

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
Linda Barrera, Chief Counsel
Mona Badie, Public Advisor
Lucio Hernandez, Energy Specialist, Reliability, Renewable
Energy, and Decarbonization Incentives Division
Deanna Carrillo, Director, RREDI Division
Geoff Dodson, Supervisor, Clean Energy & Technology Branch,
RREDI Division
Fiona Mooney, Shultz Fello, Chair Hochschild's Office

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P R O C E E D I N G S

SEPTEMBER 13, 2023 10:04 a.m.

CHAIR HOCHSCHILD: Good morning, friends, I'm David Hochschild, Chair of the California Energy Commission. Today is September 13th 2023. I call this meeting to order. Joining me are, Vice Chair Gunda, Commissioner McAllister, and Commissioner Gallardo. Commissioner Monahan is presently testifying before the Legislature and will join us shortly.

Let's begin with the Pledge of Allegiance.

(Whereupon the Pledge of Allegiance was recited.)

Before we proceed, I would like to acknowledge, this is the 22nd anniversary of September 11th. And we'd like to begin with a moment of silence.

(Whereupon a Moment of Silence was observed.)

Thank you. All right, we'll turn to -- first, to public comment, and then we'll move on to agency announcements. So let's begin with public comment.

MS. BADIE: Good morning. This is Mona Badie, the Public Advisor for the California Energy Commission. The Energy Commission welcomes public comments at its business meetings. This initial open public comment period is for any items on the agenda including any informational items. There will be dedicated public comment periods for voting items on the agenda.

1 And to let us know if you'd like to make a
2 comment, we're asking folks that are in the room to use the
3 QR codes that have been posted. You can also approach the
4 podium. And if you're on Zoom, we're asking folks to use
5 the raise hand feature if you're online. It's an open palm
6 symbol at the bottom of your screen. And if you're joining
7 by phone, you'll press *9 to raise your hand.

8 We're asking comments to be limited to two
9 minutes or less. And that you state your name and
10 affiliation and spell your name for the record when you are
11 called on to make your comment.

12 So first, we'll go and see if there's folks in
13 the room. No one in the room, so now we'll transition to
14 Zoom. And Benjamin Davis, I'm going to open your line.
15 Please unmute on your name -- on your end. Announce your
16 affiliation, please spell your name for the record, and you
17 may begin.

18 MR. DAVIS: Good morning, Ben Davis, with the
19 California Solar and Storage Association, B-E-N D-A-V-I-S.
20 So good morning. We at the California Solar and Storage
21 Association, we represent 760 solar companies across the
22 state. We are very supportive of the Commission's work to
23 automate solar and storage permitting. This is Item Number
24 4. And I wanted to give a big thank you to Geoff,
25 Elizabeth and Lucio on staff for taking this on.

1 Every property in California that wants to
2 install solar first needs to receive a permit from the
3 local building department. And in many areas there are
4 really outdated and really bureaucratic permitting
5 requirements. And those combined with staffing shortages,
6 that can add months of delays and thousands and thousands
7 of dollars to solar projects.

8 And as a result, fewer homes go solar than
9 otherwise would. In many cases, property owners, they give
10 up on solar entirely because the permitting just becomes
11 too difficult an obstacle. And even the customers that
12 stick with it, solar carries a higher price tag than it
13 otherwise would. And all of these permitting requirements
14 here, they are the biggest reason why solar in California
15 is double the cost of solar in Europe.

16 So we are really supportive of the Commission's
17 programs to automate and standardize the solar and storage
18 permitting processes. Regarding the CalAPP grants, the
19 Commission has awarded grants to roughly 315 jurisdictions;
20 315, right. And I think this speaks really to the success
21 of the program. There is approximately \$1.5 million left
22 over, so it would be great to get those funds out the door,
23 September 30th, so the end of this month is a big deadline.
24 Per Senate Bill 379, cities with more than 50,000 people
25 need to completely automate their solar permitting by

1 adopting the Federal Department of Energy's Solar app
2 software or something equivalent. So that's 210
3 jurisdictions in California need to do so by September
4 30th.

5 So anything the Commission can do to help
6 jurisdictions comply by this September would be greatly
7 appreciated. It would be a benefit to these jurisdictions.
8 It would be a benefit to properties going solar, a benefit
9 to the industry. And of course a benefit to the
10 environment as well, because we would have more solar. All
11 right, thank you.

12 MS. BADIE: Thank you.

13 Next, we have Nick Josefowitz. So sorry if I
14 have mispronounced your name. I'm going to open your line,
15 Nick. Please spell your name for the record, announce any
16 affiliation, and you may make your comment.

17 MR. JOSEFOWITZ: Thank you very much. Nick
18 Josefowitz, you pronounced it right on. N-I-C-K J-O-S-E-F-
19 O-W-I-T-Z. And I was formerly with SPUR. I also wanted to
20 thank the Commission for the incredible work that they've
21 been doing to support the automation of rooftop solar and
22 energy storage, and in particular the CalAPP program.

23 It would be a real irony if the CalAPP program
24 had been difficult to apply for given that the point was to
25 help cities and counties automate permitting. But actually

1 the irony was not fulfilled, it was actually incredibly
2 simple to apply for. And that's why so many people
3 applied. And as Ben was saying, an enormous kudos to your
4 staff for making that happen.

5 We're now hitting the sort of where the rubber is
6 hitting the road on the deadlines within SB 379, for the
7 largest cities in California to comply and to automate
8 their permitting for rooftop solar and energy storage. The
9 deadline is September 30th, just a few weeks away. Many
10 cities have in the process, have complied with or are in
11 the process of complying with the law, but some are not.

12 And we really hope that the Energy Commission can
13 continue to sort of proactively reach out to those cities
14 that are not complying with the law to make sure that they
15 come into compliance. It's not fair to the members of the
16 public who live in those jurisdictions that their cities
17 are not following the law and they are -- and their solar
18 is going to be more expensive. And they're going to be
19 less able to get it.

20 I also wanted to sort of talk about the sort of
21 potential future for automated permitting. Because right
22 now SolarAPP, SB 379 CalAPP, is very much focused on solar
23 and energy storage. But there are tens of millions of
24 other clean energy appliances, which need to be installed
25 around the state -- zero emission vehicle chargers, heat

1 electric heat pumps.

2 And I really hope that we can work with the
3 Energy Commission to expand automated permitting to all the
4 clean energy appliances that need it. Thank you.

5 MS. BADIE: Thank you.

6 That is all the raised hands. Back to you,
7 Chair.

8 CHAIR HOCHSCHILD: Thank you so much.

9 Well, first, I just wanted to reflect on those
10 two public comments. Thank you both. And I really
11 appreciate your acknowledgement of Energy Commission staff
12 who have been working really hard on this CalAPP program.
13 We'll get to it in more detail when we get to Item 4.

14 But I did want to observe, the moment we're in
15 with climate and grid reliability really requires the
16 participation of individuals and distributed generation.
17 Our grid is getting cleaner. It's getting more
18 distributed, and it's getting more interactive. And that's
19 a trend we want to see continue.

20 And that the CalAPP is really a gateway, not just
21 to solar, but very often in the market, what we've seen
22 happen is solar is the first thing a customer gets. And
23 then they get excited more and focused on energy and look
24 at getting an electric vehicle or home energy storage or
25 electric heat pumps. So it's really been a sort of door

1 opener to many other technologies we want to see go
2 mainstream. And as we approach 2 million solar roofs
3 there's just a really nice follow-on effect with all these
4 other beneficial technologies. And CalAPP is really trying
5 to make that process as friction free as possible.

6 So thank you for those comments. And thank you
7 to the team who worked on that. Really proud of you, and I
8 look forward to that discussion on Item 4.

9 Today, we're going to be seeking to approve over
10 \$27 million of investments, helping our state's economic
11 recovery continue. And before we move on I wanted to
12 acknowledge a terrific new member of the Energy Commission
13 team who has been appointed by the Governor, Tai Milder, as
14 the new lead on our Division of Petroleum Market Oversight.
15 He is joining us virtually. I'd like to ask Tai to
16 introduce himself, share a little bit about his background,
17 and the role of his office. And then we'll go to some
18 welcoming comments, beginning with Vice Chair Gunda.

19 But I do want to say, about a year ago we had
20 these really significant price spikes in gasoline that led
21 to the Governor convening a special session of the
22 Legislature, which went well into the spring. And the
23 result of that was SB X1-2, which created this Division,
24 really with the goal of holding the oil industry
25 accountable, making sure as a state we're doing everything

1 possible to prevent these sudden price spikes again from
2 happening.

3 And so Tai, we're really thrilled to welcome you
4 to the team and would welcome a few opening remarks from
5 you.

6 Is Tai on as a speaker? He should be in there.
7 Can you elevate him? Tai Milder. Stand by, Tai. We're
8 just getting that sorted out. Maybe while Mona is sorting
9 -- standby, Tai. We're just -- we've never had technical
10 problems at these things before.

11 MS. BADIE: Sorry about that. So, Tai, you
12 should be a panelist now. You can mute and unmute on your
13 end.

14 MR. MILDER: Good morning, all. I see my name
15 and the ability to unmute, but not a camera option.

16 CHAIR HOCHSCHILD: Yeah. We can hear you, but we
17 can't see you. (Indiscernible). There we go. Yeah.
18 Welcome, Tai.

19 MR. MILDER: Well, thank you all for your
20 patience through that technical challenge. And sorry that
21 I'm not joining you in person. So hello, all.

22 Brief background, I started my career as part of
23 the US Department of Justice during the Obama
24 Administration. And then my career has been as a federal
25 prosecutor, and then also as a deputy attorney general.

1 And those principles are the principles we're going to
2 bring to the new Division. So I want to share just three
3 of them.

4 First, the Division will follow the facts. Which
5 means we're going to build capacity at the Division, and
6 recruit attorneys, economists, analysts --

7 CHAIR HOCHSCHILD: Hey, Tai. Sorry. Can you try
8 to speak up, maybe a little closer to the mic? Thank you.

9 MR. MILDER: Yes. So, the first principle I was
10 mentioning was that we will follow the facts. And that
11 means we will build capacity at the new Division by
12 recruiting attorneys, economists, analysts and
13 investigators. We will engage with the industry. And we
14 will use our subpoena power where necessary. We will
15 present those facts to the policymakers, and where
16 appropriate to law enforcement, and to the public.

17 A second principle is that the Division like
18 prosecutors will be independent. As you know, the Division
19 is an independent part of the Energy Commission. And how
20 that's going to work is that we're going to be working very
21 closely with the Commission under SB 2 in a number of ways,
22 including the Transportation Fuels Assessment, the Fuels
23 Transition Plan, and the Gross Margin Penalty.

24 And third, the Division will promote transparency
25 and seek accountability. Transparency means that if we see

1 something wrong in the market, we will bring it to light.
2 Some of the referrals we bring to law enforcement might be
3 confidential to start. But the ultimate goal will be to
4 bring transparency through public enforcement actions and
5 public reports. Accountability can include referrals to
6 law enforcement, closing loopholes, and exposing bad actors
7 one way or another.

8 So earlier, I stressed the Division's
9 independence, like a prosecutor. But independent doesn't
10 mean not supported, and not working very closely with the
11 Commission. So I want to thank the Chair and the entire
12 Commission for the warm welcome and support thus far.
13 Thank you so much.

14 CHAIR HOCHSCHILD: Well, thank you so much, Tai.
15 We're thrilled to have you on the team.

16 And with that, let me turn it over to Vice Chair
17 Gunda. I just want one to say another word of thanks to
18 the Vice Chair for his extraordinary work when this crisis
19 emerged last fall, together with our Executive Director,
20 Drew Bohen, really helped forge the state's response and
21 very grateful for you. So over to you for some comments.

22 VICE CHAIR GUNDA: Thank you, Chair.

23 First, I just want to say, Tai, it's so nice to
24 have you on the team. And I want to extend on behalf of
25 the entire Energy Commission a warm welcome to the team. I

1 think it's also warm, because the prices are high, and you
2 came into the hot seat right as you were joining. So thank
3 you for bringing your expertise.

4 And I really want to emphasize and thank you for
5 the comments that you just made in terms of truly setting
6 the Division to be independent and have a process that
7 follows facts and really predicated on data and analysis.
8 So thank you so much for your priorities and making not
9 only the Division stood up, but also helping the Energy
10 Commission at large at improving our analysis on the
11 products we have to do.

12 So welcome on board. It's been a pleasure
13 meeting you, talking to you in-person, and getting to know
14 who you are. And I look forward to continuing our work
15 together.

16 Before I hand off to other colleagues on the
17 dais. I just want to remind for those colleagues who have
18 not been a part of the SB X1-2. Just at a very high level,
19 last September we had record prices in California on
20 gasoline prices at the pump. And as questions emerged as
21 to what was happening, the number one thing is CEC did not
22 necessarily have the data to answer, or kind of do some
23 analysis to point to what was happening in the market. We
24 had high level information. We were able to track what was
25 going on, but not really what was driving that. So that's

17

1 one of the issues that that we noticed during the process.

2 The second part of it was as the prices were
3 really high, it coincided with extremely high petroleum
4 industry profits. And there was an incredible concern
5 among the Legislature, stakeholders, that the oil industry
6 is profiting as the prices were really high. And that's
7 the second issue that that the Legislature was really
8 interested in. One is giving tools and data necessary for
9 the CEC. And too, as the Chair mentioned, improving
10 transparency of the oil industry, but also holding them
11 accountable as needed.

12 And finally, there was clarity that there hasn't
13 been a formal place or venue in the state to think about
14 the transition away from petroleum. So we've been talking
15 about the electricity transition through SB 100 have really
16 good analysis and platforms and venues to do that. But we
17 didn't have that. So the third priority was how do we make
18 sure that there is a clear transitional plan that is
19 coordinated across the state agencies?

20 So those were the three priorities that emerged
21 during the legislative process. And we have been given
22 through the SB X1-2 a number of tools, both in terms of
23 ability to gather data, do more analysis, contract
24 resources, but also the authority to potentially set up a
25 penalty for the refining industry if we see fit as we go

1 through the process. So it's a pretty big mandate.

2 So I thank all the CEC staff who are working on
3 it. I want to call on Drew Bohan, who has been leading
4 from the front, along with Aleecia Gutierrez in EAD.

5 And then just how does this independent Division
6 come into place? The independent Division then has the
7 authority to further the work in saying as they observe the
8 market? And then if they see market manipulation, market
9 power, they could independently of the Energy Commission
10 gather more information, and send a subpoena. And also
11 refer the cases to AG's office and the Legislature
12 directly.

13 So, Tai has an incredible amount responsibility
14 in this transition. So I welcome him and thank him for his
15 public service. Thank you, Tai.

16 CHAIR HOCHSCHILD: Thank you, Vice Chair, any
17 other comments from my colleagues?

18 And Drew Bohan, is there anything you'd like to
19 say on this, since having been deeply immersed into this
20 issue as well?

21 MR. BOHAN: I would just add, great to welcome
22 Tai. He's got a lot of background and a lot of depth in
23 this area. And so the partnership is already well
24 underway.

25 CHAIR HOCHSCHILD: Okay, great. I did also just

1 want to observe one other thing, which is that this week
2 marks the five-year anniversary of Governor Jerry Brown
3 signing SB 100 into law. And that has been obviously a
4 seminal moment in energy policy for our state and a really
5 defining beacon, I think, of what the Energy Commission is
6 about today. And I just wanted to observe that at the time
7 that statute was adopted, only one other state in the
8 country had had passed 100 percent Clean Energy Law, and
9 that's Hawaii, with a population of 1.50 million people.

10 When California adopted that and really set that
11 as the goal it really sent a very powerful, strong message.
12 And where we are now is that 22 states have adopted 100
13 percent Clean Energy mandates. And those states represent
14 the majority of the population in the United States today.

15 And we are on the precipice of hitting two thirds
16 of our retail sales, coming from carbon-free sources, and
17 making incredible, incredible progress. Particularly with
18 technologies like storage, I just really want to highlight
19 how extraordinary it is to go from 250 megawatts four years
20 ago to 8,000 megawatts by the end of this year. And these
21 are milestones enabled by a good policy that are really
22 significant and are deriving not just progress in
23 California, but really helping these clean energy
24 industries launch around the country and around the world.
25 And so just a tribute to all those leaders who helped get

1 that extraordinary piece of visionary legislation into
2 statute.

3 And we have an incredible team under the Vice
4 Chair's leadership, working to implement SB 100, in close
5 collaboration with the PUC and the Air Resources Board.
6 And we're kicking off this next round of SB 100 activities
7 and reports and so on. And I just really wanted to observe
8 that milestone, because it was a big turning point for our
9 state.

10 So with that, let's just -- oh, go ahead, Vice
11 Chair. Yep. Okay, yeah. So let's go to other agency
12 announcements. Vice Chair Gunda.

13 VICE CHAIR GUNDA: Chair, just in the spirit of
14 the one kind of world we all share. It's been incredibly
15 saddening, I don't know how many of you -- I mean, I know
16 we're all track tracking this. But the just devastating
17 earthquake in Morocco, and the floods in Libya. It's just
18 crazy what's happening in the world. I don't know how many
19 staff at the Commission are from -- have roots in the
20 countries or just in the region. But I just wanted to
21 extend condolences. It's just been heart wrenching what
22 just happened in Libya, so I just wanted to offer that.

23 CHAIR HOCHSCHILD: Yeah. Thank you for sharing
24 that. It's been heart wrenching as well.

25 Commissioner McAllister.

1 COMMISSIONER MCALLISTER: So I just wanted to
2 make sure, on agency announcements, remind everyone of the
3 upcoming Building Electrification Summit on October 10th
4 and 11th. And just thank the staff that's been working
5 incredibly hard on it, my Chief of Staff Bryan Early and
6 Kathryn Kynett, my Advisor. And also Natalie Lee. Lots of
7 folks pitching in on that. It's coming together super
8 nicely.

9 And I'll just say that in the next few weeks,
10 we're going to see a lot of momentum building for building
11 electrification. You have the US climate alliance is doing
12 a lot of coordination. We have climate week coming up next
13 week. And the California contribution to that really is
14 central to creating that forward momentum that, for
15 example, heat pump markets need.

16 And the conversation at the summit in October,
17 that we're co-hosting with EPRI, Electric Power Research
18 Institute, alongside the Commission. It'll be here at
19 headquarters. It's going -- shaping up to be a really
20 great event that puts a big flag in the ground that
21 everybody can rally around.

22 So I'm excited to be pushing California's
23 leadership in that realm. And I look forward to that
24 event.

25 CHAIR HOCHSCHILD: Yeah, thank you so much,

1 Commissioner. And I'm really excited for how that's coming
2 together as well. Great work on that issue.

3 Other agency -- yeah, Commissioner Gallardo.

4 COMMISSIONER GALLARDO: Buenos Dias, good
5 morning, everyone. I know we've been talking about
6 traumatic events. Vice Chair Gunda just mentioned some.
7 The Chair started out with an acknowledgement of 9-11 and
8 the trauma we went through with that. But I also wanted to
9 acknowledge other traumatic events that are happening in
10 our society based on discrimination and hate.

11 And I know that some of our members of our CEC
12 family have been impacted by what's been going on. Whether
13 it's against the Asian American community, or LGBTQ+
14 community, African Americans, it has been continuing
15 unfortunately. So I want to remind everybody to have
16 compassion, please practice kindness, and be patient with
17 yourselves and also with others.

18 Carousel Gore who is our Equal Employment
19 Opportunity Officer, she's been affected herself. And is
20 trying at the same time to support those members of our CEC
21 family who are also affected. So just a reminder that
22 those things happen, they do affect us. And I want to make
23 sure we acknowledge that.

24 And then on a separate note here comes some hope,
25 an uplifting announcement. This is the start of the

1 Hispanic Latino Heritage Month. I was invited to speak at
2 the CPUC's Latino -- I think they call it actually Latinx
3 Employee Resource Group, yesterday. It was really nice to
4 kick off the month with that conversation with our CPUC
5 peers. And I know that our la CEC familia is going to be
6 working with CNRA to put on an event. So more details to
7 come on that. Thank you, Chair, for letting me say that.

8 CHAIR HOCHSCHILD: Thank you. And any messages
9 of hope are always welcome.

10 I did want to note Commissioner Monahan has now
11 joined us back from the Legislature and so I think we're
12 good to move ahead with Item 3, with her joining. So I
13 believe there are a few recusals from Item 3.

14 MS. BADIE: Chair, if we may take public comment
15 first?

16 CHAIR HOCHSCHILD: Oh, excuse me. Let's do
17 public comment on Item 3, yeah. Well shouldn't we have the
18 recusals before public comment?

19 MS. BARRERA: I don't think it's necessary for
20 Item 3a?

21 MS. BADIE: I can take public comment for the
22 entire Item 3, and then the votes (indiscernible). Thank
23 you.

24 Good morning. This is Mona Badie again, the
25 Public Advisor of the California Energy Commission. The

1 Commission now welcomes public comment on Item 3. This is
2 the consent agenda. And if you're in the room with us, you
3 can use the QR codes to let us know you'd like to make a
4 comment, or also approach the podium. If you approach the
5 podium, you'll want to be sure to turn the microphone on so
6 the green light is on for any speakers today.

7 And also if you're on Zoom with us, please use
8 the raise hand feature on your screen to let us know. And
9 if you're joining by phone, please press *9. Just give it
10 a moment there.

11 All right, I'm not seeing any folks in the room
12 or on Zoom. Chair, back to you.

13 CHAIR HOCHSCHILD: Okay, let's go. Are there any
14 recusals?

15 COMMISSIONER MCALLISTER: Yes. This is
16 Commissioner McAllister. I'm going to recuse from Item 3a,
17 as I'm on -- have been and continue to be on the Board of
18 National Association of State Energy Officials, which is a
19 subject of that item.

20 CHAIR HOCHSCHILD: Okay. Commissioner Gallardo?

21 COMMISSIONER GALLARDO: Yes, thank you. I will
22 also recuse myself on Item 3a. So on this is the proposed
23 resolution for CEC's membership agreement with NASEO. I
24 will be attending a NASEO event later this month in my
25 official capacity. And NASEO will be paying the CEC to

1 cover the state's travel cost.

2 While this is not a personal gift to me, out of
3 an abundance of caution, I am recusing myself from the
4 discussion and voting on this item to avoid any appearance
5 of a conflict, so that a quorum of the Commission may
6 deliberate and decide in my absence.

7 CHAIR HOCHSCHILD: Okay, thanks. We'll let
8 Commissioner McAllister and Commissioner Gallardo exit the
9 room, and then we'll take up Item 3a, and then we'll be
10 notified. And then and that will take up items 3b through
11 h when they're back.

12 They have exited the room. Unless there is
13 Commissioner discussion on this, I would welcome a motion
14 on Item 3a from Vice Chair Gunda.

15 VICE CHAIR GUNDA: Move Item 3a.

16 CHAIR HOCHSCHILD: Is there a second from
17 Commissioner Monahan?

18 COMMISSIONER MONAHAN: I second.

19 CHAIR HOCHSCHILD: All in favor say aye. Vice
20 Chair Gunda.

21 VICE CHAIR GUNDA: Aye.

22 CHAIR HOCHSCHILD: Commissioner Monahan.

23 COMMISSIONER MONAHAN: Aye.

24 CHAIR HOCHSCHILD: And I vote aye as well. Item
25 3a passes 3-0, with Commissioner McAllister and

1 Commissioner Gallardo abstaining, or recusing. Let's
2 welcome them back if we could. And then we'll take up
3 Items 3b through h.

4 And they have returned to the room. We will take
5 up Items 3b through h. Is there a motion from Vice Chair
6 Gunda on Items 3b through h? I think we did public comment
7 on all of -- sorry, are there comments on the consent
8 items? No? Okay. Did you have a comment? So is there a
9 motion from Vice Chair Gunda on Items 3b through h?

10 VICE CHAIR GUNDA: Yeah, I move Item 3b through
11 h?

12 CHAIR HOCHSCHILD: Commissioner McAllister, would
13 you be willing to second Items 3 --

14 COMMISSIONER MCALLISTER: Second.

15 CHAIR HOCHSCHILD: Okay. All in favor, say aye.
16 Vice Chair Gunda.

17 VICE CHAIR GUNDA: Aye.

18 CHAIR HOCHSCHILD: Commissioner McAllister.

19 COMMISSIONER MCALLISTER: Aye.

20 CHAIR HOCHSCHILD: Commissioner Monahan.

21 COMMISSIONER MONAHAN: Aye.

22 CHAIR HOCHSCHILD: Commissioner Gallardo.

23 COMMISSIONER GALLARDO: Aye.

24 CHAIR HOCHSCHILD: And I vote aye as well. Items
25 3b through h pass 5-0.

1 And we will turn now to Item 4. Welcome, Lucio
2 Hernandez, to present on Residential Solar and Storage
3 Permit Streamlining.

4 MR. HERNANDEZ: Good morning, Chair, Vice Chair
5 and Commissioners. My name is Lucio Hernandez and I work
6 in the Reliability, Renewable Energy and Decarbonization
7 Incentives Division.

8 CHAIR HOCHSCHILD: Is your mic on?

9 MR. HERNANDEZ: Can you hear me?

10 CHAIR HOCHSHCILD: Yeah, that's better. Thank
11 you. Maybe just speak closer, thank you.

12 MR. HERNANDEZ: Sorry about that. I am here
13 today to provide an update on the Energy Commission's
14 efforts to streamline permitting for residential solar and
15 energy storage projects, including funding opportunities
16 pursuant to this goal. My presentation will include an
17 overview of the California Automated Permit Processing
18 Program and its connection with Senate Bill 379. And I
19 would also like to just thank our comments from Ben and
20 Nick, from earlier. Next slide, please.

21 The CalAPP program, started in 2022, is a grant
22 program that provides financial assistance and resources to
23 local jurisdictions to streamline solar permitting,
24 ultimately enabling local governments to improve services
25 to residents and will empower them to lead a clean energy

1 future. Next slide, please.

2 So California has aggressive climate goals, which
3 include large scale adoption of residential solar and
4 energy storage projects. However, there are a number of
5 barriers that can slow progress. Long wait times to obtain
6 a permit can be a huge barrier. And depending on where you
7 live, the time spent obtaining a permit can vary.

8 According to the California Solar and Storage
9 Association, obtaining a permit for a residential rooftop
10 solar system in California takes between 2-3 weeks on
11 average and frequently takes more than 60 days. And that's
12 a long time to wait. Permitting delays can also cause
13 homeowners to cancel projects entirely. Across the US, 11
14 percent of solar projects are canceled, and installers say
15 that the top reasons for cancellations are the permitting
16 process and the associated delays. Next slide, please.

17 The graph shown here, released by the National
18 Renewable Energy Laboratory, highlights the results of a
19 study of select jurisdictions across different states using
20 the automated permitting software. The green dots indicate
21 the median permit wait time, in business days, prior to the
22 adoption of the permitting software. And the yellow dots
23 indicate the median wait time after adoption. So,
24 following adoption, the permits are being issued the same
25 day, which is a big difference.

1 Following for jurisdictions that still have long
2 approval times, they can implement permitting software that
3 automates portions of the permit review and allows the
4 jurisdiction to issue permits instantaneously for standard
5 residential solar and storage projects. There are a
6 variety of permitting software options for jurisdictions
7 that they are implementing, which includes SolarAPP+,
8 Symbium, and custom in-house software platforms.

