

DOCKETED

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APPEARANCES

Commissioners Present

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

Staff Present

Rob Oglesby, Executive Director
Kourtney Vaccaro, Chief Counsel
Paul Kramer, Assistant Chief Counsel, Hearing Unit
Kerri Willis, Assistant Chief Counsel, Siting
Alana Mathews, Public Advisor
Tiffany Winter, Secretariat
Roger Johnson, Deputy Director, Siting Division
Mazi Shirakh, Project Manager, 2016 Building Energy
Efficiency Standards
John Butler, Fuels and Transportation Division

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| Joseph Douglas | 2 |
| Paul Kramer | 3 |
| Peter Strait | 4 |
| Kristin Driskell | 5 |
| Erik Jensen | 7 |
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| Kiel Pratt | 10 |
| Susan Wilhelm | 11 |
| Sonya Ziaja | 12 |
| Rachel Salazar | 13 |
| Hieu Nguyen | 14 |
| Tami Haas | 15 |

Also Present (*Present via Telephone)

Interested Parties

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Also Present (*Present via Telephone)

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| George Piantka, NRG | 3 |
| Robert Sarvey | 3 |
| Richard Markuson, Associated Builders and Contractors of San Diego and Western Electrical Contractors Association | 4 |
| Tom Enslow, California IBEW/NECA State Labor Management Cooperation Committee | 4 |
| Bret Barrow, Natl Electrical Contractors Assoc. | 4 |
| Nathan Bengtsson, Pacific Gas & Electric (PG&E) | 4 |
| Gene Thomas, Ecology Action | 4 |
| Dr. Rick Brown, President, TerraVerde, Member of School Energy Coalition Executive Committee, California Association of School Business Officials, Strategic Partner for Energy | 4 |
| Charles Knuffke, Western Vice President, WattStopper Assistant Systems and Business Evangelist | 4 |
| Dustin Bertolucci, Lutron, Service Manager for West Coast and Rocky Mountains | 4 |
| *Meg Walther, NRDC | 4 |
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P R O C E E D I N G S

NOVEMBER 12, 2015 10:02 a.m.

CHAIR WEISENMILLER: Good morning.

Let's start the Business Meeting with the Pledge of Allegiance.

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

CHAIR WEISENMILLER: Good morning. We have a pretty full agenda. I was going to say for Item 8 I put a hold on that and what I want to make sure is, obviously SB 350 is a fairly complicated bill, so very very -- 60,000 or 80,000 foot level summary and it's built off of a long term process that we went through that ultimately resulted in the Governor's Executive Order.

But we're looking at substantial reductions in greenhouse gas emissions in the context of reducing the impacts we're having on climate. And as ways to do that, it's a pretty integrated program of renewables, energy efficiency, and electrification of the transportation system, all of which will be wrapped together in the integrative resource planning effort which we have the responsibility

1 to work with the publicly-owned utilities on.

2 And so I thought it would be most
3 productive if, instead of setting up the OIRs on
4 each of the elements sequentially, if we had some
5 of the comments package and that will force us to
6 think through the interrelationships and
7 basically want to do that. It's probably going
8 to be on the January Business Meeting, it may be
9 on the December Business Meeting. One of the
10 contexts for that is the PUC on December 2nd is
11 having an all-day workshop on how they're going
12 to approach the integrated resource planning
13 piece of it, and I thought it would be very
14 useful if our staff is there and has the benefit
15 of that workshop, and that could be factored into
16 our thinking, which again we'll see how it plays
17 out timing-wise, and I don't know if they open
18 the workshop to the public, written comments, or
19 is this all the pieces? But it seems like let's
20 build off of that, I mean ultimately we'll have
21 something similar here, although I would
22 anticipate that will be after the rulemaking
23 comes out as opposed to before it.

24 COMMISSIONER MCALLISTER: So we're
25 postponing it.

1 CHAIRMAN WEISENMILLER: Yeah, so we're
2 postponing Item 8 until later. But anyway, just
3 want to make sure people understood obviously we
4 are very committed to the Governor's Executive
5 Order calls and we're very committed to implement
6 SB 350, we're going to meet the schedule, I just
7 want to make sure we're thinking smart from the
8 start on it.

9 So now we're on Item 1, and it's a little
10 unusual, but let's start out. We got two pieces
11 of paper from Ellison Schneider and, I don't
12 know, some of us grew up with *Perry Mason*, but it
13 would have been more helpful if they had both
14 come in together and we got one from Mr. Harris
15 that sort of provided context for eventually the
16 request for a committee today, and so what I'm
17 going to is I'm going to have Mr. Harris describe
18 what he's asking for and I'm going to then ask
19 the staff to respond, and I'm also going to ask
20 the Public Advisor to comment on whether or not
21 the public has gotten sufficient notice on this.
22 So go ahead.

23 MR. HARRIS: Thank you. Good morning.
24 Jeff Harris on behalf of High Desert. On the
25 phone as well is Bradley Heisey, who is the

1 Portfolio Manager for the project. Yeah, it is a
2 little unusual as a standing agenda item and
3 we're asking that you exercise your authority
4 under that standing item to appoint a committee
5 to hear the amendment for the High Desert Power
6 Project, which was filed back in October right
7 before November 1st.

8 The request is for a committee. We
9 believe the matter should be heard by a
10 committee. One of the things to talk about in
11 that hearing will be the form of that discussion.
12 We're thinking maybe more an informal process,
13 but in any event the real urgency here is getting
14 the committee assigned so that we can have the
15 issues resolved relating to water supply
16 availability for this project.

17 We did file two things, although I was a
18 little afraid that I had forgotten that. It was
19 one PDF file, but two things, first was a letter
20 explaining the basis upon which we think you can
21 act on this request today. The simplest and
22 first basis for that is simply that you have this
23 standing agenda item and it's for this very
24 purpose, so we could stop there, but we know that
25 it was unusual to ask for a committee to be

1 appointed on such short notice, and so we wanted
2 to provide you with additional bases, and this is
3 laid out in the letter, I'm not going to go
4 through each one of them. But it's basically the
5 Executive Order and also your authority under the
6 Government Code.

7 The first piece was simply to lay out
8 that you do have the authority to do this. The
9 second piece is really the request for
10 appointment of a committee. And the urgency
11 there is the need to have some certainty about
12 water supply. The last amendment for this
13 project granted us use of a groundwater supply
14 through the end of this current water year, which
15 will be the end of October of 2016. So we have
16 less than a year on that current authorization.
17 So that's the urgency, that's the exigent
18 circumstances that made us take this unusual
19 request to you today. Those are the basic facts
20 of what we asked for and hope this won't be
21 particularly controversial.

22 In terms of questions to the public, the
23 other thing, my understanding is that the
24 Applicant and the public really have no input
25 into the appointment of committees. You don't

1 ask us who you're going to appoint to the
2 committee, we don't object, and I don't think we
3 could object for that, nor could a member of the
4 public. And so I see no prejudice to the public
5 from the appointment of the committee, it's
6 strictly a procedural thing, we're not here to
7 talk about any of the substantive issues in the
8 case unless of course you have questions, we'd be
9 glad to answer. So I'm going to go ahead and
10 wrap up there. I want to apologize for hitting
11 you pretty quickly with this, late last Friday
12 and I know yesterday was a holiday, so I don't
13 know whether you've had a chance even internally
14 to talk about this as much as you would. But I
15 should probably stop, and I will. So thank you.

16 CHAIRMAN WEISENMILLER: Okay. Roger, why
17 don't you respond, you know, discuss the issue.

18 MR. JOHNSON: Yes. Good morning,
19 Commissioners. Roger Johnson, Deputy Director
20 for the Siting Division. Staff is in receipt of
21 the Petition that was required to be filed by
22 November 1st. Applicant filed it October 30th,
23 as mentioned today. Staff is reviewing that
24 petition and we intend to schedule the workshop
25 to go through the facts of that matter.

