALLISTER: Pass it back to you,  
16 Chair.

17           CHAIRMAN HOCHSCHILD: Can I ask a question? This  
18 is for Alex, but it may be for you, as well, Commissioner,  
19 and I apologize if I missed this during your presentation,  
20 but all in, what is the annual projected energy savings at  
21 scale, and then how would that rank against other recent  
22 efficiency standards that we've adopted over the past  
23 years?

24           MR. GALDAMEZ: So, the annual will be in the  
25 realm of 1,700 gigawatt hours. That's at full stock. It

1 will vary between 27 to 30 years just because of the life  
2 expectancy of the fans. We ran some calculations in  
3 regards money-wise with 2020 rates. It's about 300 million  
4 per year, 300 -- 300 million per year in savings of  
5 electricity bills with a lifetime net benefit at a three  
6 percent discount of 5.3 billion. So, it's up there. Its  
7 comparable to the -- a little lower than the I think it's  
8 the television -- the television regulation that we passed  
9 a while back.

10 CHAIRMAN HOCHSCHILD: Again, 300 million a year  
11 is a meaningful number. That's terrific. And what is the  
12 -- I'm ignorant about these blower standards. So, what is  
13 the expected lifecycle of a typical blower?

14 MR. GALDAMEZ: So, it depends on the type of  
15 blower, but it's between 27 and 30 years.

16 CHAIRMAN HOCHSCHILD: Twenty-seven to thirty  
17 years.

18 MR. GALDAMEZ: Yes.

19 CHAIRMAN HOCHSCHILD: But I would say it makes so  
20 much difference for an appliance that's going to last three  
21 decades to get it right the first time when you installed  
22 it.

23 MR. GALDAMEZ: Yes.

24 CHAIRMAN HOCHSCHILD: Wow. Well, congratulations  
25 on all this.

1 MR. GALDAMEZ: Thank you.

2 COMMISSIONER McALLISTER: The other aspect,  
3 there's a lot of misspecification of motors out there, and  
4 there's oversizing of, you know, drive motors, fans and  
5 blowers and all kinds of motors. And so, part of the  
6 benefit I believe of this regulation is going to be to  
7 provide better guidance, visual guidance, about how to  
8 better size motors for optimum efficiency. But a lot of  
9 oversizing, and that really doesn't help. It uses more  
10 energy for the same amount of air, and it actually wears  
11 out the motor sooner. So, part of our support of the  
12 marketplace is just enabling that proper sizing of motors  
13 in this reg.

14 MR. HOCHSCHILD: This is very much in the  
15 category of not sexy, but really important. Is there  
16 anything less sexy than industrial fans?

17 COMMISSIONER McALLISTER: It's right up my alley,  
18 I'll tell you. This is exactly what I'm here to do.

19 CHAIRMAN HOCHSCHILD: Really needful.  
20 Congratulations to the whole team.

21 COMMISSIONER McALLISTER: We have the -- you  
22 know, this is really under the hood of the Energy  
23 Commission, and our staff does such an amazing job of  
24 keeping that motor humming along, and it's just fabulous.

25 MR. GALDAMEZ: Thank you. It's really a team



1 effort. I couldn't have done it without everybody that  
2 supported me in achieving this, so, I've got to give them  
3 props.

4 CHAIRMAN HOCHSCHILD: Great. Congratulations.  
5 Let's turn to Vice Chair Gunda.

6 VICE CHAIR GUNDA: Thank you, Chair. I couldn't  
7 resist just saying as you guys were questions, one of the  
8 very first classes I think in 2006, or something, I took an  
9 energy efficiency class from Dr. Meier, Alan Meier, from  
10 LBNL was about motors and how a small efficiency  
11 improvement in motors across, you know, the entire globe  
12 could significantly reduce our energy consumption on the  
13 globe. So, it's like the first image we shared I still  
14 remember.

15 So, yeah, just wanted to say, you know, energy  
16 efficiency, the lifeblood of the Commission, but also just  
17 the silent kind of measure, that kind of in the permits,  
18 everything we do here, so, Commissioner McAllister, just  
19 wanted to give you kudos for always recognizing the process  
20 side, so thank you, and, Alejandro, I just love the spirit  
21 in which you presented both, the competence but the  
22 collaboration, and just the spirit of generosity. Just  
23 thank everybody. That's great. Thank you so much for the  
24 work.

25 MR. GADAMEZ: Thank you.

1           CHAIRMAN HOCHSCHILD: Great. Well, unless  
2 there's other comments, my only closing thought is, you  
3 know, this is also a great reliability measure. I mean I  
4 just want to highlight how important efficiency is because  
5 it makes it easier to support the grid when we're using  
6 less power, and I just think, you know, we've got to  
7 recognize this is - reliability is really touching every  
8 single Commissioner's area of focus, and our challenge gets  
9 easier with standards like this. So, kudos to you, Alex,  
10 and the whole team. Commissioner McAllister, thank you  
11 again for your leadership, Mike Sokal, and everyone.

12           And with that, I would welcome a motion on Item  
13 6. Commissioner McAllister.

14           COMMISSIONER McALLISTER: I will move Item 6.

15           CHAIRMAN HOCHSCHILD: Okay. Vice Chair Gunda,  
16 would you be willing to second?

17           VICE CHAIR GUNDA: Second.

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

20           COMMISSIONER McALLISTER: Aye.

21           CHAIRMAN HOCHSCHILD: Vice Chair Gunda.

22           VICE CHAIR GUNDA: Aye.

23           CHAIRMAN HOCHSCHILD: Commissioner Vaccaro.

24           COMMISSIONER VACCARO: Aye.

25           CHAIRMAN HOCHSCHILD: Commissioner Monahan.

1 COMMISSIONER MONAHAN: Aye.

2 CHAIRMAN HOCHSCHILD: And I vote aye as well.

3 Item 6 passes unanimously. Thanks to all.

4 We turn now - Item 7 we're going to hold until  
5 the December meeting, but we'll turn now to Item 8, Clean  
6 Transportation Program Rural EV charging.

7 COMMISSIONER McALLISTER: Chair, could I just - I  
8 need to leave the camera just for a second. I will be  
9 listening, but I need to just attend to something really  
10 quick and then I'll be right back. So, I am listening.

11 CHAIRMAN HOCHSCHILD: That's fine. Yeah, thank  
12 you.

13 COMMISSIONER McALLISTER: Thank you.

14 MR. WENSIL: Hello Chair, Vice Chair,  
15 Commissioners. My name is David Wensil with the Fuels and  
16 Transportation Division.

17 Today staff is seeking approval for a project  
18 proposed for funding under the Clean Transportation  
19 Program's Rural Electric Vehicle Charging Solicitation.

20 Next slide, please.

21 Proposed projects from the REV solicitation will  
22 offer Californians replicable and scalable business and  
23 technology models that can deploy electric vehicle charging  
24 stations to serve rural EV drivers.

25 This solicitation will support the travel of

1 rural EV drivers with access to EV charging stations in low  
2 income and disadvantaged communities.

