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Janea Scott, Vice Chair
Karen Douglas
Andrew McAllister
Patricia Monahan

Staff Present: (Via Zoom)

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Kerry Willis, Assistant Chief Counsel
Noemi Gallardo, Public Advisor
Raj Dixit, Staff Attorney
Jacqueline Moore, Staff Attorney
Mona Badie, Staff Attorney
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Cody Goldthrite, Secretariat

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a. Pursuant to Government Code Section 11126(e), the Energy Commission may adjourn to closed session with its legal counsel to discuss any of the following matters to which the Energy Commission is a party:	
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v. <i>City of Los Angeles, acting by and through, its Department of Water and Power v. Energy Commission (Los Angeles Superior Court, Case No. BS171477).</i>	
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b. Pursuant to Government Code section 11126(e), the Energy Commission may also discuss any judicial or administrative proceeding that was formally initiated after this agenda was published; or determine whether facts and circumstances exist that warrant the initiation of litigation, or that constitute a significant exposure to litigation against the Commission, which might include.	
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1 P R O C E E D I N G S

2 MAY 13, 2020

10:00 a.m.

3 CHAIR HOCHSCHILD: Well good morning, everybody
4 and welcome to our May Business Meeting. This is the
5 second meeting we have done entirely virtually and the
6 first meeting we were doing on Zoom. So thank you all for
7 your flexibility. Our plan is to go through until 12:45
8 today. And if we're close to the end we'll probably just
9 power through and finish the meeting, but if we have a lot
10 more to go we'll take a break. And if we do take a break
11 for lunch I'll set a fixed time for us to return. So let's
12 get underway, let's begin with the Pledge of Allegiance.

13 (Whereupon the Pledge of Allegiance is recited.)

14 CHAIR HOCHSCHILD: And next, let's have a moment
15 of silence for the more than 80,000 people in the United
16 States and more than 300,000 people around the world who
17 have perished from the coronavirus.

18 (Whereupon a moment of silence is given.)

19 Thank you. Okay, so we will get to the agenda,
20 but there's a few things I want to do first. I actually
21 wanted to welcome former Chair Bob Weisenmiller is with us
22 who would like to say a few words in a moment. And Bob,
23 it's great to have you back home at the Energy Commission
24 and I'm glad you could join this morning.

25 For today's May 13th 2020 Business Meeting is

1 being held remotely without a physical location for any
2 participant consistent with Executive Order N-25-20 and N-
3 29-20 and the recommendations from the California
4 Department of Public Health to encourage social distancing
5 in order to slow the spread of COVID-19. The public may
6 participate and/or observe the meeting consistent with the
7 direction of these executive orders. Instructions for
8 remote participation can be found in the notice of this
9 meeting and as set forth on the agenda posted to the CEC
10 website link for the Business Meeting.

11 Pursuant to California Code of Regulations Title
12 20, 1104 any person may make oral comments on an agenda
13 item to ensure the orderly conduct of business. Such
14 comments will be limited to three minutes per person to
15 each item listed on the agenda that will be voted on today.
16 Any person wishing to comment on information items or
17 reports called the non-voting items, shall reserve their
18 comments for the general public comment portion of the
19 meeting agenda to have three minutes total to state their
20 remaining comments.

21 Okay now that we've wrapped up I wanted to give a
22 warm happy birthday to our colleague, Commissioner Monahan.
23 Happy birthday, Patty, it's a pleasure to serve with you
24 every day.

25 And we'll turn to Patty in a minute to kick us

1 off here. We're going to actually move forward our Item
2 14, the Presiding Member Reports to cover one item, which
3 is recognition of Kevin Barker who after 12 years of
4 distinguished service at the Energy Commission is moving on
5 this month. And he's done a tremendous job. He served
6 with distinction in the Renewables Division and was
7 recognized for that and promoted to be Chief of Staff by
8 Chair Weisenmiller. And then he went on to run the
9 Transportation Division under Commissioner Monahan. And
10 he's been a tremendous team member, incredibly dedicated,
11 incredibly hard worker. And, Kevin, you'll be sorely
12 missed. So let me kick it over to Commissioner Monahan to
13 make a few comments.

14 COMMISSIONER MONAHAN: Yes, so thank you, Chair.

15 First, I want to say that this picture of Kevin
16 just is really emblematic of the joy and excitement that he
17 brings to the work. So I'm really happy to be able to kick
18 off the process of honoring Kevin today at our Business
19 Meeting. He really deserves a lot of accolades and this is
20 just the start for his many accomplishments during his more
21 than 10 years here at the Energy Commission.

22 Kevin served about three years in the Renewables
23 Division, 8 years as an advisor to the former Chair and
24 about 1 1/2 years as the leader of the Fuels and
25 Transportation Division.

1 So I joined the CEC almost exactly one year ago
2 today. And Kevin was really my de facto advisor. I needed
3 a lot of tutelage and he graciously and proactively
4 provided that and helped me acclimate to the Energy
5 Commission. As the leader of the Fuels and Transportation
6 Division, he's really modeled an optimistic can-do attitude
7 and inspiring others around him to work harder for the
8 greater good. He gives his team credit when it's due and
9 he always takes a backseat to allow others to shine. And
10 to me this is one of the most effective ingredients to be a
11 good leader.

12 Kevin pushed his team and me to explore new
13 solutions to problems. He's really like an outside-the-box
14 thinker and he spurs others to do so as well. So one thing
15 I want to emphasize is that Kevin, he sets ambitious goals
16 and he celebrates when they are attained, so he often
17 celebrates with food. And he applies his prodigious
18 cooking skills to making baked goods, breakfast burritos,
19 lots of other food delights that I think he and his staff
20 are really going to miss those celebrations. And me too,
21 I'm going to miss those.

22 I'm also going to really miss Kevin's enthusiasm,
23 his vision, hard work and humor. So San Diego Gas &
24 Electric is really lucky to have Kevin in their ranks and
25 we are going to sorely miss him. So in Kevin's honor we've

1 drafted a resolution and I'm going to share that now.

2 "Whereas, Kevin Barker has devoted twelve-and-a-
3 half years of his career to the Energy Commission and
4 worked tirelessly as a public servant for the people of
5 California; and

6 "Whereas, Kevin started his career at the Energy
7 Commission in October 2007 in the Energy Efficiency and
8 Renewable Energy Division as an energy analyst; and

9 "Whereas Kevin served in former Chair Bob
10 Weisenmiller's office for more than 8 years, starting as an
11 advisor in May 2010, and then as the Chief of Staff in
12 January 2012 where he worked behind the scenes to keep the
13 train on track and moving. And played integral role in
14 bringing the Chair's top priorities to the Commission to
15 fruition; and

16 "Whereas, Kevin's achievements in the former
17 Chair's office in meeting former Governor Brown's
18 distributed generation efforts, working on scenarios for
19 the Renewable Energy Transmission Initiative for RETI 1.0
20 and helping launch RETI 2.0, establishing an MOU for the
21 Energy Commission and the Department of the Navy to
22 collaborate on clean energy projects. And serving as the
23 Navy's point of contact to the state of California. And
24 acting as the connective tissue among utilities, state
25 agencies, the Governor's Office and other stakeholders

1 during energy crises such as San Onofre and Aliso Canyon;
2 and

3 "Whereas, Kevin took on the role as Deputy
4 Director of the Fuels and Transportation Division in
5 October 2018 and proved to be a capable and inspiring leader
6 for his staff of 60-plus, leading his staff to achieve 100
7 percent completion of trainings and performance
8 evaluations, published over 100 final project reports and a
9 number of other accomplishments, which Kevin celebrated by
10 cooking the Division homemade meals; and

11 "Whereas, Kevin's dedication to the Energy
12 Commission and his vision are unrivaled. And his strategic
13 thinking, strong work ethic and upbeat personality have
14 brought tremendous benefits to the Commission over the
15 years.

16 "Therefore, be it resolved that the Energy
17 Commission recognizes and appreciates Kevin's extraordinary
18 efforts and achievements throughout his career at the
19 Energy Commission and wishes him all the best as he moves
20 to the next stage of his career."

21 So well deserved praise, Kevin. I wish I could
22 see your face on this webinar. So I'm going to pass the
23 mic over to Janea, Commissioner Scott -- excuse me, Vice
24 Chair Scott, for her words.

25 VICE CHAIR SCOTT: Oh yes, and that was a really

15

1 wonderful revolution. I just also want to pile on and just
2 note that it's such a happy and exciting day for Kevin.
3 I'm really looking forward to his new opportunity. I'm so
4 excited for him about that. And that also makes it a sad
5 day for the Commission.

6 We have really appreciated the leadership, your
7 commitment, the dedication that you brought both to the
8 Energy Commission and to the people of the State of
9 California. Everything that you did you handled really
10 ably, very capably. So I always said, "You know, Kevin put
11 all of it together he's got the logistics, he's got all the
12 substance. I just go and do what he tells me to do when I
13 get there, and it'll all be just fine."

14 So Kevin that's just an amazing thing to be able
15 to do across all levels working with staff, working with
16 Commissioners, working with the Governor's Office, working
17 with other high-level folks across the state and the
18 administration. And it's always just been a real pleasure
19 to work with you. And so I want to thank you so much for
20 all the great work that you've done.

21 I mentioned earlier that as soon as we can all
22 see each other I would love to run and give you a great big
23 hug and wish you congratulations in person. But thank you
24 so much for everything that you've done for the Energy
25 Commission and for the people of the state of California.

1 It has truly been a pleasure working with you.

2 CHAIR HOCHSCHILD: That's great.

3 Okay, Commissioner Douglas?

4 COMMISSIONER DOUGLAS: Sorry, I'm fumbling with
5 my "mute" button.

6 So I'd like to recognize Kevin as well for his
7 service to the Energy Commission. I remember well when he
8 joined Chair Weisenmiller's office; initially joined
9 Commissioner (indiscernible) as an advisor to Chair
10 Weisenmiller. And he has, at his time at the Energy
11 Commission just shown this tremendous commitment to
12 collaboration, congeniality, achieving results. And he's
13 been fun to work with and he gets excited when he sees an
14 opportunity. I think that's one of the things I'll miss is
15 Kevin running around in full-on excited mode, because there
16 is a chance to get something done and it's a really good
17 thing.

18 And so Kevin we -- you know -- and obviously he
19 brought his commitment in his role as Deputy Director at
20 the Fuels and Transportation Division he brought this
21 enthusiasm in and his desire to make a difference. And
22 it's great to see and Kevin will continue to do a lot of
23 good in his path. Sad to have you leave us, Kevin, but
24 it's exciting to see you continue to move forward. And
25 best of luck to you.

1 CHAIR HOCHSCHILD: Great, Commissioner
2 McAllister?

3 COMMISSIONER MCALLISTER: Yeah, just I won't
4 repeat what's been said, because this the signature
5 enthusiasm that Kevin brings and the competence and the
6 facilitated skills I think are well known and really there.
7 So he's going to take those forward to his new gig and I
8 think really looking forward to seeing that, because that's
9 ongoing professional growth.

10 I wanted to just Kevin -- so Kevin was
11 instrumental in actually my kind of to facilitating the
12 conversations that led to my actually coming to the Energy
13 Commission in 2012. And I want to say facilitated, but
14 really it's more orchestrated. It turned out that when the
15 press release went out appointing, about my appointment, I
16 happened to be sitting and testifying at that moment in
17 Hearing Room A on a topic that I can't remember exactly
18 what it was. But I had this feeling that Kevin just sort
19 of was back there pulling the strings of all the puppets to
20 make sure that everything congealed in exactly the right
21 way. (Laughs.) And so there actually at the Commission and
22 starting a new chapter in my own life.

23 And so I think I really identify Kevin just very
24 much from the outset facilitating conversations with Chair
25 Weisenmiller and with the Governor's Office, kind of really

1 taking care and that's the way I look at it now. And so I
2 really appreciate that, it's emblematic of the way he
3 approaches. There's this real competence and facilitative
4 skill, but also this compassion and humor and humility that
5 he brings to everything. And I think that really helps get
6 things done and brings people together, so I really
7 appreciate.

8 Lastly, having lived much of my life in Latin
9 America, much of my adult life, a big chunk of it in Latin
10 America, I know what soccer fandom looks like, okay?

11 (Laughs.) And Kevin is right up there with the best of
12 them, so hopefully at some point the World Cup can happen
13 again and Kevin will also have that channel for his
14 enthusiasm, so once again. So anyway Kevin really best of
15 luck and I'm sure we'll cross paths again. But really
16 excited for you and sad for the Commission, but also you're
17 still part of the family so --

18 CHAIR HOCHSCHILD: Okay.

19 COMMISSIONER MCALLISTER: -- thanks a lot, and
20 all the best.

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

23 All right so we have 10 people who asked to give
24 comments, so if we could keep those relatively brief it
25 would be great. I wanted to begin with Chair Weisenmiller

1 who is with us. Bob let me just say when you retired Kevin
2 began growing a beard, which I can now report to you is
3 larger than your beard. He has been channeling the Bob
4 Weisenmiller beard, so thank you for joining, Bob. So
5 let's go to Bob first and then to be followed by Drew,
6 Siva, John Butler.

7 MR. WEISENMILLER: Good morning Chair,
8 Commissioners and Drew. (Echo with audio.) I really thank
9 you for the opportunity to congratulate Kevin today,
10 obviously for two things: One is the opportunity to thank
11 him for his public service, and also wish him well in his
12 next engagement.

13 I interviewed Kevin about ten years ago and he
14 was very enthusiastic and eager and also very young. So it
15 was a great part of my experience at the Commission where I
16 worked mostly with Kevin, or I worked more with Kevin than
17 probably anyone else, to sort of see him grow at the
18 Commission into my office's Chief of Staff moving on into
19 his management position.

20 He was really critical to the smooth operation of
21 my office, which really simplified things for me. He
22 really as everyone noted worked a lot to smooth things,
23 smooth out the relationship with other agencies and other
24 stakeholders in the Commission processes. Lots of fond
25 memories, obviously not enough time today to talk about it.

20

1 But it's been a good opportunity for Kevin's growth and I'm
2 sure he would do very well in the future.

3 One of the accomplishments of the Commission is
4 really training and development of young staff. Some like
5 Mike Jaske and Grace Anderson stay through to retirement,
6 but many others move on. I mean my cohort from the first
7 round of administration included John Geesman, Karen Edson,
8 Ron Nichols, Gary Simon, Jan Hameron (phonetic) and Chris
9 Ellison. We all moved on from the Commission to really
10 help shape California energy policy and reflect well on the
11 Commission. I'm sure Kevin will also. Again, thanks for
12 the opportunity to speak this morning.

13 CHAIR HOCHSCHILD: Thank you, Bob, and good to
14 hear your voice again.

15 Just a reminder for those who are speaking make
16 sure if you are speaking through the phone to click "mute"
17 on the computer, so we don't get the echo.

18 Let's go to Drew, Siva, John Butler and Elizabeth
19 John in that order.

20 MR. BOHAN: Thank you, Chair. A lot of folks
21 want to speak, so I'll be brief.

22 Kevin, you and I have been through good times and
23 tough times and it's just been great having you as a
24 partner. You've always been in there ready to roll your
25 sleeves at any hour of the day or night. You're a straight

21

1 shooter who I have trusted since the very first week we
2 met. Your commitment, loyalty and humanity were on full
3 display when you did a send-off for former Chair
4 Weisenmiller, who we just heard from.

5 And as a colleague and a friend I just want to
6 say I'm really happy that this new unsolicited opportunity
7 just dropped into your lap. I know that making this leap
8 wasn't an easy decision for you. You and I talked about it
9 at length. And I just want to say I'll miss you for a
10 bunch of reasons including the fact that you're the only
11 one around the office I've been able to regularly discuss
12 basketball with. You'll leave a void in a number of
13 respects including the fact as Chair Hochschild pointed out
14 that you have the distinction of having the largest beard
15 by gross dry weight of anyone in the organization.
16 (Laughter.)

17 Kevin, you don't need luck, but just the same I
18 wish you the best of luck in this new chapter of your
19 professional life. Take care.

20 CHAIR HOCHSCHILD: That's great.

21 Siva?

22 MR. GUNDA: Yeah, good morning Chair, Vice Chair
23 and Commissioners. And it's really good to hear Chair
24 Weisenmiller's voice too. Thank you for the opportunity to
25 provide a few remarks on behalf of staff in the Energy

1 Assessments Division.

2 Kevin was very well respected by staff in the EAD
3 for his commitment to learning the division subject matter
4 to the best of his ability while making it clear to staff
5 that he did not consider himself an expert on technical
6 matters, but was a great advocate and translator of the
7 EAD's work to the leadership. As Chair Weisenmiller's
8 advisor, he listened to technical staff and tried to fairly
9 to present our technical results, use and recommendations
10 to the Chair. And we really, really thank him for that.

11 His professionalism and humility made working at
12 the time for EAD staff an absolute pleasure. His innate
13 ability to build morale in FTD has been acknowledged by a
14 number of speakers already And I just want to give him a
15 shout-out for how good of a job he's done with FTD morale.

16 Personally, for me I started my role as a deputy
17 the same time as Kevin in his role as a deputy and it was
18 great to have him as a colleague to brainstorm and handle
19 issues together. I will miss his friendship, helpfulness
20 and knowledge and energy policy.

21 To finally close as one of our staff members
22 summarized, Kevin is an exceptional human being,
23 exceptionally intelligent, exceptionally kind,
24 exceptionally spirited and exceptionally puts his peers
25 around him at ease. He cares genuinely about his team and

23

1 their individual success. You can hear his laughter
2 throughout the building or well, at least we can on the
3 second floor of the EAD. And his personality is just
4 infectious. The Energy Commission will likely be just a
5 small part of his long life-long story and journey, but he
6 certainly has made an imprint and will be remembered for
7 years to come in our offices.

8 We wish him all the luck, and we'll miss you.

9 Thank you.

10 CHAIR HOCHSCHILD: Thank you, Siva.

11 Let's go to John Butler, to be followed by
12 Elizabeth John, to be followed by Mike Gravely.

13 MR. GOLDTHRITE: So John Butler is not on the
14 line, so we'll just go to the next, Elizabeth John.

15 MS. JOHN: Chair, Vice Chair and Commissioners, I
16 just wanted to take this moment to let you know, Kevin, how
17 grateful I am to have had the opportunity to work with you
18 in the Fuels and Transportation Division. Although your
19 time as Deputy Director wasn't as long as we had hoped you
20 definitely made an impact while you were here. I am truly
21 grateful for your leadership, guidance and continued
22 support. I believe that I am a better employee and
23 manager, because of you.

24 Also thank you for making work a fun place to be.
25 You made a real commitment to the success of the Fuels and

1 Transportation Program and more importantly, the success of
2 its people. The inspiring creative things you did to make
3 the office a more positive place I know will continue for
4 many years after you leave.

5 I wish you sincere congratulations and the best
6 of luck in your new position. I hope that our paths cross
7 again soon. And I hope you know that you'll always have a
8 family with us here at the Energy Commission. Thank you.