1 Staff proposes that we're going to do our
2 standard review of the Amendment and come up with
3 the staff assessment and recommendation which
4 will be published for a 30-day review, and at
5 that time, if the Applicant -- if the Project
6 Owner feels that a committee should be involved
7 because of where staff has presented its
8 recommendations, I think that would be an
9 appropriate time for a committee to be
10 considered. But staff doesn't agree there's an
11 urgent time right now to assign a committee. We
12 think that we have this under control and we can
13 work on meeting their February schedule that
14 they've suggested they have to have to meet their
15 water needs for next year.

16 CHAIRMAN WEISENMILLER: Okay. So let me
17 ask the Public -- does the Public Advisor, again,
18 in terms of the issue of appointing a committee
19 today, has there been any outreach to the public
20 or any public reaction that you know of?

21 MS. MATTHEWS: We have not done any
22 outreach to the public and we have not received
23 any comments from the public.

24 CHAIRMAN WEISENMILLER: Okay. Roger, I
25 should have asked you the same question, but just

1 in case?

2 MR. JOHNSON: There's been no notice of
3 this matter to anybody. And we do know there is
4 an Intervenor that was active in the original
5 proceeding and still follows the water issue, and
6 would be interested in knowing about this topic.

7 CHAIRMAN WEISENMILLER: Okay. And as the
8 staff does its analysis, you plan to --
9 regardless of whether there's a committee, but
10 the public will be certainly notified?

11 MR. JOHNSON: Absolutely. We'll put out
12 notices.

13 CHAIRMAN WEISENMILLER: All right. Does
14 anyone else have any comments? Actually, Mr.
15 Harris, you made the motion, I'll let you
16 respond.

17 MR. HARRIS: Surprisingly, I would like
18 to say a few things. First off, I agree with Mr.
19 Johnson that staff and Applicant may be able to
20 work through these issues and, in fact, even
21 though we appear to be sort of at loggerheads,
22 our recommendation is that we get together and
23 talk about these issues and try to resolve them
24 mutually. And I'm hopeful for that process.
25 Having said that, though, of course once the

1 staff document is published, if there's a
2 committee appointed, we can make a joint
3 recommendation to the committee that no further
4 process is needed and we'd like you to put it on
5 the Business Agenda. If, though, at that point,
6 once the staff recommendation is published,
7 there's still disagreement, the Applicant does
8 believe that there should be a Commission
9 committee appointed to hear those differences.
10 So I think it's sort of the proverbial sleeves
11 off your vest, if you will, to appoint the
12 committee today. If we're able to work through
13 these issues, we'll make a joint recommendation
14 to you that no further process is required.

15 In terms of the urgency, I guess I do
16 need to say there is an urgency here. We're less
17 than a year away from losing the water supply for
18 this project. And to be able to contract this
19 process long term, we have to show that it can
20 operate. And in this process, we're going to
21 need the Commission to separate the permitting
22 flexibility we need from the actual anticipated
23 use of water, those are two different things.
24 It's just like the Air Permit, you have a maximum
25 air limitation, you never expect to get there,

1 but you may need to; and the same thing with the
2 water supply here, we think in most years we're
3 not going to need any groundwater under normal
4 circumstances, but in those outlier years, we're
5 going to need a little help. And I said I
6 wouldn't go into them here, so I'm going to stop
7 there. But at the end of the day, I'm hopeful
8 we'll get through this with staff, but if we
9 don't, we really -- we're going to want
10 Commissioner involvement to try to mediate
11 through the issues and that's why the request for
12 a petition.

13 CHAIRMAN WEISENMILLER: Okay. Now, any
14 other public comment either in the room or on the
15 line?

16 MR. HARRIS: I'm sorry, can I mention one
17 more thing? The two documents that were one PDF
18 were actually docketed and they were blasted out
19 to the email service list, so there was some
20 notice to anybody who gets your email Listserv,
21 it's not official notice, but I did want to say
22 I'm pretty sure that anybody who is following
23 this case is signed up for that listserv and
24 received notice of the request, even though they
25 couldn't object, I think they know about it.

1 CHAIRMAN WEISENMILLER: Okay, and of
2 course I didn't get to one thing the Public
3 Advisor requested of me at the beginning, which
4 is that we have a new Court Reporter, so I need
5 to make sure that everyone who says something
6 identifies themselves on the record and gives her
7 your card.

8 Anyway, so with that let's turn to
9 Commissioner conversation.

10 COMMISSIONER DOUGLAS: So I have a
11 question which is, when would the staff report on
12 this be issued?

13 MR. JOHNSON: We think we could get a
14 report out in January, in that timeframe.

15 COMMISSIONER DOUGLAS: So I guess my
16 inclination in hearing this is that I don't see
17 the immediate need to set up a committee today
18 given that there is some time for this issue to
19 be resolved, but I hear your concern that I think
20 your concern is that you feel like you may not be
21 able to get to a point at which you're in
22 agreement with the staff analysis and you want to
23 ensure that a committee is available if something
24 does need to be adjudicated or appealed up to a
25 committee.

1 MR. HARRIS: That's correct. On that
2 schedule, we would be here at the February
3 Business Meeting making the same request.

4 COMMISSIONER DOUGLAS: Right. So I think
5 there is the possibility of noticing this item,
6 though, for January should it be needed, or
7 something like that, as opposed to making a
8 decision today to establish a committee.

9 MR. HARRIS: Just so I understand, rather
10 than appointing a committee today, put us on the
11 January -- assuming the staff report is out --
12 before your January meeting which is early
13 January, and then we have time to review it
14 between Eggnog and whatever happens on New Year's
15 Eve. That could work. But I am concerned about
16 the early date for January and also moving into
17 February, which only gives us about six or seven
18 months left in the water year after the
19 appointment of the committee at that point. So
20 the schedule seems to be very high if we don't
21 act today or December, we could continue with
22 December, but we're going to face the same
23 quandary of not having a staff report.

24 COMMISSIONER DOUGLAS: When is the
25 January Business Meeting?

1 CHAIRMAN WEISENMILLER: Well, I was going
2 to ask Roger to respond on schedule and then ask
3 Rob on when is the January Business Meeting.

4 MR. JOHNSON: Well, on schedule we have
5 just started reviewing the submittal and we will
6 have some discovery, and so it also depends on
7 the Applicant's ability to provide the responses
8 to any data requests that we've developed. And
9 we'll schedule a workshop. So we'll get through
10 this, but today I can't give you a date. I would
11 just suggest that in January we would have the
12 report, which will go out for 30 days, and again,
13 I don't see the urgency, this is for an emergency
14 backup supply, it's not their water supply, it's
15 for an emergency.

16 COMMISSIONER DOUGLAS: So let me ask
17 another question --

18 CHAIRMAN WEISENMILLER: But I was just
19 going to put on the record for folks that
20 obviously there's conversation about El Nino this
21 year and how that may be changing this from
22 drought to floods, but anyway, I think our
23 planning assumption worst case would be the
24 drought was in Year Five, we're certainly hoping
25 for better, and even if it is an El Nino year, it

1 will certainly be more wet in Southern
2 California, it may or may not be wet in Northern
3 California, and if it's wet in Northern
4 California it may or may not have a snowpack. So
5 anyway, there's a bunch of reasons why I think
6 our assumption statewide is pretty much worst
7 case is five years.

8 COMMISSIONER DOUGLAS: So I was just
9 going to say that given that the staff report
10 goes out for a 30-day comment period in any case,
11 What is the prejudice to appointing a committee
12 in February if it does slide to a February
13 Business Meeting? I mean, you would of course --
14 we would need to be on notice that there would be
15 a matter that needed to be picked up pretty
16 quickly. But a committee is not going to really
17 do anything until the comments are in on the
18 staff report.