3 Funding will go towards supportive services such  
4 as operations and maintenance to help ensure chargers are  
5 reliable and readily accessible.

6 This solicitation is also tailored to engage  
7 local rural communities and businesses to increase charger  
8 awareness and promote EV adoption.

9 This solicitation requires charging  
10 infrastructure to be deployed and installed in rural areas  
11 with a minimum of 50 percent of total project costs applied  
12 in low income and disadvantaged communities. Charging  
13 stations must be available and accessible at least 18 hours  
14 per day and operational at least 97 percent of the standard  
15 operating hours of the charging facility.

16 With support from the REV solicitation, these  
17 projects will provide necessary local baseline data and  
18 information which will allow rural communities to more  
19 effectively budget, plan and implement future EV charging  
20 stations.

21 The project that I will be presenting today  
22 accounts for roughly \$656,000 out of the total 14.2 million  
23 proposed for awards under this solicitation. The rest of  
24 the agreements are expected for the December and January  
25 Business Meetings.

1           Next slide, please.

2           The transition to EVs requires charging  
3 infrastructure to support all kinds of trips and drivers,  
4 including those in rural areas.

5           Fast charging can act as an opportunity for  
6 economic growth and development in rural areas since much  
7 of their economy is based on tourism. Given this  
8 information, however, many rural communities have sparse  
9 public fast charging coverage.

10           According to the latest SB 1000 report, rural  
11 communities have less public fast charging station coverage  
12 than urban communities. The map on the right shows rural  
13 communities with drive times of five minutes or less in  
14 blue, six to nine minutes in gray, or 10 or more minutes in  
15 orange.

16           The report found that 60 percent of all rural  
17 populations in California have drive times of 10 minutes or  
18 more, with low-income rural communities having the least  
19 fast charger coverage.

20           While the project being discussed today in Ukiah,  
21 California will not include fast chargers, other projects  
22 that have been awarded out of this solicitation will be.

23           In the end there is much work to be done to  
24 promote widespread EV adoption in rural communities.  
25 Public charging, including fast charging, can improve range

1 confidence for rural drivers with longer daily travel and  
2 support road trips and tourism in rural communities.

3           Investing in electrical infrastructure in rural  
4 communities will play an essential role in achieving the  
5 state's climate and clean transportation goals.

6           Next slide, please.

7           The proposed project with the county of Mendocino  
8 will demonstrate replicable and scalable models for  
9 accelerating EV charging infrastructure by including  
10 multiple site locations per project and ensuring chargers  
11 are placed in convenient and easily accessible locations.

12           The county is requesting around 656,00 and will  
13 be providing match funding near 170,000 to install 12 dual-  
14 port level two chargers at two county owned facilities in  
15 Ukiah, California. The map on the slide represents  
16 priority populations from CalEnviroScreen 4.0, the light  
17 blue area where both proposed sites are located or adjacent  
18 to represent low-income communities.

19           The first site is at the County Administration  
20 Center, which serves as the main hub for county business  
21 and includes various local government services, as well as  
22 access to recreational sport fields. The county  
23 anticipates heavy EV usage from county workers and visitors  
24 and will house the dual-port level two chargers.

25           The next site is the Yokayo Social Services

1 Complex where the county will install the remaining six  
2 dual-port level two charging stations. This site provides  
3 children and family services, employment and family  
4 assistance, and adult aging services, and is within a  
5 quarter mile of various shopping destinations. Both sites  
6 represent areas of high foot traffic, publicly accessible  
7 parking spaces and 24/7 availability.

8           The county plans on purchasing ChargePoint's  
9 Assure Package which offers support services to cover  
10 defective parts and onsite labor for part replacement, a 98  
11 percent uptime guarantee, and one business day response  
12 time for both parts and onsite labor.

13           Lastly, the county will publicize the project and  
14 conduct outreach to the community to inform them of the  
15 project and encourage the use and adoption of electric  
16 vehicles. This will be accomplished through press releases  
17 that announce major project milestones, signage at the  
18 project site to inform the public of the new infrastructure  
19 and its funding source and the intent of the project as  
20 well as updates at public meetings such as County Board of  
21 Supervisor meetings.

22           Next slide, please.

23           Staff's recommendation is to approve the proposed  
24 agreement with the County of Mendocino to install 12 dual-  
25 level two chargers at two locations in the city of Ukiah

1 and adopt staff's determination that this action is exempt  
2 from CEQA.

3 Thank you for your consideration. This concludes  
4 my presentation, and I would be happy to answer any  
5 questions, if there are.

6 CHAIRMAN HOCHSCHILD: Thank you so much. Just be  
7 clear, when you say 12 dual port, that's actually enough to  
8 charge 24 vehicles? Is that right?

9 MR. WENSIL: Yes.

10 CHAIRMAN HOCHSCHILD: Okay. Thank you. That was  
11 a great overview.

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

13 MS. MURIMI: Thank you, Chair. So, for  
14 individuals that are on Zoom, go ahead and use the raised  
15 hand feature, and for individuals that are calling in, go  
16 ahead and press star nine. Once we open your line, please  
17 state, spell your name, give your affiliation, if any.  
18 You'll have three minutes to give your comments. One  
19 moment. Once again, used the raised hand feature. Looks  
20 like an open palm at the bottom of your screen and star  
21 nine if you are calling in.

22 Seeing no raised hands, Chair, back to you.

23 CHAIRMAN HOCHSCHILD: Thank you. Let's go to  
24 Commissioner discussion starting with Commissioner Monahan.

25 COMMISSIONER MONAHAN: Well, I was a big



1 proponent of bringing this to the business meeting instead  
2 of having it just be a consent item, having it be a  
3 discussion item because this is the first of the REV  
4 grants, and also let's just reflect on a moment of how cool  
5 that acronym is for electric vehicles, REV.

6           And the fact that this portfolio grant is better  
7 upcoming is really to focus on the findings of our SB 1000  
8 report that there is inequitable distribution of chargers  
9 across the state. As David showed in that nice map of  
10 California that rural areas have the least access in terms  
11 of like they have the longest drive times to EV chargers,  
12 and rectifying that is particularly important.

13           I've got to say I was actually just in Mendocino  
14 County with my husband celebrating our anniversary last  
15 weekend. There is a dearth of chargers. I can verify  
16 that. And, so, we need to I think as a state and as an  
17 agency really do a better job making sure that both those  
18 who live in rural areas have access and people traveling  
19 through rural areas also have access.

20           So, just appreciate the work of David and the  
21 team to focus in on the SP 1000 reports and address them  
22 through our grantmaking. And that's all, Chair.

23           CHAIRMAN HOCHSCHILD: Great. Okay. Well, let me  
24 see if there's any other Commissioners wishing to make a  
25 comment. Seeing none, I will ask just a couple of other

1 questions.

2           Typical permit time now in California for level  
3 two. I know at one point it was as long as 62 days. Do we  
4 have any updates or progress on that or insight on that to  
5 get these constructed?