9

10 CHAIR HOCHSCHILD: Thank you, Elizabeth.

11 Let's go to Mike Gravely, to be followed by
12 Heather Raitt.

13 MR. GRAVELY: Yeah, Kevin, this is Mike. And I
14 just wanted to take a minute to thank you for all the work
15 you've done over the years for the military relationship.
16 We have a very active partnership with the Department of
17 Navy. And you were around for the very beginning of it and
18 all the activities we did, scheduling face-to-face meetings
19 and for conference calls between the Pentagon and all the
20 different agencies in California. It was a very successful
21 program and it continues to be successful.

22 We've just recently last week announced the award
23 of an EPIC grant to a contractor working for Pendleton.
24 And I just had a conference call yesterday with some of the
25 staff, we had over 20 military personnel from the Marines

25

1 and the Navy participating. So you have left a very active
2 and very successful program. We wish you the best in the
3 future and we just want to thank you for your dedication
4 and support to making this partnership such a success.
5 Thank you.

6 CHAIR HOCHSCHILD: Thank you, Mike.

7 Let's go to Heather Raitt to be followed by
8 Dorothy Murimi. Heather, are you there?

9 MS. RAITT: Can you hear me?

10 CHAIR HOCHSCHILD: Yeah, now we can hear you.
11 Yes.

12 MS. RAITT: Okay, so sorry. So I was just going
13 to say I first worked with Kevin in the Renewables Office,
14 but mostly recently had the opportunity to work with him
15 while he served for former Chair Weisenmiller. We
16 collaborated on very special projects and on several IEPRs.
17 Kevin is -- you are amazing to work with. He has the
18 ability to clearly communicate the policy landscape and
19 also the technical details. I watched him skillfully
20 navigate so many difficult complex issues. And each time
21 he was an integral force in finding solutions.

22 Kevin, you have truly helped the state improve
23 energy reliability and advance clean energy first in the
24 electricity sector and more recently in the transportation
25 space. And not only do you know your stuff, but you were a

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1 kind, fun, energetic person. One of the things I miss
2 about being in the office is hearing your distinctive laugh
3 rolling down the halls; it always brought a smile. I'm so
4 excited for you to start this new chapter in your life and
5 will miss you so much. Thank you for all the support
6 you've given me over the years, it's truly been a pleasure
7 to work with you.

8 I wish you all the best and congratulations
9 Kevin. Thanks.

10 CHAIR HOCHSCHILD: Thank you, Heather.

11 Let's go to Dorothy.

12 MS. MURIMI: Hi, Dorothy here. Sad to see you
13 go, Kevin, but it's great to see the direction in which you
14 are headed. You've led with so much humility, always
15 putting your team first, always ready and willing to serve
16 no matter the duty, always treating others with dignity and
17 respect and elevating everyone around you. You've served
18 so well and it's an honor to send you off. I think you
19 have a standing invite to future picnics.

20 And I think I look forward to seeing the
21 evolution of your career, because you're definitely going
22 places. And the evolution of your beard, because that was
23 a definitely -- (laughter) it was an interesting thing to
24 see grow over the years as well.

25 You've definitely left a positive mark in the

1 agency and everyone you've ever worked with, so thank you
2 so much Kevin.

3 CHAIR HOCHSCHILD: That's great. Thank you,
4 Dorothy.

5 Let's go to Mike Murza to be followed by Alana
6 Sanchez, who's our final speaker.

7 MR. MURZA: Great. Thank you, Chair.

8 I had the pleasure of working closely with Kevin
9 in former Chair Weisenmiller's office. And in that
10 position I learned a lot and Kevin was often a teacher. He
11 was able to effortlessly make work topics fun, exciting and
12 understandable. And as soon as I got there I could see how
13 well Kevin could both juggle a thousand moving pieces while
14 being able to maintain open lines of communication and
15 support for his team. I also quickly found out that Kevin
16 considered the entire Commission and all the stakeholders,
17 other agencies, the Governor's Office and anyone else it
18 took to get the job done to be on his team.

19 It was especially inspiring to see how even with
20 this insane workload Kevin dedicated a significant amount
21 of time to ensuring that the interns in the Chair's office
22 were provided with an invaluable experience at the
23 Commission and that support for the next generation of
24 state energy workers is essential. And Kevin never let his
25 projects distract him from this important goal.

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It became abundantly clear that his uncanny ability to get everyone on board with some of the most complex projects was based on a very simple fundamental vision, do what is best for the Commission and the people of California.

I know that Kevin will bring the same energy to do the best job possible to his next chapter. But I also know that it will remain here at the Commission and everyone with whom he worked even if we can't hear his laugh from the other side of the building. So thank you, Kevin, and good luck as you move forward.

CHAIR HOCHSCHILD: Thank you, Mike.

Alana?

MS. SANCHEZ: Thank you. Yeah, I definitely will miss the laughter, an infectious laugh that carries throughout the halls. And I would always find myself smiling, so I'll miss that.

But yeah, I had the opportunity to work with Kevin under former Chair Weisenmiller's leadership. And I'm very honored to have had the opportunity to work with you, Kevin. You have a very positive can-do attitude. And you always keep it real. You're smart, capable and genuinely kind. And I think that really shines through to everyone that comes in contact with you.

1 A few things that come to mind when I think about
2 you are your leadership, your guidance, your friendship.
3 You are an excellent teammate. You lead from within as
4 part of the team. The laughter that you bring to everyday
5 work and the supportive personality that you have I really
6 appreciate the support that you've given to me and the
7 leadership and guidance that you've provided over the
8 years.

9 You also have a zany, creative side that's fun
10 and a little bit silly at times. And I think everyone
11 appreciates that. You definitely have a knack for bringing
12 people together and also for getting things done. I can't
13 believe how much work you did as Chief of Staff. I don't
14 think I could have done that. I think that you are
15 uniquely capable of handling that and also keeping us
16 really solid as a team and also having fun.

17 So I really look up to you in so many ways. And
18 of course, I'm a little bit sad to see you go, but I'm
19 overjoyed for your success and for this next chapter in
20 your career. And I thank you so much for just being a good
21 friend. I'll miss you.

22 CHAIR HOCHSCHILD: Well, thank you to all the
23 speakers for those beautiful comments. And most especially
24 Chair Weisenmiller for giving Kevin the opportunity that
25 you did.

1 You know, one observation I have is the
2 difference that it can make in someone's life the first
3 time someone in a position of power really believes in you
4 and gives you an opportunity and mentors you it can be life
5 changing. And my challenge to you, Kevin, going forward is
6 that you pay that forward and do that for the younger
7 professionals that will be working under you in this next
8 role and roles to come. You did an incredible amount of
9 good here. And you can help others follow that path, so
10 we're really proud of you.

11 I've joked with you that leaving the Energy
12 Commission is a little bit like the mafia, you never can
13 fully leave. You're always connected, and you'll always be
14 part of the Energy Commission family. But we're really
15 proud of you and want to congratulate you. So, Kevin,
16 you're welcome to make a few remarks.

17 MR. GOLDTHRITE: I think Jerome Lee wanted to say
18 something?

19 CHAIR HOCHSCHILD: Oh, go ahead, Jerome. I'm
20 sorry, that wasn't on my list.

21 MR. BUTLER: Actually, this is John Butler. Can
22 you hear me okay?

23 CHAIR HOCHSCHILD: Oh, now we can hear you, John,
24 yeah. Yeah, go ahead, John.

25 MR. BUTLER: Great, sorry about that, a little

1 technical difficulty. Good morning, Chair, and thank you.

2 Boy Kevin, Kevin, Kevin, wow, I don't even know
3 where to start here, but I guess I'll start by saying we
4 can't believe you're leaving us. I mean, on behalf of the
5 Fuels and Transportation Division I really want to thank
6 you for everything that you brought to the Division over
7 the last 18 months. Your knowledge, dedication, energy and
8 passion has made a positive impact to both FTD and CEC.
9 And you often found ways to make the work fun and exciting.
10 Even though your time in FTD was short, I know I learned a
11 lot from you. We certainly appreciate everything you have
12 accomplished, and we wish you the best of luck in your new
13 position, Kevin.

14 Thanks for everything and good luck. Thank you.

15 CHAIR HOCHSCHILD: Okay, Kevin.

16 MR. BARKER: Hi, can you hear me?

17 CHAIR HOCHSCHILD: Yeah.

18 MR. BARKER. Yeah, thanks Chair Hochschild,
19 thanks to everyone for your remarks. This really means so
20 much to me. I really appreciated working with everyone and
21 can't thank everyone enough for all they've done. I just
22 wanted to maybe take a second to highlight a few things.

23 Thanks to Rachel and Diana for bombarding me my
24 very first day at work and almost scaring me off, but not
25 quite and made it fun to come back. It was really strange

1 to come full circle and as the deputy of the Fuels and
2 Transportation Division my office was literally six feet
3 away from where I started at the Energy Commission.

4 Thank you so much, Bob, for the opportunity. It
5 was surreal to be able to jump from just a few years in the
6 Renewables Office to have the opportunity to work for you
7 and learn from you. I think I said it all in your going-
8 away and just wanted to thank you again for the
9 opportunity.

10 Really, Drew, you've been more of a friend and a
11 mentor than necessarily just the boss. And with the
12 revolving door, the cooling-off period, I hope at some
13 point we can actually go catch a Kings game. So maybe we
14 can figure out a way. We'll talk to the attorneys for
15 that.

16 And this past Sunday, and last thing I guess I
17 would just say, this past Sunday was Mother's Day. And I
18 know they say being a mother is one of the most difficult
19 jobs. Yeah, most of you folks, I would just want to let
20 you know being my mother is by far the most difficult job.
21 (Laughter.) I was not an easy child to deal with. And so
22 I just want to thank -- give all the thanks to my mom for
23 putting up with me, for picking me up in Southern
24 California the day before I started in at the Energy
25 Commission and helping bring me up to Northern California.

1 And I thank her.

2 Lastly, I would just say I know there is the kind
3 of the saying, "You know, it's not a job if you enjoy what
4 you're doing." And I have to say being the deputy of the
5 Fuels and Transportation Division was by far probably the
6 easiest job I've ever had. And it was because of some of
7 the folks you have heard from, John and Elizabeth and the
8 entire team. And they really are just exceptional people
9 and really hard workers and do a great job. And so it's
10 incredibly sad to leave. It was hard to do, and yet I'm
11 looking forward to meeting with everyone again as a friend
12 and not just a colleague.

13 So thank you so much for this, it really means a
14 lot. And good luck with the rest of your day and the
15 Business Meeting. Thanks much so though.

16 CHAIR HOCHSCHILD: All right, thank you, Kevin,
17 and again, congratulations to you.

18 All right, and thank you to everybody for those
19 very kind comments.

20 Okay, so let's go to the Consent Calendar. And
21 one, is there a motion for the Consent Calendar? Let me
22 see if the Vice Chair would be willing to do that.

23 VICE CHAIR SCOTT: Yes, this is Janea Scott. I
24 will move approval of the Consent Calendar.

25 CHAIR HOCHSCHILD: Okay, moved by the Vice Chair.

1 Would someone like to second that?

2 COMMISSIONER DOUGLAS: Second.

3 CHAIR HOCHSCHILD: Seconded by Commissioner
4 Douglas.

5 I will call your name, and I vote aye.

6 Vice Chair Scott?

7 VICE CHAIR SCOTT: Aye.

8 CHAIR HOCHSCHILD: Commissioner Douglas.

9 COMMISSIONER DOUGLAS: Aye.

10 CHAIR HOCHSCHILD: Commissioner McAllister?

11 COMMISSIONER MCALLISTER: Aye.

12 CHAIR HOCHSCHILD: Commissioner Monahan?

13 COMMISSIONER MONAHAN: Aye.

14 CHAIR HOCHSCHILD: That passes unanimously.

15 Thank you.

16 Let's move on to Item 2, the Great Oaks South
17 Backup Generating Facility. And let's have Steven Kerr.

18 MR. KERR: Good morning Chair, Commissioners. My
19 name is Steven Kerr, S-t-e-v-e-n K-e-r-r. I supervise the
20 Siting and CEQA Review Unit in the Siting, Transmission,
21 and Environmental Protection Division. With me are staff
22 attorneys Raj Dixit and Kerry Willis. We're here to
23 present a proposed order appointing a Committee to oversee
24 a Small Power Plant Exemption, or SPPE proceeding for the
25 Great Oaks South Backup Generating Facility.

1 The SPPE option is only available for thermal
2 power plants between 50 and 100 megawatts, and pursuant to
3 Public Resources Code Section 25541. The exemption can
4 only be granted if, "No substantial adverse impact on the
5 environment or energy resources will result from the
6 construction or operation of the proposed facility."

7 The Applicant, SV1 LLC., filed its SPPE
8 application on March 19th, 2020, seeking an exemption from
9 the Commission's Power Plant Application for Certification
10 process.

11 The data center project is in the City of San
12 Jose and would consist of three two-story buildings that
13 house data servers, and associated diesel-fueled backup
14 generators to provide an uninterruptible power supply of up
15 to 99 megawatts if the utility power service has failed.

16 Staff will conduct a CEQA review of the exemption
17 application and produce an initial study.

18 In addition to the Great Oaks South Backup
19 Generating Facility, staff is currently working on the San
20 Jose City, Walsh, Sequoia, and Mission College data center
21 projects. Staff anticipates two additional SPPE
22 applications for data centers in the Santa Clara area to be
23 submitted this month.

24 This concludes my presentation. Also online
25 representing the Applicant are Scott Galati and Masoud

1 Zafaripour. We'd be happy to answer any questions you may
2 have. Thank you.

3 CHAIR HOCHSCHILD: Thank you, Steven.

4 Scott or Masoud do either of you wish to make a
5 comment?

6 MR. GALATI: No Commissioner, just here to answer
7 any questions.

8 CHAIR HOCHSCHILD: Okay. Is there any other
9 public comment on this item?

10 (No audible response.)

11 CHAIR HOCHSCHILD: Okay. Hearing none, let's go
12 to Commissioner discussion. I think we'll do -- my number
13 has come up on these, so far the Committee we'll do
14 Commissioner Douglas as Lead and I'll do Associate.
15 Commissioner Douglas, any comments?

16 COMMISSIONER DOUGLAS: No. I could make a motion
17 and move for approval of the Committee named with myself as
18 the Presiding Member and you, Chair Hochschild, as the
19 Associate Member.

20 CHAIR HOCHSCHILD: Okay, that'd be great. Moved
21 by Commissioner Douglas. Is there a second?

22 VICE CHAIR SCOTT: Second by Commissioner Scott.

23 CHAIR HOCHSCHILD: Second by Vice Chair Scott.

24 I'll call the roll. I vote aye.

25 Commissioner Douglas?

1 COMMISSIONER DOUGLAS: Aye.
2 CHAIR HOCHSCHILD: Vice Chair Scott?
3 VICE CHAIR SCOTT: Aye.
4 CHAIR HOCHSCHILD: Commissioner McAllister?
5 COMMISSIONER MCALLISTER: Aye.
6 CHAIR HOCHSCHILD: Commissioner Monahan?
7 COMMISSIONER MONAHAN: Aye.
8 CHAIR HOCHSCHILD: Okay that motion passes

9 unanimously.
10 Let's move on to Item 3 -- thank you everybody --
11 the Disadvantaged Community's Advisory Group New Member.
12 Okay, and Noemi Gallardo will do it.

13 MS. GALLARDO: Good morning Chair, Vice Chair and
14 Commissioners. For the record my name is Noemi Gallardo,
15 that's spelled N-o-e-m-i, last name G-a-l-l-a-r-d-o. I am
16 the Public Advisor and Lead Liaison to the Disadvantaged
17 Communities Advisory Group, also known as the DACAG, D-A-C-
18 A-G.

19 I am seeking your approval today to advance
20 equity and diversity by adding a new member to the DACAG.
21 The DACAG is an advisory body to the Energy Commission and
22 the California Public Utilities Commission. DACAG advises
23 the Commissions on the effects of clean energy and
24 pollution reduction programs in disadvantaged communities
25 pursuant to Senate Bill 350.

1 If approved the proposed resolution before you
2 would fill the currently vacant spot on the DACAG that
3 became available last year. Several candidates applied for
4 the position. The Commissioners overseeing the DACAG, Vice
5 Chair Scott, Commissioner Douglas and the CPUC's
6 Commissioners, Rechtschaffen and Guzman Aceves selected
7 Román Partida-López to recommend for the appointment.

8 I'll tell you a bit about Román. He is the son
9 of immigrants and grew up in a low-income neighborhood
10 located near the U.S./Mexico border. Motivated by his
11 family's experiences Román has dedicated his career to
12 seeking justice for the underrepresented by helping
13 communities and community-based organizations develop clean
14 energy solutions through capacity building along with
15 legislative policy and regulatory efforts.

16 Román currently serves as legal counsel on the
17 Environmental Equity team at The Greenlining Institute,
18 working to eliminate poverty and pollution in California's
19 low-income communities of color. He has extensive
20 expertise and experience advancing environmental equity,
21 climate investments, transportation electrification and
22 resource conservation to benefit disadvantaged communities.

23 Román is a strong community leader and passionate
24 advocate living in the southern California region. He
25 serves as a member of the San Diego Urban Sustainability

1 Coalition, Healthy Chula Vista and the city of San Diego's
2 Climate Equity Working Group among others.

3 Overall, his unyielding commitment to
4 disadvantaged communities, his extensive professional and
5 personal experiences combined with the geographic diversity
6 he represents make Román an excellent fit for the DACAG. I
7 have personally witnessed and benefited from his advocacy
8 over the years and I'm honored to present this resolution.
9 And I am available to answer questions. That concludes my
10 presentation.

11 And I believe
12 Román Partida-López is available on the phone line as well
13 to answer questions.

14 CHAIR HOCHSCHILD: That's great. Thank you,
15 Noemi.

16 And thank you, Román, for being willing to serve.
17 Would you like to make a few comments?

18 MR. PARTIDA-LOPEZ: Sure, can folks hear me?

19 CHAIR HOCHSCHILD: Yes, we can.

20 MR. PARTIDA-LOPEZ: Great. Yeah, good morning
21 Chair, Vice Chair and Commissioners. As Noemi mentioned my
22 name is Román Partida-López, Legal Counsel with The
23 Greenlining Institute. Thank you, Noemi, for that
24 introduction and review. Definitely after you read that it
25 made me take a step back and realize some of the work

1 that's happened.

2 The only additional points I would make is that
3 as Noemi mentioned I reside in San Diego. As you all may
4 know or are aware of The Greenlining Institute is based in
5 Oakland, but I'm the one San Diego -- or one remote stop
6 for here and San Diego. And I just want to note that as
7 part of me deciding to take a position in San Diego, I made
8 sure to connect a lot of the community-based organizations
9 in the region prior to taking the position to ensure that
10 they realize that, well I wasn't planning to just
11 helicopter in with the Greenlining name. But that we were
12 going to be in the region to help support and really
13 prioritize the needs that they have been advocating for
14 over time.

15 And now see this opportunity as serving on the
16 DACAG to continue to do that and raise some of the issues
17 and concerns and opportunities that are coming out of the
18 border region, San Diego region, and have that be part of
19 the discussions that we're having at the Energy Commission
20 and at the CPUC.

21 Yeah, I'm open to any other questions. But I
22 look forward to engaging and hopefully with the
23 confirmation participating and collaborating with the
24 colleagues on the DACAG.

25 CHAIR HOCHSCHILD: Well thank you so much, Román,

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1 for being willing to serve.

2 Are there any other public comments, Noemi?

3 MR. GOLDTHRITE: We have Fabiola Lao from the
4 Center for Sustainable Energy on the line.

5 CHAIR HOCHSCHILD: Okay, thank you. And I
6 neglected to say Fabiola, when you speak and anyone else
7 who is doing public comment, to please spell your full name
8 and explain your affiliation before you speak. So Fabiola,
9 go ahead.

10 MS. LAO: Hi, can you hear me?

11 CHAIR HOCHSCHILD: Yes, we can.

12 MS. LAO: Okay, excellent. Yeah hi, so I'm
13 Fabiola Lao. That's F as in Frank-a-b as in boy-i-o-l-a
14 and last name is Lao. So I'm the Senior Equity Policy
15 Manager at the Center for Sustainable Energy. So thank
16 you, Chair and Commissioners, for the opportunity to speak.

17 I just wanted to express my great support of the
18 appointment of Román Partida-López to the Disadvantaged
19 Communities Advisory Group. Román is a well-respected
20 equity advocate across the state and here in the San Diego
21 region where I also live, so I see him firsthand, his
22 commitment to communities and his dedication and just
23 passion to make sure that disadvantaged and low-income
24 communities actually are -- that their needs are put front
25 and center in policies and decision making.

1 So yeah, I just wanted to once again express my
2 support for this appointment. And I know that the DACAG
3 will greatly benefit from his presence and expertise, so
4 thank you.

5 CHAIR HOCHSCHILD: Great. Thank you so much.

6 Noemi, is there anyone else wishing to speak on
7 this item?

8 MS. GALLARDO: No one else.

9 CHAIR HOCHSCHILD: Okay. Let's go to
10 Commissioner discussion, Vice Chair Scott?

11 VICE CHAIR SCOTT: Yes, so this is really
12 exciting. I am delighted to put Román forward for your
13 consideration today. I don't actually have much to add to
14 the details and excellent remarks that Noemi provided about
15 Román except to say I'm really excited to work with him as
16 well. I'm looking forward to having him as part of our
17 Disadvantaged Community Advisory Group. He brings a very
18 important voice from San Diego. I do know that folks in
19 San Diego have asked several times whether or not we could
20 have someone from San Diego, so I'm glad that we've got
21 that as well.

22 And I also really want to thank Commissioner
23 Douglas and also Commissioners Rechtschaffen and Guzman
24 Aceves over at the PUC for their partnership on this. This
25 really is something that the Energy Commission and the PUC

1 take seriously. We're excited to work on it together and
2 all of them have been great colleagues with me as we have
3 worked together with the Advisory Group.

4 So if there are no other -- I can't tell if other
5 Commissioners would like to make comments. I'll pause and
6 then if they don't then I'll make a motion.

7 COMMISSIONER MCALLISTER: Yes.

8 CHAIR HOCHSCHILD: (Overlapping colloquy)

9 COMMISSIONER MCALLISTER: Yes, I wanted to make a
10 very quick comment. Yes, this is --

11 CHAIR HOCHSCHILD: Go ahead, yeah please.

12 COMMISSIONER MCALLISTER: -- Andrew McAllister.
13 Yeah thanks, so I just wanted to congratulate Román on a
14 great trajectory. We actually worked at the Center for
15 Sustainable Energy at the same time and Román came on to do
16 the clean transportation work and also really brought this
17 strong equity focus. And I think that was a really great
18 hire and sort of evolution at that time and for that
19 organization. And then just looking at his trajectory
20 there and since, I think is really worthy of praise.

21 And thanks for stepping up and really
22 representing communities that need that support. And
23 hopefully this is going to be a great vehicle for Román as
24 well, so thanks for stepping up.

25 CHAIR HOCHSCHILD: Great, thank you,

1 Commissioner.

2 COMMISSIONER MONAHAN: You know --

3 CHAIR HOCHSCHILD: Oh, go ahead. Did someone
4 else, another Commissioner, want to speak?

5 COMMISSIONER MONAHAN: Yes, this is Commissioner
6 Monahan. I just wanted to also say Román, congratulations.
7 And I too have worked with Román for many years. He was one
8 of the leaders in this new network that got set up across
9 the country to work at the interconnection of electric
10 vehicles and the grid called EV GridEx. And he was a real
11 thought leader across the entire network.

12 So he wasn't just thinking in his own box but
13 think about how do we socialize information across the
14 entire country so that we can accelerate progress on clean
15 transportation and make sure that there is a strong
16 attention to equity and disadvantaged communities. So just
17 really am excited that Román will be joining the DACAG.
18 And that we've been working really closely with the DACAG
19 on the Clean Transportation Program, so I look forward to
20 his contributions and helping advise us in our program.

21 COMMISSIONER DOUGLAS: Yes, and so --

22 CHAIR HOCHSCHILD: Thank you.

23 COMMISSIONER DOUGLAS: Chair Hochschild I'll just
24 jump in quickly and say I'd just like to welcome Román to
25 the Advisory Group. And thank him for being willing to

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1 step up and then support the work in this way.

2 CHAIR HOCHSCHILD: Great. Vice Chair Scott,
3 would you be willing to make the motion?

4 VICE CHAIR SCOTT: Yes, I move approval of Item
5 3.

6 CHAIR HOCHSCHILD: Okay, is there a second?

7 COMMISSIONER DOUGLAS: Second.

8 CHAIR HOCHSCHILD: Commissioner Douglas?
9 Seconded by Commissioner Douglas. We'll take the vote. I
10 vote aye. Vice Chair Scott?

11 VICE CHAIR SCOTT: Aye.

12 CHAIR HOCHSCHILD: Commissioner Douglas.

13 COMMISSIONER DOUGLAS: Aye.

14 CHAIR HOCHSCHILD: Commissioner McAllister?

15 COMMISSIONER MCALLISTER: Aye.

16 CHAIR HOCHSCHILD: Commissioner Monahan?

17 COMMISSIONER MONAHAN: Aye.

18 CHAIR HOCHSCHILD: All right, that passes
19 unanimously. Congratulations Román, that's wonderful news.

20 VICE CHAIR SCOTT: Congratulations.

21 CHAIR HOCHSCHILD: Yeah, we look forward to
22 working with you.

23 Okay let's move on to Item 4, Proposition 39:
24 California Clean Energy Jobs Act K through 12 Program.
25 Let's go to Marites Antonio.

1 MS. ANTONIO: Commissioners, can you hear me?

2 CHAIR HOCHSCHILD: Yes, we can.

3 MS. ANTONIO: Thank you. My name is Marites
4 Antonio, first name is spelled M-a-r-i-t-e-s, and last name
5 is spelled A-n-t-o-n-i-o. I'm from the Local Assistance
6 and Financing Office in the Efficiency Division and with me
7 are Office Manager Bill Pfanner and Attorney Jacquie Moore.
8 Next slide please.

9 So this is the Proposition 39 K-12 program
10 timeline with the proposed due dates. I'm here to request
11 your approval of the revised Proposition 39 K through 12
12 program implementation guidelines, which expand two key due
13 dates. The final project completion date has been changed
14 from June 30, 2020, to June 30, 2021. And the final
15 reporting date has been changed from June 30, 2021, to June
16 30, 2022 due to the COVID-19 pandemic resulting in the
17 closure of public schools in California.

18 The California Clean Energy Jobs Act, Proposition
19 39 K through 12 program has allocated over \$1.5 billion in
20 five years to K through 12 public schools across the state
21 to implement energy-efficient projects that support local
22 health, safety and resilience while saving local
23 educational agencies money in energy bills. To date,
24 roughly 60 percent of all approved energy expenditure plans
25 have been completed which represents over \$740 million of

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1 energy efficiency projects invested into California K
2 through 12 public schools. The local educational agency is
3 a remaining 40 percent of the approved energy expenditure
4 plans are scheduled to report project completion by June
5 30, 2020.

6 The COVID-19 pandemic has resulted in the closure
7 of all public schools in California. This has had a
8 significant impact on local educational agencies
9 participating in the programs because they're not able to
10 complete installation of their approved energy expenditure
11 plans. Without the extension funds for work not completed
12 by the original date Of June 30, 2020, would be required to
13 be returned to the California Department of Education, the
14 entity responsible for awarding and disbursing the program
15 funds. This guideline's extension will provide schools
16 with an additional year to complete their approved
17 projects.

18 Staff requests approval of the revised
19 Proposition 39 K through 12 program implementation
20 guidelines to extend the project completion and final
21 reporting deadlines by one year. This item does not
22 require legislative action upon the Commissioners'
23 approval.

24 This concludes my presentation. And again online
25 with me are Acting Office Manager Bill Pfanner and Attorney

1 Jacquie Moore to answer questions you may have.

2 CHAIR HOCHSCHILD: Great, thank you, Marites.

3 Okay we'll go to public comment. I see several
4 potential speakers here. I'll just call your name, if
5 you're on the line you can speak up, Jeff Becker to be
6 followed by Janet Dixon to be followed by Rick Seppa.

7 Jeff, are you on the line?

8 MR. BECKER: Yes, good morning and thank you for
9 taking my comments. I'm Jeff Becker, first name J-e-f-f
10 and last name Becker, B-e-c-k-e-r. I'm the Senior Director
11 of Facilities & Operations for the Fresno County
12 Superintendent of schools and Vice Chair of the Coalition
13 for Adequate School Housing.

14 Thank you for recognizing the importance of this
15 issue and bringing this item forward. This extension will
16 provide needed relief for school districts and county
17 offices of education whose projects have been impacted by
18 the COVID-19 pandemic. The pandemic has slowed
19 construction including the Fresno County Superintendent of
20 Schools HVAC deep retrofit project. Project owners and
21 contractors quickly implemented appropriate social
22 distancing and site disinfection procedures on their
23 construction site to keep workers safe. Additionally,
24 supply of specialized equipment and materials coming from
25 other states with their own orders affecting manufacturing

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1 is causing delays on projects. As a result projects that
2 were on schedule to complete before June 30 are now at risk
3 of missing that deadline.

4 So schools are appreciative of this program and
5 realize the importance of these projects and look forward
6 to realizing the goals this program. And I thank you and
7 urge your support of this item.

8 CHAIR HOCHSCHILD: Great. Thank you. Let's go
9 to Janet Dixon.

10 MS. DIXON: Good morning, Commissioners. My name
11 is Janet Dixon, J-a-n-e-t, last name Dixon, D-i-x-o-n.
12 And I am the Director of Facilities Development for the for
13 the Temecula Valley Unified School District. I'm speaking
14 today as the Interim Chair of the School Energy Coalition
15 Executive Committee. And I am speaking in support of the
16 extension of the Prop 39 California Clean Energy Job Act
17 deadlines for school districts to complete projects and
18 final reports.

19 Districts have spent time and dollars preparing
20 projects for construction, only to have the process
21 disrupted by the current COVID-19 crises. We've
22 experienced supply chain disruptions. We've been unable to
23 hold pre-bid job locks. And there have been varying
24 construction restrictions throughout the state.

25 We hope that these delayed projects can continue,

1 and the construction-ready projects will contribute to the
2 much-needed economic stimulus as the state restrictions are
3 lifted. So thank you for your consideration And I urge
4 your support of this item. Thank you.

5 CHAIR HOCHSCHILD: Thank you. Let's go to Rick
6 Seppa.

7 MR. GOLDTHRITE: We have nobody else on the line.

8 CHAIR HOCHSCHILD: Okay, thank you. Then let's
9 go to -- and are there any other written comments to relay
10 on this Noemi?

11 MS. GALLARDO: Yes, this is Noemi Gallardo,
12 Public Advisor. Rick Brown, that's spelled R-i-c-k, Brown
13 B-r-o-w-n of Terra Verde, T-e-r-r-a, separate word V-e-r-d-
14 e says he is in support of the proposed resolution. That
15 concludes my comments.

16 CHAIR HOCHSCHILD: Great, thank you.

17 Okay let's go to Commissioner discussion,
18 Commission McAllister?

19 COMMISSIONER MCALLISTER: Yeah, so this is -- I
20 mean you heard from the two speakers. And thank you very
21 much to all three of the commenter speakers for really
22 giving us a sense of boots-on-the-ground situation. That
23 we heard loud and clear from a lot of schools that this was
24 something that they would benefit from, found that it was
25 not in violation of the original statute or of the Prop 39

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1 statute and needed this little modification to allow it to
2 happen, so just the right thing to do in this moment. And
3 I fully, fully support it.

4 CHAIR HOCHSCHILD: Great, thank you.

5 Any other comments, Vice Chair Scott?

6 VICE CHAIR SCOTT: I would just note again this
7 is an example I think of our Energy Commission team being
8 really proactive and looking around corners and just taking
9 smart actions for us to be flexible and nimble in these
10 days of COVID. And I think all of us want to ensure that
11 these schools have the opportunity to complete the
12 projects. And so I appreciate the work that the Department
13 of Education and the schools all across the state have done
14 with us in implementing Prop 39. It's an exciting program.

15 CHAIR HOCHSCHILD: Thank you.

16 Commissioner Douglas any comments?

17 COMMISSIONER DOUGLAS: Just that I'm in strong
18 support of this as well.

19 CHAIR HOCHSCHILD: Thank you.

20 Commissioner Monahan?

21 COMMISSIONER MONAHAN: No comment.

22 CHAIR HOCHSCHILD: Okay. Yeah, I would just add
23 really we're doing a bunch of things right now to support
24 economic recovery and to recession-proof the clean energy
25 economy. And part of that is getting money out the door

1 faster, part of that is greater flexibility. All these
2 things matter and I'm just really glad we were able to take
3 this action today. And I want to thank all the staff for
4 working on this to make these accommodations.

5 And again, Prop 39 has been really one of the
6 crown jewels of the Energy Commission. We have funded
7 \$1.75 billion in projects for schools in every county in
8 the state of California saving \$105 million on energy bills
9 every year and it's just a great tribute. And those are
10 projects that are vetted, that are projects we can really
11 feel good about. And so I just really want to commend the
12 whole team and all the stakeholders for coming together.
13 That's been an incredible process and I'm really proud of
14 the results.

15 So with that I'd entertain a motion, Commissioner
16 McAllister?

17 COMMISSIONER MCALLISTER: Yeah, actually before I
18 make a motion I'll just sort of highlight what you pointed
19 out with respect to our program administration and the
20 stimulus conversation in D.C. and this restarting the
21 economy, sort of trying to get it moving again. It is
22 obviously very salient conversation that's happening as we
23 speak. And Prop 39 and a few other programs that we've run
24 in the state are great examples of templates and actually
25 could get restarted or reformed in some way in pretty short

1 order to channel a lot of federal funds or other funds if
2 and when they come.

3 So certainly this program in particular helps us
4 show that we are standing ready to provide a conduit for
5 economic stimulus and that's a really powerful story to
6 tell. So I'll move Item 4.

7 CHAIR HOCHSCHILD: Thank you.

8 Is there a second?

9 VICE CHAIR SCOTT: Second, this is Vice Chair
10 Scott.

11 CHAIR HOCHSCHILD: Seconded by Vice Chair Scott.
12 Okay I vote aye. Commissioner McAllister?

13 COMMISSIONER MCALLISTER: Aye.

14 CHAIR HOCHSCHILD: Vice Chair Scott?

15 VICE CHAIR SCOTT: Aye.

16 CHAIR HOCHSCHILD: Commissioner Douglas.

17 COMMISSIONER DOUGLAS: Aye.

18 CHAIR HOCHSCHILD: Commissioner Monahan?

19 COMMISSIONER MONAHAN: Aye.

20 CHAIR HOCHSCHILD: Okay, that motion passes
21 unanimously. Thank you.

22 And let's move on to Item 5, Renewable Portfolio
23 Standard 2014 to 2016 Compliance Period 2 Verification
24 Results.

25 MR. CHOU: Good morning, can you hear me?

1 CHAIR HOCHSCHILD: Yes, we can.

2 MR. CHOU: Great. Good morning Chair, Vice Chair
3 and Commissioners. My name is Kevin Chou, spelled K-e-v-i-
4 n C-h-o-u. I'm an Energy Commission Specialist I from the
5 Renewables Portfolio Standard-RPS Verification and
6 Compliance Unit in the Renewable Energy Division. I'm
7 joined by Legal Counsel, Mona Badie. Representatives from
8 Azusa Light & Water and the City of Industry are also on
9 the line with us.

10 Today staff is requesting adoption of the RPS
11 verification results for local publicly owned electric
12 utilities reports for Azusa Light & Water and the City of
13 Industry for Compliance Period 2, which covered the years
14 2014 through 2016.

15 California's RPS is one of the most ambitious
16 renewable energy policies in the nation and a key driver
17 for achieving decarbonization of the energy sector. The
18 RPS requires the state's local publicly owned electric
19 utilities, or POU's, to procure increasing amounts of
20 renewable energy. With the passage of Senate Bill 100 in
21 2018 POU's are required to serve 60 percent of retail sales
22 with eligible renewable energy resources by 2030 and must
23 plan to procure 100 percent renewable and zero-carbon
24 resources by 2045.

25 For Compliance Period 2, the period covered in

1 these reports, the procurement target was 25 percent of
2 retail sales by 2016. The RPS POU verification results
3 reports presented for your consideration today provide
4 California Energy Commission staff's findings of renewable
5 energy procurement claims submitted by Azusa Light & Water
6 and the City of Industry for Compliance Period 2. The
7 verification results include procurement target and
8 portfolio balance requirements, the amount of eligible
9 renewable energy retired and applied shown by portfolio
10 content category and other classifications, any deficits in
11 meeting the procurement requirements, any balances of
12 historic carryover, excess procurement or surplus RECs that
13 can be applied in future compliance periods. And when
14 applicable any optional compliance measures.

15 As shown in the reports Azusa Light & Water and
16 the City of Industry have met their procurement targets and
17 portfolio balance requirements for Compliance Period 2. In
18 preparing Azusa Light & Water and the City of Industry's
19 RPS POU verification results reports, staff followed the
20 message described in the CEC's Renewable's Portfolio
21 Eligibility Guidebook and further detailed in the
22 Renewable's Portfolio Standard Verification Methodology
23 Report. Azusa Light & Water and the City of Industry have
24 reviewed and accepted staff's findings as contained in
25 these reports.

1 The RPS POU verification results, the staff draft
2 reports were posted for public comment on April 22nd. No
3 public comments were received by the notice deadline of May
4 1. These verification results do not represent a
5 compliance determination. Following adoption of the RPS
6 POU verification results reports staff will evaluate the
7 POU's compliance with the RPS requirements for Compliance
8 Period 2 in accordance with the RPS POU regulation and will
9 provide a recommendation to the Executive Director for his
10 determination.

11 CEC staff finds that the procurement claims
12 detailed in the RPS POU verification results report for
13 Azusa Light & Water and the City of Industry are eligible
14 to count towards meeting the POU's RPS procurement
15 requirements for Compliance Period 2. Staff recommends the
16 Energy Commission adopt the RPS POU verification results
17 reports for Azusa Light & Water and the City of Industry.

18 This concludes my presentation. Thank you for
19 your consideration and we'll be happy to answer just any
20 questions you may have.

21 CHAIR HOCHSCHILD: Great, thank you, Kevin.

22 Let's go to public comment beginning with Richard
23 Torres. Again, please spell your name and state your
24 affiliation.

25 MR. GOLDTHRITE: So just so you know, we don't

1 have Richard Torres.

2 CHAIR HOCHSCHILD: Do we have Len Viejo?

3 MR. VIEJO: Yes, I'm only here to answer any
4 questions you may have.

5 CHAIR HOCHSCHILD: Okay, great. Thank you, Len.
6 Are there any other public comments on this item,
7 Noemi?

8 MS. GALLARDO: No other comments.

9 CHAIR HOCHSCHILD: Okay, let's move to
10 Commissioner discussion. Commissioner Douglas.

11 COMMISSIONER DOUGLAS: Well very briefly I want
12 to thank the staff in the Renewables Division for their
13 hard work on this.

14 MR. TORRES: Hi (indiscernible)?

15 COMMISSIONER DOUGLAS: As the Energy
16 Commissioner's Lead Commissioner for renewable energy I'd
17 like to acknowledge that the RPS is a cornerstone --

18 MR. TORRES: (Overlapping colloquy) This is
19 Richard Torres, R-i-c-h-a-r-d --

20 COMMISSIONER DOUGLAS: Sorry, somebody is --

21 MR. TORRES: -- T-o-r-r-e-s.

22 COMMISSIONER DOUGLAS: -- is somebody trying to
23 make public comment?

24 MS. GALLARDO: I think that's Richard Torres of
25 Azusa Light & Water.

1 COMMISSIONER DOUGLAS: Oh, Richard Torres.

2 CHAIR HOCHSCHILD: Okay. So let's -- sorry
3 Commissioner, can we just go to Richard's comments?

4 COMMISSIONER DOUGLAS: No problem.

5 CHAIR HOCHSCHILD: Richard, are you with us and
6 wanting to make a comment? I am not hearing anything.
7 Richard, are you there? No?

8 MR. TORRES: Good morning?

9 CHAIR HOCHSCHILD: Yeah is this Richard?

10 MR. TORRES: This is the City of Azusa.

11 CHAIR HOCHSCHILD: Yes. Did you want to make it
12 a comment on this item?

13 MR. TORRES: Hi, good morning. My name is
14 Richard Torres. I just had a quick comment. I appreciate
15 that, the time you guys took to look over the compliance
16 period numbers for Azusa. And we're happy for your
17 approval.

18 CHAIR HOCHSCHILD: Great, thank you.

19 Okay. Sorry Commissioner Douglas, please
20 continue.

21 COMMISSIONER DOUGLAS: All right, well I will
22 just say the verification reports results presented today
23 reflect progress towards our clean energy goals. And I
24 would be happy to move approval of this report, of this
25 item.

1 CHAIR HOCHSCHILD: Thank you.
2 Moved by Commissioner Douglas. Is there a
3 second?
4 VICE CHAIR SCOTT: Second, this is Vice Chair
5 Scott.
6 CHAIR HOCHSCHILD: Second by Vice Chair Scott.
7 Let's take the motion.
8 Commissioner Douglas?
9 COMMISSIONER DOUGLAS: Aye.
10 CHAIR HOCHSCHILD: Vice Chair Scott?
11 VICE CHAIR SCOTT: Aye.
12 CHAIR HOCHSCHILD: Commissioner McAllister?
13 COMMISSIONER MCALLISTER: Aye.
14 CHAIR HOCHSCHILD: Commissioner Monahan?
15 COMMISSIONER MONAHAN: Aye.
16 CHAIR HOCHSCHILD: And I vote aye as well. That
17 motion passes unanimously. Thank you to everybody.
18 Let's move on to Item 6, The Energy Coalition -
19 The EPIC Challenge.
20 MR. FERREIRA: Good morning, can you hear me?
21 CHAIR HOCHSCHILD: Yes we can.
22 MR. FERREIRA: Hi. Good morning, Commissioners.
23 My name is Michael Ferreira. That's spelled m-i-c-h-a-e-l
24 F-e-r-r-e-i-a. And I work in the Energy, Research and
25 Development Division. I'm here seeking approval for a \$9

1 million grant agreement with The Energy Coalition to build-
2 out the Bassett-Avocado Advanced Energy Community, which
3 aims to provide the community's energy needs with more
4 efficient, regenerate and cost-effective clean energy
5 that's produced locally. That is, the core of this project
6 is really about demonstrating how a community that is
7 heavily burdened by poverty and pollution can be
8 transformed and uplifted into one of the most advanced
9 energy communities in the world when building clean energy
10 development at the local level. Next slide please.

11 Here's a quick background on the project. The
12 Energy Commission issued its first design build challenge
13 in 2016 called the EPIC challenge. This two-phased
14 competition challenged project teams to develop innovative
15 and reputable approaches that will accelerate the
16 deployment of advanced energy communities throughout
17 California.

18 Phase 1 of the competition focused on the
19 planning and design, while Phase 2 will provide funding to
20 build out and demonstrate the model developed under Phase
21 1. Next slide, please.

22 So a little background on the project area,
23 Basset and Avocado Heights are adjacent communities located
24 east of Los Angeles and are in the 90 percentile Of
25 California communities most burdened and vulnerable to

1 multiple sources of pollution.

2 In Phase 1 the project team conducted extensive
3 outreach into the communities to understand the issues they
4 are facing, gather feedback and incorporate their input
5 into a design for Phase 2. Using the community's feedback
6 the project soon identified several barriers to clean
7 energy adoption in their community including high levels of
8 renters, limited capital and space to distribute energy and
9 inadequate business and financial strategies. Next slide,
10 please.

11 So just those barriers to the Phase 2 design
12 needed an integrated approach that included several of the
13 following components. A Smart Community solar system
14 located at the Evergreen Baptist Church, who will offset
15 the electricity consumption of participants who opt into a
16 Community Solar Green Tariff, which would provide a 20
17 percent discount on their current electricity rates.

18 This project will also create a Microgrid
19 Resiliency Hub at the same church site using a standalone
20 PV and battery storage system that can provide a minimum of
21 four hours of emergency electricity and will provide of
22 refuge during energy emergencies.

23 Next, the Prosumer Network will demonstrate how
24 residential homeowners can participate in the distributed
25 energy market. This includes installing residential solar

1 PV with a V-net limited (phonetic) and a battery storage
2 system managed through a virtual power plant system. The
3 Prosumer Network will stimulate and test a Blockchain
4 Network that can transfer the value of the electricity and
5 carbon credits produced to participating homeowners. This
6 is a unique (indiscernible) and a proof of concept that can
7 scale to a larger network of households and be replicated
8 by other communities in the future.

9 Finally, this project included Mobile Grid
10 providing clean mobility options for the communities that
11 include an EV vanpooling program and micro-transit service.
12 The Mobile Grid will also include smart-charging
13 infrastructure, which optimizes use of local and generated
14 solar energy to balance the grid and drive down costs.

15 In Phase 1 -- oh sorry, next slide please -- in
16 Phase 1 the project team modeled a design which produced
17 the estimated benefits showed on the slide. In addition to
18 the benefits to the community and local electricity grid
19 this project will showcase and document the steps needed to
20 replicate and scale an advanced energy community. And by
21 serving as a successful pilot this project will diminish
22 the reliance on cost subsidies in the future.

23 This project represents a tremendous opportunity
24 to raise the bar on creativity for cities, agency and
25 community-based organizations to produce models for

1 investment that has a more direct financial benefit to
2 participating residents, building owners and the community
3 overall. Next slide, please. This concludes my
4 presentation.

5 I am happy to answer any questions you may have.
6 Also on the line, I have David Diaz and Christy Zamani who
7 are part of the project team and would like to make similar
8 comment. Thank you.

9 CHAIR HOCHSCHILD: Great. Thank you, Michael, a
10 really exciting project. Let's turn now to public comment
11 beginning with David Diaz. If you can again spell your
12 name and state your affiliation before you make your
13 remarks. David, we'll start with you.

14 MR. GOLDTHRITE: So David is not on the line, but
15 we do have Christy.

16 CHAIR HOCHSCHILD: Christy. Good morning,
17 Christy, go ahead.

18 MS. ZAMANI: Good morning, Christy Zamani, C-h-r-
19 i-s-t-y, last name Z-a-m-a-n-i, so good afternoon everyone.
20 My name is Christy Zamani. I'm the Executive Director for
21 DayOne. Our agency has over 30 years of experience in
22 building healthy, vibrant cities by advancing public health
23 in the San Gabriel Valley. Our expertise has been utilized
24 to advance a range of initiatives that LA County, including
25 Measure W, Measure A and lastly the L.A. County

1 Sustainability Plan.

2 Our team's expertise in working with vulnerable
3 neighborhoods speaking a range of languages and
4 sensitivity, the current concerns allows as to
5 authentically build relationships needed to advance this
6 project.

7 During Phase 1 we were able -- I'm sorry I'm
8 getting feedback here. Let me turn this off, sorry about
9 that.

10 CHAIR HOCHSCHILD: It's okay.

11 MS. ZAMANI: During Phase 1 we were able to build
12 meaningful connections by listening, learning, building
13 trust. Some of the key survey findings allowed us to learn
14 that 50 percent of residents are interested in
15 participating in the AEC Program, 96 percent are interested
16 in reducing electricity costs. And 60 percent of apartment
17 building residents and 37 percent of single-family
18 residents said they would sometimes leave their home to
19 conserve energy.

20 Through some of our focus group conversations, we
21 learned real community concerns regarding how to pay for
22 higher temperatures on their home. We learned of worries
23 regarding health impacts caused by not one, not two but
24 three major freeways resulting in higher levels of air
25 pollution and ongoing concerns about harmful lead and

1 arsenic emissions from the nearby battery-recycling center.

2 We also learned that families heavily rely on
3 parks as essential places for both their well-being and
4 places together to cool down. One parent shared that she
5 said, "I can't afford to have all my appliances turned on
6 all day. I have to pick and choose what appliance we use
7 throughout the day and it's usually a cooking appliance.
8 We don't have the luxury of staying cool at home. We can't
9 afford it."

10 When speaking with vulnerable populations like
11 seniors and low-income families we found that they were
12 worried about not having access to cooling systems or being
13 provided with low-cost amenities like dual-pane windows or
14 insulated buildings.

15 When speaking to students in the Bassett Unified
16 School District we found too although they were aware of
17 climate change they didn't know how to adapt due to lack of
18 resources, their social economic level.

19 Finally, we learned the majority of participants
20 welcomed the project by AEC. One of our focused
21 participants sharing, "We need a program like this. Where
22 do I sign up? I really need help reducing my monthly
23 electricity bill. And I don't want to keep worrying about
24 the well-being of my family during hot summer days."

25 So as I bring my comments to a close I will share

1 that the community is expecting to experience over 40
2 additional days of extreme heat by 2050. Indoor
3 temperatures average 85 degrees during summer for all 24
4 hours of the day. This is a little taxing on a person's
5 health and wallet.

6 This project is important in that it allows us to
7 think ahead and bring innovative solutions to disadvantaged
8 communities in an effort to help them leap into clean
9 energy future instead of potentially being left behind. It
10 speaks to equity and resilience.

11 Thank you all for listening do the voices and
12 needs of our most marginalized residents and for doing your
13 best to protect them. The widespread adoption of AEC's
14 second phase is necessary to achieve the state's mandatory
15 energy and climate goals. We look forward to demonstrating
16 how to do this and to help inspire future projects across
17 the region and state. Thank you for your time.

18 CHAIR HOCHSCHILD: Thank you.

19 Noemi, do we have any additional speakers on this
20 item?

21 NMS. GALLARDO: This is Noemi, no additional
22 written comments on this item.

23 CHAIR HOCHSCHILD: Okay. Thank you.

24 Let's move to Commissioner discussion. Let me
25 just say this is in keeping with this trajectory of doing

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1 projects disadvantaged communities, I really want to
2 recognize Vice Chair Scott's work on this and the whole
3 team, Laurie and everyone else, 65 percent of our
4 demonstration projects in the EPIC Program are in either
5 low-income or disadvantaged communities, which is an
6 incredible feat. So thank you all for that.

7 Vice Chair Scott?

8 VICE CHAIR SCOTT: Yeah, thank you very much.

9 This is a project that I will heartily recommend
10 to you all. I know that you have heard my glowing
11 excitement for the EPIC challenge probably every time one
12 of these projects comes through. But it's really exciting
13 to see. And I just like how we started the EPIC challenge
14 as Michael said in his presentation with Phase 1, and that
15 was planning and really thinking through how do you develop
16 an advanced energy community?

17 And then I just love that we have this Phase 2,
18 because this Phase 2 is how do you actualize that plan?
19 How do we take that plan and implement it and make it
20 really happen in these communities? And that's where as
21 you all know the rubber meets the road, when we are trying
22 to get to 100 percent clean energy standards, keep our
23 energy reliable and affordable, and make sure that we're
24 bringing all communities, low-income communities,
25 disadvantaged communities and others along with us.

1 Figuring out, listening closely to the community and then
2 figuring out the ways to really make these communities
3 become advanced energy communities is just incredibly
4 important.

5 And actualizing that and make it actually happen
6 on the ground is just incredibly important. And that's
7 what we're seeing as these Phase 2 projects come through.

8 And it's a little bit of everything, there's a
9 ton of lessons learned in this. How to engage with
10 communities, how to communicate with communities, how to
11 make sure communities are part of making those plans. And
12 I think that the team has done a really great job with the
13 Basset-Avocado Heights community and this project. And so
14 I look forward to approving it, so I recommend it for your
15 approval. And I will pause in case others have comments.

16 CHAIR HOCHSCHILD: Yeah. Let's see, any other
17 comments? Commissioner McAllister.

18 COMMISSIONER MCALLISTER: Yeah, just quickly I
19 agree with all that and would echo the importance of our
20 work in the disadvantaged communities. It's just we're not
21 going to get to our goals if we don't do that better,
22 faster and more. And so this is a great step in that
23 direction.

24 I would just highlight Number 3 there, the
25 Prosumer Network and the transactive grid element of this

1 project. I think it's really innovative, particularly
2 innovative. And the idea that you have a local transactive
3 grid that has energy exchange happening in real time just
4 within the distribution grid and bringing value and
5 reliability and resilience in ways that hopefully will be
6 quantifiable and demonstrable. So that's an innovative
7 feature of this. And kudos to the Energy Coalition and the
8 team for sort of developing that idea.

9 CHAIR HOCHSCHILD: Great, other comments?
10 Commissioner Monahan.

11 COMMISSIONER MONAHAN: Yeah, I just want pile on
12 the accolades for this project. I think this is really
13 representative of the type of projects that we need to do
14 more of and the type of public engagement that we should
15 really be proud of.

16 Just I think that the fact that there was so much
17 attention to making sure that this met community needs and
18 that the community was participating and supportive of this
19 project is really a model for others. And of course I love
20 the fact that it includes EV charging as part of the
21 package. Let's keep that going forward. So yeah I'm
22 really excited to see how this project materializes and to
23 learn more as we actually get it off the ground about
24 what's working, what's not working and how do we do more
25 with it.

1 CHAIR HOCHSCHILD: Great, thank you.

2 Any other comments, Commissioner Douglas?

3 Hearing none let's entertain a motion. Vice Chair Scott,

4 would you be willing to move the item?

5 VICE CHAIR SCOTT: Yes, I move approval of Item

6 6.

7 CHAIR HOCHSCHILD: Okay. Commissioner

8 McAllister, would you be willing to second?

9 COMMISSIONER MCALLISTER: I will second it.

10 CHAIR HOCHSCHILD: Okay. Let's take the vote,

11 Vice Chair Scott?

12 VICE CHAIR SCOTT: Aye.

13 CHAIR HOCHSCHILD: Commissioner McAllister?

14 COMMISSIONER MCALLISTER: Aye.

15 CHAIR HOCHSCHILD: Commissioner Monahan?

16 COMMISSIONER MONAHAN: Aye.

17 CHAIR HOCHSCHILD: Commissioner Douglas?

18 COMMISSIONER DOUGLAS: Aye.

19 CHAIR HOCHSCHILD: And I vote aye as well. That

20 item passes unanimously. Thank you everybody.

21 Let's move on to Item 7, Advancing Next-

22 Generation Heating, Cooling and Water Heating Systems.

23 MR. WILLIAMS: Hello, are you able to hear me

24 clearly?

25 CHAIR HOCHSCHILD: Yes, we can. Go ahead.

1 MR. WILLIAMS: Great, thank you. So good morning
2 Chair, Vice Chair and Commissioners. My name is Brad
3 Williams, spelled B-r-a-d W-i-l-l-i-a-m-s. I'm a
4 Mechanical Engineer with the Energy Efficiency Research
5 Office in the Research and Development Division.

6 The purpose of this solicitation in recommended
7 awards is to develop and demonstrate innovative approaches
8 to providing space conditioning, refrigeration or water
9 heating in buildings. These projects focus on the use of
10 low global warming potential, or GWP, or non-vapor
11 compression heat pumps.

12 Staff recommends approval of the following five
13 projects. The first project with Franklin Energy Services
14 will develop and test a combined space conditioning and hot
15 water heating system with built-in load shifting
16 capabilities. The integrated mechanical pod systems will
17 be installed in residential buildings to assess cost-
18 effectiveness, energy savings, load flexibility and
19 greenhouse gas emission impacts.

20 Staff is also recommending the adoption of CEQA
21 findings in the statement of overriding considerations as
22 detailed in the staff CEQA memo included in the back of the
23 materials for this item.

24 The second project with Lawrence Berkeley
25 National Laboratory will develop and test an open source

1 building energy management system called HP-Flex. This
2 system both controls heat pump settings in small to medium
3 commercial buildings and provides load flexibility such as
4 shape, shift, shed or shimmy, while also meeting occupant
5 needs and minimizing operating costs. And the testing will
6 occur in multiple disadvantaged and low-income communities.

7 The third project, with Electric Power Research
8 Institute, will develop Testing advanced heat pump system
9 for multifamily and small commercial applications. The
10 system is a reversible heat pump that uses low global
11 warming refrigerants, ammonia and carbon dioxide in an
12 innovative way, ammonia being the primary refrigerant while
13 carbon dioxide is used both as a refrigerant and a
14 distribution fluid depending on the mode of operation.
15 This project will evaluate the energy savings potential
16 compared to comparable commercial systems.

17 The fourth project with the University of
18 California Davis Western Cooling Efficiency Center will
19 develop and test an advanced heat pump control system with
20 the intent to save energy and prove grid reliability and
21 reduce greenhouse gas emissions through system
22 optimization. The system will be tested for both space
23 conditioning and water heating and will be tested in
24 multiple low-income households.

25 And finally, also with the University of

1 California Davis Western Cooling Efficiency Center this
2 project will develop and demonstrate affordable near and
3 medium-term solutions for integration of low and ultra-low
4 Global warming potential heat pumps. The near-term
5 solution focuses on closed circuit(phonetic) market
6 technology that uses a lower cost compressor drive and
7 drop-in refrigerants; whereas the medium- term solution
8 explores a novel heat exchanger and secondary loop to
9 enable greater efficiency and ultimately the use of
10 ultralow global warming potential refrigerants.

11 Staff recommends approval of these five projects.

12 I'm happy to answer any questions.

13 CHAIR HOCHSCHILD: Great, thank you for that.

14 Noemi do we have any public comments on this item?

15 MS. GALLARDO: No other comment.

16 CHAIR HOCHSCHILD: Okay, let's go to Commissioner
17 discussion. Vice Chair Scott?

18 VICE CHAIR SCOTT: Sure, I don't have too much to
19 add to Brad's excellent presentation other than maybe just
20 to state the obvious. As you all know that the heating and
21 cooling and comfort of buildings can often be energy
22 intensive if we are not looking at it carefully, right?
23 And so I think these types of projects that help
24 demonstrate how we do that in a much more energy efficient
25 way combined with the low global warming pollutant, a

1 potential low global warming potential refrigerants is also
2 just incredibly important, right. But that's kind of that
3 short-lived climate pollutant piece. And we want to make
4 sure that we have -- that we are reducing that all of the
5 time in getting towards these low or no global warming
6 potential refrigerants. And so all of these projects are
7 working on working on that as well, so I recommend those
8 for your approval.

9 CHAIR HOCHSCHILD: Great, any other comments?
10 Commissioner McAllister, yes?

11 COMMISSIONER MCALLISTER: Hey yeah, this group of
12 projects really just gets my heart pumping, I guess --
13 pardon the pun -- but I really think this is a great group
14 of projects. And I think kudos to Laurie and her team and
15 Commissioner Scott, Vice Chair Scott, for shepherding these
16 projects and all the rest of them, but these in particular.

17 The EPIC team is so responsive to the needs that
18 come out of the divisions and just sort of having,
19 collecting ideas and making sure that those in fairly short
20 order, remarkably short order sometimes, show up in a
21 solicitation through EPIC for a really innovative R&D. I
22 think that this group is really emblematic of that and
23 representative.

24 And, you know, finally I'll just point out that
25 the shake, rattle and roll and shimmy and shift, (laughter)

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1 is proof that energy efficiency can be fun, and these
2 organizations can be fun. As we really as a state rely
3 more and more on heat pumps for space conditioning and
4 other uses, water heating, this refrigerant issue is really
5 surging to the fore. And it has to have a solution or
6 we're digging a different hole that we'll then have to get
7 out of.

8 And so really I've got a CO2-based one, and they
9 are a killer technology. They're quiet and beautiful and
10 they run great, but the costs really need to come down.
11 That market development needs to happen. And so this is a
12 terrific group of projects to help that and many other
13 market developments happen, so I'm in strong support.

14 CHAIR HOCHSCHILD: Well Commissioner McAllister I
15 think yes, "Shape, shimmy, shift," sounds like the title of
16 your viral video when you do your public outreach for an
17 energy efficiency dance video that could be the name.

18 (Laughter.)

19 Unless there's other comments on this, just raise
20 your hand, we'll take it to a vote. Is there a motion,
21 Vice Chair Scott?

22 VICE CHAIR SCOTT: Yes, I move approval of Item
23 7.

24 CHAIR HOCHSCHILD: And Commissioner McAllister
25 would you be willing to second?

1 COMMISSIONER MCALLISTER: I will second.

2 CHAIR HOCHSCHILD: Okay. I'll call the roll.

3 Vice Chair Scott?

4 VICE CHAIR SCOTT: Aye.

5 CHAIR HOCHSCHILD: Commissioner McAllister?

6 COMMISSIONER MCALLISTER: Aye.

7 CHAIR HOCHSCHILD: Commissioner Monahan?

8 COMMISSIONER MONAHAN: Aye.

9 CHAIR HOCHSCHILD: Commissioner Douglas?

10 COMMISSIONER DOUGLAS: Aye.

11 CHAIR HOCHSCHILD: And I vote aye as well. That
12 motion passes unanimously.

13 Let's move on to Item 8, Geothermal Energy
14 Overcoming Technology Hurdles and Enabling Recovery of
15 Lithium.

16 MR. GENTRY: Good morning Commissioners, my name
17 is Chuck Gentry spelled C-h-u-c-k G-e-n-t-r-y. I'm a
18 Mechanical Engineer in the Energy Research and Development
19 Division.

20 As the amount of renewable energy on the
21 California grid continues to climb it becomes increasingly
22 important to add new baseload and load following renewables
23 such as geothermal power. The purpose of the geothermal
24 solicitation is to fund projects that help increase the
25 cost-effectiveness and the value of geothermal power by

1 improving the productivity and flexibility of geothermal
2 facilities. And also by advancing technologies for the
3 recovery of lithium geothermal brine.

4 A total of five projects from this solicitation
5 will be recommended for funding, three of which will be
6 presented at this Business Meeting.

7 The first proposed agreement is with Lawrence
8 Berkeley National Laboratory. This project will
9 demonstrate a new approach to produce enhanced images of
10 the subsurface geothermal reservoir at the Geysers using a
11 combination of microseismic and magnetotelluric data. This
12 project is a follow-up to a previous EPIC project that
13 developed and demonstrated the seismic data collection and
14 processing technology. This project will lead to cost
15 savings by improving the placement of future geothermal
16 wells.

17 The next proposed agreement is with Materials
18 Research. This project will be scaling up a new lithium
19 recovery technology that uses an improved sorbent and
20 regeneration process, which leads to the direct formation
21 of high purity lithium carbonate at substantial cost
22 savings. The technology was previously supported by EPIC
23 funds to demonstrate on a lab scale. This project will be
24 a pilot scale demonstration.

25 The next proposed agreement is with the BHER

1 Minerals. This project will demonstrate an integrated
2 system for lithium recovery from geothermal brine on a pre-
3 commercial scale processing 100 gallons of brine per
4 minute. This project is a first of its kind on such a
5 large scale and it will help pave the way for the emerging
6 industry of lithium recovery from geothermal brine.

7 This concludes my presentation. Staff are on the
8 line and are available to answer any questions. Also Eric
9 Besseling and Jonathan Weisgall from Berkshire Hathaway are
10 on the line and would like to make comments.

11 CHAIR HOCHSCHILD: Great. Thank you, Chuck.
12 That's really helpful.

13 Let's turn now to public comment. Why don't we
14 begin with Eric? And again if I could have the speakers
15 please spell their names and state their affiliation before
16 you make your remarks.

17 MR. BESSELING: Yes, thank you. Am I on now?

18 CHAIR HOCHSCHILD: Yes, you are.

19 MR. BESSELING: Thank you. Yes, it's Eric
20 Besseling. I'm with BHE Renewables. Again, spelling is E-
21 r-i-c, last name B-e-s-s-e-l-i-n-g. And I'm the Vice
22 President of the Business Development for BHE Renewables
23 and the Project Manager for the BHER Minerals Project.

24 I'd like to just first start just by thanking the
25 Energy Commission for its leadership and vision in

1 promoting the development of the lithium economy in
2 southern California. We're very excited to be part of
3 this. With the accelerated development of the electric
4 vehicles battery storage technologies the lithium is
5 certainly going to become a critical resource to support
6 the state's clean energy goals.

7 BHE Renewable itself is excited to go on this
8 journey with the Energy Commission and hopes to support the
9 technology development and demonstration projects that will
10 catalyze this industry and support significant clean-tech
11 job growth in the area. And provide hopefully a platform
12 for further in-state renewable investment with the
13 geothermal power.

14 I'd like to also specifically thank our Agreement
15 Manager Katharina Gerber, who's been very helpful in
16 guiding us through the process so far. She's been
17 knowledgeable and responsive and informative for us to
18 participate in this program, so we appreciate that and look
19 forward to working with her throughout the project.

20 I would also like to thank the Commissioners
21 themselves for consideration for this project. This is the
22 added boost that we needed to get this project to proceed,
23 so that's been very helpful with our development program,
24 we appreciate that. And we're excited for this opportunity
25 and look forward to working together with the Energy

1 Commission and with the state for the years to come. Thank
2 you very much.

3 CHAIR HOCHSCHILD: Thank you.

4 Let's turn to Jonathan Weisgall.

5 MR. WEISGALL: Thank you chair. My name is
6 Jonathan Weisgall, J-o-n-a-t-h-a-n, Wiesgall, W-e-i-s-g-a-
7 l-l. I'm Vice President for Government Relations for
8 Berkshire Hathaway Energy, the parent company of BHE
9 renewables.

10 I want to echo what Eric said. I want to add,
11 this project and the other projects funded under this
12 grant-funding opportunity to demonstrate technologies to
13 recover lithium from geothermal brine really represent a
14 bold first step in establishing a lithium valley in
15 Imperial County. And further solidifying the state's
16 global leadership in renewable energy and sustainability.
17 We are certainly hopeful that this demonstration project
18 will be the first of many critical steps in the supply
19 chain flow for California's growing transportation
20 electrification sector, ranging from battery and catheter
21 manufacturers to electric vehicle production.

22 In addition, successful lithium production from
23 geothermal brine will bring another source of revenue to
24 these geothermal plants and thus could become a catalyst to
25 revive Imperial Valley's decades-old geothermal thermal

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1 power industry. So this will not just create jobs but make
2 the price of baseload geothermal power much more cost-
3 effective for the benefit of California ratepayers.

4 Lastly, and echoing comments some of you and your
5 colleagues have already made, but your leadership here
6 sends a clear message that California sees clean energy
7 investment as a critical component of plans to repair
8 California's ravaged economy from the economic impact of
9 COVID-19. Thank you very much.

10 CHAIR HOCHSCHILD: Thank you so much. Are there
11 any other public comments before we turn to Commissioner
12 discussion, Noemi?

13 MS. GALLARDO: No other comments on my end.

14 CHAIR HOCHSCHILD: Okay, thank you. Let's turn
15 to Commissioner discussion. Madam Vice Chair?

16 VICE CHAIR SCOTT: Yes. This is again another, I
17 think, exciting set of projects. It is on the cutting
18 edge. I think when we're looking at both at making
19 geothermal continue to be cost-competitive and drive out
20 costs. But also to bring forward the ability to produce
21 the battery grade lithium right here in California for the
22 electric vehicles and battery storage and other things that
23 we need that are going to be the foundation for 100 percent
24 clean energy standard meeting our clean air goals, meeting
25 our climate goals, it's just it's all very exciting. There

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1 is a lot of possibility here.

2 And I think that the team did a great job putting
3 the solicitation together. We had a great set of projects
4 that came through. And really taking some time to think
5 critically about which projects to bring forward for your
6 consideration. So I am happy to recommend the projects in
7 Item 8 to you all.

8 CHAIR HOCHSCHILD: Great.

9 Commissioner Douglas any comments?

10 COMMISSIONER DOUGLAS: Well, just that I'm really
11 excited to see these move forward. I want to thank Vice
12 Chair Scott for her leadership and to the EPIC team for
13 their hard work in moving things forward.

14 I think there is a huge potential for lithium and
15 geothermal at the Salton Sea. And without any doubt these
16 projects are going to help the state move forward in
17 understanding this potential and getting much closer to
18 commercializing it.

19 CHAIR HOCHSCHILD: Great.

20 Any other comments Commissioner Monahan or
21 Commissioner McAllister?

22 COMMISSIONER MONAHAN: Yeah, just very quickly.
23 I want to just reiterate support for this project, but also
24 that I'm very excited to move forward in having California
25 lead not just on electric vehicle manufacturing, but also

1 on lithium production and trying to develop a holistic
2 system that's housed here in California is really exciting.
3 So just really strong support for these projects and for
4 the leadership role that the EPIC team is playing in this.

5 CHAIR HOCHSCHILD: Commissioner McAllister, any
6 comments on this?

7 COMMISSIONER MCALLISTER: No, no comment for the
8 moment.

9 CHAIR HOCHSCHILD: Okay. Well, I wanted to just
10 offer my thanks to all the stakeholders, and the grant
11 recipients, and the staff and to Vice Chair Scott and
12 Laurie and everyone else who's been involved with this.

13 This is one of my top priorities as Chair,
14 promoting the vision of Lithium Valley. It is a vision
15 that meets many, many different needs. I see lithium as
16 sort of the oil of the clean energy future. As we make
17 this transition we will have to produce more lithium. And
18 what's exciting about this possibility in California is
19 this is really the greenest, most impact way to produce
20 lithium compared to -- most of the lithium comes from
21 Australia and Chile and is a much higher impact, so it's a
22 greener process by far.

23 But it also supports all these other goals we
24 have. This is employment in a part of the state that has
25 sort of the highest unemployment in the whole country. And

1 it supports the raw material we need for in-state
2 manufacturing, we have 17 electric vehicle manufacturing
3 operations in California.

4 It also makes geothermal a more viable resource
5 and more competitive, which we need because we need
6 diversity among our renewable resources. And it
7 establishes a sort of foothold in this marginal ecosystem
8 potentially to attract back capital manufacturing
9 ultimately to California, because we have these end use
10 markets for electric vehicles with the 700,000 electric
11 vehicles in our fleet today. And we have increasing use
12 for energy storage and other types which are including
13 we're seeing a lot of two-wheeled electric vehicles,
14 scooters and bicycles and so forth. So this really fills a
15 sort of big missing piece in the puzzle.

16 And I want to just particularly commend the
17 folks who are early, Jonathan, you and others who have
18 gotten in. It takes a lot of relentlessness early on in
19 starting an emboldened vision like this and tenacity. But
20 if you think about how Silicon Valley got started and the
21 impacts that has had around the world we would not be the
22 fifth largest economy in the State of California were it
23 not for Silicon Valley. And when I think about Lithium
24 Valley I'm equally excited because I think we can attract a
25 lot of investment and do a lot of good if we're smart about

1 it. And these early investments matter a lot. They really
2 help drive more private sector investment, more innovation.

3 And so we hosted a symposium in February at
4 Stamford on the vision of Lithium Valley and it feels like
5 a millennium ago given all that's happened. But we'll
6 continue to do those kind of gatherings, probably virtually
7 in the near term. And as we sort out next steps on this.
8 But thank you for these proposals and we look forward to
9 that ones that are coming. I think there's another \$4
10 million coming at our June meeting.

11 So with that I would entertain a motion. Vice
12 Chair Scott, if you would be willing.

13 VICE CHAIR SCOTT: Yes, I move approval of Item
14 8.

15 CHAIR HOCHSCHILD: Okay, Commissioner Douglas,
16 would you be willing to second?

17 COMMISSIONER DOUGLAS: Absolutely. I second it.

18 CHAIR HOCHSCHILD: Okay. All in favor, Vice
19 Chair Scott?

20 VICE CHAIR SCOTT: Aye.

21 CHAIR HOCHSCHILD: Commissioner Douglas?

22 COMMISSIONER DOUGLAS: Aye.

23 CHAIR HOCHSCHILD: Commissioner Monahan?

24 COMMISSIONER MONAHAN: Aye.

25 CHAIR HOCHSCHILD: Commissioner McAllister?

1 COMMISSIONER MCALLISTER: Aye.

2 CHAIR HOCHSCHILD: And I vote aye as well. That
3 motion passes unanimously. Thank you to all the staff and
4 stakeholders.

5 Let's move on to Item 9, Advanced Refrigeration
6 and Heat Pumps for the Industrial Sector.

7 MR. KRUPENICH: Hello, can you hear me?

8 CHAIR HOCHSCHILD: Yes we can.

9 MR. KRUPENICH: Hello, my name is Ilia Krupenich,
10 spelled I-l-i-a, Krupenich, K-r-u-p-e-n-i-c-h. I work with
11 the Industrial, Agriculture, and Water team in the Research
12 and Development Division.

13 The industrial sector is the second largest
14 source of emissions in California, which also accounts for
15 about one-third of the State's energy consumption. Process
16 heating accounts for approximately 70 percent of the total
17 industrial energy use. For certain applications,
18 unfortunately up to 85 percent of heat is eventually
19 wasted.

20 And we are recommending approval of the following
21 five projects industrial sector decarbonize. The focus is
22 on using heat pumps to reuse the medium-temperature waste
23 heat, which is identified by Department of Energy as a
24 promising area currently undersubscribed and on using
25 advanced refrigeration technologies that can improve

1 efficiency for industrial applications.

2 Please note that there was a minor update to the
3 backup materials for the Item 9b on May 12th. We added
4 more specifics on compliance with the California
5 Environmental Quality Act. And we also included additional
6 warning on inadvertent disclosure of intellectual property
7 in the scope of work.

8 The first project is with General Engineering &
9 Research. The processing for high tech manufacturing of
10 electronics and computer components, which is one of the
11 fastest-growing industrial segments in California, requires
12 cooling below -240 Fahrenheit. The efficiency of
13 conventional vapor compression cooling is only around 5
14 percent at these temperatures, while the magnetic
15 refrigeration system is capable of delivering the
16 efficiency of about 50 percent, providing high energy
17 savings in the electronics industry.

18 The second project is with UC Merced. UC Merced
19 will develop a heat pump that uses the Stirling cycle and
20 can be adjusted for a wide range of input temperatures with
21 higher efficiency than state-of-the-art equipment. The
22 awardee plans to use liquid pistons to overcome
23 technological complications usually associated with the
24 Stirling cycle. And UC Merced anticipates reduction of
25 capital and operational costs by more than 20 percent.

1 Both flexibility and economical advantage could increase
2 market penetration of waste heat recovery technologies in
3 the industrial sector, improve energy efficiency, and
4 reduce greenhouse gas emissions.

5 The third project is with Gas Technology
6 Institute. The efforts of this project will integrate a
7 thermally driven ejector into the conventional industrial
8 chiller system and make use of low Global Warming Potential
9 refrigerant.

10 This will improve the efficiency by 15-25 percent
11 and protect the compressor from pressure fluctuations,
12 increasing its service life. The food processing and
13 beverage industries, which are major energy users of the
14 industrial sector, will benefit from this technology.

15 The fourth project is with Electric Power
16 Research Institute. The objective of this project is to
17 develop an efficient high-temperature heat pump that
18 produces steam for applications in the food processing,
19 chemical, paper, and textile industries. Reuse of waste
20 heat could promote efficiency and reduce greenhouse gas
21 emissions.

22 The fifth project is with Nelumbo. Nelumbo is to
23 develop an innovative advanced coating technology that
24 improves the efficiency of industrial refrigeration systems
25 by reducing ice buildup, which will reduce the energy used

1 for de-icing, improve the efficiency of heat exchangers,
2 and reduce maintenance.