9 And in the next 2 slides, I will highlight the
10 work we're doing at the Energy Commission to help increase
11 access and assist California cities and counties in
12 benefitting from automated permitting solutions. Next
13 slide.

14 In 2021, California allocated \$20 million and
15 directed the Energy Commission to administer a grant
16 program for cities and counties to establish online,
17 automated permitting. This led to the creation of the
18 California Automated Permit Processing Program, known as
19 CalAPP.

20 CalAPP offers grants on a rolling basis between
21 40 and 100 thousand dollars. Grant sizes were chosen with
22 help from public input by incorporating population size to
23 accommodate internal staff and installer training needs in
24 implementing the new platforms.

25 To date, we've awarded over 300 grants to

1 jurisdictions all over the state geographically
2 representing an area that serves about 24 million
3 residents, or over 60 percent of California's population.
4 Grant awards so far total about \$17.5 million, leaving
5 around \$1.5 million available for new applicants.

6 Any jurisdiction that has not yet applied -- and
7 with the passage of latest budget bill, the deadline to
8 apply for funding has been extended by one year to May 1st,
9 2024. And any jurisdiction that has not yet applied may
10 submit an application while funding lasts. So hurry up and
11 apply. Next slide, please.

12 Following the release of CalAPP, the state signed
13 into law Senate Bill 379 in 2022. The law requires most
14 jurisdictions to adopt a streamlined permitting software.
15 The bill impacts all cities over 5,000 in population, and
16 counties above 150,000 in population. Smaller populations
17 are exempt. Jurisdictions with larger populations must
18 comply with the bill by September 30th, 2023. Non-exempt
19 smaller jurisdictions below 50,000 have until September
20 30th, 2024.

21 The bill also directed the Energy Commission to
22 collect reporting, with basic information such as number of
23 permits issued. This data will be made available through a
24 public dashboard. Next slide.

25 Before we wrap up, we'd like to recognize some

1 early adopted jurisdictions that have already implemented
2 and gone live with an online automated solar permitting
3 platform. As shown on the map, there are six counties that
4 have been early adopted, which are shown in color. And the
5 36 cities that are indicated by the gold dots.

6 There are also a few dozen jurisdictions we're
7 aware of that are close to finalizing adoption and will be
8 live soon as well. And this list is growing rapidly, and
9 we thank all jurisdictions making it easier for their
10 residents to obtain permits for residential clean energy
11 projects. Next slide.

12 All right, this concludes my presentation. We
13 appreciate the opportunity to offer this overview. And we
14 welcome any comments or questions you may have.

15 CHAIR HOCHSCHILD: Thank you so much, Lucio, for
16 that presentation. And I just really wanted to commend the
17 staff for their work on this. And observe that we fund a
18 huge amount of technology, innovation in solar and storage.
19 And that this is really, I'd call it administrative
20 innovation, but it's more significant in many ways than
21 whatever next increment of solar efficiency, because of the
22 cost savings and the delay.

23 Time is money. And a lot of projects do fall out
24 because of these kinds of delays, and -- for many of the
25 companies operating in this space. And there's so a lot of

1 mom and pop shops doing these installations, the difference
2 -- that can be the difference between them surviving or
3 not. The margins are tight.

4 And so, I just really want to commend everyone
5 for leaning in on this. And refresh my memory, the total
6 budget we got for this was what, 20 million? And this was
7 about a year or two ago that money came through to us; is
8 that right?

9 MR. BOHAN: Yes.

10 CHAIR HOCHSCHILD: Something like that? Right,
11 yeah. So fantastic. Great progress.

12 We're going to open up any -- Yeah, Commissioner
13 Gallardo, please.

14 COMMISSIONER GALLARDO: Thank you so much, Lucio
15 and team, for the wonderful work you've done, the great
16 presentation. I was particularly excited about slide 14,
17 where you show the differences from what's been
18 traditionally the time it takes to what's current. And it
19 seems like a significant impact already. And you mentioned
20 the one-day application collation. That's amazing. So
21 it's already turning out great results. I'm looking
22 forward to seeing the next impact.

23 I did want to get some clarification. You
24 mentioned that the deadline for the funding is May 2024 if
25 I understood correctly?

1 MR. HERNANDEZ: Yes.

2 COMMISSIONER GALLARDO: Okay. But there's a
3 deadline coming up for the big cities and counties right,
4 of a population 50,000 plus. So would they be able to --
5 well, I was trying to figure out, if they still want to
6 apply for funding would they still have time, because it's
7 not due until May 2024 with the deadlines now? So it just
8 seems like it's a little off. Will there be some
9 flexibility for those who maybe don't meet the deadline,
10 can still apply for funding? Or is it are we kind of
11 blocking them from funding because they didn't meet the
12 compliance? Does that make sense, what I'm saying?

13 MR. HERNANDEZ: Yes. So the 2023 deadline,
14 September, is for the Senate Bill 379, but they will still
15 be able to apply for CalAPP for the May 1st, 2024 deadline.

16 COMMISSIONER GALLARDO: Okay, so there won't be
17 any issue if --

18 MR. HERNANDEZ: No.

19 COMMISSIONER GALLARDO: We would like for them to
20 comply by the -- at least the 50,000 plus population,
21 cities and counties to apply by September 2023. But if
22 they don't, they still have time, they could still apply
23 for funding. So you know as long as we're getting more
24 online that's what we're looking for. Okay. Thank you for
25 that clarification.

1 And then one more question on outreach, because
2 there's still time to put in the platform, apply for
3 funding. Are there efforts to do outreach, additional
4 outreach? If you could speak to that a little bit. And I
5 have some suggestions, too, but we'd love to hear from you
6 first.

7 MR. HERNANDEZ: Oh, yes. We reached out to the
8 cities and counties that haven't yet applied to CalAPP.
9 But with the upcoming deadline, we will -- we're planning
10 to do outreach to the specific jurisdictions that are in
11 the category of needing to comply by the end of this month.

12 COMMISSIONER GALLARDO: Okay, great. So you're
13 doing calls, emails, whatever it takes.

14 MR. HERNANDEZ: Yeah. Yes, yes.

15 COMMISSIONER GALLARDO: All right. Wonderful,
16 thank you.

17 CHAIR HOCHSCHILD: Commissioner Monahan.

18 COMMISSIONER MONAHAN: Well, first, I want to say
19 it's really helpful to have some of these informational
20 items that otherwise wouldn't come, because I was able to
21 meet with Lucio and the team and ask them questions about
22 applicability to EV charging, whether there could be an app
23 that would help with that streamlining purpose. And they
24 put my office in touch with NREL, and now we'll have a
25 follow up conversation to see whether that is possible.

1 Because I think doing all we can to speed up
2 permitting delays, which we know is a real issue, I think
3 is important writ large in the clean energy system. So I
4 just appreciate the work of the team and the education and
5 the potential applicability to EV charging.

6 CHAIR HOCHSCHILD: McAllister.

7 COMMISSIONER MCALLISTER: Yeah, along those same
8 lines, I think this is sort of the first foray into really
9 improving, permitting and just streamlining implementation
10 at particularly at the building level. And we're doing a
11 fair amount of work, quite a bit of work with AHJs. With
12 the authorities having jurisdiction, meaning local
13 governments, to improve the permitting and make it easier
14 across the board for energy efficiency. And we need lots
15 of heat pumps.

16 And so solar I think is a good sort of first case
17 and the AHJ's need more tools to do better across the
18 board. And they're all strapped for resources, and it's
19 super important to keep this (indiscernible)

20 UNKNOWN SPEAKER: (Overlapping) I don't know why
21 it's doing that for speaker.

22 COMMISSIONER MCALLISTER: So thanks very much.

23 CHAIR HOCHSCHILD: Yeah, Vice Chair Gunda.

24 VICE CHAIR GUNDA: Yeah, thank you, Chair.

25 Lucio, thank you for the presentation. And thanks to the

1 entire team and RREDI, for the RREDI team to push this
2 forward. As the Chair mentioned, the process improvements
3 are always not visible, but it's so important in making
4 things happen.

5 I have just a couple of comments, questions for
6 us to kind of follow up on. So as you are doing this, I
7 think a huge value is data collection, which you kind of
8 talked about. Just kind of what you're thinking on the
9 process for continually looking at how these things are
10 actually improving over time. We can discuss that
11 separately, but I just want to put (indiscernible) -- just
12 the opportunity to collect data.

13 Second, given that RREDI also has money to push
14 on reliability projects, you know, the S chip, the CPUC
15 program. How are you thinking about the interconnection
16 between the permitting process and other incentive programs
17 in the state? I mean, are you actively tracking that? Is
18 that something that you'll be looking into?

19 MS. CARRILLO: Because as the Commissioner know,
20 we are doing cross divisional and cross section and unit
21 work. So we're considering that as we look at the data
22 collection. One of the CalAPP's existing scope is somewhat
23 narrow, and essentially is just looking at the single
24 family, residential market. And so as there's
25 applicability to other residential markets, we'll be

1 looking at how we can pull that string between the
2 different initiatives.

3 CHAIR HOCHSCHILD: Can I ask -- oh sorry, did you
4 have a -- Yeah, just, I'm excited about administrative
5 innovation. I actually think it is incredibly, incredibly
6 important to focus on that stuff. And I just really
7 commend you and the whole team for the work here.

8 Is there a briefing that we could provide to the
9 Legislature like a memo or something on the progress?
10 Because I think just looking at the list and the number of
11 grants that have gone out I think it would be a great thing
12 to be able to do a little summary memo, if that's not
13 already in the works.

14 MS. CARRILLO: I think that's a great idea,
15 Chair, just to loop back to some of the legislative
16 initiatives (indiscernible).

17 CHAIR HOCHSCHILD: Yeah. Could you do that and
18 then report back? Okay.

19 MS. CARRILLO: Yep.

20 CHAIR HOCHSCHILD: And thank you again, Lucio and
21 the whole team for all the work on that. Unless there is -
22 - Yes, Commissioner Gallardo, please.

23 COMMISSIONER GALLARDO: Deanna, I don't know if
24 this one's for you or for Lucio. I was also curious about
25 whether you're seeing there's an uptick of the

1 Solar+Storage, given the ease of process now with the
2 permitting. It looked like on slide 14 there might be that
3 uptake. It might be for other reasons, too. I was just
4 curious if you noticed anything with the results you're
5 getting now.

6 MS. CARRILLO: Yeah, that's a good question.
7 Let's get -- it's a team approach here at RREDI.

8 COMMISSIONER GALLARDO: I love that.

9 MR. DODSON: Hi, thanks for the question. Yeah,
10 so I do believe that that is now kind of the standard
11 that's being adopted.

12 CHAIR HOCHSCHILD: Geoff, do you want to just
13 introduce yourself?

14 MR. DODSON: Hi, sorry, I'm Geoff Dodson, Lucio's
15 supervisor. Yeah, and so that portion of the software, I
16 believe, is kind of a newer software. And so a lot of
17 early adopters might not have had that portion. And they
18 can now add that in and integrate that. But I do believe
19 that the new standard for those currently adopting right
20 now is to include the whole package.

21 COMMISSIONER GALLARDO: Got it. Okay.

22 MS. CARRILLO: Okay. And then one other note.
23 Again, this is Deanna, Division Director at RREDI, for the
24 record. One element, as we start getting data under the
25 legislative statute we'll be able to pull that up and

1 create dashboards and visibility on a more universal basis.
2 COMMISSIONER GALLARDO: That's wonderful. I'm
3 looking forward to that. And then, I think the final thing
4 was just a suggestion I forgot to mention earlier to Lucio
5 is also to leverage organizations like Civic Well, who have
6 those great connections. And I know, Deanna, you're
7 working closely with them on all sorts of things. So I
8 just thought that could be a good opportunity to get the
9 word out about this wonderful program and the grant monies
10 as well. So I look forward to continuing to work with you
11 on that.

12 MS. CARRILLO: Great, thank you. Thank you,
13 Lucio and the team.

14 CHAIR HOCHSCHILD: Thank you, Lucio. Thank you,
15 everyone. Great job.

16 All right. With that, we'll turn now to Item 5,
17 Commercializing Industrial Decarbonization. I welcome
18 Michael Lozano.

19 MR. LOZANO: Good morning, Chair, Vice Chair, and
20 Commissioners. My name is Michael Lozano, and I work in
21 the Energy Research and Development Division. Today I'm
22 presenting four or five recommended awards from the
23 Commercializing Industrial Decarbonization solicitation.
24 We call it the CID program. That's an aside. We're
25 pleased to note that you'll find that these projects run

1 the gamut for regions of California. That just happened to
2 work out that way, but you'll see that we're in the North
3 Valley. We're in the Central Coast and we're in the desert
4 in this solicitation. Next slide, please.

5 The purpose of this solicitation is to fund
6 technology development and demonstration projects of
7 promising pre-commercial technologies to accelerate
8 industrial decarbonization and increase overall energy
9 efficiency to reach statewide goals set forth in SB 32, SB
10 100, and SB 350.

11 Projects must fall within one of the following
12 project groups: Group 1: Low-Carbon, High-Temperature
13 Industrial Heating, Group 2: Energy Efficiency and
14 Decarbonization of Concrete Manufacturing, and Group 3:
15 Energy Efficient Separation Processes. Next slide, please.

16 Benefits to California. The projects will
17 increase electrification and energy efficiency, decrease
18 use of fossil fuels, greenhouse gas emissions, and energy
19 costs, and help meet California's decarbonization goals for
20 industry.

21 The industrial sector has significant potential
22 for improvements in energy and water efficiency but it's a
23 difficult sector to decarbonize. Each individual facility
24 has unique operational needs, has a mix of old and new
25 equipment, lacks easy access to actionable operation data

1 for decision-making, and lacks verified performance data
2 under real-world conditions. The recommended research
3 projects will address these areas. Next slide, please.

4 The first project with Porifera will design,
5 manufacture, and install the Porifera Forward Osmosis
6 Recycler system at the Procter & Gamble Company facility in
7 Oxnard to maximize recovery of hard-to-treat pulp and paper
8 wastewater.

9 Procter & Gamble is interested in recovering its
10 wastewater and increasing onsite water reuse with high
11 water recovery rates, but has had limited success due to
12 high temperature requirements of incumbent technologies
13 that increase fossil gas use, in this case, gas and
14 associated costs. The technology to be demonstrated will
15 use novel membranes to filter the wastewater using a low
16 energy forward osmosis process.

17 Project goals of this is less than 12 kilowatt
18 hours per 1,000 gallons of water reclaimed for overall
19 system, a greater than 95 percent reduction in energy use
20 and greenhouse gas emissions compared to evaporators. And
21 80 to 90 percent reclamation of high purity water for on-
22 site reuse, with a less than 2.5 year simple payback.

23 We're pleased to note that this project will
24 benefit from \$5 million in cash match from Procter &
25 Gamble. As a note, in our projects usually we will have a

1 large amount of in kind match. So that is not an unusual
2 number, but \$5 million in Cash Match is noteworthy. Next
3 slide, please.

4 The second project with Element 16 Technologies,
5 Incorporated will develop and demonstrate sulfur thermal
6 energy storage integrated with electrotechnology powered by
7 renewable energy, or low-cost grid electricity. The
8 technology will be demonstrated at Searles Valley Minerals
9 located in Trona, California, which is in the desert.

10 The project will develop and demonstrate using
11 grid-electricity, or renewables if possible. What it'll do
12 is heat mineral oil transfer fluids in an electric heater
13 and then store this thermal energy in a single tank of
14 sulfur to be used or discharged during the nighttime to
15 reduce fossil gas use and greenhouse gas emissions. The
16 system will have a peak heat discharge rate of 100
17 kilowatts over an 8-hour discharge period.

18 During discharge, the stored heat will be used to
19 heat boiler feedwater to 230 degrees Celsius for the
20 nighttime discharge. This project is noteworthy, the
21 sulfur thermal battery using sulfur, is quite a bit cheaper
22 than state of the art. Next slide, please.

23 The third project with Caliskaner Water
24 Technologies will develop and demonstrate advanced sludge
25 separation and treatment systems to assess overall

1 reductions in facility electricity use, greenhouse gas
2 emissions, and overall facility costs compared to drum
3 dryers and digestors. The technologies will be
4 demonstrated at the Linda County Water District's
5 Wastewater Treatment facility located in Olivehurst,
6 California.

7 What this project is, is we'll demonstrate three
8 integrated technologies. The first technology is a
9 Biosolids Filtration Thickener. This is designed to work
10 with the advanced primary treatment of this waste water
11 treatment plan to reduce sludge volumes by ten times.

12 The second technology is a Suspended Air
13 Flotation Thickener. This uses flotation and formation of
14 a micron-sized polymer encapsulated air bubble froth.
15 These bubbles rise to the surface carrying suspended solids
16 out at a 97 percent recovery efficiency. A key advantage
17 of this technology is to use atmospheric air instead of
18 high pressure dissolved air as is currently done.

19 The third, and last technology, is the Ultra
20 Energy Efficient Super Critical Water Oxidation technology.
21 In this sludge and air are heated and pressurized. This
22 creates conditions for a rapid and complete destruction of
23 the organics, which releases heat. This technology
24 advances the process by recovering heat and pressure
25 energy, reusing it internally to run the process, and

1 potentially outputting excess heat as electricity.

2 The savings of these combined projects in the
3 form of reduced electricity use is estimated potentially at
4 46 percent, and greenhouse gas emissions savings estimated
5 at 32 percent. Next slide, please.

6 The last project with Capture6 Corp. will develop
7 and demonstrate a direct air capture technology integrated
8 into Pure Water Antelope Valley water treatment facility in
9 Palmdale, California.

10 What this project does is it will use brine from
11 the water treatment facility to produce sodium hydroxide
12 and hydrochloric acid. The sodium hydroxide will combine
13 with atmospheric carbon dioxide to form a mineralization,
14 which is called carbonates. The hydrochloric acid will be
15 used in the water treatment facility and the sodium
16 carbonates will be able to be permanently sequestered as a
17 solid. The project will validate the end-to-end direct air
18 capture process while simultaneously removing the need for
19 brine disposal and reclaiming water for reuse.

20 Currently the water treatment facility uses
21 between 0.4 and 0.7 tons of fresh water per ton of brine
22 treated. This project will result in the elimination 35
23 acres of brine evaporation ponds, reclaim water for reuse,
24 and directly remove 70 metric tons/year of CO2 from the
25 atmosphere. At commercial scale the technology could

1 remove 100,000 metric tons a year, of CO2, from the
2 Palmdale facility. Next slide, please.

3 Staff recommends approval of these four grant
4 agreements and adoption of staff's determination that these
5 projects are exempt from CEQA. I'm available for any
6 questions. And this concludes my presentation. Thank you
7 for your time.

8 CHAIR HOCHSCHILD: Thank you, great presentation.
9 Let's go now to public comment.

10 MS. BADIE: Good morning. This is Mona Badie
11 again, the Public Advisor of the California Energy
12 Commission. The Energy Commission now welcomes public
13 comment on Item 5. If you're in the room, you can use our
14 QR code feature or approach the podium if you'd like to
15 make a comment. And if you're on Zoom, we are asking Zoom
16 participants to raise their hand to let us know they'd like
17 to comment. If you are joining online, you'll use the
18 raise hand icon with the open palm on your screen. And if
19 you're joining by phone, press *9, please, to let us know.

20 Just giving that a moment here. I'm not seeing
21 any raised hands, Chair, back to you.

22 CHAIR HOCHSCHILD: Okay. We'll go to
23 Commissioner discussion starting with Commissioner Monahan.

24 COMMISSIONER MONAHAN: Well, first off, I want to
25 congratulate the team, and thank them for the briefing they

1 gave me, it was really helpful. And I'm the Lead for
2 Industrial Decarbonization, but I have focused much more on
3 the \$90 million Indigo Grant Program that's under
4 development. And it was great to better understand the
5 sort of the R&D connections to that program and how we are
6 building, especially with the Porifera -- am I pronouncing
7 it correct -- grant. This idea that we have provided early
8 seed funding and we get to see more of this implementation
9 phase and characterize how broadly applicable it might be
10 across the state.

11 And I'm excited for this package of grants, but
12 also for the one that's coming on cement. Cement has been
13 a particular interest, I think both of Commissioner
14 McAllister and me, because it's 2 percent of the state's
15 greenhouse gas emissions. There's a limited number of
16 facilities. There's a possibility for replicability across
17 the state and across the country. And we're really looking
18 for these opportunities to really accelerate
19 decarbonization writ large and have these SEED grants show
20 what can be done.

21 And so I am also really pleased with the way
22 these grants have an outreach component to make sure that
23 the facilities -- getting these grants, have -- there's
24 strategies for being able to share results. And allow for
25 other facilities to understand the potential for this

1 technology to help them. So I think that's it for me. I'm
2 not sure if Commissioner McAllister has --

3 CHAIR HOCHSCHILD: Yeah. Commissioner
4 McAllister.

5 COMMISSIONER MCALLISTER: Sure. Well, thank you
6 so much. Again, congratulations to the team. It's super
7 exciting. And these are large grants and that's appropriate
8 in the industrial sector. You know, every facility really
9 is unique even within sort of the same kind of sector
10 within industrial industry.

11 And so I think historically the Energy Commission
12 I think, has had a little bit of stop and start in our
13 engagement with industry, just because it's so -- every
14 facility is so unique. And I'm really excited about Indigo
15 and these grants. And sort of our much more, I think
16 comprehensive and thoughtful approach, sort of broad-based
17 approach to our industrial sector as it actually grows,
18 right?

19 And so I think the water aspect obviously is key
20 for California. Energy storage is a key technology sector.
21 Waste diversion is also huge, keeping waste out of our
22 landfills. And so I really like this industrial ecology
23 approach, sort of closed loop on materials and minimizing
24 energy and water. That just has to be our strategy going
25 forward. And one person's waste is another person's input.

1 And so I think you're seeing that in at least one of these
2 projects.

3 So I'm really encouraged by this and the whole --
4 this set of grants in the whole project that that we're
5 doing in EPIC, to address industry, including Indigo and
6 beyond. So really again I share the excitement about
7 getting our heads around the cement. So, thanks again.

8 VICE CHAIR GUNDA: Thank you, Michael, for the
9 presentation. Really appreciate that. Again, I want to
10 thank the R&D team, but also Commissioner Monahan and
11 Commissioner McAllister for your leadership.

12 I just wanted to share a couple of things as an
13 opportunity for the building decarb as a whole. Just the
14 connection between the industrial load and the grid
15 planning. Commissioner McAllister and I were chatting
16 before the start of the business meeting, just kind of
17 having where does that reside right now? We don't really
18 have a way of tracking the energy demand for the industrial
19 sector as we're thinking about scenarios. There is some
20 work happening within the SB 100 context, but really would
21 kind of request that the R&D team and the Commissioner
22 Offices really support the conversation on that sector.

23 Second I think the industrial sector has a
24 specific opportunity on reliability, the demand flexibility
25 in the evening, potentially under extreme weather events.

1 So I think it's something that needs to be tracked and
2 would love for both the Commissioner Offices to be plugged
3 into that conversation as it pertains to reliability and
4 industrial decarb.

5 And finally I think this is a point that I'm
6 taking from the Chair with the investment, federal
7 investment we have, there is a lot more pull for expanding
8 industrial base in California. And up until now the demand
9 forecast and all has been -- the errors of that might not
10 matter that much. But given the decarbonization
11 concurrently with potential expansion of the industrial
12 sector could be pretty significant to the grid planning
13 efforts. So I just wanted to kind of flag that as a
14 conversation for our teams to do in traditionally. Thank
15 you.

16 CHAIR HOCHSCHILD: Yeah, great point.
17 Commissioner Gallardo.

18 COMMISSIONER GALLARDO: Thank you, Michael,
19 again. And I am also excited about this package. And I
20 was really proud to see that there is one of these projects
21 happening in Oxnard, Ventura County, where I'm from. And
22 so I asked the team if I could go visit. It's really nice
23 to see this happening in areas as you said at the
24 beginning, a little bit more remote areas where maybe we
25 haven't been. Oxnard we talked about recently at the

1 Commission, not so good news that we had to deliver. So
2 this is really a benefit that could impact them
3 significantly. So if there's anyone else interested on
4 Commissioner row here who would like to go on that trip let
5 me know.

6 And then I also wanted to highlight, Commissioner
7 McAllister and I recently went to the Imperial Valley. And
8 we wanted to talk with the mayors and city managers there
9 about their priorities. And we thought for sure they're
10 going to talk to us about what they want to do on energy.
11 A few of those cities talked to us about wastewater and
12 their issues with wastewater. That was the first thing
13 that came up.

14 And so I was really grateful to hear what we're
15 doing on this, for example, the Caliskaner Water
16 Technologies in Olivehurst. That's going to be exciting if
17 you know those processes go well. That's information we
18 could provide to these other cities and counties that are
19 in need of this type of treatment. So I'm looking forward
20 to making those connections, seeing if we can continue
21 helping local government get solutions to some of their
22 priority issues.

23 And then also the Capture6 technology at the
24 Antelope Valley Water Project in Palmdale. The potential
25 to produce fresh water is another type of project tech that

1 could be helpful in areas like Imperial Valley that need
2 that water.

3 So I'm just really excited about all of this and
4 glad that we keep talking about how local government and
5 state are coming together to develop these wonderful
6 solutions. Thank you, Michael and team.

7 CHAIR HOCHSCHILD: My thanks as well, Michael.

8 And to Commissioner Monahan and Commissioner
9 McAllister, thank you for stepping up and leading us on
10 this issue.

11 Not to be captain obvious here, but I just want
12 to say this is very difficult to do. Like when I compare
13 industrial decarbonization, for example, to transportation
14 where we're building a bunch of EV charging infrastructure,
15 the OEMs are making EVs where basically one out of four
16 cars now being sold in the state has a plug. And that's
17 proceeding -- actually in many ways that's a simpler
18 proposition than some of these extremely complex industrial
19 processes. And so I accept that we're going to try and
20 experiment. Not all these will be successful, but I'm just
21 really proud that we're pushing forward.

22 This is the first big tranche of money we've had
23 to do something at this scale. And it's very high stakes,
24 as well, as the Vice Chair noted, because the Governor is
25 really, rightly I think, trying to bring more of these

1 operations, industrial manufacturing back to our state.
2 The CHIPS Act and the IRA create a sort of gravitational
3 pull to bring these processes back from overseas. And we
4 want -- if they're going to be here, which we hope they
5 will -- we want them to be as green and low emitting as
6 possible. So this is really tip of the spear.

7 Yeah, Vice Chair, go ahead.

8 VICE CHAIR GUNDA: Chair, I think I just wanted
9 to add to that one. Which is, I think as we decarbonize as
10 a sector -- different sectors and economy -- I think
11 electrification has been pretty well understood for
12 residential, potentially commercial. But I think the need
13 for clean molecules is all in the industrial sector, and in
14 parts of transportation. So it's even more an opportunity
15 as you develop the findings from these projects, provide
16 insights into the broader policymaking in the industrial
17 sector. So thank you so much for leading this.

18 CHAIR HOCHSCHILD: Commissioner McAllister.

19 COMMISSIONER MCALLISTER: Yeah, the same kind of
20 thought. But it's when you need heat, especially high
21 quality heat and high temperatures, which is pretty much
22 you know the industrial sector and not many other places in
23 our economy. That is particularly challenging. And I
24 think that's part of the reason why we've circled around
25 the industrial sector a little bit, because it is it is

1 complex and diverse and hard to get kind of a program
2 structure around. But as we really get our emissions down,
3 that'll be the lion's share of the fossil combustion.
4 Because that's historically, that's -- even new industries
5 we have a very articulated gas grid.

6 So I think as we move towards clean molecules and
7 electrification those will be some big investments. And I
8 think it's great that we're investing in these new
9 technologies.

10 But as to the Chair's point onshoring -- the
11 global economy is changing in a way that kind of favors
12 production nearer to demand. And with China kind of not
13 being the sort of manufacturer of choice across the world.
14 And so I think that presents a great opportunity for us to
15 grow our economy, but it brings this challenge of
16 addressing the heat loads. So I think just it's a really
17 great moment to be moving in this direction and investing.
18 So thanks again.

19 CHAIR HOCHSCHILD: Thank you. Okay, with that
20 I'd entertain a motion on Item 5 from Commissioner Monahan.

21 COMMISSIONER MONAHAN: I move Item 5.

22 CHAIR HOCHSCHILD: Commissioner McAllister, would
23 you be willing to second?

24 COMMISSIONER MCALLISTER: Second Item 5.

25 CHAIR HOCHSCHILD: All in favor, say aye.

1 Commissioner Monahan.

2 COMMISSIONER MONAHAN: Aye.

3 CHAIR HOCHSCHILD: Commissioner McAllister.

4 COMMISSIONER MCALLISTER: Aye.

5 CHAIR HOCHSCHILD: Vice Chair Gunda.

6 VICE CHAIR GUNDA: Aye.

7 CHAIR HOCHSCHILD: Commissioner Gallardo.

8 COMMISSIONER GALLARDO: Aye.

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

10 5 passes unanimously. We'll turn now to Item 6, California

11 Clean Energy Fund, CALCEF Ventures. I welcome Josh Croft.

12 MR. CROFT: Good morning, Chair and

13 Commissioners. I am here before you today to present for

14 your approval a total of 27 small grant awards under the

15 CalSEED Initiative, which is under EPIC program funding.

16 Next slide.

17 Since its inception in 2017, CalSEED has awarded

18 \$28 million to 120 clean energy startups with innovative

19 technologies. To date, these companies have garnered over

20 \$155 million in follow on funding. And furthermore, four

21 companies have been acquired. The growth of these

22 companies can also be measured in terms of an increase in

23 career opportunities, technology ownership rights,

24 advancement on the technology readiness level scale, and

25 successful small-scale validation of the unique

1 technologies.

2 In reflection of the CEC's commitment to
3 diversity, CalSEED actively conducts outreach to ensure
4 that the applicant pool is representative of all
5 Californians including women, low-income entrepreneurs,
6 veterans, communities of color, and other underrepresented
7 groups. Next slide.

8 CalSEED provides small grants to entrepreneurs
9 with early-stage clean energy technologies. Applicants
10 first apply for a \$150,000 Concept Award, which also comes
11 with access to technical resources and business development
12 expertise. Those that receive a Concept Award are then
13 eligible to compete for \$450,000 additional dollars via a
14 follow-on CalSEED Prototype award to further develop their
15 innovation.

16 The awards under consideration today are the
17 sixth round of those \$150,000 Concept Awards. Next slide.

18 CalSEED held its sixth open application period in
19 March of this year and received over 150 applications.

20 CalSEED directed applicants to submit proposals to one of
21 four groups based on their geographic location. Applicants
22 were screened for Technology Readiness Level, alignment
23 with EPIC objectives, and other metrics with applicants
24 then being invited to submit a full proposal. Next slide.

25 This application period CalSEED chose new

1 eligible technology categories and specified technologies
2 within each category that were eligible. For example, the
3 eligible technologies for Energy Storage were non-lithium-
4 ion short duration technologies, solid state batteries,
5 long duration storage, and technologies that advance low-
6 impact recovery of lithium and other co-products.

7 These applications spanned a wide range of
8 innovations over these technology areas. And some were at
9 the concept stage whereas others had a basic prototype
10 tested in the lab. The applications were evaluated for
11 long0term potential impact including technical,
12 environmental and social impact, business strategy, and the
13 experience and expertise of the team.

14 I'll now overview each of the technology areas
15 and highlight some of the exciting small grants before you
16 today. Next Slide

17 The first technology group is Energy Storage. As
18 we electrify our buildings, grid, and industry while adding
19 to our clean generation capacity, next generation energy
20 storage solutions open our options and provide consistent
21 and affordable resilience.

22 The energy storage solutions before you today
23 include flow batteries, cleaner lithium extraction
24 technology, new microwave assisted manufacturing technology
25 and others. One interesting innovation is from a company

1 called Waste Salt Technologies who is developing a process
2 to cheaply prepare salt from desalination plants into a
3 form that can provide high-quality thermal energy storage.
4 Next slide.

5 Next is the Distributed Energy Resources
6 Integration and Load Flexibility category. This year, we
7 have small grant awards for technologies that help
8 residents integrate and control electric loads without grid
9 upgrades as well as awards for technology that determines
10 the potential value of DER resources at any node on a local
11 utility circuit.

12 I'd like to highlight the sub-awardee Conusant.
13 Conusant is developing a self-learning microcontroller for
14 refrigerators that pre-cools freezers below the normal 0
15 degrees Fahrenheit using off-peak energy, effectively
16 turning the freezer into a thermal battery. It will take a
17 user's behavior into account just like a smart thermostat
18 and will be designed to work with any freezer model. Next
19 slide.

20 Our last group of projects is from the
21 Electrification and Decarbonization category. This year's
22 awardees include an innovative heat pump technology that
23 uses the solid to liquid transition instead of the liquid
24 to gas, as well as zero carbon concrete technologies, and
25 EV charger maintenance prediction algorithms.

1 A company named Mirai Solar is recommended to
2 receive their \$150,000 small grant to develop an
3 algorithmic control system for retractable solar PV shade
4 screens for greenhouses. This smart algorithm will
5 optimize both the crop growth and electricity needs by
6 choosing when the sun should fall on the plants or onto the
7 photovoltaic shades. Next slide.

8 Overall, this was an exciting cohort of small
9 grants that I'm pleased to recommend for funding. It is
10 staff's recommendation to find that funding these small
11 grants is an action exempt from CEQA and to approve these
12 27 small grants for funding.

13 We have some folks on the line from New Energy
14 Nexus, who is the CalSEED administrator, as well as some of
15 the recommended sub awardees. And we'll be happy to answer
16 any questions you may have.

17 CHAIR HOCHSCHILD: Great. Thank you so much.
18 Great presentation. We'll go to public comment on Item 6.

19 MS. BADIE: Hello, this is Mona Badie again, the
20 Public Advisor. The Commission now welcomes public comment
21 on Item 6. If you're in the room with us, you can use the
22 QR codes or approach the podium to let us know you'd like
23 to make a comment. And if you're joining us by Zoom, on
24 the screen you'll see a raise hand feature. And if you're
25 joining us by phone please press *9 to let us know you'd

1 like to make a comment.

2 And there is no one in the room. So we'll
3 transition to Zoom. Joy Larson, I'm going to open your
4 line. Please unmute on your end, state and spell your name
5 for the record and any affiliation. We are asking for
6 comments to be two minutes or less.

7 MS. LARSON: Hi, my name is -- Hello.

8 MS. BADIE: Yes, please proceed.

9 MS. LARSON: Thank you. My name is Joy Larson.
10 That's J-O-Y L-A-R-S-O-N. I'm Director of the CalSEED
11 program at California Clean Energy Fund under the brand New
12 Energy Nexus. Thank you for this opportunity to say a few
13 words in support of this agenda item. It was a really
14 competitive process to get here. I would like to express
15 gratitude to our partners within the Research & Development
16 Division of the CEC, specifically Josh Croft and Savi Ellis
17 for your support and guidance through the process.

18 Josh has shared some of the overall impact that
19 CalSEED is having, and I know there are a number of other
20 companies waiting to make some comments. So I just want to
21 take a moment to give a shout out to the CalSEED Review
22 Committee. This year there was a group of 33 industry
23 leaders and representatives from energy agencies,
24 accelerators and incubators around the state, not-for-
25 profits, academic institutions, foundations, venture

1 capital firms, energy engineering firms and veteran startup
2 founders. Each application was scored by at least nine
3 subject matter experts. And that is really what makes this
4 process so rigorous. The work they do behind the scenes
5 holds up this process. And without their subject matter
6 expertise and effort we would not be able to support such
7 promising companies. So on behalf of the CalSEED team, I'd
8 like to say thank you to each of the judges who support
9 this competition. And thank you to the CEC for your
10 continued support of early stage energy entrepreneurs and
11 continued collaboration in this program. Thank you.

12 MS. BADIE: Thank you.

13 Next, we have Kira Wyckoff. Kira, I'm going to
14 open your line. Please state and spell your name for the
15 record. We are asking for comments to be two minutes or
16 less. You may unmute on your end.

17 MS. WYCKOFF: Great. Hello, can you hear me?

18 MS. BADIE: Yes.

19 MS. WYCKOFF: Hi, I'm Kira Wyckoff, K-I-R-A W-Y-
20 C-K-O-F-F, and I'm a co-founder of the startup Lita
21 Materials. We're based in Galena, California, close to the
22 University of California Santa Barbara. And we're
23 developing a microwave assisted heating process for battery
24 cathode materials. Our technology will really integrate
25 the latest advances in material science in an effort to

1 significantly reduce the energy consumption of this process
2 and reduce the overall environmental footprint of lithium-
3 ion batteries.

4 We're part of this CalSEED cohort. And we are
5 sincerely grateful for the support and opportunity from the
6 State of California that will enable us to develop our
7 technology and advanced the clean energy future of
8 California. Thank you so much.

9 MS. BADIE: Thank you.

10 Next, we have Kevin Hurlbutt. Kevin, I'm going
11 to open your line. Please state and spell your name for
12 the record, announce any affiliation. And we are asking
13 for comments to be two minutes or less.

14 MR. HURLBUTT: Hello, thank you. Yeah, I'm Kevin
15 Hurlbutt, that's K-E-V-I-N H-U-R-L-B-U-T-T. And I am with
16 Project K, our CEO and Co-Founder. We're very excited to
17 be awarded this CalSEED grant from the California Energy
18 Commission. Project K is developing and commercializing
19 potassium ion batteries for affordable and safe storage of
20 electrical energy by utility operators, micro grid managers
21 and homeowners individually.

22 Our goal is to eliminate the rare and expensive
23 elements in today's lithium-ion batteries and to make the
24 storage of clean, renewable and reliable energy accessible
25 to all California ratepayers. On behalf of my co-founders,

62

1 Sam Wheeler and Mauro Pasta, thank you so much to the CEC
2 for investing in our next generation technology for the
3 next generation of Californians.

4 MS. BADIE: Thank you.

5 Next we have Reza Lakeh. Reza, I'm going to open
6 your line. Please state and spell your name for the
7 record, announce any affiliation. We are asking for
8 comments to be two minutes or less. Reza, your line is
9 open.

10 1:21:19

11 MR. LAKEH: Hello, good morning, everyone. My
12 name is Reza Lakeh, R-E-Z-A L-A-K-E-H. And I'm
13 representing Waste Source Technologies LLC, a spinoff from
14 California State Polytechnic University, Pomona. We are a
15 clean energy technology company that develops sustainable
16 solutions for desalination concentrate and energy storage.

17 Our team is a diverse group of students and
18 faculty who value diversity and inclusion. Our company's
19 technology repurposes desalination brine for low-cost
20 thermal energy storage. This means that we can use the
21 processed brine to store heat, which can then be used to
22 generate electricity or be used as processed heat. Our
23 technology is a sustainable solution to the problem of
24 desalination concentrate. It is also a cost-effective way
25 to store energy, which can help to reduce our reliance on

1 fossil fuels. Our test site is also located in a
2 disadvantaged community.

3 We are grateful for the opportunity to be
4 considered for the CalSEED fund. This fund would help us
5 to scale up our technology and allow Cal Poly Pomona Labs
6 to pilot to scale while creating several jobs and contracts
7 in the state of California. Thank you for your time.

8 MS. BADIE: Thank you.

9 There are no more hands raised. Back to you,
10 Chair.

11 CHAIR HOCHSCHILD: Thank you so much. So love
12 this diverse portfolio of really compelling technologies.
13 And just again, I'm really thrilled with how this program
14 has operated over the last few years. I think it's pouring
15 a lot of fruit. The only point I made during the briefing
16 a few weeks ago, I do think going forward since it's been a
17 few years since we launched this with inflation and
18 everything, I think for the next round, we should really
19 look at bumping up the initial grants to 200 and the follow
20 on to maybe 500.

21 But for this one I'm thrilled with the suite of
22 different technologies. And really want to commend you and
23 the whole team for pulling this together. And I'd welcome
24 any comments from my colleagues. Vice Chair Gunda, please.

25 VICE CHAIR GUNDA: Yeah, I just wanted to say

1 thanks Josh for the presentation, really helpful.

2 I just wanted to kind of put this at a higher
3 level. First of all, I think that the CalSEED program has
4 been exceptional. Everything that you are doing, I think
5 the value proposition of that was so well established a few
6 years ago. And then the continued progress on this.

7 I think what I would really request is as we
8 continue this work somehow showcasing the investments with
9 the policy needs. So I think one of the critical areas,
10 with Commissioner Monahan leading the IEPR this year, I
11 think we're talking about some significant challenges in
12 the electrification pathway, significant challenges both on
13 the interconnection, whatever right. It's technology -- it
14 could be process, it could be controls, whatever.

15 How if there is a way for us to really kind of
16 say here are the core areas that are being flagged as
17 important areas and here's how we're plugging these things
18 in on the top of the value proposition you showed earlier,
19 it would be really helpful. So I just wanted to put this
20 out there. Thanks.

21 CHAIR HOCHSCHILD: Commissioner Monahan.

22 COMMISSIONER MONAHAN: Well, can I just say, this
23 is such a smorgasbord. It's like an all you can eat menu
24 of cool technologies. And it's dealing with so many, as
25 the Vice Chair said, of our major energy challenges.

1 And in addition to the distinct challenges of
2 meeting our 100 percent clean energy goals for as a state.
3 Also to look at materials, especially in the battery side,
4 that don't use cobalt, or that use reduced amounts of these
5 precious minerals that we want to make sure that we have a
6 supply chain that as much as possible is domestic. Where
7 we know there are good worker conditions where we know the
8 environment is being protected. And so I just appreciate
9 the forward leaning investments in this package.

10 And I want to congratulate the whole team of
11 folks, New Energy Nexus, for all their leadership in this
12 space and the deep collaboration that they have with our
13 team.

14 CHAIR HOCHSCHILD: Commissioner Monahan.

15 COMMISSIONER GALLARDO: Thank you again, Josh,
16 for your wonderful presentation.

17 I also wanted to give thanks to the applicants
18 who joined us today to make comments. I think it's really
19 helpful to hear from them directly. And I would look
20 forward to and welcome any stories they have to share with
21 us, not necessarily today, but on the outcomes and impacts
22 that the program is having on them.

23 And I also wanted to emphasize that I appreciate
24 you showing that these are all small businesses. And so
25 many of them are led by women, almost 30 percent

1 minorities, as well, 45 percent. And then veteran as well
2 at around 2 percent. So that's wonderful to see that
3 breakdown. And I again encourage you to continue doing
4 that for us. It's helpful to see that type of impact as
5 well. And just the technologies moving forward.

6 CHAIR HOCHSCHILD: Yeah, Commissioner McAllister.

7 COMMISSIONER MCALLISTER: Yeah, kudos Josh.
8 Really proud of you and the team. Just great work
9 nurturing this program and having such a huge impact.
10 Storage, flex, and DER and electrification,
11 decarbonization, all of these are the huge topics of our
12 time, and it's really great to be seeing all this
13 innovation, I mean, the diversity is incredible.

14 And it's just they are companies that are based
15 here. I think I would like to see going forward perhaps a
16 catalog, comprehensive kind of catalog of all the level of
17 leveraging that's happened, sort of the follow on funding.
18 I think it's really important the stadium perimeter be on -
19 - it helps the companies sort of highlight their relevance
20 and go out and look for more funds. And really want to
21 sort of appreciate that and track that.

22 Also the intellectual -- so definitely, we need
23 the products and the technologies. But I think the
24 intellectual property and sort of the development of the
25 ecosystem and the R&D professionals really is also a huge

1 byproduct of this. Really it's not even a byproduct, it's
2 a core element of this.

3 So just so many reasons to like this, and I look
4 forward to seeing technologies really move forward. So
5 thanks again to you and the team.

6 CHAIR HOCHSCHILD: Do you look forward to it
7 enough to be willing to move the item?

8 COMMISSIONER MCALLISTER: Absolutely. I'll move
9 Item 6.

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

12 COMMISSIONER GALLARDO: I second.

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

15 COMMISSIONER MCALLISTER: Aye.

16 CHAIR HOCHSCHILD: Commissioner Gallardo.

17 COMMISSIONER GALLARDO: Aye.

18 CHAIR HOCHSCHILD: Vice Chair Gunda.

19 VICE CHAIR GUNDA: Aye.

20 CHAIR HOCHSCHILD: And Commissioner Monahan.

21 COMMISSIONER MONAHAN: Aye.

22 CHAIR HOCHSCHILD: And I vote aye as well. Item
23 6 passes unanimously, thank you so much. I would just
24 stress, going forward again, I know we're all aware of
25 this, but just the load flex piece of this work is so

1 critical. I know that's already really robust here. But
2 we really want to keep that focus central. So thank you,
3 Josh so much. Great job.

4 We'll turn now to Item 7, which is the Shultz
5 Summer Fellows Update, Information Item.

6 MS. MOONEY: Good morning Chair, Vice Chair and
7 Commissioners. My name is Fiona Mooney, and I've served as
8 the Shultz Fellow in the Chair's Office this summer. Next
9 slide, please.

10 The Shultz Energy Fellowship is a program for
11 Stanford students where fellows work in a variety of energy
12 related government agencies including the CEC, CAISO, CARB,
13 and WECC and more. In preparation we all took a class on
14 Energy Policy in California in the spring term. And there
15 were three fellows at the CEC this summer: myself working
16 in the Office of the Chair; Ethan Amaya, who worked in the
17 Office of Commissioner Monahan, and Camden Burke, who
18 worked in the Office of Commissioner Gallardo. Next slide,
19 please.

20 I had the opportunity to prepare a memo and
21 presentation for the Chair's Office on the CADEMO Offshore
22 Wind Project and will present a brief overview of that here
23 as an example of a Shultz Fellow's work. Next slide,
24 please.

25 The CADEMO project is the product of joint

1 venture between CIERCO and SBM Offshore formerly Floventis
2 Energy. The former is an independent renewable energy
3 project development company established in 2001, and the
4 latter is a Dutch-Based company, which specializes in
5 offshore platform technology with a history in the fossil
6 fuel industry. Next slide, please.

7 The CADEMO project is a 60 megawatt project
8 comprised of four 15 megawatt turbines located 2.8 miles
9 off the Vandenberg Space Force Base in Santa Barbara
10 County. The project has been approved by the Department of
11 Defense and with final approval from the State Lands
12 Commission pending. This project is a demonstration
13 project and there has been attention and concern from the
14 public with regard to the potential environmental impacts
15 of the project.

16 With the current timeline, the build is expected
17 to begin in 2025 and be operational in late 2027. Next
18 slide, please.

19 Though the CEC does not have a visual simulation
20 of the turbines this is a comparable one of the Block
21 Island Wind Farm in Rhode Island, located 3 miles offshore.
22 The CADEMO project will be 2.8 miles offshore. The
23 turbines at block island are 600 feet, while the ones for
24 the CADEMO project will be approximately 870 feet. Next
25 slide, please.

1 Via a High Road Training Partnership grant from
2 the California Workforce Development Board, the expected
3 workforce impacts of the project were studied, and that was
4 the main scope of my research. Next slide, please.

5 The Labor Union Negotiations and the Project
6 Labor Agreement for the project have been completed. The
7 process took about two years with the State Building and
8 Construction Trades Council and IBEW 1245 both signing in
9 November of 2022. The Southwest Mountain States Regional
10 Council of Carpenters signed in May 2023, adopting the same
11 agreement as the first two unions.

12 Although the project labor agreement is still
13 confidential, noted terms from the High Road study include
14 an Outside Line Agreement with utility union IBEW 1245
15 covering all land and offshore transmission cable and
16 substation installation work. And for construction-related
17 crew positions on any foreign ships used, there must hire
18 as many American trade union workers as foreign workers,
19 but this excludes non-construction work on the vessel.
20 Next slide, please.

21 The potential for California job creation in
22 manufacturing of turbine components for this project is
23 low, but high for construction and assembly. Overall, the
24 majority of job creation will be seen around the
25 construction of the turbines rather than operational roles.

1 Jobs in construction will be centered around the ports the
2 project uses, whereas operational roles will be
3 geographically based near the turbines' final location.

4 A study in conjunction with the High Roads
5 Training Partnership from Cal Poly titled, "The Economic
6 and Employment Impact of Floating Offshore Wind Projects in
7 California's Central Coast," estimates the creation of 922
8 full time equivalent jobs in construction, and 23 full time
9 equivalent jobs in Operations.

10 In the context of larger potential future
11 projects, the study also found that a 1 gigawatt floating
12 offshore wind project would generate nearly 24 thousand
13 jobs in its approximately 6-year construction phase and 600
14 annual jobs in its 25 year operational phase. Next slide,
15 please.

16 Floventis has identified Pier 96 of the Port of
17 San Francisco as the expected location of platform
18 construction, with the second option being the Port of
19 Humboldt. These platforms could be either steel tension-
20 leg platforms or a concrete barge. With the former, this
21 would require imported pieces that would be welded together
22 at a U.S. port, but with the latter, concrete, this could
23 be made with locally produced concrete at San Francisco.

24 The constructed platforms would then be partially
25 submerged and transported via tugs to the Port of Los

1 Angeles. There, final integration of likely imported
2 turbine towers, nacelles, and blades being placed on the
3 floating platforms. The fully integrated turbines would be
4 towed to the final project site in state waters off
5 Vandenberg Space Force Base. Therefore, with this project,
6 job creation would be most highly geographically
7 concentrated near ports, especially the Port of LA, and
8 less so along the Central Coast. Next slide, please.

9 This concludes my presentation. Thank you to the
10 CEC for this valuable experience serving as a Summer
11 Fellow. I believe I can speak for Ethan and Camden as well
12 when I say this was an incredible learning experience. And
13 I really appreciate your all being so welcome and sharing
14 your knowledge. And thank you for the work you're doing.
15 Yeah, thank you so much.

16 CHAIR HOCHSCHILD: Thank you so much, Fiona.
17 Great presentation. And thanks to you for joining the
18 Energy Commission this summer, wonderful to have you and
19 all of your colleagues. And I appreciate the presentation
20 on CADEMO.

21 I'll just open it up if there's any comments or
22 questions for Fiona on that project. Yeah, Vice Chair.

23 VICE CHAIR GUNDA: Not specifically the project.
24 I just wanted to say thank you, Fiona and your colleagues,
25 for joining the CEC. I had the pleasure of having some of

1 your colleagues from last year in the office. And I just
2 really appreciate, both the commitment that you all bring,
3 but kind of the new ideas that you are learning in school
4 and how to think about some of these problems.

5 So thank you so much for all your work and look
6 forward to intersecting again in the future. Thank you.

7 CHAIR HOCHSCHILD: I also just wanted to note the
8 program that you're a part of, the Schultz Fellowship, is
9 named after former US Secretary of State George Shultz who
10 passed away two years ago. And he was really a remarkable
11 leader on the environment. And really -- we talked earlier
12 in the meeting about hopeful stories.

13 And really one of the most inspiring I think
14 environmental success stories of my lifetime is the
15 Montreal Protocol, which was adopted, really because of his
16 leadership under then President Reagan in 1987. And
17 negotiated on a bipartisan basis, and in response to this
18 crisis at the time of the ozone hole getting wider and
19 wider as a result of these ozone depleting chemicals
20 getting out in circulation. And there was a global
21 agreement around reining those in. And it's actually
22 helped tremendously and the Ozone Hole is now closing.

23 And really I think a great opportunity to just
24 reflect on what's possible with real leadership on a
25 bipartisan basis to solve these global environmental

1 threats. And so just a tribute to George Shultz and his
2 dedication on that issue.

3 So thank you again, Fiona, for that presentation.
4 And unless there are -- sorry, Commissioner Monahan, were
5 you going to say something?

6 COMMISSIONER MONAHAN: Well, I just had a comment
7 about this whole Fellowship Program. Ethan was amazing in
8 my office. He helped with some really detailed comment
9 processing for our IEPR, and really dove deep into the
10 distribution and transmission system and how we can improve
11 it. And he also did several, like just spot projects for
12 me that I had some curiosity about. He was fantastic. So
13 it really was just like wonderful to have him in our
14 office. Good to have young people who bring a lot of
15 enthusiasm and just smarts to the table. So it was really
16 delight, a delight to have him in our office.

17 CHAIR HOCHSCHILD: It's great, good to hear.
18 Yeah. Commissioner Gallardo.

19 COMMISSIONER GALLARDO: Quickly, on -- about the
20 Fellowship. I also benefited from having a Schultz Fellow
21 Camden Burke, and we really enjoyed him. I think my main
22 complaint about the program is it's too short. We have
23 them for just a glimpse, and then they're gone, so it would
24 be wonderful if there was a possibility to elongate that
25 fellowship.

1 CHAIR HOCHSCHILD: Yeah, they get distracted by
2 having to go back to school. So anyway thank you so much
3 for your great, great presentation, and congratulations on
4 all the work.

5 Unless there are further comments. We will turn
6 now to Item 8, the minutes of the July 26th and August 9th
7 business meetings. And any public comment on these items?

8 MS. BADIE: Hello, again. This is Mona Badie,
9 the Public Advisor for the Energy Commission. The Energy
10 Commission now welcomes public comment on Item 8, the
11 minutes. And if you're in the room with us, you can use
12 the QR code or approach the podium to make a comment. And
13 if you're joining us via Zoom, please use the raise hand
14 feature on your screen or *9 if you're joining by phone.

15 All right, not seeing any hands raised. Back to
16 you, Chair.

17 CHAIR HOCHSCHILD: Okay, so we're going to take
18 these items up separately, because there's one abstention.
19 So could I get a motion from Commissioner Gallardo on Item
20 8a?

21 COMMISSIONER GALLARDO: I move to approve Item
22 8a.

23 CHAIR HOCHSCHILD: Is there a second from
24 Commissioner McAllister?

25 COMMISSIONER MCALLISTER: Second.

1 CHAIR HOCHSCHILD: All in favor, say aye.
2 Commissioner Gallardo.
3 COMMISSIONER GALLARDO: Aye.
4 CHAIR HOCHSCHILD: Commissioner McAllister.
5 COMMISSIONER MCALLISTER: Aye.
6 CHAIR HOCHSCHILD: Commissioner Monahan.
7 COMMISSIONER MONAHAN: Aye.
8 CHAIR HOCHSCHILD: You're abstaining?
9 VICE CHAIR GUNDA: Yeah, abstaining.
10 CHAIR HOCHSCHILD: Okay. So that item, and I
11 vote aye as well, that item passes 4-0.
12 MS. BARRERA: Chair. I apologize, I need to
13 interrupt. I think you also need to abstain since you
14 weren't at the business meeting.
15 CHAIR HOCHSCHILD: Oh, I apologize. I abstain as
16 well. So that item passes 3-0. Correct, thank you. And
17 we'll turn now to Item 8b. Thank you, Linda.
18 Let's see, Vice Chair Gunda, would you be willing
19 to move Item 8(b)?
20 VICE CHAIR GUNDA: Yeah, move Item 8b.
21 CHAIR HOCHSCHILD: Is there a second from
22 Commissioner Monahan?
23 COMMISSIONER MONAHAN: I second.
24 CHAIR HOCHSCHILD: All in favor, say aye. Vice
25 Chair Gunda.

1 VICE CHAIR GUNDA: Aye.

2 CHAIR HOCHSCHILD: Commissioner Monahan.

3 COMMISSIONER MONAHAN: Aye.

4 CHAIR HOCHSCHILD: Commissioner McAllister.

5 COMMISSIONER MCALLISTER: Aye.

6 CHAIR HOCHSCHILD: Commissioner Gallardo.

7 COMMISSIONER GALLARDO: I abstain.

8 CHAIR HOCHSCHILD: And you abstain. Okay, and I

9 vote aye as well. That item passes 4-0. Thank you.

10 And we'll turn now to Lead Commissioner or

11 Presiding Member Reports. Maybe starting with Commissioner

12 Gallardo.

13 COMMISSIONER GALLARDO: Sure. Thank you. I

14 wanted to remind our CEC family and the Commissioners that

15 I have a new team. I have Erik Stokes, who came from ERDD.

16 He's been at the Commission for over 15 years and so I'm

17 really grateful to have them as my new Chief of Staff.

18 He's also going to be the Lead Advisor on the Lithium

19 Valley Vision, so eager to get that ball rolling now that

20 Erik is on board.

21 And also Jimmy Qaundah has joined my team. He's

22 going to be my Lead Advisor on all things citing including

23 our opt-in permitting, and I'm really grateful to have him.

24 And he also brings a tremendous amount of experience with a

25 legal hat. He has served in Chief Counsel's Office and he

1 did private law as well. And worked with tribes for an
2 extensive period of time, so he'll also be my Advisor on
3 Tribal Affairs, so really appreciate having both of them.

4 And I did want to say thank you to Camden Burke,
5 who I mentioned earlier, he was my Energy Fellow. He's
6 going back to school. He was a wonderful asset to have
7 during the time that he was here. And also a big thank you
8 to Andrea McGarry, who was my former Interim Chief of
9 Staff, she returned to the Public Utilities Commission to
10 serve as an Administrative Law Judge there, but I'm really
11 grateful for the time she supported me.

12 And I also wanted to highlight a couple of events
13 that I attended. So August 18th the Disadvantaged
14 Communities Advisory Group, also known as DACAG, held a
15 meeting at the CPUC headquarters. And before that meeting
16 we visited the Resiliency Center. It's not that photo that
17 is being shown right now, so not to confuse anyone. But I
18 wanted to highlight this event, because we learned a lot
19 from the community of about how a community center in
20 downtown Oakland that has served the community for decades,
21 is now being turned into a resiliency hub. I thought it
22 was a phenomenal idea to advance clean energy and serve the
23 community at the same time.

24 So I'm not a lead on the reliability resiliency
25 efforts that we're doing, but I wanted to highlight that

1 for Vice Chair Gunda, for Deanna Carrillo. I think it
2 would be a great opportunity to talk more with those
3 organizations and DACAG about these resiliency hubs. We
4 had a really robust discussion about the benefits.

5 And then I also wanted to highlight, so a visit
6 that I had. Commissioner McAllister and I both went to
7 Imperial Valley with some additional staff and other
8 representatives from states, including the Governor's
9 Advisor on Innovation, and also -- social innovation, I
10 should clarify. And then also some friends from CAEATFA,
11 one of the new executive directors.

12 So it's a really fun trip we had in Imperial
13 Valley. So the images that you're seeing there, I'm not
14 going to go through each one, but just highlighting that we
15 visited mayors, managers, and also public works directors
16 in all of the seven cities that make up Imperial Valley.
17 And so it was really important for me to connect with these
18 leaders as we're going through our Lithium Valley Vision
19 process, and hear from them what their priorities are, what
20 their questions are in all things. And so we didn't focus
21 on Lithium Valley. We really focused more on them and what
22 their priorities were. And so we learned a lot.

23 And a few themes that kept coming up were one,
24 grants. They're really excited about the all the grants
25 that we have. And even this -- but the problem is that

1 they don't have enough capacity to even be able to apply
2 for the ones that are simple. So grant writing is a major
3 need that these jurisdictions have. And we hear that from
4 tribes and other others as well. So I wanted to bring that
5 to your attention.

6 The other one that they highlighted was planning.
7 They don't have enough planners to go through all the steps
8 needed in order for them to bring clean energy to their
9 areas, even though they're excited about it and want to do
10 it. So that's a deficit they have.

11 And then finally, I mentioned this earlier,
12 several of them brought up wastewater and the issues they
13 have. For example, the City of Calipatria, they said that
14 one of their schools has such a bad problem that it smells
15 like sewer in the cafeteria. You know where the students
16 go to eat, so just imagine that. That image stayed with
17 me. And that was one of their main concerns. And they
18 were telling us, because they see us as folks from the
19 state who potentially have resources, potentially have
20 connections, and we can help them do something about it.

21 So anyways it really spoke to me. And so then
22 when I heard our ERDD team, focusing on these wastewater
23 processes that could be really transformational I'm hoping
24 that I can make those connections for the Imperial Valley
25 cities and others that maybe we haven't heard from yet that

1 need those services.

2 And so a wonderful trip. And I was really glad
3 that Commissioner McAlister came with me with his visit
4 that enabled us to say that all five Commissioners have
5 visited the Imperial Valley, have gotten to know the
6 residents there who are really resilient and wonderful
7 people. And just excited about all things to come. So
8 thank you to all of my fellow Commissioners who have been
9 willing to engage there and who continue working with me on
10 this.

11 And then during -- at the end of that trip we did
12 have a site visit and hearing for the Berkshire Geothermal
13 Applications for Certification. And I won't go too much
14 into detail other than there was a lot of people there. We
15 had a full house. It was wonderful to see how much the
16 community was interested in this.

17 And I wanted to thank staff from the STEP
18 Division, from Chief Counsel's Office, and also from Pio
19 Plus (phonetic) for coming together putting on such a great
20 event and helping us get through that process so smoothly.
21 And also to my fellow Commissioners, Chair Hochschild and
22 Commissioner McAllister for serving and being patient with
23 me, because it was my first hearing that I was leading.

24 And then finally I wanted to highlight, we had a
25 visit. The Chair and I went to Petaluma per an invitation

1 from the US Coast Guard to check out the new micro grid
2 that they're building. And it was really exciting to hear
3 how much they're doing. It's a 5 megawatt solar array, if
4 I remember correctly, with 11.6 megawatt hours of battery
5 storage. And it's just really exciting all the things that
6 the US Coast Guard is an example, but the military services
7 in general are contributing to help us get to that 100
8 percent clean energy future for all. And just really
9 grateful that they were willing to have us and looking
10 forward to more of those visits and engagement.

11 And that's it for me.

12 CHAIR HOCHSCHILD: Thank you, Commissioner.

13 Let's go to Vice Chair Gunda.

14 VICE CHAIR GUNDA: Thank you, Chair. Thank you,
15 Commissioner Gallardo. That's super. It's just
16 fascinating to hear all the visits and the lessons from
17 that.

18 I'm going to touch quickly on a few topics that
19 our office has been working on. Just reliability,
20 hopefully we are at the tail end of the electric
21 reliability concerns for the summer. So just kind of
22 flagging a couple of statistics for the Commissioners.

23 September 6th, 2022 we were about 52,000
24 megawatts going towards 53,000 megawatts on the CAISO
25 system. A year later on September 6th, 2023 we were at

1 33,000. That's a 20,000 megawatts swing between two years.
2 And that's the issue that we're dealing with. One day
3 you're like, I don't know what to do with the resources and
4 another day you're like I don't have enough. So I just
5 want to make sure that everybody's tracking that it's a 20
6 gig change.

7 And that really kind of goes to the work that
8 Commissioner Monahan, Commissioner McAllister have been
9 working on, both the electrification and potential load
10 flexibility. I think moving forward it's really important
11 to carry a significant amount of load flexibility that we
12 can tap into under these extreme events, so we don't have
13 to build as much. So that's on the reliability.

14 A second factor on the reliability, last year in
15 September the WAEC (phonetic) as a whole was 167,000
16 megawatts. WAEC as a whole to the Western Interconnect.
17 This year, it was not that far off. It was about 160,000.
18 So while we had to rely on our neighbors last year, this
19 year California was able to support our neighbors in their
20 reliability events suggesting a regional element of that.

21 And so I'll go to the second element from there,
22 which is regionalization and regional coordination efforts
23 between California and the rest of the West. Incredibly
24 thankful to have the steady hand of Commissioner McAllister
25 as a partner on that 30,000 foot level, the real thrust of

1 the work that California is trying to do is advance the
2 opportunity for ADAM, which is the Advanced Day Ahead
3 Market that CAISO has. But really create a pathway that
4 keeps most of the West including California, as a part of a
5 westward market to both leverage all the investments we've
6 made in the EIM market or the Energy Imbalance Market.

7 Most of the western states have contributed to
8 that effort, but also -- so one is to leverage the money
9 that we've already put in. But the real impact and the
10 savings come from holding the West together, the maximum
11 footprint.

12 So that's the effort that Commissioner McAllister
13 and I along with President Reynolds and Commissioner Houck
14 from CPUC have been a part of, and a lot of staff are
15 helping on that. Some of the people, Linda Barrera from
16 CEC, along with Lisa, EAD, Aleecia Gutierrez, I just don't
17 mention them anymore, but nothing happens without them. So
18 thank you.

19 Third, petroleum. We've already covered that
20 earlier today in the comments.

21 IEPR, I will defer to Commissioner Monahan if she
22 wants to add anything but just moving at a good pace, the
23 IEPR.

24 Finally SB 100. Our office is working on SB 100
25 efforts. We've done a couple of workshops now on SB 100.

1 Really in the process of thinking through how do we frame
2 the tradeoffs conversations, the scenario conversation, and
3 the scope of SB 100. So I want to thank Liz Gill from our
4 office. Aleecia, again for her effort on keeping SB 100
5 together.

6 Plenty happening. And we are in the middle of
7 all this we are doing a lot of travel and engagement with
8 our partners, both in the state and nationally and globally
9 to both learn and share the stories of our success and
10 challenges we're learning along the way. So thank you.

11 CHAIR HOCHSCHILD: Thank you, Vice Chair.

12 Let's go to Commissioner Monahan.

13 COMMISSIONER MONAHAN: All right, well, first, I
14 have to talk about why I was late, which was because I was
15 at a Senate budget Subcommittee Hearing for AB 8
16 reauthorization. And we're not at the finish line yet, but
17 we'll know I would say by tomorrow night whether this
18 program is reauthorized. I think the signs are good, but
19 at this point I'm waiting. I'm not counting my chickens
20 before they're hatched. So we're waiting for floor votes
21 to see what happens.

22 But I just want to say this has been a crazy
23 time. I'm looking at our Chief Counsel who has been
24 amazing. And a number of folks have just been stepping up
25 with me and others saying we need help within the next hour

1 and Linda would just be on it. So I just want to thank
2 you, because I know you have a big workload and you're
3 still doing all this. So thank you.

4 VICE CHAIR GUNDA: She also does time travel,
5 goes back into yesterday.

6 COMMISSIONER MONAHAN: Yeah, I think she has
7 multiple personnel, multiple people, because I don't know
8 how one person could do the whole thing. And Hannon Rasul
9 on his vacation has been responding. Sarah Lim in my
10 office. We've had a lot of with Kat Robinson, so many
11 working, so much work after hours back and forth, trying to
12 figure out how to be responsive to the Governor's Office.

13 And the quarterback for this whole thing in the
14 Governor's Office, Grant Mack, has been amazing with I
15 guess maybe Lauren Sanchez as the coach. I'm not sure how
16 I would characterize on the playing field, but really a lot
17 of support from everybody. Brady, our new head of OTA, oh
18 my gosh, amazing.

19 So just we haven't gotten the finish line. But
20 we are as close as we've ever been to getting the program
21 reauthorized through 2035. So, yes. So fingers crossed.
22 Think good thoughts. Tomorrow night I'll definitely be
23 watching the floor vote.

24 Just a quick update. So we talk a lot about ZEV
25 new sales numbers, but we recently just updated the map of

1 ZEV related manufacturers, so we have 56. There's a cool
2 map that the team has put together, so check it out.

3 And just to talk for a minute about the IEPR
4 workshops. I would say we're on a good track. We're
5 working right now with our sister energy agencies to make
6 sure that we are coming out as a California energy policy
7 report. And that we have alignment in terms of our goals.
8 And Ben Wender has been point in my office. He's really
9 done an amazing job together with Heather and the team to -
10 - Heather says we're in good shape, which when Heather says
11 that I think okay we're in good shape. She knows what
12 she's doing.

13 And we've had a series of workshops. I want to
14 thank the Vice Chair and Commissioner McAllister, who have
15 been kind of my steadfast partners through this process and
16 others who have come in too as they can. I know, it's a
17 big workload. We have a lot of workshops.

18 I want to say that the AB 2127 draft report,
19 which maps out charger needs through 2030 and 2035, is on
20 the street. One of the big questions we're wrestling with,
21 which I think you'd be interested in Vice Chair, is whether
22 we're going to move more towards what we characterize as a
23 gas station model which would be much more DC fast
24 charging, less Level 2.

25 Level 2 charges are good for the grid, because we

1 can soak up that sunshine charge during the middle of the
2 day at workplaces. DC fast charging is I would say, we
3 have to be careful about how that rolls out, because that
4 has the potential to have grid impacts that we want to
5 avoid. So price signals are going to be really important
6 in that working with the EVSPs. The electric vehicle
7 service providers on that, I think is also going to be
8 important.

9 But as I think anybody who has read the news
10 maybe who pays attention to chargers, I don't know maybe
11 that's a very small subset. But you know a lot of
12 manufacturers are saying we're going to adopt the Tesla
13 standard. And Tesla is a supercharger network, kind of
14 sets the standard for I would say reliability. And at the
15 end of the day I think this will probably be good for
16 everyone, because more competition in the charging space
17 for everybody is a good thing.

18 In the near term, there are some challenges that
19 we're working through around making sure that everybody
20 will still have access, even if charging migrates more
21 towards the Tesla versus the other, it's called TCS
22 standard. So our team is working on that. But interesting
23 questions that we're wrestling with in the AB 2127 context
24 that will have implications for planning.

25 I did a tour of Moxion in Richmond, which was

1 awesome. And with Ethan my Shultz Fellow. Moxion makes
2 mobile storage for like at construction sites, so you can
3 electrify vehicles. And they're building out with a grant
4 from us, their facility. They'll be expanding enrichment
5 and it was really great to see them. They're a really
6 interesting startup company. They have a lot of obviously
7 good investors in the space. So I think there'll be
8 something to watch.

9 And Patricia Carlos in my office has been
10 organizing a series of events, some of which I can't talk
11 about because there'll be in the media hopefully soon. But
12 one that I can talk about is just internal to state
13 agencies. It's an EV manufacturing virtual tour and it's
14 something the Chair in particular has been interested in.
15 You should have received an invitation. It's just internal
16 to state workers. But it's not just us, so we're
17 organizing this tour together with GO-Biz. We're inviting
18 CARB and other state agencies, Caltrans others to join.

19 And it's going to be viewing BYD Ride, which is
20 an EV manufacturer, the world's biggest EV manufacturer in
21 terms of numbers of EVs and Moxion, so the company that I
22 just talked about. So I'm hoping you or your teams or
23 everybody in the Energy Commission, who's interested will
24 be able to join that virtual tour. We've never done
25 something like this. So Patricia has taken the step in

1 terms of like how do we do this in real time, have a little
2 iPad, going around at the facility. So it's going to be
3 definitely not something we have practice doing. We're
4 doing it for the first time. And that's it.

5 CHAIR HOCHSCHILD: Thank you. Great update.
6 Let's go to Commissioner McAllister.

7 COMMISSIONER MCALLISTER: Great. Well, so much
8 going on. I mean, it's so impressive. It's incredible to
9 be working with all of you, and just partnering on so many
10 different diverse things. Sometimes in my case a portfolio
11 includes energy efficiency all the way. We heard about
12 refrigerator level load management today, right? So the
13 tiniest of loads all the way up to the Western
14 regionalization stuff. And I think sometimes it's kind of
15 hard to connect all the dots from top to bottom. But
16 there's so many pieces of this puzzle, and we're working on
17 all together at once and across all the agencies. So it's
18 a really wonderful time actually making progress.

19 I wanted to just highlight a few things. One,
20 the Chair and I went and spoke at the Loan Program's
21 Office, the DOE put together with some state agencies,
22 BCSH, and the Strategic Growth Council, and some others.
23 GO-Biz, I think actually led the organization, on
24 affordable housing in the state. And we link -- they
25 explicitly wanted to talk about sort of the linkages

1 between energy and affordable housing. And there's I think
2 the conversation really is ripe. We obviously need more
3 affordable housing. We want to be building that affordable
4 housing in the state. And we want that affordable housing
5 to be incredibly energy efficient and flexible.

6 And so I think the Loan Programs Office is really
7 thinking outside the box about how they can bring their low
8 cost capital to California to help build factories that
9 then would produce modular and factory built homes, to also
10 address the affordable housing crisis that we have.

11 So that was a really incredible day and it's
12 actually already starting to pay benefits. There are a few
13 projects, a couple projects that have come out of the
14 woodwork saying, "Hey, we need capital. We're about to
15 build a factory, we need capital." So I think that's super
16 exciting. That's a longer play. But you know, housing
17 construction is a longer play. And some staff was also
18 there, Deanna and some of our team. So it was really a
19 great presence by the Commission across all the agencies.

20 Let's see, just on the Imperial Valley visit was
21 really, I think, very productive. And not just the
22 hearings around the geothermal plants, which is great to
23 see that conversation starting, but also just sharing some
24 interaction with Commissioner Gallardo and some of the
25 local officials at the various towns in Imperial Valley.

1 And it was sort of like old home day for me in a
2 way. I used to work just across the border actually in the
3 industry -- in the industrial sector in Mexicalidores
4 (phonetic) long before I came to the Energy Commission.
5 And I had this -- it feels like a very rural area in the
6 Imperial Valley. And it is a very rural area. Massive,
7 massive agricultural production. A lot of big corporate
8 farms, a lot of big family-owned farms, and lots of growth.
9 And so the demographics are changing really fast. And then
10 there's growth and the stress on the water and energy
11 systems is really important, just the institutional
12 facilities.

13 And right across the border it feels rural, on
14 our side of the border. And on the Mexican side of the
15 border actually they're huge. Mexicali is a big, big city.
16 And it goes basically all the way over to the coast and
17 Tijuana is massive.

18 And so you have these demographic, these flows of
19 people across the border every day. And so it stresses all
20 of their infrastructure. And so, you know, they really are
21 struggling with these basic issues. As Commissioner
22 Gallardo said they need urban planners and it's hard to
23 keep professionals down in the cities helping to plan. And
24 so the -- I think any economic development is going to help
25 that that region. But I think, you know, really an all

1 government kind of approach. They have some really
2 inspiring leaders at the cities across Imperial Valley. It
3 was super impressive, actually.

4 So I, a couple weeks ago, went down to Los
5 Angeles for the 10th anniversary of the Southern California
6 Regional Energy Network. That was an initiative funded by
7 the CPUC a little over a decade ago. A whole suite of
8 these regional energy networks was funded. And it really
9 had legs. It was sort of a response to some of the needs
10 at the local government level to control more of their own
11 destiny in the energy efficiency realm. And sort of take
12 some of the ratepayer monies that have been going to
13 utilities and use those for regional and local
14 organization. And it was just an idea whose time had
15 arrived. And they've done so much great work over the
16 years on permitting reform, on just all the issues, many of
17 the issues we talked about today, just at the local level.
18 So very inspiring.

19 They're still going in the County of LA, and all
20 the smaller cities within the county are just getting huge
21 benefits out of that. So kudos to the CPUC and just the
22 SoCal ran itself. You know, 10 years. They've done a lot,
23 and I'm sure they'll be around for another 10. I happened
24 to be at the -- back in with a previous hat that was sort
25 of the origin of that REN, (phonetic) that whole REN

1 conversation. And that the need that the local government
2 was very palpable, and kudos to the PUC for responding to
3 that.

4 Let's see I think did we do the SCA Awards since
5 our last meeting? I think we might have. No? Okay, sorry
6 about that. Anyway, just that again that was that was a
7 great event. I went back a little too far, I guess.

8 Then then finally just I wanted to thank the
9 Legal Office. Linda, you and your team, we have probably a
10 dozen issues that we're interacting on. And just the
11 responsiveness and the smarts and the sort of sensitivity
12 to the issues, and just the legal grounding obviously is
13 just immaculate. It's really, really amazing. It's so
14 great to work with you and your team. And I think you're
15 going to -- you're welcoming a whole new cohort of legal
16 attorneys on your staff, so congratulations. I mean if I
17 were in that realm I would love to work for you. So I can
18 see why it's a big draw.

19 So with that, I think I will wrap it up. Thanks.

20 CHAIR HOCHSCHILD: Great. Thank you,
21 Commissioner.

22 And let's see I wanted to begin by highlighting a
23 really good piece of news, which is we got a really
24 promising solicitation announced from the Department of
25 Energy a few weeks ago, \$3.5 billion dollars for lithium

1 recovery and battery manufacturing. And I think our state
2 is well positioned hopefully to land some of those federal
3 dollars.

4 I really want to thank Commissioner Gallardo for
5 an amazing job pulling together, we did a tour with about
6 15 representatives from the Department of Energy and a
7 couple from the Department of Defense this spring.

8 And I also went with Hannon Rasul and Mike
9 Gravely to Washington DC in August to do a follow-up
10 meeting with the Department of Energy. But hoping to see
11 some real federal investment in our priorities here. I
12 think we can deliver a lot for the President's agenda and
13 the country's agenda on minerals independence and in state
14 battery manufacturing. So excited to see where that goes.

15 I also wanted to just highlight a visit the Vice
16 Chair and I did to the Central Coast, which was a tribal
17 consultation on offshore wind. I really wanted to
18 recognize the incredible work of our tribal team. In
19 particular, Sierra Graves, who was instrumental while
20 Katrina Leni-Koenig was out, in really setting up what I
21 thought was a very, very full and rich discussion with all
22 the Central Coast tribes on offshore wind. And they're
23 asking a bunch of very fair questions about impacts to
24 marine life and marine biology. And some of which we had
25 answers to, and some of which we don't yet. And that

1 really points to there is a future study. But just that
2 was a great engagement and really a full trip down there.

3 And also, technology. One of the biggest things
4 happening in the Central Coast now is the marine sanctuary,
5 which has been now formally proposed through NOAA and that
6 public comment is underway. And that's a major marine
7 sanctuary for the United States and for California.

8 And related to that I wanted to highlight that
9 the state's Native American Day is going to be September
10 22nd. I believe that's here at the Capitol. Yeah, yeah.

11 And I guess the final note, I think we covered
12 already a lot. Just I'm always interested to kind of
13 highlight milestones in clean energy technology
14 development. And just to report out that just yesterday
15 the news was announced of the longest-range electric semi-
16 truck has been independently tested. It was a Tesla semi
17 and it was independently verified at a 545-mile range for
18 an electric truck, which is really extraordinary. And when
19 we think about what we're doing, investments in fast
20 charging and so on and the need to decarbonize that sector,
21 that's a really, really significant milestone I just wanted
22 to recognize.

23 So with that I think I'll stop there. I did want
24 to just highlight one other thing. The Governor announced
25 yesterday that he will be going to China later this fall

1 and engaging on climate collaboration, which is really
2 welcome news. And I think wonderful to see that
3 international engagement on climate collaboration, and look
4 forward to supporting his efforts and further international
5 climate collaboration.

6 So with that we'll wrap with that and then go to
7 Item 11 -- oh sorry, Item 10, Executive Director's Report.
8 Drew.

9 MR. BOHAN: Thank you, Chair. Drew Bohan,
10 Executive Director.

11 A couple announcements, we have a lunch -- the
12 timing is good -- that begins when this meeting ends. I
13 know a number of the Commissioners and folks in the room
14 will repair to the third floor, the Lake Tahoe Room, and
15 it's a nice opportunity for staff to rub shoulders with
16 Commissioners. So please consider yourself welcome if
17 you're here today.

18 Second, the annual picnic is back. It is next
19 Thursday. It starts at noon. It's always a lot of fun.
20 Family, especially babies and toddlers, are welcome. They
21 bring a great levity and thrill to the event, so please
22 come.

23 You mentioned, Chair, the 56th Annual California
24 Native American day. It is next Friday, the following day.
25 We will have a booth. And if staff want to help

1 participate in staffing the booth they should reach out to
2 Mona. But we've got a team already, but if folks want to
3 join, they should feel free. I've gone the last many
4 years. And it's just a very fun and illuminating
5 celebration.

6 And then finally, I sent a notice to all staff
7 about some position changes that are happening at the at
8 the Energy Commission. We now have the use of a couple of
9 the Public Utilities Commission positions, and it's going
10 to take a few years to integrate them into our organization
11 over time, but the gun is fired. And we are off to the
12 races, so thank you.

13 CHAIR HOCHSCHILD: Thank you.

14 We'll go to Item 11, Public Advisor's Report.

15 MS. BADIE: No report for me. Thank you, Chair.

16 CHAIR HOCHSCHILD: Thank you, Item 12 Chief
17 Counsel's Report.

18 MS. BARRERA: Good afternoon, Commissioners and
19 Chair. I have two quick announcements. Just a reminder
20 that the Chief Counsel's Office is hosting a meet and greet
21 after this event, after the business meeting, to introduce
22 you to the largest group of recent law graduates that the
23 CEC has ever hired.

24 And I want to quickly welcome our latest group of
25 new team members. So please stand up, because it'll help

1 Commissioners put a face to your name. The first person
2 here is Eric Kodak. (phonetic) He's from Galt. So
3 welcome, Eric. Kaline Jamorty (phonetic) from Palo Alto.
4 Welcome, Kelly Isaac Gatos (phonetic) from the East Bay.
5 And Monty DeCampo (phonetic) from Sacramento. So just
6 please come by for a few minutes later after this meeting
7 too, so you can meet our new team members. Thank you.

8 CHAIR HOCHSCHILD: Good. Well, welcome to you
9 all.

10 And I think we are adjourned.

11 (The Business Meeting adjourned at 12:14 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.

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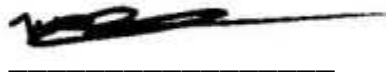
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