6           MR. WENSIL: Specifically on the permitting time  
7 for level two chargers, I don't know the exact dates. I  
8 know it usually takes about a couple of months.

9           CHAIRMAN HOCHSCHILD: Yeah, okay. Okay, that's  
10 fine.

11           Well, congrats on a great project. Happy to  
12 support and appreciate all the work, and I would welcome a  
13 motion from Commissioner Monahan on Item 8.

14           COMMISSIONER MONAHAN: I move to approve Item 8.

15           CHAIRMAN HOCHSCHILD: Commissioner McAllister,  
16 would you be willing to second?

17           COMMISSIONER McALLISTER: Second.

18           CHAIRMAN HOCHSCHILD: All in favor say "aye."  
19 Commissioner Monahan.

20           COMMISSIONER MONAHAN: Aye.

21           CHAIRMAN HOCHSCHILD: Commissioner McAllister.

22           COMMISSIONER McALLISTER: Aye.

23           CHAIRMAN HOCHSCHILD: Commissioner Vaccaro.

24           COMMISSIONER VACCARO: Aye.

25           CHAIRMAN HOCHSCHILD: Vice Chair Gunda.

1 VICE CHAIR GUNDA: Aye.

2 CHAIRMAN HOCHSCHILD: And I vote aye as well.

3 Item 8 passes unanimously. Thanks to all.

4 We'll turn now to Item 9, Reliable, Equitable and  
5 Accessible Charging for Multifamily Housing.

6 MS. LOPEZ: Good morning, Chair, Vice Chair and  
7 Commissioners. My name is Thanh Lopez, staff in the Fuels  
8 and Transportation Division.

9 Today staff is seeking approval for four projects  
10 proposed for funding under the Clean Transportation  
11 Program's Reliable, Equitable and Accessible Charging for  
12 Multi-family Housing, also referred to as REACH, under GFO-  
13 21-603.

14 Next slide, please.

15 Proposed projects from the REACH solicitation  
16 will increase access to charging for residents of  
17 multifamily homes.

18 At-home charging for electric vehicles is often  
19 the cheapest and most convenient form of charging.  
20 However, installing charging for multifamily housing can be  
21 challenging, especially when the residents are low income.

22 Multifamily properties also present unique  
23 challenges in deploying electric vehicle charging,  
24 including the age and size of the properties. Making  
25 retrofits to older buildings to add electric vehicle

1 charging can also be cost prohibitive.

2 Multiple studies have also shown that homeowners  
3 are far more likely than renters to own an electric vehicle  
4 due, in part, to a lack of accessible charging  
5 infrastructure at home.

6 The REACH solicitation is designed to address  
7 these issues and add measurable benefits for these  
8 communities statewide.

9 The projects presented today will provide two  
10 different charging solutions, offsite fast charging and  
11 onsite level two charging to test innovative models for  
12 installing charging to help meet statewide electric vehicle  
13 adoption goals.

14 The proposed projects will deploy over 500 level  
15 two onsite chargers and 33 fast chargers near multifamily  
16 housing properties with more than half of these chargers to  
17 be installed within disadvantaged and/or low-income  
18 communities

19 The projects presented today accounts for roughly  
20 7.8 million dollars out of total 26.6 million dollars  
21 proposed for awards under this solicitation. Ten million  
22 dollars in projects have been approved at previous Business  
23 Meetings, and the remaining 8-1/2 million dollars are  
24 expected for the December and January business meetings.

25 Next slide, please.

1           The first proposed agreement is with EVgo  
2 Services. Staff is requesting roughly 2.7 million dollars  
3 for this project which will install at least 24 direct  
4 current fast chargers at five locations in southern  
5 California.

6           The chargers will be a mix of high-powered 100  
7 kilowatt and 350 kilowatt charges centrally located at  
8 retail shopping locations accessible to over 186,000  
9 multifamily units within a five-mile radius.

10           All five locations are either in or directly  
11 adjacent to disadvantaged or low-income communities.

12           EVgo plans to replicate this model statewide and  
13 nationally, planning further network expansion specifically  
14 in high density areas with a large portion of multifamily  
15 homes.

16           This off-site fast charging project, paired with  
17 other projects installing onsite level two at multifamily  
18 homes is essential to supporting electrification for  
19 multifamily housing residents.

20           Next slide, please.

21           The second proposed agreement is also with EVgo  
22 Services. Staff is requesting roughly \$860,000 for this  
23 project, which will install at least nine direct current  
24 fast chargers at two locations in northern California.

25           Similar to the previous project, the high-powered

1 chargers will be centrally located at retail locations  
2 offering plenty of amenities and available to over 36,000  
3 multifamily housing units within a five-mile radius.

4           The retail locations are both located in low-  
5 income communities.

6           Next slide, please.

7           The third proposed agreement is with ChargePoint.  
8 Staff is requesting roughly 2.1 million dollars for this  
9 project, which will install at least 254 on-site level two  
10 chargers at multifamily properties in southern California.

11           The chargers will have the capability to serve at  
12 least 378 units.

13           ChargePoint is committed to installing at least  
14 75 percent of all charging ports at multifamily housing  
15 properties located in a disadvantaged and/or low-income  
16 community.

17           The project aims to provide multifamily housing  
18 residents with access to onsite charging and increase  
19 electric vehicle adoption.

20           The project will utilize installation techniques  
21 such as surface mounted conduit and software enabled power  
22 sharing to demonstrate a replicable and scalable approach  
23 to cost effect electric vehicle charger installation at  
24 existing multifamily properties.

25           Next slide, please.

1           The fourth proposed agreement is also with  
2 ChargePoint. Staff is requesting roughly 2.1 million  
3 dollars for this project, which will install at least 254  
4 onsite level two chargers at multifamily properties in  
5 northern California.

6           Similar to the previous project, the chargers  
7 will have the capability to serve at least 378 units, and  
8 at least 75 percent of all charging ports will be installed  
9 at multifamily housing properties located in a  
10 disadvantaged and/or low-income community.

11           Next slide.

12           Staff recommendation is to approve these four  
13 agreements and adopt staff's determination that these  
14 actions are exempt from CEQA.

15           Thank you very much for your consideration. This  
16 concludes my presentation. I'm happy to answer any  
17 questions you may have.

18           We also have representatives from EVgo and  
19 ChargePoint that may make some supporting comments. Thank  
20 you.

21           MR. HOCHSCHILD: Great. Thank you so much.  
22 Let's go to public comment on Item 9.

23           MS. MURIMI: Thank you, Chair. Once again, for  
24 individuals who are on Zoom, go ahead and use the raised  
25 hand feature. For individuals that are calling in, go

1 ahead and press star nine to raise your hand and star six  
2 to unmute. Once we open your line, please state, spell  
3 your name, give your affiliation, if any. You'll have  
4 three minutes to give your comments.

5 We'll start with Courtney Cucchissi, and  
6 apologies if I have misstated your name. Please state,  
7 spell your name. You may begin your comments.

8 MS. CUCCHISSI: Hello, Chair, Co-Chair and  
9 Commissioners, and thank you, Thank, for your descriptive  
10 presentation.