19 MR. HARRIS: The potential prejudice
20 would be a discovery dispute. I'm learning that
21 there may be discovery for the first time, and so
22 --

23 CHAIRMAN WEISENMILLER: Well, actually I
24 was looking for your commitment on the discovery
25 side, so --

1 MR. HARRIS: I can commit to everything
2 that is relevant to the questions that are
3 presented to us, yes.

4 CHAIRMAN WEISENMILLER: In a timely
5 fashion -- timely is the thing I was looking for.

6 MR. HARRIS: I will timely answer
7 everything that is relevant and reserve my right
8 to object to anything that's not, so that is
9 probably the best reason I've heard today and I
10 wish I would have thought of it before I sat down
11 as to why you should appoint a committee, again,
12 the sleeves off your vest. We hope to not bother
13 you. It would be nice -- and we've worked very
14 well so far, I think we had a very nice meeting
15 pre-filing, so there's none of that to worry
16 about. And I'm hopeful that we'll work through
17 these issues. But, you know, I'm a lawyer, so I
18 hope for the best and plan for the worst, and the
19 worst is no settlement and discovery disputes,
20 and a need to bring it back to committee for
21 resolution.

22 COMMISSIONER DOUGLAS: So I'm going to
23 make a suggestion, then. It sounds like there
24 needs to be some additional conversation about
25 what the potential scope of discovery might be

1 and what issues may or may not stand in the way
2 of timely resolution of discovery and issuance of
3 the staff report. So if it would be possible for
4 you, Mr. Harris, to work with staff to better
5 scope what you might be looking at going forward
6 and if you feel like it's very important to have
7 a committee after having that discussion, bring
8 that to us for December. I think the Commission
9 would be happy to hear it. I think we're getting
10 the request maybe a bit on the early side, this
11 month, but if you work with staff on it, you may
12 be able to make a very strong case in December,
13 or not, and you may actually find that you don't
14 need it.

15 MR. HARRIS: I think we just had a
16 nodding agreement here, so that's fine. You
17 don't have to continue the item because it's your
18 standing Item 1. Maybe you want to specify us,
19 just belt and suspender it, but I think that's a
20 very good approach. It means Roger and I get to
21 spend time together between now and Thanksgiving.
22 How could that be bad?

23 CHAIRMAN WEISENMILLER: Well, it's either
24 that or over the holidays, so... Okay, so this
25 sounds like we have a plan, so let's go on to

1 Item 2.

2 MR. HARRIS: Thank you.

3 CHAIRMAN WEISENMILLER: Sure. Which is
4 Ivanpah Solar Electric Generation System. Joe
5 Douglas, please.

6 MR. DOUGLAS: Good morning,
7 Commissioners. My name is Joseph Douglas. I am
8 the Compliance Project Manager for Ivanpah Solar
9 Electric Generation System Project. To my right
10 is Kevin Bell, Senior Staff Counsel, and we have
11 members from the Solar Partners today, as well.

12 Ivanpah Solar Electric Generating System
13 Project, ISEGS, is a 370 megawatt project that
14 was certified by the Energy Commission on
15 September 22, 2010, and began commercial
16 operation in December of 2013. The facility is
17 located in the Mojave Desert near the Nevada
18 border in San Bernardino County.

19 On March 17, 2015, Solar Partners I,
20 Solar Partners II, and Solar Partners VIII, LLC
21 filed a petition with the California Energy
22 Commission requesting to amend the Air Quality
23 Conditions of Certification for the ISEGS
24 project.

25 The project owners are proposing the

1 following: to remove a requirement using Standard
2 Cubic Feet as unit of measurement for the
3 auxiliary boiler field use, to revise source test
4 methods to industry accepted methods for
5 particulate matter, which are more conservative,
6 to make changes to ratings and descriptions of
7 engines to match that of what has been installed,
8 and to modify the allowable time for emergency
9 readiness testing on the fire pumps and emergency
10 generators from 30 minutes to one hour.

11 The Mojavi Desert Air Quality Management
12 District has refused proposed changes and has
13 incorporated the revisions to their permit.

14 The staff analysis was published October
15 1, 2015 and staff concluded that the proposed
16 project modifications would not change any
17 project mitigation measures designed to reduce
18 potential air quality impacts from the project to
19 less than the significant levels. And the
20 proposed modifications will not result in any
21 significant adverse direct or cumulative impacts
22 to the environment or inconsistency with any
23 applicable Federal, State, or Air District laws,
24 ordinances, regulations and standards, and will
25 have no additional impacts beyond those

1 identified in the Commission Decision for the
2 ISEGS project.

3 The Order before you to date does contain
4 minor administrative changes from the COCs that
5 were published in the staff analysis for the
6 ISEGS project.

7 With that, staff has determined that the
8 changes proposed in the amendment comply with the
9 requirements of Title 20, Section 1769(A) of the
10 California Code of Regulations and recommends
11 approval of the project modifications and
12 associated revisions of Air Quality Conditions of
13 Certification. Thank you.

14 CHAIRMAN WEISENMILLER: Thank you.
15 Applicant? Again, would everyone please identify
16 yourself and make sure the Court Reporter has
17 your card?

18 MR. SISK: Good morning, Commissioners.
19 Tim Sisk, Environmental Manager with NRG,
20 representing the Applicant, Ivanpah Solar
21 Electric Generating System.

22 MR. HILL: My name is Steve Hill,
23 consultant to NRG and I prepared the Application.

24 CHAIRMAN WEISENMILLER: Do you have any
25 comments or presentation?

1 MR. SISK: No comments or presentation,
2 just here to answer any questions you have.

3 CHAIRMAN WEISENMILLER: Okay, great. So
4 any public comment either in the room or on the
5 phone? Okay, so let's transition to the
6 Commissioners. Commissioners, questions or
7 comments?

8 COMMISSIONER DOUGLAS: Just as a brief
9 comment, I've looked at this, I think these
10 changes are fine and would recommend it for the
11 Commission's approval, so I don't know if there
12 are other questions? If not, I'll go ahead and
13 move approval of Item 2.

14 COMMISSIONER HOCHSCHILD: Second.

15 CHAIRMAN WEISENMILLER: All those in
16 favor?

17 (Ayes.) So Item 2 passes 5-0. Thank
18 you.

19 CHAIRMAN WEISENMILLER: Let's go on to
20 Item 3, which is Carlsbad Energy Center Project
21 Amendments. Paul Kramer, please.

22 MR. KRAMER: Good morning. Paul Kramer,
23 Assistant Chief Counsel for the Hearing Unit. A
24 final Commission Decision approving two Petitions
25 to Amend the Carlsbad Energy Center project was

1 approved by your Commission on July 30th of this
2 year. On September 2nd, Robert Simpson filed a
3 Petition for Reconsideration of that decision.
4 You held a hearing on September 22nd, and
5 partially granted his petition for the sole
6 purpose of allowing the California Department of
7 Fish and Wildlife to review and comment on the
8 Presiding Member's Proposed Decision and the
9 Commission Decision. Those documents were
10 provided to CDFW the following day and CDFW
11 provided its comments in two letters, an initial
12 letter dated October 19 and a supplemental letter
13 dated November 5. Both letters are in the Docket
14 and they're also loaded on today's WebEx system
15 so the WebEx viewers can look at any of them and
16 scroll through them as they desire.

17 I can sum up CDFW's comments by this
18 excerpt from their November 5 letter: "To
19 clarify, the Department did not intend any
20 monitoring program as a form of mitigation, nor
21 is any monitoring program required for this
22 particular project. Instead, the Department
23 recommended implementation of such a monitoring
24 program to begin learning about potential
25 effects, if any, that thermal plumes could have

1 on birds and bats.