3 The concept validation has previously shown 14
4 percent savings in daily electricity use. This project
5 will increase the Technology Readiness Level to make the
6 coating technology ready for demonstration. Food
7 processing is the target industry for this project.

8 These are the five projects recommended for
9 approval. I will be glad to answer any questions if you
10 have them. This concludes my presentation.

11 CHAIR HOCHSCHILD: Thank you. Great.

12 Are there any public comments on this side?

13 MR. GOLDTHRITE: There's nobody on the line.

14 CHAIR HOCHSCHILD: Okay. Thanks. Let's go to
15 Commission discussion, Madam Vice Chair.

16 VICE CHAIR SCOTT: Yes, so don't have too much
17 more to add to Ilia's excellent presentation. Other than
18 just to note that the item, a couple of items back as you
19 all will recall was focused on the building sectors, very
20 similar focus in the technology. And then this is on the
21 industrial sector, which of course is another incredibly
22 important sector in California. It uses quite a bit of
23 energy as Ilia noted in his presentation.

24 And again we're looking at how do we reduce the
25 amount of energy that these industries use. And also how

1 to reduce the global warming potential of the refrigerants
2 that are used as well. So I recommend the projects in Item
3 9 to you.

4 CHAIR HOCHSCHILD: Okay. This falls pretty much
5 in line with everyone. Wave your hand if anyone wants to
6 make additional comment later. Oh, Commissioner
7 McAllister, go ahead.

8 COMMISSIONER MCALLISTER: Yeah, just quickly
9 everything I said about the previous one with the heat
10 pump. I guess last year's too. But also combustion is a
11 critical process in the industrial, critical element in
12 many industrial processes. And heat exchange and heat
13 recovery really helps optimize that and manage it. And has
14 criteria of air quality implications as well in improving
15 in that aspect of the environment as well. So just kudos
16 to Ilia for a great job, nice presentation and to the whole
17 EPIC team for this.

18 CHAIR HOCHSCHILD: Great. Okay, then let's move
19 -- are there any other Commissioner comments? Let me see a
20 motion here. Vice Chair Scott, did you want to move the
21 item?

22 VICE CHAIR SCOTT: Yes, I will move approval of
23 Item 9.

24 CHAIR HOCHSCHILD: Okay, Commissioner McAllister
25 would you be willing to second?

1 COMMISSIONER MCALLISTER: Yes, second.

2 CHAIR HOCHSCHILD: Okay. Let's take the motion,
3 Vice Chair Scott?

4 VICE CHAIR SCOTT: Aye.

5 CHAIR HOCHSCHILD: Commissioner McAllister?

6 COMMISSIONER MCALLISTER: Aye.

7 CHAIR HOCHSCHILD: Commissioner Douglas?

8 COMMISSIONER DOUGLAS: Aye.

9 CHAIR HOCHSCHILD: Commissioner Monahan?

10 COMMISSIONER MONAHAN: Aye.

11 CHAIR HOCHSCHILD: And I vote aye as well. That
12 motion passes unanimously.

13 CHAIR HOCHSCHILD: Let's move on to Item 10,
14 Developing Lessons Learned, Best Practices, Training
15 Manuals and Guidebooks for Customer Side of the Meter
16 Energy Storage.

17 MS. LUM: Hi, can you hear me?

18 CHAIR HOCHSCHILD: Yes we can

19 MS. LUM: Great, Thank you. Good morning Chair,
20 Vice Chair and Commissioners, I'm Quenby Lum, Q-u-e-n-b-y
21 L-u-m with the Energy Research and Development Division.

22 Currently we have a challenge in California with
23 deploying energy storage, because storage permitting
24 requirements are inconsistent around the state.

25 Recognizing this the Legislature passed Assembly Bill 546

1 to help address this problem. AB 546 was developed to
2 authorize the Governor's Office of Planning and Research to
3 create a California Energy Storage Permitting Guidebook.
4 And this solicitation was developed in collaboration with
5 the Governor's Office.

6 The purpose of this solicitation is to fund
7 research that will identify best practices and guidelines
8 for permitting behind-the-meter energy storage based on
9 different types of storage technology, system sizes and
10 applications.

11 The awarded project with the Center for
12 Sustainable Energy will identify key permitting issues that
13 are currently barriers to the installation of energy
14 storage on the customer's side of the meter. This project
15 will result in a comprehensive set of permitting guidelines
16 in an online electronic format to help streamline and
17 standardize the permitting process. This will help make
18 the storage permitting process more efficient and cost-
19 effective for stakeholders including the permitting
20 authorities, builders and contractors and the customers.

21 This concludes my presentation. And I'm happy to
22 answer any questions you may have. Staffs David and Mike
23 Gravely and attorney William Dietrich are on the line to
24 answer questions as needed. And I believe Scott Morgan
25 from the Governor's Office of Planning and Research is also

1 on the line. Thank you.

2 CHAIR HOCHSCHILD: Great, thank you so much.
3 Let's go to public comment beginning with Scott Morgan.

4 MR. MORGAN: Yeah, Scott Morgan here, S-c-o-t-t
5 first name, last name is Morgan, M-o-r-g-a-n.
6 Commissioners, thank you very much for having me.

7 As the presenter mentioned this is a
8 recommendation out of AB 547, so she pretty much stole all
9 my talking points. But we just want to reach out and say
10 how much we appreciate the partnership that the Office of
11 Planning and Research in the Governor's Office has with the
12 California Energy Commission. OPR has partnered on a
13 variety of projects over the years and will continue to do
14 that. And I look forward to that strong working
15 relationship. And this is another example of that
16 continued partnership.

17 When I saw this recommendation in the Legislature
18 the first thing I thought of was how do we partner with the
19 Energy Commission on making this happen? And so having
20 this available as a project under this program is great and
21 we really appreciate the support. So I obviously strongly
22 recommend approval of this action.

23 And I also want to mention that how exciting it
24 is to see the approval that you guys have made so far on a
25 variety of projects, so I'm going to steal the "Lithium

1 Valley" name. I think that's a great thing. That, the
2 lithium power projects are very exciting to see here in
3 California. As you all mentioned there is a lot of
4 benefits to that including national security and other
5 issues, which goes to some of the comments on our
6 partnerships with CEC with the Department of Defense and
7 the military on a variety of projects in California.

8 So again, I strongly support you all approving
9 this guidebook. And if you have any questions we'll be
10 happy to answer those and also looking forward to
11 continuing to work with the Energy Commission on a variety
12 of projects moving forward, so thank you very much for your
13 time.

14 CHAIR HOCHSCHILD: Thank you.

15 Noemi, do we have any other members of the public
16 on the line wishing to comment on this item?

17 MS. GALLARDO: No written comments at this time.
18 I'll defer it to Cody if there's anyone else on the line?

19 MR. GOLDTHRITTE: No, there's no one else on the
20 line.

21 CHAIR HOCHSCHILD: Okay. Let's go Commissioner
22 discussion, Madam Vice Chair?

23 VICE CHAIR SCOTT: All right, great. Well,
24 Scott, thank you so much for joining us this morning. I
25 just want to take a moment to echo your appreciation and

1 also enthusiasm for the partnership that the Energy
2 Commission and Office of Planning and Research has together
3 on this and many other important initiatives, so thank you
4 so much for that. And that's the only comment I'll make
5 for now.

6 CHAIR HOCHSCHILD: Okay, wave your hand if you
7 have anything else to add on this, otherwise I'll entertain
8 a motion. Madam Vice Chair would you like to move the
9 item?

10 VICE CHAIR SCOTT: Yes. I will move approval of
11 Item 10.

12 CHAIR HOCHSCHILD: Okay, Commissioner Douglas
13 would you be willing to second?

14 COMMISSIONER DOUGLAS: Absolutely. I second it.

15 CHAIR HOCHSCHILD: Okay. All in favor? Vice
16 Chair Scott?

17 VICE CHAIR SCOTT: Aye.

18 CHAIR HOCHSCHILD: Commissioner Douglas?

19 COMMISSIONER DOUGLAS: Aye.

20 CHAIR HOCHSCHILD: Commissioner McAllister?

21 COMMISSIONER MCALLISTER: Aye.

22 CHAIR HOCHSCHILD: Commissioner Monahan?

23 COMMISSIONER MONAHAN: Aye.

24 CHAIR HOCHSCHILD: And I vote aye as well. That
25 motion passes unanimously.

1 Let's move on to Item 11, California Dairies,
2 Food Production Investment Program.

3 MS. CHANG: Good morning Chair and Commissioners.
4 My name is Kaycee Chang spelled K-a-y-c-e-e, last name
5 Chang, "C-h-a-n-g. And I am with the Energy Research and
6 Development Division. Staff is recommending or seeking
7 approval for one project funded by the Food Production
8 Investment Program.

9 Industrial scale solar thermal systems have not
10 been deployed widely in California. The proposed project
11 would install an industrial scale high temperature solar
12 thermal energy system at California Dairies Incorporated, a
13 dairy processing facility in Turlock. This project will
14 reduce natural gas consumption and greenhouse gas emissions
15 by converting solar energy into heat for facility processes
16 and is an early example of the potential to decarbonize
17 industrial process heat.

18 Staff recommends approval of this award and I am
19 available to answer any questions you may have. In
20 addition, a representative from the California Dairies
21 Project is on the line and would like to make a comment.
22 Thank you.

23 CHAIR HOCHSCHILD: Great. Thank you, Kaycee.

24 We'll move to public comment at this time and go
25 first to -- please correct me if I mispronounce you --

1 Inbal Nachman of Skyven Technologies. Again, if you can
2 spell your name and explain your affiliation before you
3 speak.

4 MS. NACHMAN: Hi, can everyone hear me?

5 CHAIR HOCHSCHILD: Yes, we can hear you.

6 MS. NACHMAN: Great. My name is Inbal Nachman,
7 spelled I-n-b-a-l N-a-c-h-m-a-n. And I'm speaking on
8 behalf of California Dairies. We'd like to thank the
9 California Energy Commission for accelerating the adoption
10 of state-of-the-art energy technologies that can
11 substantially reduce GHG emissions. So I am a
12 representative from the manufacturer, Skyven Technologies.
13 This project will deploy 3000 cutting-edge IMA Skyven
14 Technologies collectors, which capture heat from the sun
15 and inject that heat into the plant's boilers reducing the
16 need for burning natural gas and reducing 756 metric tons
17 of CO2 per year.

18 CDI is one of the nation's leading's dairy co-ops
19 with seven dairy processing facilities in California. And
20 with the support of the California Energy Commission it is
21 setting best practice examples for fuel-less heat solutions
22 that can be adopted in the food and beverage industry.

23 So thank you again, for giving California Dairies
24 the opportunity to prove that sustainable businesses
25 practices and innovative solutions pay off and benefit both

1 the industrial sector and local communities.

2 CHAIR HOCHSCHILD: Great. Thank you.

3 Are there any other members of the public wishing
4 to speak on this item, Noemi?

5 MS. GALLARDO: No written comments. I'll defer
6 to the Secretariat Cody for anyone else on the line.

7 MR. GOLDTHRITE: No, we have no one else on the
8 line.

9 CHAIR HOCHSCHILD: Okay, let's move to
10 Commissioner discussion, Vice Chair Scott?

11 VICE CHAIR SCOTT: Yes. I would just like to
12 note again the excellent work that I think our staff has
13 done in reaching out to the food producers. As you all
14 know a few years ago food producers may not have been an
15 area that we worked with in so much detail. I think the
16 team worked really hard to put together a program that
17 works well with food producers. And I think the response
18 that you've seen back from the food producers in working
19 with us has been phenomenal. So I'm really excited to see
20 this project here with the California Dairies.

21 I appreciate how much food producers around
22 California are willing to work with the Energy Commission
23 and test out some of the technologies from FPIP, as you
24 guys call it or drop-in technologies. (phonetic) Some of
25 them are newer kind of cutting-edge technologies that we're

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1 working to demonstrate together on, but all of them are
2 reducing natural gas consumption, sometimes water
3 consumption. They are reducing greenhouse gas emissions
4 and often that translates into criteria pollutant emissions
5 reductions as well.

6 So it's a great set of projects. I'm excited
7 about the California Dairies one and recommend that to you.

8 CHAIR HOCHSCHILD: Fantastic. Are there other
9 comments on this from Commissioners? Commissioner
10 McAllister.

11 COMMISSIONER MCALLISTER: Yeah, just briefly I
12 remember three or however many years ago it was when this
13 idea first came up, and before the program existed and was
14 still just an idea. And Secretary Ross convened meetings
15 and there was palpable sort of like, okay how is this going
16 to work? And there was just no track record of this kind
17 of collaboration, certainly with the food production
18 industry.

19 And so fast-forward to today and it's just so
20 great to see the level of trust and collaboration and the
21 platform now that exists and is very solid for this kind of
22 work. And hopefully it's something we can keep funding and
23 keep moving forward and keep really innovative in this key
24 area of the economy. So really happy to see this project.

25 CHAIR HOCHSCHILD: Great. Vice Chair Scott would

1 you be willing to move the item?

2 VICE CHAIR SCOTT: Yes, I move approval of Item
3 11.

4 CHAIR HOCHSCHILD: Commissioner McAllister, would
5 you be willing to second?

6 COMMISSIONER MCALLISTER: I will second.
7 Absolutely.

8 CHAIR HOCHSCHILD: Okay. All right, all in
9 favor? Vice Chair Scott?

10 VICE CHAIR SCOTT: Aye.

11 CHAIR HOCHSCHILD: Commissioner McAllister?

12 COMMISSIONER MCALLISTER: Aye.

13 CHAIR HOCHSCHILD: Commissioner Monahan?

14 COMMISSIONER MONAHAN: Aye.

15 CHAIR HOCHSCHILD: Commissioner Douglas?

16 COMMISSIONER DOUGLAS: Aye.

17 CHAIR HOCHSCHILD: And I vote aye as well. Item
18 11 passes unanimously.

19 Let's move on to Item 12, Demonstrating
20 Replicable, Innovative Large-Scale Heat Recovery in the
21 Industrial Sector

22 MR. MORI: Hi. Hello?

23 CHAIR HOCHSCHILD: Yeah, we can hear you. Go
24 ahead.

25 MR. MORI: Hi. Good morning. Good morning Chair

1 and Commissioners my name is Kevin Mori, spelled K-e-v-i-n
2 M-o-r-i. I am a Mechanical Engineer from the Energy
3 Efficiency Research Office of the Energy Research and
4 Development Division.

5 Today staff is recommending approval of two
6 projects that will help the industrial sector reduce
7 greenhouse gas emissions through waste heat recovery.
8 These systems must focus on being replicable and scalable
9 throughout the industrial sector and must achieve a simple
10 payback of five years or less to show promise of market
11 penetration.

12 Item 12a is with the Gas Institute of Gas
13 Technology, or GTI. GTI is demonstrating a low-cost heat
14 exchanger system that extracts waste heat from brew kettle
15 flue gas. They will implement an automated control system
16 that will regulate the amount of heat extracted to prevent
17 condensation build-up. Using advanced heat exchanger
18 tubes, this system is expected to extract 60 percent of the
19 waste heat from the flue gas for the facility's hot water
20 processes. If adopted widely in California, this system
21 has the potential to reduce GHG emissions by approximately
22 35,000 metric tons of CO2 per year.

23 Item 12b is with Trevi Systems. Trevi is
24 developing and testing a large-scale, low-costing plastic
25 heat exchanger for low temperature waste heat recovery at a

1 micro-brewery and a winery in the Sonoma County. This
2 technology uses thin-walled polymeric tubes that are self-
3 supported in the flue gases to extract up to 95 percent of
4 the waste heat. The recovered waste heat will be used for
5 hot water processes to substitute steam production. And
6 this project is estimated to reduce greenhouse gas
7 emissions by 170 metric tons of CO2 per year.

8 In closing, again staff is recommending approval
9 of these two agreements. Thank you and I'd be happy to
10 answer any other questions. This concludes my
11 presentation. We also have Virginia Lew and Christian
12 Fredericks from the project.

13 CHAIR HOCHSCHILD: Great, thank you, Kevin.

14 We'll go to public comment. Is Brian Kolodji on
15 the line?

16 MR. KOLODJI: Yes I am. Can you hear me?

17 CHAIR HOCHSCHILD: Yes, go ahead sir.

18 MR. KOLODJI: Great. "Then the Lord God formed
19 the man out of dust of the ground and blew into his
20 nostrils the breath of life and the man became a living
21 being."

22 Joe Hochschild, I begin with this, because I'm
23 amazed with the power of breath, especially God's breath.
24 And as a chemical engineer with many family members in the
25 health field, two nurses' students at pre-med and an

1 emergency room nurse, wife, as a chemical engineer I would
2 make a man probably by fabricating bones, muscles, putting
3 them together. And just it sort of just seems to me being
4 that he simply did it -- amazing that he simply did it with
5 breath.

6 I start with a story, because our own breath is
7 amazing. I mention this fact for a reason. Industrial
8 power and transportation sectors around the globe are
9 heading towards production of a hundred billion tons of CO2
10 per year with machines. Unbeknownst to many, the growing
11 human population and other living animals want to expel
12 breath through the biological process of common
13 respiration, producing in excess of 10 billion tons of CO2
14 per year. Only a chemical engineer would probably be
15 interested in this stat of which I did a rough calculation.

16 CO2 is necessary for life. That's my point.
17 This is because the CO2 picked up by plants and trees,
18 flora. Reverse the respiration process using
19 photosynthesis to manufacture oxygen, which is what is
20 inhaled by the previously mentioned humans and fauna to
21 produce CO2, and the cycle continues. God made this
22 wonderful cycle and I'm inspired to prayer to use it to
23 solve the global warming crisis caused by this imbalance of
24 these man-made sectors producing CO2.

25 Chair Hochschild, first I want to thank you for

1 this process with this new process and the other processes.
2 And even through the evolution of applying for these grants
3 I've met some fabulous people at CALGreens, the Commission
4 starting with Phil Dyer and Marissa Sutton in person. And
5 also I'm spoken extensively to Kevin Mori and his fine team
6 as well as the Ombudsman. I congratulate you on developing
7 the Ombudsman process through Jennifer Martin Gallardo.
8 I'm very satisfied with that, so I wanted to emphasize
9 that. Thank you.

10 In short Kolodji Corp. is owned by Brian Kolodji,
11 the speaker here. It has intellectual property patenting
12 rights for energy carbon management and another company are
13 called Black Swan, LLC. They own the -- that company has
14 the property rights. And I'm a California company trustee,
15 I pay my taxes.

16 But I told you -- me, I am a chemical engineer
17 who attended Compton College in the ghetto of Los Angeles
18 and then graduated from USC to a full state scholarship
19 from my mentor, Governor Brown, whom Governor Newsom knows
20 very well. (Overlapping colloquy)

21 And also I want to brief thank Bob Weisenmiller,
22 who is your retired Chairman and who I understand --

23 CHAIR HOCHSCHILD: -- Mr. Kolodji, I'm sorry,
24 sir. Thank you, sir. At this point I'm going to have to
25 ask you to wrap up. Thank you. Unfortunately, we can only

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1 do three minutes per public comment, but thank you for
2 calling in. And any additional comments you want to make
3 you're welcome to submit to our Public Advisor. And thank
4 you as well for your kind words about Jennifer Martin
5 Gallardo as she's working very hard on that.

6 Are there any additional public comments on this
7 item before we move to Commissioner discussion?

8 MR. GOLDTHRITE: Yeah, we have Sean Kolodji From
9 Kolodji Corporation also on the line.

10 CHAIR HOCHSCHILD: Okay, Sean, go ahead.

11 MR. SEAN KOLODJI: Sure. So I just wanted to
12 mention that I think that the critical elements of this
13 project are really important, taking carbon dioxide and
14 ensuring that we not only get CO2 reductions, but also that
15 we use it to increase agricultural production.

16 I think one of the key points that has been
17 raised in the content of the proposal, is that when we look
18 at all of the uses, all of the CO2 production that is
19 making sure that we take the emissions from the actual
20 plants and convert it to into the carbon cycle and make use
21 of that. That that's really important, so please do review
22 the proposal and give it consideration. Thank you.

23 CHAIR HOCHSCHILD: Thank you.

24 Are there any additional members of the public
25 wishing to comment on this item, Noemi?

1 MS. GALLARDO: Let's first check with Cody, the
2 Secretariat, to see if there's anyone else on the line.

3 MR. GOLDTHRITE: No, we have nobody else on the
4 line.

5 MS. GALLARDO: Okay.

6 CHAIR HOCHSCHILD: Okay.

7 MS. GALLARDO: I do have some written comments
8 that I'd like to relate.

9 CHAIR HOCHSCHILD: Yeah, go ahead.

10 MS. GALLARDO: The first comment is from Swan
11 Kolodji. That's spelled, S-w-a-n, last name is K-o-l-o-d-
12 j-i. Swan says, "I am Brian Kolodji's daughter. My dad's
13 company, Black Swan's technologies were invented to reduce
14 emissions and promote growth in the agriculture sector.

15 "The technology of Black Swan is unique due to
16 the novelty of the technologies as well as making the
17 emissions profitable. Funding is very important to the
18 success of Black Swan technology because it is a small
19 majority-family-run company. Thank you for your time."

20 The second comment is from Bruce A. Kimball of
21 The Greenleaf Group. Bruce is spelled B-r-u-c-e, middle
22 initial A, last name is K-i-m-b-a-l-l, Greenleaf Group, G-
23 r-e-e-n-l-e-a-f, all one word.

24 Bruce says, "I am writing to express my support
25 for the proposal submitted by Brian Kolodji of Kolodji Corp

1 and Black Swan, LLC.

2 "For most of my career, as a scientist with the
3 USDA Agricultural Research Service, I have studied the
4 likely effects of the increasing atmospheric CO₂
5 concentration on the growth, yield, and water use of
6 agricultural crops, especially tomatoes cotton, wheat,
7 sorghum, and orange trees. I have more than 330
8 publications on my resume, and I am a Fellow of the
9 American Society of Agronomy. I officially retired in 2010
10 from USDA-ARS.

11 "I can assure you that the CO₂ fertilization
12 effect on agricultural crops is real, and my group and
13 others from around the world have observed substantial
14 yield increases of tomatoes, cotton, wheat, and especially
15 the orange trees.

16 "Since 2018, I have provided advice and numerous
17 technical papers and made presentations on crop CO₂
18 enrichment to promote and encourage the efforts of Black
19 Swan LLC to utilize CO₂ from power plant stack gas to
20 stimulate agricultural crop growth before it is released to
21 the atmosphere. Therefore, I strongly encourage your
22 approval of the Kolodji proposal."

23 The final comment is from Mark E. Russell.
24 That's spelled M-a-r-k, middle initial E, Russell is R-u-s-
25 s-e-l-l, of Radian, R-a-d-i-a-n Design Group, Inc.

1 Mark says, "I am writing to support the grant
2 application submitted by Brian Kolodji of the Kolodji
3 Corporation. As a licensed architect born and raised in
4 California, I have become keenly aware of the state's
5 ongoing challenges of controlling the degradation of our
6 air quality in our state. That is why we need to test all
7 available technologies to reduce emissions in the Southern
8 San Joaquin Valley.

9 "I was the County of Kern's Architect for 18
10 years of my professional career. In that role I was
11 required to build, maintain or upgrade over 330 facilities
12 the County owned, occupied or leased. Not one of these
13 facilities, which included courts, jails, hospitals and
14 office buildings use anything but traditional HVAC
15 applications with gas boilers for heating or water heating
16 applications. Most of these facilities are 25 to 40 years
17 old and in need of renovation.

18 "Why not start with the area needing the most
19 aggressive air pollution control, the Southern San Joaquin
20 Valley, and allow Kolodji Corporation to test and monitor
21 the applications that could contribute to improving air
22 quality while reducing fuel consumption. This would become
23 a standard that all counties and their associated aging
24 stock of commercial buildings, both public and private,
25 would benefit from similar renovations without fear of

1 unproven technologies.

2 "Please support the grant application that we
3 believe can set a new standard for renovating these
4 antiquated traditional boiler and chillers systems used
5 throughout the State of California."

6 That concludes the public comments that I
7 received.

8 CHAIR HOCHSCHILD: Thank you, Noemi.

9 And thank you to the members of the public who
10 commented in written and spoken form.

11 Let's move on to Commissioner discussion, Vice
12 Chair Scott.

13 VICE CHAIR SCOTT: Yes, so on this item you will
14 notice that we have proposed funding technologies that
15 reduce greenhouse gas, water, natural gas criteria
16 pollutants across several of our programs. So you heard
17 that from we had some EPIC proposals, we had some FPIP
18 proposals, and this is a PIER natural gas proposal.

19 The team has worked closely amongst itself to
20 make sure that these projects are all complementary and
21 non-duplicative and kind of all moving the industry forward
22 in different parts. And so I just wanted to recommend that
23 to you because you've probably noticed a theme to some of
24 these grants that have come forward today.

25 And that's all I have to say about that on Item

1 12. We'll see if there any other comments.

2 CHAIR HOCHSCHILD: Unless there's other comments,
3 wave your hand, let's entertain a motion. Madam Vice
4 Chair?

5 VICE CHAIR SCOTT: Yes, I move approval of Item
6 12.

7 CHAIR HOCHSCHILD: Okay, Commissioner Douglas
8 would you be willing to second?

9 COMMISSIONER DOUGLAS: Yes, second.

10 CHAIR HOCHSCHILD: Seconded by Commissioner
11 Douglas. Let's call the roll. Vice Chair Scott?

12 VICE CHAIR SCOTT: Aye.

13 CHAIR HOCHSCHILD: Commissioner Douglas?

14 COMMISSIONER DOUGLAS: Aye.

15 CHAIR HOCHSCHILD: Commissioner McAllister?

16 COMMISSIONER MCALLISTER: Aye.

17 CHAIR HOCHSCHILD: Commissioner Monahan?

18 COMMISSIONER MONAHAN: Aye.

19 CHAIR HOCHSCHILD: And I vote aye as well. That
20 item passes unanimously.

21 Let's move on to Item 13, the Minutes. Are there
22 any public comments on the minutes?

23 MS. GALLARDO: No written comments. This is
24 Noemi Gallardo, Public Advisor. I'll defer to Cody if
25 there is anyone on the line.

1 MR. GOLDTHRITE: Yeah, but I have no public
2 comment on the line.

3 CHAIR HOCHSCHILD: Thank you. Is there a motion,
4 Vice Chair Scott?

5 VICE CHAIR SCOTT: Yes, I will move approval of
6 the minutes.

7 CHAIR HOCHSCHILD: Okay, Commissioner McAllister
8 would you second?

9 COMMISSIONER MCALLISTER: I will second, yes

10 CHAIR HOCHSCHILD: All right. Let's call the
11 roll. Vice Chair Scott?

12 VICE CHAIR SCOTT: Aye.

13 CHAIR HOCHSCHILD: Commissioner McAllister?

14 COMMISSIONER MCALLISTER: Aye.

15 CHAIR HOCHSCHILD: Commissioner Monahan?

16 (Silence on the line.) Commissioner Monahan, I'm assuming

17 --

18 COMMISSIONER MONAHAN: Aye.

19 CHAIR HOCHSCHILD: -- can you say, aye? Thank
20 you.

21 Commissioner Douglas?

22 COMMISSIONER DOUGLAS: Aye.

23 CHAIR HOCHSCHILD: And I vote aye as well. The
24 minutes passed unanimously. Let's go to Lead Commissioner
25 and Presiding Member Reports beginning with Commissioner

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1 Monahan.

2 COMMISSIONER MONAHAN: Yeah, well I wanted to
3 mention that I had mentioned to you all at our last
4 Business Meeting that we were going to host a Fuels and
5 Transportation Division all-hands webinar. And we did do
6 it. I just want to say it went really, I think, pretty
7 well.

8 Noemi was one of the speakers, so was Lenna
9 Ledesma from Human Resources and we also had Lupe
10 Williamson from CNRAC (phonetic) as well as Kevin. And
11 I've got to say Lindsay Buckley was key in pulling this
12 together, so if you need to host a webinar I would really
13 recommend consulting with her. She knows what she's doing.

14 And we did a survey afterwards. We asked folks,
15 "Well did you like it? What did you, what didn't you like?
16 What could we do better?" And we got a very strong, nearly
17 95 percent of the respondents said they rated it excellent
18 or very good. So that was a good sign to us that we need
19 to continue to do these kinds of webinars, especially in
20 this shelter-in-place and especially, I think as Kevin
21 transitions out and FTD is going to be going through a
22 leadership change, it'll be even more important.

23 But if anybody is interested we can share the
24 webinar. We recorded it and if you want it, I can share it
25 with you. Just if you're just thinking about, "Well what

1 can I do for the folks that I'm Lead Commissioner over?"

2 It might be just something to consider.

3 I also wanted to say that so much of the work,
4 and I'm sure you all are facing the same issue, that so
5 much of our work is -- being COVID and the economic
6 implications -- is really weighing I think heavily on me
7 and the folks in the Fuels and Transportation Division.
8 And I think across the whole agency about, "Well how do we
9 leverage our funds the most effectively so that we can help
10 support an economic recovery, get jobs on the ground and
11 make investments that we need both to help California
12 economically and help people struggling. But also to
13 continue progress on clean energy."

14 And so in terms of the IEPR reports we are really
15 refocusing it or expanding the focus maybe to also include
16 well what are the impacts of COVID-19 to your industry in
17 the clean transportation world? And what can we do as a
18 state to support you?

19 So I feel good about the fact that we have
20 pivoted pretty quickly to think more about COVID and its
21 implication for our strategies.

22 On the Clean Transportation Program so we were, I
23 don't know if you may recall, we were kind of moving
24 towards this three-year plan. We had an Advisory Committee
25 meeting pre-COVID. So a lot of the comments that we got I

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1 would just say like they were through a pre-COVID lens, and
2 I think we all did. Like the first month we were all kind
3 of struggling with what is this? What is this? How long
4 are we going to be sheltering in place? What? What?

5 So and now we all I think have a more realistic
6 world view about, well we could be sheltering in place for
7 a long while. We got to really figure out how to use Zoom
8 to our advantage. And we have to rethink our strategies
9 based on that.

10 So in terms of our thinking for the investment
11 plans for the Clean Transportation Program we are
12 prioritizing what we're calling high-road, shovel-ready
13 projects, like investments in EV charging infrastructure.
14 And looking at ways that we can include more of those high-
15 road components in our scoring criteria so to make sure
16 we're getting jobs out there fast, but also good jobs.

17 And we are having another Advisory Committee
18 meeting in June. We're going to be meeting with the DACAG.
19 And we're going to come in with this framing of like, "Hey
20 the world has changed so dramatically, so now what do we
21 do? And what do you think about the changes that we're
22 making in lieu of COVID?" So I'm really looking forward to
23 that conversation with our stakeholders.

24 Our goal is to bring this plan to you this summer
25 by July or at the latest August. And I think though we had

1 planned like this three-year oh, we'll just make minor
2 tweaks going forward, but I don't know how much minor -- I
3 don't know if we'll be doing minor tweaks, because of the
4 enormity of the situation we're facing and our desire to
5 remain nimble to new opportunities. So we'll continue to
6 focus of course on zero-emission, transportation and near-
7 zero emission transportation to help us reach our 2045
8 goals, but also incorporating the strong focus on jobs and
9 the economy.

10 Just a heads-up the Vehicle-Grid Integration
11 Roadmap is nearing its final stages. Vice Chair Scott,
12 you'll be happy to hear that. And it'll be out, a draft
13 will be available in June. We're going to be sharing some
14 of the early results, the results of that in an IEPR
15 workshop with Commissioner Rechtschaffen from the CPUC, so
16 excited to move forward to get to the finish line on that.

17 We're still aiming for our report on what are the
18 charging needs to reach 2030, we're still aiming for that
19 by the end of the year. That's required by 2127. Well, I
20 keep telling staff in terms of the priority it's like let's
21 get money out the door and let's make sure we don't -- our
22 staff has the capacity to do a good job and do it well
23 without overly taxing themselves to meet deadlines. So I'm
24 being more flexible on deadlines in support, but really
25 prioritizing the getting the money out the door as soon as

1 we can.

2 CHAIR HOCHSCHILD: Great. Thank you,
3 Commissioner Monaghan. Let's move on to Commissioner
4 McAllister.

5 COMMISSIONER MCALLISTER: Okay. Well, thanks, so
6 yeah just a few things to report. I guess I wanted to
7 just, I guess highlight and express appreciation for our
8 colleagues over at the PUC and also at the ARB
9 (indiscernible) so for all of the collaboration that we've
10 managed to pivot. But certainly with the PUC we've got a
11 lot going on, and you know a lot of really important
12 groundbreaking work that we're working together on, looking
13 at forecasting support and doing a lot of modeling
14 associated with SB 100 and a number of other areas.

15 Certainly, yeah, so I wanted to just highlight
16 that, that's there's just been tremendous amount of
17 interaction going on that's positive. And we're really
18 still focused on our goals even though we're all remote,
19 particularly with Commissioner Randolph and Commissioner
20 Rechtschaffen on those issues, natural gas and kind of
21 planning some of our tools going forward. and then also of
22 course under President Batjer's leadership.

23 The second thing I wanted to mention is building
24 on something Commissioner Monahan just said about jobs. So
25 I think I've mentioned that we -- I highlighted in my

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1 comments a meeting or two ago about the U.S. Energy and
2 Employment Reports that came out a couple months now. And
3 we've sponsored actually in partnership again with the PUC,
4 a California version of that, that got a little bit of a
5 deeper dive, sectoral analysis and things like that, on the
6 energy jobs. A little bit more focus on clean energy jobs
7 of course, this being California where that's a bigger
8 emphasis than average across the country. And that is
9 basically ready pending some updates to take into account
10 the latest jobs numbers.

11 You know, every month is kind of critical at this
12 point in terms of understanding where the job market is
13 going. And the hemorrhaging across the energy sector of
14 jobs and certainly including the clean energy sector, which
15 is well over half of our energy jobs in the state like 60
16 percent or so. A lot of those jobs if they haven't
17 evaporated they're kind of on hiatus. And some of them are
18 essential and still working, actually a lot of them are,
19 but still the impacts have been tremendous.

20 And so our focus is trying to figure out how to
21 pivot and support, and really be ready with whatever
22 stimulus money might be coming in whatever proceedings
23 we've got going, like the Building Code Update, AB 3232.
24 Those sorts of initiatives, really to try to look through
25 they employment and economic lenses in a more intentional

1 way. We always do that to some extent, but in a much more
2 central and intentional way.

3 So that report, we'll be seeing it in the coming
4 weeks or months. But the release is pending some updates
5 to make sure that the job numbers -- the original report
6 was definitely with a 2019 lens when all of the survey work
7 was done in 2019, the report was developed and ready to go
8 after COVID hit and the job landscape really changed. And
9 so we're trying to reflect that in the report, but also
10 make it kind of aspirational in terms of well this previous
11 jobs landscape is something we can aspire to get back to
12 and kind of blast beyond. And eventually double or triple
13 or more those clean energy jobs as we retrofit all the
14 buildings and we really ramp up that aspect of our economy
15 to meet our long-term climate change and energy goals.

16 So I think that that will still be a great
17 resource that we can all use to highlight the part of
18 California's economy. Nationwide, it's like 2 percent of
19 our jobs across the country are clean energy jobs. That's
20 about half of the overall energy jobs, California is even
21 more so. So it's a compelling story and as we come out of
22 the economic travails really that we're in right now, it'll
23 be relevant.

24 Let's see, I wanted to just mention a couple of
25 things. I gave a -- along these lines with jobs, it's all

1 about jobs and stimulus and trying to figure out how we
2 navigate in these times, the IEA, the International Energy
3 Agency in Paris put together a webinar on stimulus and
4 energy efficiency a couple weeks ago. And that, the video
5 or audio is now posted actually, so folks can have a look.
6 But it was the biggest webinar that the IEA has ever done.
7 The attendance was well over a thousand people and all over
8 the world. And so much so that their system crashed and
9 there was technical difficulties. But eventually it all
10 got back on track. And there's just a huge amount of
11 interest in how to in governments and California just has a
12 lot of good examples, we've talked about them some here,
13 but just knowing your building stock, understanding the
14 industrial landscape, understanding where those
15 possibilities are and where projects can go to be done
16 expeditiously.

17 We learned a lot from the ARRA period that we
18 were still able to implement, but more recently we've
19 really gotten our ducks in a row on how to make that
20 happen. And this is a big challenge. We're going to need
21 all of our tools in our toolbox. So that also can be a
22 good resource And I think the IEA is going to follow up
23 with more efforts along those lines.

24 And last thing, I did an interview with Amy Holm
25 from The Climate Registry. She's got this series going

1 that it's "Coffee With Climate Leaders." And actually
2 California again is of interest to her audience and to the
3 sort of climate-oriented -- any climate-oriented effort
4 really. They're the ones together with The Climate
5 Registry" and Climate Resolve, or the Climate Reserve are
6 the ones that sponsor the state-level trips to the COP and
7 Clean Energy Ministerial and do a lot of great work getting
8 sub-national representation to those global meetings.

9 And so they sponsor a bunch of states including
10 some California folks, including myself, to go to Madrid.
11 And so their audience is really thought leadership. and
12 they do a great job of marshalling those efforts and making
13 sure that we're present. And I think, I believe, the idea
14 is that Glasgow does it in about a year, the next COP is a
15 year later, a year postponed.

16 But the sub-national conversation is really
17 poised to almost take over in a lot of important ways,
18 because there's just this increasing recognition that
19 states like California and regions across the globe are
20 leading in ways that may -- they have fewer constraints
21 really in some ways than our nation. So anyway that's a
22 good effort.

23 And then finally I just wanted to mention the
24 workshop for Assembly Bill 3232 that's happening next
25 Friday, the 22nd. That's our building decarbonization

1 effort and staff is working hard on preparing for that that
2 and starting to get the document together. And it will be
3 I think an interesting discussion, obviously all virtual,
4 but interesting discussion. And I just wanted to invite
5 all of you for that. So thank you.