11 My name is Courtney Cucchissi. My first name is  
12 spelled with a C. My last name is spelled C-U-C-C-H-I-S-S-  
13 I.

14 I am on the Account Management team at EVgo, and  
15 I'm here to comment on behalf of EVgo Services.

16 EVgo would like to offer sincere thanks to the  
17 CEC for providing the opportunity to accelerate charging  
18 accessibility to those living in multifamily housing units  
19 in both northern and southern California.

20 EVgo is very excited for further collaboration  
21 with the CEC as more strides are taken to advance the  
22 shared goal of providing equitable access to electric  
23 vehicle charging statewide.

24 Thank you for your time and consideration today.

25 MS. MURIMI: Thank you. Next, we have Charlotte



1 Goodrich. Please state, spell your name, give your  
2 affiliation, if any. You may begin your comments.

3 MS. GOODRICH: Hi, there. I'm Charlotte  
4 Goodrich, the grant manager for these grants at  
5 ChargePoint. My name is spelled C-H-A-R-L-O-T-T-E. My  
6 last name is G-O-O-D-R-I-C-H.

7 Thank you for having me, Chair, Vice Chair and  
8 Commissioners, and thank you, Thank, for the presentation.

9 I just wanted to say that ChargePoint is very  
10 grateful to be the recipient of the REACH grants, one for  
11 North Cal and one for So Cal. We are really looking  
12 forward to working with CEC to install charging stations  
13 and provide outreach and education on EV charging for  
14 multifamily residents, particularly those in disadvantaged  
15 and low-income communities. Thank you.

16 MS. MURIMI: Thank you. One last call for public  
17 comment. Again, use the raised hand feature. It looks  
18 like an open palm and star nine if you are calling.

19 Seeing no comments, Chair, I hand the mike back  
20 to you.

21 CHAIRMAN HOCHSCHILD: Okay. Let's go to  
22 Commissioner discussion. Back to Commissioner Monahan.

23 COMMISSIONER MONAHAN: Well, as I said, REV was  
24 one of the best acronyms. I would say REACH maybe is in  
25 competition for it.

1           And, again, this is really, you know, critical  
2 when we're talking about equity. And I want to be  
3 transparent that we don't have all the answers when it  
4 comes to multifamily dwellings. We know it's going to take  
5 a mix of level two, maybe even level one, onsite or really  
6 nearby, convenient refueling for overnight where there's  
7 long dwell times. We know DC fast charging is going to be  
8 an ingredient as well, but generally you don't want to use  
9 DC fast charging as your primary strategy because of the  
10 grid implications and also because it can be very  
11 expensive.

12           So, you know, we're really trying to sort through  
13 with this portfolio of grants, seed investments that we're  
14 going to learn from and be able to tailor future  
15 solicitations to incorporate the learning that we have from  
16 these projects. And I like the fact that they're a mix of  
17 northern California, southern California. I also think,  
18 you know, ChargePoint isn't going to be looking for  
19 locations, onsite locations. Those are -- those tend to be  
20 more expensive, but the grant is actually pretty cost  
21 effective I would say on a per charger basis. And, you  
22 know, so there's going to be work that's going to have to  
23 follow from this to ensure that they can find these good  
24 locations and provide onsite refueling access.

25           My dog is very excited about these REACH grants

1 as well.

2 So, just thank Thanh and the team for tackling  
3 this one. Again, it's a finding -- you know, it's a  
4 general equity issue that we're really trying to tackle  
5 with having so many families living in multifamily  
6 dwellings.

7 CHAIRMAN HOCHSCHILD: All right. Well, I think  
8 we heard comments from Commissioner Monahan's dog as well  
9 on this. We'll count that as a sixth vote here.

10 Unless there are other Commissioners wishing to  
11 chime in on this, I would welcome a motion from  
12 Commissioner Monahan on this item.

13 COMMISSIONER MONAHAN: I move to approve Item --

14 CHAIRMAN HOCHSCHILD: Nine.

15 COMMISSIONER MONAHAN: -- nine. Thank you. This  
16 item.

17 CHAIRMAN HOCHSCHILD: Thank you. Commissioner  
18 McAllister, would you be willing to second Item 9?

19 COMMISSIONER McALLISTER: I second Item 9.

20 CHAIRMAN HOCHSCHILD: All in favor say "aye."  
21 Commissioner Monahan.

22 COMMISSIONER MONAHAN: Aye.

23 CHAIRMAN HOCHSCHILD: Commissioner McAllister.

24 COMMISSIONER McALLISTER: Aye.

25 CHAIRMAN HOCHSCHILD: Commissioner Vaccaro.

1 COMMISSIONER VACCARO: Aye.

2 CHAIRMAN HOCHSCHILD: Vice Chair Gunda. Oh, he  
3 may have left, so --

4 VICE CHAIR GUNDA: Aye.

5 CHAIRMAN HOCHSCHILD: Oh, you're back, okay,  
6 great. And I vote aye as well. So, those items pass --  
7 that item passes unanimously. We'll turn to Item 10,  
8 Minutes of the October 12<sup>th</sup> and October 24<sup>th</sup> Business  
9 Meetings.

10 Dorothy, we had all Commissioners at both those  
11 meetings, correct?

12 MS. MURIMI: That is correct, Chair.

13 CHAIRMAN HOCHSCHILD: I believe we did. Okay.  
14 So, we don't need to -- can we -- is there any public  
15 comment on Item 10?

16 MS. MURIMI: Thank you, Chair. Just reiterating  
17 instructions once again. So, for individuals that are on  
18 Zoom, go ahead and use the raised hand feature. And for  
19 individuals that are calling in, press star nine to raise  
20 your hand and star six to unmute on your end. Once  
21 unmuted, state, spell your name, give your affiliation, if  
22 any. There being no raised hands, I'll hand the mike back  
23 to you.

24 CHAIRMAN HOCHSCHILD: Okay. Unless there's  
25 public -- any Commissioner discussion on this, Vice Chair

1 Gunda, would you be willing to move Item 10?

2 VICE CHAIR GUNDA: Move Item 10.

3 CHAIRMAN HOCHSCHILD: Commissioner Vaccaro, would  
4 you be willing to second Item 10?

5 COMMISSIONER VACCARO: Yes, second.

6 CHAIRMAN HOCHSCHILD: All in favor say "aye."  
7 Vice Chair Gunda.

8 VICE CHAIR GUNDA: Aye.

9 CHAIRMAN HOCHSCHILD: Commissioner Vaccaro.

10 COMMISSIONER VACCARO: Aye.

11 CHAIRMAN HOCHSCHILD: Commissioner McAllister.

12 COMMISSIONER McALLISTER: Aye.

13 CHAIRMAN HOCHSCHILD: And Commissioner Monahan.

14 COMMISSIONER MONAHAN: Aye.

15 CHAIRMAN HOCHSCHILD: And I vote aye as well.

16 Item 10 passes unanimously.

17 We'll turn now to Item 11, Lead Commissioner or  
18 Presenting Member Reports, beginning with Commissioner  
19 Monahan.

20 COMMISSIONER MONAHAN: Well, I just want to start  
21 with the excitement that I have for my -- the fact that I  
22 have a new team of advisors. I think I introduced Sarah at  
23 a business meeting. My latest advisor from the rotational  
24 assignment is Ben Wender, and he comes from ERDD, long  
25 history in working on vehicle to grid issues at the CEC,

1 has a PhD in engineering. He's published numerous papers  
2 on life cycle analysis, including battery recycling. So,  
3 he just brings a wealth of expertise in the transportation  
4 side to the team, so, really excited to have him join us.

5 We had our first in-person retreat at Sarah's  
6 house, and it was great to feel like, okay. It was a  
7 little traumatic to lose both of my advisors  
8 simultaneously, so just excited to have a team to rely on  
9 and be able to move forward for this year.

10 I also wanted to just highlight that we had our  
11 last meeting of the EV Charging Infrastructure Strikeforce,  
12 and you might recall that this -- we started this  
13 initiative two years ago, exactly two years ago pretty much  
14 with CALETC, the California Electric Transportation  
15 Coalition, being kind of the lead agency or lead  
16 organization pulling it together. But the Co-Chairs of  
17 that were Cathy Zoi from EVgo. She's the head of EVgo, I  
18 think the CEO, and Angelo Logan, who until pretty recently  
19 was the policy lead from the Moving Forward Network, and he  
20 was also on President Biden's Environmental Justice  
21 Advisory Committee, and just a really great person, great  
22 set of co-chairs.

23 And the idea was like let's lead with equity when  
24 it comes to EV charging, and let's make sure that there is  
25 a healthy budget for EV charging.

1           So, again, reflecting where we were two years  
2 ago, a hundred million dollar per year budget, a billion  
3 last year from the general fund, over two billion this  
4 year, federal funds coming in, still, basically the strike  
5 force was okay, check the box, we kind of did it.

6           At the last meeting we had a very robust  
7 discussion about one of the products of one of the work  
8 groups which was an equity analysis of EV charging. And I  
9 want to thank Larry Vieta (phonetic) who was our staff lead  
10 on that. He really did an amazing job sort of facilitating  
11 between a lot of different groups, including industry  
12 groups, environmental justice groups on the ground, this  
13 kind of guidance document which is, I think, a great input  
14 into the internal process that we're having in the fields  
15 of transportation division to better define community  
16 benefits.

17           So, we'll be over the next several months and  
18 into next year developing specific criteria around  
19 community benefits that we'll be measuring. And that  
20 report from the strike force is going to be a great input  
21 into it.

22           So, it's very rare that you start and finish an  
23 initiative. You know, usually these things they can drive  
24 on forever, or they just -- they're not very short in  
25 lifespan. This one I feel like was the right lifespan for

1 this initiative.

2           And now we're really in the implementation phase  
3 where we as an agency have to make sure that we have a  
4 robust public process in our -- in how we distribute our  
5 funding. So, we're kind of moving away from this EV strike  
6 force into like now we have these funds. Let's make sure  
7 we do this right.

8           The last thing I want to say is, and I guess I  
9 shared a picture with all of you guys, taking a ride in  
10 that cruise autonomous vehicle in San Francisco. I would  
11 recommend it. It was a really interesting experience to be  
12 in a driverless vehicle. And we're going to see more and  
13 more of them on the road, so I would recommend taking a  
14 ride. They'll welcome you. And that's all.

15           CHAIRMAN HOCHSCHILD: All right. Thank you.  
16 Let's go to Commissioner Vaccaro.

17           COMMISSIONER VACCARO: Thank you. I'll keep this  
18 brief. So, just a couple of things that I did recently. I  
19 had the privilege of speaking at a Reuter's Floating  
20 Offshore Wind conference just last week, and it was -- felt  
21 like an intimate conference of folks who are very excited  
22 about the prospect of offshore wind in federal waters off  
23 the coast of California. So, really privileged to be there  
24 and speak, and hear all of the insights and really good  
25 recommendations for the Commission to consider as we



1 continue to do our work under Assembly Bill 525, and as we  
2 work towards the permitting road map and the strategic plan  
3 that's due in June of 2023.

4 I was also able to participate in a discussion  
5 with local leaders and representative of Bureau of Land  
6 Management and a discussion that was hosted by University  
7 of California, Riverside, moderated by V. John White,  
8 really talking about some of the opportunities and  
9 challenges of renewable energy projects and deployment in  
10 San Bernadino County. Very important conversation for us  
11 to be having as we're looking at the SB 100 resource  
12 buildout and what that means in terms of land use  
13 implications. So, I was very pleased to be part of that  
14 discussion.

15 Something that is going to be coming up tomorrow  
16 I am very excited about which is the Blue Ribbon Commission  
17 on Lithium Extraction California, also known as the Lithium  
18 Valley Commission, is expected to take action hopefully to  
19 approve its report that is due to the legislature. That  
20 Commission determined that it wishes to submit that report  
21 by December 1<sup>st</sup> to the legislature. We are really so close.  
22 At the next meeting of our Commission, I'd like to reflect  
23 on some of that work.

24 But as I sit here today, just so appreciative of  
25 the dedication and the time of each of those 14 appointed

1 members over the past almost two years to really focus on  
2 this. It's been a very heavy lift, and they have centered  
3 community voices, they've centered tribal voices in much of  
4 the work that's been done here. A lot to commend, you  
5 know, in terms of their focus and their commitment.

6           And, of course, you know our Renewable Energy  
7 Division staff has done a tremendous job supporting the  
8 Lithium Valley Commission. So, more to say about that once  
9 we get through tomorrow's meeting, but I'm really excited  
10 about tomorrow and feel like it is very important for me to  
11 make sure to recognize how much work it has taken and how  
12 much commitment. They are folks, they're not per diem.  
13 They don't get paid for any of this work, and it's taken  
14 quite a bit of their time and focus and attention I think  
15 to get this far. So, I think I'll leave it there.

16           CHAIRMAN HOCHSCHILD: Well said, and congrats.  
17 That's tremendous. We'll turn now to Vice Chair Gunda.

18           VICE CHAIR GUNDA: Thank you, Chair. So, just  
19 wanted to give a few updates and set some policy questions  
20 I think for discussion as we move forward.

21           So, since the last business meeting on the 24<sup>th</sup> of  
22 October, so one of the highlights has been an opportunity  
23 to moderate a panel in Kern County in Bakersfield on  
24 finding common ground. It was an incredible privilege to  
25 be able to moderate a panel between oil and gas industry

1 and community leaders on how to move forward in this clean  
2 energy transition recognizing that we're moving from the  
3 highly industrialized past to a highly industrialized  
4 future, and along the way there are going to be tough  
5 choices for us to make.

6 I think there is agreement on what the point B  
7 is, our destination is, and the realities of today in terms  
8 of the inequities and how do we ensure those inequities  
9 don't persist in point B and along the way. And it has  
10 been an incredible opportunity. I think it was one of the  
11 scariest things I've done in my life. I could not sleep  
12 the night before. I didn't just know how the panel was  
13 going to go, but it went well.

14 And I think it was an opportunity to also  
15 recognize that when we have opposing points of view the  
16 importance of finding humanity during the discussion. and  
17 respect, and ability to let the other person voice their  
18 opinion and concern without feeling threatened, and the  
19 importance of choosing your words wisely.

20 So, it was an incredible opportunity, and I just  
21 wanted to elevate that, you know, we have a lot of public  
22 comments coming in. We have a lot of comments that, you  
23 know, are always good to hear in between each other and the  
24 broader constituency choosing words to help each other move  
25 forward would be great, suggesting that set that stage.

1 Another couple things. Commissioner McAllister  
2 will probably speak to it. He and I had an opportunity to  
3 speak at SedNet annual conference to just kind of set the  
4 stage on some of the opportunities for the demand side.  
5 Incredibly grateful.

6 One thing I want to elevate for us as a Commission to  
7 really think about as a point of discussion is we are  
8 working pretty hard on the demand side, but I do not  
9 believe, and I think Commissioner McAllister will probably  
10 back me on this, a unified, robust, comprehensive vision of  
11 the future on the demand side and the broad (indiscernible)  
12 strategy. I think -- there's different elements that we're  
13 all tackling and, you know, 846 provides us some  
14 opportunity to elevate the conversation, but I think I want  
15 to use this opportunity to just continue to request, you  
16 know, the key stakeholders to, you know, share their vision  
17 of how we want to get, you know, into a future where demand  
18 flexibility and demand response is a reality. I know we  
19 have approximately 1,500 today that we depend on in the  
20 resource stack. You know, how could we get to 3,000,  
21 4,000, you know, in the next 10 years. I think this is the  
22 section that Commissioner Monahan comes, especially on the  
23 V to G side. You know, we've been using this statistic  
24 that there is 10 gigs on the wheels today in terms of the  
25 storage and how do we use that to really address not only

1 the middle peaks, but also the broader resource  
2 transitions. I just wanted to elevate that as a policy  
3 opportunity for all of us to think through and put a  
4 unified vision into how best to realize that.

5           Finally, I just wanted to say a big, big thank  
6 you, Chair, to you and Drew at the Governor's office for,  
7 you know, having the privilege to go to COP-27 and to  
8 present the seat in the California delegation. It was an  
9 incredible opportunity.

10           The highlight, of course, was hanging out  
11 with Commissioner Rechtschaffen from PUC. He just --  
12 absolute pleasure to California Water, breadth of  
13 experience and the ability he has. So, it was just really  
14 good to learn from him.

15           A few things to elevate from COP-27. The  
16 importance of some national leadership has come up over and  
17 over again as a safety net to the changing dynamics at the  
18 subnational level, and the recognition of California's  
19 incredible work in climate change.

20           So, I just wanted to elevate that, you know, just  
21 congratulations to everybody in California that works on  
22 energy policy, the leadership calls for every single  
23 individual Californian whose heart is in climate change and  
24 how to be influence that, and we had had a robust vision on  
25 how to move forward. So, that came up.

1 Another thing that came up was the importance of  
2 environmental justice and mean if this COP had been adopted  
3 as an implementation, so a lot of conversation on loss and  
4 damages in developing countries, how do we support that.  
5 So, that was an important conversation.

6 And there was also a conversation specifically  
7 for us, what are some of the technologies and strategies  
8 that California is unlocking for the broader globe. And I  
9 think, you know, we were able to elevate again we V to G,  
10 me and Commissioner Rechtschaffen had a number of speaking  
11 engagements where we were able to speak about vehicle  
12 integration, broad building decarbonization, load  
13 management standards that Commissioner McAllister is  
14 working on, and elevating the opportunity on the demand  
15 side management along the electrification path.

16 We were also able to elevate Commissioner  
17 Vaccaro's work on offshore wind and the importance of  
18 California's work in unlocking that as a technology and the  
19 lithium valley overall.

20 So, I would not be able to speak to all of them  
21 well, so I was really glad that Commissioner Rechtschaffen  
22 was there. He could speak to anything and set up the  
23 energy conversation, and I was able to share my thoughts on  
24 the liability and strategies.

25 A couple of unique opportunities for us to build

1 some use with sister provinces across, you know, across the  
2 globe. You know, Commissioner McAllister has been recently  
3 in Australia. His work on New South Wales, I think there  
4 is a real good opportunity that New South Wales has a  
5 (indiscernible)not only on the building efficiency side,  
6 but their issues on liability are exactly the same that we  
7 have, so we were able to talk about that.

8 Our opportunities with India, provinces in India,  
9 Brazil and Scotland are other conversations we had.

10 So, I will try to send a debrief document to all  
11 of you, and my partner in the enjoyment and learning was  
12 Elizabeth Huber who was able to go with me, and it was  
13 great to have her on the trip and learn together and share  
14 our stories with her in a broader world learning and  
15 sharing. So, thank you.

16 CHAIRMAN HOCHSCHILD: Great. Thank you so much,  
17 Vice Chair. Let's go to Commissioner McAllister.

18 COMMISSIONER McALLISTER: Well, thanks a lot.  
19 Just a few things to comment on. I will just raise my hand  
20 and be the first to offer to lead the delegation to  
21 (indiscernible). Yeah, I think they will have a new  
22 president. I think they have a little bit of a new posture  
23 on clean energy, so sort of like Australia, like this  
24 happened to Australia recently with their new government  
25 that is really committed in trying to make up for lost time

1 in the previous -- that the previous government kind of  
2 didn't do a whole lot on the climate front.

3 So, shifting lens in various directions, but such  
4 positive stuff going out, so I appreciate it. And, you  
5 know, really looking forward to hearing about all the play  
6 by play from COP, and I'm sure you were quite the road show  
7 with Commissioner Rechtschaffen, quite the tag team and  
8 duo.

9 First, I wanted to start off with thanking staff  
10 on a couple of fronts. So, you know, we had an item on the  
11 fans and blowers that was sort of under the hood, you know,  
12 really kind of bread and butter, not sexy but getting lots  
13 of results.

14 And there are just a couple of key activities in  
15 the Efficiency Division that I wanted to highlight that  
16 really are along those lines that, you know, you wouldn't  
17 necessarily have heard about in any sort of public, you  
18 know, media, but they are both fundamentally important.

19 The first one is getting ready for the 2025,  
20 getting moving on the 2025 building code update. And staff  
21 has been really laying the foundation, doing the blocking  
22 and tackling to start that conversation in earnest.

23 And the first big step on that front is the  
24 energy accounting, deciding what the metrics are for our  
25 cost effectiveness and our energy efficiency goals, like



1 how we're going to engage, which measures are in the code  
2 update and which don't quite make the cut. So how do we  
3 prioritize the different measures in the building code.  
4 So, the system life cycle cost and the -- and the source  
5 energy, the lifetime source energy -- their hourly source  
6 energy, rather, as a metric. So, the two are used to do  
7 that. And it's actually quite technical, and there's a big  
8 team in the building standards office, you know, led  
9 capably by Will, and, you know, all the staff in that  
10 office along with our partners at E3 and NORESKO.