2 The Commission's Reconsideration
3 Regulation requires you to hold a public hearing
4 and following the hearing you can decide whether
5 to leave the Commission Decision in place as it
6 is, to change the Commission Decision, or to
7 appoint a committee to conduct further
8 proceedings if you find that necessary.

9 I have prepared and docketed a proposed
10 Order to serve as a starting point for the
11 Decision you may choose to adopt. And I'll note
12 that there have been no written comments docketed
13 or filed in this proceeding, except a response
14 from the Applicant to the initial CDFW letter.

15 So with that, I would just recommend that
16 you hold a hearing and, depending on the degree
17 of comment, I may want to offer some amendments
18 to the Proposed Order at the end.

19 CHAIRMAN WEISENMILLER: Thank you. In
20 terms of the Department of Fish and Wildlife, my
21 understanding is they're not in the room or on
22 the line? Is that correct? So I was going to
23 ask our Chief Counsel if she has any information
24 to discuss the relationship between the
25 supplement and the original letter.

1 MS. VACCARO: Yes, thank you, Chair
2 Weisenmiller. For the record, this is Kourtney
3 Vaccaro speaking. I think I can shed some light
4 on why it is that you received a supplemental
5 letter. So some of the background on this is,
6 when the initial letter came in from the
7 Department of Fish and Wildlife, I reviewed it in
8 my role as the Advisor to this Commission to
9 determine what legal significance it might have,
10 and I found that letter to be very ambiguous and
11 not clear on whether or not the Department was
12 asserting that there was or might be a potential
13 significant impact that needed to be further
14 evaluated and potentially mitigated.

15 So I reached out to Chief Counsel Wendy
16 Bogden at the Department, expressed my concern
17 that the letter was ambiguous, asked her to
18 review it herself if she was so inclined to make
19 her own determination in that regard, and if she
20 believed that it was ambiguous if she would
21 consider working with another attorney within her
22 department or technical staff to provide clarity
23 so that the Commission could understand whether
24 or not the Department was making an important
25 statement that would trigger obligations under

1 CEQA for this commission.

2 So I think the second letter speaks for
3 itself. It indicates that the Department did
4 believe that clarity was required and it seems as
5 though that clarity has been provided in the
6 second letter.

7 CHAIRMAN WEISENMILLER: Thank you. So
8 let's now go through the comments of the parties
9 on this. So I'll go to CEC staff on this issue.

10 MS. WILLIS: Good morning. Kerri Willis,
11 Assistant Chief Counsel for Siting. Staff
12 appreciates Department of Fish and Wildlife's
13 supplemental comment letter clarifying the
14 Department's position that revisions to the PMPD
15 are unnecessary, and furthermore, staff supports
16 the Hearing Officer Proposed Order.

17 CHAIRMAN WEISENMILLER: Thank you. Mr.
18 Simpson? Mr. Sarvey? Or actually, let me ask
19 the Applicant and then Mr. Sarvey.

20 MR. MCKINSEY: Good morning. John
21 McKinsey, Counsel to the Project Owner, Carlsbad
22 Energy Center, LLC. Also with me is George
23 Piantka of NRG, the parent owner of the project
24 and the project entity.

25 And the project owner in its comments had

1 made a couple of recommendations that mirror the
2 November 5th letter, which the project owners
3 reviewed, and so the project owners are in
4 concurrence with the proposed order and this
5 proposed outcome.

6 CHAIRMAN WEISENMILLER: Thank you. Now,
7 Mr. Sarvey? I understand you're on the line?

8 MR. SARVEY: Yeah, this is Bob Sarvey.
9 Can you hear me?

10 CHAIRMAN WEISENMILLER: Yes.

11 MR. SARVEY: Okay. I noticed that the
12 California Department of Fish and Wildlife letter
13 references a letter from the California Energy
14 Commission staff dated October 19, 2015, that's
15 not in the Docket log or hasn't been shared with
16 the parties, so I'm a little concerned about
17 that. The other issue I'm concerned about is the
18 lobbying by the Commission's Chief Counsel, so
19 I'm not really prepared to make a statement
20 without seeing that October 19, 2015 letter.

21 I also want to tell you that you have an
22 error in the Decision. Exhibit 6001 was accepted
23 into evidence in the Decision, but it was
24 actually rejected by the committee. That's all I
25 have to say. Thank you.

1 CHAIRMAN WEISENMILLER: Thank you. I was
2 going to ask staff to clarify the letter.

3 MS. WILLIS: Yes.

4 CHAIRMAN WEISENMILLER: Please. Identify
5 yourself.

6 MS. WILLIS: Kerri Willis, Assistant
7 Chief Counsel. I think Mr. Sarvey is confused.
8 My understanding is that the letter they're
9 referring to from October 19th is the letter that
10 Department of Fish and Wildlife sent to the
11 Chair, not the letter that staff sent. Staff did
12 not send that letter.

13 CHAIRMAN WEISENMILLER: Okay, so how did
14 the staff transmit the document to Fish and Game?

15 MS. WILLIS: Staff has had no
16 communication with Fish and Game after this
17 letter.

18 CHAIRMAN WEISENMILLER: Fish and
19 Wildlife.

20 MS. WILLIS: Yes, I'm sorry.

21 CHAIRMAN WEISENMILLER: Okay, but before
22 that, I'm just trying to clarify -- I understand
23 that you're correct on the 19th letter, just to
24 see if when we transmitted the document, was
25 there anything with it? And was that docketed?

1 MR. KRAMER: There was an email exchange
2 that I believe was docketed. If it's important,
3 I could get on the computer and call it up.

4 CHAIRMAN WEISENMILLER: Please do that.
5 We'll go on to continue walking through the
6 parties and then we'll clarify that with Mr.
7 Sarvey and come back to Mr. Sarvey. Okay, Sierra
8 Club? Anybody in the room or on the line? Any
9 other commenters on this issue either in the room
10 or on the line? Apparently not, so let's -- Mr.
11 Kramer, if you could help clarify to Mr. Sarvey
12 what's going on so we can get his comments?

13 MR. KRAMER: Chairman Weisenmiller, I'd
14 like to comment on Mr. Sarvey's comment and
15 Kerri's comment. I think it is correct, the
16 plain language of the November 5th letter from
17 Department of Fish and Wildlife is referring to
18 their October 19th comment letter and not to any
19 letter from the Energy Commission, so I don't
20 think there's any issue there at all, and if you
21 concur with staff's interpretation, in fact, I
22 think if one is to read the sentence out loud,
23 it's that obvious.

24 CHAIRMAN WEISENMILLER: Mr. Sarvey, do
25 you have a response on that question, that issue,

1 excuse me?

2 MR. SARVEY: Oh, the only thing that
3 concerns me is that the second letter from the
4 California Department of Fish and Wildlife says
5 they appreciate the outreach by the Energy
6 Commission staff to resolve the Department's
7 concerns. Well, what was that outreach and why
8 isn't it in the docket log?

9 CHAIRMAN WEISENMILLER: Okay, I believe
10 our Chief Counsel explained what occurred in
11 terms of outreach and you had the opportunity to
12 hear that.

13 MS. VACCARO: So if I may, Chair
14 Weisenmiller?

15 CHAIRMAN WEISENMILLER: Sure.

16 MS. VACCARO: So of course I only speak
17 on my own behalf and what my communications were
18 with Fish and Wildlife. I think it would be for
19 Ms. Willis and staff to indicate whether they had
20 any subsequent communications with Fish and
21 Wildlife after the October letter. I wouldn't
22 know if that occurred.

