

DOCKETED

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APPEARANCES (*Present via Zoom)

Commissioners

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

Staff Present:

Drew Bohan, Executive Director
Lisa DeCarlo, Acting Chief Counsel
Brady Borcharding, Former Director of CEC's Office of
Government International Affairs
Raja Ramesh, Senior Policy Advisor
Mike Gravely, Energy Storage Technical Lead,
Military Advisory to Chair Hochschild

Public Advisor:

Mona Badie, Public Advisor
Dorothy Murimi, Public Advisor's Office

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Also Present:

Delphine Hou, Deputy Director of the Statewide Water &
Energy Office, Department of Water Resources
Elliot Mainzer, President, CAISO
Leuwam Tesfai, Deputy Executive Director for Energy
and Climate Policy, CPUC
Derek Kirk, California Labor and Workforce Development
Agency

Public Comment: (*Present via Zoom)

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a. Pursuant to Government Code section 11126(a)(1), the CEC may adjourn to closed session with its legal counsel to consider the appointment, employment, evaluation of performance, or dismissal of a public employee or to hear complaints or charges brought against that employee by another person or employee.	
b. Pursuant to Government Code section 11126(e)(1), the CEC may adjourn to closed session with its legal counsel to discuss the following pending litigation:	
i. Shasta County and Pit River Tribe, et al. vs. California Energy Commission	
ii. State of California Department of Industrial Relations Division of Labor Standards Enforcement Legal Section: In the Matter of the Request for Appeal from Citation Issued Against: California Energy Commission; Anheuser-Busch, LLC, Respondents, State Case Number: 48-76293.	
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P R O C E E D I N G S

APRIL 10, 2024 10:00 a.m.

MS. MURIMI: (Start of Introductory Video)

Welcome to the California Energy Commission's Business Meeting. Close captioning via Zoom is available for today's meeting. Attendees can use this feature by clicking "CEC Closed Caption" or "Live Transcript" and then selecting either "Show Subtitle" or "View Full Transcript."

You can find the agenda for today's meeting, presentation materials, and other links on the business meeting event page. A Zoom recording of today's business meeting will also be made available on the event page. Please visit energy.ca.gov/proceedings/business-meetings to find the event page for this business meeting.

Approved orders, resolutions and court reporter transcripts will also be made available in this year's CEC business meeting docket.

The CEC welcomes public comment at its business meetings. To ensure the orderly and fair conduct of business public comments will be limited as announced and a timer will be shown on the screen. To make a comment please follow the instructions provided by the Public Advisor's Office during the meeting. We ask that all commenters spell their name and state any affiliation for the record before making their comment.

1 Welcome to the California Energy Commission's
2 business meeting. The meeting will now begin.

3 (End of Video)

4 CHAIR HOCHSCHILD: [No Audio] Introduction and
5 Pledge of Allegiance done on Zoom without audio.

6 CHAIR HOCHSCHILD: Mona, are you --

7 MS. BADIE: Yes.

8 CHAIR HOCHSCHILD: Okay, let's just stand by for
9 a minute.

10 MS. BADIE: Sorry. Please hold one moment while
11 we fix that, because we want to make sure we have a good
12 record with the court reporter. Hold on.

13 CHAIR HOCHSCHILD: Yeah. Do you want to just do
14 that now?

15 MS. BADIE: Testing, testing. Court reporter,
16 can you message in the chat, please if you can hear us now?

17 All right. We're back on, Chair. Back to you.

18 CHAIR HOCHSCHILD: Okay. Sorry about that. It
19 wouldn't be a full meeting if we didn't have a few IT
20 issues.

21 So let's begin with public comment if we could,
22 and then we'll move on to agency announcements.

23 MS. BADIE: Thank you. Good morning everyone.
24 This is the open comment period for the business meeting.
25 This is the comment period for any non-voting items on the

1 agenda, including informational items. If you're in the
2 room with us we're asking folks to use the QR code to let
3 us know they'd like to make a comment. And also, if you
4 raise your hand you can let me know that as well. And then
5 if you're joining us on Zoom online please use the "raise
6 hand" feature on your screen, it looks like an open palm.
7 And if you're joining us by phone you'll use -- you'll
8 press *9 to raise your hand.

9 And so first we'll go to folks in the room. We
10 have Claire Warshaw. Claire, if you could please approach
11 the podium to make your comment. We're asking folks to
12 limit their comments to two minutes or less. And just a
13 reminder to please spell your name for the record before
14 you begin your comment.

15 MS. WARSHAW: Claire Warshaw, C-L-A-I-R-E, then
16 W-A-R-S-H-A-W. I'm a member of the public, no special
17 affiliation, a consumer. I'm speaking as a consumer and a
18 resident in Sacro County. I have a long list of things I
19 wanted to say, but I know there's only two minutes so I'm
20 going to go straight to the important part and then I might
21 back up. I have some EV charging suggestions after having
22 an unusual experience last December.

23 When is -- and I also used to work at SMUD 2005
24 to 2015 in their Design and Construction Department. When
25 I worked there we had specific ways of dealing with things.

1 And we fielded, and I know things may have changed a lot
2 since I worked there in terms of what people do in terms of
3 fielding, they might look at GIS maps, instead of going out
4 there. I'm going to speak anyways and you can just
5 decipher what makes sense.

6 I would suggest that people that install EV
7 charging, the managers, the project managers, field the
8 area and determine signage that needs to be changed in
9 advance of installing the project. And specify details,
10 technical details, like even including replacing cement for
11 signage that needs to be changed out, you know, dimensions
12 and everything. That's the first suggestion. And have
13 that as part of the project.

14 The second thing if you're looking at something
15 later, like an outdated area where there's already EV
16 charging that's no longer using, like at the Watt Avenue
17 SAC Regional Light Rail Station (phonetic) there's a bunch
18 of EV chargers that no one is using. It's been there for
19 years and years and years. I specify having that moved
20 might be difficult. Submit something to the County like a
21 311 request, have a network of your EV project managers get
22 together, and send a lot of those in so that it gets more
23 important to them.

24 Third, resist entangling other tech like cell
25 phones, because that can make the processes less

1 affordable.

2 And four, endorse more of pedestrian bicycle
3 public transportation people. We're part of the system, so
4 we rent cars sometimes. Thank you.

5 MS. BADIE: Thank you.

6 Next we'll hear from Hoiyin Ip online. Hoiyin I'm
7 going to open your line, if you could please unmute on your
8 end. We're asking for comments to be two minutes or less.

9 MS. IP: Commissioners, I am Hoiyin Ip in Orange
10 County. I was honestly really surprised and very
11 disappointed to hear that you put AC heat pump replacement
12 requirements out of the Title 24 terms. You know many
13 people in the state started advocating building
14 electrification since 2020. Electrification is the one
15 issue in my City Council Chamber that all community members
16 are united. But since the Berkeley case we've been putting
17 all of our hopes on the state. And last week, "LA Times"
18 had an editorial piece titled "Backtrack on Gas Ban Won't
19 Stop the Electrification Trend" and it mentioned to you.

20 Well, gas power furnaces generate many of the
21 same pollutants from car exhaust. And you know the power
22 of regulation. And you know so many people like me are
23 counting on you. So please, do not pull AC heat pump
24 replacement requirements out of the Title 24 terms. Thank
25 you, thank you, thank you. We're counting on you.

1 MS. BADIE: Thank you.

2 Next we'll hear from Bryce. Bryce, I'm going to
3 open your line. If you could please spell your name for
4 the record. We're asking for comments to be two minutes or
5 less.

6 MR. NESBITT: Okay, this is Bryce Nesbitt. Audio
7 check quickly.

8 MS. BADIE: Yes.

9 MR. NESBITT: Okay, Great. And clarification,
10 the BART item. Will that have a separate public comment?
11 Or is this the time?

12 MS. BADIE: Sorry, which item was that?

13 The BART funding for EV chargers under consent.

14 MS. BADIE: Oh, that one will have a separate
15 public comment period.

16 MR. NESBITT: Great. So I'll make an open public
17 comment not on the agenda item regarding the replacement of
18 failed air conditioner units. It's Bryce Nesbitt, B-R-Y-C-
19 E. And I work as a inspector, so I see lots of projects and
20 end up with properties that have problems and see a lot of
21 what happens actually in the field. And when an AC unit
22 fails is a perfect opportunity to put in -- a one-way AC
23 unit -- to put in a two-way AC unit. It's just a little
24 bit more expensive.

25 But unfortunately, the incentive programs that

1 are out there right now are burdensome enough in terms of
2 paperwork. And when somebody's AC fails it's typically an
3 emergency. So they're looking for a bid and they're
4 looking for the contractor who can do it the fastest and
5 the cheapest and that's what happens. And that doesn't
6 give that opportunity for that little incremental project
7 to replace the one-way AC with a two-way heat pump to
8 happen. And I encourage you not just to move this to the
9 mandatory section, but to rethink the process,
10 understanding those factors.

11 Again, when a homeowner has a failed AC unit they
12 want a fast, immediate solution, and the current incentive
13 programs for doing this take weeks and weeks of application
14 and paperwork.

15 Thank you. And I'm happy to answer any questions
16 if anyone on the Commission has that or would be interested
17 in my perspective as an inspector and project manager.
18 Thank you.

19 MS. BADIE: Thank you.

20 Next we'll hear from Sahm White. Sahm, I'm going
21 to open your line. Could you please spell your name for
22 the record. We're asking for comments to be two minutes or
23 less.

24 MR. WHITE: Thank you. My name is Sahm White, S-
25 A-H-M W-H-I-T-E. I'm an energy consultant working with a

1 number of nonprofit ratepayer organizations, and I'm very
2 concerned about the proposed rollback of heat pump retrofit
3 to requirements.

4 California has benefited enormously from forward-
5 looking Title 24 building codes to have related energy
6 efficiency measures. They've helped us dramatically reduce
7 our energy demands over the last 50 years. And this, in
8 turn has helped to reduce our emissions, our need for more
9 energy infrastructure and those costs, and the impact on
10 land, air and water.

11 Heat pumps have been in widespread use for many
12 decades in other parts of the country. I remember them,
13 what was it, 50 years ago myself, and as well as other
14 countries. And this is an established efficient technology
15 that we've been terribly slow to adopt here.

16 When replacing existing heating and cooling
17 systems at the end of their life it's the obvious time to
18 require installation of heat pumps instead. There is
19 little added cost and what there is, is usually offset
20 through tax credits and related programs. Efficient
21 electrification of home heating is a crucial step in
22 meeting our state's emission targets. And we should have
23 done this years ago.

24 I really ask you not to delay any longer and keep
25 this as a required Title 24 upgrade. Thank you.

1 MS. BADIE: Thank you.

2 Next we'll hear from Melissa Yu. Melissa, I'm
3 going to open your line, if you could please spell your
4 name for the record. We're asking for comments to be two
5 minutes or less.

6 MS. YU: Hi, Commissioners. My name is Melissa
7 Yu, M-E-L-I-S-S-A Y-U. I'm with the Sierra Club and I'm
8 also a San Francisco resident. Similar to the previous
9 commenters I also fully support establishing a regulation
10 that enforces air conditioners to be replaced with heat
11 pumps at their end of life.

12 I live in San Francisco where only 47 percent of
13 homes have cooling. And this is a major health threat as
14 temperatures in the region rise with climate change. In
15 the Bay Area only about half of homes have AC, and low-
16 income households have even less. Avoiding the
17 installation of one-way AC now will also save family and
18 money the hassle down the road as CARB and other agencies
19 move forward with zero emission appliance standards in
20 2030, which will require heat pumps to be installed instead
21 of polluting gas furnaces.

22 Alongside of this, we also need to protect
23 programs like the CEC's Equitable Building Decarbonization
24 Program and stop cutting funding to support building
25 decarbonization regulations like this.

1 In 2022, heat pump sales in the United States
2 actually surpassed gas furnace sales for the first time.
3 And this trend is growing, so we need to continue on this
4 trajectory. This rule is a great way to promote a gradual
5 transition to zero-emission appliances by ensuring that
6 individual appliances upon burnout are switched to zero-
7 emission appliances. Thank you.

8 MS. BADIE: Thank you.

9 Next we'll hear from Jonny Kocher. So Jonny, I'm
10 going to open your line. If you could please spell your
11 name for the record. We're asking for comments to be two
12 minutes or less.

13 MR. KOCHER: Yes, my name is Jonny Kocher with
14 Rocky Mountain Institute. That's J-O-N-N-Y K-O-C-H-E-R.
15 And thank you for the opportunity to speak today. I would
16 like to yeah, kind of reiterate what's been said by other
17 folks. I'm disappointed to see that the AC heat pump
18 requirement was removed from Part 6 to Part 11 from the
19 initial draft expressed terms that were released in
20 November.

21 You know, in order for California to hit its 2030
22 goals we needed to be getting all these low-hanging fruit
23 opportunities. And the cost to put a heat pump in when a
24 central air conditioner is broken is a very small amount of
25 costs with IRA tax credits available that could actually

1 make it to where folks can actually get a more efficient
2 air conditioner -- or sorry, more efficient heat pump that
3 can do air conditioning during summer more efficiently than
4 a federal minimum air conditioner at very, very small
5 costs.

6 I'd like to implore the CEC to reconsider this
7 provision. I really do appreciate the leadership that the
8 CEC has shown on electrification through Part 6, both in
9 2022 and then 2025 for new construction, but we are missing
10 a huge opportunity on AC heat pump in existing buildings.
11 Thank you so much.

12 MS. BADIE: Thank you.

13 Next we'll hear from Bill Woodridge. I'm going
14 to open your line, Bill, if you could please spell your
15 name for the record. We're asking for comments to be two
16 minutes or less.

17 MR. WOODBRIDGE: Okay, my name is Bill, B-I-L-L,
18 Woodbridge, W-O-O-D-B-R-I-D-G-E. I implore you to
19 reconsider adding back the heat pumps to replacements of
20 burned-out air conditioners and for new construction. I'm
21 in Santa Barbara, I'm on the Ex Comm of the local Sierra
22 Club chapter.

23 We are determined not to go backwards in allowing
24 more methane gas and natural gas to escape into our
25 atmosphere. This is a one small step towards reaching the

1 state's goals of reducing pollution in our atmosphere and
2 reducing global climate change. I hope you will add this
3 back into the plan, both for replacement and for new
4 construction. This is critical it's a great time to do it.

5 It's not doing it is just taking a step backwards
6 in the states and the country's attempt to reduce global
7 warming. So I can't imagine any reason that you would not
8 include this in the plan. It's just mind boggling that
9 there would be any reason not to go forward and include
10 this back in the plan to replace burned-out air
11 conditioners that are very polluting and new construction
12 with heat pumps.

13 Please reconsider this. And please, let's take a
14 step forward and not backwards. Thank you very much.

15 MS. BADIE: Thank you for your comment.

16 Next we'll hear from an account identified as
17 Sierra Club Angeles Chapter. I'm going to open your line.
18 If you could please spell your name for the record. We're
19 asking for comments to be two minutes or less.

20 MS. ORBE: Hi, good morning. This is a
21 soundcheck, can you all hear me?

22 MS. BADIE: Yes.

23 MS. ORBE: Hi, good morning. I'm actually here to
24 call -- I'm speaking here as a resident. My name is
25 Kimberly Orbe, Kimberly K-I-M-B-E-R-L-Y, last Name O-R-B-

1 as-in-boy-E. So again, I'm calling here as a resident of
2 Koreatown in Los Angeles. And if you're not familiar with
3 Koreatown, it's really dead, it's gray. Summers, August
4 specifically, I mean, now even going into October it's
5 terrible. I'm a renter, I don't have AC. And we really
6 need heat pumps, because it can protect households from gas
7 price mortality. And it provides household and renters
8 with another option for heating.

9 Requiring installation of heat pumps upon burnout
10 is crucial for public health, not just the climate and also
11 savings. Yeah, California cannot miss on this opportunity
12 to cut planet warming emissions, improving the health and
13 safety of homes, and benefit consumers by encouraging the
14 installation of energy-saving heat pumps when air
15 conditioning units burn out.

16 This is like a no brainer. It's a commitment and
17 leadership that we need from you to add it back to Title
18 24. And we hope that you have listened to all of us
19 calling from across the state demanding that this is really
20 needed right now. Thank you for your time.

21 MS. BADIE: Thank you for your comment.

22 That concludes public comment. Back to you,
23 Chair.

24 CHAIR HOCHSCHILD: All right. Well, thank you to
25 all the members of the public for sharing your

1 perspectives.

2 At this time I'd like to invite Brady Borcharding
3 to come to the front here. And I want to just begin by
4 congratulating Brady on his appointment to go work on
5 legislative affairs in the Governor's Office and thank him
6 for really a tremendous tour of duty since he joined, I
7 believe, this last August. I have really appreciated your
8 professionalism and energy and passion for the mission.

9 I want to just highlight a few things, like this
10 shop that Brady has run is the Office of Governmental and
11 International Affairs. And so many of our mission-critical
12 pieces of work flow through that office. International
13 engagement, the Vice Chair, Commissioner McAllister just
14 returned from India doing a bunch of climate and clean
15 energy engagement. I was in Beijing last week engaging on
16 climate, and we're doing a lot of that. And ramping up I
17 think, Mexico in the future. Your shop oversees and
18 supports a lot of that work. You staffed me incredibly
19 well in Dubai for a nonstop week, dawn to dusk of meetings
20 and engagement.

21 We're also pursuing a huge amount of federal
22 money now. And we've created a new position with your
23 leadership to go after those funds and match funding we can
24 procure. And then the engagement with the Legislature.
25 And you've hired incredibly well. So really, we want to

1 say thank you and congratulations. And just give an
2 opportunity for you to share a few remarks. And we'll hear
3 from the rest of the Commissioners. But go ahead, Brady.

4 MR. BORCHERDING: Thank you Chair Hochschild, I
5 really appreciate it. And thank you to all the rest of the
6 Commissioners. It was a brief eight months, but truly a
7 privilege to be part of the Commission AND the Commission's
8 work.

9 And I think I've really taken to heart and tried
10 to evangelize on your behalf Chair the great implementation
11 that we are now facing. Which is, I think, the most
12 worthwhile and pressing challenge of probably the next
13 generation if not the one that we're living in now, too.
14 And I think that's an urgency that I want to take the rest
15 of my career and certainly wanted to embody while I was
16 here. And I'm just very, very privileged and happy to have
17 been part of this for the portion of time that I was. And
18 will continue to be now with the with the Governor's
19 Office. So thank you.

20 CHAIR HOCHSCHILD: Great. Well, congratulations.

21 Any other comments from the dais? Commissioner
22 Monahan.

23 COMMISSIONER MONAHAN: Well I thought this was
24 going to be a roast. I didn't know we were supposed to say
25 nice things. But Brady, I just want to thank you for all

1 you did to get AB 126, to the finish line. And you really
2 did elevate our game, and you showed us what OGA could
3 accomplish. And by running in, and so I just want to thank
4 you for your work here and for just giving us that
5 perspective of all that the office could do to help us
6 accomplish our goals.

7 And I do wish you well, even though I'd rather
8 you were staying. But we're just grateful for what you
9 have done for us and look forward to you doing great things
10 in the Governor's Office.

11 CHAIR HOCHSCHILD: All right. Commissioner
12 Gallardo.

13 MR. BORCHERDING: It could still be a roast if
14 you'd like. (Laughter.)

15 COMMISSIONER GALLARDO: I can't do that. But I
16 just am too grateful to you for helping me get through my
17 confirmation process. I know it was the first time you
18 were going through a confirmation process with someone.
19 You kept me calm, on track, you worked really well with my
20 team. And I just felt like that was a great bonding
21 experience for us. And so I was really disappointed to
22 hear you were leaving, but I'm so excited for you. And I
23 know you're going to do even greater and bigger things.
24 And I'm excited to see all of your successes. And I really
25 do hope that you stay in touch with us.

1 And again, just super grateful for all you did
2 for me on that level as an individual and getting me
3 through that process. Thank you, Brady.

4 CHAIR HOCHSCHILD: Okay. Let's go to
5 Commissioner McAllister.

6 COMMISSIONER MCALLISTER: Well, a few weeks ago
7 when you came next door from your office to my office and
8 poked your head in the door I was like -- you didn't even
9 have to say it -- I'm like, "Oh, no, I know what he's going
10 to say exactly," because you learn to sort of anticipate
11 these things when you show competence and just incredible
12 smarts. That gets noticed when you're doing good work for
13 the right reasons, in good faith, that opens up
14 opportunities for you. And so I'm really happy, I'm super
15 happy for you as a professional and as a person for the
16 opportunity.

17 I had no doubt you would get noticed, and it
18 wasn't a surprise. But definitely it was short and too
19 sweet, or sweet and too short -- I'm sorry -- your tenure
20 here. But you really did, just reiterating what my
21 colleagues have said already, just you set a new standard
22 for what OGA can do. And I think invited more
23 responsibility and embraced and really executed on that
24 responsibility incredibly well.

25 So you're leaving a great legacy and you hired

1 wonderful people. And I just really -- particularly on
2 well, really, on two fronts: on just increasing our
3 presence at the Legislature and the building. I mean,
4 obviously the Legislature knows where they are and they
5 know how competent we are. But they don't always think to
6 reach out on the issues that maybe we could help on. And I
7 think you helped facilitate all that.

8 And then internationally just creating a platform
9 of support for those of us who are developing international
10 collaborations and partnerships, just really helped. And
11 thanks for all that support as well.

12 So really just thank you. And I know we'll see a
13 lot of you going forward, so happy about that. And really
14 just thanks for all you've done.

15 CHAIR HOCHSCHILD: Vice Chair Gunda.

16 VICE CHAIR GUNDA: Thanks, Chair.

17 Brady, I think we've had some discussions
18 offline. But I just want to second and add my voice to
19 everything that has been said. And I think particularly
20 given what the Energy Commission's role has been in the
21 last few years. The amount of work that we have taken in,
22 it really requires people that have courage and commitment
23 to kind of a vision that we all agree on and have the
24 boldness to carry that. And I think you represent the best
25 of all those pieces. A really, really good communicator,

1 and really able to kind of put forth your ideas with
2 courage.

3 And I appreciate that, as sitting in these seats,
4 it's kind of that we can do the best work we can do if we
5 hear from our team on the good and bad. And push each
6 other to get the best out of each other. I appreciate you
7 in fitting into that cultural context of our team. I'm
8 incredibly happy for you for the opportunities that you're
9 getting. As stated we'll miss you here. But I'm beginning
10 to see you in other meetings at the Governor's Office,
11 which is wonderful. Good luck with everything. And thank
12 you for choosing to be a public servant. Thanks.

13 CHAIR HOCHSCHILD: Let's give Brady a round of
14 applause. (Applause.) Thank you.

15 And with that, Vice Chair Gunda, over to you.
16 You have a new staff you'd like to introduce?

17 VICE CHAIR GUNDA: Yeah, I would like to take a
18 minute to just introduce one of our team members in our
19 office, Raja Ramesh. Raja, if you want to come up to the
20 podium.

21 Raja was at the Energy Commission for a couple of
22 years in FTD and then left to join the industry for a while
23 and helped with renewable development. Incredibly grateful
24 for Raja being here. He has been here only for a week, but
25 already is adding incredible value to our office. He will

1 be focusing on SB 100 for Liz Gill, who was a previous
2 advisor that was leading that effort, Raja is going to go
3 in.

4 And one of the things, I didn't know if I wanted
5 to say it, but as a part of our interview process we threw
6 a wrench at the end. We just gave Raja a very difficult
7 math problem at the very last minute. And we said to him,
8 "Solve this if you can, text the answer if you have," and
9 he is the only one who gave us the right answer. But more
10 so it's not about the right answer. He just went through a
11 process on figuring out. And much of this job is about
12 trying to search for answers and not being scared to find
13 answers. So Raja, thank you for coming back. And if you
14 want to say anything.

15 MR. RAMESH: Sure. Thank you, Vice Chair. Yeah,
16 it was certainly a curveball. It took me back to my
17 engineering days. But I'm very excited to be rejoining the
18 Commission and looking forward the opportunity to work with
19 all of you.

20 CHAIR HOCHSCHILD: Can you share with us a little
21 bit about your background, your professional background?
22 What you're doing before?

23 MR. RAMESH: Sure. I was working electrical, I
24 studied electrical engineering, worked at the Commission in
25 FTD. And then I was working at a renewable energy developer

1 before on battery, wind, and solar projects on the East
2 Coast.

3 CHAIR HOCHSCHILD: Great. Well, wonderful to
4 have you join the team. Welcome. All right. Thank you.

5 So other agency announcements. Commissioner
6 Gallardo? Yeah? Oh, sorry. Go ahead, Commissioner
7 Monahan.

8 COMMISSIONER MONAHAN: Well, maybe following on
9 the nerdy heels with our Vice Chair, I'm so curious about
10 that math question. Is anybody else?

11 So normally draft regulations I wouldn't make an
12 announcement, but I want to make an announcement this time
13 about draft reliant charger reliability standards and
14 reporting requirements that were delivered yesterday. That
15 were posted yesterday. And there's a lot of interest by, I
16 think, every EV driver in the state as well as the many EV
17 drivers in the Legislature, to improve the reliability of
18 our charging network.

19 And I think we all realize there's a lot of work
20 to be done. The electric vehicle service providers realize
21 there's a lot of work to be done. And the team issues sort
22 of first-in-the-world draft standards that include uptime
23 requirements of 97 percent which aligned with the federal
24 programs. But also for the first time, successful charge
25 initiation as a standard, so when you plug in your vehicle

1 does it actually start to charge? Which is different than
2 a charger being up.

3 And these are -- we're also requiring all
4 chargers to provide some data, reporting data so we can
5 better understand the state of play of the entire network.
6 And understand how different providers are performing in
7 terms of their uptime and other metrics.

8 So we are welcoming public feedback on this and
9 just encouraging all stakeholders to come in and talk to
10 us. This is a dialogue, it's a process, and we want to
11 make sure that we have robust public engagement. There
12 will be a public workshop, before we move to the next round
13 of developing final standards.

14 And I just want to give a shoutout to the team
15 who have really been working hard to kind of push the
16 envelope on this and think creatively and out of the box
17 about how to improve charger reliability. So Taylor Marvin
18 is leading that work and supervising that work together
19 with Dustin Schell, Michael Dioha, and Ralph Lee from our
20 Chief Counsel's Office has been amazing.

21 So I can't say enough about the importance of
22 getting to the finish line with strong standards that help
23 improve the customer experience. This is especially
24 important for all the chargers that we fund as a state, so
25 there are special requirements to those to those chargers.

1 And yeah, just encourage folks to spread the word
2 and give feedback to us in a public way, either through the
3 workshop or through written comments.

4 CHAIR HOCHSCHILD: Great, thank you. And
5 congratulations on getting that out. That's a really
6 important milestone.

7 Commissioner Gallardo.

8 COMMISSIONER GALLARDO: Buenos Dias, good morning
9 everybody. I wanted to give a quick announcement, about
10 more of a reminder about the Clean Energy Hall of Fame
11 awards. It's an annual event that the Energy Commission
12 does to recognize local leaders throughout the state who
13 are contributing to getting us to a 100 percent clean
14 energy future.

15 So the event is happening December 5th this year.
16 But nominations are open now, or they'll be open until May
17 10th. So we encourage you to please submit a nomination.
18 All of the information is on our webpage. We'll share the
19 link in the Zoom chat for those of us who are joining via
20 Zoom. And everyone else please hop in the webpage to learn
21 more about the details. Thank you.

22 CHAIR HOCHSCHILD: Okay. I also wanted to ask if
23 we can have Christine Collopy come up in a moment.
24 Christine has served with distinction for many years at the
25 Energy Commission, and is going to be retiring later this

1 year. We're enormously grateful for all your
2 contributions, and especially this last few months, which
3 has been incredibly intense with the federal money.

4 So I wanted to give Commissioner McAllister an
5 opportunity to speak.

6 COMMISSIONER MCALLISTER: Okay, so Christina, I'm
7 sorry to put you on the spot. I know you don't like to be
8 the center of attention. But you've just been such a rock
9 at the Commission for so long and played a lot of different
10 roles and worn a lot of hats. And I think I have both
11 benefited from your time at the Commission. And I'd love
12 to hear sort of your perspective on that.

13 But I also want to acknowledge just the fact that
14 working within a bureaucracy in these times can be
15 challenging. And I think you've just carried that with an
16 amazing personal integrity and professionalism. And at the
17 same time not shying away from advocating for yourself and
18 others. You've been an incredible mentor to many, many
19 women and across the board at the Commission.

20 You've taught me a lot, actually. And I've taken
21 those lessons to heart. I hope I have. We went through
22 some early, sort of late ARRA period battles together with
23 when I joined the Commission. And you were already sort of
24 very, I think, sort of hardened by that battle. And really
25 I've taken away some lessons that I think were super-

1 helpful in getting stuff done then with a bunch of programs
2 that were innovative and efforts that really had a big
3 impact. Even before that, I think, before I came to the
4 Commission, just was aware of the role that you were
5 playing. And so your state service beyond the Commission
6 has just been, I think, the value has been immeasurable.

7 So and then lastly, I'll just say this period,
8 this sort of ARRA redux, that is the IRA, is also
9 presenting some significant challenges. It's an incredible
10 opportunity. And I think you're leading us through that,
11 you have led us through that with aplomb and with smarts.
12 And you partnering with Deana and the team, and just you
13 hired a bunch of great people.

14 And I certainly wish you would stick around and
15 help see this through too. But I'm totally -- you have
16 every reason to go into the next stage of life. And so I
17 don't feel like I'm quite doing justice. But I just want
18 to thank you for all your service and partnership and
19 everything you've contributed to the Commission.

20 CHAIR HOCHSCHILD: Yeah, Christine, anything you
21 would like to say would be welcome.

22 MS. COLLOPY: Thank you. Thank you. Yes, I am
23 taken a little off guard. But thank you so much for your
24 kind words, Commissioner. I've spent 15 of my 32 years of
25 public service here at the Energy Commission, and then have

1 spent the other years working in a variety of jobs, mostly
2 in the legislative arena. And that's how I came to the
3 Energy Commission.