11           And I want to commend also Eric Jensen for  
12 keeping those trains running and just really doing the  
13 coordination for that. So, there have been two workshops  
14 on that already and with lots of robust participation. You  
15 know, we've got a really knowledgeable stakeholder group  
16 out there in California that is helping us get that right.

17           So, I just wanted to highlight that. And it gets  
18 pretty technical, but I would encourage folks to kind of  
19 get at least a high level briefing on that because I think  
20 it is important to our long-term work on the building  
21 standards which are obviously key to carbonization pathway.

22           The second kind of block and tackle kind of  
23 activity is updating our HERS regime, our home energy, our  
24 residential kind of energy efficiency regime existing  
25 buildings, well, for new and existing buildings, but the

1 kind of restructuring the Title 24 and Title 20 enforcement  
2 regime around the building standards.

3           And, so, the first workshop happened yesterday.  
4 I think it was highly successful on field verification and  
5 diagnostic testing. So, how do we actually make sure that  
6 the projects that are done on the new building, new  
7 construction and on retrofits, in particular retrofits  
8 where we have an issue that we need to solve. It is, you  
9 know, really kind of revisiting and redoing that anew. So,  
10 you know, how do we make sure that enforcement is actually  
11 happening, that compliance is happening.

12           So, there was a workshop yesterday and I want to  
13 just commend Joe Loyer and Lorraine White, Armando Ramirez  
14 and the whole team as well as CCO. You know, Linda has  
15 been tremendous in her leadership, and Jimmy as well, and  
16 Matt Chalmers and Justin Delacruz, Matt Pinkerton. They've  
17 all really contributed to that in earnest. And Christine  
18 also Colope (phonetic) has been key there and Ronnie  
19 Raxster (phonetic) as well, no longer with the Efficiency  
20 Division, but really, really a team effort in the next six  
21 years.

22           So, that update is going to be, I think, it's  
23 going to create a lot of conversations that you'll hear  
24 about because it is actually a pretty broad reform of the  
25 compliance and enforcement regime, and so those are two

1 rulemakings, one in Title (indiscernible) and Title 44  
2 moving forward. So, just heads up on that.

3           And then another couple things. Really I want to  
4 just commend Thao Chau and the team on getting the  
5 California utility allowance calculator updated and  
6 improvised, so that's going to really help in our pursuit  
7 of efficiency in affordable housing. So, it's a way that  
8 landlords can actually know what to charge for rent and  
9 what to allow for in terms of efficiency and decreased  
10 energy bills. So, it helps landlords and helps renters in  
11 affordable housing really double down on efficiency. So,  
12 Thao been leading that.

13           I did a trip to the Resilient Harvests conference  
14 which was extremely interesting and Thao Chau also  
15 organized that, so she is really doing double duty working  
16 very hard and effectively. But that's indoor cultivation,  
17 so all types, vegetables, cannabis, you name it, all sorts  
18 of different consumer bases and, you know, manufacturing  
19 processes, et cetera. But that is increasingly  
20 industrialized and, so, with the large energy consumer lots  
21 of lighting, but also lots of HVAC energy use. And so,  
22 we're getting a handle on how to approach that in the  
23 building code and working with all these stakeholders. And  
24 they were eager to participate with the Energy Commission.

25           It's really a testament to the staff, just open

1 door and really listening to what's a quickly growing part  
2 of our economy, so I'm excited to engage with them further  
3 and make sure that we get the code right with respect to  
4 those industries.

5 Lots of progress, I think, and lots of good  
6 thinking on how to bring both the State general fund money  
7 and the Federal Inflation Reduction Act funds to building  
8 decarbonization. So really commending Deana and Mike and  
9 their joint division work on conceptualizing those programs  
10 and getting them moving forward, getting the design moving  
11 forward and starting to have public interactions about  
12 those.

13 So, really super excited about the building  
14 decarbonization efforts. Opportunity and challenge, you  
15 know, they come hand in hand, so we're going to get a  
16 billion and a half dollars to do building decarb, but we  
17 really have to make it count. So, I know we're all going  
18 to rise to that challenge.

19 I guess -- so on the CEDMEC front, so Vice Chair  
20 Gunda mentioned that, but we have an amazing group of  
21 stakeholders that are members of the California Demand  
22 Management and Efficiency Council, and they do a conference  
23 every year and are really primed to be partners. Many of  
24 them operate in the utility portfolio space in efficiency  
25 and demand response, and as we, you know, really bring a

1 lot of resources to bear on those efforts, we need to  
2 coordinate with them, and I think they have a really great  
3 stakeholder group to coordinate with.

4           But I do agree with Vice Chair Gunda that we've  
5 got to parse out what demand management actually means.  
6 You know, demand response is a term that really has kind of  
7 outlived its usefulness, and really, we're talking about  
8 specific sets of complementary resources that all are on  
9 the demand side. And, so -- and they touch us in different  
10 ways in our various responsibilities. So, technology is  
11 going to be a big part of the solution to quantify and to  
12 control end uses in a coordinated way and quantify the  
13 impacts. And I think there's just -- as I said, I think  
14 there's very broad knowledgeable interest in helping us  
15 together with the energy agencies figure out the path to  
16 point B, so excited about that.

17           I guess finally I just wanted to mention that it  
18 was, again, a real pleasure to go down to San Diego for the  
19 Leslie K. McAllister Climate and Energy Symposium -- the  
20 Climate and Energy Law Symposium. And, you know, obviously  
21 that's renamed in honor of my late wife. And I was just so  
22 -- I don't necessarily have to play a role every year, but  
23 this year it just came together, but I did play a role.  
24 It's really her day. But I just want to thank the Chair  
25 and President Reynolds from the PUC and Chair Randolph from

1 the Air Resources Board for doing the keynote panel and  
2 really giving that event this year the kind of level and  
3 gravitas that I think it deserves. So, I was able -- I  
4 moderated the panel subsequent to that, you know, about  
5 decarbonizing the grid, electric grid, in California. But  
6 I think that really the one was really set by that keynote  
7 panel. It was fantastic, and just thanks to the Chair and  
8 leaders of the three energy agencies, so I appreciate that.

9           And with that, I will pass the mike back to the  
10 Chair.

11           CHAIRMAN HOCHSCHILD: Well, thank you so much,  
12 Commissioner, and, yeah, it was my honor and privilege to  
13 join in really a wonderful event, wonderful discussion, and  
14 I know I had the good fortune to know your wife a little  
15 bit, and I just know how incredibly proud she would be of  
16 everything you're doing day in and day out to advance this  
17 shared vision we have and that she shared as well, building  
18 the clean energy sustainable future. So, that was an honor  
19 to be able to join you.

20           As we approach the end of the year, I always tend  
21 to try to come out of the valley a little bit and go up to  
22 the mountaintop and just get a little pushback. And, you  
23 know, we had an election last week. The governor got  
24 reelected. And at this point I think all of us on the  
25 Commission have either been appointed or reappointed by

1 Governor Newsom, and just, you know, from my perspective,  
2 you know, continues to be the honor of a lifetime to be  
3 able to work in an administration that's so focused on  
4 climate. This is why I'm doing this work and here every  
5 day, and I feel that is shared by all of us.

6           There's a quote I love from President Biden. He  
7 said, "Don't tell me what your values are, show me your  
8 budget and I'll tell you what your values are." And, you  
9 know, I think when I look at our budget and how climate and  
10 justice, you know, have really been elevated, you know,  
11 it's extraordinary. We have a 10X increase in our budget  
12 this year to do all the stuff that we are passionately in  
13 support of, everything from offshore wind to electric  
14 vehicles, to building decarbonization, to energy storage,  
15 renewables, travel microgrids, and an incredible honor.

16           And also, just to be a part of this team with  
17 such talented and dedicated and motivated staff, it really  
18 keeps me going as we approach the end of the year just for  
19 the chance to be able to be a part of this amazing  
20 organization and build this future together.

21           And just to continue on that note, you know, the  
22 tribal work in particular, you know, we did an event down  
23 with the Kumeyaay Indians. This was a project we approved  
24 at the last meeting, 31-million-dollar energy storage  
25 project, to our knowledge, the largest tribal grant ever

1 given by the state to a tribe in California and definitely  
2 our largest long duration storage project. It's the eighth  
3 tribal microgrid that the Energy Commission has funded.  
4 We'll be doing a ninth early next year. And just wanted to  
5 recognize, you know, what an incredible body of work that  
6 is and the tribal energy sovereignty that represents the  
7 event was really emotionally actually and beautiful. We  
8 had a dinner with the tribe, and did, you know, a press  
9 event.

10 I just really wanted to recognize Lindsey Buckley  
11 on the comp team and her terrific group over there for  
12 working with the tribe just setting it up and creating an  
13 amazing event, memorialize that, and it was a real  
14 privilege to join them.

15 I also want to recognize Noemi Guiardo yet again  
16 for just a wonderful unity celebration with all the Energy  
17 Commission staff by Zoom I guess a week or two ago, just a  
18 chance for folks to share their stories, how their families  
19 came to the United states, and it was just really beautiful  
20 and authentic, and, you know, I think as we talked about  
21 the way you get through tough times and tough challenges is  
22 by coming together and building that cohesion and getting  
23 to know each other better. And, Noemi, you and Carosel and  
24 Dorothy, you guys pulled off an incredible event, really  
25 the heartbeat of the Energy Commission.



1           So, I did a couple of Clean Tech San Diego and  
2 some lithium valley stuff, but I think I'll just wrap  
3 there.

4           So, with that, lets turn now to Item 12,  
5 Executive Director's Report.

6           EXECUTIVE DIRECTOR BOHAN: Thank you, Chair.  
7 Good afternoon, Chair, Vice Chair, members. No report  
8 today, a great November.

9           CHAIRMAN HOCHSCHILD: Okay. Let's go to Item 13,  
10 Public Advisor's Report.

11          MS. BADIE: Thank you, Chair. No reports from my  
12 office.

13          CHAIRMAN HOCHSCHILD: Okay, thanks. Item 14,  
14 Public Comment.

15          MS. MURIMI: Thank you, Chair. So, this is a  
16 period for any person wishing to comment on information  
17 items or reports of the meeting agenda or any other items.  
18 Each person has up to three minutes to comment, and  
19 comments are limited to one representative per  
20 organization. We may reduce the comment time, depending on  
21 the number of commentors. After you are called on, please  
22 restate and spell your first and last name and state your  
23 affiliation, if any.

24          For those joining via Zoom, use the raised hand  
25 feature to indicate that you'd like to make a comment. For

1 those calling in, press star nine to raise your hand and  
2 star six to unmute on your end. I'll begin with on Zoom.  
3 I see Claire Warshaw. Your line is unmuted. Please state,  
4 spell your name, give your affiliation. You may begin.

5 MS. WARSHAW: Hi, my name is Claire Warshaw.  
6 That's C-L-A-I-R-E, and then W-A-R-S-H-A-W. I'm a member  
7 of the public and no affiliation.

8 I wanted to mention something that I'm reminded  
9 of by something said in this meeting. It's about LED  
10 lights. And I have really appreciated the LED light  
11 transition from the incandescent traditional bulbs that had  
12 to be replaced so often. I've noticed a big difference in  
13 replacing bulbs around my home.

14 I understand there is some danger in replacing  
15 bulbs because if you don't know what you're doing watts to  
16 watts doesn't necessarily make sense because they are so  
17 much more powerful. And, so, I know that there are  
18 instructions and people can access them, but there are  
19 apparently people that don't access instructions, and it  
20 gets kind of dangerous.

21 For instance, at Sacramento City College I know  
22 when I was attending there someone had installed a very  
23 super bright light. It was actually painful to be under.  
24 It kind of almost becomes a security device, and maybe  
25 that's why they did that at that time. I don't know if

1 they took it out afterwards. They might have.

2 I've also noted like sports lighting that seems  
3 much more brighter than it needs to be. And recently my  
4 nearby post office has installed in a parking lot 24-hour  
5 parking lot street lights, and I've seen that in a few  
6 other places. I'm not sure how that is allowed or why that  
7 is happening, if that's fine because we have solar during  
8 the day and so they don't care. I'm not sure.

9 But I do think it is something to be aware of  
10 that can be talked about a little bit by speakers if they  
11 have a chance, and perhaps a little bit more instruction in  
12 making it a little bit easier on the laypeople. I've seen  
13 arguments by one woman on LinkedIn who thinks that LED  
14 lighting shouldn't be allowed at all because of the way  
15 it's been installed in like even vehicle lighting and how  
16 bad it is for humans. And it's a difficult argument when  
17 you know how long it can last and just the better qualities  
18 that can happen. So, I just want to encourage on that,  
19 public education, of possible. Thank you.

20 MS. MURIMI: Thank you, Claire. All right, give  
21 one more opportunity for public comment. Again, use the  
22 raised hand feature if you are on Zoom, and if you are  
23 calling in press star nine. Seeing no more comments,  
24 Chair, I hand the mike back.

25 CHAIRMAN HOCHSCHILD: Thank you. Let's turn now

1 to Item 15, Chief Counsel's Report.

2 MR. WARD: Good afternoon, Chair. This is Alan  
3 Ward sitting for Chief Counsel Linda Barrera. Our office  
4 has no report today. Thank you.

5 CHAIRMAN HOCHSCHILD: Okay. Thank you so much.  
6 We're adjourned. Appreciate.

7 (Business meeting adjourned at 12:17 p.m.)

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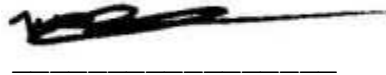
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