23 CHAIRMAN WEISENMILLER: Okay, thanks.
24 And I believe Mr. Kramer has pulled up on his
25 screen the email, right?

1 MR. KRAMER: Yes. This was an email that
2 was docketed on it looks like on, yes, the 23rd
3 of September, it's actually dated on September
4 22nd, so I misspoke when I said it was the day
5 following your Business Meeting that the
6 documents were sent, they were actually sent that
7 afternoon.

8 CHAIRMAN WEISENMILLER: Okay, Mr. Sarvey?

9 MR. SARVEY: I guess what the letter is
10 referring to is the Chief Counsel's outreach to
11 the Fish and Wildlife, and I'm satisfied with
12 that explanation, it was just very confusing and
13 I didn't understand if staff had been in contact
14 with the Fish and Wildlife, I think that should
15 have been in the docket log, but other than that,
16 thank you, Mr. Chairman.

17 CHAIRMAN WEISENMILLER: Okay, do you have
18 any other comments?

19 MR. SARVEY: Well, the only other comment
20 I had is that you do have an error, Exhibit 6001
21 was accepted into evidence and it was actually
22 rejected by the committee, but that's the only
23 other comment that I had.

24 CHAIRMAN WEISENMILLER: Okay. Mr.
25 Kramer, do you agree that was an error? Will you

1 make that correction?

2 MR. KRAMER: Well, this is hitting me out
3 of the blue, and I don't have the papers to check
4 that. At this point in time, I would suggest all
5 the passage of time Mr. Sarvey could have raised
6 this much earlier. I am reluctant to recommend
7 that you do anything to that Decision at this
8 point, it does not seem like an important error.
9 If it is in fact one, that we do have his
10 comments on the record and I'm happy to go back
11 if you like and research that, but the time to be
12 raising this issue is long past, I think, and
13 that's why I'm reluctant to reopen that Decision
14 in any sort of way.

15 CHAIRMAN WEISENMILLER: Okay. So the
16 question, sorry, I may be confused. Mr. Sarvey,
17 is that a comment on the adopted Decision or the
18 --

19 MR. SARVEY: Yeah, that's --

20 CHAIRMAN WEISENMILLER: Okay, fine, thank
21 you.

22 MR. SARVEY: But basically Exhibit 6001
23 was my testimony on compliance and closure which
24 the committee ruled was public comment, and it's
25 actually admitted into evidence as evidence in

1 the Decision. Just trying to correct that, it's
2 not major, but it's just something that, you
3 know, to make your decision proper, that's all.
4 I'm not challenging the decision in any way, I'm
5 just saying that should be corrected. If you
6 guys choose not to correct it, that's your
7 decision. Thank you.

8 CHAIRMAN WEISENMILLER: Well, thank you.
9 Okay, so no other comments? Let's transition to
10 Commissioners' discussion.

11 COMMISSIONER DOUGLAS: Well, I just want
12 to say that the presentations have been helpful
13 and in looking at the two letters from CDFW, they
14 are consistent factually and, of course, the
15 second letter puts much more clearly into context
16 what the Department specifically mentions with
17 regard to the points that are raised. So based
18 on -- really, looking at both letters and
19 especially the second one, and also hearing from
20 the parties, I'm comfortable moving forward with
21 the Proposed Order. I would of course like to
22 hear any other comments or questions
23 Commissioners may have.

24 COMMISSIONER MCALLISTER: As the
25 Associate Member on this, I agree and I think it

1 seems that the Department of Fish and Wildlife is
2 sort of suggesting that, you know, as a matter of
3 principle generally, or looking at environmental
4 issues, there ought to be some kind of -- they
5 would like to see more evidence about these sorts
6 of issues and this is an opportunity to do that,
7 but not suggesting that be part of the official
8 Decision that comes from the Commission. So
9 really it's up to them and others that get
10 together and gather that sort of data, so taking
11 off the table for this particular purpose --

12 CHAIRMAN WEISENMILLER: You know, I think
13 if there's something to clarify, they're looking
14 for data as opposed to necessarily evidence.

15 COMMISSIONER MCALLISTER: Yeah, they're
16 looking for good data, exactly. So it really is
17 a scientific endeavor and it's kind of a moving
18 forward understanding of this issue, which is
19 certainly a valid academic pursuit, but not the
20 purposes of modifying this Decision, certainly,
21 it doesn't rise to that level. So I'm supportive
22 of what we have.

23 COMMISSIONER DOUGLAS: So if there are no
24 other comments, I will move that we adopt the
25 Proposed Order for the Carlsbad Decision. How's

1 that? For reconsideration of the Carlsbad
2 Decision.

3 CHAIRMAN WEISENMILLER: Do I have a
4 second?

5 COMMISSIONER MCALLISTER: I was looking
6 at the Chief Counsel to see if there's any
7 rewording, but it looks like a nod.

8 MS. VACCARO: Yeah, I have no rewording
9 because that Proposed Order has been made
10 publicly available and the effect of the Order,
11 just for clarity, is to make no changes to the
12 adopted Decision in the Carlsbad matter.

13 CHAIRMAN WEISENMILLER: Thank you.

14 COMMISSIONER MCALLISTER: So I'll second.

15 CHAIRMAN WEISENMILLER: All those in
16 favor?

17 (Ayes.) So the Order passes 5-0. Thank
18 you.

19 CHAIRMAN WEISENMILLER: Let's go on to
20 Item 4. Hearing and Possible Adoption of
21 Regulations - Building Energy Efficiency
22 Standards, 2016 Nonresidential Lighting
23 Alterations, and Peter Strait, please.

24 MR. STRAIT: Hello Commissioners. This
25 is Peter Strait. You'll notice that this item is

1 actually two items in one, that's because there
2 was a CEQA component that has to be done
3 procedurally before we actually adopt the
4 proposed change to the Regulations. I'll be
5 speaking on the CEQA component and then Mazi has
6 a presentation on the Regulations we'll be
7 adopting, the staff presentation that is on
8 screen.

9 Very quickly, staff prepared the initial
10 study related to these proposed amendments. That
11 initial study found that there were no
12 significant negative environmental impacts that
13 would be caused by this, and therefore a negative
14 declaration as to its environmental effects would
15 be appropriate.

16 We did receive one comment on this CEQA
17 component that asked whether a report that was
18 prepared at the end of our analysis raised a fair
19 argument of significant environmental effects.
20 Staff analyzed that report and considered that
21 comment and found that the report did not raise a
22 fair argument of significant environmental
23 effects, and thus finally said a Negative
24 Declaration remains appropriate. And there's
25 material that has been provided to you if there's

1 any questions you have on that piece, I'm happy
2 to answer them, otherwise I can move on to Mazi's
3 presentation.

4 CHAIRMAN WEISENMILLER: Actually I need
5 to get some clarification. So we have one
6 comment that's listed as on 4a and we have a
7 number of other comments that were listed on 4.
8 Now, my presumption is most of the other comments
9 are really dealing with 4b, but let's at least
10 get the 4a comment now. So again, this could be
11 mismarking, but I believe Mr. Richard Markuson
12 has a comment on 4a. Is that correct?

13 MR. MARKUSON: Yes. Mr. Commissioner and
14 Commissioners, Richard Markuson representing the
15 Associated Builders and Contractors of San Diego
16 and the Western Electrical Contractors
17 Association. We support the staff's
18 recommendation for the Negative Declaration and
19 the underlying rule change. Thank you.

20 CHAIRMAN WEISENMILLER: Okay, thank you.
21 Any other comments on 4a? So let's go on to 4b.
22 Go ahead, Mazi.

23 MR. SHIRAKH: Good morning,
24 Commissioners. I'm Mazi Shirakh, I'm the Project
25 Manager for the 2016 Building Energy Efficiency

1 Standards and I will show my presentation and
2 then after that we can move on to answering any
3 questions. Next slide, please.