4 And it's been a really great ride. I've learned
5 so much from all of you and I've learned so much from our
6 staff. The Energy Commission staff are what has kept me
7 here and have been, they're amazing, I just can't ever lose
8 sight of that. So it's been a great ride.

9 I am so pleased to and honored to have been able
10 to work on this final big project. It's big for the state
11 of California, and I feel privileged to have been part of
12 this. So thank you, Commissioner for your kind words.
13 It's been a great partnership. I've enjoyed working with
14 you as well. So thank you.

15 CHAIR HOCHSCHILD: Vice Chair Gunda.

16 VICE CHAIR GUNDA: Yeah Chair, thank you.

17 And Christine and I had a brief encounter
18 outside. She said, "Do not be throwing at me stuff in the
19 last day." (Laughter.) But I'm just going to say, just a
20 reminder, everything, I agree with everything that has been
21 said.

22 On my first day when I started here Christine
23 onboarded me as staff. So I was talking to the Executive
24 Office and a few colleagues about how to best get onboarded
25 at CEC and they're like, "Oh, Christine is doing a

1 presentation today, all day in her Division, you should go
2 there." I know she was from a different Division. Two
3 things I took away: super-passionate and clear on an
4 expectations, and very scary. That's what I took away from
5 that meeting. I'm like, "I am not sure. I know she's
6 going to make my life difficult." And both came to be
7 true.

8 One, she is that incredibly passionate, and just
9 in a golden heart and just getting work done. And she
10 would not back down from her point of view. And we would
11 have these long conversations on how to land things. And
12 those conversations have yielded everything to be better.
13 And I just want to say thank you, Christine. And for those
14 people who don't know, she has a heart of gold on the
15 outside, the things that she does out of the work. That's
16 a completely different thing.

17 And I do want to just commend you on getting the
18 data modernization started. It was, again one of those
19 topics where we're all like, "I'm not sure we agree on how
20 to do this." But if not for your work that was seeded in
21 2017 and 2018 we would not have done the work we've done.
22 So thank you for everything. Just good luck, and you're a
23 wonderful person. And I hope this next chapter will be
24 relaxing. Thanks.

25 CHAIR HOCHSCHILD: Yeah, Commissioner Gallardo.

1 COMMISSIONER GALLARDO: So Christina I was going
2 to say something similar as Vice Chair Gunda, about you
3 also onboarding me when I came to the Energy Commission in
4 2019. I just think your vibrant personality just makes a
5 difference. And you make people feel like they're at home
6 and welcomed and embraced. And I've seen you also be a
7 coach and a guide for everyone at every level. And it's
8 just so helpful to have that. So you add so much value.

9 And so when you told me yesterday that you were
10 retiring, yeah, I did feel some disappointment there as
11 well, because you've just been such a ray of sunshine here.
12 And also just a coach and model employee. If we all
13 strived to be like you we would be such a better place and
14 we would have a better world. So thank you for all you
15 contributed, and I wish you so much luck. And also I heard
16 that the retirement annuitants opportunity is really fun
17 and stimulating. So yeah, just saying.

18 CHAIR HOCHSCHILD: Well one final point I just
19 want to make, particularly for the younger staff who are
20 here. And I look out in the audience I think a theme that
21 emerges is like the benefits of longevity in a role.
22 Because when I look at how have you been able to hit so
23 many homeruns, particularly this last year? You've been
24 here a while and you know where the bodies are buried, you
25 know how to move things. And that institutional knowledge

1 is invaluable. And you know that, combined with the fire
2 in the belly and the sense of urgency you brought, it made
3 you so effective.

4 So let's give Christine a big round of applause.
5 (Applause.)

6 MS. COLLOPY: Thank you.

7 CHAIR HOCHSCHILD: All right, thank you.

8 So today we're going to be seeking to approve --
9 is this right? -- \$778 million. So I said it correct?
10 (Laughter.) All right let's do it. So which all of this
11 will help contribute to our state's economy. So this is
12 CALSTART, right? Yeah, yeah. Okay with that, that
13 concludes Item 2.

14 Let's turn now to Item 3, which is the Consent
15 Calendar. And I believe Commissioner Monahan has a
16 statement.

17 COMMISSIONER MONAHAN: So on this Item 3c, I will
18 recuse myself from any discussion, consideration and vote
19 of this proposed contract award to the International
20 Council on Clean Transportation, which I will refer to as
21 ICCT. I am currently an advisor to the Board of ICCT. In
22 that role I do not make decisions on behalf of ICCT. But I
23 advise the Board on issues related to environmental energy
24 and transportation policy. I recently received
25 compensation for travel payments from ICCT to attend a

1 board meeting. Thus, there is an economic interest in
2 which there would be a conflict of interest under the
3 Political Reform Act and Government Code Section 1090.

4 I will step away from my seat before the vote on
5 Item 3c, and I will return when the Public Advisor contacts
6 me to return.

7 CHAIR HOCHSCHILD: Great. Thank you.

8 Let's go ahead and take public comment on Item 3
9 at this time.

10 MS. BADIE: Good morning. The Commission
11 welcomes public comment on Item 3. If you're joining us in
12 the room we're asking folks to use the QR code and let us
13 know you'd like to make a comment on this item. And if
14 you're joining by Zoom, please use the "raise hand" feature
15 on your screen to notify us. And if you're joining by
16 phone press *9 at this time.

17 And I'm just giving that a moment. All right,
18 Bryce, I'm going to open your line. If you could please
19 spell your name for the record again. We're asking for
20 comments to be two minutes or less.

21 MR. NESBITT: Okay, excellent. Bryce Nesbitt, B-
22 R-Y-C-E, last name Nesbitt, N-E-S-B-I-T-T. And I am
23 commenting on 3b, the BART charger item, which is I think
24 around \$2.2 million for 173 charging stations. Hey, it
25 makes plenty of sense for BART stations to have charging.

1 Lots of people can't charge at home, they could charge
2 during their work time. But \$2.2 million for a guarantee
3 of only 173 charging stations is a pretty poor deal, even
4 at BART prices.

5 My background, by the way, is founder of a
6 company called NextBus working in public transit, so I know
7 about BART prices. But that's a lot of money for not a lot
8 of stations.

9 As well those stations are seen as also having
10 neighborhood-serving. And I think perhaps what's going on
11 here is that BART is looking at the wrong type of stations.
12 What makes sense for a long dwell time, where you are
13 parked for a long time, are a whole number of very
14 inexpensive slow chargers. So everyone can plug in and
15 charge slowly over the many hours that they are likely
16 going to be gone during their BART trip, rather than a
17 bunch of high-cost stations.

18 So I encourage you to look into the details of
19 this one and ask BART for more cost efficiency.
20 Essentially, at least double, perhaps four times as many
21 charging heads for that \$2.2 million.

22 I'm a technical geek on this issue. I design EV
23 charging systems professionally and load management. And
24 I'd to be happy to answer any detailed questions that the
25 Commission has on this matter. Thank you for the

1 opportunity to comment.

2 MS. BADIE: Thank you.

3 That concludes public comment for Item 3. Back
4 to you Chair.

5 CHAIR HOCHSCHILD: Okay, thank you.

6 Let's go ahead and take up a vote on Items 3a
7 through 3b, and then we'll take up to 3c separately. So
8 unless there's Commissioner discussion on those items I'd
9 welcome a motion from Vice Chair Gunda on Items 3a and b.

10 VICE CHAIR GUNDA: I move Items 3a and b.

11 CHAIR HOCHSCHILD: Is there a second from
12 Commissioner McAllister?

13 COMMISSIONER MCALLISTER: Second.

14 CHAIR HOCHSCHILD: All in favor say aye.
15 Vice Chair Gunda?

16 VICE CHAIR GUNDA: Aye.

17 CHAIR HOCHSCHILD: Commissioner McAllister?

18 COMMISSIONER MCALLISTER: Aye.

19 CHAIR HOCHSCHILD: Commissioner Gallardo?

20 COMMISSIONER GALLARDO: Aye.

21 CHAIR HOCHSCHILD: And Commissioner Monahan?

22 COMMISSIONER MONAHAN: Aye.

23 CHAIR HOCHSCHILD: And I vote aye as well. And
24 Items 3a through b pass 4-0 at this point.

25 Commissioner Monahan will exit and recuse for

1 Item 3c. And unless there are any additional comments from
2 Commissioners, I would welcome a motion on Item 3c from
3 Vice Chair Gunda.

4 VICE CHAIR GUNDA: I move Item 3c as well.

5 CHAIR HOCHSCHILD: Is there a second from
6 Commissioner McAllister?

7 COMMISSIONER MCALLISTER: Second.

8 CHAIR HOCHSCHILD: All in favor say aye.
9 Vice Chair Gunda?

10 VICE CHAIR GUNDA: Aye.

11 CHAIR HOCHSCHILD: Commissioner McAllister?

12 COMMISSIONER MCALLISTER: Aye.

13 CHAIR HOCHSCHILD: Commissioner Gallardo?

14 COMMISSIONER GALLARDO: Aye.

15 CHAIR HOCHSCHILD: And I vote aye as well. Item
16 3c passes 4-0 with Commissioner Monahan recusing. Can you
17 notify her to come back to the room?

18 CHAIR HOCHSCHILD: And then we'll go ahead and
19 get ready for Item 4. If we could have the DWR. Is
20 Delphine here?

21 VICE CHAIR GUNDA: Yeah.

22 CHAIR HOCHSCHILD: Welcome Delphine.

23 Let's go ahead and start Item 4, Information on
24 Department of Water Resources Update On Strategic
25 Reliability Reserve Investments.

1 MS. HOU: All right, good morning. Good morning
2 Chair, Vice Chair, Commissioners. I'm Delphine Hou, Deputy
3 Director of the Statewide Water and Energy Office with the
4 Department of Water Resources. Thank you for having me
5 back again. It's been fun every quarter. So I'm here to
6 provide another briefing. Go to the next slide, please.
7 Nope, it's the next slide after that.

8 All right. As part of SB -- Assembly Bill 205,
9 which created the state's Strategic Reliability Reserve I'm
10 here to provide an update.

11 So going back a little bit, there are actually
12 three parts of the Reserve and the Energy Commission
13 actually oversees two parts. One is focused on demand
14 response and the other is focused on distributed resources,
15 whereas DWR's third part, our program is focused on grid-
16 connected resources.

17 So our Electricity Supply Strategic Reliability
18 Reserve Program, or lovingly called ESSRRP, acts as an
19 insurance policy and safeguards the statewide electric grid
20 during extreme and combined events, such as heatwaves and
21 wildfires and droughts driven by climate change. The
22 program also supports California's transition to a clean
23 energy future. Next slide, please.

24 Per AB 205 DWR is requested to provide regular
25 updates at an Energy Commission meeting -- oops, sorry

1 about that problem. We are trying to provide regular
2 updates at the Energy Commission meeting for investments
3 made or under consideration.

4 Moreover, the Legislature requires the attendance
5 of the California Public Utilities Commission, and the
6 California Independent System Operator. And I believe a
7 representative from each entity is in attendance today on
8 the Zoom meeting.

9 So today is our sixth update to the CEC and we
10 expect the next update to occur early in the third quarter
11 of 2024. Next slide, please.

12 As a review there are five main eligible types of
13 projects that we can invest in. The first is an extension
14 of the operating life of existing generating facilities
15 which were planned for retirement. The second are new and
16 temporary power generators of five megawatts or more. The
17 third is generation facilities using clean, zero emission
18 fuel technology of any size to produce electricity. The
19 fourth is new energy storage systems of 20 megawatts or
20 more and capable of discharging for, at minimum, 2 hours.
21 And the fifth is reimbursement of electrical corporations
22 for the value of imports that were procured at above-market
23 costs in excess of procurement authorizations and existing
24 requirements.

25 Slide 5, please, the next slide -- sorry, Slide

1 16 in the deck.

2 So this is a grid we've shown a few times to give
3 you an idea of where the investments have been over the
4 last couple of years. For this presentation nothing has
5 changed for 2022 or 2023. But I will want to note that for
6 the firm energy import contracts we are actively completing
7 our assessment of that. The preliminary numbers coming out
8 of that is about 3,400. So similar to where we were last
9 year, but we'll run through the settlements using the CAISO
10 settlement data and have that information to you by the
11 next update. But from what we can preliminarily see we're
12 about the same as we were in 2022's procurement for the
13 firm energy imports. But other than that there were no
14 changes to what we're showing here for 2023.

15 Moving into this summer for '24 we are expecting
16 up to 291 megawatts total of emergency and temporary
17 natural gas generators. And that includes the 147.5 we had
18 from last year. And then additional ones that are nearing
19 the end of construction ready for the summer.

20 The big change, of course, is the once-through
21 cooling natural gas resources. Those three resources at
22 Alamitos, Huntington Beach, and Ormond Beach are now part
23 of the reserve starting January 1st, 2024. And as I've
24 discussed in prior presentations the units are default
25 "off" rather than available 24 hours, 7 days a week as they

1 were in the resource adequacy program. So starting from
2 now this is a very, very different and new paradigm for
3 these resources.

4 Currently DWR doesn't have any new resources
5 under consideration. We, like the rest of the industry
6 have found it difficult to move forward with new projects
7 because of increased costs, lack of interconnection, kind
8 of very high demand for non-emitting technologies such as
9 battery storage. We continue to look and we continue to
10 see where there could be opportunities. But we also need
11 to prioritize investments that do not compete with
12 facilities already planned for by load-serving entities and
13 public utilities.

14 Lastly, I want to acknowledge the considerable
15 coordination with the Energy Commission, the staff as well
16 as the leadership, Public Utilities Commission, and the
17 CAISO for developing and maintaining the state's Strategic
18 Reserve. And we are prepared for what may come for this
19 summer. So that ends my presentation. Thank you.

20 AIR HOCHSCHILD: Thank you so much.

21 Shall we open up to Commissioner discussion
22 starting with Vice Chair Gunda?

23 VICE CHAIR GUNDA: Yeah. Thank you, Chair.

24 And thank you Delphine Hou. And thanks for the
25 really incredible work you and your entire staff do in

1 making sure we operationalized these resources. I think
2 it's important to uplift the difficulty that we all
3 collectively had in choosing some of these resources. But
4 we all collectively deemed that these were important
5 resources for us to get through the next few years, as we
6 build our clean resources and dig ourselves out of some of
7 the shortcomings in 2020. But really also create pathways
8 for cleaner emergency resources, so I really appreciate the
9 work that you do.

10 So I also wanted to just kind of put some data
11 points. I think going into May we'll have a May workshop
12 on the summer outlook. And the CAISO, CPUC and DWR will be
13 there. I think we'll also get some update on hydro
14 conditions for this year, the fire conditions, and longer-
15 in-temperature forecasts. So we really get a picture going
16 into that workshop, on how the summer looks.

17 Given all things equal, it's just important to
18 kind of observe that the demand has not gone up that
19 significantly over the last three, four years, but we have
20 added thousands of megawatts to the grid, including heating
21 on 10,000 megawatts of storage. Really, those resources
22 will help offset some of the gas generation.

23 So I think we might invite the stakeholders to be
24 a part of the conversation in May, and continue to offer
25 solutions on how best to move forward in creating that

1 emergency set of resources.

2 Again I really appreciate, I'm going to say,
3 Delphine as my friend and colleague just for the incredible
4 work that you do. And thanks for kind of pulling us all in
5 this direction. Thanks.

6 CHAIR HOCHSCHILD: Great. Thank you, Delphine.
7 Yeah, Commissioner Gallardo?

8 COMMISSIONER GALLARDO: Well first a question for
9 Vice Chair Gunda. Vice Chair, that workshop that you're
10 talking about, do you have an exact date and also the
11 venue? Is that something that Energy Commission is putting
12 on?

13 VICE CHAIR GUNDA: Yeah.

14 COMMISSIONER GALLARDO: Okay.

15 VICE CHAIR GUNDA: It's the Energy Commission. I
16 think it's May 12th. I'll get back to the date. Let's say
17 by the end of this call and the meeting, we can say that.

18 COMMISSIONER GALLARDO: Okay. I feel like the
19 public is really interested in these issues and so it'd be
20 helpful to get the word out about it.

21 VICE CHAIR GUNDA: Oh sorry, May 29th .

22 COMMISSIONER GALLARDO: May 29th. Okay,
23 wonderful.

24 And I did have a question for you, Delphine. So
25 first thank you so much for the update, I really appreciate

1 that. I know it's the sixth one, it's still exciting to
2 hear what's happening. I was curious given the public
3 interest, if folks want to engage, which is the best venue
4 to be able to get the information, be able to participate
5 when it comes to the public?

6 MS. HOU: I think this is exactly the venue here.
7 So that's why I think the Legislature required DWR to
8 provide these updates. But also as Vice Chair Gunda has
9 said this is kind of an all-hands-on-deck with the various
10 energy entities to look at the state's reliability as a
11 whole.

12 So I think the annual May workshop on reliability
13 is really critical. The data is being pulled in not only
14 from the various agencies, but even within DWR there's
15 obviously this program dealing with the contingency
16 reserve. But also my colleagues at the State Water Project
17 on the hydro side, because that's another really critical
18 aspect.

19 This year is different than last year. We are
20 seeing increasing allocations, but we won't really know
21 until the end of August until we get that fresher data.
22 And that really is part of the tools in the toolkit to
23 understand where the capabilities of the state are.
24 Because unlike last year when we had so much hydro I think
25 maybe the misconception is, "There's lots of hydro, great,

1 there's lots of flexibility." But actually there isn't.
2 Because there was so much hydro we had 100 percent
3 allocation, which we had not had since 2006. And what that
4 means is the water delivery system has to deliver 100
5 percent of allocations, which means there's little, very
6 little flexibility left on the system.

7 So this year we're in a slightly different
8 scenario. We are seeing robust snowpack, for example. But
9 the State Water Project will do their assessment and figure
10 out what the allocations really are. And to the extent
11 there's more flexibility in the system that also provides
12 more capability to be able to help out in the summer. But
13 all of that really is a very sort of in-the-moment
14 operational decision. So it's one of those things that we
15 keep really close tabs on.

16 So, in the sense that the reserve is a little bit
17 easy, they're still in the ground, you can stare at it and
18 point at it. But the hydro side is a little bit of a
19 flexible moving target and we want to make sure that's part
20 of the conversation as well.

21 So yes, I would say the reliability meeting is a
22 great landing spot for folks to really understand
23 everything that the state is doing.

24 VICE CHAIR GUNDA: (Overlapping colloquy.) I
25 just wanted to add a couple of things.

1 I think the one of the support stuff on the
2 stakeholder engagement, please Delphine, I would love to
3 hear from you on any additional steps we ought to be
4 taking. But I think at this point staff are going to reach
5 out through our Public Advisor's Office to give a heads-up
6 on the reliability workshop, and there'll be information
7 presented.

8 As Delphine noted I think the conditions are kind
9 of better going into this summer. We have added more
10 resources. We kind of expect their forecasts to be
11 generally okay. And the hydro conditions are better. But
12 again, in real time, we have no idea what might hit us.

13 There's a couple of pieces. As we were --
14 especially I know this was to close your heart on the
15 decision on the OCF (phonetic) extension, one of the things
16 we mentioned and asked the staff, technical staff at CEC to
17 do, is to study the conditions necessary to not extend them
18 again. So that if it's ready will be presented soon as an
19 informational item. And I think you will get a heads-up on
20 that. And we would really like to be able to share that
21 information.

22 But I think the general tenor here is I think the
23 significant decision on developing the strategic reserve is
24 in place. It's about now making sure how we create the
25 conditions to minimize this operation and really target

1 when it's used. And I think that's being done as an
2 interagency function to really think through the policy in
3 our playbook on how do we operationalize that. But we'd
4 love to brief you on those issues.

5 CHAIR HOCHSCHILD: With that, I would -- oh
6 sorry, go ahead Commissioner McAllister, please.

7 COMMISSIONER MCALLISTER: Thanks a lot, Delphine.
8 And, really, just the partnership between the agencies that
9 you're supporting is tremendous.

10 Sort of a little bit along these lines of the
11 decision-making that hinges around the hydro resource when
12 sort of roughly -- and I'm hearing you to say obviously how
13 quickly snow melts and how late in the summer we have the
14 resource available. It depends a lot upon unknowns, and
15 we'll have to see what the weather does and everything.
16 When would you anticipate sort of if there is a timeframe
17 where critical decisions may have to be made in
18 anticipation of the August and September potential heavy
19 summer peaks? When will sort of go time potentially be?
20 Just if I could ask you to speculate a little bit on that.

21 MS. HOU: Those are great questions. I can't
22 answer for my colleagues on the State Water Project side.
23 So we'll see what the numbers come out to be kind of early
24 in spring. But it's just like you said it also depends on
25 what kind of summer we're having. Are we seeing very high

1 temperatures throughout? Does it get hot starting in
2 June? Do we get a reprieve and it's not a big deal until
3 September? I mean, we kind of naturally plan towards that
4 like September-ish peak for the last couple of years.

5 So that's where we're kind of concentrating our
6 efforts. But I think it really depends on a couple of
7 different items. Not only where California is over this
8 summer, but as we've experienced over the last couple of
9 years, where the rest of the west was.

10 So in 2022 when we really had a tremendous heat
11 wave, I think what we didn't see because we were very
12 occupied with what was going on in California is the rest
13 of the west was hot, but not as hot. And so there was
14 support from other systems throughout the west to support
15 California.

16 Last year, it was kind of a relatively
17 California, mild summer, or normal summer. But really we
18 can see that the rest of the systems outside of the state
19 were really suffering. And then when we get the data back,
20 2023 was the hottest year on record. And those other
21 systems really felt it in a very, very extreme way.

22 So I think all of that is part-and-parcel of the
23 conversation. So unfortunately I don't have a crystal
24 ball. I probably wouldn't be standing here if I did. But
25 it's a great question. I think it's one of those things

1 where, as Vice Chair Gunda said, we have this snapshot
2 going into the summer. But we constantly have to reassess
3 and reevaluate where we are because conditions change. And
4 we have to be nimble with our toolbox of what we can do and
5 whatever the scenario is that arises.

6 COMMISSIONER MCALLISTER: Yeah. Thanks.

7 CHAIR HOCHSCHILD: We are joined by Leuwam
8 Tesfai, who is the Director of the Energy Division at the
9 PUC and Elliot Mainzer, who's the CEO of the CAISO. And I
10 want to provide an opportunity for them to talk.

11 And I think let's just start with Elliot. I just
12 want to first say again, Elliott, how grateful we all are
13 for your incredible leadership and hard work at the CAISO
14 to support grid reliability successfully since you got
15 here. And all the also great hiring you've done, and it's
16 just been -- we had a meeting with you earlier this week --
17 and just the caliber of people you brought in to help
18 support on this issue is amazing. So thank you for your
19 work. And I would welcome some comments by you followed by
20 Leuwam.

21 MR. MAINZER: Well, thank you Chair Hochschild.
22 And I would just want to express my appreciation to all of
23 you. This is an important briefing on the strategic
24 reserve. Thank you to Delphine and her team for doing such
25 an excellent job of managing that. I think this is clearly

1 an important part of the transition and the focus on the
2 primacy of maintaining reliability for all Californians.
3 So we appreciate the coordination.

4 Also, as Vice Chairman Gunda said I think we are
5 definitely better prepared going into this summer. We have
6 already begun our tabletop exercises and thinking about how
7 to operate the system and these various resources,
8 absolutely, as efficiently as possible. So we can really
9 appreciate that. This is an important briefing. We will
10 have staff attending the May 29 workshop and providing our
11 latest snapshot as well in complement to all the work of
12 the state agencies.

13 So thanks again for the opportunity to
14 participate in the briefing. And I just appreciate the
15 collaboration and partnership with all of you.

16 CHAIR HOCHSCHILD: All right, thank you.

17 Leuwam?

18 MS. TESFAI: Yes, good morning. I don't have any
19 questions, but I do want to remark and thank Director Hou
20 for her diligence, as well as that of her team at the
21 Department of Water Resources on managing California's
22 Electric Supply Strategic Reliability Reserve.

23 We communicate weekly to work through details on
24 the strategy that DWR is executing. And we continue to
25 collaborate to ensure that these investments are in

1 alignment with the existing reliability enhancements that
2 the Public Utilities Commission directs through the
3 Resource Adequacy Program, and our other related
4 reliability programs.

5 I do look forward to the continued close
6 coordination between the Department of Water Resources, the
7 CEC on programs like the demand-side grid support program,
8 and the Distributed Electricity Backup Assets Program. And
9 of course, the California Independent System Operator as we
10 prepare for the summer. Thank you.

11 CHAIR HOCHSCHILD: Great. Well, thank you all
12 and thank you Delphine, appreciate it.

13 With that we'll turn now to Item 5, which is an
14 Information Item - Jobs First Collaboratives, California
15 Jobs First Council, and Jobs First Operational Plan. And I
16 welcome Derek Kirk from the Labor and Workforce Development
17 Agency to come present.

18 MR. KIRK: Good morning, Chair, Vice Chair and
19 Commissioners. My name is Derek Kirk. I serve as the
20 Assistant Deputy Secretary for Climate Economy at the Labor
21 and Workforce Development Agency and serve as Senior Staff
22 to both the Secretary of Labor and the Director of GO-Biz
23 on the new Jobs First Council.

24 So Commissioner Gallardo, thanks for the
25 invitation to come and provide this this informational

1 update to you all today. So we can go to the next slide.

2 I'd like to spend just a little bit of time
3 giving you some context. You all likely know that the
4 Governor has been invested in economic development and
5 economic growth for California for a very long time. Since
6 really his tenure serving the city and county of San
7 Francisco, through his tenure serving as Lieutenant
8 Governor, and certainly over the last several years as the
9 Governor of this state,

10 When the Governor was first elected in 2019 he
11 launched the Regions Rise Together initiative with then-
12 Director Lenny Mendonca at GO-Biz and Director Kate Gordon
13 at OPR, and Secretary Su at the Labor Agency.
14 Unfortunately, the COVID pandemic put a stop to our visits
15 across the state, but did not put a stop to the Governor's
16 commitment in investing in regional economic development.

17 So with a great surplus in 2021, the Governor
18 worked with the Legislature to champion a \$600 million
19 investment into regional economic development across the
20 state of California. This is the largest pot of funds that
21 are directly supporting economic development strategy
22 planning and pre development and implementation investments
23 that California has ever seen. We're incredibly grateful
24 for the investment.

25 And the initiative, which was at the time called

1 the Community Economic Resilience Fund has taken a variety
2 of different shapes. Over the last two-and-a-half years I
3 will personally say I have gone on paternity leave and
4 back, and traveled the state around this initiative. And
5 it's become a significant part of my life and the work
6 that GO-Biz and Labor Agency and OPR are undertaking.

7 So I want to provide you just with an overview of
8 this initiative and a couple of the key milestones. So we
9 can go to the next slide.

10 The California Jobs First Initiative is really
11 based on this idea of building a community-led, climate-
12 forward economy. I have spent my career in economic
13 development. And I can tell you that economic development
14 historically has been navigated by city and county
15 officials. No disrespect to those individuals, but it
16 hasn't been the most inclusive and open process. And we
17 haven't provided opportunities to explain to community
18 members across the state what really it is. What are we
19 talking about when we say "economy and economic
20 development?"

21 So this initiative is in partnership with our 13
22 economic regions across the state. Early on in this
23 process the three agencies collaborated with our partners
24 to divide California, everywhere from Siskiyou to San
25 Diego, and San Luis Obispo to Mono, into 13 economic

1 regions. Those regions were informed by both public
2 comment, labor market flows, and economic analysis.

3 And this initiative is really intended for the
4 state to invest in job creation, the development of an
5 industrial strategy, and creating economic development
6 initiatives to create a greener and more equitable future.
7 It is an incredibly exciting opportunity for California to
8 lead in this way, and to reshape the ways in which economic
9 development is practiced in a state as large as ours, to
10 really lead and serve as an example to states across the
11 country.

12 We'll go to the next slide.

13 So the Jobs First Initiative, this new brand was
14 launched by our leadership team in October at the
15 California Economic Summit down in Palm Springs.
16 California Jobs First is the Governor's new umbrella brand,
17 if you will, that represents our efforts to align
18 investments and maximize benefits for Californians across a
19 variety of different state agencies and departments.

20 The Governor's Office of Business and Economic
21 Development may be the only department with "economic
22 development" in its title. But there are approximately
23 nine different agencies and many, many departments, sports
24 panels, and offices within those agencies that have a role
25 to play in economic development, including all of you here

1 at the California Energy Commission.

2 This brand is intended to reflect the Governor
3 and the entire administration's priority of creating
4 climate-resilient, family-sustaining jobs for all
5 Californians in every community, particularly those that
6 have historically lacked investment and have been left out
7 of the conversation. Next slide.

8 So on March 8th of this year the Governor
9 formally announced the creation of the California Jobs
10 First Council. This council is intended to be the body that
11 will govern the new California Jobs First Initiative and
12 will provide strategic support to each of the agencies that
13 are administering programs within the California Jobs First
14 Portfolio.

15 The council includes representation from cabinet-
16 level agencies as well as the Public Utilities Commission.
17 And has a mandate to promote interagency coordination and
18 the development of this new statewide industrial strategy
19 that we're calling the California Jobs First Operational
20 Plan. And I'll mention a little bit more about that as we
21 go.

22 Even now, as we're going into a budget that is
23 not necessarily as exciting as years gone by we have a
24 really, really strategic and unique opportunity to align
25 the investments that we have across all of our state

1 agencies to imagine the ways in which we're promoting the
2 growth and sustainability of whole economies. Whether you
3 are a community in the north state that is imagining how to
4 build industry, really for the first time since the lumber
5 industry transitioned out many, many years ago. Or you are
6 in San Diego with a booming life sciences industry, but a
7 need to ensure that more individuals have access to those
8 jobs. Next slide.

9 So the Jobs First Council will include
10 representation from these folks. So the Council will be
11 co-chaired by the Director of GO-Biz and the Senior Advisor
12 to Governor Newsom. Dee Dee Myers, and the Secretary of
13 Labor and Workforce Development, Stewart Knox.

14 And will include the Director of OPR,
15 specifically, who will work to promote alignment with land-
16 use plans. I like to remind folks that in economic
17 development we don't often think about zoning, it isn't
18 necessarily the first thing in our minds. But zoning can
19 make or break economic opportunity and economic impact in
20 communities.

21 The Secretary of Natural Resources, with a
22 particular focus on representing the nature-based solutions
23 in clean energy industries.

24 The Secretary of Food and Agriculture to
25 represent the robust and critically important agriculture

1 industry in California.

2 The Secretary of Environmental Protection,
3 specifically to represent the Governor's and the
4 Legislature's commitment to the circular economy in the
5 last couple of years.

6 The Secretary of Health and Human Services to
7 represent the health care industry and promoting job growth
8 for disabled and disadvantaged workers.

9 The Secretary of Veterans Affairs to represent
10 the more than 1.6 million former service members that
11 reside in this great state, as well as the President of the
12 Public Utilities Commission to represent opportunities to
13 advance California's clean-energy workforce and
14 infrastructure.

15 So nine agencies in total will participate in
16 this conversation. And again, as well as a variety of
17 different boards, panels, offices and Commissions,
18 including your own, to really understand the ways in which
19 we can wrap our arms collectively around economic
20 development and economic opportunity in the state. Next
21 slide.

22 So the core initiative under the California Jobs
23 First brand, which is formerly the Community Economic
24 Resilience Fund, or CERF, as you may have heard it referred
25 to, is the program that has had \$600 million invested into

1 it since 2021.

2 The Regional Investment Initiative has supported
3 the establishment of Jobs First Collaboratives, are
4 regional governing bodies in each of the 13 regions across
5 the state. These collaboratives have included
6 representation, mandated representation from our offices,
7 to include business representatives, labor representatives,
8 education representatives, environmental justice
9 representatives, workforce training providers, California
10 Native American tribes, et cetera. And so we really, for
11 the first time, have built these really unique governing
12 bodies in the state to collectively work together to
13 develop a jobs-first strategy or an economic development
14 strategy for their region.

15 It has been many, many decades since California
16 has had wall-to-wall coverage of economic development
17 strategies. In fact, we're really one of the only states
18 in the nation that hasn't had wall-to-wall coverage of
19 economic development strategies, particularly in
20 partnership with the federal government. So we're really
21 excited about the opportunity to get there.

22 I will tell you most economic development
23 strategies that have been funded in California, the most
24 expensive one prior to this program cost about \$200,000.
25 We said here's \$5 million, really do the work to engage

1 community, to stand in front of grocery stores and ask
2 individuals what kind of jobs they want their children to
3 have, what type of opportunities they want their children
4 to have in these communities.

5 And so we've worked really, really diligently to
6 create a unique atmosphere for our communities, to bring
7 the economy to the people, and really reshape and reframe
8 what we're talking about when we're talking about economic
9 development.

10 So under the Regional Investment Initiative, the
11 collaboratives are actively developing their strategies
12 right now. Those are due at the end of August.

13 We also, early in March the Governor announced
14 \$182 million in investments for pre-development projects.
15 We have noticed that many, many regions lack the capacity
16 to go through things like feasibility studies, CEQA, NEPA,
17 environmental clearance, accessing permits. And thus their
18 projects have not been eligible for a lot of federal
19 funding, because the feds and the state have wanted to fund
20 ready-to-go projects. And so we're funding the risky
21 stuff, if you will, to fund some pre-development work in
22 the regions.

23 We also expect about \$270-ish million to fund
24 ready-to-go projects at the end of this work. And the
25 Governor has maintained his commitment to that investment

1 in his Jan. 10 budget proposal.

2 So these Jobs First Collaboratives are really,
3 really incredible assets in our communities that that we
4 hope that you all will be in contact with and engage with.
5 Next slide.

6 So all in, the ways in which we imagine this
7 working, I'm going to start at the bottom. The bottom 5
8 logos are a representation of the 13 collaboratives. Many
9 of them have developed their own brand names. I'm from
10 down in the Valley, so Valley Jobs First on the far right
11 is a great example of the central San Joaquin, Madera,
12 Fresno, Tulare Kings collaborating together. For those of
13 us that now live here in the capital region, we prosper
14 together as that brand. They're collaborating together to
15 develop their Jobs First strategies. And to identify
16 projects, portfolio projects that they believe will advance
17 their priority industry sectors in their communities.

18 Those strategies will be fed up to the California
19 Jobs First Council, and collectively we will adopt an
20 industrial strategy for California. That industrial
21 strategy will identify priority sectors for the state. The
22 Governor consistently reminds us that clean energy will be
23 a priority sector for the state of California, moving
24 forward as it is now.

25 And then we're going to develop a business and

1 workforce development strategy for the state which we
2 really have never had.

3 GO-Biz does incredible work on business
4 expansion, attraction and retention, because of their
5 commitment to regions. For the first time GO-Biz will lead
6 the state's effort around business development with a
7 business expansion, attraction and retention strategy. And
8 the labor agency in our departments will partner with them
9 on the workforce side to align our investments.

10 That operational plan, that industrial strategy
11 will inform the ways in which all of our departments and
12 agencies collaborate on program investments moving forward.

13 This council is not intended to circumvent
14 existing authority of departments and agencies and to
15 remove specific authorities, but rather to partner together
16 to streamline and make easier the ability for our partners
17 to access those program investments. Which we hope will be
18 guided by each of the Jobs First Collaboratives.

19 So we imagine this for those of you that are
20 visual as a cycle of investments and partnerships and
21 strategy development as they move forward. Next slide.

22 I also wanted to just note that some of you may
23 have seen the Governor signed an Executive Order on Career
24 Education in August. That Executive Order mandated the
25 creation of a new Master Plan for Career Education. That

1 master plan will be the first new master plan for education
2 since the 1960s in California. I cannot even begin to
3 imagine what that 1960s document said versus the ways in
4 which life has changed to now.

5 That master plan is largely aimed at aligning and
6 simplifying all of our education and workforce development
7 systems across the state, with the priority sectors that
8 our regions and that the state are defining. The example I
9 often give is if Kern County hasn't prioritized the life
10 sciences industry we probably don't need to prioritize
11 education and training in the life sciences industry in
12 Kern County. We want to prioritize the types of
13 investments in training and education that align with the
14 opportunities for jobs and good-quality jobs in those
15 communities.

16 The Director of GO-Biz and the Labor Secretary
17 serve as members of the Governor's Council for Career
18 Education. They're overseeing this process, and will
19 liaise back and forth.

20 We'd like to start framing this really as a
21 supply-and-demand conversation. As we think about the
22 driving of demand in job creation by business and industry
23 in California, we need to ensure that workers have access
24 and opportunity and build a robust supply side in that
25 space. Next slide.

1 So I just wanted to briefly touch on some brand
2 design and messaging. If you did not see the Governor's
3 press release on the new film and television tax credit
4 that came out this Monday, those of us that have been
5 working on this project, we're very excited to see the
6 Job's First logo on the header to just start to show these
7 programs are working in partnership and in concert
8 together.

9 So you can go to the next slide. And I just
10 wanted to briefly show you all some of the ways in which
11 this brand really represents the vision and the work for
12 the State of California. I hope that you start to see this
13 logo all over the place. Director Myers told me yesterday,
14 "I think we all need vests now. Because God knows we love
15 swag when we're doing this type of work." If we can go to
16 the next slide.

17 All of our different partners, you'll start to
18 see these types of owned assets across social media.
19 Really the drive here is the economy and economic
20 development have been so inaccessible by so many
21 individuals for so long. We need to start taking this down
22 and making this, making our words, the words that I am
23 guilty of using on the robust technical policy side, into
24 plain language so that people including my wife can
25 understand for once what I do and the types of things that

1 we're doing in economic development.

2 On the next slide you'll see some of our partner
3 assets that we are collaborating with. Many of our
4 grantees and our partners at the local level have started
5 to use the In Partnership with California Jobs First to
6 show that the state is not mandating this work; rather,
7 we're partnered with California regional economies.

8 On the next slide I believe that we'll talk about
9 some key milestones and -- or some key messaging first,
10 excuse me. So you'll start to see just some examples of
11 some of the plain language that we're using here in
12 California. And with this initiative. Things like with
13 this new model California is bringing together varying
14 elements of government to create an industrial strategy.
15 Or the engaged state agencies and departments will promote
16 a more strategic use of all of our resources, et cetera.
17 Next slide.

18 So some key milestones that I wanted to share,
19 and you can go to the next slide. We are bringing the
20 California Jobs First Council together for their first
21 official meeting next month here in Sacramento, where
22 they'll begin to work on the Operational Plan and identify
23 priority actions and equity metrics in accordance with the
24 Governor's Executive Order on Equity.

25 In October we anticipate rolling out a Jobs First

1 Council website where we will highlight all of the Jobs
2 First strategies that the regions have developed, but also
3 to highlight the portfolio of projects that we're actively
4 working to coordinate that come under the Jobs First
5 umbrella.

6 In November we'll announce the Jobs First
7 Operational Plan and Industrial Strategy and begin work on
8 implementing that strategy.

9 And then by January of 25, the Jobs First Council
10 in partnership with the departments within are going to
11 start to conduct stakeholder outreach to understand the
12 opportunities and challenges around applying for state
13 dollars. I think all of us can admit accessing state
14 resources is not necessarily the easiest thing in the
15 world. And we certainly need accountability metrics. But
16 as the Governor and the Legislature have championed things
17 like advance pay for the first time in the last couple of
18 legislative cycles, we think that there's an opportunity to
19 just further review in making sure that all of these
20 resources are accessible. Not to just the same
21 organizations every time, but to a wider swath of
22 individuals across the state. So if I can go to the next
23 slide I think that that is it for me.

24 I just wanted to say we're thrilled to be working
25 with agencies and departments like all of yours. We're

1 thrilled for the recognition that the Governor has declared
2 across the state that departments like the Energy
3 Commission and Natural Resources Agency have a critical
4 role to play in economic development. I know that many,
5 many of our regions are collaborating on the clean energy
6 industry and clean energy resources. Commissioner
7 Gallardo's work down in Lithium Valley with communities
8 like Imperial, this is a deep and important part of the
9 conversation for economic development.

10 So thanks for the opportunity to brief you all
11 today on this initiative. And I'm happy to answer any
12 questions.

13 CHAIR HOCHSCHILD: Great, thank you so much. And
14 congratulations for all your hard work and progress.

15 Let's go to Commissioner Gallardo.

16 COMMISSIONER GALLARDO: Yes, I wanted to start
17 with gratitude too, Derek, for you carving out time to
18 educate us about what's happening here. And the reason why
19 I invited Derek is first selfishly I wanted to better
20 understand how all these pieces were working together. And
21 I learned about CERF, as it was previously labeled, when I
22 was in the Imperial Valley area or Salton Sea Region
23 generally. And I kept hearing the leaders that I was
24 working with talking about this process. And they were
25 both excited about the opportunity and also anxious about

1 it, because it takes a lot of work to be able to
2 collaborate, and especially because there were counties
3 being put together. And so they had to collaborate in
4 different ways.

5 And so anyway I wanted to learn more about that,
6 so I would have a better understanding of how to do better
7 on Lithium Valley.

8 And then I thought for my fellow Commissioners it
9 would be helpful just to learn, kind of get out of our
10 energy silo and learn the bigger context of this grand
11 effort that the Governor is leading. And be able to do our
12 work within that context. And so I think this is really
13 impressive that the Governor is leading this and it is the
14 type of effort that will make generational impacts. So
15 that's why I'm also excited about it.

16 And third, I just want to make sure there was
17 alignment. We are hearing a lot from the public, from
18 people who are actively participating with us, our
19 partners, our tribes, communities, that clean energy jobs
20 are the future, if not like the present, and they want to
21 be more involved in. And we want to ensure that we're
22 meeting that moment as well. And so I think aligning
23 better with these efforts will help us as well.

24 So I do have a couple questions, but I wanted to
25 turn it over to the Commissioners to see if they had --.

1 CHAIR HOCHSCHILD: Yes, let's go to Vice Chair
2 Gunda.

3 VICE CHAIR GUNDA: Yeah, just Derek I just want
4 to begin by saying that that was a wonderful presentation.
5 Really, really helpful. And I think the way you
6 contextualize the initiative and effort seems to be an
7 extremely important part of what needs to be done. So just
8 really thankful.

9 Just a couple of kind of questions in the spirit
10 of Commissioner Gallardo's thinking around alignment. And
11 I think what I struggle oftentimes in this, is how do we
12 take the industrial and economic development of everything
13 we are doing and then package that in a way that it's
14 understandable and accessible, and solving for the
15 barriers? So kind of two or three questions for like just
16 the 30,000-foot level, how does the previous effort of just
17 transition kind of align with the work? I mean, it's just
18 an umbrella that takes over their work.

19 MR. KIRK: That's a great question. So, largely
20 yes. The California Jobs First brand is really the
21 Governor's, the embodiment of the Governor's commitment to
22 a just transition. To be quite frank, we have a
23 significant number of parties that really struggle with
24 just transition language in California. We have labor,
25 environmental justice, business industry, and it's not

1 necessarily the most plain for people to comprehend and
2 understand. So the Jobs First brand is really the
3 embodiment and the new language we're using in that effort.

4 VICE CHAIR GUNDA: Great. Awesome. So just a
5 second question. I think, generally as we begin to do our
6 policy work, right, so there are -- we talked about this as
7 a supply demand issue -- there are some fungible skills.
8 And some are like, really, those kind of -- and I think,
9 whether we go offshore wind, whether we go in long-duration
10 storage, or you go depending on technology and hydrogen,
11 right? These are important elements of this intersection
12 of economic and industrial policies with energy.

13 What is your guidance in one, ensuring that as
14 there is a development strategy on the supply that the
15 demand is actually well understood? Because some of the
16 state policies are still in flux and not exactly
17 articulated, the Legislature is still grappling with it.
18 And we're talking about here a 20-year timeframe. So just
19 would love to hear from your perspective how you're seeing
20 some challenges right now. And that could be better
21 supported through coordination, whatever, like any
22 solutions you have that can be immediately implemented?

23 MR. KIRK: Yeah. Love the question. And I'll
24 try really hard not to get super-nerdy and policy-focused
25 on this, because this is where I really enjoy sitting. So

1 when I was appointed to my position a little over a year
2 ago at the Labor Agency I had a lot of folks remind me that
3 in the late '90s, and early 2000s when we were pushing,
4 when the Presidential Administration was pushing green
5 jobs, there were a lot of individuals that left jobs like
6 truck driving. Went into solar training, finished their
7 training, only to find out there were no solar jobs for
8 them to go into. And so they ended up back in things like
9 truck driving and in other careers, because there was no
10 attention paid to aligning supply-and-demand issues.

11 And so as our regions are collaborating together
12 to identify priority sectors for example, the redwood coast
13 in prioritizing offshore wind and clean energy development
14 and jobs in Del Norte, Mendocino, Humboldt, Lake Counties.
15 We're collaborating with them across the board on the
16 Governor's Council for Career Education. Also to start to
17 get to skills-mapping exercises where we're saying you have
18 prioritized hydrogen -- as another example. Let's
19 understand the skills that are necessary for the
20 occupations in hydrogen as a subsector of energy and fuels
21 in general.

22 And how do we start to partner with our regions
23 to look at all of the skillsets across the variety of
24 industries and partner those industries together? So that
25 maybe there is several industries, subsectors of industries

1 like hydrogen and a few others where the base-level skills
2 are the same, but once you start getting into the higher-
3 level technical skills they change.

4 The challenge we've had in California
5 historically is that we go all-in on hydrogen, just as an
6 example. And we forget about the fact that one day future
7 regulatory, legislative or market policy changes might make
8 the hydrogen industry go away. And thus we lose hundreds,
9 if not thousands of jobs, and they have nowhere to go.

10 And so how do we start mapping these exercises
11 and skills and occupations together, so that in a place
12 like The Bay when we see refineries are closing or
13 transitioning to cleaner, renewable resources we can say,
14 "We know the skills map for your occupation. With this one
15 training class you become qualified in this new sector that
16 we are building and increasing capacity for in your
17 region."

18 And so really, as we start to get to priority
19 sectors we'll start sitting down together with all of you
20 and with your counterparts in other agencies and
21 departments to say, "What are the policies that you all are
22 choosing to enact? What are the market impacts that it's
23 having? And how do we start to align these resources
24 together?"

25 VICE CHAIR GUNDA: Great, thank you so much.

1 CHAIR HOCHSCHILD: Alex, we're running way, way
2 behind on the agenda. So unless it's a burning question --
3 is that okay -- we do want to say thank you so much --

4 MR. KIRK: Absolutely.

5 CHAIR HOCHSCHILD: -- for your presentation. And
6 thank you Commissioner Gallardo for suggesting that you
7 come in. Thank you.

8 MR. KIRK: Thank you.

9 CHAIR HOCHSCHILD: All right. With that we'll
10 turn to Item 7. I would ask as we do these if we could try
11 to keep the presentations really tight. Going forward, one
12 request I have for information items let's really try to
13 keep the presentation to ten minutes and then go directly
14 to our Commissioner discussion. We have a whole bunch more
15 still to go.

16 So let's go to, excuse, me Item 6 my mistake --
17 Appliance Efficiency Enforcement Waste Energy and Water
18 Calculator.

19 And colleagues, if it's okay, I was thinking just
20 because the lengthy agenda we could try to plow through to
21 12:15, then take a short lunch break and return at 1:00.
22 Does that work? Okay.

23 Go ahead. Welcome, thank you, Maunee.

24 MS. SANCHEZ: Oh, thank you. Good morning,
25 Chair, Vice Chair and Commissioners. My name is Maunee

1 Sanchez, and I'm the Manager of the Office of Compliance
2 Assistance and Enforcement. And my office is primarily
3 responsible for enforcing the Appliance Efficiency
4 Standards in California. And today I'll be presenting the
5 wasted energy and water calculator that my team recently
6 developed to quantify the wasted energy and water
7 associated with our enforcement actions. Next slide.

8 So there's no question that Appliance Efficiency
9 Standards are a highly successful policy tool to save
10 energy and water. Not only do they conserve precious
11 resources they also save consumers money on their utility
12 bills. For example, a refrigerator that's produced today
13 is bigger, better and has more features than one that was
14 made 50 years ago. Yet today's refrigerator uses a quarter
15 of the electricity and as half the retail cost.

16 Appliances sold in California that don't comply
17 with the standards waste energy and water, undermine the
18 savings intended by the regulations and rob the consumer
19 partner and dollars. Next slide.

20 My office recently created the energy and water
21 waste calculator to estimate the energy and water wasted in
22 California from non-compliant product sales that have been
23 identified through our enforcement cases and product
24 testing.

25 The calculator currently estimates waste for

1 showerheads, bath faucets and portable electric spas, but
2 we plan to add more appliance types in the near future.

3 It covers non-compliant product sales identified
4 and enforcement cases that were closed beginning in 2023.

5 Not only does it estimate the wasted energy and
6 water from actual product sales it estimates the future
7 waste that was prevented by the Energy Commission's
8 enforcement intervention and the associated savings to the
9 consumer from that waste.

10 To obtain the wasted energy and water we input
11 the energy and water consumption data generated by
12 performance testing, the number of units sold in
13 California, period of time the sales occurred, duty cycle
14 or estimated average use of the appliance, and lifecycle or
15 estimated life expectancy of the appliance.

16 With this information the calculator estimates
17 the average annual energy and water wasted per unit, total
18 lifetime energy and water wasted, future prevented waste,
19 and waterway -- excuse me -- energy and water waste savings
20 to the consumer from the prevented waste.

21 The calculator does have a few assumptions built
22 into the model.

23 The waste generated is constant throughout the
24 unit's lifetime. This is actually really conservative
25 given that products are tested when they're brand-new and

1 at peak performance, when over time performance tends to
2 decline. So if we were to test these products at the end
3 of their life they wouldn't be nearly as efficient as they
4 are when they're brand-new. But we do estimate that their
5 performance is consistent throughout its lifetime in their
6 brand-new condition.

7 To estimate the future predicted ways we assume
8 the non-compliant product sales would have continued over
9 the next five years if we hadn't intervened.

10 And lastly, the estimated life expectancy and
11 average daily use we're taking from the rulemaking staff
12 reports. Next slide.

13 So our calculator determined that the annual
14 energy wasted from the non-compliant product sales is
15 estimated to be over 18,000 megawatt hours. This may not
16 seem like much, but over the life of the product it amounts
17 to over 54,000 megawatt hours of wasted energy enough to
18 power over 5,000 American homes for one year.

19 The annual water wasted from noncompliant product
20 sales is estimated to be over 74,000 kilogallons. And over
21 the life of the products this amounts to 743,000
22 kilogallons, which is over 2,200-acre feet of water and
23 enough to supply 6,700 American homes for one year. Next
24 slide, please.

25 The future energy and water waste that was

1 prevented because of our enforcement intervention is
2 estimated to be over 90,000 megawatt hours, enough to power
3 8,300 American homes for a year and over 934,000
4 kilogallons, which is over a 2,800-acre feet of water,
5 enough to supply over 8,600 homes for one year.

6 The cost savings to Californians from this
7 prevented waste is estimated to be close to \$24 million
8 over the lifetime of the appliances. Next slide.

9 Moving forward, my office will continue to
10 generate the energy and water waste data associated with
11 our enforcement actions on an annual basis, work with
12 industry experts to refine the calculator, and incorporate
13 new appliance types when feasible.

14 I'd like to close by saying this is a new tool
15 for our office and the calculator is in its infancy. As we
16 add more appliance types, close enforcement cases, and feed
17 it more data it will grow and reflect the totality of our
18 enforcement efforts.

19 Thank you very much. This concludes my
20 presentation.

21 CHAIR HOCHSCHILD: I just want to say that was
22 fantastic. I've never seen that data before, really
23 compelling. So terrific work and a great presentation.

24 Let's go to Commissioner McAllister.

25 COMMISSIONER MCALLISTER: Yeah, just quickly.

1 Thank you, Maunee. I really appreciate it. And I'm just
2 so happy that you've put that tool together, and it'll only
3 get better as we go forward, and more comprehensive.

4 And part of the sort of motivation for it is in
5 my time at the Commission, which is roughly 12 years now,
6 we've made efforts to estimate -- and prior to that over
7 the last 20 years-plus -- we, the Commission has tried to
8 estimate the overall savings from our Appliance Efficiency
9 Standards and our Building Code. And the numbers get so
10 big and we've been doing it for 50 years. And those
11 statistics become kind of just intractable, right? It's
12 just hard to trace specific outcomes to specific
13 regulations when you have the whole world out there making
14 things complicated.

15 And so, but we know that the overall impact of
16 our appliance efficiency standards has been more than \$100
17 billion over the last 50 years. Like that's big money for
18 our economy. And more likely it's in the rough, in the
19 realm of like \$200 billion, and it's growing hugely every
20 year.

21 So this is an effort to really ground truth where
22 we're at and be more rigorous and be able to tell that
23 message more, more completely, and really give these
24 regulatory efforts their due. I mean I think that the
25 Energy Commission has made through these efforts, a huge

1 and positive impact on our state and on the world. It goes
2 full-on effects across the whole world.

3 So just you and your team are doing such amazing
4 work. I'm glad you're building tools to tell the story.
5 And I'm just really proud of all of you.

6 And I think the challenge is always to take those
7 big numbers and put them in terms that make sense for
8 actual people out there. And so with all the different
9 metrics and acre feet, and megawatt hours, we always need
10 for units that make sense to people. So I'm looking
11 forward to working with you and your team on that, going
12 forward. So thanks for the presentation.

13 CHAIR HOCHSCHILD: Let's go to Vice Chair Gunda.

14 VICE CHAIR GUNDA: Yeah, thanks, Chair.

15 Dear Maunee, thank you so much for the
16 presentation, wonderful. Again, everything that
17 Commissioner McAllister mentioned. Just one kind of ask, I
18 didn't see it when you were presenting, I think it would be
19 really helpful for us to begin to estimate the greenhouse
20 gas emission reduction opportunity.

21 I think as we begin to think about the non-energy
22 benefits of some of the appliance standards, such we're
23 going to do, I think the impact of what you're doing is
24 even more. So I just kind of flag that as an opportunity.
25 Thanks.

1 CHAIR HOCHSCHILD: Just again, thank you. And we
2 need to bring a level of intensity to this work. All
3 right, there's a huge amount of savings. And many of these
4 devices last a long, long, long time, right. And so we're
5 talking about the cumulative benefits of that. So thank
6 you for that focus and I appreciate you presenting today.

7 With that, we will turn now to Item 7, which is
8 an Update on Data Visualization and Exploration Tools from
9 Jason Harville.

10 MR. HARVILLE: All right, are we ready? All
11 right. Good morning Chair, Vice Chair, Commissioners. I
12 am Jason Harville, our Director of Enterprise Data and
13 Analytics. I lead the Enterprise Data and Analytics
14 Office, which is responsible for enterprise-level data
15 infrastructure, management, and governance. I am here this
16 morning to provide an update on our data modernization
17 efforts. Specifically, on data exploration tools and
18 visualizations.

19 But before I get to that I'm just going to take a
20 quick minute. I just realized Christine is retiring and I
21 just want to second what the Vice Chair had to say about
22 her and her team and Mike Sokol really being the first ones
23 to get into the brush with a machete and clear the road
24 towards us having some kind of way to handle terabyte-scale
25 data, which is something very few folks in this state in

1 the government sector are doing. And to be able to
2 modernize their energy infrastructure. So my job might not
3 exist today if it weren't for Christine and I just want to
4 say congrats and thank you.

5 All right, with that aside, I will do my part to
6 get us caught up and to lunch here, so slow me down if you
7 like. But let's get going. Next slide.

8 All right. Data visualization and exploration
9 tools provide many benefits to Californians. Members of
10 the public who want to see our data, want to get our data,
11 want to be able to manipulate and parse and slice and dice
12 our data, they can do so now through the public website
13 through just a web browser with no special tooling. And
14 they can download the results of that too for their own
15 purposes, without any additional time or effort from our
16 staff. It's a huge savings in time for the public and for
17 our agency, which then trickles back to the public. Next
18 slide, please.

19 To refresh your memories, Tableau and ArcGIS are
20 tools for creating interactive data visualizations that can
21 be hosted and used through a web browser.

22 For example, the screenshot on the right there is
23 our visualization on the public website for hydrogen
24 refueling stations. It allows users to filter the data
25 across a number of properties, then view or download

1 whichever subsets of the data they like.

2 As we build these tools we maintain a link and a
3 description for each on our Data Exploration Tools page,
4 which is available on our public website. And we are also
5 tracking their popularity to help measure their value to
6 the public. Next slide.

7 This table you're seeing here shows the number of
8 website use for our top five visualizations and across all
9 of our visualizations on the public website, both for the
10 last quarter and for the last 12 months.

11 As you can see the dashboards for hydrogen
12 refueling stations and new zero-emission vehicle sales came
13 in at the top, with the hydrogen refueling stations edging
14 it out just a little.

15 And in total, we had over 40,000 views to our
16 data visualizations on the public website in quarter one of
17 this year.

18 In my last update you all asked me for a live
19 demonstration how some of this works, and to see one of
20 those visualizations. So I'm going to take our winner for
21 this last quarter, the hydrogen refueling stations, and
22 give you a quick, live walkthrough. If you could go to the
23 next slide, please. And then I'll steal the screenshare.
24 Okay. Hey, it's working. All right.

25 Okay, so what we're looking at here is, there we

1 go. So to begin with as I mentioned, we have a page right
2 here available from our -- forgive me, I have a bunch of
3 popups you can't see there. There we go. Available
4 directly from the main web page here are data exploration
5 tools.

6 Page, this is the list I mentioned of all of our
7 data visualizations that are currently on the public
8 website. They're organized by subject matter. This list
9 is growing regularly and getting quite long. We're looking
10 at options for adding more sophisticated filtering and
11 searching capabilities onto this page so folks can get what
12 they're looking for more quickly.

13 But you can see in our Fuel section is Hydrogen
14 Refueling Stations. If I were to click on that it would
15 take me over to this page here.

16 Each of our visualizations has a dedicated web
17 page for it. These web pages include descriptions,
18 contexts, the links to download the data outside the
19 visualization, definitions of terms, all the things that we
20 need to meet our website accessibility requirements and
21 ensure that any member of the public can come and get the
22 information they need, regardless of how well they're able
23 to interact with the visualization itself. These are the
24 web pages that the views I just showed you apply to.

25 We can measure hits to these pages. We cannot

1 measure folks accessing the full-page version of the
2 visualization directly. So that the numbers I'm showing
3 you for the number of views are certainly undercounts,
4 because if I were to click on this full-page link right
5 here it takes me to a larger view of the visualization,
6 which is helpfully reloading, and these are the ones. If I
7 were to save this link on my on my browser and just come
8 here directly because I like the big one, we don't see
9 those views. So there's more than those 40,000 views I
10 showed you. Those are just the ones we're capable of
11 measuring because they came to that main web page for the
12 visualization.

13 So a quick overview of this one you can see.
14 Starting up at the top we have totals for different types
15 of hydrogen fueling stations in different stages of
16 development. So this visualization breaks them down across
17 the type and also whether they're planned or currently
18 operational.

19 On the far left you can see a map. This map
20 allows users to scale, or sorry, to zoom. There we go.
21 Sorry, I'm on a mouse pad which is a little wonky. But you
22 can come in here, look at individual counties, hover over
23 items, see information about the particular installations
24 or planned installations in separate counties.

25 Here in the middle is a bar chart that's broken

1 down by the type of facility we're talking about and ranked
2 in order for the most facilities.

3 Users, if they are interested in a particular
4 county, for example, can come over here and say, "What's
5 going on in our county right now, Sacramento County?" And
6 we can see we have four stations represented here: two that
7 are planned, two currently operational. You can see the
8 map is filtered down to these. This allows the user to
9 very quickly get to whatever it is they're interested about
10 in our data.

11 And then down here at the bottom, which I can't
12 quite reach my mouse, is a download button where they can
13 download the data for themselves.

14 Great, thank you. I'm going to drop the
15 screenshare. Please go back to the presentation.

16 All right. And I think my computer died. The
17 battery has been waiting, like all of us, for lunch here.
18 Can you kick me off the screenshare please and put the
19 slides back up? Apologies. This is the opposite of getting
20 us to lunch faster. Great. All right, yes I believe it's
21 where we should be.

22 Okay, great. So progress this quarter. You can
23 see on the right we currently have 31 data visualization
24 tools live on the public website. There's 7 in active
25 development, and at least 5 that I'm aware of that are in

1 some stage of prototyping.

2 Or maybe one of you all has requested the staff
3 look into it. They're out there, they're ruminating, but
4 they haven't actually entered our formal development
5 process yet.

6 As I mentioned before, in quarter one, we had
7 over 40,000 views collectively to these 31 visualizations
8 you're seeing that are live on the website.

9 And last time I updated you I also talked about
10 training. On Christmas, right around Christmas we had
11 rolled out access to a cool tool called DataCamp. We got a
12 lot of interest from staff, very fast adoption. Much more
13 than I expected and it's continued to grow. So as of, I
14 think, the first of this month we have over 300 registered
15 users from within the organization, which is a substantial
16 amount of the organization. And 1,250 hours of training
17 logged on DataCamp.

18 So that's not all visualization. It is Tableau
19 training. But there's also training in a number of modern
20 data tools like Python, SQL, R, all these types of modern
21 tooling that are going to allow our staff to interact with
22 data in our new data infrastructure. Next slide, please.

23 Okay, final slide. I had this carried over from
24 the last time, these are the goals that I laid out for
25 2024: 20 new visualization or exploration tools. You can

1 see from the numbers before, once the ones that are in
2 development are live on the website, we will have nearly 10
3 built. So we are on track, I believe, to get 20 new
4 visualizations on the website this year.

5 We are, at the same time we are working on
6 updating the processes and how we shepherd staff and these
7 visualizations through to the development to ensure we have
8 top quality, Energy Commission branding. And that we can
9 do this efficiently, quickly, so we don't get stuck down in
10 the review process and the approval process, all these
11 types of things.

12 So we have a new full-time staff member, we call
13 a Data Visualization Specialist, his name is Eduardo
14 Barraza. And he's working on this right now across the
15 board, updating our standards, our process, et cetera.

16 Currently, we're talking mainly about Tableau and
17 ArcGIS. But there is a whole world of tools out there to
18 visualize data and to give interactive access to data.

19 So as we mature in our usage of the two main
20 tools we're using now we're also looking at other tools,
21 starting this year with Microsoft's Power BI. It's a
22 built-in data visualization tool that operates right within
23 the Office 365 environment that we're all familiar with, we
24 all know and love, and mostly love.

25 And finally, all of this, all of these fancy

1 tools in this new infrastructure depends on our ability to
2 take our data from wherever it is currently and however
3 currently gets there and to get it into our new modern
4 cloud-based data architecture. And what this means,
5 effectively, is building new data pipelines, re-designing
6 how data is submitted to us, how it comes in and is
7 automatically processed, where it's stored. And then
8 ultimately, from there we can serve it through all these
9 great tools and use cases and folks who are doing analysis
10 and all that. So we are continuing to work on that.

11 We are making good progress in standing up the
12 new data engineering unit, and that is going to be their
13 bread and butter for probably quite a few years to come as
14 we migrate all of our existing data sources to the cloud.

15 CHAIR HOCHSCHILD: Great. I just wanted to begin
16 by saying thank you, again, for all the work. And we have
17 this vast new universes of data that we have access to.
18 But making it accessible and usable and relevant for people
19 is a top priority.

20 And I would just want to say from my perspective
21 any conferences that you can attend or your team that are
22 focused on this, I really support. Let's learn the very
23 best practices.

24 I'm also interested in any other agencies inside
25 or outside of California or in Europe or elsewhere that are

1 doing amazing things with this, these kind of renderings.
2 We want to be pushing the envelope and really be doing the
3 best we can.

4 So let's open up to a Commissioner discussion.
5 Commissioner McAllister.

6 COMMISSIONER MCALLISTER: Jason, thank you. I'm
7 just breathing a huge sigh of like satisfaction I guess.
8 That's a lot of work ahead. But just being where we are is
9 a testament to all the effort that you've put in over the
10 years.

11 And I just will also call out Christine for
12 having managed the first, the interesting consulting
13 project that got us into this and I think opened our eyes
14 to what it was going to take. And in sort of helping at
15 least to find some scope to move forward.

16 And then I want to call out Drew as well for
17 really taking this idea and running with it to re-modernize
18 the Energy Commission. And how we looked at, how we
19 intake, how we use, and how we provide now data to the
20 world. I think it's just fabulous.

21 I was going to sort of go one step in the
22 direction the Chair just said, I think we're positioned to
23 be really a leading state agency on this. And some other
24 agencies would really love to know what we're doing. And
25 maybe that's true, like GovOps or -- but some interagency

1 coordination, so that you can get in front of other
2 agencies and say and then let them know what we're doing.
3 And so maybe some of that's happening already, but I think
4 we can be intentional about that. And it would create a
5 lot of good out there in the world.

6 And then so hugely, hugely impressed with all
7 these tools. I thought, and I think it's confirmed, that
8 staff creativity has now a place to go to really manifest
9 the expertise that we have in the building, which is just
10 world class, and show the world that that's what it is and
11 to help the world benefit from it. So just incredible.

12 I'm also really looking forward to not just the
13 sort of public-facing data, sort of data visualization,
14 fully developed data visualizations, but also enabling
15 access to the data in secure ways. And ways to protect the
16 PII, et cetera, to sort of more sophisticated clients that
17 need it like local governments, right, for climate
18 planning. And we've made a lot of progress together with
19 Legal on that. I think I'm really looking forward to
20 getting that up and running ASAP as well. And again,
21 that'll just permeate and create tons of good.

22 So a lot of really wonderful stuff is revolving
23 around you. I know there's a lot of detailed work and a
24 lot of active management that you're doing to make it all
25 happen and just want to thank you for all the all the hard

1 work. It's really producing amazing results. Thanks,
2 yeah.

3 CHAIR HOCHSCHILD: Vice Chair Gunda.

4 VICE CHAIR GUNDA: Yeah, thanks, Chair.

5 And just some time, I'm going to keep it short.
6 I just completely want to agree with everything
7 Commissioner McAllister said and just a few things. Just
8 kind of uplifting, this is one of four critical foundations
9 of our mission. Data transparency, and being able to
10 really help with what's happening, how are we describing
11 the data. So thank you for all the work, Jason. I think
12 you've been pivotal.

13 Second, Christine, I want to just uplift the
14 Executive Office's support for your shop and making it
15 happen.

16 And just close with Commissioner McAllister,
17 thank you for your leadership as well. Thanks.

18 CHAIR HOCHSCHILD: Thank you, Jason.

19 Oh, do you want to --

20 COMMISSIONER MONAHAN: Well, Jason, I appreciate
21 that. I think it was me that requested some of the
22 walkthrough and some of the data on the use and it was
23 really interesting to see. I'm curious about that,
24 transportation is really a big area of focus. And I think
25 it was the first of the ZEV dashboards I give Vice Chair

1 Gunda credit for being the visionary on that piece. And
2 just really wonderful to see how much the public is using
3 it, it's not just me.

4 CHAIR HOCHSCHILD: It's not just you.

5 MR. HARVILLE: Well, 10,000 of those might have
6 been you. (Laughter.)

7 CHAIR HOCHSCHILD: Yes, 10,000 of those
8 (indiscernible) --

9 COMMISSIONER MONAHAN: 10,000 is really good.

10 CHAIR HOCHSCHILD: Exactly. Thank you, Jason.
11 Great work.

12 All right. We'll turn now to Item 8, Federal and
13 Administrative Updates Rulemaking, Carlos Baez.

14 MR. BAEZ: Hello. Good morning, Chair and
15 Commissioners. My name is Carlos Baez and I'm an Energy
16 Commission Specialist 2 in the Appliances Branch. Also
17 with me are Peter Strait, Michael Murza, and Tanner Kelsey
18 from the Energy Commission.

19 I am here today seeking adoption of Rulemaking
20 Docket 22-AAER-04 regarding the Title 20 Appliance
21 Efficiency Regulations. This is for the Federal and
22 Administrative Updates Rulemaking. Next slide.

23 The purpose of this rulemaking is to provide
24 federal alignment and administrative updates to Title 20,
25 often referred to as California's Appliance Efficiency

1 Regulations.

2 These regulations contain mandatory requirements
3 for both federally regulated and state-regulated appliances
4 to provide manufacturers, distributors, retailers, and
5 consumers of appliances with a clear and comprehensive set
6 of requirements in a single location.

7 This rulemaking does not propose new energy or
8 water efficiency standards for any appliance, nor does it
9 propose to increase the stringency of any existing state
10 appliance standards. Next slide.

11 This rulemaking results in changes that ease
12 compliance for manufacturers and other regulated parties by
13 providing clarification changes to Title 20, eliminate
14 duplicative and outdated information, and ensure that Title
15 20 reflects up-to-date state and federal appliance
16 regulations in a single location. The rulemaking process
17 is collaborative. And public feedback was received and
18 considered during an initial 45-day comment period, a
19 public hearing, and a 15-day comment period. Next slide.

20 Here's an overview of the specific types of
21 changes involved in this rulemaking. Most of the proposed
22 edits are to align with current Department of Energy
23 regulations.

24 As mentioned earlier, California's Title 20
25 includes both state and federal requirements for

1 appliances. Rulemakings like this one are needed to
2 incorporate new or updated federal requirements into Title
3 20.

4 The proposed changes involve edits to the
5 information listed for some federally regulated appliances
6 in order to match exactly what is shown in current federal
7 law.

8 Next are changes to update and streamline the
9 CEC's product compliance review and administrative
10 proceedings relating to enforcement. Next slide.

11 Continuing, this rulemaking contains updates to
12 the data submittal requirements for certain appliances.
13 This relates to the certification process involving the
14 Modernized Appliance Efficiency Database System.
15 Manufacturers submit their appliance models to the database
16 to demonstrate compliance with the regulations.

17 These changes are needed to properly align the
18 data fields required for certification with the most
19 current testing and performance requirements for those
20 specific appliances.

21 Next, is a change related to the marking
22 requirements for commercial and industrial fans and
23 blowers. The redundant font size requirement is proposed
24 to be removed.

25 And lastly, there are proposed changes that

1 provide clarifying edits, numbering and cross-reference
2 updates and other edits to ensure consistent formatting and
3 terminology throughout Title 20. Next slide.

4 Staff recommends adoption of Rulemaking 22-AAER-
5 04 regarding the amendments to the Title 20 Appliance
6 Efficiency Regulations. Also recommended is adoption of
7 staff's determination that this action is exempt from CEQA.

8 Thank you for your time today, we are available
9 to answer any questions.

10 CHAIR HOCHSCHILD: Thank you so much, Carlos.

11 With that let's go to public comment on Item 8.

12 MS. BADIE: Good afternoon. This is Mona Badie
13 the Public Advisor. The Energy Commission welcomes public
14 comment on Item 8 at this time. If you're joining us in
15 the room we're asking folks to use the QR code. We'll also
16 take a wave of your hand. And if you're joining us on
17 Zoom, please use the "raise hand" feature on your screen,
18 it looks like an open palm. And *9 if you'd like to raise
19 your hand and you're joining us by phone.

20 So I'll just give that a moment. And I'm not
21 seeing any raised hands, back to you Chair.

22 CHAIR HOCHSCHILD: Okay with that let's go to
23 Commissioner discussion starting with Commissioner
24 McAllister.

25 COMMISSIONER MCALLISTER: Very well. Thank you

1 very much, Carlos. I've obviously been overseeing this.
2 And this is kind of a function of our leadership. It is
3 our part of our responsibility to circle back periodically
4 and ensure alignment with the feds. And I think you did a
5 great job of presenting that.

6 And we cover a lot of ground and just want to
7 make sure that stakeholders have what they need.

8 And I want to just thank the stakeholders
9 actually, as well for bringing us -- raising flags where
10 we're out of alignment. And sort of helping us populate
11 the updates that are needed in this rulemaking.

12 Just really is an example of good government.
13 Our team is out there paying attention and fixing, updating
14 what needs to be updated, fixing what needs to be fixed.
15 And this is really pretty workaday stuff that is I think a
16 function of the fact that we're out leading in a lot of
17 ways and need to maintain alignment actively with DOE. So
18 I'm in strong support of this item.

19 And if there's no other comment I can move it.

20 CHAIR HOCHSCHILD: There was --

21 COMMISSIONER MCALLISTER: Oh, but there's one
22 other?

23 CHAIR HOCHSCHILD: -- another public comment, is
24 there?

25 MS. BADIE: I'll check.

1 CHAIR HOCHSCHILD: Okay, let's stand by for
2 (indiscernible)

3 COMMISSIONER MCALLISTER: (Overlapping colloquy.)
4 We may have public comment, so hold on one sec.

5 CHAIR HOCHSCHILD: Okay. Thank you.

6 And then colleagues when this is done I'd like to
7 move to Item 9 and then break for lunch if that's okay.

8 MS. BADIE: Laura Haider, we saw your hand raised
9 and then lowered and raised again and I didn't know if you
10 want to comment on this Item 8. I'm going to open your
11 line. If it was raised by mistake just let us know and
12 then we'll move on. Laura, are you --

13 MS. ROSENBERGER HAIDER: Hello, this is Laura
14 Rosenberger Haider. I wanted to restore the AC heat pump
15 replacement requirements in Title 24 terms. I don't know
16 if it's in agenda item --

17 CHAIR HOCHSCHILD: Sorry. Yeah, they have
18 different --

19 MS. ROSENBERGER HAIDER: (Overlapping colloquy.)
20 (Indiscernible) winter from my landlord's gas heater.

21 CHAIR HOCHSCHILD: -- different item. And I
22 apologize.

23 Let's return to Item 8, I think if you wanted --

24 COMMISSIONER MCALLISTER: That might have been a
25 public comment. They might have missed the opportunity for

1 public comment earlier.

2 CHAIR HOCHSCHILD: (Overlapping colloquy.) Yeah,
3 I don't think we have any further public comment on that.
4 So but we'll take that up at the next Commissioner meeting.

5 COMMISSIONER MCALLISTER: Okay, yeah.

6 CHAIR HOCHSCHILD: So let's return, if we could,
7 to Item 8. Commissioner McAllister, I welcome a motion on
8 this Item 8.

9 COMMISSIONER MCALLISTER: Sure. I'll move Item
10 8. Move Item 8.

11 CHAIR HOCHSCHILD: Okay. Is there a second from
12 Vice Chair Gunda?

13 VICE CHAIR GUNDA: Yes, second.

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

16 COMMISSIONER MCALLISTER: Aye.

17 CHAIR HOCHSCHILD: Vice Chair Gunda?

18 VICE CHAIR GUNDA: Aye.

19 CHAIR HOCHSCHILD: Commissioner Monahan?

20 COMMISSIONER MONAHAN: Aye.

21 CHAIR HOCHSCHILD: And Commissioner Gallardo?

22 COMMISSIONER GALLARDO: Aye.

23 CHAIR HOCHSCHILD: And I vote aye as well. Item
24 8 passes unanimously.

25 We'll turn now to Item 9 --

1 COMMISSIONER MCALLISTER: Thanks, fellas.

2 CHAIR HOCHSCHILD: -- C Note Limited
3 Partnership's Application for a Solar Photovoltaic
4 Exception Determination.

5 MR. SAEED: Hi. Good morning, Chair, Vice Chair
6 and Commissioners. My name is Muhammad Faisal Saeed. I'm
7 the Senior Electrical Engineer of the Building Standards
8 Branch in the Efficiency Division. I am here to request
9 approval of the C Note Limited Partnership's Application
10 for a Solar Photovoltaic Exception Determination under
11 Section 10-109(k) of the 2019 Energy Code. Next slide,
12 please.

13 Section 10-109(k) benefits California by ensuring
14 that the PV requirements in that 2019 Energy Code only
15 apply when the public agency rules are consistent with
16 CEC's cost-effectiveness determinations.

17 This item provides code flexibility by
18 recognizing the high costs, different agency rules and
19 other analytical circumstances encountered by C Note
20 Limited Partnerships Benjamin project. Next slide, please.

21 To provide background the 2019 Energy Code became
22 effective on January 1st, 2020, and required rooftop solar
23 PV on all newly constructed, low-rise multifamily
24 buildings.

25 As part of the PV adoption Section 10-109(k)

1 authorizes the CEC to determine that the PV requirements do
2 not apply to certain buildings when public agency rules are
3 inconsistent with CEC's cost-effectiveness determinations.
4 Examples of differences include lower electrical rates, net
5 energy metering rules, high interconnection fees and other
6 high costs. This is the first cost-determination
7 application on a project level. Next slide, please.

8 C Note Limited Partnership's property developers
9 submitted an application to the CEC requesting a
10 determination regarding whether the solar photovoltaic
11 system requirements should apply to the Benjamin project, a
12 108-unit, low-rise multifamily project located within the
13 City of Lodi, San Joaquin County, permitted under the 2019
14 Energy Code.

15 The Applicant claimed that the cost of the PV was
16 high because the City of Lodi doesn't offer virtual net
17 energy metering, which forces the applicant to install
18 individual PV systems for each applicant for each dwelling
19 unit.

20 Also, the Lodi electric utility charges unusually
21 high interconnection fees.

22 Other unique characteristics of this project also
23 contributed to the higher costs. For example, the flat
24 roof required a relatively expensive PV support system.

25 As a result of all these considerations the

1 lowest cost bid for the PV design came to more than \$7.32
2 per watt, which is way higher than the cost consideration
3 by the Commission when the PV requirements were developed.
4 Next slide, please.

5 Staff conducted an analysis of the Benjamin
6 project, published a staff report, and received comments
7 from three stakeholders as well as responses from C Note
8 LP. The benefit-to-cost ratio from our analysis for the
9 Benjamin project was 0.93. This indicates that the solar
10 PV is not cost-effective under Lodi's net energy metering
11 rules for low-rise multifamily buildings.

12 Staff received various comments from different
13 stakeholders about the staff report in the docket. All
14 those comments were responded by the applicant in the
15 docket as well. Next slide, please.

16 Staff therefore recommends that the CEC should
17 approve the order that this project is exempt from
18 California Environmental Quality Act, CEQA, as the as the
19 proposed determination would have no significant effect on
20 the environment.

21 Also, City of Lodi's rules such as not allowing
22 virtual net energy metering, VNEM, and high interconnection
23 fees make the PV requirements not to be cost-effective.

24 As a result, solar PV requirements of the 2019
25 Energy Code solar PV requirements do not apply to the

1 Benjamin project in C Note Limited Partnership's
2 application.

3 Also staff highlights that this project has
4 unusual characteristics which uniquely apply including high
5 interconnection fees and the requirements of a production
6 meter and an AC disconnect for each dwelling unit, and
7 therefore is not representative of low-rise multifamily
8 buildings in California. Thank you.

9 CHAIR HOCHSCHILD: Great. Thank you. Let's go
10 to public comment on Item 9.

11 MS. BADIE: Good afternoon. The Commission
12 welcomes public comment on Item 9 at this time. If you're
13 in the room with us, we're asking folks to use the QR code.
14 Also take a raised hand in the room. And if you're joining
15 by Zoom please use the "raise hand" feature on your screen
16 it looks like an open palm. And if joining by phone,
17 please press *9.

18 All right, we don't have any comments in the
19 room, so I'm going to transition to Zoom. CALSSA I'm going
20 to open your line. If you could please state and spell
21 your name for the record. We're asking for comments to be
22 two minutes or less.

23 MR. HEAVNER: Yes. Hello, this is Brad Heavner
24 with the California Solar and Storage Association, CALSSA.
25 Brad, B-R-A-D, Heavner, H-E-A-V-N-E-R. We support staff's

1 recommendation in this case, and we're really appreciative
2 of staff's work on this on this project. They've been both
3 dedicated to making sure that they're trying to make the
4 project work. And also being reasonable for both the
5 developer and the solar side.

6 As staff mentioned it was a combination of forces
7 in this particular project, not just the lack of virtual
8 crediting, but a combination of requirements from both the
9 utility and the low-level jurisdiction made this project
10 unusually expensive.

11 But I'd like to say that we didn't do a good
12 enough job early enough to work through those obstacles.
13 And we still believe that it's possible to do a project
14 exactly like this cost-effectively. But we didn't jump in
15 early enough to address the obstacles. There may have been
16 opportunities to relax some of the requirements on both the
17 utility and the local jurisdiction side. In retrospect,
18 those should have been pursued early on and we failed to do
19 so.

20 Installing solar at multifamily sites with
21 individual tenant interconnections is relatively new, but
22 there are multiple technical solutions and those are
23 becoming more common and cost-effective.

24 This Benjamin project has been a learning
25 experience not just for CEC staff, but for us. And I think

1 in the future we'll be able to respond more quickly and get
2 -- make sure that the bids can come in that are deemed
3 cost-effective, or at least work harder earlier to make
4 that happen.

5 So we certainly don't like exceptions to the
6 solar requirements, but we do in this case support staff
7 recommendation. Thank you.

8 MS. BADIE: Thank you.

9 Next we'll hear from Laura Haider. Laura I'm
10 going to open your line. If you could please spell your
11 name for the record. We're asking for comments to be
12 limited to two minutes or less. Laura, your line is open.

13 MS. ROSENBERGER HAIDER: My name is Laura
14 Rosenberger Haider, L-A-U-R-A, Haider H-A-I-D-E-R. I'm
15 opposed to the solar voltaic exemption, because we aren't
16 going to meet, make our carbon-reduction goals. And the
17 other means are not going to work either to reduce the
18 carbon to what your goals are.

19 And there's not enough solar jobs right now, so
20 we need more solar panels installed, right. Thanks.

21 MS. BADIE: Thank you.

22 Next we'll hear from Bronte Payne. Bronte I'm
23 going to open your line. If you could please spell your
24 name for the record. We're asking for comments to be two
25 minutes or less.

1 MS. PAYNE: Hi. I'm Bronte Payne with SunPower.
2 It's B-R-O-N-T-E P-A-Y-N-E. I'm the Senior Policy Manager
3 covering new construction at SunPower. We are one of the
4 nation's leading providers of residential and multifamily
5 solar and battery storage and energy services. We
6 currently serve more than 550,000 residential customers
7 across the U.S. And we work directly with customers, but
8 we also work with homebuilders and multifamily developers
9 to install solar and storage in new construction projects.

10 And I support the comments made by Brad Heavner
11 at CALSSA. We similarly support this proposed order from
12 staff to provide an exemption to the Benjamin apartments.
13 We think that there are really unique circumstances for
14 this specific project that warrant an exception. But don't
15 think that this should be viewed as precedent-setting for
16 other projects, too. We don't think exceptions should be
17 widespread.

18 As Brad mentioned, whether it was requirements
19 from the utility at Lodi or the local authority having
20 jurisdiction, there were several things that made this
21 unique project more expensive. In addition to the timing
22 of the quotes, which were received between November 2022
23 and May 2023, a time of unusually high cost from
24 everything; from solar to building materials, to things
25 like racking or copper wiring.

1 And I would say in addition to the comments that
2 Brad made, even in utilities where you have to do an
3 individual interconnection to each tenant meter, solar is
4 incredibly cost-effective and can still provide the savings
5 benefit to tenants to uphold the solar requirement. So
6 while we support this exception for this unique project we
7 think, broadly, even in utilities with similar policies
8 this type of solar is incredibly cost-effective.

9 MS. BADIE: Thank you.

10 That concludes public comment. Back to you,
11 Chair.

12 CHAIR HOCHSCHILD: Okay. Commissioner
13 McAllister.

14 COMMISSIONER MCALLISTER: Okay, great. Well, so
15 this has been a real -- I think you've heard from the
16 commenters -- a real learning experience for everyone
17 involved.

18 And first of all, I just want to give a thanks
19 and incredible kudos to you, Muhammad, and the team for
20 creating an environment that can really forge consensus,
21 use a boundary case like this as a learning experience, and
22 really create a platform for solving some of these
23 challenges going forward. And I really appreciate Mr.
24 Heavner and Ms. Payne is well. Thanks for your comments
25 and your partnership on this and developing this

1 discussion, to come out and land where we are.

2 And I'll just say this is exactly, this kind of
3 project, is exactly why we created the exemption language
4 in the code that we did and in the way we did, to enable an
5 exception to be granted where it was warranted. And so it
6 did set off a lot of alarm bells, both in this building and
7 out there in the in the stakeholder community. And just
8 rolling up the sleeves, working together, and putting facts
9 on the table and working through the issues just gets us to
10 a good result.

11 And I think it's demonstrating that we do have
12 improvement that needs to be made to come on getting costs
13 down, on creating new technology solutions, really helping
14 solar penetrate ever deeper into the building stock. So
15 this is a case of new construction, but I think across the
16 solar market we could say something similar.

17 So with that I just, without dwelling too much, I
18 just want to really hold up the staff and all the
19 stakeholders who worked on this. Lots of interaction, lots
20 of back and forth, and some sweat along the way that
21 really, I think, forged a great group to work on this going
22 forward.

23 So thanks, Muhammad, to you and the whole team.
24 And Bill Pennington, I'll call him out as well. He's
25 always been in the middle of this issue for a long, long

1 time, too. So thanks.

2 CHAIR HOCHSCHILD: Vice Chair.

3 VICE CHAIR GUNDA: Thanks, Chair.

4 Muhammad, thank you for that presentation. I
5 Just want to attach my comments to what Commissioner
6 McAllister said. I think the code takes a very careful
7 process in ensuring that there is embedded wisdom on both
8 kind of our north star of the target, where we need to get
9 to, and how do we create certainty to allow for scale and
10 cost-effectiveness to occur from the market. But also
11 thinking about these extraordinary conditions and
12 situations.

13 So I think I want to continue to advocate for
14 everything we can do as an agency to develop the conditions
15 necessary for cost-effectiveness of this, whether it's
16 clarity on the policy goals, alignment of our incentives,
17 whatever that might be, while also balancing with the
18 realities on the ground.

19 So I just want to appreciate the thoughtful
20 approach here. And also support the comments that have
21 been made and look forward to supporting this issue.
22 Thanks.

23 CHAIR HOCHSCHILD: Thanks. So unless there's
24 other comments -- oh sorry, Commissioner Monahan.

25 COMMISSIONER MONAHAN: I'll be very speedy. Just

1 Muhammad, I appreciated the briefing that we had and some
2 of the responses to questions and just the uniqueness of
3 the situation. And I think that you, several things you
4 said reassured me, which, one, was that in every cost-
5 effective you ran different sort of scenarios, I would say,
6 and they always came out the same. And so that was
7 reassuring.

8 Also looking forward to this report that you'll
9 be publishing that we'll look at across the state with
10 POU's, kind of the different factors that are going to go
11 into this cost-effectiveness and how much it varies across
12 the state. And I think there's a lot of work to be done to
13 support POU's as we move towards clean energy deployment to
14 help them meet state goals.

15 CHAIR HOCHSCHILD: Unless there's other comments,
16 Commissioner McAllister I'd welcome a motion from you on
17 Item 9.

18 COMMISSIONER MCALLISTER: I'll move Item 9.

19 CHAIR HOCHSCHILD: Okay. Is there a second from
20 Commissioner Monahan?

21 COMMISSIONER MONAHAN: I second.

22 CHAIR HOCHSCHILD: All in favor say aye.
23 Commissioner McAllister?

24 COMMISSIONER MCALLISTER: Aye.

25 CHAIR HOCHSCHILD: Commissioner Monahan?

1 COMMISSIONER MONAHAN: Aye.

2 CHAIR HOCHSCHILD: Vice Chair Gunda?

3 VICE CHAIR GUNDA: Aye.

4 CHAIR HOCHSCHILD: Commissioner Gallardo?

5 COMMISSIONER GALLARDO: Aye.

6 CHAIR HOCHSCHILD: And I vote aye as well. Item
7 9 passes unanimously.

8 We will adjourn for lunch. We'll recess for
9 lunch and return at one o'clock.

10 (Off the Record at 12:17 p.m.)

11 (On the Record at 1:00 p.m.)

12 UNKNOWN SPEAKER: We are now live and recording.

13 CHAIR HOCHSCHILD: All right. Welcome back from
14 lunch, everyone.

15 We will resume with Item 10, Electric Program
16 Investment Charge 2023 Annual Report. I welcome Rachel
17 Salazar to present.

18 MS. SALAZAR: Good afternoon Commissioners. I'm
19 Rachel Salazar. And I work in the Research and Development
20 Division. I'm seeking approval of the 2023 EPIC Annual
21 Report, which I'll quickly summarize here today.

22 Next slide, please. Oh, I don't see
23 (Indiscernible.). All right, can we? Yes, thank you.

24 In 2011 the CPUC established EPIC to fund
25 research, development and deployment of advanced clean

1 energy technologies that support the state's electrical
2 grid. The CPUC administers EPIC jointly with the three
3 largest investor-owned utilities PG&E, SCE and SDG&E, whose
4 ratepayers fund the program. As such, all projects must
5 benefit these ratepayers.

6 Last year the CPUC adopted a mission statement to
7 ensure that ratepayers have equitable access to safe,
8 affordable, reliable and environmentally sustainable
9 energy. Next slide, please.

10 The report follows a different format than in
11 prior years and focuses on progress towards the strategic
12 objectives and initiatives, which have become the
13 foundation of how the CPUC wants to develop investment
14 plans and measure success under EPIC.

15 While reportable projects received funding from
16 all four investment plans for the purposes of this report
17 we focused on progress towards the most recent objectives
18 and initiatives as outlined in EPIC 4.

19 The report also provides summaries of challenges
20 experienced in projects and staff coordination efforts.

21 Next slide.

22 Here is a quick summary of the CEC's total
23 approved funding per investment cycle. Note the increase
24 in funding between EPIC 3 and 4, largely due to the longer
25 investment cycle of five years. Next slide.

1 Some of the accomplishments achieved over the
2 span of the program include awarding \$1.2 billion to over
3 500 projects, over \$10 billion of private investment was
4 secured by recipients. And 41 EPIC-funded startups
5 performed successful exits through mergers and acquisitions
6 after receiving support from the program. Next slide,
7 please.

8 In 2023, EPIC awarded nearly \$90 million in new
9 agreements. And active projects were able to attract \$463
10 million in government follow-on funding stemming from
11 federal and other state agencies.

12 And since 2012 nearly 60 percent of total TD&D
13 investments have been made to non-combustion projects that
14 were both located in and benefiting disadvantaged and low-
15 income communities.

16 Additionally, over \$21 million in cumulative TD&D
17 investments went to projects located on tribal lands. Next
18 slide.

19 Here are some examples of benefits, which include
20 investing half of EPIC funds to small and medium-sized
21 businesses, awarding more than 50 projects to teams that
22 include a diverse-led business entity either as a prime or
23 subcontractor. Decreasing energy costs by about \$1.5
24 million as reported by recipients for 18 projects. And
25 avoiding 17,000 tons of greenhouse gases in another 18

1 projects. This is comparable to removing over 4000 gas-
2 powered vehicles from the road in a single year. Next
3 slide.

4 Turning now to progress towards EPIC 4 strategic
5 objectives, the first one focuses on advancing renewable
6 energy technologies to support SB 100. Some key successes
7 include investing \$21 million in 7 new projects to develop
8 and test environmental monitoring technologies and
9 components for offshore wind.

10 And another project includes RCAM's 3D printing
11 of concrete tower sections, shown here at the top, for
12 large wind turbines to help lower costs.

13 And also successfully demonstrating a lithium
14 recovery pilot using geothermal brine, which is showing
15 greater efficiency over conventional methods. Next slide.

16 Moving on, the second objective aims to develop
17 zero-carbon resources, increased load flexibility,
18 expedited grid modernization, and advanced cybersecurity to
19 maintain a flexible and reliable grid.

20 Successes here includes selecting three projects
21 totaling over \$26 million for long-duration energy storage
22 awards that help improve grid reliability and resilience
23 for under-resourced communities and tribes.

24 Also, projects with OhmConnect, Polaris Energy,
25 whose system is here on the left, and AgMonitor contributed

1 a combined total of 56 megawatts worth of additional load
2 reduction during last summer's grid-stress events. Next
3 slide.

4 This next objective focuses on advancing
5 distributed energy resources for both customers and the
6 electric grid.

7 The CEC invested in a variety of demonstration
8 and deployment projects in 2023, including four Next EPIC
9 Challenge Phase II projects, aiming to build new, mixed-use
10 developments that are zero-carbon resilient and grid-
11 responsive.

12 Collectively, the plans include 733 affordable
13 housing units with energy-efficient and sustainable
14 building designs, and state-of-the-art appliances that can
15 help residents realize an electricity bill savings of up to
16 100 percent. Here I've included Mutual Housing's rendering
17 for a new senior housing development in Stockton.

18 Additionally, the Redwood Coast Airport Microgrid
19 serves as PG&E's first fully renewable, multi-customer,
20 front-of-the-meter microgrid. Located in the far north of
21 the state, the microgrid provides automatic and seamless
22 islanding and backup power to two critical facilities, an
23 airport and a local U.S. Coast Guard Air Station, which
24 supports search-and-rescue for the nearly 250 miles of
25 rugged, mostly rural coastline.

1 In 2023 the microgrid was able to island during
2 the 8 separate power outages for up to 17 hours at a time.

3 Following on this success PG&E is using the
4 project as a model for two of its programs aiming to help
5 other communities deploy similar solutions. Next slide.

6 Objective 4 focuses on advancing promising
7 innovations that aid in industrial and building
8 decarbonization, addressing the hard-to-decarbonize
9 processes and components.

10 Key successes include General Engineering &
11 Research finalizing their magnetic refrigeration prototype,
12 pictured here, targeting the electronics industry where
13 manufacturing includes energy-intensive cooling processes
14 and requires temperatures near absolute zero. General
15 Engineering aims to cut energy consumption by up to half of
16 traditional cooling methods.

17 Additionally, UC Davis's affordable low and
18 ultra-low Global Warming Potential heat pumps, one of which
19 includes an ultra-low solution incorporating an innovative
20 heat exchanger in the secondary loop for improved
21 efficiency. The team won research journal ASHRAE's Best
22 Paper Award and was selected by ARPA-E to demonstrate their
23 technology in data centers. Next slide, please.

24 The CEC funded several activities in alignment
25 with the fifth objective, which aims to provide new

1 entrepreneurs with access to the resources needed to propel
2 promising innovations to the marketplace.

3 This included providing almost \$20 million to 7
4 projects in the latest round of RAMP funding awards, aimed
5 at advancing manufacturing from hand-built prototypes to
6 products that can be commercialized at scale.

7 Additionally, Antora Energy brought its first
8 pilot scale system online at an industrial facility in
9 Fresno County, shown here, and also commissioned another
10 pilot production line in Sunnyvale. Their new carbon-
11 free, flexible, combined heat and power system is designed
12 to support industrial decarbonization. The technology uses
13 renewable energy to resistively heat a low-cost, thermal
14 energy storage medium which can be deployed on demand.
15 Next slide.

16 And the final objective focuses on climate
17 resilience and environmental sustainability, ensuring
18 health equity and climate considerations are represented in
19 California's clean energy transition.

20 Examples of success here include Lumen Energy
21 Strategy led a series of CPUC-hosted workshops, helping
22 stakeholders identify, analyze and integrate resiliency
23 needs within the California's electric grid planning
24 process. The work was well-received by the CPUC and IOUs.
25 And in addition to the integrated resource planning, helped

1 inform 2023 IEPR cycle's Energy Demand forecasts, and will
2 continue to be utilized in the 2024 update.

3 Next, Eagle Rock Analytics with PG&E identified
4 gaps in the utility's weather station network, which is
5 used for risk management. The work led PG&E to add more
6 weather stations in its service territory and inform their
7 2023 Wildfire Mitigation Plan.

8 And this is a screenshot of Eagle Rock's CalAdapt
9 web platform. Next slide.

10 Moving on, here's a table representing staff's
11 coordination efforts. Please note that this is not an
12 exhaustive list.

13 Some highlights here include knowledge sharing of
14 projects at the 2023 EPIC Symposium, which had over 800
15 attendees; coordinating with the Department of Energy and
16 California Air Resources Board to streamline research and
17 disseminate project results; engaging with tribes to
18 conduct general program outreach and touring some of their
19 facilities installing resilience measures; and attending
20 outreach events hosted by recipients to increase engagement
21 with environmental justice communities.

22 And I just wanted to note that the engagement
23 with the EJ communities and DACAG extends beyond the
24 efforts captured in this table. Next slide.

25 In 2024 staff plan to release 17 solicitations

1 with funding from EPIC 4.

2 Additionally, staff continue to support the EPIC
3 5 development process, including participating in the
4 CPUC's technical working groups to develop strategic
5 objectives and a new Impact Analysis Framework, which are
6 expected to be finalized at the end of the year. The
7 framework will be used as the basis for measuring progress
8 of EPIC 5 investments.

9 And finally, staff are developing and preparing
10 to host engagement activities for the CEC's fifth
11 investment plan. Next slide.

12 So to conclude, staff recommends Commission
13 approval of the 2023 EPIC Annual Report so that it can be
14 submitted to the Legislature and CPUC by April 30th.

15 I'm happy to answer any questions you have. And
16 we've also got staff on the line. Thank you.

17 COMMISSIONER MCALLISTER: Thanks so much, Rachel.
18 The Chair had to step out to take a call. Mona,
19 do you want to go to public comment?

20 MS. BADIE: Yes. Thank you. The Commission now
21 welcomes public comment on Item 10. If you're joining us
22 in the room we're asking folks to use the QR code or raise
23 their hand in the room. And if you're joining us by Zoom
24 please use the "raise hand" feature on your screen or *9 if
25 you're joining by phone. And just giving that a moment.

1 All right, no raised hand. So back to you
2 Commissioner McAllister.

3 COMMISSIONER MCALLISTER: Great. Well, thank
4 you, Mona.

5 And thanks Rachel for a great presentation. It's
6 really been such a pleasure to see the dozens and dozens of
7 valuable projects that your division manages that EPIC
8 program sponsors and funds, that those come to fruition and
9 just really go into the mix in California's clean energy
10 transition.

11 And I did want to make just a couple of points
12 just about the EPIC program. The various cycles and the
13 development of the strategic plan and the implementation of
14 that strategic plan really has a lot of the team -- you and
15 the team that manages it, Jonah and the entire team, the
16 Division -- has processes in place to really vet publicly,
17 to really make sure that the portfolio is as broad as it
18 needs to be, that it targets the right topics, and the plan
19 itself for each cycle is robust and complete.

20 But at the same time building and flexibility is
21 really important. And so I really appreciate, have
22 appreciated that when there's learning by doing, when a
23 project produces some results or a new technology pathway
24 opens up or this is a very dynamic sector, very, very
25 quick, fast-moving, that the program structure has been

1 flexible enough to enable a certain amount of pivoting to
2 embrace and really push those envelopes as they come up.
3 And so that's incredibly necessary, especially now that the
4 cycle has been lengthened. I think that flexibility is
5 really important.

6 And I want to just highlight the partnership with
7 the Public Utilities Commission. Ratepayer funding is what
8 funds EPIC. And it's important to take good care of that
9 funding and I appreciate the PUC's role in that and just
10 all the partnership across with our PUC partners.

11 So it's really hard to overstate the importance
12 of this program. It's by far the largest state investment
13 in R&D in the electric sector. And it opens up market
14 opportunities, both within the state and far, far beyond
15 our state. Every study shows that it produces multiples of
16 benefit and economic development, that it pushes technology
17 solutions.

18 So you've highlighted a bunch of projects there.
19 Not every project is a homerun. And that's kind of the
20 nature of the beast and that's kind of as it should be.

21 That means we're taking the right amount of risk
22 and really producing results. So I really appreciate the
23 fact that the report captures those ideas and really does
24 provide a catalogue of this program that's just so powerful
25 and the results it produces. And also just in the fact

1 that it bolsters California's leadership and gives others
2 something to key off of.

3 So I really appreciate your leadership and the
4 whole team's leadership on this.

5 Chair.

6 CHAIR HOCHSCHILD: All right, Vice Chair Gunda.

7 VICE CHAIR GUNDA: Yeah, thanks Chair. And
8 thanks, Commissioner McAllister. And I just wanted to say
9 thank you for the presentation.

10 I think I just wanted to maybe follow up, we'll
11 follow up as an office. I think the amount of work that's
12 being done in EPIC to capture both the clean energy
13 transition and support reliability, all the way from
14 developing microgrids five years ago. I think it will be
15 really helpful to uplift that story, kind of like in
16 totality and kind of the cost-effectiveness of some of
17 those measures in scaling solutions. So we'll go back with
18 you, but excellent work. Thank you.

19 CHAIR HOCHSCHILD: Well, I will just say I'm
20 sorry to have missed most of the presentation. I got the
21 presentation in its entirety yesterday.

22 So mainly what I want to say with all due respect
23 to the Fraunhofer Institute in Germany and Cicero
24 (phonetic) in Australia and many (phonetic) in Japan and
25 U.S. DOE's program, this is the best clean energy research

1 and development program in the world. I feel that very
2 strongly.

3 And I think the team here has done just
4 absolutely spectacular work. And it's not just that what
5 it means for our agenda to decarbonize the state, but also
6 increasingly this is the seed planting for the economy of
7 the future and new industries that are getting hatched
8 here. We're dedicating a big project tomorrow, the
9 Paskenta Tribe. The storage project, we're doing things
10 like the long-duration storage program, and the whole
11 battery ecosystem, and so much of the cutting-edge demand
12 response and clean energy technology and vehicle-to-grids,
13 and all the rest. And it's just an incredible portfolio.
14 So really proud of the team. I want to just recognize how
15 meaningful it is and how important it is.

16 Again, thank you to the PUC leadership a few
17 years ago for reauthorizing, really, on a ten-year time
18 horizon, to have that level of certainty that has enabled a
19 vast amount of private capital to be deployed in
20 California. We get the majority of U.S. cleantech venture
21 capital coming into California as a consequence. And it's
22 also enabled a lot of federal match money to flow. So
23 those faucets are open because of this program.

24 So really I just want to recognize the incredible
25 hard work, Rachel, you and the whole team, Jonah and

1 everyone else. And happy to support this.

2 So is there a motion? Unless there's other
3 comments is there a motion, Commissioner McAllister, for
4 Item 10?

5 COMMISSIONER MCALLISTER: I move Item 10.

6 CHAIR HOCHSCHILD: Okay. Is there a second from
7 the Vice Chair?

8 VICE CHAIR GUNDA: And I'll second.

9 CHAIR HOCHSCHILD: All in favor say aye.
10 Commissioner McAllister?

11 COMMISSIONER MCALLISTER: Aye.

12 CHAIR HOCHSCHILD: Vice Chair Gunda?

13 VICE CHAIR GUNDA: Aye.

14 CHAIR HOCHSCHILD: Commissioner Gallardo?

15 COMMISSIONER GALLARDO: Aye.

16 CHAIR HOCHSCHILD: Commissioner Monahan?

17 COMMISSIONER MONAHAN: Aye.

18 CHAIR HOCHSCHILD: And I vote aye as well. Item
19 10 passes unanimously.

20 Thank you Rachel.

21 I will turn now to Item 11, Order Instituting
22 Rulemaking on Electric Vehicle Charging Standards,
23 Including Payment Methods and Interoperability Under Senate
24 Bill 123. A welcome to Jim Harms to present.

25 MR. HARMS: Thanks. Good day Commissioners. I

1 am Jim Harms. I'm in the Fuel and Transportation
2 Division's Strategy, Equity and Economic Benefits Branch.
3 This proposed rulemaking on electric vehicle charger
4 standards is primarily focused on implementing Senate Bill
5 123, which I will summarize in just a moment. This
6 rulemaking combined with the Assembly Bill 2061 Reliability
7 Rulemaking is aimed at addressing both sides of the EV
8 driver charging experience. Next slide.

9 CHAIR HOCHSCHILD: Jim, can I ask you to speak a
10 little closer in the mic?

11 MR. HARMS: Oh, yes sir.

12 CHAIR HOCHSCHILD: Thank you. Yeah.

13 MR. HARMS: The direct benefit to Californian EV
14 drivers through this proposed rulemaking is an improved EV
15 driver experience including updating how drivers pay for
16 charging. Realizing the fantastic benefits of plug-in
17 charge where drivers can just plug in and the vehicle
18 handles the rest of the transaction. Increasing
19 interoperability between charge stations to create a large,
20 seamless network of chargers. And creating a competitive
21 EV charging marketplace where consumers begin to demand a
22 user-friendly charge experiences and benefit from those
23 changes.

24 Through this regulation California can provide
25 direction to and demonstrate a willingness to work with

1 stakeholders in the EV industry. Next slide.

2 A short summary of Senate Bill 123, which applies
3 to all charge stations that require a fee and were made
4 public or installed after July of 2023, these regulations
5 are not limited to only publicly funded projects. SB 123
6 specifically removed the need for chip/swipe terminals and
7 now requires contactless and phone payment options be
8 offered.

9 Newly installed DC fast chargers must also have
10 plug-and-charge capabilities, meaning ISO 15118 standards.

11 The CEC was granted specific authority to draft
12 regulations related to payment methods and interoperability
13 billing standards, which is how SB 123 describes network
14 roaming.

15 Additionally, this new authority extends to
16 charge station-related labeling, signage, and reporting
17 requirements. Next slide.

18 With your approval we plan to hold an initial
19 pre-rulemaking public workshop and incorporate that public
20 feedback into our draft staff report. A draft staff
21 report, public workshop and comment period are projected
22 for late 2024 or early 2025. Draft regulations would be
23 presented for adoption at a future business meeting, likely
24 in late 2025. Next slide.

25 We ask for your approval to begin the rulemaking

1 process and move forward with improving the EV driver
2 charging experience.

3 This concludes my presentation and I'm happy to
4 answer some questions.

5 CHAIR HOCHSCHILD: Thank you so much.

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

7 MS. BADIE: Good afternoon. The Commission
8 welcomes public comment on Item 11. If you're joining us
9 in the room please use the QR code or raise your hand in
10 the room. And if you're joining us on Zoom please use the
11 "raise hand" feature that's on your screen. It looks like
12 an open palm. And if you're joining us by phone press *9
13 to let us know you'd like to comment.

14 And just giving that a moment. I'm not seeing
15 any comments in the room or on Zoom or phone. So back to
16 you Chair.

17 CHAIR HOCHSCHILD: Let's go to Commissioner
18 discussion, starting with Commissioner Monahan.

19 COMMISSIONER MONAHAN: Well thanks, Jim. And I'm
20 excited to embark on this process. It's been a long time
21 coming. The California Air Resources Board did have
22 authority over setting payment. It's been transferred to
23 the CEC, which makes sense since that's our area of
24 authority. And now we're in the process of implementing
25 the variety of different tasks that we were given under AB

1 123. So this is just the beginning of the process. We're
2 trying to really -- and it complements what we're doing on
3 the reliability side with our standards. And I think I'll
4 just stop there.

5 CHAIR HOCHSCHILD: Okay, great. Well, I second
6 all that and I'm really excited to see some progress on
7 this. Much needed. This is a topic we get asked about a
8 lot and it's gotten a fair bit of press. And it's
9 obviously fundamental to our long-term goals to decarbonize
10 transportation and ramp up transportation electrification.

11 So I would welcome a motion on Item 11 from
12 Commissioner Monahan, unless there's other discussion? I'm
13 sorry, were there commenters? Okay.

14 COMMISSIONER MONAHAN: I move to approve Item 11.

15 CHAIR HOCHSCHILD: Okay. Commissioner Gallardo
16 would you be willing to second?

17 COMMISSIONER GALLARDO: I second.

18 CHAIR HOCHSCHILD: All in favor say aye.

19 Commissioner Monahan?

20 COMMISSIONER MONAHAN: Aye.

21 CHAIR HOCHSCHILD: Commissioner Gallardo?

22 COMMISSIONER GALLARDO: Aye.

23 CHAIR HOCHSCHILD: Commissioner McAllister?

24 COMMISSIONER MCALLISTER: Aye.

25 CHAIR HOCHSCHILD: And Vice Chair Gunda?

1 VICE CHAIR GUNDA: Aye.

2 CHAIR HOCHSCHILD: And I vote aye as well. Item
3 11 passes unanimously.

4 We'll turn now to Item 12.

5 Thank you, Jim.

6 National Technology and Engineering Solutions of
7 Sandia LLC, as Management and Operating Contractor for the
8 Sandia National Laboratories. Welcome to Caitlin
9 Planchard.

10 MS. PLANCHARD: Hello, good greetings Chair and
11 Commissioners My name is Lin Planchard. I'm a Utilities
12 Engineer in the Energy Research and Development Division.

13 Today I will be presenting to you a proposed \$2
14 million agreement to the federal national lab Sandia
15 National Laboratories to provide technical analysis and
16 support long-duration energy storage technology. Next
17 slide, please.

18 If this agreement is funded, Sandia National Labs
19 will work collaboratively with the CEC to directly support
20 deployment projects funded under the long-duration energy
21 storage program by providing valuable insights and
22 technoeconomic analysis.

23 Sandia would work with the CEC to collect and
24 share data and best practices for LDES technology to
25 benefit the public, disseminating knowledge crucial for its

1 current and future applications of LDES.

2 Overall Sandia's efforts and expertise will aid
3 in accelerating the advancement of LDES technology, which
4 will benefits California's efforts to improve grid
5 resiliency and reliability and reduce greenhouse gas
6 emissions. Next slide, please.

7 The proposed agreement is under a Cooperative
8 Research and Development Agreement, otherwise known as a
9 CRADA. This CRADA builds on an MOU that the CEC and Sandia
10 signed in 2021, and proposes a collaborative effort between
11 the CEC and Sandia National Labs. Sandia would provide
12 technical assistance by sharing knowledge on various energy
13 storage technologies and their applications and assist the
14 CEC in the evaluation and implementation of energy storage
15 deployment projects.

16 Under this CRADA there are two Project Task
17 Statements, also known as PTS, to support this effort.

18 Under the proposed scope of work and PTS 1 Sandia
19 would receive \$2 million of CEC funds to critically
20 evaluate various LDES technologies.

21 PTS 2 is a collaborative statement of work
22 between CEC and Sandia to support the anticipated upcoming
23 CEC e-Zinc deployment project. And no CEC funds would be
24 exchanged per this PTS scope.

25 The structure of the CRADA is intended to allow

1 CEC and Sandia to amend a new PTS to the CRADA agreement
2 for future opportunities in supporting LDES deployment
3 projects in the LDES program. These PTS would be added on a
4 per-project basis and incur no additional CEC funds. Next
5 slide, please.

6 The scope of PTS 1 primarily focuses on
7 activities to support knowledge share with the CEC and
8 stakeholders. The proposed software developed by CEC -- or
9 excuse me -- developed by Sandia to quantify greenhouse gas
10 emission reduction metrics for LDES technology would
11 directly support the LDES's programs GGRF funding
12 requirements.

13 Sandia will also provide their expertise in
14 evaluating the capabilities of select LDES technology under
15 CEC guidance and contribute to valuable knowledge sharing
16 and research through substantive participation in the DOE
17 LDES Consortium and CEC Energy Storage Safety Working
18 Group.

19 In addition to the \$2 million of CEC funding the
20 DOE will also be contributing \$750,000 to Sandia for this
21 effort. Next slide, please.

22 PTS 2 of the CRADA would serve as supporting work
23 to validate the anticipated project with easing to deploy a
24 500-kilowatt, 24-hour, zinc-air battery at the Sandia
25 facility in Livermore, California.

1 The CEC project with e-Zinc mentioned here is
2 currently in the preliminary stages of awarding grant funds
3 and will be a separate project independent of the CRADA.

4 As part of a competitive HQ DOE award Sandia
5 received \$10 million in DOE funding and the CEC is
6 expecting to award a \$9 million grant to e-Zinc to serve as
7 match funding for Sandia's as DOE award.

8 To support this effort Sandia would gather field
9 data to conduct measurement and verification tests and
10 provide suggestions based on technoeconomic analysis, such
11 as optimizing the sizing, use cases, community benefits,
12 resilience, and economic analysis to further improve the
13 technology. Next slide, please.

14 Staff proposes to approve the CRADA agreement
15 with Sandia National Laboratories, including PTS 1 and PTS
16 2, and adopt staff's determination that the action is
17 exempt from CEQA.

18 This concludes my presentation. Thank you.

19 CHAIR HOCHSCHILD: Thank you so much.

20 Let's go to public comment.

21 MS. BADIE: Thank you. The Commission now
22 welcomes public comment on Item 12. If you're joining us
23 in the room we have the QR codes ready for you to let us
24 know you'd like to comment or you can raise your hand in
25 the room. And if you're joining by Zoom please use the

1 "raise hand" feature on your screen, it looks like an open
2 palm. And press *9 to raise your hand if you're joining us
3 by phone.

4 So just giving that a moment. All right, there
5 is no raise hands for Item 12. Back to you, Chair.

6 CHAIR HOCHSCHILD: All right. Well I'll just say
7 I am overall really pleased with the progress I'm seeing in
8 long-duration storage. The updates we've gotten from the
9 technologies we've funded: Form Energy, Eos, and others are
10 really encouraging. And I think this is a very prudent
11 investment of state resources to support the grid and meet
12 the increasing needs as we decarbonize the grid. But the
13 need for storage, the need for long-duration storage only
14 grows. So I feel great about the progress we're making.

15 Especially I want to thank Mike Gravely, who has
16 been instrumental in getting us to this point. And we got
17 a bunch of really exciting milestones this year as we're
18 pushing out a huge sum. So this is a really prudent step.

19 And Caitlin, thank you for the presentation.

20 Let me just see if there's other hands. Yeah,
21 Commissioner McAllister.

22 COMMISSIONER MCALLISTER: Lin thank you very
23 much. I really appreciate the briefing on this. And kudos
24 to Mike as well, and the whole team on this. And I think
25 this is a really great agreement to be partnering with the

1 National Labs. It works for California in any number of
2 ways. And without presuming anything going forward, I
3 think, to really jumpstart new technologies into this
4 space, and really have sort of a broad response team to
5 really address this with the urgency that it deserves and
6 needs and requires is great. And could see this kind of
7 partnership growing and flowering and growing in different
8 directions as chemistry, different technologies come on the
9 scene. And we need their infrastructure and their sort of
10 expertise to come to this space.

11 So I'm really, really optimistic about this and
12 support this item. Thanks.

13 MS. PLANCHARD: Thank you.

14 CHAIR HOCHSCHILD: Vice Chair.

15 VICE CHAIR GUNDA: Yeah, I also just wanted to
16 say thank you for the presentation. I think there's a
17 couple of things I want to uplift that it's a perfect
18 example of the state dollars leveraging federal dollars, so
19 thank you for that.

20 As the Chair mentioned, long-duration energy
21 storage will be a critical resource. I think in evaluating
22 the cost benefits it's really kind of important for us to
23 drive the point of the value, how do you value these
24 resources as you move forward from a grid reliability, GHG
25 emissions, ramping capability. So I really would like to

1 continue to kind of enhance the conversation on truly
2 establishing the value of LDES through the R&D program.

3 So again, thank you for all the work and kudos to
4 Mike Gravely, so thanks.

5 CHAIR HOCHSCHILD: Commissioner Monahan.

6 COMMISSIONER MONAHAN: Is it Caitlin or Lin?

7 MS. PLANCHARD: I usually go by Lin, but it's
8 Caitlin, either way. I think they're all fine.

9 COMMISSIONER MONAHAN: That was a great
10 presentation. It's a really exciting project.

11 And I'm curious about these zinc-air batteries
12 and anything you can tell us about like the stage of
13 commercialization and performance when it comes to long-
14 duration energy storage.

15 MS. PLANCHARD: Yeah, of course. So we currently
16 have an EPIC project with e-Zinc right now that's underway.
17 I can't remember the exact number off the top my head, but
18 they're in a more free commercial, early development phase.
19 They're working on kind of like their prototypes. And so
20 yeah, we have an EPIC project with them currently. They're
21 going to be deploying it at the RUC facility (phonetic) at
22 the Miramar Base.

23 And Sandia has also, given that they're wanting
24 to work quite closely with e-Zinc, this is kind of like all
25 the key members playing. They're also giving us input and

1 being a team player on that as well. And so yeah, Sandia
2 has been working closely with us and using us three to move
3 forward. And we want to deploy this e-Zinc battery at the
4 fed Sandia facility. And Sandia would like to do lots of
5 more research and testing at their facility with the e-Zinc
6 batteries.

7 Currently right now for the e-Zinc project, the
8 anticipated one that we're going to deploy under the long-
9 duration energy storage program that I mentioned in the
10 presentation, that's in the preliminary stages. They're
11 doing CEQA analysis right now. And have done a lot of like
12 plans and scope has begun.

13 COMMISSIONER MONAHAN: So is this the first kind
14 of one of its nature to be deployed and tested?

15 MS. PLANCHARD: For the zinc-air batteries?

16 COMMISSIONER MONAHAN: Mm-hmm.

17 MS. PLANCHARD: Mike, do you have a better answer
18 on that? I think so, right? Is it the first zinc-air
19 battery or the only zinc-air battery I mean.

20 MR. GRAVELY: So they are a previous EPIC awardee
21 on much smaller scale. And so our excitement with them is
22 primarily this demonstration.

23 As most people are aware Form Energy is really
24 kind of establishing the multi-day market and we have an
25 award with them. This technology is probably the closest

1 to being able to do competitive award in the same price
2 range. Both of them feel they can get a price that's
3 roughly 10 percent of today's costs.

4 So this project will be giving them the -- so
5 they have a small project that's in the kilowatt range.
6 This puts them in the multi-megawatt range. And then the
7 next one would be for the 100 hours with multi-megawatt,
8 and we're hoping in two or three years.

9 And Sandia provides us the ability to get third-
10 party assessment of performance and safety, and also helps
11 us bring the cost down.

12 So obviously, we need these types of analysis to
13 convince the investors in community. It's not just us, not
14 just the vendors, but we're getting a full spectrum. So
15 they'll help us interject. And the biggest question they
16 were helping us with is, what is the role long-duration
17 storage can really play? I mean, everybody wants to sell
18 us long-duration storage. But what do we need? And this
19 is the type of technology that will help us get there.

20 CHAIR HOCHSCHILD: Yeah. The last observation I
21 just wanted to share is that if you look at the stack of
22 the build materials necessary to build almost all long-
23 duration storage chemistries, they're all domestic. We're
24 not relying on cobalt from the Congo. And I think it's a
25 really important feature of the program. It does increase

1 our minerals independence and energy independence as well.

2 So thank you so much Lin, for the presentation.

3 MS. PLANCHARD: Thank you.

4 And with that Commissioner Monahan would you be
5 willing to move Item 12?

6 COMMISSIONER MONAHAN: I make a motion to move
7 Item 12.

8 CHAIR HOCHSCHILD: Commissioner McAllister would
9 you be willing to second?

10 COMMISSIONER MCALLISTER: Second.

11 CHAIR HOCHSCHILD: All in favor say aye.
12 Commissioner Monahan?

13 COMMISSIONER MONAHAN: Aye.

14 CHAIR HOCHSCHILD: Commissioner McAllister?

15 COMMISSIONER MCALLISTER: Aye.

16 CHAIR HOCHSCHILD: Commissioner Gallardo?

17 COMMISSIONER GALLARDO: Aye.

18 CHAIR HOCHSCHILD: Vice Chair Gunda?

19 VICE CHAIR GUNDA: Aye.

20 CHAIR HOCHSCHILD: And I vote aye as well. Item
21 12 passes unanimously. Thank you.

22 MS. PLANCHARD: Thank you.

23 CHAIR HOCHSCHILD: We'll turn now to Item 13,
24 Cohen Ventures, DBA Energy Solutions. Welcome back,
25 Christine.

1 MS. COLLOPY: Good afternoon. Good afternoon
2 Chair, Vice Chair, Commissioners. I am Christine Collopy,
3 Deputy Director of Building Decarbonization, in the
4 Reliability, Renewable Energy and Decarbonization
5 Incentives, or RREDI Division.

6 Today I am presenting Item 13, a contract with
7 Cohen Ventures, Inc. doing business as Energy Solutions for
8 approximately \$96 million to augment the existing statewide
9 TECH Clean California Initiative.

10 This agreement is being proposed contingent upon
11 U.S. Department of Energy formula award and California
12 Legislative budget authority approval, both of which are
13 underway and imminent. Next slide, please.

14 On August 16th, 2022, President Joseph R. Biden
15 signed the Inflation Reduction Act into law, making this
16 one of the largest investments in the American economy and
17 the climate in the nation's history.

18 The California Energy Commission, as the state of
19 California's Energy Office, has been allocated over \$492
20 million in total under the formula-driven Inflation
21 Reduction Act, or IRA. The proposed agreement before you
22 today falls under the IRA's High Efficiency Electric Home
23 Rebate Act or HEEHRA. This agreement with Energy Solutions
24 will be the first agreement implemented by the Energy
25 Commission to make the federal IRA funds available to

1 Californians. Next slide, please.

2 The benefits of this agreement to California are
3 many. The agreement with Energy Solutions deploys long-
4 awaited federal Inflation Reduction Act funds into
5 communities across California as soon as summer of 2024.

6 The Department of Energy's programs require that
7 40 percent of funds reach disadvantaged and under-resourced
8 communities. The TECH Clean California Initiative aims to
9 exceed that goal by offering rebates to low-income
10 multifamily and single-family homeowners across the state.

11 The TECH Initiative will build off an existing
12 robust contractor network by offering education and
13 training to new contractors joining the program. These are
14 good-paying, high-road jobs focusing on equity and job
15 quality.

16 And lastly, the measures installed through this
17 program will make homes healthier by improving the indoor
18 air quality and making homes more comfortable in
19 California's diverse and extreme climate zones. Next
20 slide, please.

21 Under this agreement the CEC will augment the
22 TECH Initiative with approximately \$96 million, of which
23 \$80 million will be allocated to rebates and incentives for
24 low- and moderate-income homeowners.

25 Both multifamily and single-family homeowners are

1 eligible for rebates through an existing robust contractor
2 point-of-sale network with over 1,000 participating
3 contractors statewide. Initial qualifying electrification
4 measures and rebate amounts are shown on the slide before
5 you.

6 If this agreement is approved, an estimated 6400
7 multifamily projects and 7500 single-family projects will
8 be funded, with an estimated 44 percent reduction in gas
9 usage. Next slide, please.

10 The TECH Clean California Initiative is
11 implemented through a highly qualified team of professional
12 organizations. This slide lists those contractors along
13 with their implementation responsibility. Next slide,
14 please.

15 I request the Commission adopt staff's
16 recommendation that this action is exempt from CEQA and
17 approve the proposed agreement.

18 Thank you for your consideration today. That
19 concludes my presentation, and I am happy to answer any
20 questions. And I also have Energy Solutions here today
21 with me Teddy Kisch just to also answer any questions.
22 Thank you.

23 CHAIR HOCHSCHILD: Thank you so much, Christine.

24 Let's go to public comment on Item 13.

25 MS. BADIE: Good afternoon. The Commission

1 welcomes public comment on Item 13 at this time. If you're
2 in the room with us we're asking you to use the QR code or
3 raise your hand and then we'll move to Zoom. If you're on
4 Zoom please let us know you'd like to make a comment by
5 using the "raise hand" feature on your screen or pressing
6 *9 if you're joining us by phone.

7 So in the room we have Teddy Kisch. Teddy, if
8 you want to approach the podium. Please spell your name
9 for the record and we're asking for comments to be two
10 minutes or less.

11 MR. KISCH: My name is Teddy Kisch with Energy
12 Solutions, T-E-D-D-Y K-I-S-C-H. So first off, I'd like to
13 thank the Chair, Vice Chair, Commissioners and particularly
14 Chair Hochschild and Commissioner McAllister and CEC staff
15 for their leadership supporting equitable building
16 decarbonization. (Indiscernible) as well.

17 And we're excited to potentially support
18 California's Phase I implementation of the HEEHRA program
19 and enabling low- and moderate-income customers to achieve
20 the air quality, comfort, cost savings with these high-
21 efficiency electric technologies, as well as supporting
22 equitable access to cooling during extreme heat events.

23 TECH is an award-winning statewide program that's
24 been in existence for 2021 and will really enable the
25 HEEHRA program to leverage existing project infrastructure

1 and support that rapid deployment.

2 To date, as Christine mentioned, we have had over
3 1,000 participating contractors and deployed over 45,000
4 projects over 45,000 households, both single and
5 multifamily throughout the state. And we are set up for
6 the HEEHRA equity requirements in place. So we know that
7 many people and communities are excited about these
8 incentives. It is becoming available and rolling out and
9 being able to upgrade their homes. And our team is looking
10 forward to supporting this important effort to get off the
11 ground.

12 CHAIR HOCHSCHILD: Thank you.

13 MS. BADIE: Thank you. And I'm just checking the
14 queue one more time. All right, no raised hands in the
15 room or on Zoom. Back to you Chair.

16 CHAIR HOCHSCHILD: Okay. Commissioner
17 McAllister.

18 COMMISSIONER MCALLISTER: Well great. Well
19 thanks Christine, great presentation. And Teddy thanks for
20 being here.

21 And I just want to make a couple of points
22 briefly. This initiative to use some of HEEHRA money to
23 load a preexisting program really is the fastest way as you
24 said, Christine, that we could possibly get some of the
25 federal IRA money out into the world so that it can do the

1 good that it's going to do. And really just we've gotten
2 to this point with an incredible amount of work by you,
3 Christine, your staff, and Deana, and just the whole team
4 behind you fielding innumerable of meetings and really
5 trying to get this done. And so we're here because of all
6 that hard work, largely over the holidays, and just really
7 thanks to you for really leaning into this.

8 And it's also in partnership with the federal
9 government, the Biden Administration, and with our
10 Governor's Office. And we all really wanted to make this
11 happen. And so I'm really happy to be here today.

12 And TECH is a successful program. It's out there
13 in the street, it's got the infrastructure, it's got the
14 contractors, and it makes all the sense in the world. We
15 are going to focus on a different demographic than most of
16 the projects under TECH have had targeted up to now. So we
17 really are going to learn how to deploy effectively in
18 under-resourced communities. And so I think that's an
19 extremely important element here.

20 I also wanted to just highlight that the data
21 infrastructure, the data collection that Energy Solutions
22 and partners have been doing under TECH is going to inform
23 directly our other initiatives under IRA and equitable
24 building, decarbonization. So that's extremely important,
25 that's an extremely important data infrastructure, to use

1 public funds of all flavors well and to make sure that they
2 benefit the people that we're aiming to benefit. And that
3 we can understand the impacts going forward on actual
4 energy bills that actual people are facing. So I think for
5 all these reasons I'm super-excited to get this and
6 strongly support this item, and super-excited to get this
7 money out there in the world.

8 And finally, I will note that the \$778 million
9 that the Chair noted at the outset of this meeting did
10 actually not include this money, because it's contingent on
11 getting the federal money, which is formula funds. So we
12 will get it, but it's still contingent. And so actually,
13 our total is more like \$870 million that we're giving out
14 at this meeting so far. And just to make sure almost a
15 billion. Maybe someday we'll (indiscernible) --

16 CHAIR HOCHSCHILD: Anybody else (indiscernible)
17 (Laughter.)

18 COMMISSIONER MCALLISTER: But I'm really
19 optimistic about where it's going and I strongly support
20 this item. Thanks, Christine.

21 CHAIR HOCHSCHILD: Great. Vice Chair.

22 VICE CHAIR GUNDA: And thank you, Chair. And
23 Commissioner McAllister thank you for your kind of
24 impressions and the overall kind of background on this.
25 Thank you for framing it.

1 COMMISSIONER MCALLISTER: I also want to just
2 acknowledge my Chief of Staff Bryan and Kat in the Chair's
3 Office, Katerina, because they have been right in the
4 middle of all this as well, helping grease the skids. So
5 didn't want to leave them out.

6 VICE CHAIR GUNDA: Thank you. So yeah, I think
7 before I go into a comment I just wanted to say I used to
8 work at UC Davis. And we would apply for grants of the
9 size \$100,000 or \$150,000. We have quickly moved from
10 thousands to millions to now hundreds of millions, so it's
11 kind of mind-boggling how much money we're moving.

12 And I thank you, Christine, for the presentation.
13 I believe this is the first federal IRA program that's kind
14 of coming through, so that's amazing. And I think I really
15 appreciate you uplifting the incredible work at the federal
16 government in terms of Biden Administration on pushing this
17 money. I mean, this is just amazing.

18 And I think to the kind of general tenor of how
19 Chair Hochschild frames this it's really important for us
20 to take a minute and appreciate the progress we are making
21 and the amount of money we're spending too, to do good
22 things. And it's always going to be short in some shape or
23 form. And I absolutely want to keep fighting on that end.
24 But also just take a moment to appreciate the wonderful
25 things.

1 And especially this program with the focus on the
2 multifamily and the opportunity to really support the
3 Justice40 goals, this is just amazing. And I think the
4 focus to create the conditions by upgrading the buildings
5 and allow for more DERs to come online, it's just that
6 steam we want to continue.

7 I recognize that we are going to continue to
8 apply for funds like this and infuse them into the work we
9 do. So yes, your last request we will never deny. (Laughs)
10 So I know I cannot --

11 MS. COLLOPY: That's why I'm here.

12 VICE CHAIR GUNDA: Yeah, I can't disagree with
13 you. But I also want to just uplift Energy Solutions'
14 work. I know you guys have been doing some good work over
15 the many years. And I think my only request is to gather
16 information.

17 I think a huge part of this energy transition,
18 when I think about it, it's going to be very, very
19 expensive. And the exact pain points are not fully
20 understood in terms of where the money is needed and how
21 it's needed. So would really appreciate taking the
22 opportunity to really gather information to help us move
23 forward.

24 So with all that thanks again, and I'm looking
25 forward to supporting this.

1 CHAIR HOCHSCHILD: And I think Commissioner
2 McAllister has one additional point there.

3 COMMISSIONER MCALLISTER: I wanted to just also
4 acknowledge all of the public interest and impatience in
5 getting access to the federal funds. There's a lot of
6 information out there that's really not all that accurate.
7 And there is an under-appreciation of all the steps that
8 are necessary to get this money sort of up and running and
9 out into the world.

10 And nationally, "USA Today" or "New York Times"
11 will say, "Hey, there's all this money," and we get just a
12 huge, huge number of requests from the public. And they
13 come to the same staff that's trying to get this done. And
14 Christine, you and the team have responded to all of these
15 members of the public who don't understand they don't have
16 access to kind of the real deal on what's happening.

17 And so I really appreciate that too, because we
18 have to be responsible to the public. But we do have to
19 abide by the law in order to get this money out there. And
20 so that's a hard balance to strike and I just really thank
21 you for doing that.

22 CHAIR HOCHSCHILD: Okay, with that I would
23 welcome a motion on Item 13. Commissioner McAllister?

24 COMMISSIONER MCALLISTER: All right. I'll move
25 Item 13.

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

3 COMMISSIONER GALLARDO: I second.

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

6 COMMISSIONER MCALLISTER: Aye.

7 CHAIR HOCHSCHILD: Commissioner Gallardo?

8 COMMISSIONER GALLARDO: Aye.

9 CHAIR HOCHSCHILD: Vice Chair Gunda?

10 VICE CHAIR GUNDA: Aye.

11 CHAIR HOCHSCHILD: Commissioner Monahan?

12 COMMISSIONER MONAHAN: Aye.

13 CHAIR HOCHSCHILD: And I vote aye as well.

14 MS. COLLOPY: Thank you so much.

15 (Overlapping colloquy.)

16 CHAIR HOCHSCHILD: Way to finish strong there.

17 (Indiscernible.)

18 All right, we'll turn now to Item 14: CALSTART.

19 Kay Williams.

20 MS. WILLIAMS: Good morning Chair and
21 Commissioners. My name is Kay Williams and I'm staff with
22 the Fuels and Transportation Division here. We are seeking
23 approval today for an agreement with CALSTART for up to
24 \$390,000 million to design and implement the Zero Emission
25 School Bus Infrastructure Block grant, also known as ZESBI,

1 resulting from Solicitation GFO-23-605 and to adopt staff's
2 determination that this project is exempt from CEQA. Next
3 slide, please.

4 This block grant and its respective funding will
5 bring benefits to California. These benefits include
6 empowering local educational agencies, or LEAs, like school
7 districts and county offices of education to join the zero-
8 emission future by reducing cost barriers for zero-emission
9 school bus fleet investments, stimulating economies of
10 scale and zero-emission vehicle market growth, supporting
11 the state's goals for decarbonization of the transportation
12 sector, and actualizing respiratory health and emissions
13 reductions benefits. Next slide, please.

14 The funding for this block grant originated from
15 the educational omnibus budget trailer bill Senate Bill 114
16 and its \$125 million appropriation to the CEC for the 2023-
17 2024's fiscal year. The purpose of the appropriation is
18 for the CEC to fund grants that cover charging and fueling
19 infrastructure costs that will support LEAs replacement of
20 internal combustion school buses with zero-emission school
21 buses.

22 The zero-emission school buses will be awarded by
23 the California Air Resources Board's Hybrid and Zero-
24 Emission Truck and Bus Vehicle Incentive project, better
25 known as HVIP. This block grant is intended to cover

1 today's appropriation as well as future appropriations that
2 were indicated in SB 114, and which can be seen in the
3 table. The block grant will include up to \$375 million for
4 LEAs, subject to future appropriations. Next slide. I
5 think this may have been flipped. If you could go back to
6 the previous slide? There.

7 GFO-23-605, Zero-Emission School Bus Charging and
8 Fueling Infrastructure Block Grant was released in November
9 of 2023. This was a competitive solicitation with the
10 purpose of awarding block grant recipient to design and
11 implement an incentive program for California LEAs for
12 zero-emission school bus infrastructure projects. This
13 block grant will provide up to \$5 million in administrative
14 costs to design and implement up to \$125 million for school
15 bus charging and fueling incentive projects.

16 Up to \$10 million for administrative costs and
17 \$250 million in grant incentive funding may be added to
18 this agreement, subject to future appropriation in
19 California State Budget Act and approval by of the CEC's
20 Executive Director through an amendment. Next slide,
21 please. And one more. There.

22 Under this proposed agreement CALSTART's primary
23 responsibilities will be to launch a joint application with
24 CARB's HVIP.

25 Develop an Implementation Manual that sets forth

1 award amounts, eligible costs, infrastructure and technical
2 requirements, and expectations of awardees and vendors.

3 Conduct outreach and engagement activities
4 targeting eligible applicants, priority grantees, equity
5 populations, and industry stakeholders.

6 Report progress to CEC staff in monthly calls
7 and quarterly reports.

8 Design a user-friendly database for awardees to
9 report on key performance indicators and submit required
10 document.

11 And process incentive request in a timely manner.

12 Next slide, please. And one more. Thank you.

13 To conclude, staff recommendation on this item is
14 to approve the block grant agreement with CALSTART and
15 adopt staff's findings that the project is exempt from
16 CEQA.

17 This concludes my presentation. I'm available
18 for questions. And I believe CALSTART has staff online who
19 are available and may make public comment. Thank you for
20 your time.

21 CHAIR HOCHSCHILD: Thank you, Kay.

22 Let's go to public comment on Item 14.

23 MS. BADIE: Good afternoon. The Commission
24 welcomes public comment on Item 14 at this time. If you're
25 joining us in the room we're asking folks to use the QR

1 code or raise their hand in the room. And if you're
2 joining us via Zoom please use the "raise hand" feature
3 that appears on your screen. Or press *9 if you're joining
4 us by phone.

5 One moment please. Okay, Alyssa Haerle -- I'm
6 sorry if I mispronounced your name -- I'm going to open
7 your line. If you could please spell your name for the
8 record. We're asking for comments to be two minutes or
9 less.

10 MS. HAERLE: Thank you Commissioner. Yes, that
11 was correct. Alyssa Haerle. H-A-E-R-L-E, last name,
12 Alyssa, A-L-Y-S-S-A, first name. At CALSTART I'm Director
13 of Infrastructure Incentive Administration.

14 First of all, want to thank the Energy Commission
15 for this selection. And looking forward to the
16 Commission's vote. We are excited for this opportunity,
17 look forward to leveraging our voucher and incentives
18 experience in HVIP EnergiIZE and the coordination we've
19 done on the set-asides thus far.

20 While school districts do have some unique
21 challenges we would look forward to working through the
22 solutions with the CEC game (phonetic) team. And thank
23 you, we all look forward to this vote. Thank you.

24 MS. BADIE: Thank you. And I don't have any
25 other raised hands. So back to you, Chair.

1 CHAIR HOCHSCHILD: All right, let's go to
2 Commissioner discussion, starting with Commissioner
3 Monahan.

4 COMMISSIONER MONAHAN: Well I realized at the
5 very beginning of this business meeting the Chair said
6 we're approving how many hundreds of millions? And then I
7 was like, "That must be wrong!" And I'm like, "Oh no, it's
8 for transportation," the ones I oversee, so that's a little
9 embarrassing.

10 Anyways, Kay thank you for this presentation and
11 for all the work to really shepherd these monies wisely.
12 And CALSTART, I think folks recognize the name CALSTART.
13 They've actually been the administrator of a number of our
14 grant programs in the transportation space. They also
15 administer the California Air Resources Board's HVIP
16 program, so that it does allow for some good synergies
17 between money for zero emission vehicles and money for
18 infrastructure.

19 And as Kay said this depends on the total amount
20 out, it depends on future allocations from the budget, so
21 this is just setting an outer bound for now.

22 And school buses, we all love electric school
23 buses. I think I can't -- we've spoken about them enough
24 that I don't think I need to wax philosophic about their
25 value.

1 CHAIR HOCHSCHILD: Yeah, we can almost like write
2 love poetry about electric school buses there. And in
3 fact, my Advisor Lorraine Gonzalez worked for many years on
4 that program.

5 Great. I second all those comments. Vice Chair,
6 please.

7 VICE CHAIR GUNDA: Just thanks Chair and
8 Commissioner Monahan. And Kay thank you for the
9 presentation. Part of it is like I know there is
10 competition between Commissioner McAllister and
11 Commissioner Monahan. I did not think that's going to play
12 out in terms of hundreds of millions. (Laughter.)

13 COMMISSIONER MONAHAN: Yeah, I think I win.

14 VICE CHAIR GUNDA: Especially with two items.

15 But again, I think I just wanted to uplift.
16 Thank you for this program. As Commissioner Monahan said I
17 think that school bus decarbonization is critical,
18 especially with the V2G capability that could come from
19 this. And this is just an amazing program.

20 MS. WILLIAMS: I also got to work on the V2G
21 solicitation that we recently brought several agreements to
22 this business meeting for. and we are excited to watch
23 those projects move along.

24 COMMISSIONER MONAHAN: (Overlapping colloquy.)
25 I'm sorry. I actually meant that we can fund like this

1 infrastructure. If you could talk a minute about what this
2 allows.

3 MS. WILLIAMS: Absolutely. As SB 114 required,
4 we are encouraging bidirectional charging as available.
5 And we have additional funding proposed for school
6 districts that are willing to go for bidirectional
7 charging. So that that can be something they include in
8 their projects.

9 VICE CHAIR GUNDA: That's awesome. Yeah, and I
10 just also kind of love that it's going to cover the whole
11 cost, right, which is great as a part of the program. And
12 the consolidation of the programs to really kind of set
13 them up as block grants, so we can push the money out
14 quickly and then they can go out. And just that CALSTART
15 has a number of programs that they can coordinate and
16 consolidate, so it's great. So look forward to supporting
17 it. Wonderful. Thank you.

18 CHAIR HOCHSCHILD: Okay, Commissioner Monahan
19 would you be willing to make a motion?

20 COMMISSIONER MONAHAN: I move to approve Item 14.

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

23 VICE CHAIR GUNDA: Second.

24 CHAIR HOCHSCHILD: All in favor say aye.

25 Commissioner Monahan?

1 COMMISSIONER MONAHAN: Aye.

2 CHAIR HOCHSCHILD: Vice Chair Gunda?

3 VICE CHAIR GUNDA: Aye.

4 CHAIR HOCHSCHILD: Commissioner McAllister?

5 COMMISSIONER MCALLISTER: Aye.

6 CHAIR HOCHSCHILD: Commissioner Gallardo?

7 COMMISSIONER GALLARDO: Aye.

8 CHAIR HOCHSCHILD: And I vote aye as well. Item
9 14 passes unanimously. Thank you, Kay.

10 We'll turn now to Item 15, also CALSTART. And I
11 welcome Michelle Vater to present.

12 MS. VATER: Good afternoon Chair and
13 Commissioners. My name is Michelle Vater. I'm Supervisor
14 with the Fuels and Transportation Division's Truck, Bus and
15 Goods Movement Unit. We are seeking approval today for an
16 amendment to an agreement with CALSTART. This agreement,
17 approved at the March 2021 business meeting, is for a block
18 grant to design, implement, and fund with CEC oversight,
19 various medium- and heavy-duty zero-emission vehicle
20 infrastructure and incentive projects throughout
21 California. Next slide, please.

22 The proposed amendment would increase the
23 agreements contingent spending authority by nearly \$269
24 million for a total grant-spending authority amount of
25 nearly \$544 million. This includes the \$276 million an

1 authority previously approved at the December 2021 business
2 meeting. Approval by the CEC's Executive Director through
3 an amendment would be needed to access these additional
4 funds.

5 Additionally, the proposed amendment will also
6 modify the agreements terms and conditions as well as
7 revise the scope of work to include new reliability and
8 data requirements. Next slide, please.

9 So the goal of this agreement is to develop and
10 implement medium- and heavy-duty zero-emission vehicle
11 infrastructure incentive projects to address critical
12 barriers and gaps to the deployment of this infrastructure
13 across California.

14 This agreement is designed to speed up the
15 installation of medium- and heavy-duty zero-emission
16 vehicle infrastructure to provide more accessible electric
17 charging and hydrogen-refueling options, which are critical
18 for accommodating future medium- and heavy-duty zero-
19 emission fleets.

20 Modeling from the CEC's AB 2127 second Electric
21 Vehicle Charging Infrastructure Assessment estimates that
22 to support the projected 155,000 medium- and heavy-duty
23 plug-in electric vehicles in 2030 California we'll need
24 about 114,500 chargers. Which would include 109,000 lower-
25 power depot chargers which are chargers located at trip

1 destinations, including the locations where vehicles are
2 stored overnight. And would be classified as between 20 to
3 150 kilowatts.

4 As well as 5,500 high-powered public chargers
5 along highway corridors and along routes that trucks
6 typically take for their everyday operations, which would
7 range between 350 to 1,500 kilowatts.

8 This agreement will help the state reach this
9 2030 target to support future zero-emission fleets.

10 Lastly, this agreement will provide targeted
11 emissions reductions and health benefits to Californians,
12 especially within disadvantaged communities that typically
13 have much higher rates of diesel air pollution. Next
14 slide, please.

15 So this agreement with CALSTART was approved at
16 the April 2021 business meeting. Since that time CALSTART
17 has designed and implemented incentive projects through
18 this block grant project called "EnergIIZE Commercial
19 Vehicles," including targeted strategies for transit bus,
20 school bus, and drayage zero-emission vehicle
21 infrastructure through set-aside funding lanes designed to
22 directly complement participants of the California Air
23 Resources Board's Hybrid and Zero-Emission Truck and Bus
24 Voucher Incentive project.

25 CALSTART has designed the internal controls,

1 processes, and procedures necessary to process block grant
2 funding, evaluate incentive requests and produce regular
3 fiscal accounting and reporting.

4 Furthermore, CALSTART has developed an inclusive
5 equity strategy that utilizes focused outreach to ensure
6 maximum projects benefit to underserved communities.

7 CALSTART began to release incentive funding
8 publicly and funding lane launches, beginning in the first
9 quarter of 2022. Next slide, please.

10 So this slide represents energized project
11 statistics as of March 2024, covering the project's
12 progress since the launch of the first funding lane in
13 March 2022.

14 So far, CALSTART and their project team have
15 reviewed approximately 443 applications resulting in 185
16 incentive awards granted, totaling nearly \$106 million
17 across four foundational funding lanes.

18 Additionally, three set-aside funding lanes have
19 been introduced to complement CARB's HVIP, further
20 enhancing our support efforts.

21 Out of the \$106 million in incentives awarded
22 nearly \$100 million has been awarded to applicants in
23 disadvantaged and low-income communities.

24 The awards made to projects throughout the state
25 will aid in the installation and deployment of 2178

1 chargers as well as 45 hydrogen dispensers that will be
2 able to support about 2,683 medium- and heavy-duty battery
3 electric vehicles and 822 medium- and heavy-duty fuel-cell
4 electric vehicles.

5 I will note that there are gaps in the vehicle
6 data being reported within EnergiIZE, because CALSTART has
7 been depending on applicant self-reporting until the
8 projects are commissioned and final numbers are known. So
9 in many cases, for electric vehicle charging projects we
10 are assuming a one-to-one vehicle-to-charger ratio. And
11 with hydrogen projects, we assume a 16-to-1 vehicle-to-
12 dispenser ratio where self-reporting has not been
13 submitted. So these are CALSTART's conservative estimates.
14 Next slide, please.

15 So in summary, staff would like to recommend
16 approval of this proposed amendment to increase this
17 agreement's contingent spending authority by nearly \$269
18 million, for a total grant spending authority amount of
19 nearly \$544 million, to modify the agreements, terms and
20 conditions, as well as revise the scope of work to include
21 new reliability and data requirements.

22 And lastly, we would like to recommend adoption
23 of staff's determination that this action is exempt from
24 CEQA.

25 Currently nearly \$276 million in funding is

1 available to CALSTART through this block grant. The
2 additional funding of nearly \$269 million, up to the nearly
3 \$544 million total in spending authority, will require
4 approval from the Executive Director of the CEC through an
5 amendment.

6 So we would like to thank you for your time and
7 consideration of these items. Tesi Bravo with CALSTART is
8 here to provide public comments. We are both available for
9 any questions you may have. And that concludes my
10 presentation.

11 CHAIR HOCHSCHILD: Thank you, Michelle.

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

13 MS. BADIE: Good afternoon, the Commission
14 welcomes public comment on Item 15 at this time. If you're
15 joining us in the room we're asking folks to use the QR
16 code or raise their hand in the room. And if you're
17 joining by Zoom you'll see a "raise hand" feature on your
18 screen, it looks like an open palm. And if you're joining
19 by phone please press *9 to notify us you'd like to
20 comment.

21 And I'm going to transition to Zoom, we don't
22 have any in-room commenters. Tesi Bravo I'm going to open
23 your line. If you could please spell your name for the
24 record. We're asking for comments to be two minutes or
25 less.

1 MS. BRAVO: All right, thank you so much.

2 Testing for sound.

3 MS. BADIE: Yes.

4 MS. BRAVO: Perfect. So Tesi Bravo, B-as-in-boy-
5 R-A-V-as-in-victory-O, last name, Tesi, T-E-S-I, first
6 name. I'm the Deputy Director for Clean Fuels and
7 Infrastructure and also the Project Lead on EnergIIZE with
8 the CALSTART team.

9 So I'll recap a little bit of what Michelle went
10 into. So EnergIIZE is part of the CEC's clean
11 transportation program. We provide reimbursement-style
12 funding grants to infrastructure projects in California
13 that deploys ZEV charging or fueling that's electric or
14 hydrogen, with heavy focus on medium-duty and heavy duty-
15 commercial fleets. We also focus on the reduction of the
16 GHGs, especially on locations that need it most.

17 So again, we are electric or hydrogen. We have
18 stackable programs that pair with HVIP, which is the
19 program that ties vehicles and then we provide
20 infrastructure or chargers to support those vehicles.

21 We are also stackable with utility programs,
22 things like Charge Ready Transport, for instance, from SCE,
23 alongside any other of the utility programs, local
24 government programs, etc.

25 We also support innovative technologies:

1 bidirectional, wireless, innovative technologies. This is
2 a dynamic landscape, we have them coming through
3 constantly. So we take these all into consideration, we
4 escalate them up to our cans (phonetic), which would be
5 Michelle. And we thank the CEC for continued collaboration
6 to allow these items in to the program.

7 Our impact, we have over 2000 chargers in our
8 queue currently. Our commission chargers serve roughly 25
9 to 100 medium-duty, heavy-duty electric vehicles a day.
10 These numbers are increasing steadily. And we were working
11 on optimizing the items Michelle focused on around
12 reliability, really looking to incorporate AB 2061 guidance
13 into our program and working with the industry to deploy
14 that.

15 We have awarded projects over \$100 million, as
16 Michelle stated, and most of our project sites are located
17 in those areas that need it most. With barriers, based on
18 the experience implementing this program so far and looking
19 to the future, we see an opportunity to continue to work on
20 industry gaps in supply chains, knowledge, education and
21 standardization.

22 We're streamlining our internal processes to
23 decrease the amount of time it takes from award to
24 reimbursements.

25 And I will pass it back. My time is up.

1 MS. BADIE: Thank you.

2 That concludes public comment. Back to you
3 Chair.

4 CHAIR HOCHSCHILD: Let's go to Commissioner
5 discussion. Commissioner Monahan.

6 COMMISSIONER MONAHAN: Well I want to actually
7 give a shout out to Michelle who has been leading this
8 project, which is complicated, and doing a great job. This
9 is the first EnergIIIZE Commercial Vehicles, which is such a
10 good name. It was the first of its kind in the nation, as
11 far as we know, to give out these sorts of incentives for
12 medium- and heavy-duty infrastructure.

13 And Michelle has really been like a very capable
14 and responsible leader. And we get -- I get reports on a
15 very regular basis about the performance. And so I
16 encourage anybody who wants to, to reach out to Michelle
17 and she can give a lot of data about what is happening in
18 this program.

19 So CALSTART has done a really good job
20 shepherding at this. This is part of the reason why we
21 want to expand their authority to give funding towards this
22 program.

23 And I think it's no surprise that this building-
24 out infrastructure is key to the California Air Resources
25 Board being able to implement its regulations to zero out

1 diesel pollution in the state. We need this
2 infrastructure, we need it fast. And EnergIIZE is our main
3 vehicle for being able to deploy infrastructure for medium-
4 and heavy-duty vehicles.

5 CHAIR HOCHSCHILD: Yeah. Go ahead, Vice Chair.

6 VICE CHAIR GUNDA: Yeah. Thank you, Michelle.

7 Just a quick question and follow-up from what
8 Commissioner Monahan said, what's kind of the current
9 structure in getting like regular feedback in coordination
10 with CALSTART? Given these monies are moving out how are
11 you kind of reviewing the program and kind of getting
12 feedback and helping support the continued amendments as
13 needed?

14 MS. VATER: Well, they do provide us with
15 quarterly progress reports. But on top of that we were
16 meeting with them weekly, now biweekly.

17 But we're just constantly receiving feedback from
18 them, constantly taking the feedback we received from the
19 public, the participants of the program, the active
20 awardees through EnergIIZE. And just seeing how we can
21 streamline this process, this project through EnergIIZE and
22 really refine our guidelines. We're constantly working on
23 it and then trying to make it better.

24 VICE CHAIR GUNDA: Yeah, thank you so much. And
25 I think it's good for the record that there is this

1 coordination process. Thank you again, and wonderful
2 presentation. Good luck.

3 CHAIR HOCHSCHILD: Commissioner McAllister.

4 COMMISSIONER MCALLISTER: Thanks Michelle, this
5 is great. And it's just, I mean, it's amazing. This is
6 the lifeblood of our economy, right? It's medium- and
7 heavy-duty, it just makes it everything happen out there.

8 And I wanted to ask is there -- what sort of
9 information or feedback is gathered from the users of these
10 programs, like the recipient, the end recipient, the
11 project- level actors? Just looking at it through the lens
12 of sort of a customer service type of approach?

13 MS. VATER: Well CALSTARAT works closely with
14 Tetra Tech, who is also part of their project team and who
15 receives applications and reviews them and scores them, so
16 applicants can reach out to Tetra Tech at any point.

17 There is also a kind of "Contact Us" form through
18 the EnergIIZE website that filters directly to the CALSTART
19 team. And they meet weekly with Tetra Tech to review the
20 feedback that's received from potential participants, but
21 also active awardees.

22 They are constantly doing surveys to the awardees
23 to collect additional information or to clarify certain
24 things within the project, especially from the CEC side,
25 where we're requesting information and CALSTART may not

1 necessarily have it as part of the initial application.
2 We're able to reach out directly to the awardees and
3 request it or see if they can provide us with more
4 information. But we do meet weekly with them.

5 We provide monthly updates to Commissioner
6 Monahan and receive her feedback into the project as well.
7 So we're just constantly trying to refine in balancing
8 everything within EnergIIZE to make it better.

9 This is year three of the project. And at this
10 point we thought we're going to just be able to launch
11 everything and on a consistent basis every year, and it
12 would just be we're ready to go. But we're constantly
13 revising our strategies.

14 With this amendment we are adding a new
15 operations-and-reliability task to it to collect even more
16 information and ensure these chargers are going to be
17 functional once installed. But it's all project related.
18 So how many vehicles are going to be able to serve the
19 timeline, the commissioning timeline, from time of award to
20 installation? We're getting feedback on that. If there's
21 little issues in terms of the construction we're receiving
22 feedback on that on a monthly basis.

23 COMMISSIONER MCALLISTER: Thanks so much. I
24 really appreciate that. Because that takes some
25 vulnerability, really, to sort of put yourself out there,

1 "Okay, how can we do better?" And I think it's critical
2 to really do improvement, do constant improvement. And
3 then that's how we get to it, that's how we make projects
4 work. So I really appreciate your doing that and getting
5 ahead of the issues before they really become problematic.
6 Thanks.

7 CHAIR HOCHSCHILD: Commissioner Gallardo.

8 COMMISSIONER GALLARDO: Thank you Michelle for
9 the presentation. I was just impressed with the over 400
10 applications that have come in and also the \$100 million
11 invested in projects that are located in disadvantaged
12 community. And hopefully those are delivering additional
13 benefits and better outcomes to those, the residents in
14 those communities, so just wanted to highlight that. Thank
15 you.

16 CHAIR HOCHSCHILD: Yeah, I echo all the
17 enthusiasm.

18 And one request I'd have I would love some sense
19 of the average development time for charging infrastructure
20 in California. I know for permitting we were unfortunately
21 the longest delay in the country for a while. It was
22 averaging 62 days to get a permit. I think that's it.
23 But I still don't have a good sense of what we're averaging
24 start to finish to develop these projects. And I don't
25 know if you have anything on top of your head, or?

1 MS. VATER: No, we are still seeing some of our
2 initial year one projects so in the construction phase of
3 it. We have eight projects that have been fully
4 commissioned and fully operational at this time, and quite
5 a few in the queue that should need permission in the next
6 three to six months. But no, we are -- that is data that
7 we are actively collecting up.

8 CHAIR HOCHSCHILD: Yeah, I would welcome any
9 updates as we go forward on what the picture is on that.
10 And obviously how we can that we can improve it to get the
11 stuff built faster. So thank you for the presentation.

12 I'd welcome a motion from Commissioner Monahan on
13 Item 15.

14 COMMISSIONER MONAHAN: Yeah. I think also
15 because of the level of interest maybe in six months,
16 Michelle, you could come back and do just a very short
17 briefing, a five-minute briefing just on the status.

18 CHAIR HOCHSCHILD: Yeah, great.

19 COMMISSIONER MONAHAN: I move to approve Item 15.

20 CHAIR HOCHSCHILD: Vice Chair, would you second?

21 VICE CHAIR GUNDA: Second.

22 CHAIR HOCHSCHILD: All in favor, say aye.

23 Commissioner Monahan.

24 COMMISSIONER MONAHAN: Aye.

25 CHAIR HOCHSCHILD: Vice Chair Gunda.

1 VICE CHAIR GUNDA: Aye.

2 CHAIR HOCHSCHILD: Commissioner McAllister.

3 COMMISSIONER MCALLISTER: Aye.

4 CHAIR HOCHSCHILD: Commissioner Gallardo.

5 COMMISSIONER GALLARDO: Aye.

6 CHAIR HOCHSCHILD: And I vote aye as well. The
7 item has passed unanimously. Thank you, Michelle.

8 We'll turn now to Item 16, County of Los Angeles.

9 MS. BIRNMAUM: Hello Chair, Vice-Chair and
10 Commissioners. My name is Sarah Birnbaum with the Fuels
11 and Transportation Division. Today, staff is seeking
12 approval for one project that was proposed for funding
13 under the Reliable, Equitable, and Accessible Charging for
14 Multi-family Housing 2.0 Solicitation, GFO-22-614,
15 otherwise known as REACH 2.0. Next slide, please.

16 The proposed agreement will benefit California's
17 Multi-Family Housing Residents by providing increased
18 access to reliable at-home and near-home electric vehicle
19 charging, to serve multifamily housing residents in
20 disadvantaged and low-income communities and affordable
21 housing. At-home charging is usually the most convenient
22 and least expensive charging option, but multifamily
23 housing presents challenges to its deployment.

24 By deploying L1 and L2 chargers with a 97 percent
25 charger uptime requirement for multifamily housing, the

1 agreement will provide a low-cost transportation energy
2 option, test scalable business models, and increase
3 awareness of EVs and charging infrastructure.

4 Additionally, the projects will reduce greenhouse
5 gas emissions and criteria air pollutants, providing air
6 quality benefits to local communities in the vicinity of
7 the project areas. Next slide, please.

8 Before I present the County of LA project, I want
9 to provide a brief overview of the REACH 2.0 solicitation.

10 GFO-22-614, otherwise known as REACH 2.0, was
11 released April 26, 2023. The solicitation has four
12 overarching objectives. One, to provide business and
13 technology models to deploy EV charging for multi-family
14 housing residents.

15 Two, to enable EV adoption among multi-family
16 housing residents through the installation of L1 and or L2
17 chargers on-site or within a quarter mile of multi-family
18 housing properties.

19 Three, to provide outreach to residents on EV
20 charging.

21 And four, to address equity by requiring at least
22 50 percent of sites to be located in a low-income or
23 disadvantaged community, with an incentive to have at least
24 90 percent serving low-income and disadvantaged communities
25 and affordable housing.

1 Staff have proposed 11 projects for a funding
2 total to over \$41 million. The remaining 10 projects
3 proposed for funding under the REACH 2.0 solicitation will
4 be presented at subsequent business meetings. Next slide,
5 please.

6 The proposed agreement is with County of Los
7 Angeles. County of LA proposed for an award of \$4 million
8 in CEC funding and is contributing \$1 million in match
9 funding to install at least 320 Level 2 charging ports
10 within a quarter mile of multifamily housing properties.
11 Although the county government is the recipient, these
12 properties are located across the Southern California
13 project area, as defined by the REACH 2.0 solicitation.

14 County of LA has already engaged with 60+
15 regional multifamily housing properties which are depicted
16 on the map above. Sites hosts will be selected after the
17 execution of the agreement with the commitment that at
18 least 50 percent of sites are to be located in
19 disadvantaged or low-income communities.

20 County of LA has already committed to supplying a
21 portion of chargers at the Sundance Vista Housing
22 Development in Whittier, which is a 100 percent affordable
23 housing development reserved for low-income families.
24 Residents at Sundance Vista receive support through the Los
25 Angeles County Development Authority's resident services

1 program.

2 The project aims to increase multi-family housing
3 residents' knowledge of EV infrastructure, to the cost of
4 EV ownership and available incentives. With increased
5 exposure to EV charging, the project will result in an
6 increase in EV adoption among multifamily housing
7 residents. Next slide, please.

8 Staff's recommendation is to approve this
9 agreement and adopt staff's determination that these
10 actions are exempt from CEQA. From the County of LA is
11 Lujana Medina who is available for public comment. Thank
12 you for your consideration. This concludes my presentation
13 and I'm happy to answer any questions.

14 CHAIR HOCHSCHILD: Great. Thank you.

15 We'll take public comment on Item 16.

16 MS. BADIE:

17 Hello again, this is Mona Badie, the Public
18 Advisor. The Commission welcomes public comment on Item 16
19 at this time. If you're joining us in the room, please
20 raise your hand or use the QR code. And if you're joining
21 by phone, please press *9, excuse me. And if you're
22 joining on Zoom online, use the "raise hand" feature on
23 your screen.

24 Lujana Medina, I'm going to open your line. If
25 you could please spell your name for the record. We're

1 asking for comments to be two minutes or less.

2 MS. MEDINA: Sure, no problem. Lujuana Median
3 with the County of Los Angeles. It's L-U-J-U-A-N-A, last
4 name Medina, M-E-D-I-N-A. I first want to thank the
5 California Energy Commission for allowing this time to not
6 only thank the CEC for recognizing the proposal as a way
7 for multifamily properties to overcome EVSE infrastructure
8 installation. But to also just applaud the efforts to also
9 provide access for communities who are facing environmental
10 justice, specifically public housing. I'm actually a child
11 from public housing, so I can definitely understand, you
12 know, the need for investment in public housing and access
13 to clean energy options.

14 In addition, I just want to let the Commission
15 know also the County of Los Angeles, we look at ourselves
16 as an energy champion across Southern California. So as we
17 implement programs, we're bringing in rural, and largely
18 disadvantaged communities that go beyond the County of Los
19 Angeles into Inland Empire, and to county of Ventura and
20 other counties that surround us. So we really want to
21 emphasize access across Southern California.

22 Last, I just also want to comment that we also
23 understand that there's a workforce development need that's
24 attached to all of these installations that are going to be
25 completed. And just so you guys are aware, we just

1 recently got awarded the Department of Energy, Energy
2 Futures Award Grant, which will allow us to establish an EV
3 workforce plan. And so we're hoping to really marry it
4 with the REACH 2.0. so we can start developing that
5 workforce plan. And then implement it in a year to help
6 provide operation and maintenance technicians, so once
7 those installations are done. So really something to look
8 forward by providing comprehensive solutions to EVSE
9 infrastructure that go beyond typical grant periods.

10 So I know my time is up. But I also want to say
11 congrats to Christine Collopy for her retirement. I've
12 worked with her for many years, so I'm super excited to
13 hear about that. And so thank you all, appreciate your
14 time.

15 MS. BADIE: Thank you.

16 That concludes public comment for this item.
17 Back to you, Chair.

18 CHAIR HOCHSCHILD: Yeah, thank you. And just in
19 response to that public comment, I really want to just
20 highlight these are job creators. And I don't know if we
21 have good data. Back in the day when I was in the
22 renewables industry there were some really good charts
23 showing per megawatt of wind or solar and storage, what the
24 job years created are. Do we have good estimates for
25 chargers? Do we at the staff level have a good sense of

1 how many jobs are created for a project like this?

2 MS. BIRNMAUM: Yeah, that's a great question. I
3 don't know that I had, but I can look into that.

4 COMMISSIONER MONAHAN: CalETC actually did a
5 study on it as well, so I'll get the data from CalETC.

6 CHAIR HOCHSCHILD: Okay. Yeah, I would welcome
7 if just maybe the next meeting, if you could share that.
8 It would be great to know.

9 COMMISSIONER MONAHAN: Yeah.

10 COMMISSIONER MCALLISTER: Yeah, and I want to
11 just throw in the mix here. And, you know, we had the
12 previous item from Derrick about you know, that the jobs
13 perspective of the clean energy transition. And I wanted
14 to just remind everyone that the US Department of Energy
15 does a quite in-depth look at energy jobs every year, the
16 Energy and Employment Report we actually supported a few
17 years ago. It almost went away during the previous federal
18 Administration. And the states stepped in and funded it
19 when DOE pulled out. And now it's back with DOE and
20 they're -- it started in 2016. And it's an incredibly
21 valuable resource, longitudinal resource. You know, it has
22 data from 2016 every year going forward. It's done by a
23 highly competent firm every year.

24 And there is state level information about very
25 detailed information that's survey based and interview

1 based about the energy jobs landscape. And all the
2 different sub sectors of energy, including lots of slicing
3 and dicing around the clean energy, various clean energy
4 sectors. And including, you know, a deep dive on
5 transportation.

6 So I was going to sort of make sure that the
7 conversation this morning was connected with that data.
8 Because I think there's an opportunity for us to piggyback
9 and find incremental additional work, to do more in-depth
10 on-the-ground work in California to quantify the jobs
11 landscape with a pretty modest investment to get a lot of a
12 lot of bang. So I think that that resource is a little bit
13 underappreciated, and I think it's very relevant for us.

14 CHAIR HOCHSCHILD: Great, terrific. Well thank
15 you, Sarah, for the presentation.

16 I welcome a motion on Item 16 from Commissioner
17 Monahan.

18 COMMISSIONER MONAHAN: I move approve this item.

19 CHAIR HOCHSCHILD: Commissioner McAlister, will
20 you be willing to second?

21 COMMISSIONER MCALLISTER: Second.

22 CHAIR HOCHSCHILD: All in favor say aye.

23 Commissioner Monahan?

24 COMMISSIONER MONAHAN: Aye.

25 CHAIR HOCHSCHILD: Commissioner McAllister.

1 COMMISSIONER MCALLISTER: Vice Chair Gunda.

2 VICE CHAIR GUNDA: Aye.

3 CHAIR HOCHSCHILD: Commissioner Gallardo.

4 COMMISSIONER GALLARDO: Aye.

5 CHAIR HOCHSCHILD: And I vote aye as well. So we
6 are passing Item 16 unanimously. Thank you so much, Sarah.

7 And with that we'll turn Item 17, Responsive,
8 Easy Charging Products with Dynamic Signals. Welcome to
9 Jeffrey Lu.

10 MR. LU: Hey, there. Good afternoon,
11 Commissioners. My name is Jeffrey Lu. I'm staff in the
12 Fuels and Transportation Division. I'm glad to be here
13 today to present Item 17 of today's agenda, which includes
14 five agreements, including with Compass Global, Kaluza,
15 dcbel LLC, Prologis Mobility, and ev.energy. Next slide,
16 please.

17 So the five agreements I'm presenting today are
18 projects submitted to our solicitation that we call
19 "Responsive, Easy Charging Products with Dynamic Signals"
20 or REDWDS for short. REDWDS provides funding for the
21 development of intelligent and easy to use charging
22 products, which help customers manage EV charging in
23 response to electricity prices and other grid signals. In
24 other words, REDWDS will help realize load flexibility with
25 EVs, and this will help save customers money and help

1 support grid reliability and process.

2 Such products can come in many forms. They can
3 be one way chargers. They can be bidirectional chargers.
4 They can also be cloud based optimization software. And
5 you actually see this diversity reflected in the agreements
6 that we're bringing here today.

7 REDWDS also provides funding for projects to
8 deploy the actual product with customers throughout
9 California. And at least half of their deployments need to
10 be located in a disadvantaged or low-income community.

11 For successful projects that meet the predefined
12 performance metrics we've outlined. Our agreement terms
13 actually include provisions for additional funding to
14 further scale deployments with customers.

15 Funding for today's projects comes from the state
16 budget as well as the Clean Transportation Program.

17 We announced 10 proposed awards for REDWDS last
18 year, and we're bringing to you five agreements for your
19 consideration today. This is on top of the two that we
20 brought last month, and there are three more that we hope
21 to bring to you at a future business meeting. Next slide,
22 please.

23 Let's talk briefly about benefits. We expect
24 that all projects awarded through REDWDS will provide
25 benefits to California by advancing load flexibility and

1 supporting the CEC's Load Management Standards. More
2 practically what this means is that all of the projects
3 today will help drivers and other vehicle operators reduce
4 charging electricity costs and the emissions associated
5 with the electricity used to charge their vehicles.

6 These product will also help improve grid
7 operations by making sure that EV charging is done in a
8 grid friendly way, without compromising the driver's
9 experience. So for example, these products might schedule
10 charging when clean electricity is abundant and cheap.

11 Some projects will help equip folks with home
12 backup power capabilities using their EVs. And across
13 today's awards, projects will install 100 high power
14 chargers for large drayage trucks and nearly 400 new
15 chargers for passenger cars, including over 200
16 bidirectional chargers. Next slide, please.

17 So given that we have five projects as part of
18 this item, I've summarized the main details of each in this
19 table. You can keep your eyes on the center and the left
20 for this one to begin with. I'll verbally walk you through
21 each of these projects in a bit more detail.

22 First up, we have Compass Global, Incorporated.
23 Compass Global will develop their Optiwatt software
24 platform and app that helps drivers manage their charging
25 in response to various grid signals, such as rates.

1 Optiwatt works by connect to a driver's existing
2 vehicle or charger to schedule charging, so there is no
3 installation of new hardware as part of this particular
4 project. Compass Global plans to roll out their software
5 and app to 22,000 existing EVs and chargers in California.
6 CEC is providing \$1.57 million for Phase 1, and Compass
7 Global will provide \$582,000 in match.

8 Next, we have Kaluza US, LLC. Kaluza will
9 develop a software platform that helps folks manage their
10 charging and discharging. Kaluza's software is capable of
11 connecting to both EVs and chargers, and the team plans to
12 install new chargers with customers in PG&E's territory as
13 part of this project. Kaluza plans to install 166 new
14 unidirectional chargers and 30 new bidirectional chargers,
15 both manufactured by Wallbox. We'll provide \$1.55 million
16 and Kaluza will provide \$698,000 in match

17 Moving on to dcbel LLC. Dcbel is developing a
18 new bidirectional home energy station that's powered by a
19 software platform that's also developed in house. The home
20 energy station is designed to help homes manage their
21 energy use and it works as a solar inverter, a stationary
22 storage inverter, and EV charger, including home backup
23 capability. Dcbel will install their home energy station
24 at 200 residences throughout California. We're providing
25 \$2.47 million for Phase 1, and dcbel will bring \$863,000 in

1 match

2 Next, Prologis Mobility, LLC. They're deploying
3 new chargers at their charging depots. These chargers will
4 be managed by a software platform developed by a project
5 partner. And this is a medium and heavy-duty focused
6 project. These chargers will serve drayage trucks at
7 Prologis Mobility's Torrance, Ontario, and Redlands
8 locations, so Southern California. There will be a total
9 of 116 new high power charging ports will be installed, and
10 this is the only REDWDS project with only one project phase
11 so no Phase 2. CEC is providing \$2.5 million and Prologis
12 is providing \$5.7 million.

13 Finally, last one, ev.energy Corporation will
14 develop a software platform and app that helps drivers
15 manage their charging in response to grid signals. This
16 software platform works by connecting to existing EVs and
17 chargers, so again here there is no new hardware deployment
18 as part of this project. Ev.energy will roll out their
19 software and app to 1,000 residential EV customers by
20 connecting to their EVs or existing chargers. CEC is
21 providing \$1.6 million, and ev.energy is providing \$532,000
22 in match. Next slide, please.

23 Okay. We're excited to bring you these five
24 agreements. We're seeking your approval for these grants
25 as well as adoption of staff's findings that these actions

1 are exempt from CEQA.

2 I'm happy to answer any questions you have, and
3 we may have folks from these project teams called in and/or
4 here in person to address questions as well. Thank you.

5 CHAIR HOCHSCHILD: Thank you so much, Jeffrey.
6 Let's go to public comment on Item 17.

7 MS. BADIE: Thank you, Chair.

8 Now is the time for public comment on Item 17.
9 If you're in the room with us, we're asking folks to use
10 the QR code to notify us. I'll also take a show of hands.
11 And then if you're on Zoom, please use the "raise hand"
12 feature on your screen to let us know you'd like to
13 comment, or *9 if you're joining us by phone.

14 So we'll start in the room. We have Samuel Goda.
15 If you're still with us, please approach the podium if you
16 could spell your name for the record and we're asking for
17 comments to be two minutes or less. Thank you.

18 MR. GODA: Hey, Chair, Vice Chair, Commissioners.
19 Good afternoon. My name is Samuel Goda, S-A-M-U-E-L, and
20 my last name, G-O-D-A. And I work as a Regulatory and
21 Government Affairs Manager for Kaluza.

22 Kaluza is a software company committed to
23 accelerating the EV, the energy transition by helping
24 utilities deliver innovative solutions on everything from
25 managed EV charging to billing. On behalf of Kaluza. I'd

1 like to express my profound gratitude for the support from
2 the California Energy Commission through the RDWDS grant.

3 Our project in collaboration with Wallbox and our
4 partners will leverage CEC funding to use and modify
5 Kaluza's innovative energy software solutions to improve
6 grid resilience through EV managed charging and Vehicle to
7 X, Vehicle to Everything technology in PG&E's service
8 territory.

9 Moreover, the incorporation of dynamic pricing
10 goes for both V1G unidirectional, and bidirectional V2G
11 charging or V2X charging, exemplifies a paradigm shift
12 towards a more resilient and responsive energy ecosystem.

13 As a certified B Corp. Kaluza shares the CEC's
14 commitment to equity and inclusivity in the energy
15 transition, which is why we enthusiastically intend to
16 enroll at least 50 percent of the EV drivers from
17 disadvantaged and low-income communities into our managed
18 charging program.

19 Lastly, I'd like to emphasize that the CEC
20 funding will help not only the industry in general but it
21 will also contribute to a future where end consumers are at
22 the center of the energy transition. In this future
23 individual households enjoy more control of their own
24 devices. Their interaction with the grid is mutually
25 beneficial, and leads the collective effort to mitigate

1 negative impacts of climate change. The 5D future:
2 distributed, decentralized, digitalized, decarbonized and
3 democratic.

4 In conclusion, I'd like to thank CEC staff,
5 especially Art Cam (phonetic) Robert Naldi, for his
6 invaluable support. And again, commend the California
7 Energy Commission for its unwavering commitment to
8 advancing innovative energy solutions. Thank you for your
9 steadfast leadership and dedication to shaping a brighter
10 and more equitable tomorrow for all Californians. Thank
11 you.

12 MS. BADIE: Thank you.

13 Anyone else in the room? If not, I'll transition
14 to Zoom. Steve Mannhard, I'm going to open your line, if
15 you could please spell your name for the record. We're
16 asking for comments to be two minutes or less. Steve, if
17 you can unmute on your end.

18 MR. MANNHARD: Yeah. Hi. Are you able to hear
19 me, okay?

20 MS. BADIE: Yes, thank you.

21 MR. MANNHARD: Hi, I am Steve Mannhard. I'm
22 representing Compass Global here. And also we're called
23 Optiwatt here. And so Optiwatt's an EV and broader load
24 management software provider based in San Francisco. And
25 we're really focused on scaling grid connected distributed

1 energy resources, in particular EVs.

2 Currently in California, we've got over 21,000
3 EVs in the state, as well as 7,000 of those that are in
4 designated disadvantaged communities that are using our
5 platform today to help them optimize their charging to
6 their specific rates. And they're being deployed in
7 different CAISO type programs like the ELRP DRAM (phonetic)
8 and those different types of programs.

9 And related to this particular project, we wanted
10 to thank you for the thoughtful design of the RDWDS grant
11 opportunity, and for your support for our proposed
12 solution.

13 Our projects similar to our mission is very
14 focused on scaling these grid connected rate optimized EVs
15 and EVSEs with a focus on disadvantaged communities. As
16 well as a focus on helping these customers get enrolled and
17 optimized to their dynamic rates that are forthcoming and
18 already here in the State of California.

19 So the unique aspects of the project that we are
20 working on and working through are really around hyper-
21 scalability. Not utilizing and not requiring hardware in
22 order to connect to these devices and help save customers
23 money on their rates and through incentives, while also
24 optimizing to different dynamic grid signals.

25 Also as dynamic rates roll out, these are

1 complex. Another component is around providing and
2 building out rate calculator types of solutions and ways in
3 which customers can understand the value of entering into
4 and signing up for a dynamic rate and optimizing towards
5 that.

6 Finally, there's a lot of value that can be
7 offered here with emergency response and grid resilience
8 through connecting these customers and these EVs into
9 programs like ELRP. (phonetic)

10 Thank you very much for all of your leadership
11 with this grant. And we look forward to hearing questions
12 from you as needed.

13 MS. BADIE: Thank you.

14 Next we'll hear from Tanuj Deora. I'm going to
15 open your line, if you could please spell your name for the
16 record. We're asking for comments to be two minutes or
17 less. Tanuj, if you can unmute on your end and begin.

18 MR. DEORA: Thank you. Tanuj Deora, that's
19 spelled T-A-N-U-J, last name Deora, D-E-O-R-A. I'm with
20 ev.energy, a Certified B Corp. with a mission to bring
21 greener cheaper charging for all. And we also have a RDWDS
22 award as you just heard from Mr. Lu.

23 It's with both enthusiasm and excitement we've
24 proposed this ChargeWise Program. The time-of-use rates
25 being rolled out for residential electricity customers

1 today provide an important intermediate step, but will
2 ultimately likely prove insufficient to realize the full
3 value of electric vehicles as assets and not liabilities to
4 our electric power system.

5 Maximizing the grid value from California's
6 growing EV fleet requires dynamic incentives as a signal to
7 unlock the optimization across driver needs, the
8 distribution system, the wholesale market, and emissions
9 reductions. And we at ev.energy are excited to work with
10 the energy providers in California. That includes CCAs,
11 Munis, IOUs, to empower EV drivers to help deliver this
12 decarbonize distributed power capacity. Lowering costs not
13 only for themselves, but also for non-participating
14 customers, their neighbors who are not necessarily EV
15 drivers as well.

16 Our ChargeWise proposal will enable California to
17 move past the early stage programs we have today where only
18 about 5 percent of EV drivers are participating in active
19 managed charging programs. Tying smart charger incentives
20 to dynamic rates will increase the levels of participation
21 past 20 percent where programs elsewhere have achieved.
22 And towards the majority participation that will be keenly
23 needed in the next few years.

24 With our innovative partners such as our current
25 clients Peninsula Clean Energy and Marin Clean Energy, we

1 can build a EV powered virtual power plant, which will be
2 the first step towards a larger Phase 2 VPP of over 250
3 megawatts by 2026.

4 Now we also want to thank you, the CEC staff, the
5 State of California for this opportunity to join us in this
6 important effort. And we look forward to developing,
7 deploying, and disseminating the results from this
8 initiative across the country and the world. Thanks for
9 this program, and looking forward to working together.

10 MS. BADIE: Thank you.

11 And that concludes public comment for this item.
12 Back to you, Chair.

13 CHAIR HOCHSCHILD: Thank you.

14 Let's go to Commissioner discussion, starting
15 with Commissioner Monahan.

16 Well I first want to say that I broke the policy,
17 sorry Drew, of if we've had one grant from a certain
18 solicitation we don't have another one. But Vice Chair
19 Gunda and Commissioner McAllister weren't here last month.
20 And so I said let's just break the protocol, because these
21 are so interesting from just a grid resilience perspective.

22 And California is really at the forefront of
23 these types of innovative investments. And it's all
24 happening. I mean, utilities are doing it and so are we.
25 And I just feel like the work that Jeffrey and his

1 colleagues are managing to exploit, or at least to better,
2 you know, make these early investments in what we hope will
3 be a major support for the grid.

4 And we don't know yet how to fully unlock the
5 potential for vehicles to support the grid. But these
6 investments are critical to being able to assess that and
7 eventually to being able to exploit that possibility. And
8 if we do it right, we run our vehicles on sunshine, they
9 deliver energy back to the grid when the sun goes down, we
10 save ratepayers money, we save EV drivers money. I mean,
11 it's the perfect marriage. But there's a lot between this
12 future and where we are today.

13 Where we are today, people don't understand how
14 to do this. How to unlock it. At least the average EV
15 driver doesn't have a good understanding of even how to how
16 to charge their vehicle to minimize the cost of that
17 charging. So these technologies are critical. They're
18 critical enablers. And I really want to be able to
19 showcase this to everybody.

20 And I think going forward I won't make Jeffrey do
21 that again, because he's getting -- he's reading faster and
22 faster. But I thought this was just an opportunity for all
23 of us to be able to hear about some of these projects and
24 ask questions.

25 CHAIR HOCHSCHILD: Commissioner McAllister.

1 COMMISSIONER MCALLISTER: I appreciate that point
2 and I think, you know, a worthy violation of the policy.
3 This is super exciting for many, many reasons. But as the
4 transportation system and the electric system kind of meld,
5 this kind of -- these projects become just like so, so
6 relevant to making it all fit together.

7 And this effort shares a lot of DNA with what
8 we're doing with buildings, and Load Management Standards
9 and load flex generally. And I think figuring out how to
10 conduct this orchestra of many, many billions of points of
11 make sure that the billions of instruments out there all
12 playing in harmony, is a problem that we have the tools to
13 solve. We really do. And, you know, the digital age opens
14 up all these possibilities to do things really quickly and
15 really well. And provide consumers the information they
16 need and work with the grid as it is in each moment.

17 So it's super exciting to see these projects, and
18 definitely would love a periodic update. So thanks.

19 CHAIR HOCHSCHILD: Okay. Vice Chair?

20 VICE CHAIR GUNDA: Thanks, Chair. I told the
21 Chair that this is going to be my longest comment for the
22 day. But Jeff, I just want to begin by thanking you for I
23 think it was probably a year-and-a-half ago that you
24 presented at a business meeting, a kind of very conceptual
25 framework. You know, with this nice flowchart of what can

1 be achieved and just over the last 18 months, kind of
2 translating those thought leadership into more actionable
3 items. And now we're in this phase of actually gathering
4 data points to ensure that that thinking can be validated,
5 right? So just love, love the progress of what's been
6 happening here.

7 You know, I just want to appreciate and elevate
8 Commissioner McAllister's kind of thought leadership that
9 intersects here with the demand flexibility, right? So all
10 the work that's happening on the Load Management Standards,
11 the MIDAS Database, and the intersection that it perfectly
12 creates I think to your point, Samuel, on the 5Ds that you
13 laid out, right? That kind of, I think everybody agrees on
14 those 5Ds, but how do you really operationalize that, you
15 know, at a scale of this economy, right.

16 So I kind of wanted to just put this on the table
17 for both everybody here participating from the dais. SB
18 100 requires an incredible amount of new build. So
19 conservatively, we are talking about 2 to 3 million acres
20 of land and ocean space that is required to get to our SB
21 100 goals. That's one data point.

22 Reliability, we constantly talk about extreme
23 events and the potential need of 5 to 10 gigawatts of those
24 energy, you know, that we can quickly rely on to keep the
25 lights on under extreme conditions.

1 And then when you take those two things in
2 consideration, the one thing that you cannot deny is the
3 value of demand flexibility. Everything you do on demand
4 flexibility will make the problem smaller as Commissioner
5 McAllister states. And kind of just gives us an
6 opportunity and tools in our quiver (phonetic) to really
7 address this.

8 So I think as we then go into what CEC has been
9 talking about, we have adopted a 7,000 megawatt demand
10 flexibility goal by 2030. And these projects are critical,
11 critical in operationalizing that vision, right. So I just
12 want to say thank you, thank you, thank you to kind of
13 laying that out for us.

14 And then the point comes to another challenge of
15 just the interconnection. You know, how do we interconnect
16 the load? How do we interconnect the resources? Sure, you
17 know, we can fight on the land, we can get it, but still,
18 you know, how do you interconnect? And I think there is a
19 role for these resources specifically on grid reliability
20 in locally constrained areas, flexibility, and where you
21 have interconnection challenges. So the totality of the
22 opportunity here is just amazing, right.

23 And to the point of the extreme weather and the 5
24 to 10k problem we have, conservatively we're going to add,
25 60 gigs of storage on the wheels in the next 8 to 10 years.

1 And when you're talking about that amount, and not being
2 able to operationalize that to support the grid, it just
3 feels an absolute loss, right.

4 So just again I know I'm preaching to the choir,
5 but like this is the most important work, I think, in
6 benefiting the grid moving forward. But as we do this,
7 right, as we do this, one of the most important pieces is
8 educating and informing the public transparently on the
9 value of this. And making sure this doesn't add to the
10 reliability affordability crisis, right.

11 One of the useful data points is as we do this
12 through the CEC it gives us an opportunity to say hey, this
13 is a potentially a cost effective solution even for the
14 ratepayers, right. And I just want to like emphasize,
15 please kind of continue to pay attention to, as we deploy
16 these projects, how can we get those data points to ensure
17 and justify the cost effectiveness of this? Not just from
18 a general fund standpoint, but more of a ratepayer funded
19 programs. Is it possible, right? Is it really? Or like,
20 what level of discount or what we need from the general
21 fund to make this cost effective to realize all the non-
22 energy benefits that could potentially have? So I just
23 want to like put that challenge on us to really educate
24 ourselves on that.

25 And I think I really like one of the commenters

1 who said maximizing the grid value, right? Like everything
2 should maximize the grid value. I think it should also
3 maximize the climate agenda value, and the decarbonization
4 value. So how do we think about these in that context of
5 really scaling these resources?

6 So I again fully support this, and thank you for
7 your leadership on this, Commissioner Monahan. I know you
8 just knocked out \$7 or \$8 million here, but this is my
9 favorite millions of dollars. (Laughs.) And I think
10 everything we can do to create the conditions to
11 decarbonize the grid, if we can through these kinds of
12 projects retire a few power plants in disadvantaged
13 communities. That's incredible, right. But as you do this
14 try to inform on the net benefit. Sometimes like some of
15 the projects here like linear generator, right? It could
16 be done in hydrogen. We could combust hydrogen with a low,
17 low kind of impact today. These are essential grid
18 solutions as long as the communities where they're deployed
19 are supported. And a part of developing that support is
20 really creating the awareness and the net benefit value.

21 So again, thank you. I'm looking forward to
22 voting on this. That's the longest (indiscernible).

23 CHAIR HOCHSCHILD: (Overlapping colloquy.) It
24 was worth every minute.

25 Okay. Well, thank you so much, Jeffrey. And

1 unless there are further comments I'd welcome a motion from
2 Commissioner Monahan.

3 COMMISSIONER MONAHAN: Move to approve Item 17.

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

6 VICE CHAIR GUNDA: Please, yes.

7 CHAIR HOCHSCHILD: All in favor say aye.
8 Commissioner Monahan.

9 COMMISSIONER MONAHAN: Aye.

10 CHAIR HOCHSCHILD: Vice Chair Gunda.

11 VICE CHAIR GUNDA: Aye.

12 CHAIR HOCHSCHILD: Commissioner McAllister.

13 COMMISSIONER MCALLISTER: Aye.

14 CHAIR HOCHSCHILD: Commissioner Gallardo.

15 COMMISSIONER GALLARDO: Aye.

16 CHAIR HOCHSCHILD: And I vote aye as well. And I
17 want to just associate myself with all those comments,
18 really great progress.

19 So with that we'll turn now to Item 18, which is
20 the California Clean Energy Planning Program. And I
21 welcome Kristy Chew.

22 MS. CHEW: Good afternoon, Chair, Vice-Chair, and
23 Commissioners. My name is Kristy Chew and I am part of the
24 Climate Initiatives Branch within the California Energy
25 Commission's Siting, Transmission, and Environmental

1 Protection Division. I am presenting for your approval
2 today, the California Clean Energy Planning Program. Next
3 slide, please.

4 Thanks. The program is in response to a
5 recognition that local governments and California tribal
6 governments are essential partners in meeting California's
7 100 percent clean electricity goal.

8 Assembly Bill 128, the Budget Act of 2021,
9 appropriated \$1 million.55 million to the Energy Commission
10 to "maximize local government and tribal participation in
11 the statewide interagency planning process,... including but
12 not limited to improving their capacity to advance the
13 planning and permitting of new clean energy facilities and
14 related infrastructure, to support the state reaching its
15 goals set forth in Senate Bill 100."

16 Funds must be encumbered by June 30, 2024, and
17 liquidated by June 30, 2026. Next slide, please.

18 The first SB 100 Joint Agency report released in
19 2021, found that California will need a significant build
20 out of clean energy generation over the next 25 years. And
21 that amount of new infrastructure will likely require
22 developing land and ocean space in many regions of the
23 state.

24 Based on modeling conducted for the 2021 report,
25 meeting the 2045 goal will require sustained record setting

1 build rates through 2045. Deployment of clean energy
2 facilities requires tribal consultation and local
3 government engagement in the state's planning, permitting,
4 and project development policies and practices.

5 The AB 128 Grant Program will provide a funding
6 mechanism to ensure access for tribal and local government
7 involvement in clean energy transition planning processes.
8 Next slide, please.

9 To develop the AB 128 California Clean Energy
10 Planning Program, staff consulted with California tribal
11 governments and tribal members, state agency tribal
12 liaisons, local governments and local government
13 associations. And we surveyed local planning department
14 staff to find what would help them plan for more clean
15 energy facilities within their jurisdictions.

16 We also talked with land use planning experts as
17 well as other state agencies with similar programs and
18 mission and grant programs.

19 Tribal government representatives stated that
20 compensation for participating in clean energy events such
21 as SB 100 related meetings, workshops and working groups,
22 would enable regular participation in these proceedings and
23 processes. Specific grant opportunities such as this
24 proposed grant program would offset the costs that tribes
25 experience from ongoing state related consultations and

1 roundtables as well as enable them to hire subject matter
2 experts and staff. Whereas city and county governments
3 identified a need for support in developing new or updates
4 to their general plans, climate action or sustainability or
5 sustainability plans, zoning ordinances and other clean
6 energy related land use policies. Next slide, please.

7 As a result of the comments, feedback and
8 information received, staff developed the proposed
9 California Clean Energy Planning Program. This program
10 would provide grants to California Native American tribal
11 governments to support their participation and provide
12 their perspectives and clean energy planning events led by
13 the Energy Commission and SB 100 sister agencies: the Air
14 Resources Board and the Public Utilities Commission.

15 The program would provide planning grants to help
16 local governments develop new, or update their land use
17 policy documents, and support clean energy development in
18 their jurisdictions. These grants will be awarded on a
19 first come-first served basis, and is comprised of three
20 funding categories.

21 Category 1 would provide California Tribal
22 governments funding to participate in SB 100-related
23 activities. And events such as targeted SB 100 proceedings
24 around offshore wind energy development, transmission
25 planning, land use mapping, scenario forecasting, and

1 battery energy storage safety policy development.

2 The maximum funding for Category 1 activities is
3 \$150,000 and up to \$15,000 per tribal government. Next
4 slide, please.

5 Category 2 activities would allow for California
6 Tribal governments to select and hire subject matter
7 experts to conduct renewable resource or clean energy
8 potential studies, expertise related to understanding
9 renewable or clean energy technologies and their potential
10 impacts, and/or fund staff salaries whose duties include
11 advancing the tribes' development of clean energy related
12 projects or related infrastructure.

13 The maximum funding for all Category 2 activities
14 would be \$900,000, with up to \$200,000 per tribal
15 government. Next slide, please.

16 Category 3 activities would fund cities and
17 counties to help them update or develop new land use
18 planning documents to support clean energy development in
19 their jurisdictions. The maximum funding for all Category
20 3 activities is \$500,000, with up to \$100,000 per entity.
21 Next slide, please.

22 Staff recommends approval of the California Clean
23 Energy Planning Program and adoption of the staff's
24 determination that the program is exempt from the
25 California Environmental Quality Act. If approved today,

1 staff intends to release the grant solicitation tomorrow,
2 April 11th, to hold a public grant solicitation workshop on
3 April 23rd, to receive applications between May 7th and
4 June 3rd. And then make awards to the passing applications
5 by June 30, to meet the encumbrance deadline.

6 This concludes my presentation. And I'm happy to
7 answer any questions.

8 CHAIR HOCHSCHILD: Thank you so much, Christine.
9 Let's go to public comment on Item 18.

10 MS. BADIE: Thank you.

11 The Commission now welcomes public comment on
12 Item 18. If you're joining us in the room, please raise
13 your hand in the room or use the QR code. And if you're
14 joining by Zoom, please use the "raise hand feature" on
15 your screen or press *9 if joining by phone.

16 And it looks like we don't have any comments for
17 this item. So back to you, Chair.

18 CHAIR HOCHSCHILD: Great. Well, I just wanted to
19 say thank you, Kristy, for the presentation. I'm really
20 pleased to see this and again on the tribal element as
21 well. That is really a missing piece of the puzzle, the
22 funds to enable participation is something that
23 Commissioner Gallardo has been working on for a long time
24 for a lot of the under-resourced communities in our state,
25 to have the capacity to effectively engage in and

1 participate and do the planning. That's so important. So
2 I really wanted to just identify that and name that and
3 open it up for discussion.

4 Vice Chair, please, to you.

5 VICE CHAIR GUNDA: Yeah. Thanks, Chair.

6 I think I would repeat your words, but just first
7 of all, Kristy, thank you for the presentation. And thanks
8 for the briefing along the process of developing this.

9 Again, I think the only thing I just want to
10 uplift is you know, we're spending a lot of a lot of money
11 today, right? Like we're approving a lot of things. This
12 particular item is around procedural equity, and really
13 centers around supporting the voices at the table as we do
14 this planning. And I really want to uplift Commissioner
15 Gallardo's work in her previous role working as a partner
16 to kind of help get these funds. It's not what we would
17 like. We would like many times of this money to create the
18 necessary conditions for better equitable participation.
19 But really thank you for taking the thoughtful process
20 here.

21 The one thing I, based on today's meeting would
22 really like us to kind of think about how to engage with
23 the Jobs First Initiative this morning that was discussed.
24 There's like hundreds of millions of dollars there. I
25 don't know if it could expand. And I know there are

1 programs at PUC to also support the \$30 million that PUC
2 got as a part of this entire package a couple years ago.

3 So just again thank you for taking the first
4 steps, or enhancing the steps we have in making this
5 better. Thanks.

6 CHAIR HOCHSCHILD: Commissioner Gallardo.

7 COMMISSIONER GALLARDO: Thank you so much,
8 Kristy, for the presentation. And I think I was the one
9 who asked for this to be pulled off. So I thought it was
10 just so important to show that we are listening to what we
11 hear from the tribes, from communities and other residents,
12 who we're engaging with about what they want to do.

13 So a double click highlight what Vice Chair Gunda
14 just said. And also just feel this gratitude and so I do
15 want to ensure that we're showcasing that work. Not to
16 show off, not to boast, but instead to demonstrate that
17 we're listening. That we do care and that with the more
18 you know, input and guidance, feedback, etcetera that we
19 get from the public, the better that we're going to do as a
20 whole to get to all of our goals. So this one's fantastic.

21 And I also want to emphasize that the tribes have
22 been asking about doing co-management, co-planning, co-
23 designing. We've heard that from EJ communities as well,
24 so this is an example of a way that it can be done even if
25 it is a start. And it may not be perfect and may not be

1 the, you know, the full extent of funding we'd like to be
2 able to provide, but I think this is a phenomenal
3 beginning. So thank you, Kristy.

4 And then also thank you Vice Chair Gunda, for
5 being the Lead, for supporting, for being a champion
6 overall, on all this.

7 CHAIR HOCHSCHILD: With that --

8 COMMISSIONER MCALLISTER: Could I? I know we're
9 running late here, but I just I would link this back to the
10 Tribal Resolution. And just all the consistent work that
11 we're doing to try to help tribes engage in, at the
12 decision making cadence that they have, right.

13 And I think, you know, these kinds of
14 facilitative monies are often what gets value engineered
15 out of a project. And they're super scarce. And so I
16 think it's meaningful that we're supporting that exact
17 thing, and allowing people to get at the table and
18 participate.

19 And it would just, I think raise up the term co-
20 management that Commissioner Gallardo just used where just
21 bringing -- meeting at the table as equal parties with our
22 sleeves rolled up together. And this facilitates that, and
23 I think we should do as much as we possibly can.

24 CHAIR HOCHSCHILD: So thank you for those
25 comments. With that I'd welcome a motion on Item 8 from

1 the Vice Chair.

2 VICE CHAIR GUNDA: I move Item 18.

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

5 COMMISSIONER GALLARDO: I second.

6 CHAIR HOCHSCHILD: All in favor say aye.
7 Vice Chair Gunda?

8 VICE CHAIR GUNDA: Aye.

9 CHAIR HOCHSCHILD: Commissioner Gallardo?

10 COMMISSIONER GALLARDO: Aye.

11 CHAIR HOCHSCHILD: Commissioner McAllister?

12 COMMISSIONER MCALLISTER: Aye.

13 CHAIR HOCHSCHILD: And Commissioner Monahan?

14 COMMISSIONER MONAHAN: Aye.

15 CHAIR HOCHSCHILD: And I vote aye as well. And
16 Item 18 passes unanimously. Thank you, Kristy.

17 We'll turn now to Item 19, Minutes of the March
18 13th Business Meeting. Any public comment on that?

19 MS. BADIE: Thank you, Chair.

20 If you want to comment on the Item 19 at this
21 time please raise your hand if you're in the room with us.
22 And if you're on Zoom please use the "raise hand" feature
23 on your screen. And *9 if you're joining us by phone.

24 And I'm not -- so hold on one second. I'm not
25 seeing any raised hands for this item. Back to you, Chair.

1 CHAIR HOCHSCHILD: Okay. Unless there is
2 Commissioner discussion I think the Vice Chair and
3 Commissioner McAllister will abstain, having been out of
4 the country. So I'd welcome a motion from Commissioner
5 Monahan on Item 19.

6 COMMISSIONER MONAHAN: I move Item 19.

7 CHAIR HOCHSCHILD: Is there a second from
8 Commissioner Gallardo?

9 COMMISSIONER GALLARDO: I second.

10 CHAIR HOCHSCHILD: All in favor say aye.
11 Commissioner Monahan?

12 COMMISSIONER MONAHAN: Aye.

13 CHAIR HOCHSCHILD: Commissioner Gallardo?

14 COMMISSIONER GALLARDO: Aye.

15 CHAIR HOCHSCHILD: And I vote aye as well, with
16 Commissioner McAllister and Vice Chair Gunda abstaining.

17 We'll turn now to Item 20, Lead Commissioner or
18 Presiding Member Reports. And I would ask if we can keep
19 this really brief that would be most welcome.

20 You only have six things, great. That's be most
21 welcome. Please go ahead, Vice Chair.

22 VICE CHAIR GUNDA: Chair, I think we'll have
23 opportunities maybe at a future business meeting, but just
24 the one thing I wanted to elevate is Commissioner
25 McAllister and I had a chance to travel to India along with

1 President Reynolds, staff from PUC and Chair Randolph and
2 staff from CARB. To really begin the conversations around
3 fostering better climate collaborations between the state
4 of California and the government of India and many states
5 in India. So I'll hold that for the future, but just the
6 scale of what's happening in India and the opportunities
7 for us to collaborate are immense. And I look forward to
8 bringing more in a future meeting,

9 CHAIR HOCHSCHILD: Commissioner Monahan?

10 COMMISSIONER MONAHAN: I was on vacation for two
11 weeks, so I can talk a lot about that. But I won't, because
12 you could get mad at me. (Laughter) And Battery Day, which
13 I think you're going to talk about, so I'm just going to be
14 quiet.

15 CHAIR HOCHSCHILD: Great. Commissioner
16 McAllister?

17 COMMISSIONER MCALLISTER: Okay, well I'm going to
18 talk a little bit more than my previous two colleagues
19 here, but I will try to keep it brief. The India trip was
20 amazing. I mean, you get that environment way more than I
21 do, it was my first time in India. But spending a week
22 with Chair Randolph and the ARB team and the UC Davis team
23 that facilitated that, that component of the trip that
24 first week, was really amazing. And so it was great to
25 sort of get an insider view a little bit of what makes the

1 ARB tick a little bit in terms of its outreach. So that
2 was, I think helpful and fascinating.

3 And then the second week, more focused on
4 electric issues and Energy Commission issues, together with
5 the PUC. And great to get that time with President
6 Reynolds as well. So but I'll hold it there.

7 I did feel like we gave Christine a lot of kudos
8 about the HEEHRA application, but I did want to highlight a
9 few other staff just if I might, and I hope some of them
10 are still listening. But the RREDI team, it was all-hands-
11 on-deck. And I think some of these folks just deserve a
12 callout. So on Christine and Deana's team Carol Schmitt,
13 Andrea Hoppe, Mei Chang, Kailyn Strubel (phonetic) Savi
14 Ellis. And that team was just ready and willing to just
15 jump in at any moment to help move that ball forward.

16 And CCO, which was critical for getting this done
17 just really, Lisa, your team was just on top of it as
18 things came up: Christina Evola, Matt Pinkerton and
19 Chadrick Punch, thank them.

20 And then Admin, CGL and Budgets for the
21 contracting issues and budget authority, and that was very
22 complex. I'm glad they were on it, and helping figuring it
23 out. Mike Poe, I think Carey Justin Junio, (phonetic)
24 Damon Knott (phonetic), Patrick Steggall and Rob Cook, just
25 thanks all of you for pitching in tremendously on getting

1 that done quickly and well.

2 Then I just high level wanted to thank the RREDI
3 Division for all of that work. But also the Efficiency
4 Division, they chimed in and has been chiming in on all the
5 technical issues programmatically. That even with RREDI
6 putting the programs together, the Efficiency Division has
7 been on deck, really to help on the technical front.

8 And I want to just let everyone know Title 24,
9 the Building Energy Efficiency Standards, Part 6, and Part
10 11 CALGreen, our piece of that, both of those are moving
11 forward.

12 And I was actually on vacation for two weeks as
13 well, up until this past weekend and out of the country.
14 And I managed to do a press conference about the -- or a
15 press event about the Building Standards publication and
16 their formal rulemaking beginning. And that's always a
17 kind of a big news item and we've gotten a really good
18 balance.

19 And that's really due to the team effort, and
20 particularly Lindsey in Media and her team, Elaine and
21 others in Media, helping to get the message out well and
22 completely. So that we can really kind of own the message
23 about the work that we do and get out the right message. So
24 I think we've done that forcefully and really well.

25 So and again, thank just thanks to CCO for all

1 the backup on the building standards, both Part 6 and part
2 11. But kudos to the whole Efficiency Division team. You
3 know, Mike and Will have just done an amazing job. They
4 have an incredible team.

5 So those are my comments for this week.

6 CHAIR HOCHSCHILD: Thank you.

7 Commissioner Gallardo.

8 COMMISSIONER GALLARDO: All right, I'll have a
9 medium-sized report here. I do have some images, if those
10 can be pulled up? Okay, there's none there and the images
11 are important. There is someone in particular who I want
12 you to get more familiar with. I think it's the report.
13 Anyway, I'll move forward with talking about it while they
14 look for the slides.

15 I went to visit Lake County with other staff
16 members for two purposes. One was to meet Chairman Simon
17 from the Middletown Rancheria of Pomo Indians. He is an
18 incredible leader, an incredible individual. And I wanted
19 you to see the image because he is a former professional
20 football player. And he played for the Indianapolis Colts,
21 so he's very tall. I look puny standing next to him. But
22 he also has a giant personality.

23 He's so excited about clean energy and wants to
24 be involved with everything, wants to take advantage of all
25 the funding opportunities. We talked with him about the

1 ECAA program he said, "We're going to do it," and they
2 actually did. So they've applied for the ECCA loan, that
3 they're the first tribe to do so. And so I'm really
4 excited about that, because I think that'll get the ball
5 rolling for more tribes to get comfortable to apply for it.

6 Let's see if we can pull it up real quick. And
7 then I'll move on to my next updates.

8 Anyway, so I think Chairman Simon is someone who
9 we're going to have more engagement with, so that's why I
10 wanted to highlight him. And then also wanted to give a
11 big round of applause to the staff who did the GRDA
12 workshop. We had a GRDA workshop out there in Lake County.
13 So that's the Geothermal Resource Development Act grants,
14 really excited about those.

15 And then also wanted to highlight we did the
16 Lithium Valley Symposium out in the Imperial Valley area on
17 March 29th. That went really well. And I wanted to
18 highlight that we had about 17 state representatives out
19 there, which there are the pictures. So you see Chairman
20 Simon in the black shirt. Me looking puny. And Sierra,
21 our Tribal Liaison who went with us, and also my Advisor
22 Jimmy. And then in the other photo is our group photo at
23 the GRDA workshop there in Lake County.

24 So we can go to the next slide.

25 So just talking real quick about the Lithium

1 Valley Symposium. That middle picture is some of the state
2 representatives who were still there until the end,
3 including Assemblymember Garcia. We had really robust
4 panels. And we now think that we had about 140 attendees
5 at that symposium. We didn't do much promotion. It was
6 because we wanted it to be "invite only," smaller, but even
7 then it was still a major attendance. And again, good
8 representation from the state. So we're doing a lot of
9 work on Lithium Valley. And I wanted to share that with
10 you since this is one of my priority areas in my portfolio
11 of policy work that we're doing.

12 And we'll go to the next slide. And just this is
13 just an invitation, we have a workshop April 19th. This is
14 for our Lithium Valley Vision Proceeding. It's going from
15 9:30 to 12:00. It'll be here at the auditorium, also
16 available via Zoom in case anyone is interested to attend.

17 We'll have the County of Imperial here in-person
18 with us to share the efforts that they're working on. And
19 then we'll also share as a state the ways that we're trying
20 to address the 15 recommendations that were adopted by the
21 Lithium Valley Commission a couple of years ago. So a lot
22 of exciting stuff going on with Lithium Valley.

23 And that's it. That's my report.

24 CHAIR HOCHSCHILD: Great, thank you. I'll be
25 really brief.

1 So Battery Day was a home run. We had about 250
2 people, Commissioner Monahan and I and GO-Biz. We co-
3 hosted it. And I was just absolutely thrilled with the
4 turnout in Fremont and the level of innovation and
5 engagement.

6 And I do want to thank Commissioner Monahan's
7 team for getting the latest round of battery grant money
8 out the door. That's solicitation is on the street, I
9 believe about 35 million for the next round of battery
10 manufacturing grants.

11 I just got back from China, really fruitful set
12 of meetings with the Chinese government and we're going to
13 be content with let's just say since the Governor was there
14 in October the level of engagement between the U.S. and
15 China, between California and China, has absolutely
16 skyrocketed. We've had a number of delegations go back and
17 forth. And there's going to be a lot more coming as we
18 press to reinvigorate climate policy and clean energy
19 transition. So super-fruitful there.

20 And then finally I just want to note this was a
21 heck of a day approving \$800 million of projects. So thank
22 you to the team and to Drew and Jen and the whole staff for
23 joining us here.

24 And with that, we'll turn to Item 21, Executive
25 Director's Report.

1 MR. BOHAN: Thank you, Drew Bohan here, no report
2 today.

3 CHAIR HOCHSCHILD: And Item 22, Public Advisor's
4 Report.

5 MS. BADIE: Thank you. I just wanted to let the
6 folks know that next Friday, April 19th. We're going to
7 have a meeting of the CEC CPUC Disadvantaged Communities
8 Advisory Group. And on the agenda we'll recognize outgoing
9 members Adrian Martinez, Andres Ramirez and Roger Lin, who
10 have termed out of the DACAG after years of service. Fuels
11 and Transportation Division staff from the CEC will present
12 technical assistance solicitation funding concepts. And
13 then we'll also discuss their equity framework and CPUC is
14 having a few of the utilities present their draft community
15 engagement plans for the climate adaptation vulnerability
16 assessments.

17 And that was my report. Thank you.

18 CHAIR HOCHSCHILD: Great. Oh, one thing I forgot
19 to mention is that tomorrow we have a big event with
20 Paskenta. This is the largest tribal grant ever given by
21 the Energy Commission and it may be the largest grant ever
22 given to any tribe in the United States, \$32.75 million for
23 tribal energy microgrids, and has leveraged \$9 million in
24 federal funds. And just another great example of that
25 leadership. And I just really want to lift up the team

1 that's been supporting that. So a number of us will be
2 joining for that.

3 Item 23 is the Chief Counsel's Report. Lisa,
4 anything?

5 MS. DECARLO: Nothing to report from the Chief
6 Counsel's Office. But I will recommend that now is the
7 time to go into closed session in accordance with Item 23a.

8 CHAIR HOCHSCHILD: Yes, let's do that. And we'll
9 reconvene after. Thank you.

10 (Off the Record at 3:21 p.m.)

11 (On the record to 4:34 p.m.)

12 CHAIR HOCHSCHILD: Are we good? Okay, we're back
13 from closed session. Nothing to report and we are
14 adjourned. Thank you.

15 (The Business Meeting adjourned at 4:34 p.m.)

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CERTIFICATE OF REPORTER

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

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

IN WITNESS WHEREOF, I have hereunto set my hand this 6th day of August, 2024.



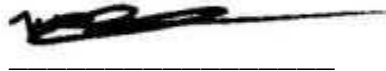
MARTHA L. NELSON, CERT**367

TRANSCRIBER'S CERTIFICATE

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

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

IN WITNESS WHEREOF, I have hereunto set my hand this 6th day of August, 2024.



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