6 CHAIR HOCHSCHILD: Great. Thank you.

7 Vice Chair Scott?

8 VICE CHAIR SCOTT: Excellent. Well, I just had a
9 couple of things to mention to you all. Last week
10 Commissioner Douglas and I had a chance to, we kind of
11 threw an all-staff town hall follow-on to the one that
12 Chair Hochschild and Commissioner McAllister did about a
13 month ago. And I wish that we could have had 600 little
14 squares up here on the Zoom. I really would have liked to
15 see everyone's face. I do miss really getting to see
16 everybody in person each day, but it was really a nice
17 opportunity for us to talk with the Energy Commission team
18 and highlight and thank them for the excellent work that
19 they have done.

20 It has not been easy, right? Everyone is
21 balancing their children and parents and pets and all kinds
22 of things that are going on, homeschooling while they are
23 also trying to telework. And I think our team has done a
24 laudable job staying on top of the things that are
25 incredibly important, showing some flexibility, both for

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1 ourselves and on teams but also with the folks that we work
2 with.

3 And the Prop 39 extension of the deadline that we
4 did earlier today is just a great example of that. And so
5 the work that everyone has done to be flexible, to be
6 nimble, to be proactive and to be responsive to keep the
7 important mission and work of the Energy Commission going
8 is just incredibly important.

9 And as you all know, that ties back to jobs, the
10 clean energy economy and so many others of our goals, so I
11 just can't -- I can't overstate the importance of that and
12 our appreciation. And so I really appreciated the chance
13 to have the opportunity to talk with our staff about that a
14 little bit. We also had the opportunity to hear from Drew
15 and from Lenna and also from Justin about some of our
16 emergency services. So I hope that folks found that really
17 interesting and valuable, I know that I did.

18 I also wanted to highlight that within the
19 Research team we're also thinking through some of these
20 strategies or having strategic thoughts like Commissioner
21 Monahan laid out in terms of our investments and what to
22 do, prioritizing them, how to invest. And that intentional
23 planning that you heard Commissioner McAllister mention,
24 that's very much taking place through the Research team as
25 well.

1 And you know there are also a few things in that
2 space with this clean energy economy. A lot of what we are
3 working with on the research side are startups and thinking
4 through strategically how can the Energy Commission help
5 these startups to weather the storm. And we fully
6 recognize that we're just a small piece of that puzzle, but
7 making sure that we continue to be intentional and
8 effective in that space. And so we are brainstorming ideas
9 there.

10 And also on our customer service side I want to
11 make sure to thank our Chief Counsel's Office, the
12 Contracts, Grants and Loans, our IT team, our Executive
13 Office, the Deputy Directors and really everyone across the
14 Commission who is making this happen. I think that we have
15 done a really great job. And it's been like what are we
16 on, day 61 or something, or 62. And the magnitude of the
17 transition that we've made and kind of to keep moving
18 without really missing a beat I think really is quite
19 impressive. And we couldn't have done it without everyone
20 rolling up their sleeves and jumping in, so I want to say
21 thank you so much for that as well.

22 And then a couple of things looking forward is I
23 have one small piece of IEPR with Chair Hochschild. We are
24 going to be doing an IEPR workshop on microgrids. And we
25 are working very closely with our colleagues at the PUC and

1 our wonderful IEPR team to do that virtually. It may be in
2 person, but it is likely that it's going to be virtual.
3 And to make sure that we have put it together in a format
4 that continues to be engaging and bring forth the same
5 level and caliber of data and information that folks are
6 used to seeing in IEPR workshops, so I'm looking forward
7 to that a lot.

8 And then I also wanted to flag, and maybe Drew
9 will mention this in his Executive Director Report or maybe
10 at a later time, that we are looking into a task force on
11 telework and what that should look like. And we do
12 recognize that some items of folks' job descriptions don't
13 lend themselves necessarily to being at home only.

14 For example, if you're supposed to be out at a
15 project site and taking a look at it to see how that
16 project is coming along, to make sure things are moving
17 apace you can't do that if we're sheltering in place. And
18 kind of trying to think through if there are virtual --
19 maybe there is a Zoom and folks can kind of show you around
20 their workshop or show you around their lab in that way.
21 Really thinking through how we can continue to smartly and
22 effectively do a robust job implementing our programs in
23 the areas where shelter-in-place -- not shelter in place,
24 but in areas where you may need to be someplace other than
25 working from your home. So that's something the Commission

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1 has been very thoughtful about and will continue to be.

2 And so I hope that folks will continue to engage
3 us both internally, things that you think are important,
4 make sure that we're hearing it, we're not missing it. And
5 externally, if folks have great ideas about other things
6 that the Commission could be doing to be flexible and to
7 continue to provide the excellent customer service that we
8 do, we're always open to hearing that. So please make sure
9 that you share that information with us.

10 And that is all that I wanted to share with you
11 all today. Thanks so much.

12 CHAIR HOCHSCHILD: Thank you so much.

13 Let's go on to Commissioner Douglas.

14 COMMISSIONER DOUGLAS: All right. Well, just a
15 very few brief updates. As Commissioner Scott noted the
16 session we were able to have with the Energy Commission
17 staff was really nice. It was great for us. I think it
18 was appreciated. I think it's really nice that we were able
19 to do some of those.

20 And as we have adjusted to the remote way of
21 working and the COVID situation and how that impacts all of
22 our work, my office has been working with the Legal Office
23 and the hearing officers on moving hearings online for data
24 center cases.

25 We've been working very closely with staff in the

1 STEP Division and Electricity Analysis Office to work with
2 power plant donors and just assess and learn about,
3 communicate about steps they are taking to maintain
4 reliability to the power system, ascertain how electricity
5 use in California has changed and could continue to shift,
6 at least while this continues.

7 And I've had the opportunity to make a number of
8 calls and have a number of conversations with industry
9 leaders, really kind of across the clean -- especially
10 electricity -- spectrum to get a sense of how they're
11 adapting and adjusting and what some of the challenges are.

12 So it's been a fascinating time. I think that
13 obviously the state and the Energy Commission have
14 challenges in front of it as we work to meet our goals.
15 And at the same time we are seeing people stepping up and
16 showing creativity and showing a lot of determination. And
17 so I think I'll stop there in terms of my update. And I
18 appreciate hearing from all of you as well.

19 CHAIR HOCHSCHILD: Great, well thank you for
20 that.

21 So first of all I just want to point out we've
22 been meeting for 2 1/2 hours, okay? We're at the end of
23 this thing. We just pushed \$46 million out and I feel
24 really good that the Energy Commission continues to
25 operate. And from my perspective this work-from-home thing

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1 has mostly been working, not that there is not challenges.

2 There clearly are, but we are continuing to
3 advance the mission and serve the priorities of the state
4 and take action that's going to help with the economic
5 recovery and do the sort of seed planting that we need to
6 do. And I just really want to thank everybody on the team,
7 from top to bottom, for staying at it.

8 And also to say this has been the first meeting
9 we've done entirely with Zoom as a Commissioner Business
10 Meeting. And I think this was a home run from my
11 perspective, just a lot of things that I was worried about
12 didn't happen. We have good phone lines and I can actually
13 see everybody's faces, and so this is really -- this
14 experiment has been a success.

15 And I just wanted to recognize Noemi especially
16 and Raj, Patty, Sam, Jason, Courtney and all the others who
17 are involved in this with the IT team, Jerome and others,
18 really tremendous work. This is a great step forward.

19 I also wanted to just invite everybody who's
20 still on the phone, my colleagues who are still on Zoom, to
21 really own this process of finding a replacement for Kevin
22 running the Fuels and Transportation Division. I know
23 we're going to get some great applications. I would like
24 to really cast a net as far and wide as we possibly can.

25 It's an incredible job to give away \$100 million

1 a year. In this case, it will be \$151 is the budget for
2 the program for this year. And to get to work with
3 Commissioner Monahan and on this really important topic of
4 how do we clean up the transportation sector and do it
5 intelligently. And we are going after superstars.

6 And we're on a roll from my perspective this last
7 year, bringing in Noemi Gallardo as Public Advisor has been
8 a home run. Darcy as Chief Counsel has been incredible and
9 so many others, Mike Sokol now running the Efficiency
10 Division and others that are coming in and Lindsay Buckley
11 before that running Communications. We're getting
12 superstars and we want that to continue, so really help us
13 find the very best candidate for that position.

14 I've been continuing to do a whole bunch of
15 activities, but also some public speaking, which is still
16 going on. So we did a webinar with the Clean Energy States
17 Alliance on Monday. We had 700 people on that. It was us
18 in California and NYSERDA. And it was really on the 100
19 percent Clean Energy Standard. And we now have 14 states
20 that have adopted those standards, 10 by legislation, 4 by
21 executive order from Governors' and more on the way.

22 And just be able to share where we are with that,
23 the fact that we are at 63 percent of retail sales being
24 carbon-free today and the price points that we're at, that
25 both solar and wind are cheaper than combined-cycle natural

1 gas. And also the other milestones that we're hitting
2 there was terrific.

3 Tomorrow I'm doing one with Naomi Nichols for the
4 L.A. Business Council. So it's nice to sort of see some of
5 these speaking engagements transition to virtual, and
6 seemingly work.

7 I wanted to especially call out the good work of
8 EAD Division under Siva. I've been asking a lot of those
9 guys. And one of the things that they have produced, I
10 actually want Siva to come back online just give a quick
11 overview of it, is the Energy Commission's sort of
12 thumbnail overview of the key impacts of the COVID-19
13 economic crisis on our energy use trends in California. We
14 have a little dashboard that's on our website.

15 If we could open up Siva's line just to give us a
16 very brief overview of that since that is new.

17 MR. GUNDA: Yeah, Chair this is Siva. Can you
18 hear me?

19 CHAIR HOCHSCHILD: Yes, we can. Go ahead.

20 MR. GUNDA: Yeah and thank you so much, Chair.
21 Thanks for the leadership on this topic that you just
22 presented.

23 So the Energy Commission has launched as of
24 yesterday a new product in response to a request from
25 leadership and as well as media on generally the trends and

1 the changes that we are observing since California went
2 into a state shelter-in-place a couple of months ago.

3 So this document is now online and we will be
4 moving towards changing the document, which is in a PDF
5 form right now, into more of a webpage with the dashboards
6 that public can access and thoroughly look at trends that
7 have been happening over the last couple of months.

8 Just to kind of highlight a few high-level points
9 that we noted in our first version, are for the electricity
10 sector since California's stay-at-home order was enacted on
11 March 19th, 2020. The average weekday demand for
12 electricity in California declined by more than 4 percent
13 in late March and about 9 percent in April compared to the
14 same time last year.

15 On the residential sector, energy use
16 electricity, just looking at the three IOUs the energy use
17 has increased between 8.9 to 12.4 percent comparing last
18 March and April to 2020. Electricity demand is down during
19 the middle of the day than it is during the peak periods
20 and is resulting in steeper ramp-ups in the evening.

21 Moving to the natural gas side, natural gas
22 demand has continued to grow despite the drop in
23 electricity demand. So our natural gas demand during April
24 2020 was up about 6 percent compared to April 2019. Most
25 gains are in the electricity generation sector. This is

1 partly because of the hydro conditions that we observed,
2 the changes in the hydro conditions, that we observed
3 between 2019 and 2020.

4 Industrial natural gas demand has been
5 consistently below 2019 since early April reflecting
6 economic conditions of COVID-19.

7 On the transportation fuel sector, California
8 transportation fuel production saw the following key
9 declines over the last couple of months: Gasoline
10 production declined by 47.5 percent in the state. Jet fuel
11 production has dropped by 68.3 percent. Diesel production
12 decreased by 33.2 percent. And to date, three refineries
13 temporarily shut down in the United States as a whole with
14 one in California.

15 The future of the insights document, as we move
16 forward into the dashboard paradigm, for now we have it in
17 a web page. The link to that would be
18 www.energy.ca.gov/datareports/energyinsights. And you can
19 find it easily through a Google search on the Energy
20 Commission's website.

21 These data points and observations will be
22 updated either weekly or biweekly based on the new data
23 that we receive.

24 In closing, I would like to recognize all the
25 technical staff in the Assessments Division that worked on

1 this and also the Executive Office and media for really
2 helping launch this important product as well as a lot of
3 broader COVID-related coordination that CEC is engaged in.
4 With that, I'll lead back to the Chair. Thank you so much,
5 Chair.

6 CHAIR HOCHSCHILD: Great. Thank you, Siva. And
7 thanks to your team that's terrific work, a really helpful
8 resource.

9 I will stop there. I guess the last
10 (indiscernible) I've been working with Secretary
11 Blumenfeld who's on this Governor's Economic Recovery Task
12 Force chairing the Climate Committee of that. And he has
13 been terrific and just in terms of looking at what
14 solutions we can offer up, so that process is underway for
15 recovery concepts.

16 I'll leave it at that. And then let's go to
17 Executive Director's Report.

18 MR. BOHAN: Thank you, Chair. Can you hear me?

19 CHAIR HOCHSCHILD: Yes, we can.

20 MR. BOHAN: Just a brief report, I wanted to
21 respond to Vice Chair Scott's nice description of the
22 meeting we just had with all staff at the town hall and
23 mentioned the issue of teleworking. We did establish an
24 internal telework task force that has met a couple times.
25 The landscape is rapidly shifting so there's nothing

1 tangible to report in the task force at this point.

2 But as you know, we've also developed a survey
3 for all staff. I sent around the link earlier in the week
4 and we've already gotten 350 responses. And I look forward
5 to reporting the results out soon. The task force is going
6 to use this info to guide how we approach a lot of emerging
7 questions, things like what equipment needs do we have, how
8 do we differentiate between needs and wants, what types of
9 training are staff benefiting from the most and what's the
10 best manner of delivery, so looking at all that stuff.

11 And the survey looks like it's going to be very
12 helpful. Thanks.

13 CHAIR HOCHSCHILD: Yeah, yeah. I would just add
14 to that on the work-from-home. This has been for me a real
15 lesson that I think we can do more this way than I had sort
16 of conceived. I mean I miss the office. I do think
17 there's a lot to be said for this sort of unintended
18 collisions you have with people, the water-cooler
19 conversations, that sort of stuff. But whether that can be
20 trimmed when we get back to some state of normalcy I think
21 it's really this technology development, Zoom and others,
22 has really shown it's possible.

23 And state government is really a signal sender.
24 And I think we can demonstrate some best practices. And
25 the emissions reductions from this are very significant and

1 we have to actually think about that. It's really
2 remarkable to see how clean the air has been in L.A. and so
3 forth, so I'm looking forward to the recommendations and to
4 discussing that together with all my colleagues.

5 Let's move on to Public Advisor's Report.

6 MS. GALLARDO: This is Noemi Gallardo, the Public
7 Advisor. I do not have a report today, but I do want to
8 say thank you to you, Chair, for the kind and generous
9 comments you made you made during your report about me.
10 And I also want to emphasize that I really appreciate the
11 opportunity to advance a clean energy future for California
12 working at the Commission. It's a privilege to work with
13 you, the Commissioners and the staff so thank you so much.
14 That concludes my report.

15 CHAIR HOCHSCHILD: Well, we're the ones who are
16 lucky Noemi for having you here. And for folks who don't
17 know, Noemi, is organizing all of the logistics for this
18 thing. It's very complicated with all the different
19 machinations and she's just super-attentive to detail, so
20 thank you, Noemi, for all that.

21 Is there any public comment on any item at this
22 time?

23 MR. GOLDTHRITE: Yeah, we have Marc Straub on the
24 line.

25 CHAIR HOCHSCHILD: Okay. Go ahead, Marc. Marc,

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1 can you hear us?

2 MR. STRAUB: (Indiscernible.)

3 CHAIR HOCHSCHILD: Marc, can you hear us?

4 MR. STRAUB: Hello?

5 CHAIR HOCHSCHILD: Yes, we can hear you. Go
6 ahead.

7 MR. STRAUB: Okay, perfect. Thanks to the
8 Commission and thanks for hearing me. I'm calling in
9 connection with Item 12. There was an application by
10 Kolodji Corporation about pre- and post-combustion waste
11 heat recovery. I'm kind of a key stakeholder in that. I'm
12 Mike Straub with GENERON. We're a California East Bay
13 company manufacturing membranes here in the East Bay since
14 about 40 years (indiscernible) spin off. We would be part
15 of that project. I think it's quite exciting.

16 It is known that oxygen-enriched air can help to
17 reduce the fuel consumption for power generations. The
18 generation with membrane is not used so far. Typically
19 people use these huge ASUs (phonetic). With our
20 technology, we can generate lower purity oxygen at a more
21 cost-effective and more energy-efficient way.

22 Another advantage is that we also remove the CO2
23 from the waste gas. We're basically sending the CO2 into
24 the combustion chamber and it's then discharged with the
25 flue gas. It means we're not sending it back in the

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1 atmosphere, we're actually sending it in the flue gas. The
2 flue gas is reduced in flow rate by a lot, which reduces
3 the waste heat, hence the product application. We are
4 reducing NOxs by 60 to 70 percent, which is proven in some
5 DOE projects. Again typically it's as viewed our
6 technology has some advantages. We're also more modular.

7 So I would just love to (indiscernible) and hope
8 that this project is reconsidered. I think there was some
9 miscommunication at the beginning. I have not heard
10 Brian's comments. I believe that he had spoken earlier.

11 Anyway, what I'm really excited about is that the
12 enrichment of the CO2 in that flue gas, which is a reduced
13 stream now, and it's enriched to about twice allows so many
14 new innovative technologies to come out of flue gas's use.

15 For instance, in the agricultural industry it can
16 be used. But it can be used for concrete to harden
17 concrete and reduce the amount required for construction.
18 Algae growth is one application. It makes a lot of
19 technologies that make use of the CO2 in the flue gas more
20 viable. And it would be exciting to have a pilot plant
21 here prove that. And then look into new -- and allow to
22 look into more a new and innovative technologies to make
23 use of that CO2 and reduce the CO2 from that
24 (indiscernible).

25 CHAIR HOCHSCHILD: Thank you. Thank you for

1 those comments. I appreciate it.

2 Noemi, do we have any other public comments at
3 this time?

4 MS. GALLARDO: No other written comments. I'll
5 defer to Cody if there's anyone else on the line.

6 MR. GOLDTHRITE: We have nobody else on the line.

7 CHAIR HOCHSCHILD: Okay, let's move on to Item 18
8 Chief Counsel's Report. Darcie, can you hear us?

9 MS. HOUCK: Yeah, and I apologize. I had it on
10 double mute." There was no report today. Thank you,
11 Chairman.

12 CHAIR HOCHSCHILD: Okay. I think we are
13 adjourned. Thank you, everybody.

14 (The Business Meeting adjourned at 12:50 p.m.)

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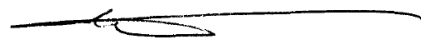
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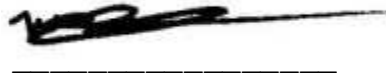
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