4 A little background: back on June 10th of
5 this year, we came to the Commission and you
6 adopted Title 24, Part 6, except for the Lighting
7 Alteration language that was included in Section
8 141 to give the public additional opportunity to
9 express their concerns to the Commission. Next
10 slide, please.

11 A little bit more background. Back in
12 2013, the Energy Commission adopted new language
13 for Lighting Alteration requirements in order to
14 capture more energy savings.

15 Once these standards went into effect on
16 July 1 of 2014 and various people and businesses
17 around the state attempted to comply with the
18 Standards, they raised a few concerns related to
19 that language, which was listed here on this
20 slide. The first one was that the language was
21 confusing and we heard that from many different
22 practitioners, Engineers, Architects, the
23 Lighting Designers.

24 The other concern was that some of the
25 control requirements that was in the language of

1 2013, the multi-level controls and bi-level
2 controls required extending new wiring in
3 existing buildings which could be very expensive.
4 While these requirements make a lot of sense in
5 newly constructed buildings, it could present a
6 challenge in existing buildings.

7 Another concern that they raised was that
8 the language required doing area calculations in
9 existing buildings as part of the Lighting Power
10 Density Calculations, and many of these buildings
11 don't have the blueprints or other material that
12 would make the area calculations readily
13 available which made that into sometimes a costly
14 endeavor.

15 And also they raised a concern that, you
16 know, for some of the smaller projects, the cost
17 was excessive and it's simply because, you know,
18 doing acceptance testing has high fixed costs
19 associated with it, whether it's one or two
20 controls or 100, so for these smaller projects,
21 acceptance testing became an issue. Next slide,
22 please.

23 In response to this concern, back in
24 January, we released 45-day language to address
25 these concerns. It was released and some

1 stakeholders, they looked at the language and
2 they raised a concern about the negative energy
3 impact of that proposed language or requirements
4 in the 45-day language. And the IOUs, they
5 developed an Energy Impact Tool which they made
6 it available to us and we used that tool to
7 assess the energy impact of the 45-day language
8 and all the subsequent iteration of that updated
9 present proposal.

10 And then we wanted to work and huddle
11 with all the stakeholders that were impacted by
12 this and listen to the series of changes to
13 address these concerns.

14 I just want to pause for a moment here
15 and acknowledge the valuable contribution of all
16 the stakeholders that really participated in
17 this, which has resulted in the language that's
18 much improved, it's simpler, and more energy
19 efficient, both the 2013 language and the 45-day
20 language, and a lot of the credit goes to the
21 retrofitters, the IBW, the IOUs, and their
22 consultants, the Equipment Manufacturers, and
23 NRDC. So next slide, please.

24 The six bullets on this page summarizes
25 the changes since the 45-day language. Number

1 one is that we retain or restore the area
2 controls and automatic shutoff controls and
3 occupancy sensors to most of the occupancies that
4 are included and impacted by the Standards.
5 Number two is that there is an option of
6 requirements for a luminaire component
7 modification. There was a threshold of 40
8 luminaires to trigger the Standards requirement.
9 We raised that number to 70 to provide relief for
10 smaller projects. I should also briefly note
11 that this threshold of 40 was introduced into the
12 Standards for the first time in 2013; prior to
13 that, there was no requirement at all for this.
14 And what this is, is basically these are
15 essentially lamps and ballasts replacements.
16 Prior to 2013 Standards, one could go through a
17 building like this and replace all the lamps and
18 ballasts without triggering any requirements, so
19 both 40 and 70 represent a big improvement over
20 what was historic practice.

21 Number three is we added another option
22 in 2016 Standards which is in the proposed 15-day
23 language to allow deep power reductions in
24 exchange for relaxed controls. The first sub-
25 bullet there, 50 percent reduction for hotels,

1 retails, and office occupancy, so basically what
2 that means, you know, for those three
3 occupancies, if you go in there and you reduced
4 the installed lighting power, the reduced
5 lighting power, existing luminaires by 50
6 percent, then you can take advantage of this
7 option.

8 And for all the other occupancies in the
9 state, the reduction has to be about 35 percent.
10 This is a key change, 50 percent which was
11 recently incorporated into the Standards, which
12 actually enables us to confidently claim that the
13 2016 Standards is a more energy efficient version
14 of the options that under the existing 2013,
15 which are with more energy efficiency and they're
16 very similar control ratings.

17 Number four is we provided an exception
18 from Acceptance Testing for projects that impact
19 20 luminaires or less. This actually could be a
20 very small project because you can control 20
21 luminaires with one or two or three control
22 plants.

23 Number five, simplification and
24 clarification, which was a goal that we had from
25 the outset. An interesting point here is that I

1 was just reviewing the 2016 Compliance Manual
2 language related to this section and we've been
3 able to reduce the number of pages by 40 percent
4 relative to 2013 because there seemed to be not
5 enough explanation needed for this anymore.

6 And number six is that we established a
7 fan-luminaire threshold for daylighting
8 requirements for wiring alterations. Next,
9 please.

10 So trying to explain the differences
11 again, in the 2013 Standards going back, the
12 standard doesn't allow tradeoffs between energy
13 which is kWh, and so between power which is kW,
14 and time, which is hours. Why maintain the same
15 energy, which is kWh, so this has always been
16 recognized in the Standards and that's why we
17 allow power adjustment factors and other measures
18 in the Standard that recognizes this trade-off
19 between the two parameters. 2013 Standards
20 recognized this by providing two options for
21 meeting the Standards requirement: option 1 is an
22 option that allows you to put in the maximum
23 LPDs, Lighting Power Densities allowed with a
24 full regiment of controls which includes multi-
25 level controls, daylighting controls, and demand

1 response. The same 2013 Standards allowed an
2 Option 2 which said if you reduce your LPDs or
3 Lighting Power Densities by 15 percent, you can
4 have a simplified control regiment. And under
5 Option 2, multi-level controls and daylighting
6 controls and DR controls were not required. And
7 I'll show that in a minute in a table.

8 What 2016 does, it actually allows
9 another option which is based on Option 2, which
10 results in deeper energy savings and rate
11 control, very similar control regimens. And next
12 slide, please.

13 So this table is actually a table that's
14 very similar to let's say this and I know there's
15 a lot of words in here, but what it does, it
16 actually allowed us to illustrate, compare the
17 new language which is in the last comment column,
18 red, with the existing options. Column 1 is the
19 Option 1 that I just described, these full power
20 densities that are allowed, you can install the
21 maximum power under this option with the full
22 controls, which includes area controls, multi-
23 level controls, shutoff controls, automatic
24 daylighting controls, and DR controls.

25 Option 2 says, well, instead of

1 installing the 100 percent, you've reduced the
2 installed power by 15 percent, then you have to
3 do area controls, but you still have multi-level
4 controls, all you need to do is bi-level controls
5 because it's just two switches. They still have
6 to have the shutoff controls, but you're not
7 required to do any daylighting controls or DR
8 controls.

9 The third option, which is our new one,
10 has a very similar control regimen to the second
11 option, with the exception of not requiring bi-
12 level controls. But, you know, as we'll show
13 that this third option will result in a much
14 deeper energy savings than even Option 2, and
15 giving up the bi-level controls for this is not a
16 big deal because the bi-level controls have been
17 part of the Standards requirements since 1988,
18 even older buildings like this that was built in
19 1983, and I know that because I used to work in
20 the Resource --

21 CHAIRMAN WEISENMILLER: Actually the
22 building -- we moved in in '82 and this was a
23 cutting edge building at the time, so let's not
24 go there.

25 MR. SHIRAKH: I'm so sorry I forgot the

1 year, but actually I used to work in the
2 Resources building and watched this building
3 built. So anyway, and this building has bi-level
4 controls in most of our offices, private offices,
5 wherever, so it is there and if it's not there,
6 if bi-level control is not there, as we
7 discussed, it's just not cost-effective to open
8 the walls and ceilings to extend your wire.
9 Next, please.

10 So the result is that now we have a set
11 of standards that saves an additional 112
12 Gigawatt hours per year compared to the 2013
13 Standards. To put that in perspective, this is
14 about on par with all the savings we've got from
15 residential measures from 2016, including high
16 performance attics, high performance walls,
17 tankless water heaters, and all the residential
18 lighting. So this is very significant. And we
19 can do this while reducing the installed cost for
20 many projects; again, they don't have to do area
21 calculations. If you take this room, for
22 instance, it's irregularly shaped, there are
23 corridors, they're small, opposite, and doing
24 area calculations takes time. But all they have
25 to do now is just take an inventory of the

1 lighting fixtures, if there's 800 watts of power
2 in this, they can reduce it by 50 percent, put in
3 400 watts with the controls and they're done.
4 And again, it is a simpler language than what we
5 had before. Next, please.

6 So this table also helps us understand
7 why we're attributing this deeper energy savings
8 compared to the existing requirements. This is
9 based, it's a summary of a table that has all the
10 different occupancies in the state from
11 auditoriums to gymnasiums, classrooms, retail
12 office, hotels, and then associated lighting
13 power densities, and those LPDs have been
14 corrected by the weighted average for the square
15 footage of each of those occupancies that are
16 subject to alterations in the state.

17 And then we represent an LPD here for
18 each vintage of the Standards that we've had in
19 the state since 1998 and 2001, 2005, '08, '13,
20 and '16. Basically what it says in there, Option
21 1 that exists under both 2013 and '16 Standards,
22 you have the option of allowing the maximum
23 lighting power density which is about 1.01,
24 that's the number that's represented there. And
25 if you do that, then you have to put in the full

1 regiment of controls, including multi-level
2 controls and daylighting. The Option 2, which
3 also exists under both Standards, says that if
4 you reduce that 1.01 by 15 percent, you get an
5 LPD of .86, and you can do that and then get
6 reduced controls.

7 Our Option 3 shows that, you know,
8 looking at the 2001 Standards, for instance, it's
9 always going to be less than book, the Option 1
10 and 2, for every vintage in the state. And for
11 the very worst scenario, we can demonstrate that
12 our new option 3 is at least eight percent better
13 than anything that existed under 2013, and the
14 savings get larger as we move into the more
15 current vintages. Next, please.

16 So this is basically a summary of
17 everything we just said, that the 2013 Standards
18 provided two control paths, and then we're simply
19 providing an addition control path that has
20 similar control requirements, more energy
21 savings, lower install costs, and simplified
22 language, and results in a very significant
23 energy savings compared to 2013. Next.

24 I'll be happy to answer any questions.

25 CHAIRMAN WEISENMILLER: Okay, thank you.

1 Let's go on to getting public comment. First,
2 Tom Enslow.

3 MR. ENSLOW: Good morning. Tom Enslow on
4 behalf of the California IBEW/NECA State Labor
5 Management Cooperation Committee. The Committee
6 represents over 1,000 contractors and over 30,000
7 Electricians who install lighting systems to
8 controls across the state, so they're very
9 interested in these proposals.

10 And first, I'd really like to thank
11 staff, Mazi in particular, and Commissioner
12 McAllister for listening to our concerns
13 throughout this process and addressing these
14 concerns in the areas where we're able to reach a
15 consensus. Staff spent significant time meeting
16 with us and answering our questions and we really
17 appreciate that.

18 We support the changes that have been
19 made since the proposal was first introduced and,
20 as you know, we weren't convinced that there was
21 new proposals that would have saved energy, we
22 thought it would have lost energy under these new
23 proposals. It's substantially less likely that
24 this would result in less energy savings and
25 enforce correctly, it should result in new

1 savings. But we still have a few significant
2 concerns we want to highlight that, if not
3 addressed now, should be addressed at a future
4 date. And the first is an enforcement of this
5 new lower power consumption pathway. We're
6 concerned that there's no mechanism to verify the
7 power decrease because when we remove the
8 luminaire, their existing luminaires, they're
9 gone before anyone comes in to inspect the new
10 luminaires. And our clients are concerned this
11 would lead to large spread fraud and over
12 estimation of the actual energy savings.

13 Commissioner McAllister has committed to
14 work with us to address this issue as the Code is
15 implemented, and we just want to reiterate that,
16 you know, we think this is a significant concern
17 with the new pathway and that many "verification
18 measures" need to be identified and implemented.

19 The second concern is under the new
20 Regulations, lighting wiring alterations no
21 longer require multi-level controls, automated
22 demand response controls. And SB 350 directs the
23 Commission increase ADR capabilities in buildings
24 in order to maintain Grid reliability as we try
25 to reach the Governor's new 50 percent goal for

1 renewable energy. And the most cost-efficient
2 time to install ADR controls is when you're doing
3 rewiring or upgrading of lighting wiring, and ADR
4 controls were only required in buildings over
5 10,000 square feet, and this doesn't affect the
6 smaller businesses and we think it's a mistake
7 not to require ADR when you're doing rewiring of
8 a space of 10,000 square feet.

9 So if the Commission moves forward to
10 implement 350, we urge them to take another look
11 at that issue.

12 You know, before to remain at the 40
13 luminaire threshold than 70, but we're going to
14 stand with what they're doing there. The only
15 other concern is that for some reason when you
16 take the new 35 percent power reduction path,
17 you're now exempt from requirements to install
18 corridor and stairwell occupancy sensors. And
19 studies have shown that this is significant
20 savings from installing occupancy sensors in
21 corridors and stairwells, it's not a real
22 expensive install, we're not sure why that
23 exemption is there. We think that leaves some
24 additional energy savings on the table.

25 But with those reservations, we support

1 the rest of the proposal and, again, we thank
2 Commissioner McAllister and staff for the time
3 they put into this, we know that they worked hard
4 at this, and put together the best package that
5 they thought they could. Thank you.

6 COMMISSIONER MCALLISTER: Thanks for
7 being here, I really appreciate it, and this has
8 been a long collaboration and just a lot of back
9 and forth and been really productive, you know,
10 with all the stakeholders, but particularly I
11 think the last weeks in the discussion have been
12 very helpful to get to a really good solid saving
13 number that we're going to be able to achieve.
14 So thanks.

15 MR. ENSLOW: We appreciate it. Thank
16 you.

17 CHAIRMAN WEISENMILLER: From NECA, Brett
18 Barrow.

19 MR. BARROW: Mr. Chairman and
20 Commissioners, my name is Bret Barrow with the
21 National Electrical Contractors Association. I
22 just want to connect what Tom Enslow had
23 mentioned and not restate all of that. We are
24 here today and feel that this language is much
25 better than what we saw in the 45-day language,

1 and we appreciate the moves the Commission has
2 made in that regard.

3 I'd also like to reemphasize the fact
4 that we would like to continue to work with the
5 Commission to make sure that the proper
6 enforcements and verifications are in place so
7 that the people don't abuse the new requirements
8 in the new go-round on these, so we would like to
9 offer ourselves to continued discussions. I know
10 that there are a number of proceedings that exist
11 here and certainly that deal with energy
12 efficiency and it's always been a priority, so we
13 get concerned when we see stuff that may be
14 perceived as being roll-back to Codes and
15 Standards that would deal with that. So again,
16 thank you and look forward to our continued
17 partnership. Thanks.

18 CHAIRMAN WEISENMILLER: Thank you. PG&E,
19 Nathan Bengtsson?

20 MR. BENGTTSSON: Good morning,
21 Commissioners. Nathan Bengtsson from PG&E. Just
22 here to echo the positives we've already heard.
23 We want to express our support alongside the
24 other investor-owned utilities for the revised
25 2016 lighting alteration provisions, which pull

1 off the amazing trick of saving energy while
2 reducing compliance burden. The statewide IOU
3 CNS team docketed a letter supporting the
4 adoption of the 15-day language on Monday. And
5 also I'm up here, we would really like to
6 recognize Mazi Shirakh and the other staff that
7 worked on this for his leadership in negotiating
8 a balanced solution here. All the parties who
9 participated in the lighting retrofit
10 negotiations over the past six months really
11 should be recognized. Through this work, we've
12 reached a proposal that, as he said, is going to
13 result in significant energy savings, about 112
14 gigawatt hours a year compared to the 2013
15 Standards, and we appreciate the partnership of
16 the parties involved. PG&E and the CNS team
17 looks forward to supporting the CEC staff with
18 implementation. And again, thank you for your
19 work.

20 CHAIRMAN WEISENMILLER: Thanks. Gene
21 Thomas, Ecology Action.

22 MR. THOMAS: Yeah, Gene Thomas. Karl
23 Jackson has been deeply involved in the
24 development of the 2016 Code's Lighting
25 provisions and we appreciate the working

1 relationship we've developed with Mazi and Peter
2 and other people and staff.

3 Just briefly, so over that past year, a
4 lot of different parties have worked with CEC to
5 come up with new language that would eliminate
6 the unintended negative consequences of the 2013
7 Code, while also saving more energy than current
8 Regulations.

9 The proposed 15-day language embodies a
10 hard won compromise that balances the concerns of
11 the various parties and has broad, if grudging,
12 support from the stakeholders who actually engage
13 in the business of lighting upgrades in existing
14 buildings. And a partial list of stakeholders in
15 support of the proposed language is attached for
16 the record.

17 I would especially like to note that the
18 proposed language will be easily enforceable
19 using the same practices already widely used by
20 Contractors, Program Implementers who routinely
21 supply robust documentation of existing and new
22 fixture wattages to utilities for rebate
23 purposes. And I note that IOUs have concurred
24 with this assessment in their Joint Comments.
25 And we look forward to working with CEC staff and

1 local jurisdictions to ensure that the compliance
2 process and paperwork is simple and
3 straightforward. So we just urge the committee
4 to vote to adopt the Standards today.

5 COMMISSIONER MCALLISTER: I want to just
6 say thanks to you, as well, Gene. I mean, I know
7 it's not easy to wrangle a diverse coalition
8 together and keep on top of what the views
9 actually are and express them articulately and I
10 think there's been a fantastic job of that
11 throughout this process, so thank you very much.

12 MR. THOMAS: Thank you very much,
13 Commissioner.

14 CHAIRMAN WEISENMILLER: Rick Brown.

15 DR. BROWN: Good morning, Commissioners.
16 Rick Brown, President of TerraVerde. We're an
17 independent energy advisor primarily working with
18 schools and other public agencies. We're here to
19 support the changes that have been proposed
20 today. I'm also here as a member of the School
21 Energy Coalition Executive Committee and the
22 California Association of School Business
23 Officials, Strategic Partner for Energy.

24 One of our concerns, though, is speed of
25 implementation. I know that you're all aware

1 that there's been some issues around the delays
2 in the implementation of Prop. 39 and this is one
3 of those obstacles, the current rules have made
4 it such that for schools that wanted to do
5 interior lighting retrofits, whereas they had
6 hoped that these kind of measures would get them
7 Savings Investment Ratios, SIRs, in the 1.2 to
8 1.4 level, with the burden of the extra cost
9 associated with the current Regs, those SIRs were
10 more like .5 and .6, which really got in the way
11 of them being able to include these in their
12 plans. So with these changes, we'll be able to
13 get those higher SIRs and move things forward,
14 but we need to get that as soon as possible
15 because, for schools, a lot of the construction,
16 implementation of their Prop. 39 occurs during
17 the summer, construction season. And to be able
18 to get contracts bid and designs in and approved,
19 we really need to get this as quickly as
20 possible. So my request is, if there's any way
21 we can have some kind of process, I don't know
22 the rules here, but for having an exemption for
23 schools to be able if these are adopted to be
24 able to use them as quickly as possible. That
25 would really help accelerate this process. And

1 just for order of magnitude, we're working with
2 about 40 LEAs in Prop. 39 that have a total of
3 about \$50 million worth of projects. I would say
4 10 to 20 percent of that are these interior
5 lighting retrofits, so getting some way to smooth
6 things along would be very helpful.

7 CHAIRMAN WEISENMILLER: Okay, thank you.
8 I'm going to take the rest of the comments and
9 after we're done, I'll ask staff if they have
10 comments on any of these comments and certainly
11 encourage you to respond on this one.
12 WattStopper.

13 MR. KNUFFKE: Good morning,
14 Commissioners. My name is Charles Knuffke, I'm
15 the Western Vice President for WattStopper
16 Systems Business, as well as a Systems Business
17 Evangelist. And I stand here today to just be
18 able to tell you that, as somebody who has been
19 involved in the lighting control Code Sections
20 since the mid-'90s and most recently in 2013, my
21 company very luckily allows me to go out and be
22 an evangelist in regards to lighting controls in
23 general. And so in the past year and a half I
24 presented to no less than about 3,000 people on
25 what the 2013 Code required. I can tell you that

1 the acceptance testing and modification in place
2 section on the 2013 Code was one of the stumbling
3 blocks that we often hit in trying to make sure
4 that it was clear and it was understandable and
5 it was enforceable. I just wanted to say that I
6 definitely appreciate that staff has continued to
7 work with the divergent opinions that have arisen
8 about this particular subject and has actually
9 brought them down to something that everybody is
10 in agreement on. The complexity, the acceptance
11 testing that was required now seems like this is
12 now no longer going to be an issue.

13 The items that were not specifically
14 required now are opportunities for being
15 incentivized by the utilities, so I believe that
16 that's actually a very positive way of being able
17 to get some of the results that may not be
18 required, but now are very much in demand by the
19 utilities. So I just stand here to say I do hope
20 that you accept the recommendations of staff and
21 that you accept this Code. Thank you very much.

22 CHAIRMAN WEISENMILLER: Thank you. We
23 have one card in the room and some are on the
24 line. Lutron has both someone in the room, I
25 think Mr. Bertolucci and we have someone on the

1 phone, and I was just trying to make sure you two
2 consolidate into one presentation.

3 MR. BERTOLUCCI: Thank you. We do have
4 people on the phone, I'll be talking for Lutron
5 as a whole.

6 CHAIRMAN WEISENMILLER: Okay.

7 MR. BERTOLUCCI: So my name is Dustin
8 Bertolucci, I'm with Lutron, I'm the Service
9 Manager for the West Coast and Rocky Mountains.

10 We support all the documentation that's
11 been put forth so far, as well. We had a couple
12 concerns on a few points, one of them being the
13 power reduction complaints path of 50 percent.
14 The concern there is just that, it was already
15 even stated, it's not enforceable. With someone
16 coming in later and trying to figure out what was
17 there and figure out if there was 50 percent
18 reduction, usually when an inspector comes in
19 they're not going to know what was originally
20 there. So it just leaves room for error and for
21 people to maybe not be honest about it. We would
22 recommend there that it was based off of lighting
23 power density instead, that's something that's
24 enforceable and could be checked and ensure that
25 it's done properly.

1 Our second point was that the 70
2 luminaire threshold is too high for luminaire
3 component modifications. We'd urge the number to
4 stick down at 40 as it was previously. And the
5 point behind that is that projects could be done
6 in phases. