

DOCKETED

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In the Matter of:)
) 17-BUSMTG-01
 Business Meeting)
)

APPEARANCES

Commissioners

Robert Weisenmiller, Chair
Karen Douglas
Andrew McAllister
Janea Scott
David Hochschild

Staff Present:

Rob Oglesby, Executive Director
Kourtney Vaccaro, Chief Counsel
Alana Mathews, Public Adviser's Office
Cody Goldthrite, Secretariat
Jared Babula, Staff Counsel
John Heiser
Keith Winstead
Cheryl Closson

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Others Present (* Via WebEx)

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Stephen O'Kane, AES Huntington Beach LLC	2, 3
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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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P R O C E E D I N G S

APRIL 12, 2017 10:02 a.m.

CHAIRMAN WEISENMILLER: Good morning. Let's start the Business Meeting with the Pledge of Allegiance.

(Whereupon, the Pledge of Allegiance was recited in unison.)

CHAIRMAN WEISENMILLER: Good morning. We will hold item one, so let's skip on to Huntington Beach, Item 2.

Hang on, one second. Why don't you and you do your disclaimers?

COMMISSIONER DOUGLAS: Yeah.

COMMISSIONER MCALLISTER: Yeah, so I just have quick disclosures on Items 8, 16a and 16c. On Item 8, UC Davis is a subcontractor and 16a and c, they're the prime. My wife is a professor at King Hall, the law school at UC Davis. I'm just disclosing that, there's no conflict of interest, but just for the purposes of transparency I wanted to disclose that.

COMMISSIONER DOUGLAS: So I will join in this disclosure. I teach a renewable energy law class at King Hall at UC Davis, and while none of these contracts are with the law school I still wanted to make this disclosure, thank you.

CHAIRMAN WEISENMILLER: Please, go ahead.

1 HEARING OFFICER COCHRAN: Good morning. I'm
2 Susan Cochran with the Chief Counsel's Office and I'm very
3 pleased to be standing before you today to present the
4 Presiding Member's Proposed Decision, PMPD, and Committee
5 Errata for the Huntington Beach Energy Project Amendment,
6 which I will be referring to as the amended project.

7 The PMPD can be found in the docket at TN 216247.
8 An Errata has been prepared and was filed on April 11,
9 2017, as TN 216931. A Proposed Order was filed on April 11
10 as TN 216932.

11 In October 2014 the Energy Commission approved
12 the Huntington Beach Energy Project. If built, that
13 project would have resulted in the creation of a 939-
14 megawatt natural gas facility on a portion of the existing
15 Huntington Beach generating station, located on the Pacific
16 Coast Highway in Huntington Beach, California. The power
17 would be generated by two independently operating 3-on-1
18 combined-cycle gas turbine power blocks.

19 In September 2015, AES Huntington Beach, LLC
20 filed a Petition to Amend seeking revisions to the 2014
21 license. The primary difference is a reduction in the
22 project size from 939 megawatts to 844 megawatts and a
23 change in the suite of equipment to produce power.

24 The amended project will be built in two phases
25 if approved. The first phase is a combined-cycle gas

1 turbine with related facilities to produce 644 megawatts.
2 That is subject to a Power Purchase Agreement with Southern
3 California Edison. The second phase is for 200 megawatts
4 from two GE simple-cycle gas turbines LMS-100 PBs.

5 The amended project will take approximately nine
6 years to construct. This length of time is necessary so
7 that the existing Huntington Beach generating station can
8 continue to provide voltage support to Southern Orange
9 County and San Diego. That voltage support is currently
10 provided by synchronous condensers, which will continue to
11 operate until the first phase is built and operational. At
12 that point, the synchronous condensers will cease
13 operations.

14 We've had thoughtful and substantive
15 participation from many parties, including Applicant, staff
16 and Intervenor Rob Simpson, Helping Hand Tools. The
17 Committee and the Energy Commission have received several
18 public comments from interested individuals and agencies,
19 including the California Coastal Commission, the City of
20 Huntington Beach and three letters from members of the
21 public. And a joint letter from several public
22 organizations including the Sierra Club, LA WaterKeeper,
23 Surf and Surfrider Foundation.

24 The Coastal Commission provided comments that
25 were addressed in the PMPD. The Coastal Commission did not

1 submit any comments on the PMPD after its issuance. The
2 City of Huntington Beach was an active participation in the
3 project providing comments on the PSA, the FSA and the
4 PMPD. As with the 2014 project, the Applicant and the City
5 worked together on a visual screening and enhancement
6 program that are reflected in the visual Conditions of
7 Certification. The City does not oppose the project.

8 We received approximately letters from members of
9 the public and public interest groups. And responses to
10 those comments are included in the Errata.

11 As an amendment, the focus and analysis of this
12 project are different from an Application for
13 Certification. The primary question asked in our review of
14 this project is, does the proposed new project include so
15 many changes that new environmental review is required?
16 The PMPD concludes that for the majority of the topic
17 areas, no supplemental or subsequent environmental review
18 is required. The areas that we did include additional
19 information of an environmental nature are in visual and
20 biological resources.

21 The PMPD than makes the finding that with the
22 imposition and implementation of the Conditions of
23 Certification, the amended project will not result in any
24 significant unmitigated environmental impacts. In
25 addition, the PMPD finds that with the imposition and

1 implementation of the Conditions of Certification, the
2 project complies with all LORS, which are Laws, Ordinances,
3 Regulations and Standards. Therefore no overriding
4 considerations are required or necessary.

5 I request that you adopt the Proposed Order
6 approving the Huntington Beach Energy Project amendment.
7 And I'm available for any questions that may arise.

8 CHAIRMAN WEISENMILLER: Thank you. Staff?

9 MR. BABULA: Jared Babula, Staff Counsel.

10 MR. HEISER: John Heiser, Project Manager for the
11 Project. No comment.

12 MR. BABULA: Yeah, we don't have any comments,
13 unless there are specific questions from the Commission.

14 CHAIRMAN WEISENMILLER: Thank you.
15 Applicant?

16 MR. O'KANE: Good morning. This is Stephen
17 O'Kane. I'm Vice President for AES Huntington Beach Energy
18 LLC, the Applicant. We do have a couple of items we'd like
19 to talk with the Committee about -- the Proposed Order --
20 and I'll let my Counsel, Melissa Foster, speak to those.

21 MR. FOSTER: Melissa Foster with Stoel Rives,
22 outside counsel for the Project Owner, AES Huntington Beach
23 Energy. Good morning, Commissioners. We appreciate the
24 opportunity to discuss this and have this before you today.
25 It's been a long road to get here and so we're looking

1 forward to this.

2 There are two items that we'd like to discuss.
3 And we did provide yesterday in the docket, comments on the
4 Proposed Order and specifically the effective dates set
5 forth therein. As well as comments on the Errata and the
6 Condition of Certification GEO-3, as well as proposed
7 revisions we had made to WORKER SAFETY-1 and 2 that were
8 not addressed in the Errata. So we would like to discuss
9 those two topics today in whichever order you prefer.

10 CHAIRMAN WEISENMILLER: Please, go ahead.

11 MS. FOSTER: Okay. I'll start with the Proposed
12 Oder and the effective date in the Proposed Order. There
13 was a comment letter provided by myself yesterday, as well
14 as a letter provided by AES in the docket related to the
15 effective date in the Proposed Order, which is set forth as
16 April 17th. There are no regulations that require the
17 specific timeframe for a Proposed Order to take effect as
18 an Order adopted by the Commission, if a project is
19 approved. And AES would like to request and strongly urges
20 the Commission to make the effective date of the order
21 April 12th, today's date.

22 And I'll let Mr. O'Kane speak of that as to why
23 that is so important to the project.

24 MR. O'KANE: Thank you. In short, every day is
25 critical to our schedule. When we went into a Petition to

1 Amend for a smaller project with minimal areas of
2 environmental analysis required, we certainly expected to
3 be further down the road in our schedule than we are today.
4 Seeing as how there are subsequent work to be done,
5 approvals to made from other agencies subsequent to the CEC
6 decision, every day that an order is not effective, affects
7 the orders and position permit to construct from the South
8 Coast Air Quality Management District. And even the
9 Conditions of Certification that we need to fulfill before
10 we can start construction. So this does impact our
11 construction schedule, which is slated to begin this year.

12 And so we're pleading for a effective date of
13 today as we are down the actual day-for-day analysis of our
14 schedule as we move forward.

15 MS. FOSTER: And for the record, we would like to
16 indicate that the effective date of the Order approving the
17 original Huntington Beach AFC was the date of the approval,
18 October 29th, 2014. And we would just like to request that
19 that happen here as well.

20 CHAIRMAN WEISENMILLER: Okay. Let's first turn
21 to the Hearing Adviser and staff. What's the precedent in
22 this area?

23 HEARING OFFICER COCHRAN: In general, and
24 historically, unless there's been a compelling reason to
25 give a decision an immediate effect making it effective on

1 the Monday following a business meeting maximizes the
2 number of days for the Chief Counsel's Office to analyze a
3 court petition and prepare and file the Commission's
4 response. But that has been the historical precedent, not
5 necessarily one that I can speak to, I've not been here
6 historically.

7 CHAIRMAN WEISENMILLER: I was going to say my
8 impression is it's probably more of a recent precedent as
9 opposed to historic. Chief Counsel?

10 MS. VACCARO: I think the Hearing Officer said it
11 correctly that I think in recent years that's been our
12 custom and practice, but it is not a precedent of the
13 Commission. And you have before you, I think, some
14 advocacy that's giving you I think some compelling reasons,
15 at least in the view of the Applicant for doing something
16 different. I think it's worth considering and from where I
17 sit I have no opposition, from a legal perspective, to the
18 date being moved to today's date to accommodate the
19 Applicant. But of course that's something that's for the
20 Commission to decide.

21 COMMISSIONER DOUGLAS: So I'll just make a brief
22 comment and then ask a question. As our Chief Counsel
23 noted, this is a date that we use that is to some degree
24 for our convenience in terms of maximizing the time that we
25 have to respond to petitions. And because the process has

1 a pretty tight timeframe for responding, that can be
2 helpful to us. And particularly when there might be
3 multiple approvals, for example, or multiple issues that
4 Chief Counsel's Office could be called upon to respond to
5 at the same time. And you never know that, but that's a
6 possibility.

7 Now, on the other hand as has been noted, it is
8 possible for us to go with today's date. And I think the
9 main question that I wanted to ask of the Applicant is
10 whether you have and can give us specific examples of how
11 you would be inconvenienced by this five-day longer
12 effective date, so that we could weigh that against our
13 considerations for preferring the 17th?

14 MR. O'KANE: Specifically, the five days would
15 immediately mean that no other agency: the City, Air
16 Quality Management District could act on their approvals,
17 specifically our permit to construct and encroachment
18 permits in the City of Huntington Beach for an additional
19 five days. It would then also push out our time for
20 preparing all of our pre-construction elements as laid out
21 in the Conditions of Certification. And we have a fixed
22 time schedule for the new CCGT to be online in 2020 and we
23 have a 36-month construction schedule with no way to make
24 that up.

25 Per our Conditions of Certification, we have very

1 restrictive construction hours. So any loss at this point
2 in our schedule is an impact to us and a risk to us to
3 deliver the new power service in 2020.

4 UNIDENTIFIED SPEAKER: You also have a existing
5 license (indiscernible).

6 COMMISSIONER DOUGLAS: You also have an existing
7 license and there are a number of things that you can do
8 today under that license. So are there specific issues
9 that you're waiting on for this amendment?

10 MR. O'KANE: So the specific thing we cannot do
11 is commence with any sort of construction until we've
12 cleared our Construction Conditions of Certification.
13 There are Conditions of Certification for mobilization of
14 construction crews to the site, for ground disturbance such
15 as the initial grading, fencing, etcetera.

16 But then there is a significant set of conditions
17 related to the start of construction, not the least being a
18 federal permit to construct, PSD permit to construct, which
19 cannot be issued from the AQMD until the Order is effective
20 here. So we are pushing all of our abilities to start
21 actual construction with every day lost. So today you're
22 right, we are doing work at the site. We have an existing
23 license, but none of that work goes beyond ground
24 disturbance of site mobilization type work. There is no
25 construction work authorized to proceed yet.

1 COMMISSIONER MCALLISTER: So I have a question
2 for staff. I guess from my perspective rushing things more
3 often than not opens up the possibility for having errors,
4 which then need to get fixed. I mean, a part of our
5 caution here in giving ourselves a few days, as I
6 understand it, is to make sure that all the "I's" are
7 dotted, all the "T's" are crossed. We're going to talk
8 about a few other issues in addition to the effective date,
9 here. So making sure that everything is in place and has
10 been fully vetted, so that everything is in order, I think
11 is part of the reason that staff likes to give themselves a
12 few days.

13 MS. VACCARO: Yeah. If I may answer?

14 COMMISSIONER MCALLISTER: I agree, go ahead.
15 Sure.

16 MS. VACCARO: It's really the Legal Office, more
17 so than staff, just as a point of clarification of what
18 we're talking about here. Really this timeframe that's at
19 issue goes to the possibility of the Commission decision
20 being challenged whether it's a Petition for
21 Reconsideration directly to the Commissioners or something
22 that might be filed in court. And there are very specific
23 timeframes for that.

24 So really, what we're talking about here is more
25 on the legal side. How much time the attorneys who would

1 be representing the Commission, my office, and perhaps with
2 the assistance of the Attorney General's Office would have
3 to review whatever pleadings were filed. And then to have
4 ample time to respond, because a swift response is going to
5 be required. And I think, quite frankly, that's really
6 what's at issue here. It's not so much that there's
7 anything left to do with respect to the decision or the
8 completeness of the record. And that's why I spoke early
9 in this proceeding just to let all of you know that this
10 really is a matter of discretion for the Commissioners,
11 based on what you're hearing from the Applicant. And that
12 you are getting no opposition or pushback from the Chief
13 Counsel's Office, including the hearing officers to the
14 request.

15 But it does seem to us, as Commissioner Douglas
16 has noted, there needs to be a reason for it. A reason for
17 us to deviate from what our custom and practice is and I
18 think that's the dialogue then that Commissioner Douglas
19 has just invited with the Applicant.

20 COMMISSIONER MCALLISTER: Okay. Thanks for the
21 clarification.

22 COMMISSIONER DOUGLAS: And I will add just for
23 the information of anyone who might, or might not be
24 interested, the reason why the original Huntington Beach
25 decision that we adopted had the effective date as the

1 business meeting date is that when we looked out at how many
2 extra days we would get, those extra days were over
3 Thanksgiving, or something like that. And we decided it
4 wasn't very valuable to us in that instance.

5 So I think we've had a good discussion of this.
6 I would be willing, especially given the Chief Counsel's
7 lack of overt unhappiness at this, to go with today's date
8 and I appreciate the explanation. Sometimes, really that's
9 what we need. It's not that every day matters, because it
10 does. It's helping us see the context that you're working
11 within and so that we can weigh it against the
12 considerations that are motivating us.

13 Shall we go --

14 COMMISSIONER MCALLISTER: Oh, yeah. So thanks to
15 the Chief Counsel for that and Commissioner Douglas as
16 well, so I have no opposition either.

17 MS. FOSTER: And before anything else happens I
18 just want to make sure we do have the discussion related to
19 GEO-3 on the record, as well.

20 CHAIRMAN WEISENMILLER: No, please go ahead. I
21 was just going to comment. I mean I had the same reaction
22 to the pleading last night was that you asked, but you
23 really didn't give the rationale for it, so getting that on
24 record today helps understand your request.

25 MS. FOSTER: We appreciate that. Thank you very

1 much.

2 Yesterday, we filed comments on the Errata
3 related to specifically staff and the proposed decision's
4 inclusion of GEO-3, which is a Tsunami Response Plan. We
5 had a discussion about this plan and this condition at the
6 PMPD conference back on March 9th. And AES filed follow-up
7 comments, proposing changes to WORKER SAFETY-1 and 2, to
8 incorporate language related to tsunami plans, similar to
9 what's in the Alamitos PMPD. And those comments were not
10 addressed in the Errata, so we provided those comments
11 again yesterday. And would like to have a dialogue or
12 information with the Hearing Officer and the Committee
13 related to those comments.

14 Specifically that there's no basis for GEO-3.
15 And we think that the proposed revisions we've made to
16 WORKER SAFETY-1 and 2, to include specific tsunami response
17 in the worker safety plans addressed the concerns that
18 staff initially raised. And that were carried over into
19 the PMPD, so we would like to have a discussion about that
20 as well.

21 HEARING OFFICER COCHRAN: If I may, Chair?

22 The discussion on the condition GEO-3, which
23 concerns a Tsunami Mitigation Hazard Plan is addressed on
24 PMPD pages 5.4-2. And the same arguments that Applicant
25 raised in comments on the PMPD and in his letter of

1 yesterday are the same and that is their preference that we
2 amend WORKER SAFETY-1 and WORKER SAFETY-2.

3 In this case while we tried to be as consistent
4 as possible with Alamitos, we determined that the unique
5 site characteristics here at Huntington Beach as well as
6 the existence of what the Committee has identified as a law
7 relating to tsunami hazardous plans, required us or
8 informed us, to adopt a Condition of Certification GEO-3,
9 for a separate Tsunami Hazard Mitigation Plan condition.

10 Now yesterday was the first time that Applicant
11 had asked for any sort of questions regarding -- or any
12 changes to the verification from 60 days prior to ground
13 disturbance, as set forth in the PMPD, versus 30 days prior
14 to construction. Because the Committee had adopted staff's
15 position, I think that we would need to hear from staff on
16 whether that change is appropriate. But the Committee
17 believed that it had already addressed the substantive
18 arguments raised by petitioner in the PMPD, regarding the
19 imposition of this condition.

20 MR. BABULA: So this is Jared Babula Staff
21 Counsel. Staff's okay with the change in the timing that
22 they had suggested, so we would be okay with that. But we
23 agree with the PMPD and the layout and the arguments for
24 why we want to keep GEO-3.

25 HEARING OFFICER COCHRAN: If the Commission were

1 interested in amending the decision as currently set forth
2 in the PMPD, then we would need to add a point to the
3 Errata under Appendix A. I don't have the correct number,
4 but it would be for Appendix A, page 123, change in the
5 language of the verification from, "30 days prior to ground
6 disturbance." Strike that language and insert, "30 days
7 prior to construction."

8 So the entire verification would then read, "The
9 Project Owner shall submit the THMP 30 days prior to
10 construction for CPM review and approval. The Project
11 Owner shall submit any subsequent updates to the THMP to
12 the CPM, within 90 days of an update to an applicable
13 THMP." And again that's page 123 of Appendix A to the
14 PMPD.

15 CHAIRMAN WEISENMILLER: Applicant?

16 MR. O'KANE: Thank you. Well, obviously we're --
17 it's not a preferred position. We thought it was well-
18 addressed in our worker safety plans and our existing
19 Huntington Beach generating station's worker safety plans
20 and emergency response times. We think that it's
21 adequately addressed for tsunami. However, I think this is
22 a compromise position and quite frankly it is the only
23 logical position, since we have already started "ground
24 disturbance" at the site. It would be actually impossible
25 to meet the language of this condition as written if it's

1 adopted today.

2 So we will be amenable to the change in leaving
3 in GEO-3 and taking "30 days prior to construction."

4 COMMISSIONER MCALLISTER: Yeah, so I think we've
5 vetted that issue. Any comment on that Commissioner
6 Douglas?

7 (No audible response.)

8 COMMISSIONER MCALLISTER: Okay. Thanks and I
9 think I'm supportive of the compromise.

10 CHAIRMAN WEISENMILLER: Okay. Let's go to the
11 Intervenor in the case for comments on the decision. And
12 is he in the room or on the phone? Please.

13 (Off mic colloquy to set up audio.)

14 CHAIRMAN WEISENMILLER: Sorry. While we are
15 waiting for the Intervenor, let's see if there are any
16 other public comment in the room, any public comment on the
17 line?

18 (No audible response.)

19 So again any -- first for the Intervenor, are you
20 either in the room or on the line, and then any other
21 public comment?

22 (No audible response.)

23 I think we'll transition to the Commissioners,
24 then. Actually, Public Adviser, could you call the
25 Intervenor and see where they are? Thank you.

1 We'll hold off until she --

2 COMMISSIONER HOCHSCHILD: Just while we're

3 waiting, I just want to clarify, so there is a PPA for the

4 combined-cycle portion of the project, but there's not one

5 for the simple-cycle portion; am I understanding that

6 correctly?

7 HEARING OFFICER COCHRAN: That's correct. The

8 PPA was approved by the CPUC in November of 2015 for the

9 644 megawatts.

10 (Off mic colloquy.)

11 UNIDENTIFIED SPEAKER: I'm sorry, I'm unable to

12 hear you. If you could please check your mute feature?

13 MR. CHANDAN: Unless the Commissioner has

14 something us, we don't have anything to say unless there

15 are some questions from the Commissioner.

16 UNIDENTIFIED SPEAKER: Air District.

17 HEARING OFFICER COCHRAN: I believe that's from

18 the Air District.

19 CHAIRMAN WEISENMILLER: Okay. Thanks for being

20 on the line. We were just checking. We have an Intervenor

21 in the case and we're waiting for his public comment or

22 seeing if there's other public comments. But it's good to

23 know and thank you for being on the line and if we do have

24 questions when we get to the Commission conversation, we

25 will reach out to you.

1 MR. CHANDAN: Sure. Thank you.

2 CHAIRMAN WEISENMILLER: Thank you.

3 (Off mic colloquy.)

4 CHAIRMAN WEISENMILLER: Actually, yeah if you
5 want to make the comment over where the (indiscernible) is,
6 that's probably the easiest way to get to a microphone.

7 MS. MATHEWS: Okay. Good morning, it's Alana
8 Mathews, the Public Adviser. And I directed my staff to
9 contact all the intervenors yesterday, who are on both
10 matters on the business meeting agenda, just to make sure
11 that they knew the item was on, and to see if they had any
12 questions about participating.

13 So Rosemary in my office did speak to Mr. Simpson
14 at 2:48 to inquire if he was aware of the business meeting
15 and to see if he had any questions. And he said he did not
16 have any questions and he knew about the business meeting.

17 I have checked my personal email and we have also
18 checked the PAO email. We have not received any
19 communications of anyone having any trouble getting in,
20 accessing the WebEx to join remotely.

21 However, I did ask Rosemary to call and she was
22 actually actively listening. And so she actually heard
23 your request as well, so she is calling the Intervenor in
24 this matter just to double check. And she's also checking
25 the PAO email to see if anything has changed from the time

1 we started the business meeting as to whether or not anyone
2 has had trouble getting on to the WebEx.

3 CHAIRMAN WEISENMILLER: Thank you. So let's
4 transition to the Commissioners.

5 COMMISSIONER MCALLISTER: So as the Presiding
6 Commissioner on this case, I want to thank all the
7 participants. Certainly Susan, the Hearing Adviser, and
8 staff working on this, Chief Counsel, certainly the
9 Applicant as there's been a lot of back and forth between
10 the Commission and the Applicant, obviously. All the
11 intervenors as well have provided a lot of input and
12 actually had some influence on the areas that they've been
13 open to commenting on. And then the City of Huntington
14 Beach as well, they've been a really positive, active
15 participant in a lot of, I think very relevant and cogent
16 points to the discussion.

17 So we can talk about details that the
18 Commissioners want to talk about, all the different issues
19 that came up. And we solicited some input from the ISO and
20 also we had an ongoing interaction with the Coastal
21 Commission. We also want to express appreciation for South
22 Coast for their participation as well. So everyone of
23 interest in this case has been involved.

24 And obviously this has been an amendment, it's
25 not an original application, so there was a pretty solid

1 basis to work from. So I'm satisfied with where things
2 have come down on this and would recommend approval. I
3 thank Commissioner Douglas as well for her leadership on
4 this, as Lead Siting Commissioner.

5 COMMISSIONER DOUGLAS: I'll just say briefly, and
6 I don't know if other Commissioners have questions or
7 comments, but I'll join in Commissioner McAllister's
8 comments and also thank him for his thoroughness and
9 leadership on this project. And I agree with him and
10 recommend this for the Commission's approval.

11 COMMISSIONER HOCHSCHILD: So I have two concerns.
12 First, I just want to be clear, we're being asked to
13 approve gas capacity for which there's not a contract,
14 okay? So the original needs assessment that we used to do,
15 which we no longer do after restructuring, the vision
16 behind that was to let the market basically determine what
17 comes to us through a contract. So I get that through the
18 simple-cycle -- for the combined-cycle portion, but we're
19 being asked to go beyond that and approve potentially
20 projects for which there is no contract and there is no
21 market-established demand yet, via PPA. That's a concern.

22 And then secondly, I want to just return to the
23 point I made when we had the discussion and vote on
24 Carlsbad, around clutch capacity. Because obviously the
25 standard for new gas capacity in California is high to

1 begin with now given our greenhouse gas goals. But if it's
2 going to be built, my very strong view is that it should be
3 built right with an eye towards doing everything possible
4 to minimize emissions. And to go back to my analogy there,
5 throwing the ball to where the receiver is going, and not
6 to where the receiver is.

7 And I think at that at that time, two years ago,
8 there was even some question about whether we would get to
9 50 percent renewables. I think that debate is settled.
10 We're on track, not just to hit it, but to blow by that
11 goal. We're headed towards a majority renewable grid.

12 And when we talk about what the question is with
13 a clutch, to recap, the issue is that today to get the
14 ancillary services from voltage regulation and inertia, you
15 need to operate the turbine and combust fuel to get those
16 services. The clutch allows you to decouple the generator
17 from the turbine, get the inertia, get the voltage
18 regulation without having to burn gas to do that. And it
19 is highly cost effective to do that. And we're talking
20 about for projects like this, in excess of a billion
21 dollars, a couple of million dollars to do a clutch.

22 I participated in the fact-finding tour with a
23 number of Commissioners from the PUC, a number of members
24 of the Board of Governors at ISO, to go down to see the
25 clutch in operation at LADWP and understand it. And it

1 persuaded me even more that this is the right philosophy to
2 be pursuing. And I agree with President Picker and I agree
3 with agree with the ISO and I agree with NRDC and other
4 stakeholders, who have weighed in to that effect.

5 We got, in November of 2015, a letter from the
6 ISO saying that that should be the default option
7 basically, for all new gas capacity where it's feasible.
8 And I want to compliment Commissioner McAllister in
9 reaching out to ISO to confirm that that's still the case.

10 I did read the correspondence back and the
11 question was for Huntington Beach, does that recommendation
12 still apply? And ISO's response was, in considering the
13 longer view, we believe there is merit to having the clutch
14 capability at Huntington Beach as a prudent hedge for
15 future uncertainty. And to assist in minimizing gas
16 consumption and the corresponding greenhouse gas emissions
17 and criteria pollutants at times when synchronous condenser
18 capabilities would suffice in meeting local reliability
19 needs.

20 They went on to say if we don't do that, as an
21 alternative and at a minimum essentially it should be
22 clutch ready, basically. So we're basically ignoring, from
23 my perspective, the default position of this for something
24 that relative to other requirements that we have put on
25 projects from land acquisition to limitations in operation,

1 the costs are still de minimis.

2 I just would like your thoughts, Commissioner
3 McAllister, having lead on that, what your take is.

4 COMMISSIONER MCALLISTER: Yeah, so I agree with
5 most of what you've gone through there, which is why I
6 reached out to the ISO. And so they have an existing
7 transmission plan and it does not recommend the synchronous
8 condenser capacity in the area of Huntington Beach, within
9 the timeframe of the transmission plan, which is ten years.
10 And so there seems to be a conflict between that and their
11 letter.

12 Certainly, the plant's going to be around longer
13 than that, so I thought it was important to reach out to
14 them. So I did so and got the letter that you read part
15 of. And their analysis has not changed in the transmission
16 plan that they had, so the update won't include that
17 capacity in the timeframe of the transmission plan either.

18 We did then engage the Applicant in a
19 conversation about if there's room at the site for a
20 clutch, if that became an important thing in that area. If
21 it was needed in that area, which of course we don't gauge
22 that need. We don't look at PPAs or the need at this or
23 any other plant. We make sure that if it's built it's
24 fully mitigated relative to the baseline, which was the
25 existing permit.

1 So there is a record about the conversation that
2 we had, and that there is room in there for a clutch. The
3 site has space obviously for these single cycles that may
4 or may not get built. I think there's uncertainty about
5 that and the future's uncertain. And so I pushed that
6 conversation on the record here as much as really I think
7 was reasonable without forcing it into it. And forcing
8 what is an investment of I don't know that I'd call it de
9 minimis, but it would be an investment that we know is not
10 needed in the next decade according to the ISO.

11 So it is possible to put one in, in the future.
12 There's space at the site and we wanted to make sure of
13 that. But it came down short based on this discussion.
14 And then certainly the Applicant and the staff are welcome
15 to comment on this issue, short of imposing a clutch
16 itself.

17 COMMISSIONER HOCHSCHILD: Yeah. Please.

18 MR. O'KANE: Okay. Thanks.

19 We did have a robust discussion about exactly
20 this through our alternative analysis and the planning.
21 And this is one area, you're touching on a couple of areas
22 that are particularly difficult for the public to follow,
23 let alone the professionals in the room to follow, because
24 we are starting to branch off into areas of different
25 jurisdictions. There's no need assessments within our

1 projects, but there is technological advances that we
2 should be looking at.

3 So we've got to be careful that we don't mix up
4 market need contracts, whether or not a contract is needed
5 or not with exactly a siting decision, so there's that
6 issue I think was partially touched on. But for the
7 specifics of clutches I think we have to be very specific
8 on what technology it could be installed on and then
9 secondly the nature of the site. First and foremost, is
10 when we're talking about clutches we're talking about the
11 simple-cycle Phase 2, if you like, for the latter part of
12 the project possibility.

13 And then as we've always communicated to the
14 public right, in this market you really can't go forward
15 with significant investment on power generation and
16 capacity without a guaranteed contract. It is not a
17 merchant type of environment. We would not build a plant
18 on spec. It can't be done, so they won't be built without
19 a contract. And that contract is the one that's going to
20 specify exactly what technology is needed to meet the
21 specific need.

22 Now why have we included it now? And I think the
23 number one reason we've included it now is the length of
24 time this takes. If it's needed it's going to be needed in
25 very short order and somebody's going to make that

1 decision.

2 This is really a broader discussion about the
3 need for the whole Western Los Angeles Basin. At the start
4 of this proceeding, the original proceeding, we had just
5 lost the San Onofre Nuclear Generating Station. We have
6 the rest of the once-through cooling stations are all being
7 retired. I know this is about reducing our dependence on
8 gas fired generation in the whole. Thousands of megawatts
9 are being retired over the next few years and only a couple
10 of plants are actually going to be built to meet that for a
11 very specific need. Now, if that need doesn't come forward
12 in the future that second phase will never be built and
13 something else, may instead, be built in its place.

14 So first and foremost putting too many specifics
15 on what that second phase would be -- your view of the
16 markets, our view of the markets, they're all just as
17 valid. So we think what we've got, if something is needed,
18 what we've presented is good. In terms of a clutch, yes, a
19 clutch could be added to that final design. We haven't
20 gotten into final engineering design for those units. That
21 could be something that could be easily be incorporated.

22 And then I think there's another point that we
23 missed here is that there's already synchronous condensers
24 in operation there, which is the most cost effective thing
25 and the best thing for the environment. If that's all we

1 need, voltage support is, we wouldn't build a gas plant.
2 We wouldn't build a gas turbine and a generator. We would
3 just use a synchronous condenser, in and of itself. And
4 there's going to be a sunset on those synchronous
5 condensers that are already in operation, so this may all
6 be a mute point in the future. There may not be a second
7 phase. We have the ability to add it.

8 And there's other options for providing extra
9 synchronous condenser and voltage support without a gas
10 driver, a gas-fired prime mover.

11 So I think there's a lot of issues we're touching
12 on, but I think the number one thing is that second phase,
13 there is space available to do it. That kind of level of
14 specification in the engineering design is not available
15 yet. We've only done the preliminary engineering for this
16 front, but it's certainly available to do in the future,
17 provided that's what is actually needed by the markets.

18 COMMISSIONER HOCHSCHILD: Right. And so my basic
19 point is these facilities have up to a 40-year life, right?
20 And so a ten-year planning horizon is not sufficient to
21 retroactively go in and install a synchronous condenser
22 where a project is not clutch ready, or clutch installed is
23 about 10X the cost of doing it right the first time. And
24 so that's my main concern is I don't want to have to be in
25 a situation of putting an additional burden on ratepayers

1 to do something where we're not doing it right the first
2 time.

3 CHAIRMAN WEISENMILLER: Let's clarify two things
4 for David. Were you talking about clutches on the combined
5 cycle?

6 COMMISSIONER HOCHSCHILD: No, just to be clear,
7 this is just for simple cycle. It's not a combined cycle
8 technology.

9 CHAIRMAN WEISENMILLER: Just for the simple
10 cycle. And also, what's the duration of your contract for
11 the combined cycle?

12 MR. O'KANE: Twenty years.

13 CHAIRMAN WEISENMILLER: Okay.

14 MR. O'KANE: So that's a good point about the
15 planning horizon. They have to overlay that with the
16 actual construction horizon and the retirement horizon. So
17 the second phase, the simple cycles, we wouldn't even start
18 construction on those for at least another three years, all
19 right? And only if there was a planning procurement
20 process that actually saw that happening, we would want to
21 see some more capacity built, gas-fired capacity built.

22 And if that's not started, if there's a gap in
23 construction, well the actual authorities to construct and
24 build actually expire if we don't stay in continuous
25 (indiscernible). So if there isn't a decision made on

1 that, that second phase will retire on its own. So we
2 don't foresee a case where we would ever be looking at
3 having to do a retrofit on the system.

4 COMMISSIONER HOCHSCHILD: Okay. Fair point.

5 COMMISSIONER SCOTT: I don't have anything to
6 add. I got a thorough briefing and have looked through
7 many of the materials, so I'm good.

8 CHAIRMAN WEISENMILLER: I was just going to add
9 in terms of my decision. I mean, first as we all know that
10 we're driving on reducing greenhouse gas emissions in the
11 state that the power sector, as of 2014 was 20 percent
12 below 1990. I suspect today's number would be much lower,
13 particularly with a good hydro year. And so we have to
14 keep our eye on that ball. I think this is part of that
15 process.

16 And also I appreciate that we're talking about, I
17 was going to say -- well, either back relative to the
18 original or the amended project, but we're talking about at
19 least 100 good construction jobs in the L.A. Basin coming
20 out of this. So again, I think basically putting our
21 people to work is always important.

22 MR. O'KANE: If I could? We kind of had a little
23 bit of a speech that I was going to wait for later. But I
24 wonder if I could touch on it now, because it's been a long
25 difficult process. We've had to evaluate these projects

1 within the siting regulations. And it's been difficult, at
2 times particularly with the public and others, to
3 understand the broader picture. And what both Huntington
4 Beach and Alamitos are, is not the building of new gas
5 plants. That's not what we should be thinking about.
6 These projects are the closing of plants or the reduction
7 of our reliance on gas-fired power plants.

8 And these simple cycles that we look for a later
9 stage of development, these are there as an option. That
10 AES is saying look, we don't have a lot of time with what's
11 happening. We're moving as fast as we can. We're closing
12 plants. We're trying to move into distributed energy,
13 reliance on more renewable energy. Our biggest growth
14 sector in the west now, is looking at distributed solar and
15 battery energy storage, which are other options that could
16 replace those second phase.

17 Our goal is to provide those options to the state
18 to be the market provider, not to build gas plants. We are
19 an energy solutions provider and that's where we're trying
20 to get to. We're trying to be consistent with the state's
21 goal. We're closing the plants. We're being more
22 efficient. We're reducing greenhouse gases. We're
23 reducing our reliance on things, but not leaving the state
24 hanging.

25 The worst thing would be if we don't have options

1 available to us in a tight timeline. And we have to leave
2 the 60-year old plants to continue to operate and we were
3 close to that situation as it is. And that would be the
4 most dire effect when we look at greenhouse gases and
5 environmental impact, to leave these old units -- the ones
6 that we rely on, which are horribly inefficient -- need to
7 be left on for days at a time just for a very small service
8 they provide us for a few hours a day. We don't want to be
9 in that position.

10 We want to make sure the options are available
11 for the state. And so we look at one project that has
12 combined cycles and some simple cycles. We talk about
13 synchronous condensers. But they are really part of the
14 bigger puzzle of battery energy storage, of distributed
15 energy. They all fit together and it's difficult for us to
16 address these in these siting cases.

17 And I'm glad you raised this, Commissioner
18 Hochschild, because it touches on exactly that. How do we
19 move forward with all of these goals, stopping OTC,
20 reducing our reliance on water, reducing greenhouse gases
21 and maintain a reliability at all times? I mean that's the
22 other key piece of it.

23 COMMISSIONER HOCHSCHILD: Yeah, well look your
24 point is well taken, both that there's another bite at the
25 apple when the contracts come before the PUC. My point is

1 we are losing our leverage, because at that point it won't
2 need to come back to us.

3 But secondly, that what you mentioned with
4 renewables, I mean there is no question in my mind we're
5 going to be in situations all over the state where what is
6 needed is not more power out of the grid, what's needed is
7 voltage regulation. And we don't want to ever be in a
8 situation of unnecessarily having to combust gas to provide
9 those services.

10 And we know the cost difference between putting
11 it in right the first time versus having to retrofit that
12 in. That's my only point, so I do hear you. There will
13 have to be another contract process that goes through the
14 PUC, but it will not have to come back before us, so which
15 is why I'm raising it now.

16 No further comments from me.

17 COMMISSIONER MCALLISTER: Yeah, so I guess I just
18 want to make one -- did you want to make some comments,
19 Commissioner Douglas?

20 COMMISSIONER DOUGLAS: I was going to say
21 something briefly at risk of anyway -- just two thoughts as
22 we have this discussion.

23 COMMISSIONER MCALLISTER: Okay. Go ahead, I'll
24 wrap up after.

25 COMMISSIONER DOUGLAS: One is I think it would

1 trigger an amendment to add a synchronous condenser. It
2 would come back before us, but it would be in the form of
3 an amendment.

4 The second is that I just wanted to say that it's
5 not merely that there's another bite at the apple at the
6 CPUC, where there's an opportunity to look at the role of
7 these simple cycles in the context of all of the system
8 alternatives and should they be contracted at all? Should
9 they be contracted, but with the synchronous condenser?
10 Should something else be done? But I think more broadly
11 that I think that's the more appropriate place for the bite
12 to be taken and it is very hard in our siting proceedings.

13 They're really not designed to be the place where
14 we implement procurement policy. And it's not to say that
15 procurement-related or policy-related issues don't come up.
16 They very often do, and they particularly come up where we
17 deal with projects that might have either unmitigated
18 impacts or the need for an override, where the Energy
19 Commission really does have to look at the importance of
20 the project in the context of the environmental or land use
21 or other issues that might be implicated.

22 But in the absence of that I do think after
23 having been through many, many, many of these cases that
24 siting cases are not the right place to make procurement
25 policy in general. Although these procurement issues or

1 these policy issues do come up, and they are important to
2 be given their place, in the discussion around these
3 projects.

4 COMMISSIONER MCALLISTER: So great discussion and
5 these are all very important issues for the whole state.
6 And again I think a lot of our collective frustration is
7 that we have a very small sliver of the overall discussion
8 within this very highly stylized environment.

9 Most of my time is actually working energy
10 efficiency to try to avoid the need for new generation.
11 And basically a megawatt is still the most cost effective
12 and optimal resource that we have in this state.

13 I do think we at the Commission have a very
14 important broader role of characterizing the non-generation
15 technologies out there such as energy efficiencies, such as
16 demand response that I'd like think could step in and
17 really replace basically one-to-one traditional generation.
18 And as technology and as modern informational and
19 electronic resources, basically technology and information
20 can step in and help us develop markets for those then I
21 think those actually will provide -- they do, but they will
22 provide even more -- alternatives for traditional supply
23 and just supply in general.

24 So I think creating that context and
25 understanding what the true breadth of the alternatives are

1 for generation. Maybe not in the definitional arena of the
2 siting realm, but just more broadly what can we do with
3 efficiency, demand response, and other types of resources
4 that are distributed? And defuse I think is really kind of
5 the challenge of our time. So we don't get to have those
6 conversations as deeply as we would like in the siting
7 context. But I want to just highlight those as really
8 important to bring, in terms of knowledge and context, to
9 the siting work that we do, do.

10 So we're all committed to having reliable and
11 cost effective energy and the context is complicated. So I
12 think we do the best we can within the siting context, but
13 it has a lot of constraints around it. So I appreciate
14 everyone's insight on that.

15 CHAIRMAN WEISENMILLER: Let me just wrap up with
16 two observations. One is we actually do influence the
17 procurement decisions in our demand forecast, which
18 includes every drop of energy efficiency we can find. And
19 maybe a little bit more than is there, but certainly and
20 renewables, so we do set that context. And I would also
21 just note that AES's original name was Applied Energy
22 Services and with Roger Sant back in the late '70s.

23 And the notion was that you weren't just buying
24 hardware. You were buying -- you want lighting and it can
25 come from LEDs. It can come from any number of things.

1 The same people want the basic energy services, so that's
2 certainly -- Roger was always a real visionary in
3 foreshadowing where we are not. So again, it goes really
4 back to the roots of this company and I'm certainly looking
5 forward to them being a partner with the state and helping
6 us in our evolution here.

7 COMMISSIONER MCALLISTER: Okay. So maybe Chief
8 Counsel can guide the statement that we make to propose
9 adoption of this item.

10 MS. VACCARO: Yes, so Hearing Officer Cochran has
11 for you proposed motion language to capture all of the
12 different decisions that are before you this morning.

13 COMMISSIONER MCALLISTER: Great.

14 HEARING OFFICER COCHRAN: So I believe that it
15 should be a motion to adopt the Proposed Adoption Order TN
16 216932, changing the effective date from 4-17 to 4-12,
17 adopting the Commission's final decision consisting of the
18 PMPD, as amended to change the verification of Condition of
19 Verification GEO-3 to "30 days prior to construction,"
20 instead of, "60 days prior to ground disturbance," and the
21 Errata.

22 COMMISSIONER MCALLISTER: Okay. Rather than
23 repeat that I will say, "So moved for Item 2."

24 COMMISSIONER DOUGLAS: Second.

25 CHAIRMAN WEISENMILLER: All those in favor?

1 (Ayes.)

2 CHAIRMAN WEISENMILLER: All those opposed?

3 (No response.)

4 HEARING OFFICER COCHRAN: Thank you very much.

5 CHAIRMAN WEISENMILLER: Sure. Thank you.

6 MS. FOSTER: Thank you.

7 CHAIRMAN WEISENMILLER: Let's go on to Alamitos.

8 MS. MATHEWS: Chair, if I could make a brief

9 announcement? It seems that we didn't have anyone on the

10 phone lines, so we have a number of participants on WebEx.

11 And I just want to remind anyone on WebEx if you want to

12 participate on the telephone, there is a notice that's

13 visual on the screen. And it says if you wish to

14 participate, you dial the number that's listed, 888-823-50

15 -- and my vision is failing -- so we'll leave that for

16 everyone to read that.

17 But if you want to make a public comment, it is

18 not enough. And I do believe we have representatives who

19 may be interested in making public comment on this item.

20 So again, I just want to make sure everyone knows to call

21 the number to be able to participate.

22 CHAIRMAN WEISENMILLER: Thank you.

23 HEARING OFFICER CELLI: Good morning, Chairman

24 Weisenmiller and Commissioners. Kenneth Celli, appearing

25 on behalf of the Alamitos Energy Center Application for

1 Certification Committee. Commissioner Douglas is the
2 Presiding Member and Commissioner Scott is the Associate
3 Member of the Committee.

4 The Presiding Member's Proposed Decision, which I
5 refer to as the PMPD, reflects the Committee's careful
6 consideration of all evidence submitted by the parties as
7 well as all public comments received. The PMPD recommends
8 that the Commission grant certification, because the
9 Alamitos Energy Center is consistent with laws, ordinances,
10 regulations, and standards. And pursuant to CEQA, will
11 have no significant adverse effects on the environment.

12 The Alamitos Energy Center would be a nominal
13 1,040 megawatt natural gas-fired combined-cycle and simple-
14 cycle air-cooled electrical generating facility, consisting
15 of two power blocks.

16 Power Block 1 would consist of two natural gas-
17 fired GE 7FA combustion turbine generators, in a combined-
18 cycle configuration with two unfired heat recovery system
19 generators, one steam turbine generator, and an air-cooled
20 condenser, an auxiliary boiler and related ancillary
21 equipment, capable of producing a nominal 640 megawatts.

22 Power Block 2 consists of four simple-cycle GE
23 LMS 100 combustion turbine generators with fin-fan coolers
24 and ancillary facilities capable of producing a nominal 400
25 megawatts.

1 The Alamitos Energy Center is located at the
2 southern-most tip of Los Angeles County. The project site
3 is bounded on the north by State Route 22, on the east by
4 the San Gabriel River, on the south by 2nd Street and on
5 the west by North Studebaker Road in the City of Long
6 Beach, Los Angeles County, California.

7 The project would occupy 21 acres within the
8 existing 71-acre Brownfield site of the Alamitos Generating
9 Station, which I refer to as the AGS. The AGS facility was
10 built between 1955 and 1969. Currently, AGS Units 1
11 through 6 are in operation with a net generating capacity
12 of 1,950 megawatts.

13 AGS Unit 7 was decommissioned in 2003. AGS
14 Units 1 through 6 are scheduled to be decommissioned by
15 2020, under the State Water Resources Control Board's phase
16 out of the use of once-through cooling.

17 No new offsite transmission lines or gas lines
18 will be needed for the Alamitos Energy Center and no new
19 offsite water pipelines are needed for fire protection.

20 The Alamitos Energy Center will construct a new
21 1,000 linear foot process/sanitary wastewater pipeline to
22 the first point of interconnection with the existing Long
23 Beach Water District Sewer system, which will eliminate the
24 current practice of discharging treated process and
25 sanitary wastewater to the San Gabriel River.

1 Stormwater will be collected in the existing
2 south basin where oil containing sludge will be removed and
3 disposed of as hazardous waste. The remaining separated
4 stormwater runoff would outflow to the San Gabriel River.
5 The total maximum annual water consumption of the Alamitos
6 Energy Center will be 130-acre feet per year. The project
7 will continue to use the existing water main connection at
8 Studebaker Road. However, a new 340,000 gallon de-ionized
9 water tank will be constructed within the site footprint.

10 The Committee took evidence at two separate
11 evidentiary hearings. The first evidentiary hearing on
12 November 15th, 2016 covered all subject areas except air
13 quality, greenhouse gases and public health. After the
14 Final Determination of Compliance was published, evidence
15 on air quality, greenhouse gases and public health was
16 taken at the second evidentiary hearing on December 20th,
17 2016.

18 The only intervenor in this proceeding was the
19 Los Cerritos Wetlands Land Trust. The Intervenor raised
20 several issues, mostly regarding the treatment of the
21 demolition of the AGS Units 1 through 6, whether a need for
22 the Alamitos Energy Center had been established, and
23 whether a 640 megawatt in the RFO, awarded by the CPUC
24 should have been considered to be a maximum capacity.

25

1 The Intervenor's issues are addressed in project
2 alternatives, facility design, project reliability, air
3 quality, hazardous materials management, waste management,
4 biological resources, soil and water resources, traffic and
5 transportation and noise and vibration.

6 As usual, the public was presented a full
7 opportunity to participate at every stage of these
8 proceedings. The Committee received public comments. The
9 PMPD, Presiding Member's Proposed Decision, considered and
10 addressed all timely filed public comments.

11 A couple of issues arose from the docket
12 yesterday that I would like to speak to at this time.
13 First, the Applicant filed additional comments on the
14 Errata. The Committee had either already accepted these
15 changes in the PMPD, or considered them to be too minor to
16 include in the Errata, or were otherwise rejected by the
17 Committee. Therefore, there are no changes or further
18 Errata for the Commission to consider today.

19 Secondly, regarding the Applicant's request to
20 change the effective date of the Final Decision, unless
21 there is a compelling reason to give your decision
22 immediate effect, making the Final Decision effective on
23 the Monday following a business meeting, maximizes the
24 number of days for Chief Counsel's Office to analyze a
25 court petition and prepare and file the Commission's

1 response.

2 Finally, the Proposed Order needs a change on
3 page 3, Order Number 1, because the Errata was filed on
4 April 11th, not April 4th. And also the footnote on page 1
5 should be TN 216938, which currently shows as an underscore
6 which is the Errata, which is the same as footnote number
7 four.

8 The Committee recommends that the Commission
9 adopt the PMPD on the Alamitos Energy Center, along with
10 the Committee Errata, which was docketed on April 11th,
11 2017. The Errata incorporates the parties and public
12 comments on the PMPD and includes clarifications of the
13 record.

14 With that, the matter is submitted and I am
15 available to answer any questions on procedural matters, or
16 the PMPD. Otherwise, the parties are here to address the
17 Commission.

18 CHAIRMAN WEISENMILLER: Thank you. Staff, do you
19 have any comments?

20 MR. BABULA: Yeah, thanks. This is Jared Babula,
21 Staff Counsel. I'm here with the Project Manager, Keith
22 Winstead. There's three things I just want to quickly
23 highlight from this project. So first, originally this
24 project was filed as a much larger project at 1,936
25 megawatts, but due to the changing energy landscape it was

1 downsized to its current size of 1,040.

2 The other thing I want to point out as the
3 Hearing Officer mentioned in this summary of the project,
4 that there was an issue regarding how to treat the
5 decommissioning and potential demolition of the existing
6 Alamitos Generating Station Units 1 through 6. In this
7 case, staff filed a Motion for Summary Adjudication to
8 allow for a robust discussion through briefing and oral
9 argument for all the parties to discuss exactly the
10 consequences of the decommissioning, in relation to this
11 project.

12 And after a full briefing and oral arguments, a
13 Committee decision was issued that crystallized the proper
14 scope of analysis. So we went through a specific process,
15 just to engage all the stakeholders on that issue.

16 And third as you may be aware, we had done some
17 updates to our regulations, and a lot of them touched on
18 the siting process. This project was under initially the
19 older version, but when the Preliminary Staff Assessment
20 came out we were under the new regs, so it was fully vetted
21 through a 30-day comment period. And staff responded with
22 detailed responses to those comments in the FSA. And so
23 all the critical issues that you may hear today from the
24 intervenors have been addressed in a number of different
25 venues as we went through this process.

1 Thank you.

2 CHAIRMAN WEISENMILLER: Applicant?

3 MR. O'KANE: Stephen O'Kane with AES Alamitos
4 Energy, the Applicant. I'll let my Counsel speak to a
5 couple of items. I'll answer the question when it comes
6 up, because I know what's coming.

7 MR. HARRIS: Yeah, if I could just a little
8 clarification from Mr. Celli on the Applicant's comments on
9 the Errata, which is number 216967, our comments about
10 yesterday.

11 I agree with you that on the first pages, those
12 are all just kind of textual things, I think they don't
13 matter. But I want to ask you about two of those changes
14 to conditions that are on page 2 of our comments. Do you
15 have that document in front of you?

16 HEARING OFFICER CELLI: Yes.

17 MR. HARRIS: So the two I'm concerned about, Mr.
18 Celli, are the first one where there's actually some
19 proposed language change on Condition SOIL & WATER-6. And
20 the language there is again a timing thing, but it say, "No
21 later than 60 days prior to commissioning of either power
22 block," was the requested change there. That one, I feel
23 is substantive.

24 And I'll give you the second one and you can
25 address them in order. The other one is the last one,

1 again down on the very bottom for Condition VIS-3. The
2 word "verification" does not appear in the PMPD and I think
3 it's important to break the verification, so can you
4 address -- those are the only two I'm really worried about
5 in our filing and I want to know what your thoughts are on
6 those.

7 HEARING OFFICER CELLI: Thank you, yes. The
8 Commission as to the, "No later than 60 days prior to the
9 commissioning," of either power block -- the Commission is
10 going to insert, "No later than 60 days prior to
11 commissioning the project," etcetera.

12 MR. HARRIS: And that's acceptable. Thank you.

13 HEARING OFFICER CELLI: Okay. As to Appendix A,
14 page 188, that verification, the Committee considered that
15 to be clerical and just inserted the verification.

16 MR. HARRIS: Those are the only two things that I
17 had in our comments. I just wanted to clarify the record
18 on that.

19 So this project has not begun construction. This
20 is not an amendment. It's a new AFC, so we have even less
21 time than Huntington Beach. And so I'll try to be short,
22 even though some people think I get paid by the word.

23 We really need two things. Number one, the
24 clarification we just received from the Hearing Officer.
25 And number two, we would like the same consideration on the

1 effective date. I will not take you back through that
2 debate. I think I know where you're going to end up on
3 that, but if you're so inclined, I will stop there and
4 thank you for your time.

5 CHAIRMAN WEISENMILLER: So let's ask the Chief
6 Counsel again on the effective date.

7 MS. VACCARO: Oh, it's exactly the same as what
8 came up in the prior matter. Chief Counsel's Office again
9 has no objection or concern with the date of the Proposed
10 Order being moved to today's date. Again though, it still
11 leaves the question for the Commissioners as to whether or
12 not the explanation that you received for the request
13 satisfies you, so that you're willing to change custom and
14 practice.

15 CHAIRMAN WEISENMILLER: So O'Kane, do you want to
16 address that?

17 MR. O'KANE: Schedule again is extremely tight
18 and important for us to meet our obligations to the state
19 and to our off-taker and the utility in 2020.

20 And in the Alamitos case it's actually a much
21 tighter schedule. The effective date will affect when the
22 permit to construct can be issued. It also affects the
23 date from which the Conditions of Certification begin
24 effective date.

25 And unlike Huntington Beach no work has begun on

1 the site. There is no ground disturbance. There is no
2 mobilization yet. I still need to clear the site, prepare
3 a large section of an existing power plant with existing
4 buildings and things onsite before I even get into
5 construction. So the effective date, our timeline to make
6 it at Alamitos is even tighter, so each day counts. And
7 all the subsequent items that come from the effective date
8 are impacted by these five days.

9 MR. HARRIS: And I just want to add one thing to
10 respond to a comment that was from the dais. Ordering
11 paragraph 10 says that the Hearing and Policy Unit shall
12 incorporate the PMPD and Errata under a single document.
13 And publication of that compilation shall not affect the
14 adoption, effective issuance, or final days of the Order
15 established in paragraph 4.

16 So as to the concerns about getting it right, I
17 think this is brilliant, paragraph 10. I wish I'd have
18 written it myself. It says basically that staff has time
19 and probably will need the transcripts, frankly, to make
20 sure that they're 100 percent sure they've got everything
21 in place. So I think administratively, that process can
22 proceed and with sufficient time to make sure that things
23 are done in a way that's not rushed.

24 So I just wanted to point out that paragraph 10,
25 for your consideration too.

1 COMMISSIONER DOUGLAS: I'll just say that I think
2 that Mr. Harris's instincts that if we were satisfied with
3 the explanation on Huntington Beach, we probably should be
4 on Alamitos, is correct. Given that they don't have an
5 amendment and that they are not able to do some of the
6 activities that Huntington Beach is able to do, because
7 they don't have an approved decision. So I am personally
8 satisfied that we can move the effective date to today.

9 CHAIRMAN WEISENMILLER: So I'll turn to the
10 Intervenor, either in the room or on the line, please come
11 forward.

12 Public Adviser, could you check email, voice mail
13 find out?

14 MS. MATHEWS: (Indiscernible)

15 CHAIRMAN WEISENMILLER: Again please intervenors,
16 just to reiterate if you're on it, you have to call in, and
17 the number is 888-823-5065. And please, if you're
18 listening on WebEx, please call in at that phone number.

19 (No audible response.)

20 Okay. Let's I guess transition to the dais.

21 COMMISSIONER DOUGLAS: Well, I'll keep my
22 comments brief, I think, while we see if we can get the
23 intervenors speaking if they're indeed here or on the phone
24 and wish to speak.

25 I want to thank all of the parties and absolutely

1 this was a -- every siting case is a big undertaking.
2 There's a lot of information. There's a lot of back and
3 forth. We had an Intervenor participating in this, a local
4 group, and it was very helpful to have their participation.

5 And I'll thank the Associate Member on the
6 Committee, Commissioner Scott, who may have some comments
7 as well.

8 In a lot of ways many of the issues raised as we
9 looked at Alamitos, paralleled to some degree, Huntington
10 Beach. And that's probably not too surprising in terms of
11 the context of once-through cooling and the combined-cycle,
12 which does have a PPA and the single cycles, which do not.
13 Like Huntington Beach, the single cycles, should they be
14 built, are proposed with space for synchronous condensers.
15 The synchronous condenser itself is not proposed in what is
16 before us today.

17 You know there was thorough and hard work by
18 South Coast Air Quality Management District. They're on
19 the phone and I'll thank them as well for being on the
20 phone today and for their work with us throughout this
21 process. And I recommend this for the Commission's
22 support.

23 CHAIRMAN WEISENMILLER: Actually, just to be safe
24 I asked for the Intervenor, either in the room or on the
25 line and obviously any public comment either in the room or

1 on the line. We'll be happy to hear from them now.

2 MR. BABULA: This is Jared Babula. I'm a little
3 concerned, because they did indicate the Intervenor was
4 going to be present or at least call in and make some
5 statement. So I just want to make sure we give ample
6 effort.

7 CHAIRMAN WEISENMILLER: Well, again I keep asking
8 the Public Adviser to check and call out.

9 MS. MATHEWS: Well, I'll state on the record
10 (indiscernible) --

11 CHAIRMAN WEISENMILLER: Please come up to the
12 microphone.

13 MS. MATHEWS: So we've already checked. We've
14 let them know. I did visually see that Ms. Lamb is on the
15 WebEx and I wasn't sure if she did not understand whether
16 or not she should call in, so I made that announcement.
17 And email has also been sent to her and we have left
18 messages. So there is no messages in our PAO email.

19 So we have reached out to make sure that everyone
20 is aware.

21 CHAIRMAN WEISENMILLER: Okay.

22 COMMISSIONER SCOTT: Sure, I just wanted to echo
23 Commissioner Douglas's thanks to all of the parties and
24 also say thanks to her. She's a fantastic Presiding Member
25 to get to work with on these.

1 I also wanted to highlight that I really
2 appreciate the discussion that we had on Huntington about
3 the broader context in which we work and the fact that the
4 Commission siting process really does look at this small
5 sliver. And I just wanted to highlight that and underscore
6 that, because that is I think also important and relevant
7 to Alamitos as well and that's pretty much it. Just kind
8 of echo what you heard from Commissioner Douglas.

9 CHAIRMAN WEISENMILLER: I was going to note that
10 one of the things is that even though we lost San Onofre as
11 part of the OTC we got a substantial reduction in the IOU
12 generation in the L.A. Basin. And that can be contrasted
13 with LADWP, which while facing the same OTC, basically did
14 a one-for-one or was doing a one-for-one replacement.

15 COMMISSIONER DOUGLAS: All right. I will make a
16 motion on this then. I think it doesn't suffice for me to
17 move to adopt the Adoption Order, because I think we have a
18 change or two.

19 HEARING OFFICER CELLI: That's correct,
20 Commissioner Douglas. We need to make the changes that at
21 the bottom of page 1 there's a footnote with an underscore
22 and that underscore is just TN 216938, which is the Errata
23 filed April 11th.

24 On page 3 of the Order, the second sentence where
25 it says filed on April, I think it said 4th, it should read

1 "April 11th, 2017."

2 And then the Commission needs to be rule on the
3 effective date of the Order, because we have it as April
4 17th as Item 4 in the Order.

5 COMMISSIONER DOUGLAS: Thank you. So I will
6 move to adopt the Adoption Order for this item, with the
7 changes read into the record by the Hearing Officer and
8 with an effective date of April 12th; is that sufficient?

9 MS. VACCARO: And I believe there's also an
10 Errata to approve; is that correct Hearing Officer Celli?

11 HEARING OFFICER CELLI: The Errata, that's
12 correct, the Errata was filed on 4-11-17. Given our
13 discussions today that the Errata is sufficient in itself
14 and so the Errata filed April 11th needs to be adopted as
15 well.

16 COMMISSIONER DOUGLAS: Oh, I thought it was
17 incorporated by reference in the Adoption Order?

18 HEARING OFFICER CELLI: It is, but I just wanted
19 to be clear that there were no further changes, based upon
20 the filing from the Applicant yesterday.

21 COMMISSIONER DOUGLAS: All right, so my motion
22 includes the Errata, which is incorporated by reference in
23 the Adoption Order anyway.

24 COMMISSIONER SCOTT: Second.

25 CHAIRMAN WEISENMILLER: All those in favor?

1 (Ayes.)

2 CHAIRMAN WEISENMILLER: All those opposed?

3 (No response.)

4 CHAIRMAN WEISENMILLER: 5-0. Thank you.

5 Let's go on to Item 4.

6 MS. SMITH: Good morning, Commissioners, members
7 of the public. I'm Courtney Smith, Deputy Director of the
8 Renewable Energy Division. The Renewable Energy Division
9 has recently pursued a variety of strategies to improve the
10 efficiency of our program administration and also to
11 provide better customer service. And I'm here today to
12 provide you a brief update on that effort.

13 In particular, our Division has focused on
14 streamlining our administration of the New Solar Homes
15 Partnership Program, or NSHP Program, as well as the
16 Renewables Portfolio Standard Program, or RPS Program.

17 As you know, the New Solar Homes Partnership
18 Program provides incentives to builders to install solar on
19 new residential homes in California. The RPS Program
20 requires utilities to procure a certain percentage of
21 renewable energy to meet program targets. Next slide.

22 From better leveraging technology, to
23 specializing staff assignments, we have and continue to
24 pursue a variety of strategies to simplify stakeholder
25 participation in our programs and to improve the use of

1 staff resources. By expanding the use of online tools and
2 systems, both the NSHP Program and the RPS Program have
3 benefitted by simplifying the submittal of data and
4 applications by stakeholders.

5 The most noteworthy example of this was the RPS
6 Program's transition this past January to a new online
7 system that replaces the previous paper reporting system
8 used in collecting information for both the certification
9 of renewable energy facilities, as well as for the
10 verification of renewable energy procurement by RPS
11 participants.

12 Since this transition, staff has already
13 identified an improved success rate for initial facility
14 certification applications. And has recently experienced
15 simplified staff review, which reduces delays for
16 stakeholders.

17 Similarly, the NSHP Program recently adopted the
18 use of an updated incentive calculator that cuts down the
19 time needed to calculate project incentive amounts for both
20 staff and program participants. This tool is created
21 solely by staff after stakeholders had raised concerns with
22 the previous approach.

23 Another strategy staff has and continues to
24 employ is to create an update protocols for staff to follow
25 when reviewing program applications. The use of these

1 protocols brings about more consistent and efficient
2 reviews among many staff and also allows new staff to be
3 trained more quickly.

4 As renewable energy markets evolve, there's also
5 an opportunity to remove or to simplify program
6 requirements to reflect a more mature market, which we have
7 done both in the NSHP Program as well as the RPS program.

8 A great example of this comes from our NSHP
9 program. After conducting several focus groups and
10 meetings with industry experts and program participants,
11 staff significantly consolidated and simplified the amount
12 and type of information requested of program applicants to
13 shorten the process, while still upholding integrity of the
14 program.

15 Another key strategy has been specialization.
16 Specializing staff in administrative tasks and on key
17 program topics have shortened staff application review time
18 and have made reviews more thorough.

19 Lastly, and perhaps most importantly, staff are
20 developing creative solutions to program administration
21 challenges. This has really required them to think beyond
22 how things have always been done, and to be willing to try
23 new approaches to problems. For example, in the NSHP
24 Program staff recognized that we had a majority of
25 applications for new projects submitted by a small group of

1 very experienced program participants. Leveraging this
2 experience, staff created a new designation, called the
3 "established installer," which provides these trusted high-
4 volume participants with streamlined processes, while
5 ensuring the same level of stringency in program
6 requirements. Next slide.

7 Staff has already seen the benefits of these
8 streamlining efforts. For the NSHP Program, the delay in
9 application review time last year was four months. As a
10 result of our streamlining efforts, the delay is currently
11 about six weeks and decreasing, with many payment claims
12 being reviewed even shorter than this timeframe.

13 In addition, the simplification of NSHP Program
14 forms and the use of the RPS online system, with its
15 immediate feedback to participants has already resulted in
16 a reduction of errors by stakeholders significantly
17 increasing the success rate for initial submissions and
18 reducing staff time associated with making corrections.

19 The use of more automated tools is improving
20 program data management and stakeholders are pleased with
21 both the simplified requirements and the quicker
22 communication from staff.

23 Moving forward, the Renewable Energy Division
24 will continue to implement the streamlining opportunities
25 identified. And will turn its aim on improving the

1 efficiency of the other programs that it administers.
2 Ultimately, designing and administering programs in a way
3 that's efficient, accountable, and best serves the public
4 is not a discrete set of efforts, but it's a mindset.

5 For each decision we make as program
6 administrators, whether big or small, we must be willing to
7 evaluate and challenge the previous approach. And if
8 needed have the boldness to do something a little
9 different. Only with this boldness can we achieve the full
10 ambition of public service.

11 Thank you for your time. I'm happy to answer any
12 questions.

13 COMMISSIONER HOCHSCHILD: Thank you, Courtney.
14 Let me thank you, and Natalie, and the whole team for this
15 progress. I asked for this item to be put on the agenda
16 just because there's been actually a lot of ongoing work in
17 many, many different parts of the Division that have
18 yielded real results.

19 We started off with certifications, when I
20 started, were as long as 60 days. We're now averaging 3
21 days. And the NSHP processing time, as you mentioned has
22 gone from four months to six months. (sic) Verification
23 report has been a challenge as well. We're working on all
24 fronts, but the goal is really to make a friction-free
25 process, make use of technology. And I particularly want

1 to compliment some of the line staff, who are actually
2 processing stuff and figured out faster, better ways to do
3 it. So let's keep it up and I'm really proud of all you
4 guys.

5 With that, if I could ask Cheryl Closson to come
6 up? I just wanted to take this moment, Cheryl has been
7 running our GRDA Program and is going to be retiring in a
8 few weeks after 29 years with the State, the last stint
9 with the Energy Commission.

10 And working on geothermal, I received on the
11 Energy Commission's behalf, this award for the GRDA Program
12 at the recent Geothermal Conference some time ago, which is
13 really that's a tribute to you, Cheryl. And you have been
14 at this with great diligence. And I hear great feedback
15 about your work from folks I interact with in the
16 geothermal community. So we just want to say, "Thank you
17 and congratulations for all your service. And we wish you
18 well."

19 MS. CLOSSON: Thank you.

20 COMMISSIONER HOCHSCHILD: And anything you'd like
21 as you retire?

22 MS. CLOSSON: Oh, thank you very much. I've had
23 a really wonderful time working for the Energy Commission.
24 It was actually my first job in state service back in 1987.
25 And then I went on to work on with CalEPA and then came

1 back and have really enjoyed especially working with the
2 Geothermal Program. So thank you very much.

3 COMMISSIONER HOCHSCHILD: We'll be doing a
4 workshop, which we timed before Cheryl leaves, so and I
5 think that's in two weeks here?

6 MS. CLOSSON: Next Wednesday.

7 COMMISSIONER HOCHSCHILD: It's next Wednesday
8 with the number of Legislators and we'll look back at what
9 we've done on GRDA and what opportunities there are going
10 forward, so glad you can participate.

11 So thank you, Cheryl.

12 (Applause.)

13 MS. CLOSSON: Thank you, very much. Thank you.

14 CHAIRMAN WEISENMILLER: Yeah, I also wanted to
15 thank Cheryl for her public service and thank you for your
16 vision here. I know when I came on board, one of the
17 things that was most concerning was obviously we had sort
18 of manual certification processes. And as you know,
19 verification and just looking at the explosion we were
20 going to have of renewable contracts and resources, it was
21 going to be like, "Oh my God. We need to get this to the
22 21st Century fast." You know? So again, thanks for
23 pushing that along. Thanks, thanks a lot.

24 Any public comment on this? I don't think so,
25 but just in case.

1 (No audible response.)

2 Thanks. Let's go on to Number 5, the Investment
3 Plan.

4 COMMISSIONER SCOTT: And right before Jacob
5 starts, I just wanted note that the Commission has a
6 handful of vehicles that we are demonstrating and they're
7 out front. I hope that you saw them as you came in. We're
8 excited to have both the all-new Chevy Volt, thanks very
9 much to Commissioner Hochschild for that. A FIAT BATTERY
10 ELECTRIC for folks to take a look at. We've got the Honda
11 Clarity, kind of hot off the lines and the Toyota Mirai for
12 people to be able to test drive. And so there are some
13 great displays and vehicles out front that are related to
14 ARFVTP.

15 And I'll turn it to Jacob.

16 MR. ORENBERG: Good morning, Chairman and
17 Commissioners. My name is Jacob Orenberg and I'm the
18 Project Manager for the 2017-2018 Investment Plan Update
19 for the Alternative and Renewable Fuel and Vehicle
20 Technology Program or ARFVTP.

21 Today, we are seeking your approval of this
22 Investment Plan Update. If approved, the current Lead
23 Commissioner Report version will be reissued as a Final
24 Commission Report and this will serve as a guide for our
25 funding solicitations and awards in the coming fiscal year.

1 The Energy Commission's ARFVTP Program was
2 developed to provide funding support for projects that
3 reduce greenhouse gas emissions within the transportation
4 sector, which is responsible for about 37 percent of
5 statewide greenhouse gas emissions. The projects we fund
6 also contribute to other complementary state goals,
7 including improved air quality, increased alternative fuel
8 use, reduced petroleum dependence and economic development.

9 To date, the program has awarded over \$748
10 million in funding to more than 585 projects. Our statutes
11 call on us to develop a diverse portfolio of alternative
12 fuels without adopting any one preferred option.

13 Accordingly, we fund a broad range of project
14 types including alternative fuel production, alternative
15 fuel infrastructure, advanced vehicle demonstrations and
16 other related needs. The projects funded by the ARFVTP are
17 expected to accrue significant benefits for the state from
18 reduced greenhouse gas emissions, petroleum use and air
19 pollution.

20 This chart provides a visualization of ARFVTP
21 projects to-date, with each column representing a component
22 of the transportation sector funded through our program.
23 The Fuel Production category represents about \$167 million
24 divided between ethanol, biodiesel, renewable diesel, and
25 biomethane. The infrastructure investments total \$248

1 million, consisting largely of hydrogen refueling stations
2 and electric vehicle charging stations. This category also
3 includes natural gas, E85, and biodiesel infrastructure.

4 The funding for vehicles totals \$230 million and
5 primarily consists of vehicle deployment incentives for
6 natural gas trucks and advanced technology hybrid, plug-in
7 hybrid, and electric truck demonstration projects. We've
8 also have funded projects in supporting areas such as in-
9 state manufacturing facilities, workforce training,
10 regional readiness planning, and fueling standards
11 development.

12 For the 2017-2018 Investment Plan Update, we
13 published a Draft Staff Report in October, which was
14 followed by the first Advisory Committee meeting held in
15 Sacramento. Based on the feedback we received, we then
16 released a Revised Staff Report in January. And held a
17 second Advisory Committee meeting in Fresno in February for
18 additional public input. Last month, we released the
19 proposed Lead Commissioner Report, which is what we are
20 seeking approval for today.

21 As we mentioned, we hosted two Advisory Committee
22 meetings, in which we received guidance and input from
23 member organizations and state agencies. Many other
24 interested stakeholders also participated in those meetings
25 and provided public comment. We received and considered 32

1 comments via our public docket, and continue to participate
2 in meetings with stakeholders.

3 This slide lists all of the Advisory Committee
4 members for the 2017-2018 Investment Plan, who we thank for
5 their contribution and dedication to our program. The
6 membership of the Advisory Committee includes
7 representatives of fuel and vehicle technology groups,
8 environmental and public health groups, academic
9 institutions, and partnering state agencies.

10 I do need to highlight one particular change in
11 the Lead Commissioner Report compared to the two prior
12 versions of the 2017-2018 Investment Plan Update. And that
13 is a \$2.8 million reduction in available funding for ARFVTP
14 funding allocations. This change is necessary, because
15 beginning with fiscal year 2017-2018 the ARFVTP funding
16 appropriation will be required to fund program staff costs
17 that traditionally have been paid for from the Energy
18 Resources Programs Account, which is more frequently known
19 as ERPA.

20 As a result \$2.8 million less will be available
21 for the Investment Plan funding allocations. The funding
22 reduction has been applied equally across every category,
23 with all of the allocations being reduced by 2.8 percent
24 compared to the draft and revised staff report versions of
25 the Investment Plan.

1 I'll now give a brief summary of this Investment
2 Plan's proposed funding allocations starting with biofuel
3 production and supply. To date, the program has funded 59
4 projects to expand the in-state production capacity of
5 ethanol, biomethane and diesel substitutes for
6 transportation fuel. For this Investment Plan, we have
7 removed landfill biogas projects from consideration, and
8 this has been done for consistency with California state
9 policies to divert organic waste from landfills.

10 Similar to prior Investment Plans this allocation
11 is open to all project stages and a variety of biofuel
12 types. And we will continue efforts to support innovative
13 and transformative biofuel technologies. For this
14 category, we're proposing a \$19.4 million allocation for
15 fiscal year 2017-2018.

16 For electric charging infrastructure, we are
17 expecting other programs to begin offering significant
18 funding, most notably from utility programs and the
19 Volkswagen diesel emission settlement. These other funding
20 sources should complement ARFVTP funding in this area, and
21 we expect to focus our own efforts on project types and in
22 areas that aren't addressed by these other programs. We
23 will also continue to monitor the deployments by the
24 investor owned utilities, charging station networks, and
25 automakers to avoid duplication. Based on the anticipated

1 need for funding, we are proposing a \$16.6 million
2 allocation for this category.

3 For hydrogen refueling infrastructure, one of the
4 goals guiding this category is to have a network of 100
5 refueling stations throughout the state to support the
6 initial deployment of hydrogen vehicles. California is
7 making progress towards this goal, and we estimate that 48
8 stations will be operational by the end of 2017, and the
9 ARFVTP has provided funding for an additional 16 stations.

10 That said, the California Air Resources Board
11 predicts that there may be statewide capacity shortfalls
12 for hydrogen refueling as soon as 2021. This reinforces
13 the need to continue funding hydrogen refueling
14 infrastructure, and for the coming fiscal year we are
15 proposing a \$19.4 million allocation for these purposes.
16 This should be able to provide funding for about eight or
17 nine new stations, as well as funding for operations and
18 maintenance necessary to support the initial stations.

19 To complete the infrastructure investments, we
20 are proposing funding for natural gas fueling stations to
21 provide an opportunity to increase the use of this proven,
22 readily available alternative fuel. The focus of this
23 allocation is on local governments without access to
24 private capital, who could not otherwise utilize natural
25 gas fuel without this funding. We expect this category to

1 emphasize projects at school districts in order to achieve
2 maximum health benefits among vulnerable populations by
3 displacing older diesel buses. And we may also consider
4 co-locating natural gas fueling stations at biomethane
5 production facilities to encourage the use of this low-
6 carbon fuel. For this, we are proposing a \$2.4 million
7 allocation.

8 Moving from infrastructure to vehicles, we are
9 also proposing funding for natural gas vehicle deployment
10 incentives. These vehicles offer opportunities for
11 achieving immediate greenhouse gas emission and petroleum
12 use reductions.

13 In addition, the recently released low-NOx
14 natural gas engines reduce nitrogen oxide emissions by 90
15 percent compared to the current diesel emission standard,
16 and we may place an emphasis on the deployment of these
17 specific engines.

18 We continue to see expressed demand for natural
19 gas vehicle incentives, and for the coming fiscal year, we
20 are proposing a \$9.7 million allocation.

21 For this year's Investment Plan Update, we've
22 renamed and reconfigured the former Medium and Heavy-Duty
23 Vehicle Technology Demonstration and Scale-Up category into
24 the new Advanced Freight and Fleet Technologies category.
25 This was done to better fit the needs and opportunities in

1 the medium and heavy-duty vehicle sector, given the
2 changing project opportunities and the complementary
3 efforts being undertaken by the Air Resources Board.

4 As in previous years, this funding is open to a
5 broad range of vehicle technologies and vehicle application
6 types. And the focus for the coming fiscal year is
7 expected to continue to be on sustainable freight and goods
8 movement projects. We may also consider funding enabling
9 technologies and non-propulsion projects, such as
10 intelligent transportation systems, as well as fueling
11 infrastructure specifically for the vehicles funded under
12 this allocation. And we are proposing a \$17.5 million
13 allocation for this category.

14 We are also reintroducing the Manufacturing
15 category in this Investment Plan Update. The category was
16 merged with the Medium and Heavy-Duty Vehicle Technology
17 Demonstration category in the 2015-2016 Investment Plan,
18 which was done in an effort to streamline combined
19 demonstration and manufacturing projects. The absence of a
20 dedicated manufacturing category, however excluded
21 manufacturing projects for standalone manufacturing -- I'm
22 sorry, standalone? I've lost my place, bear with me --
23 excluded manufacturing projects for alternative and
24 renewable light-duty vehicles, vehicle components,
25 infrastructure, and standalone manufacturing projects.

1 For the coming fiscal year, we are proposing a
2 \$4.9 million allocation to reintroduce this category, which
3 we expect will be able to fund one or two projects. These
4 projects will indirectly support the other ARFVTP
5 categories, as well as the general goals of the program,
6 and are expected to create jobs and economic benefits in
7 the state.

8 In addition to funding for alternative fuel and
9 vehicle projects, our program also funds related activities
10 that contribute to their market success. In this
11 Investment Plan we are proposing \$3.9 million for the
12 Emerging Opportunities category, which has traditionally
13 been reserved for federal cost-sharing opportunities as
14 well as for projects that weren't anticipated during the
15 development of the Investment Plan.

16 We are also proposing a \$3.4 million allocation
17 for workforce training and development, based on estimated
18 funding needs from our partnering state agencies.

19 This final slide summarizes all of the proposed
20 funding allocations for the 2017-2018 Investment Plan
21 Update. At this point, I'd be happy to answer any
22 questions you may have. Thank you.

23 CHAIRMAN WEISENMILLER: Thank you.

24 Let's start with public comment, both in the room
25 and then we'll go to the line. First, I was going to start

1 with the Governor's Office of Business and Economic
2 Development. Taylor, please?

3 MS. JONES: Hi. Thank you. Good morning,
4 Commissioners and Energy Commission staff, and thank you
5 for the opportunity to comment. My name is Taylor Jones.
6 And I'm the Policy Manager for Zero Emission Vehicle
7 Infrastructure at the Governor's Office of Business and
8 Economic Development, GO-Biz. I am here on behalf of our
9 whole team and most importantly Tyson Eckerle, our Deputy
10 Director, who unfortunately can't make it today.

11 We would like to voice our strong support for the
12 2017-'18 ARFVTP Investment Plan. The Plan is well balanced
13 and funding provided by this program remains critical to
14 the transformation of California's fuel and vehicle types
15 in support of our climate change and air quality goals.

16 Given our focus at GO-Biz, on zero emission
17 vehicles, or ZEVs, we are most interested in the hydrogen
18 fueling and plug-in charging infrastructure investments,
19 both of which provide fundamental support for the
20 Governor's aggressive ZEV targets.

21 For hydrogen, the 19.4 million in funding remains
22 critical and we are already seeing major benefits from past
23 investment cycles. The funding provided by this program,
24 coupled with the private sector investment continues to
25 enable significant growth and development of our hydrogen

1 station network. We now have 27 stations open today. We
2 actually had South Pasadena open earlier this week.

3 In pairing this with the upwards of 300 miles in
4 driving range, it really unlocks most of the state of
5 California. The 1,300 fuel cell electric vehicle drivers
6 on the road today can easily travel between and around San
7 Diego, Orange County, Los Angeles, Santa Barbara, the Bay
8 Area, Sacramento and Lake Tahoe.

9 For plug-in electric vehicles, the 16.6 million
10 in investment remains equally critical to fill key
11 infrastructure gaps, which was recently witnessed by
12 efforts to install charging at key corridor locations that
13 enable inter-regional travel and inspire confidence for
14 folks that drive across jurisdictions, ultimately resulting
15 in acceleration of ZEV adoption in California.

16 New on the horizon, we're very excited to work
17 with the Energy Commission on the Block Grant Program for
18 plug-in electric vehicle charging stations, which we
19 believe with this more nimble structure will have increased
20 ability to respond to this rapidly changing market.

21 So again, in conclusion, this program continues
22 to provide much needed strategic infrastructure support for
23 our zero emission vehicle goals in California and we
24 recommend adoption of the Investment Plan. Thank you.

25 CHAIRMAN WEISENMILLER: Thank you. Let's go on

1 to the ARB, Peter?

2 MR. CHRISTENSEN: Good morning, Peter
3 Christensen, with the Air Resources Board. Pleased to be
4 here today to support the Investment Plan and encourage
5 your adoption today.

6 This Investment Plan again, is a critical and key
7 complement to the investments that the Air Resources Board
8 is making through California Climate Investments as well as
9 our part of the AB 118 Program, the Air Quality Improvement
10 Program. Jacob, in his presentation, went through many of
11 the different ways that our programs complement each other.
12 I just want to give two examples that we don't often talk
13 about too much, and that's the manufacturing, which I think
14 is timely today.

15 One specific example, are the investments that
16 you've made in the past that support the Proterra
17 manufacturing facility in Burlingame. That's critically
18 important to what we're doing today by deploying those
19 vehicles. We are just now beginning a zero emission
20 transit bus pilot project that includes Proterra buses in
21 the San Joaquin Valley. That's a very exciting project
22 that's moving forward right not.

23 Another example are the investments that you've
24 made in the Motiv manufacturing facility. Ironically
25 enough, we have a vehicle right outside today as

1 Commissioner Scott pointed out, the AmeriPride Project,
2 which is another pilot project that we're moving forward
3 with. We're very excited about that along with many other
4 projects.

5 The landscape in advanced heavy-duty technologies
6 is very robust. There's strong market demand right now.
7 In our HDVIP Program that you're familiar with incentives
8 for hybrid and zero emission trucks and buses, the demand
9 far exceeds available funding. Right now we're on a
10 waiting list, but we are accepting applications and we're
11 encouraging fleets to apply for funding. We'll be able to
12 meet those funding requests with future funding.

13 We have \$13 million available right now for low
14 NOx engines. We're starting to see demand for the 8.9
15 liter low NOx engine especially, among the refuse haulers.
16 And as well with the transit fleets and we're very excited
17 looking forward to the 12 liter engine, which is going to
18 have a significant application in the freight sector. So
19 that funding is available today, \$13 million, and again
20 we're encouraging fleets to come in and access those funds
21 through our HDVIP Program.

22 Before I close, if you don't mind, I wanted to
23 just put a plug out there. We have three exciting events
24 coming up, and I would invite any Commissioner, staff or
25 members of the public that are interested. These are kick-

1 off celebrations, media events for a few specific projects,
2 a couple are located in Sacramento.

3 The first one though is SunLine Transit. This is
4 a fuel cell bus pilot project coming up on April 21st. If
5 you'd like to join us in Thousand Palms down south that's
6 going to be one of our next media events.

7 Second up is the Sacramento Community CarShare
8 Pilot Project. This is one of our light-duty equity
9 projects that's bringing cleaner transportation to
10 disadvantaged communities. This is a really exciting
11 project here locally in the Sacramento area. That event is
12 on May 5th at 11:00 o'clock at the Elder Grove Apartments.

13 And then the last one that I want to mention is
14 the Sacramento Zero Emissions School Bus Pilot Project.
15 That's going to be on May 12th at 10:00 o'clock at Martin
16 Luther King Junior Technology Academy, again here in
17 Sacramento.

18 So encourage anyone to join us for those exciting
19 events and I really thank you for your time and great work
20 on the Investment Plan. Congratulations to Jacob and the
21 team. And again ARB encourages your adoption of the
22 Investment Plan. Thank you.

23 CHAIRMAN WEISENMILLER: Thanks for being here and
24 thanks for the announcements of the events, they sound
25 interesting.

1 Let's go on to Proterra. Actually, excuse me,
2 let's go to the Fuel Cell Partnership first.

3 MR. WARD: Great. Thank you everyone. My name
4 is Justin Ward. I'm an Executive Manager within Toyota
5 Motor, North America and today I stand here as a
6 representative of the California Fuel Cell Partnership.
7 First, I'd like to thank everyone at the Energy Commission
8 for your continued leadership to improve California's
9 environment and the great example it sets for others within
10 the country.

11 Speaking specifically regarding the 2017 through
12 '18 Investment Plan, we at the Partnership are very
13 encouraged to see the continued commitment to fund hydrogen
14 infrastructure at levels that have real tangible benefits
15 to the marketplace today. Although fuel cell vehicles,
16 maybe from a volume point of view is small compared to
17 conventional vehicles at this moment, the feedback from
18 fuel cell vehicle drivers today show the great potential of
19 the technology to expand rapidly across the market and
20 effectively change transportation forever, as more players
21 bring their vehicles, stations and infrastructure
22 technologies into California.

23 The funding allocation defined in the Investment
24 Plan provides confidence to companies that the public will
25 have easy and convenient access to fueling. And that's one

1 of the key pieces to really allow this technology to take
2 off. As with any program, there are opportunities for
3 improvements the processes and procedures and as such as
4 the market evolves. So we would like to continue to
5 encourage that dialogue that's already happening today with
6 industry, but just keep it going as I'm sure things will
7 evolve as you move forward.

8 Speaking more broadly about the Investment Plan,
9 I feel the approach shows a very good balance in support of
10 a portfolio of technologies, which I think is very
11 important to really meet the state's needs to improve our
12 environment.

13 I'm only taking up a short time, so I'll give you
14 back a minute. Thanks again for giving me this opportunity
15 to say thanks to everyone and to recognize that great
16 effort of the writers and the supporting staff that
17 authored the 2017 and '18 Investment Plan.

18 CHAIRMAN WEISENMILLER: Yeah. Thank you for
19 being here.

20 Let's go to Natural Gas Vehicle Coalition.

21 MR. LAWSON: Good morning, Commissioners and
22 staff and everyone here. I want to take this opportunity
23 to thank you for, I think, putting together a great plan.
24 My name is Thomas Lawson, President of the California
25 Natural Gas Vehicle Coalition. And as an Advisory

1 Committee member, participating in these calls and having
2 staff really facilitate as much interaction input from all
3 of the varied technologies, has been a great experience,
4 especially as we navigate some of our WebEx technical
5 issues that's been really appreciative.

6 I did want to highlight a couple of points. One,
7 I think that this is a great plan, because it provides a
8 really great overview, not just in funding vehicle
9 incentives, but also funding infrastructure, which I think
10 is important. We have that conversation in California
11 about increasing the share of alternative fuels and
12 transportation. And you have to do both, right? You have
13 to fund the vehicles, but you also have to provide the
14 infrastructure. So the public knows that these are viable
15 options and there are contributions to getting to our
16 climate goals.

17 I also want to strongly support, I think three
18 particular pieces, which is the school bus piece. I think
19 we have way too many dirty diesel school buses on the road.
20 And we need to work really diligently as a state with all
21 the alternative fuels in trying to get that number way
22 down.

23 And also the workforce development piece I think
24 is key. Trying to train that next generation of kids,
25 especially for those communities of color where college may

1 or may not be an option, to be able to have those skills,
2 to be able to work on some of this new technology I think
3 is going to be key. And so we really appreciate that
4 inclusion.

5 And again the support specifically for natural
6 gas vehicles and the infrastructure is also welcome. And
7 we really appreciate all that everyone's done. And again,
8 we offer our strong support for the Plan. Thank you.

9 Oh, and kudos to Commissioner Scott, she's been
10 amazing.

11 CHAIRMAN WEISENMILLER: Great. She is. Thank
12 you. Thanks for being here.

13 Let's go to Proterra.

14 MR. LEACOCK: Good morning, Chairman Weisenmiller
15 and Commissioners. Thank you for the opportunity to
16 provide comments today. My name is Kent Leacock and I'm
17 the Director of Government Relations and Public Policy for
18 Proterra, the leading U.S. manufacturer of zero emission
19 battery electric commercial transit buses. Proterra
20 greatly appreciates the work of the California Energy
21 Commission. And I'll blend in with Peter Christensen's
22 comments.

23 In fact, the grant that Proterra received to
24 establish our manufacturing facility in Southern
25 California, which recently Commissioner Hochschild visited,

1 is now up and running and building buses. We've gone from
2 zero to a hundred rapidly. We currently have a large
3 number of openings and we're working with a variety of
4 workforce development local community colleges: Rio Hondo,
5 Mt. San Antonio College, etcetera, in conjunction with
6 Holda Alysses (phonetic) office to get the word out,
7 holding job fairs, etcetera.

8 And Proterra strongly supports the Energy
9 Commission's renewable, the ARFVT Program and the 2017-2018
10 Investment Plan. Specifically the allocation to expand in-
11 state manufacturing, because what many people don't realize
12 is that what the Commission did a couple of years ago, by
13 helping Proterra establish a manufacturing plan for our
14 buses led Proterra to relocate their corporate headquarters
15 to Northern California.

16 And as a result of a business decision, we ended
17 up developing a second business unit manufacturing line for
18 the battery packs that will go into our buses. We were
19 previous sourcing them from Michigan and taking the modules
20 from that source in Michigan and building the battery
21 packs. But now we'll be building them from scratch out of
22 the manufacturing facility in Burlingame. And in fact that
23 facility has gone from a plan of 10 to 20 employees to now
24 over 70 employees and we have had to purchase land in back
25 of our facility to alleviate parking issues, we've had such

1 dramatic growth in employees there.

2 Developing those extended battery packs that are
3 going to be being built in Burlingame will help the goal of
4 the accelerated deployment of zero emission heavy-duty
5 vehicles as it relates to goods movements at the ports and
6 drayage.

7 This technology transfer has become a reality.
8 We've been approached by multiple truck manufacturers and
9 even other international bus manufacturers that are
10 interested in our technology that would be built right
11 there in Burlingame and then licensed to some of these
12 other folks out there.

13 We look forward to continuing to work with the
14 Energy Commission. There are many, many additional -- I'd
15 just say scaling options that are available out there that
16 this Investment Plan would allow Proterra to take advantage
17 of.

18 And thank you again for the opportunity to
19 provide comments and our support.

20 CHAIRMAN WEISENMILLER: Thank you.

21 Any other public comments in the room? Okay. So
22 identify yourself for the court reporter.

23 MR. CASTELAZ: Yes, Jim Castelaz, Founder and CEO
24 of Motiv Power Systems, so good morning Commissioners,
25 Chairman Weisenmiller. Thank you for giving me the

1 opportunity to speak here. I want to speak in favor of
2 this Investment Plan and of the ARFVTP Program in general.

3 Motiv has been lucky and privileged to
4 participate in six programs or projects within that program
5 and some of the results Peter had already mentioned. Our
6 manufacturing facility in Hayward produces electronic
7 controllers for all electric trucks and buses.

8 There are a couple of others to highlight, one of
9 our earlier projects did a pilot of shuttle buses in
10 Mountain View, California. Three vehicles, there are now
11 six on the road there, and they just crossed 200,000 miles.
12 They move 15,000 people a month around the City of Mountain
13 View. And that's no longer a CEC project. It's completely
14 funded by Google and the City of Mountain View at this
15 point.

16 Another highlight, one of our more recent
17 projects put our technology -- again Motiv is a powertrain
18 provider, think something like Cummins but for all electric
19 -- and so putting that technology into refuse trucks. I'm
20 happy to say that Sacramento, the City of Sacramento, will
21 have one of those refuse trucks in the near future so your
22 trash can be collected with zero emissions.

23 And another program we're doing, putting that
24 same powertrain technology into school buses with a school
25 bus partner. They went from having no electric zero

1 emission school bus offering to hearing about incentives
2 available through CARB and the South Coast AQMD. And
3 becoming interested in developing an electric school bus.

4 And in the third and early fourth quarter last
5 year we started working with them. And through one of our
6 projects with the ARFVTP they were able to get a pilot
7 school bus on the road. And over the course of one month,
8 they demoed it to 40 school districts. And they received
9 order requests that they submitted to South Coast for over
10 200 buses. And that's with three to four weeks of a demo
11 of one vehicle.

12 And so that's how this money gets leveraged and
13 gets scaled up and it was just hugely successful. And I
14 think the South Coast and the school bus manufacturer were
15 kind of blown away by those results. So this program is
16 key to, I think California's climate goals. And to really
17 leading the global stage when it comes to electrification
18 in the future of transportation, especially in one of the
19 hardest segments of our economy to gain energy
20 independence, which is medium and heavy-duty vehicles.

21 And so I would certainly encourage this
22 Investment Plan, which I think really sets up ARFVTP for
23 taking the next steps and for growing with all these
24 complementary programs that Peter and others have spoken
25 to. So I just wanted to encourage your adoption and thank

1 you for the support that this program has given to Motiv
2 and to the industry.

3 CHAIRMAN WEISENMILLER: Great. Thank you.

4 Anyone else in the room? Anyone on the line?

5 (No audible response.)

6 CHAIRMAN WEISENMILLER: All right, Commissioner
7 Scott.

8 COMMISSIONER SCOTT: Well, this is great. It's
9 great to get some really good examples too of how the
10 program money is being used and then also how it's
11 leveraged. So I appreciate everyone who came made some
12 comments for us this morning.

13 I just want to start by thanking Jacob for his
14 excellent presentation and all of the great work that he's
15 put in to the 2017-'18 Investment Plan. Thank you very
16 much, Jacob. He always does a great job.

17 I've mentioned it before and I'll say it again
18 just because it's a nice time to put the program into
19 context, but as you all know, the transportation sector
20 here in California is almost 40 percent of the greenhouse
21 gas emissions. It's 80 percent of the nitrogen oxides that
22 form smog and that's bad for people's lungs and 95 percent
23 of the diesel particulate matter. And so anything that we
24 can do, any investments that we can put in place that
25 accelerate a transition to cleaner zero and near-zero fuels

1 and technologies is really important. And so I'm excited
2 about the nearly \$100 million that we have to invest again
3 this year.

4 I will note that the ARFVTP has, and will
5 continue to invest in impactful projects that help us
6 address barriers, and demonstrate technologies that
7 accelerate the commercialization of low carbon fuels and
8 technologies.

9 And another part that's really exciting to me
10 about the program is that we've been able to support
11 Governor Brown's zero emission vehicle goals. We were able
12 to help support the Sustainable Freight Action Plan and all
13 of our over-arching goals on air and on climate here with
14 our program. I really appreciate the team being creative
15 and innovative and flexible, so that we can mold the
16 program to take advantage of where we are. And these
17 technologies are changing really quickly, so the
18 flexibility that we're able to put into the program, I
19 think really helps us to stay cutting edge.

20 So I also wanted to say thank you to Kyle and the
21 team and all of the folks who brought their technologies
22 here for the showcases, which I hope we'll all take a
23 minute to look at when we break for lunch.

24 And I also wanted to just make note of our
25 acknowledgement page. We have the report in our binders.

1 Hopefully other folks have had a chance to pick it up or
2 download it off of the Web, but its Page I has
3 acknowledgements of all the fantastic staff who helped
4 Jacob to put the report together.

5 And then page II has all of the Advisory
6 Committee Members and our thanks to them for their lending
7 their expertise and their time to make sure we really shape
8 and get our program right. So that's all I have to say
9 about that.

10 If you all don't have questions, I'll heartily
11 recommend this for your approval.

12 COMMISSIONER HOCHSCHILD: I just wanted to share
13 my experience. I had this meeting in Southern California
14 and I was very close to the Proterra factory. I dropped in
15 as I know Commissioner Scott had visited and said good
16 things about it. And it was just remarkable to see the
17 scale -- I really want to encourage my colleagues if you
18 have a chance to drop by. I know (indiscernible) been to
19 the Tesla factory.

20 But they're building these buses, which I think I
21 saw the very first one. Kent led me (indiscernible) and
22 it's interesting. It has a 350-mile range, but also
23 rooftop capacity to even extend the range still further.
24 And this is I think a very exciting breakthrough. And it's
25 just great to see the stuff being built in California and

1 just a real tribute to the program.

2 So congratulations, Commissioner Scott.

3 COMMISSIONER DOUGLAS: I'll just say briefly as
4 well, and this will allow me to be even more brief later
5 when we do Commissioner reports, that I had the opportunity
6 to go to the Sustainable Energy For All event in New York
7 and speak on a panel and represent California. And the
8 panel happened to be focused on transportation and changes
9 to meet climate goals in the transportation sector.

10 So while I do my best to remain up to date on
11 transportation issues I had the privilege of spending quite
12 a lot of time getting myself very up to date on those
13 issues. And I will just say that the progress in this area
14 is really impressive in both the work at the ARB as well as
15 the Energy Commission, and other agencies in just the
16 incredible scale of transformation that we're really
17 starting to see.

18 So nice work to you, to the Advisory Committee
19 Members and speakers today and to ARB. It's quite a good
20 thing to see.

21 CHAIRMAN WEISENMILLER: I would point out that
22 Karen was in charge of our Transportation Committee back in
23 the older days, so she has some perspective of the change.

24 COMMISSIONER DOUGLAS: Yes, that's true.

25 CHAIRMAN WEISENMILLER: And that also she was

1 substituting for Mary Nichols, so not necessarily an easy
2 act to follow there.

3 COMMISSIONER DOUGLAS: That's true, I felt the
4 need to study up quite a bit actually.

5 COMMISSIONER SCOTT: I move approval of Item 5.

6 CHAIRMAN WEISENMILLER: All those in favor?

7 COMMISSIONER DOUGLAS: Second. (Laughter.)

8 CHAIRMAN WEISENMILLER: Second, good, good. It's
9 time for lunch, I can tell. All those in favor now?

10 (Ayes.)

11 CHAIRMAN WEISENMILLER: 5-0, congratulations.

12 Let's break. Let's come back at 1:00 and
13 everyone go out and have some fun.

14 (Off the record at 12:05 p.m.)

15 (On the record at 1:05 p.m.)

16 CHAIRMAN WEISENMILLER: We'll begin with Item 6
17 on the Agenda presentation. Thank you.

18 MS. MORAN: Good afternoon, Chair and
19 Commissioners. My name is Amber Moran and I am a student
20 intern with Commissioner Scott's Office. I wanted to take
21 a few minutes this afternoon to provide a brief update to
22 the Alternative and Renewable Fuel and Vehicle Technology
23 Program's "Driving to Cleaner Transportation Tour" webpage.

24 The Alternative and Renewable Fuel and Vehicle
25 Technology Program provides annual funding to develop and

1 deploy innovative clean transportation technologies to help
2 meet the state's ambitious climate goals and clean air
3 standards. Each year, dozens of projects funded through
4 the program are successfully completed, and are bringing
5 additional clean transportation options to California.

6 To showcase the diversity of successful projects
7 this program supports, each year we select a handful of
8 projects to feature on a section of the Commission's
9 website called the Driving to Cleaner Transportation Tour.

10 We have recently gone through the process of
11 adding some new projects, and I thought I would briefly
12 highlight a few here today, starting with City of Torrance.

13 The Energy Commission awarded a \$406,000 grant to
14 the City of Torrance to expand EV infrastructure within the
15 city. The City of Torrance undertook the One Mile, One
16 Charger project, making charging stations accessible within
17 a mile of almost anywhere in the City. As a result 14
18 Level 2 and 6 DC fast chargers were installed throughout
19 the City. The One Mile, One Charger approach was designed
20 to encourage residents and commuters to adopt an all-
21 electric or plug-in hybrid vehicle. And as a result the
22 City of Torrance has observed over a 300 percent increase
23 in the number of charges at city chargers.

24 The next project, the CR&R. The Energy
25 Commission awarded CR&R Incorporated with a \$5 million

1 grant to expand their waste transfer facility in Perris,
2 California with a state-of-the-art anaerobic digestion
3 system. The grant funded the first of four planned project
4 phases. Each phase will build a modular anaerobic digester
5 capable of processing 200 tons per day of municipal solid
6 waste, such as green waste and food scraps from residential
7 curbside waste collection.

8 This waste, which would otherwise be landfilled,
9 is now processed into a low carbon renewable natural gas
10 that is being used to fuel CR&R's fleet of natural gas
11 waste haulers. CR&R's project is unique in that the excess
12 renewable natural gas will be injected into the natural gas
13 pipeline, representing the first time renewable natural gas
14 will be interconnected with Southern California Gas
15 Company's natural gas system.

16 The next project is Proterra. The Energy
17 Commission awarded a \$3 million grant to Proterra to fund
18 the design, development, and construction of Proterra's new
19 zero-emission battery-electric bus manufacturing facility
20 in the San Gabriel Valley. Proterra's fast charge bus
21 features a battery pack that recharges in less than 10
22 minutes, with a nominal range of up to 50 miles between
23 charging events. Also, a newly introduced battery pack has
24 a nominal range of 251-350 miles per charge, with recharge
25 taking 3.5 to 5 hours.

1 During the term of the Energy Commission grant,
2 Proterra is estimated to manufacture and sell 424 buses,
3 resulting in a reduction of more than 900 million pounds of
4 carbon dioxide over the lifetime of the buses.

5 And the last project is the Los Angeles Harbor.
6 The Energy Commission awarded the Port of Los Angeles \$4.5
7 million to demonstrate zero and near-zero emission freight
8 technology for loading and unloading cargo at the terminal.
9 As part of the demonstration, the Port of Los Angeles will
10 equip five yard tractors with all-electric zero-emission
11 propulsion systems, and 20-yard tractors with a near-zero
12 low NOx natural gas engine that will be fueled with
13 renewable natural gas.

14 Additionally, the Port will outfit 100 trucks
15 with an advanced Intelligent Transportation System to
16 improve mobility and congestion in and around the port.
17 This project is anticipated to reduce 300,000 gallons of
18 petroleum and 1,100 tons of greenhouse gas emissions

19 These are just a handful of the many successful
20 ARFVTP projects to date. Across the board there are
21 projects that are motivating fleets to expedite their
22 transition to lower carbon fuel options, providing zero-
23 emission technologies in areas hardest hit with pollution,
24 and collectively are helping to achieve California's
25 climate and clean air goals.

1 To learn more about these four projects, as well
2 as the other projects funded through ARFVTP, we invite you
3 and the public to visit the Driving to Cleaner
4 Transportation Tour on the Energy Commission website.
5 Thank you.

6 CHAIRMAN WEISENMILLER: Yeah, thank you.
7 Commissioner Scott?

8 COMMISSIONER SCOTT: Thank you. Yeah, so this
9 got a little bit separated from the item. It was just as
10 along with the showcase an opportunity to show examples of
11 the types of projects that ARFVTP funds. And it's great to
12 have this up on our webpage, because that's a way for the
13 public to get -- and it's great, it's got pictures and
14 little dialogues that go along with it. So the public has
15 a chance to see the types of projects that we fund.

16 And I just want to say thank you very much to
17 Amber, she's very brave. This is a great project for an
18 intern to take on, really get the fully Energy Commission,
19 what it's like to be an Energy Commission staff and do a
20 presentation for the Commissioners. So thank you so much
21 for your work on that, and also to Katie and Melissa and
22 Sandy and Yee who helped us put this together and get it up
23 on the webpage. So thank you.

24 CHAIRMAN WEISENMILLER: Great, any public
25 comment?

1 (No audible response.)

2 Okay. Again, thanks again, let's go on to Item
3 7.

4 MS. PUREWAL: Good afternoon, Commissioners. My
5 name is Sharon Purewal and I'm a staff member in the Fuels
6 and Transportation Division's Zero Emissions Vehicle and
7 Infrastructure Office. Today staff is seeking approval of
8 two agreements submitted under Grant Funding Opportunity-
9 16-601, which supports new and existing planning efforts
10 for Zero Emission Vehicles. Funding is provided through
11 the Alternative and Renewable Fuels and Vehicle Technology
12 Program.

13 The first item, 7(a), is a proposed agreement
14 with the San Luis Obispo County Air Pollution Control
15 District for nearly \$300,000. This proposal aims to
16 utilize their award to implement key recommendations from
17 the Central Coast region's EV Readiness Plan and the
18 Alternative Fuel Vehicle Readiness Plan.

19 Activities for this project include creating a
20 Zero Emission Vehicle ombudsman position, analyzing
21 strategic electric vehicle charger siting opportunities,
22 accelerating medium and heavy-duty Zero Emission Vehicle
23 adoption, hydrogen refueling station siting, Zero Emission
24 Vehicle safety training for first responders, Electric
25 Vehicle Charging Station siting, and promoting Zero

1 Emission Vehicle awareness through test-drive events,
2 demonstrations, workshops, and green car shows.

3 The next item is 7(b), this proposed agreement
4 with the Monterey Bay Unified Air Pollution Control
5 District for just under \$300,000, will implement an updated
6 Zero Emission Vehicle Regional Readiness Plan.
7 Implementation activities will relate to electric vehicles,
8 and will target disadvantaged communities within the
9 region.

10 Activities for this project are to assess
11 Electric Vehicle Charging Station siting, conduct Zero
12 Emission Vehicle Awareness activities through workplace and
13 community events, support staff and elected leaders in the
14 CALGreen code adoption process, develop and adopt upgraded
15 building codes to enable Electric Vehicle Charging Station
16 ready stub-outs, and to accelerate Zero Emission Vehicle
17 deployment in major fleets.

18 With that, I would like to thank you for your
19 time and consideration of these items. And I'm available
20 for any questions you may have.

21 CHAIRMAN WEISENMILLER: Thank you.

22 Let's start, is there any comment from anyone in
23 the room or on the line?

24 (No audible response.)

25 Okay. So let's transition to Commissioner Scott.

1 COMMISSIONER SCOTT: No, I don't have any
2 additional comments on this one. I think you guys have a
3 good context for ARFVTP and the types of things it funds.
4 So if you don't have questions I'll move approval of Item
5 7.

6 COMMISSIONER MCALLISTER: I'll second.

7 CHAIRMAN WEISENMILLER: All those in favor?

8 (Ayes.)

9 CHAIRMAN WEISENMILLER: This item is approved 5-
10 0. Thank you.

11 MS. PUREWAL: Thank you.

12 CHAIRMAN WEISENMILLER: Let's go on to Item 8,
13 the Center for Sustainable Energy.

14 MR. FAUBLE: Good afternoon, Commissioners. I am
15 Brian Fauble with the Fuels and Transportation Division,
16 which is responsible for implementing the Alternative and
17 Renewable Fuel and Vehicle Technology Program or the
18 ARFVTP. I am today seeking approval for an agreement with
19 the Center for Sustainable Energy, or CSE, for up to \$200
20 million to design, implement and fund with Energy
21 Commission oversight, the various electric vehicle charger
22 incentive projects throughout California.

23 Initially, the Energy Commission is putting just
24 over \$15.25 million into this agreement. The \$200 million
25 authority under this agreement will allow additional funds

1 to be added either from the Energy Commission or other
2 public/private funding sources seeking to incentivize
3 electric vehicle charging infrastructure in California.

4 CSE had the highest-ranking proposal submitted
5 under Grant Funding Opportunity 16-603, the Block Grant for
6 Electric Vehicle Charger Incentive Projects. This
7 agreement will help identify electric vehicle incentive
8 projects by geographical regions and locational
9 requirements that at a minimum shall include:

10 The type or types and numbers of EV charging
11 equipment required for the target region.

12 Minimum technical requirements of EV charging
13 equipment such as the equipment specifications, the
14 warranty requirements, operational requirements, etcetera.

15 The type of incentive structure to be used such
16 as a voucher system using reservations, a rebate system
17 disbursing incentives after chargers are installed or other
18 appropriate incentives.

19 How much incentive should be provided per
20 charger; and the total funding required to complete the
21 proposed project or projects.

22 CSE will develop simple and user-friendly
23 application documents and will develop a plan for outreach
24 and advertisement to generate interest in applying. The
25 outreach and advertisement plan will maximize participation

1 by targeted markets and areas.

2 CSE will also develop user-friendly, public-
3 access webpages, which will include at a minimum online
4 application forms; the ability to submit online incentive
5 applications; applicable documents and forms; the ability
6 to track the total funds, both available and expended, in
7 real time. And the ability to provide information on
8 disbursements, such as a heat map representations or where
9 the funds are being disbursed.

10 ARFVTP staff will work with CSE and their
11 subcontractors to develop the individual incentive
12 projects' specifications. And then CSE will be responsible
13 for accepting, reviewing, and approving the incentive
14 applications, verifying installations, and issuing the
15 incentive payments. The agreement is designed to reduce
16 the gaps of regional EV charging needs and speed up the
17 deployment and installations of EV charging stations in
18 California toward meeting the Governor's goals of 2025.

19 The initial funding for this agreement is
20 provided through the ARFVTP program.

21 And I would like to thank you for your time and
22 consideration of these items. I'm available for any
23 questions. We also have staff from CSE available for
24 questions. Thank you.

25 CHAIRMAN WEISENMILLER: Great. Thank you.

1 So I've got two blue cards. First, CSE, Colin,
2 come on up.

3 MR. SANTULLI: Hi. Thanks Commissioners, for the
4 time. My name's Colin Santulli. I oversee our clean
5 transpirations programs for CSE.

6 We've been administering or are running ARFVTP-
7 funded projects since 2011, primarily the readiness
8 projects and now the readiness implementation projects.
9 And that worked coupled with the work we've been doing with
10 the Air Resources Board on vehicle incentives. It makes us
11 very excited and very qualified we think to do the same in
12 the infrastructure space for the Energy Commission.

13 So we're very excited to be here today and have
14 you all consider this. And we are very committed to make
15 it a successful project for California. Thanks.

16 CHAIRMAN WEISENMILLER: Okay. Thanks. Thanks
17 for being here.

18 Okay. California Clean Energy Fund, please.

19 MR. BARTLETT: Hello, Commissioners, thank you.
20 My name is Ben Bartlett with the California Clean Energy
21 Fund and it is with great, great pleasure and excitement
22 that I urge you to approve this Item Number 8, the block
23 grant for the CEVs.

24 At CalCEF, the California Energy Fund, we believe
25 that the proper use of our resources can be magnified

1 through the implementation of private funding sources,
2 which are called for in this item. And there's a
3 specialty. And we also want to thank the Public Adviser
4 for her outreach efforts and that's how we learned of this
5 program. And also that this body's commitment to
6 diversity, which we feel we embody and will also serve. So
7 I want to thank you so much and I'm here if you have
8 questions.

9 CHAIRMAN WEISENMILLER: Okay. Thank you. Thanks
10 for being here.

11 Anyone else in the room or on the line who have
12 comments?

13 (No audible response.)

14 Okay. So transition to Commissioner Scott again.

15 COMMISSIONER SCOTT: Well, I'll just say thank
16 you to Colin for being here and our other commentator as
17 well. And I will move approval of Item 8.

18 COMMISSIONER MCALLISTER: I'll second.

19 CHAIRMAN WEISENMILLER: All those in favor?

20 (Ayes.)

21 CHAIRMAN WEISENMILLER: This passes 5-0. Thank
22 you.

23 MR. SANTULLI: Thank you.

24 CHAIRMAN WEISENMILLER: Let's go on to Item 9,
25 Berryessa Union School District.

1 MS. RUDMAN: Good morning, Mr. Chairman and
2 Commissioners. I'm Monica Rudman with the Local Assistance
3 and Financing Office of the Efficiency Division. I'm here
4 to request your approval of a \$911,000 ECAA-ED loan at zero
5 percent to the Berryessa Union School District.

6 Berryessa Union School District will use this
7 loan to upgrade three schools: Cherrywood Elementary,
8 Piedmont Middle and Sierramont Middle. The scope of the
9 retrofit will be to upgrade the existing interior lights to
10 more efficient LEDs, to install occupancy lighting controls
11 and to upgrade the existing exterior lights to LEDs.

12 When the project is completed, the first year
13 electricity savings will be over 202,000 kilowatt hours.
14 By the end of 20 years, Berryessa Union School District
15 will have saved over \$1 million in utility costs. Based on
16 the loan amount, the simple payback is 17.8 years. This
17 loan fulfills the ECAA-ED Loan Program requirements, so I
18 recommend and request your approval.

19 I'm happy to answer any of your questions. Thank
20 you.

21 CHAIRMAN WEISENMILLER: Thank you. Any comments
22 from anyone in the room or on the line?

23 (No audible response.)

24 Okay, transition to Commissioners, Commissioner
25 McAllister?

1 COMMISSIONER MCALLISTER: Nothing super
2 (indiscernible) to say, but obviously lighting technology
3 has come a long way lately. And it's good to see
4 integration of the lighting itself with the controls,
5 because that's pretty key for getting savings. And, you
6 know, we need to see that marketplace developed and get the
7 costs down, so this is a great project.
8 So I'll move.
9 COMMISSIONER HOCHSCHILD: Sorry, just to -- what
10 is the backlog on the ECCA Program in general? Do you know
11 offhand how many --
12 MS. RUDMAN: What is the backlog?
13 COMMISSIONER HOCHSCHILD: -- in the program?
14 MS. RUDMAN: There's currently no loans in the
15 waiting list.
16 COMMISSIONER HOCHSCHILD: Okay.
17 MS. RUDMAN: And the amount of funding available
18 right now, if all of the potential and pending loans are
19 approved, is about \$3.75 million.
20 COMMISSIONER HOCHSCHILD: Okay. Good to know.
21 MS. RUDMAN: That's for both ECCA and ECCA-Ed.
22 COMMISSIONER HOCHSCHILD: Okay. Good to know.
23 Thank you.
24 COMMISSIONER MCALLISTER: All right, so I'll move
25 Item 9.

1 COMMISSIONER HOCHSCHILD: Second. Second.

2 CHAIRMAN WEISENMILLER: All those in favor?

3 (Ayes.)

4 CHAIRMAN WEISENMILLER: It passes 5-0. Thank
5 you.

6 Let's go on to Item 10.

7 MR. WEIGHTMAN: Good Afternoon Commissioners,
8 Directors and Attendees. My name is David Weightman. I'm
9 an Energy Generation Systems Specialist with the Research
10 Division's Energy Efficiency Research Office.

11 The agreement for which I am seeking your
12 approval today is a request for a \$250,000 grant to support
13 testing of biogas fuels when used in small appliances to
14 evaluate how the use of these fuels affect flame stability,
15 operational performance and emissions. The emissions
16 impacts will be quantified and evaluated in terms of their
17 effect on indoor and outdoor air quality. The results of
18 these tests will help facilitate the design of residential
19 and commercial appliances that can safely operate using
20 biogas fuels in the United States.

21 This project builds on two previous research
22 grants that developed and demonstrated simulation methods
23 that when used, they correctly predicted trends in
24 emissions and combustion stability as a function of fuel
25 composition. One of the previous contracts tested the

1 methodology on six burner configurations that use
2 relatively large amounts of natural gas in California.
3 These validated methodologies will be applied to
4 residential and small commercial appliance burners using
5 existing experimental data available from Lawrence Berkeley
6 National Labs.

7 Different types of fuel mixtures will be tested
8 based on input from Technical Advisory Committee members
9 that are part of this project. The results can be used to
10 guide operational modifications to existing equipment that
11 allow them to operate use alternative fuels to natural gas
12 safely, while generating lower amounts of pollutants and
13 greenhouse gas emissions.

14 So in summary, the goals of this project are to
15 help overcome barriers to the achievement of state energy
16 goals by helping facilitate the adoption of biogas and
17 other alternative fuels to natural gases in the use of
18 appliances and to reduce greenhouse gas emissions.

19 I'm here to answer any questions that you may
20 have.

21 CHAIRMAN WEISENMILLER: Thank you. Let's start
22 with are there any comments from anyone in the room?

23 (No audible response.)

24 Okay. Let's go to the line, I believe UC
25 Irvine's there? Please, Mr. McDonell? Please speak?

1 MR. MCDONELL: Yeah, this is Vince McDonell.
2 Yes, I'm here to help answer any questions if there are
3 any.

4 CHAIRMAN WEISENMILLER: Okay. Thank you.

5 Then I guess I'll transition and basically
6 encourage -- I'm the Lead Commissioner on Research -- and
7 was going to encourage the Commission to support this. I
8 think basically we're obviously trying to understand
9 better, some of the characteristics going forward. We have
10 a workshop coming up in the summer on this, generally on
11 the renewable gas issue.

12 But basically I think starting to collect data on
13 this aspect will at least be helpful with the longer term.

14 COMMISSIONER SCOTT: Yeah, move approval of Item
15 10.

16 COMMISSIONER MCALLISTER: Second.

17 CHAIRMAN WEISENMILLER: All those in favor?

18 (Ayes.)

19 CHAIRMAN WEISENMILLER: This passes 5-0. Thank
20 you.

21 Let's go on to Number 11, Off-Road Heavy-Duty
22 Natural Gas Vehicle Research and Development.

23 MS. MAGANA: Okay. Good afternoon, Chair and
24 Commissioners. I'm Pilar Magana with the Research and
25 Development Division's Transportation Office. And I'm here

1 to present for approval three agreements proposed for
2 awarding under a competitive grant funding opportunity to
3 develop, integrate and demonstrate heavy-duty natural gas
4 off-road vehicles.

5 The off-road vehicle sector is one of the primary
6 sources of emissions in both the South Coast and San
7 Joaquin Valley air basins, yet few options exist for fleets
8 to transition to low-emission vehicle options given the
9 vehicle complexity and lifespan of these niche vehicles.

10 The solicitation sought to take existing on-road
11 natural gas vehicle technologies and strategies for
12 integration into these off-road applications in order to
13 tackle emission issues faced by the off-road market.

14 The first agreement is with Gladstein, Neandross
15 & Associates to demonstrate off-road vehicles in the Port
16 of Los Angeles. They will be integrating the 6.7 liter
17 near-zero Cummins Westport engine into two yard hostlers,
18 which are used for cargo handling in the ports.

19 This project will include the use of renewable
20 natural gas in the yard hostlers as well as an innovative
21 fuel censor being developed by UC Riverside. The UC
22 Riverside fuel censor will measure gas composition and
23 adjust certain engine parameters to compensate for unusual
24 variations that can sometimes be found in renewable natural
25 gas thereby optimizing emission performance.

1 By integrating both the low NOx engine and
2 renewable natural gas this project can provide data showing
3 the significant emission performance benefits of combining
4 and utilizing two low emission options. Additionally,
5 while these port vehicles are being demoed specifically in
6 the South Coast Air Basin, they can be used in any other
7 ports throughout California.

8 Also, while the ports aren't considered a
9 disadvantaged community, the surrounding communities are
10 affected by port emissions and therefore benefit from
11 advanced vehicle activities.

12 The second agreement, with Olson-Ecologic Testing
13 Laboratories is for the demonstration of two heavy-duty
14 off-road construction vehicles. For the first vehicle,
15 Olson-Ecologic will be integrating and demonstrating a
16 near-zero CWI 8.9 liter engine into a Caterpillar wheel
17 loader, which is typically used to move aside or load heavy
18 materials such as asphalt.

19 The second portion of the project will consist of
20 converting an 18 liter diesel engine into natural gas and
21 then integrating this engine into a scraper construction
22 application, which is used for earth-moving construction
23 activities. Both of these vehicles will be demonstrated in
24 the South Coast Air Basin.

25 The third agreement will be led by Terzo Power

1 Systems to develop, integrate and demonstrate a natural gas
2 hybrid system on an agricultural tractor. Terzo Power will
3 converting a Kubota natural gas engine or a Kubota engine
4 to natural gas for this system. The hybridization of this
5 tree maker's machine will improve safety and increase fuel
6 efficiency, thereby reducing fuel consumptions and
7 improving emission performance.

8 The demonstration of this orchard vehicle will be
9 located at Richard Iest Dairy in Madera in the San Joaquin
10 Valley. This project is also located in a disadvantaged
11 community that is directly impacted by agricultural vehicle
12 emissions.

13 Thank you for your consideration and I'd be happy
14 to answer any questions.

15 CHAIRMAN WEISENMILLER: Thank you. First, are
16 there any comments from anyone in the room or on the phone?

17 (No audible response.)

18 Okay. We'll transition. I was just going to
19 remind the Commissioners this morning when we adopted the
20 Investment Plan there were a number of parties who talked
21 about basically the use of natural gas in heavy-duty and
22 the importance. Because certainly we all know that for our
23 low-income consumers, that there are substantial health
24 risks from living adjacent to freeways. I guess there's
25 some recent research that indicates that if you're within

1 the sort of 500-foot band on either side, it's particularly
2 severe.

3 So in terms of trying to respond to that and at
4 the same time recognizing this movement is 20 to 30 percent
5 of the economy in Southern California this type of research
6 is critical. And I think, compliments some of the longer
7 term efforts of the Air Board on electrifying or hybriding
8 (indiscernible) heavy-duty vehicles.

9 COMMISSIONER SCOTT: It's a really nice
10 complement as well to ARFVTP, which typically focuses more
11 on the on-road sector and the off-road sector is also very
12 important as you mentioned. And so I agree it's quite
13 complementary. I had an excellent briefing on these
14 projects and I think they sound great.

15 I will move approval of Item 11.

16 COMMISSIONER MCALLISTER: Second.

17 CHAIRMAN WEISENMILLER: All those in favor?

18 (Ayes.)

19 CHAIRMAN WEISENMILLER: This passes 5-0. Thank
20 you.

21 Let's go on to Item 12.

22 MR. ALDAS: Good Afternoon Chair Weisenmiller and
23 Commissioners. I am presenting this item in place of Mrs.
24 Snyder who cannot be here today. My name is Rizaldo Aldas,
25 I'm with the Energy Generation Research Office of the

1 Energy Research and Development Division. And I'm here to
2 seek your approval of the proposed agreement EPC-16-035
3 with Sunpreme, Inc. for a \$2,430,000 grant.

4 This project was selected under the Federal Cost
5 Share Opportunity Solicitation PON-14-308 of the Electric
6 Program Investment Charge. The purpose of that
7 solicitation was to provide cost share funding to eligible
8 applicants that apply for and receive an award from
9 eligible funding opportunity from the Department of Energy
10 and meet the requirements of the particular solicitation.

11 So on top of the EPIC grant award we're providing
12 to Sunpreme, the recipient has secured a DOE award for
13 \$4,999,999 and further contributes \$4,540,310 in match
14 funding to the project.

15 Under the proposed agreement, the grant recipient
16 will develop a next-generation manufacturing tool for low-
17 cost, high-performance copper patterning on silicon-PV
18 using technologies from printed circuit board
19 manufacturing. This manufacturing tool will reduce costs
20 by up to 35 percent, and increase efficiency by about 15
21 percent for solar PVs.

22 Lower costs and better performance of silicon-
23 based solar cells will be achieved through the substitution
24 of silver used on the front side of industrial silicon
25 solar cells by copper. Silver metal is one of the

1 important cost drivers in manufacturing of a PV cell. A
2 metallization scheme, which is the application of a
3 conductive metallic layer on top of the silicon layer based
4 on all-copper plating, has the potential to lower these
5 costs while improving the overall efficiency of the PV
6 cells.

7 So if successful, the recipient will accomplish
8 the following milestones by the end of the agreement. They
9 will establish a pilot manufacturing line for production of
10 copper-metalized solar modules. They will produce 750 test
11 modules to be tested by a third party. Establish the
12 process for at least 25 megawatts of manufacturing capacity
13 and complete an economic analysis of the manufacturing
14 costs.

15 With that, I recommend approval of the proposed
16 agreement and am ready to answer your questions. And I
17 believe a representative of the recipient is also here
18 ready to answer any questions you have. Thank you.

19 CHAIRMAN WEISENMILLER: Great. I was going to
20 say is there anyone in the room who wants to comment on
21 this, certainly the recipients or anyone on the line?

22 (No audible response.)

23 No. I was going to say to at least kick off the
24 Commissioner discussion, this is an interesting one. I
25 particularly like the idea that it's a match fund.

1 Obviously, at this point as we remind people last year
2 China installed 120 gigawatts of solar in China. I don't
3 how much they export it, so basically anyone trying to do
4 manufacturing has got a pretty heavy lift on the -- well it
5 tips the scale of the Chinese manufacturing. But I think
6 certainly continuing to see if we can make manufacturing
7 viable here is good.

8 Anyone else?

9 COMMISSIONER MCALLISTER: I'll move Item 12.

10 COMMISSIONER SCOTT: Second.

11 CHAIRMAN WEISENMILLER: Thanks. All those in
12 favor?

13 (Ayes.)

14 CHAIRMAN WEISENMILLER: This passes 5-0. Thank
15 you.

16 Let's go on to 13.

17 MS. PALMA: Good afternoon, Chair and
18 Commissioners. My name is Silvia Palma from the Energy
19 Research and Development Division. I'm here to request
20 your approval of two grant agreements recommended for
21 funding under Grant Funding Opportunity GFO-16-301. The
22 purpose of this solicitation was to fund applied research
23 and development projects that develop technologies and
24 tools to enable higher penetration of renewable energy and
25 that reduce technological and economic barriers to small

1 hydropower, geothermal, and wind power generation.

2 The agreements I am presenting today are
3 recommended for funding under the in-conduit hydropower
4 group of the solicitation. The group was focused on
5 expanding the use of in-conduit hydropower in California,
6 advancing the pre-commercial development and demonstration
7 of in-conduit hydrokinetic turbines and generators.

8 The first project is with Amador Water Agency.
9 The purpose of the project is to advance the pre-commercial
10 development and demonstration of an innovative, redesigned
11 high-head Pelton turbine runner technology. This
12 demonstration project will design, test, demonstrate, and
13 validate a 417 kilowatt in-conduit Pelton turbine runner
14 at an existing pressure reducing station site located in
15 Ione, California.

16 Amador Water Agency is also the site host and
17 California Environmental Quality Act (CEQA) lead agency for
18 the work funded under this Agreement. The Water Agency
19 adopted a Mitigated Negative Declaration on September 22,
20 2016 that reviewed the potential environmental impacts of
21 the work to be performed under the proposed grant
22 agreement.

23 As a responsible agency, the Energy Commission
24 must consider the environmental effects of the project.
25 Staff has reviewed the Mitigated Negative Declaration and

1 recommends that the Commission find, based on the back-up
2 materials for this agenda item, that the potential impacts
3 of the project have been avoided or mitigated to a less
4 than significant level.

5 The project will demonstrate the ability to
6 maximize the capture of wasted energy at a pressure
7 reducing station and contribute to the integration of in-
8 conduit small hydropower into the existing state energy
9 mix. If successful, this project will increase the turbine
10 efficiency by 1 to 1.5 percent over the current design and
11 improve the energy generation of in-conduit hydroelectric
12 stations.

13 The second project is with Natel Energy. The
14 purpose of the project is the design and demonstration of
15 an innovative modular, cost-effective and scalable civil
16 works design for in-conduit, low-head hydropower projects,
17 using the recipient's hydroEngine® turbine technology to
18 deploy an over-the-canal plant design.

19 This demonstration project will site this design
20 at up to three Yolo County Flood Control and Water
21 Conservation District locations. The site host and CEQA
22 lead agency for this project is the Yolo County Flood
23 Control and Water Conservation District.

24 On March 7th, 2017 the District Board of
25 Directors adopted an Initial Study/Mitigated Negative

1 Declaration for the canal-based, small in-channel
2 hydroelectric power plant co-located solar project. As a
3 responsible agency, the Energy Commission must consider the
4 environmental effects of the project. Staff has reviewed
5 the Mitigated Negative Declaration and recommends that the
6 Commission find, based on the back-up materials of this
7 agenda item, that the potential impacts of the project have
8 been avoided or mitigated to a less than significant level.

9 If successful, this agreement will lower
10 construction and civil works costs of in-conduit projects
11 across irrigation canal drops, because of the significant
12 drop in excavation, formwork, and bracing, as well as
13 improve construction scheduling flexibility and inlet
14 design.

15 I am requesting your approval for these
16 agreements, and I am ready to answer the questions you may
17 have. Thank you.

18 CHAIRMAN WEISENMILLER: Thank you.

19 First, is there any comments from anyone in the
20 room or on the line?

21 (No audible response.)

22 Okay. I just want to make a couple of points,
23 when it first was in actually 1978, I set up the Energy
24 Commission's Small Hydro Office. And the notion was
25 obviously no one wanted to see any new hydro facilities in

1 California, but to see if there were ways to increase the
2 energy production of existing facilities. Obviously, power
3 plants have changed quite a bit in the '70s, so it's a good
4 time to go back and relook at those.

5 And under the EPIC (indiscernible) investment we
6 had a workshop and basically the water agencies came in and
7 really asked us to try now to push some of the conduit
8 technology. And so again, we'll see how it works out, but
9 I think it's a good opportunity to explore this. I would
10 note that we've just had PG&E announcing it was actually
11 giving up one of its licenses to sort of changing wholesale
12 prices and mitigation costs. So we may be at a different
13 stage at hydro, but it's interesting to see what comes out
14 of this. All right.

15 COMMISSIONER SCOTT: Well, 13. I'll move
16 approval of Item 13.

17 COMMISSIONER MCALLISTER: I'll second.

18 CHAIRMAN WEISENMILLER: All those in favor?

19 (Ayes.)

20 CHAIRMAN WEISENMILLER: This is approved 5-0.

21 Thank you.

22 Let's go on to 14.

23 MR. SETHI: Good afternoon, Commissioners. My
24 name is Prab Sethi, and I am a Senior Mechanical Engineer
25 in the Energy Generation Research office.

1 GFO-16-302 competitive solicitation was released
2 to fund applied research and development projects to
3 advance breakthrough energy generation technologies and
4 piezoelectric-based systems to increase efficiencies,
5 reduce costs and enable generation from additional
6 renewable resources for distributed generation. The
7 following five projects from this solicitation are proposed
8 to be EPIC funded for a total of \$7 million.

9 The first project, EPC-16-036, is with AltaRock
10 Energy, Inc. for a \$1,280,000 grant to demonstrate use of a
11 thermoelectric generator for a pilot-scale project. This
12 project will produce up to 20 kilowatts of electricity at
13 the Bottle Rock geothermal power plant at the Geysers, and
14 help determine how thermoelectric technology could be used
15 to develop distributed energy production up to 5 megawatt
16 from a geothermal resource, without using mechanical
17 infrastructure such as turbines.

18 The goal of this technology is to reduce the cost
19 of small scale geothermal energy production and increase
20 its distribution.

21 The second project, EPC-16-042, is with Lawrence
22 Berkeley National Laboratory for a \$2 million grant to
23 develop a thermoelectric waste heat recovery process by
24 creating advanced thermoelectric materials constructed from
25 silicon nanowire arrays.

1 The project will create a cost-effective system
2 that will recover high temperature waste heat at 300 degree
3 to 800 C available in industrial facilities, such as
4 refineries, cement plants, and oil and gas operations to
5 generate supplemental electricity and help reduce energy
6 use in the industrial sector. The process is targeted to
7 be 2.5 times more efficient compared to the state-of-art
8 thermoelectric generators. This project is providing
9 approximately \$3.5 million as match funding.

10 The third project, EPC-16-049, is with The
11 Regents of the University of California, Merced campus for
12 \$1,270,000 grant to design and test a piezoelectric roadway
13 energy harvesting system, consisting of multi-layer stack
14 generators and power electronics, to capture over 50
15 percent of the compression mechanical energy as electricity
16 from passing vehicles. This project will demonstrate
17 electric power generation, in the lab and on a section of a
18 road at the UC Merced campus, and will determine
19 feasibility for future large-scale demonstrations on
20 highways and streets with piezoelectric under-pavement.

21 The fourth project, EPC-16-050 is with The
22 Regents of the University of California, San Diego campus
23 for \$1,450,000 grant to develop a low-cost, and high-
24 efficiency next-generation perovskite solar cells. The
25 proposed solar cells can be fabricated at low temperatures

1 around 100 C in contrast to crystallization of high-purity
2 silicon above 1,400 degrees C. And will lead to more than
3 a 50 percent reduction in \$/Watt cost of solar modules over
4 traditional silicon cells.

5 And the last project is EPC-16-052 with Pyro-E,
6 LLC for a \$1 million grant to demonstrate piezoelectric
7 technology that harvests energy by roadway deflection and
8 vibration from over-passing motor vehicles. The system
9 consists of piezoelectric materials with objective to
10 advance generation of clean electricity from untapped
11 resources.

12 This project has a target of power density equal
13 to 300 watts per square foot. The proposed piezoelectric
14 technology was developed at NASA Langley Research Center,
15 Hampton, Virginia and has been licensed by Pyro-E LLC.

16 I request approval of funding for these five
17 projects. Thank you.

18 CHAIRMAN WEISENMILLER: Thank you.

19 Well, first is there anyone either in the room or
20 on the phone who want to comment on this?

21 (No audible response.)

22 All right, then I'll transition to the
23 Commissioners. I think most people will recall that this
24 was something that Goddard (phonetic) was very interested
25 in and sort of Goddard's looking at the feasibility. And

1 we continue to march into it, it certainly has a lot of
2 interesting applications. This has probably been, of all
3 of our research activity, the one who's gotten the most
4 press as you probably know, Mike Gravely being our
5 spokesman on it.

6 So anyway, I certainly encourage us to continue
7 this explanation.

8 COMMISSIONER MCALLISTER: Okay. I'll move Item
9 14.

10 COMMISSIONER SCOTT: Second.

11 CHAIRMAN WEISENMILLER: All those in favor?

12 (Ayes.)

13 CHAIRMAN WEISENMILLER: This is approved 5-0.

14 Thank you. Thanks, Mike.

15 Let's go on to 15.

16 Oh, sure. Come on up, I forgot to call for
17 public comment.

18 MS. WARD: Hi, Mr. Chair and Commissioners. I
19 just wanted to thank you on behalf of Berkeley Lab and
20 Robbie Persher (phonetic) who's our PI on that project, on
21 piezoelectric and our partner in that endeavor, AltaRock
22 Energy, for your support of that project. And we're
23 excited and interested to see what the outcomes are for
24 you.

25 CHAIRMAN WEISENMILLER: That's great. I was

1 going to encourage you to go back to try and un-clutter
2 some of the red tape on contracting. Fortunately when I
3 was LBR I never met an attorney there, but somehow you've
4 gone over to the dark side and hired some, so.

5 MS. WARD: We're working on it.

6 CHAIRMAN WEISENMILLER: Thank you.

7 MS. WARD: Thank you.

8 CHAIRMAN WEISENMILLER: Please.

9 MR. MORI: All right, cool. Good afternoon,
10 Commissioners. I am Kevin Mori from the Energy Efficiency
11 Research Office. Today staff is recommending approval of
12 the following five research agreements. Please note that
13 the CEC 270 from the backup materials for Item 15a has been
14 updated this morning. Copies have been provided to the
15 Commissioners and have also been placed on the entry table
16 for the public. The material changes to the CEC 270 were
17 to include the CEQA exemption analysis and reflect a
18 demonstration nature of the project, which is consistent
19 with the Business Meeting agenda item description for this
20 item.

21 CHAIRMAN WEISENMILLER: Great. Thank you.

22 MR. MORI: All right, so moving on Item a is a
23 hyper-efficient pump motor unit with a fully integrated
24 permanent magnet motor and motor controls with combined
25 liquid cooling with Terzo Power Systems. Hydraulic power

1 units are used in numerous industries and currently use
2 induction motors and energy-wasting valves that are
3 inefficient. Terzo Power Systems will be integrating the
4 newest permanent magnet motor technology with the most
5 efficient motor controls in a simple liquid cooling loop.

6 The system is estimated to be approximately 80
7 percent more efficient than the conventional system and
8 will reduce size and costs for improved cost effectiveness.

9 Item b is development of new technologies for
10 agricultural loads to participate in renewables
11 integration, RTP programs, and/or new Time of Use rates
12 with Polaris Energy Services.

13 With the abundance of solar that has been
14 deployed California is experiencing over-generation in the
15 middle of the day. With a shift towards real-time pricing
16 growers need a way to participate and respond to the newer
17 market. Polaris will work with the farmers to develop
18 strategies for participating in demand response programs.
19 They will advance technology that can shed loads when
20 necessary, improve reliability, and improve data and
21 equipment accessibility.

22 Item c is pilot testing of isothermal compression
23 with Gas Technology Institute. Air compressors produce a
24 lot of heat during the compression cycle and require more
25 energy as the air gets hotter. GTI will be testing a NEAR

1 isothermal compressor that will use a liquid to compress
2 air and simultaneously extract heat out of the compressing
3 air. This process has the potential to reduce electricity
4 use by approximately 50 percent compared to the
5 conventional air compressor types.

6 Item d is development and testing of an energy
7 efficient ultralow charge ammonia refrigeration system in a
8 food processing plant with Electric Power Research
9 Institute. HFC refrigerants will most likely be phased out
10 in the near future and ammonia has been a proven
11 refrigerant. However, most ammonia-based cooling systems
12 used today require not only large amounts of ammonia, but
13 are also prone to leakage from the mechanical shaft seal
14 between the motor and compressor and require special
15 handling and management plans.

16 EPRI will pilot test their low-charge and
17 practically leak-free ammonia refrigerant system in a
18 micro-channel air-cooled condenser. The system has the
19 potential to save approximately 20 percent of electrical
20 usage compared to the conventional refrigerants.

21 Item e is increased energy efficiency via
22 programmable irrigation and fertigation with PowWow Energy.
23 Current energy efficiency programs do not address the
24 complexity of farming and can potentially have components
25 conflicting with one another. PowWow will be integrating

1 their cloud-based data analytics and data provided by on-
2 farm sensors to give the user alerts, weekly
3 recommendations, and more.

4 This integrated system has a potential to save
5 over 20 percent of energy and 15 percent of water compared
6 to existing energy efficiency program or commercial
7 irrigation offerings.

8 I recommend approval of these projects and thank
9 you. I'm happy to answer any of your questions.

10 CHAIRMAN WEISENMILLER: Thank you.

11 First, any comments from anyone in the room or
12 anyone on the line?

13 (No audible response.)

14 Okay. Then let me at least start off the
15 conversation. I mean, obviously the Energy Commission is
16 focused on buildings for decades and probably we can point
17 a lot of that inspiration to Art Rosenfeld. As you go
18 outside of buildings into more industrial and agricultural
19 uses, it's a lot more variety there although some common
20 themes like pumps or motors and stuff. So I think it's
21 really important as we move forward on doubling energy
22 efficiency we've got to get a better handle on this side,
23 outside of the building context.

24 And certainly, I've heard from ARB on their
25 concern on the refrigerants of basically move to more

1 advanced refrigerants that are kinder to the environment.
2 So these are all I think, very good projects that we'll
3 continue to push along. Although again I think more over
4 time, I think -- certainly Commissioner McAllister and I
5 have talked about trying to really figure out how to go
6 outside of buildings into other areas. I think the last
7 scoping plan required a lot of audits to be done by
8 industrial customers, but at this point everyone's trying
9 to figure out what to do with them.

10 So anyway, I certainly would recommend people go
11 forward with these.

12 Commissioner McAllister?

13 COMMISSIONER MCALLISTER: Yeah, so I mean first
14 of all I want to congratulate the R&D Division on just a
15 really great fleet of projects bringing forward for this,
16 and previous ones. I think we have another coming up after
17 this. But this one in particular, you know, SB 350 the
18 doubling really incorporates more than just buildings. You
19 know, we started out looking at buildings and when SB 350
20 came down it amplified that and expanded it to new areas.
21 And agriculture and industry are two large sources of
22 carbon, large energy consumers, big parts of our economy.
23 And really deserve a good look in this R&D.

24 This suite of projects is really great, so I want
25 to just echo really what the Chair said. It's important

1 that we find ways to develop technologies, partner with the
2 stakeholder group or many groups throughout the state. And
3 maybe we don't have as deep a relationships with or the
4 same kinds of relationships that we do with the builders
5 and the stakeholders around our Appliance and Building
6 Efficiency Standards. So this is a little bit of new
7 territory for us and a lot of it starts with R&D and that's
8 the sort of beginning of the transformation curve.

9 So hopefully we'll get some good technologies out
10 there and really create a foundation to fund along the
11 lines of what we're seeing with getting implementation
12 done, infrastructure built, really getting hardware out
13 there down the line. So thanks for your efforts on this,
14 to Lori and the team as well.

15 So I will move Item 15.

16 COMMISSIONER SCOTT: Second.

17 CHAIRMAN WEISENMILLER: All those in favor?

18 (Ayes.)

19 CHAIRMAN WEISENMILLER: So Item 15 is approved 5-
20 0.

21 Let's go on to Item 16.

22 MR. STOMS: Good afternoon, Commissioners. My
23 name is David Stoms from the Research Division. And I'll
24 be giving the presentation on behalf of Katherina Snyder
25 today.

1 Under EPIC grant funding opportunity GFO-16-306
2 the Energy Commission staff selected eight proposals for
3 funding. And today we're seeking your approval on five of
4 those proposed grant agreements for a total proposed
5 funding of about 3.3 million.

6 The first proposed agreement is with the Regents
7 of the UC Davis. This project will explore the
8 effectiveness of the so-called "head-starting" method for
9 threatened Mojave Desert tortoises and determine the
10 optimal duration for this mitigation procedure. Under a
11 head-starting procedure, juvenile tortoises are raised in
12 captivity until they are large enough to be less vulnerable
13 to threats and increase their survival, which occurs after
14 disturbance from energy projects among other things.

15 In addition, the project will test whether the
16 indoor rearing of tortoises could shorten the length of
17 that head-starting procedure. And thereby increase the
18 number of tortoises that can be treated and lower the
19 mitigation costs for developers, energy developers.

20 The second proposed agreement is with UC Irvine.
21 This project will perform a comprehensive life-cycle
22 assessment of environmental and human health impacts and
23 resource utilization associated with the deployment of
24 emerging grid-scale energy storage technologies. The
25 project will focus on different chemistries of flow

1 batteries: Vanadium Redox, Zinc-Bromide, and Iron-Sodium.

2 The third project or proposed agreement is with
3 UC Davis. This project will measure and compare
4 particulate matter emissions PM2.5 and PM10 across the
5 spray drift plume of two separate power plant cooling
6 towers that use fresh water or brackish water respectively.
7 A model of power plant PM2.5 and PM10 emissions that will
8 be developed based on the collected data could inform power
9 plant operators on how to minimize the particulate matter
10 emissions associated with the use of brackish water in
11 cooling towers.

12 The fourth proposed agreement is with Lawrence
13 Berkeley National Lab to develop and test alternative low
14 global warming potential A3 refrigerants for flammability,
15 GHG reductions and reduced electricity consumption. And to
16 identify barriers and opportunities for their adoption in
17 residential and commercial cooling equipment. The
18 refrigeration and AC units will be tested at LBNL's test
19 facilities. Elicitation will be provided by an
20 industry/expert advisory panel to provide information on
21 current barriers to greater adoption of A3 refrigerants,
22 key design issues, potential for larger charge size limits,
23 and existing flammability testing and characterization
24 studies.

25 And the fifth proposed agreement is with Humboldt

1 State University to develop a methodology addressing
2 critical knowledge gaps in the assessment of the carbon
3 neutrality of forest and agriculture residues when used for
4 the production of electricity and process heating. The
5 recipient will develop a life-cycle assessment framework
6 specific to California, and at a higher spatial resolution
7 and with greater empirical data on diverse supply chains
8 than has been available in the past.

9 The results from this project will inform state
10 policy, support future potential ratepayer benefits derived
11 from reduced environmental public health and air quality
12 impacts associated with the electricity generation from
13 woody biomass and field residues.

14 Staff recommends the approval of all five
15 proposed agreements. And I'm here to answer your questions
16 if you have any.

17 CHAIRMAN WEISENMILLER: Thank you.

18 First, any comments come on up, or of anyone in
19 the room or on the line. Come on up, yeah.

20 MS. WARD: Alecia Ward again, on behalf of
21 Berkeley Lab. Our researchers, as you know, have been
22 working originally on CFCs and now on HFCs and the Kigali
23 Amendment to the Montreal Protocol is such a driving force
24 behind this. We are very honored for the CEC to have
25 awarded this section of this EPIC solicitation to the Lab,

1 so that we can continue that important research. And that
2 California can accrue the benefits associated with
3 compliance to those kinds of agreements.

4 So thank you for your consideration of this and
5 I'm hopeful that it will be approved.

6 CHAIRMAN WEISENMILLER: Okay. Well, thanks for
7 being here. We appreciate the feedback. And yeah, we
8 agree. I mean, it's as I said, in the Scoping Plan as you
9 read it's dealing sort of with climate pollutants in this
10 area is very important. So I think -- and I know they've
11 talked about different things and (indiscernible) Andrew
12 would adopt standards tomorrow requiring different
13 refrigerants. But anyway, we need some research done.

14 COMMISSIONER MCALLISTER: Get the costs way down
15 and we'll (indiscernible) --

16 CHAIRMAN WEISENMILLER: Well, yeah. I
17 (indiscernible) \$15 a million is always fine, you know, so
18 anyway. But it's really important to try to push this. I
19 think it all is, although I would note that one of the
20 things to check on the first one, the Desert Tortoises. I
21 believe it's Fort Irwin, but there are bases that have like
22 little Desert tortoise nurseries that try to deal with not
23 just power plants, but if you can imagine if you're rolling
24 tanks or other things around the desert you could have
25 effects on Desert tortoises. And they obviously have to

1 compensate for those effects.

2 So certainly reach out to the military on some of
3 the things they're doing there.

4 COMMISSIONER DOUGLAS: Yeah, I just wanted to say
5 that I'm very supportive of this work. And I think it'll
6 be really valuable, so I'll move approval of this item.

7 COMMISSIONER MCALLISTER: I'll second.

8 CHAIRMAN WEISENMILLER: All those in favor?

9 (Ayes.)

10 CHAIRMAN WEISENMILLER: 5-0, thanks.

11 So we're now up to 17.

12 MR. SOKOL: All right. Good afternoon, Chair and
13 Commissioners. I'm Michael Sokol and here today to provide
14 an update on SB 350 implementation. So in contrast to
15 previous business meetings where we do a little more of a
16 deep dive on some of the specific topics, I thought today
17 would be useful to provide a high-level overview of some of
18 the major events and activities associated with SB 350.
19 Especially given that there's a flurry of workshops and
20 events over the next couple of months here. And I should
21 note that this is not comprehensive. There's lots of SB
22 350 things happening, but again just kind of the high-level
23 snapshot for you and for stakeholders to see here.

24 So just starting off right up at the top I think
25 the integrated resource planning. You know, Energy

1 Commission is tasked with developing guidelines for the
2 largest publicly owned utilities to develop their
3 integrated resource plans and submit them to the Energy
4 Commission starting in January 2019.

5 So you'll see that to support that effort there's
6 actually four workshops planned over the month of April.
7 Starting with next Monday there's a joint agency workshop
8 with the Energy Commission and the Air Resources Board to
9 continue the discussion of the greenhouse gas emission
10 targets that should be used for integrated resource
11 planning. And this workshop on next Monday is really
12 looking at getting into the POU-specific target discussion
13 and describing methodologies that could be used to come up
14 with those targets. It builds off the workshop that was
15 held on the morning of February 23rd here with the Public
16 Utilities Commission.

17 So after that, the next day we have a specific
18 workshop on the light-duty transportation sector for use in
19 the integrated resource plans for publicly owned utilities.
20 And so that will help fill in some of the discussion of
21 what will go into the guidelines specifically for
22 transportation and electrification.

23 And I should note, just to connect that, there's
24 on April 27th there's a similar workshop that's focused on
25 the medium and heavy-duty sector for transportation

1 electrification.

2 And sandwiched in between there is a staff level
3 webinar that's really going to get into the weeds of some
4 of the specifics around inputs, assumptions, and
5 administrative review process for POU's to submit their
6 integrated resource plans. So that will be a good sort of
7 pretty lengthy discussion with some of the technical staff
8 from the utilities and here at the Energy Commission to
9 make sure that there's clear understanding and really have
10 a good dialogue around some of those inputs and
11 assumptions.

12 So all of that is leading up to the development
13 of draft guidelines for publicly owned utilities. And that
14 will be put together in the mid-May timeframe to lead up
15 for a May 25th workshop to present those draft guidelines.
16 And then have a discussion focused on any comments that
17 come up on the specific content in the draft guidelines,
18 which is all leading up to incorporate that feedback and
19 plan to consider for adoption here at the business meeting
20 on July 12th.

21 So that kind of ties up the integrated resource
22 planning track. There's a lot of other things happening,
23 so I'm sure that there's maybe questions about some of the
24 details here, but that's just the high level overview.

25 And then just moving through I mean, these are

1 all sort of related here. But just to dive in, the
2 doubling energy efficiency savings track, so staff is
3 working very quickly here and diligently to look into and
4 analyze the potential savings that can come from utility
5 contributions towards that doubling target as well as
6 nonutility contributions.

7 And so there's some staff papers that are being
8 developed to lead up to a workshop that will be held joint
9 with the CPUC in the June or July timeframe. And I think
10 there's a tentative date on the IEPR calendar, but that's
11 potentially subject to change just depending upon when all
12 this comes together. But ultimately, leading up to the
13 planned consideration for business meeting adoption here in
14 the October timeframe to make sure that we're ahead of the
15 November 1st deadline given by SB 350. And there will be
16 potentially one or two more workshops in that time range as
17 well, including one in September that you see here, sort of
18 on the draft report that ties it all together. So next
19 slide, please?

20 And these slides are a little less dense, but I
21 just wanted to highlight over the next couple of months for
22 the Low-Income Barrier Study that was required under SB
23 350, the study itself was published in December. In the
24 study the Energy Commission discusses having implementation
25 workshops in early 2017 and so we are now getting those

1 together. We have a workshop scheduled for May 16th and
2 this is going to be a joint workshop with the Public
3 Utilities Commission to really get into the specific
4 recommendations and how to move those forward towards
5 implementation. So it'll be a pretty packed agenda.

6 The agenda is coming together here and the notice
7 should be going out fairly soon. But I wanted to make sure
8 that it was on everyone's radar for May 16th. I should
9 note that there's also discussions amongst the different
10 agencies that have some responsibility in the report
11 recommendations to figure out how to drive that
12 conversation forward ahead of this May workshop. And
13 there's been discussions with the Governor's Office to try
14 and help move that conversation forward as well.

15 And there's a second workshop later in 2017 that
16 there's a hold for the August 1st date for a second
17 workshop to get into more of those recommendations
18 discussion. Given the number of recommendations it makes
19 sense to have more than one workshop to allow for a really
20 deep discussion on those topics.

21 And lastly, I wanted to highlight an update for
22 the data collection rulemaking track. This has been a
23 topic at previous business meetings along the way. I
24 wanted to note that last Friday there was a memo sent out
25 to the docket that clarified the Energy Commission's two-

1 phased approach to implement the needed changes to support
2 SB 350 and all the associated activities.

3 So there's sort of a description of the approach
4 and the planning to finish up this Phase 1 that includes
5 items that are time sensitive. And there's sort of a need
6 to implement quickly, but take some more time and look at a
7 Phase 2 that completes the rest of the items that have been
8 discussed at previous workshops. And looks at activities
9 to support other SB 350 items, so the energy efficiency
10 doubling, potentially looking at other improvements to the
11 demand forecast or anything associated with the other items
12 here.

13 So again, look at that memo that's on the docket
14 there. And, you know, I just wanted to clarify too that as
15 we look over the next couple of months to finalize the
16 language and submit this initial Phase 1 rulemaking package
17 in June that it's possible there will be additional
18 clarifications on the specific scope of what's included in
19 Phase 1 versus what's included in Phase 2. So we'll be
20 sure that as we move forward that that's made clear to all
21 the stakeholders. And that we're completely transparent
22 about all of that.

23 And then ultimately looking at later in 2017
24 aiming for October business meeting consideration of the
25 Phase 1 rulemaking package in order to meet that January

1 1st of 2018 effective date. And then ultimately looking at
2 Phase 2 beginning some time later in the year or early next
3 year as well.

4 So that kind of ties up the schedule here, so
5 I'll be happy to answer questions or take any comments from
6 Commissioners.

7 CHAIRMAN WEISENMILLER: Well, first let's see if
8 there's any public comments from anyone in the room or on
9 the line?

10 (No audible response.)

11 Okay. I was going to say well obviously we're
12 sort of at the meetings are us phase of the IEPR this year
13 and so I appreciate everyone's collaboration on it.

14 I would note a couple of things. One is all of
15 you have probably seen the letter exchange back and forth
16 with the POU on the IERP guidelines. But certainly that
17 issue as we continue to move forward, get the data we need,
18 get the process set up, respecting that a lot of the
19 decisions will be at the local level but somehow we have to
20 make sense of the filings in some fashion. So that's still
21 evolving.

22 And on the low-income I was just going to note,
23 again sort of stepping ahead of where we'll be shortly on
24 Commissioner reports. But that I was at LACI last week for
25 a couple of presentations. The one in the afternoon I was

1 there with Ron Nichols. Ron complimented us on the Low-
2 Income Report or the Barriers Report and indicated that
3 Edison has about 40 percent of the disadvantaged
4 communities in their service territory. And they're
5 certainly looking forward to working with us on projects to
6 address some of the barriers. In fact, he's having a
7 charger on Earth Day dedication and certainly inviting
8 folks to that, it's in a disadvantaged community.

9 And also at the same time I talked to LADWP
10 there. And Nancy Sutley has gotten aboard to adopt equity
11 metrics at LADWP. And again, they are very complimentary
12 of the report in helping spark their thinking on these
13 issues. But she was here yesterday at a different workshop
14 and I asked her about it, and it's things like if you go
15 through reliability is reliability higher or lower in
16 disadvantaged areas? I mean, there's a whole series of
17 things they're doing to try to identify how well their
18 service is meeting the needs of all the customers.

19 So certainly again that was sparked out of the
20 work that Michael led. And again, I think there was a good
21 chance at that workshop yesterday to point that out to some
22 of the other utilities to get their thinking on this issue.
23 And certainly, so again that's moving on, but a lot to do
24 there. A lot to do.

25 So anyway, anyone else for Michael?

1 COMMISSIONER SCOTT: Well, I would just note that
2 for the Barriers workshop, both of the folks that you just
3 mentioned -- Ron Nichols and Nancy Sutley -- we're hoping
4 will be able to come and talk to us in more detail at that
5 workshop on the 17th. We haven't sent out all of the
6 invitations and things yet, because we're still kind of
7 finalizing the agenda. But to the extent that it's of
8 interest to you all and you want to weigh in on speakers or
9 ideas, as Mike said we have 12 recommendations, so we're
10 not going to try to do all of them in one day.

11 We're going to pull some priority recommendations
12 to talk about on the 17th. And then the next set of --
13 they're all important -- but the next set of
14 recommendations at that workshop on the 1st. But we would
15 warmly welcome your thoughts and comments on that agenda if
16 you would like to see it and haven't yet. So you can just
17 ping Mike and he'll be sure to get it to you. He's doing a
18 great job juggling a whole bunch of moving pieces that all
19 kind of fall into SB 350. And I think keeping us updated
20 in this way, on these lines is really helpful, so thanks
21 for that.

22 COMMISSIONER MCALLISTER: Yeah, I want to just
23 put my voice to that as well. You know, thanks Mike for
24 all the coordination. All of these tracks are really
25 important and they're all related. And so I think all five

1 offices are keeping track of probably all of them, so
2 that's a lot of cats to herd, but it's also really
3 important. And I'm very, very optimistic that we're going
4 to keep the trains on the tracks in getting to where we
5 need to go in the timeframe that we have. But also set
6 ourselves up for success and I'm really glad about all the
7 collaboration across agencies as well. So I'm going to
8 come to as many of these workshops as I can. So thanks.

9 COMMISSIONER DOUGLAS: Yeah, I just wanted to say
10 I really appreciate the presentation and the work. It's
11 really good.

12 MR. SOKOL: Thank you.

13 CHAIRMAN WEISENMILLER: Thank you.

14 Let's go on to minutes.

15 COMMISSIONER SCOTT: Move approval of the
16 minutes.

17 COMMISSIONER DOUGLAS: Second.

18 CHAIRMAN WEISENMILLER: All those in favor?

19 (Ayes.)

20 CHAIRMAN WEISENMILLER: Minutes pass 5-0.

21 Let's go on to Lead Commissioner Presiding Member
22 Reports, Commissioner Scott?

23 COMMISSIONER SCOTT: Sure. So my report is
24 relatively short, because I had the privilege and
25 opportunity of taking a little bit of time off, so that was

1 wonderful. And other than that it's pretty much been all
2 sitting all the time. And later today I will be headed off
3 to the Western Interconnection Regional Advisory Body,
4 which is part of the -- it's a group of western people.
5 We're looking at reliability in different electric grid
6 types and natural gas infrastructure as well topics
7 together.

8 I have recently been appointed as the Chair of
9 WIRAB, so that should be fun. I'll be out in Idaho
10 chairing my first meeting of that not too long from now, so
11 that's my brief report.

12 COMMISSIONER MCALLISTER: Great. Well, I had the
13 opportunity to take a little break with my family too, so
14 not a ton to report. And not that much travel actually
15 around the state, although I'll have some upcoming to D.C.
16 in the month with NASEO and the Alliance of Safe Energy, so
17 those will both be fun.

18 But I really just wanted to take the opportunity
19 to thank the Efficiency Division staff in a couple of
20 different ways. First of all, the team that does our
21 outreach on our Building Standards is really tremendous, is
22 led by Chris Olvera with Kristen Driskell's leadership over
23 that office. And Kris has gotten kudos lately from the
24 building officials across the state and when you work with
25 him you realize why that's the case, because he's extremely

1 competent and just very, very outgoing and articulate and
2 all the things you want in an outreach person. Also, very
3 much on top of the details.

4 But there are a bunch of really nice Youtube
5 videos up about the Building Standards now. And I'm not
6 going to read the URL, because it's kind of long, but
7 definitely it's on our website. And after stumbling
8 through a little bit, Youtube, being labeled I think as a
9 spammer or something -- I'm not sure exactly how that
10 happened -- they had to work through the legalize and
11 actually get them up on Youtube. And, "No, we're legit.
12 We're the Energy Commission." But they're real high
13 quality and they are extremely educational and they respond
14 to our stakeholders in a way that's just super-substantive
15 and accessible. And that's really the best of the best of
16 what we do, I think.

17 So Alex Pineda and Javier Perez and Paula David
18 also were really key on that effort, so I definitely
19 encourage you to check them out. Whether or not you're
20 doing a building project it's just really very bread and
21 butter stuff for the Energy Commission.

22 And then I wanted to call out Kristen's team
23 again, Kristen Driskell, in the Appliances Office. You
24 know, there are a lot of moving parts in the appliances
25 efficiency realm these days. And certainly at the federal

1 government everybody's on the edge of their seat wondering
2 what they're going to do, what they're not going to do, and
3 figuring out what our position is as California. And
4 technically, sort of where things might stand and where we
5 might get more savings, has been and still is a task that
6 requires some resources and some real competence and some
7 real deep knowledge about that field. You know, we have
8 dozens of device categories that we regulate or the feds
9 regulate and how they sort of relate is no mean feat to
10 keep track of. So they're really doing a great job on that
11 with all the shifting sands at the federal level.

12 And then really finally, Christopher Meyer, and
13 his office, the Building Standards Office, they are
14 wrestling with some complicated issues developing the 2019
15 code. And really working with a tremendous number of
16 stakeholders and dealing all the issues that we talk about
17 at all of our meetings and, you know, in our respective
18 shops. You know, fuel switching and Zero Net Energy
19 certainly, but just climate issues and how can we help
20 drive towards where we need to go as a state. Building
21 Standards is really one of the main avenues for doing that
22 at the Commission and I want to just give them kudos for
23 how well they are marshaling the discussion.

24 And certainly there are a lot of complexities,
25 and there's more complexity to come. I'll just heads up

1 everybody, as we head towards ZNE there's some interesting
2 issues that come up. So I wanted to call out Christopher
3 and his crew.

4 So in the Efficiency Division, I talked a couple
5 of weeks ago at the new hire orientation at the Efficiency
6 Division. And I was just so impressed with the quality of
7 the folks they're bringing in, so young and enthusiastic
8 but really smart and really wanting to make a difference.
9 And so that combination of competence and idealism, I think
10 is really what is best here at the Commission. And I'm
11 really happy to see the Division kind of maturing in the
12 right ways and keeping itself updated and fresh.

13 So that's it for my comments today.

14 COMMISSIONER DOUGLAS: All right, well I've got a
15 few meetings and things to talk about. Let's see, a couple
16 of weeks ago on I think around the 15th of March I had the
17 opportunity to speak at California Ocean Day 2017, which
18 was held at the Capitol in an event organized by
19 Environment California and the California State University
20 Council on Ocean Affairs Science and Technology, CSU COAST.
21 That panel addressed offshore wind and offshore renewable
22 energy off the coast of California. There's going to be a
23 theme in my comments actually. We had a meeting later on
24 in San Francisco with a number of statewide environmental
25 groups on the same topic, followed by a trip to New York

1 for the Sustainable Energy for All forum that we talked
2 about.

3 And then back on to the offshore wind theme, I
4 was in Santa Barbara yesterday. We met with local
5 environmental groups, a very well attended meeting and
6 people were appreciative that we brought the meeting there.
7 This morning at the happy hour of 6:30 a.m. I was on a
8 webinar organized by a conference that I'm speaking at
9 soon, also in New York, but it's called the U.S. Offshore
10 Wind Opportunity Roadmap. And I spoke with a
11 representative of Massachusetts and New York.

12 Tomorrow, I will be off to San Luis Obispo to
13 have actually, along with the Bureau of Energy Management
14 and a number of other agencies, to go to a meeting that's
15 hosted by two San Luis Obispo supervisors: Supervisor
16 Gibson and Supervisor Hill. And it'll be an opportunity to
17 talk about this issue in a public forum and provide
18 informational materials to members of the public. That
19 meeting for people who are interested, but not able to
20 easily get to San Luis Obispo, that meeting will be
21 available online as well. And it can be accessed through
22 the San Luis Obispo County. They have a process for
23 essentially what we would call WebExing our meetings
24 although they use a different system. So --

25 UNIDENTIFIED SPEAKER: (Indiscernible.)

1 COMMISSIONER DOUGLAS: -- oh, I don't know, I'll
2 find out. All right, in any case that is my report for
3 today.

4 COMMISSIONER HOCHSCHILD: So let's see, I just
5 returned from Brazil on Sunday for a delegation that's
6 actually funded by the State Department with the ISO around
7 renewables deployment in Brazil. Commissioner McAllister,
8 I believe, went there about a year ago or six months ago?
9 Six months ago, yeah. They're still talking about you, you
10 made an impression. (Laughter.) I gave one talk on
11 renewables and one on efficiency, so I did my best to
12 channel you. But that went well and great support and
13 engagement from a number of California clean energy
14 companies including Tesla and Energy Storage, 8minutenergy,
15 NREL and others.

16 And then I did the Local Government Commission
17 Annual Retreat with Ken Alex, Senator de Leon, Leticia
18 Perez and some others, which is just their annual
19 gathering. A lot of questions about energy, where we're
20 going, so that was fruitful.

21 I'm about halfway through a run committed to meet
22 and just do briefings for all 26 members of both Energy
23 Committees for the Senate and the Assembly. Just check in
24 and let them know what we're working on, what's happening,
25 answer any questions they have and see if there's anything

1 we can do to help them. And those have been super
2 fruitful.

3 I will just note there's other terrific people on
4 both committees, but just the level of understanding of
5 what we do is still quite low. And some people are like,
6 "Great, what are you working on? Where is the Energy
7 Commission, are you in Los Angeles? Or how many -- "

8 COMMISSIONER DOUGLAS: (Indiscernible)

9 COMMISSIONER HOCHSCHILD: " -- you're full time,
10 how many people do you have there, 25 people?" So it's
11 been great. Barry's been terrific with these, setting
12 these up and that we have every meeting a fact sheet on how
13 much money has gone into each legislator's district and
14 that's been really fruitful. And we're getting good
15 feedback for those.

16 Just gave my first TED talk last weekend at the
17 Silicon Valley TED Talks. And I was decidedly the least
18 interesting person in this group. It was a Hamilton actor,
19 a NASA scientist, a robotics inventor of Tyco Drum Group.
20 I was the dull bureaucrat. The talk, which I'll send
21 around the link when it comes out was about my time in
22 South Africa, which is how I got into renewables and what
23 the anti-apartheid movement teaches us about how to fight
24 climate change. It was a very, very formative time in my
25 life. I visited South Africa during the apartheid era and

1 then went back to work for President Mandela after
2 apartheid ended. And I know Commissioner McAllister also
3 spent some time in South Africa, so he was equally
4 informative.

5 So that was fruitful, did also cover for the
6 Chair at this Flow Battery dedication in San Diego with
7 SDG&E, small flow battery installation, and met with our
8 colleagues from NEDO and Sumitomo. And it was nice to see
9 that. I had visited Sumitomo when I was in Japan a few
10 years ago and to actually see this project get done, and
11 hopefully we can learn some things from it that can help
12 that skill up.

13 And a couple of other things, we have some just
14 rock star summer interns coming this summer, I'm really
15 excited about. Both from Harvard and from Stanford. The
16 one from Harvard is just graduating, who she won the Intel
17 Young Scientist of the Year award, has already invented a
18 fast-charging cell phone battery. And, you know, she's 21.
19 And then we got some great folks at Stanford. They're
20 going to be assigned to a variety of projects under Ken and
21 Emilio's supervision.

22 And the guest speakers have been going great.
23 We've got a really good attendance from staff on that. The
24 net one we have is Tom Kiernan who's the head of the Wind
25 Energy Association for the United States coming out from

1 D.C., I think next month.

2 And then finally we're just doing this workshop
3 on geothermal and GRDA look back at the program, at what we
4 funded in its entirety, with I think is about \$80 million
5 over the life of the program. And what we should be doing
6 funding going forward. So I had Senator Hueso joining
7 Dolly and a few other legislators who have geothermal in
8 their districts are going to join for that. I think that's
9 next week.

10 And that's it for me.

11 CHAIRMAN WEISENMILLER: Yeah, I was actually
12 going to ask you if you could check with the staff on the
13 chemistry of the Japanese flow battery versus what they're
14 studying? You know, just in terms of they talked about how
15 they're going to look at the chemistry of some of the flow
16 batteries. And anyway, I don't know what the secret sauce
17 is for that one, but --

18 COMMISSIONER HOCHSCHILD: Well, I believe it was
19 Vanadium. That's my (indiscernible) --

20 CHAIRMAN WEISENMILLER: I mean, if you could sort
21 of connect them?

22 COMMISSIONER HOCHSCHILD: -- I can just double
23 check, yeah.

24 CHAIRMAN WEISENMILLER: Yeah. I think they
25 mention one, which I know is the one I visited, which shut

1 down like two months later. So trying to make sure we're
2 hitting the viable flow battery chemistries.

3 COMMISSIONER HOCHSCHILD: That's a good point. I
4 think it's Vanadium, but I'll double check.

5 CHAIRMAN WEISENMILLER: Okay. Great.

6 So in terms of just on the theme of getting the
7 word out, so I went to Berlin for the Berlin Energy
8 Transition event, which is their response to clean energy
9 ministerial. And last year they had about 600. This year,
10 they had 1,400 and they turned 200 people away. The
11 meeting was in the old, old German foreign ministry
12 building. And 97 countries were there.

13 And part of it, I think the Germans are starting
14 to pivot although obviously the backdrop is a German
15 election coming up. And the energy space is a little bit
16 different in that it's part of Merkel's partners. And in
17 fact, the head of the Economy and Energy Ministry was
18 always expected to be her opponent in the election. Until
19 we stepped back and they brought someone back in from
20 Belgium who was not with the EU who had not been sort of a
21 partner in the coalition decisions for the last whatever
22 years.

23 And so there was a backdrop on the energy stuff.
24 It still seems to be a consensus there. I think they're
25 starting to pivot more, in a more sophisticated fashion.

1 Historically, the Germans have shut down their nukes, and
2 shoved a lot of renewables out. Record, record amounts,
3 you know, in some respects. And at the same time they
4 added 7,000 megawatts of coal. You know, they still get 40
5 percent of their power from coal. So their greenhouse gas
6 numbers are actually -- now they're more flat or going up.

7 But they're not as opposed to California where
8 the numbers are really going down, I mean theirs are not.
9 And so they're starting to pivot more towards energy
10 efficiency, particularly on existing buildings. And they
11 have some pretty interesting programs that both advertising
12 grants loans to really move the needle and also looking
13 more at zero emission vehicles. They're mix is obviously
14 different than ours. They have about 40 percent of their
15 greenhouse gas comes from power and about 20 percent from
16 transportation. So it's a flip of ours.

17 And they have relatively high-speed rail. I
18 mean, they have a lot of things, but anyone who's been on
19 the Autobahn knows the Germans love their cars and their
20 big, fast cars. So anyways they're trying to figure out
21 what to do on that part, so anyway they're starting to
22 think more about the connections across the energy space.
23 And more, again we'll see where the election comes in the
24 next steps. But I think there's that sort of consensus
25 going that they really need to be thinking more

1 strategically about what they're doing going forward.

2 But again, it was always a good event to talk to
3 them and see what they're doing. You know, touch based
4 around the world. I think it was important to be there in
5 the sense they were clearly working for someone -- funny
6 thing is when I was there, Steyer (phonetic) was there too
7 and Steve Berberich. But to say they weren't alone in the
8 path they're going on trying to do climate.

9 So I went from there to Austin. There was, I
10 forgot the name of the event again, but it's a week-long
11 event in Austin, again focused on energy. I was on a panel
12 with Rich Kauffman who is the energy czar of New York and
13 the Public Utilities Commission Chair of Texas. And we
14 were contrasting across the three areas.

15 Austin's hipper than here in some respects, so
16 they actually had artists on the stage behind Rich and I
17 drawing pictures, responding to our speech. So mine, of
18 course, had a duck but I'd never been in that situation.
19 Fortunately, they weren't like in front of you. They were
20 in back of you, so afterwards you could look at it and try
21 to figure out how the artist had connected from your speech
22 to that. But anyway it was certainly a good event.

23 I did meet with Irkahn, (phonetic) of course. I
24 met with folks at UT. Actually Alan Lloyd was there. He's
25 now a visiting scholar at UT. I assured him no, we don't

1 fund research in Texas, just to be clear. And this is a
2 university that has a huge stadium, tons of oil and money.
3 It's like let me explain that to the Legislature while
4 Perry is cutting our research money. You know, "No, Alan,
5 forget it."

6 But in terms of and also I met with Barry
7 Smitherman who's potentially a FERC Chair, so it was an
8 interesting conversation. He was obviously very tight with
9 Trump over the years.

10 And last I went to LACI. I talked about the
11 afternoon session. The morning session I met with
12 basically the various consulates in L.A. You know, there
13 is about 50 and I met with about 40 of them to talk about
14 what California is doing. In the afternoon I met with the
15 LACA (phonetic) to talk about the upcoming event in Beijing
16 and its focus on energy innovation, encouraging them to
17 participate.

18 Well, it's good to be back, yeah anyway. So
19 let's go on to Chief Counsel's Report.

20 MS. VACCARO: I think the only thing I have to
21 report is just sort of like that I'm teeing up that the
22 Chair will soon be making an announcement that we will be
23 going into closed session today.\

24 CHAIRMAN WEISENMILLER: Yeah. Let's go to
25 Executive Director's Report.

1 MR. OGLESBY: Just a heads up that we are on a
2 fiscal year basis. This is ramping up our busy season, as
3 you could see a lot of activity today. We will have a
4 second business meeting this month. It has not been posted
5 yet and the agenda is still under development, but it will
6 be on the 27th when it is posted. So heads up on that.

7 CHAIRMAN WEISENMILLER: Our Public Adviser
8 Report?

9 MS. MATHEWS: Four things very quickly, first we
10 had our second annual Diversity Career Fair, so I want to
11 say thank you to all the deputy directors, Rob, and all the
12 staff that were supportive of that. And a special thank
13 you to Eunice Murimi in my office who helped coordinate.
14 That took place on March 30th.

15 On March 24th I participated in a webinar with
16 California Environmental Justice Alliance. And all of the
17 organizations that posted the community meetings for our SB
18 350 Report and it was -- Barrier Study. And it was an
19 opportunity to communicate with them how all of their
20 feedback contributed to the report and how it was used.
21 And how it came out and impacted our recommendations as
22 well as to share with them the implementation workshops
23 that will be happening in May.

24 The third thing is that I was also invited as a
25 guest speaker for the Department of Transportation Office

1 of Small and Disadvantaged Businesses. Just learned about
2 that organization, so I had an opportunity to share with
3 their business development program opportunities for
4 procurement here at the Energy Commission for small
5 businesses as well as our funding opportunities and our
6 various funding programs.

7 Lastly, I'd like to introduce John Reef.
8 (phonetic) He is a graduating senior at UC Davis,
9 graduating with honors, political science major, and he is
10 a Fellow in my office with the University of California
11 Center in Sacramento. And they specifically have Fellows
12 who are interested in supporting in assistant government,
13 so policy. So if anyone else is interested (indiscernible)
14 have another Fellow.

15 That's it. Thank you.

16 CHAIRMAN WEISENMILLER: Thank you.

17 Let's see if there's any public comment. We're
18 going to go into closed session and come back, but I would
19 just as soon give the public a chance to comment now.

20 (No audible response.)

21 Okay. So the meeting is not adjourned, but the
22 Commissioners will now go into closed session with Legal
23 Counsel pursuant to Government Code Section 11126(e) on the
24 following items set forth in the agenda: Item 20, The U.S.
25 Department of Energy's actions to delay effective dates and

1 failure to complete certain energy conservation standards
2 and test procedures for appliances.

3 We anticipate returning to open session in
4 approximately a half hour. So that would mean about 3:10.

5 (Adjourned into closed session at 2:37 p.m.)

6 CHAIRMAN WEISENMILLER: Good afternoon, the
7 Commission is back on the record.

8 In closed session, the Commission authorized the
9 Chief Counsel's Office to take appropriate legal action
10 including initiating or joining litigation to address the
11 U.S. Department of Energy's actions to delay effective
12 dates and failures to complete certain energy conservation
13 standards and test procedures for appliances.

14 This meeting is adjourned.

15 (Adjourned at 3:10 P.M.)

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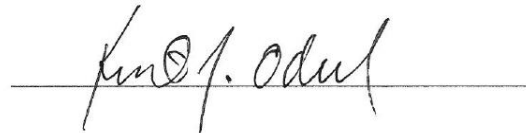
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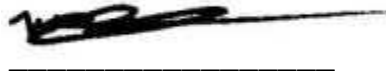
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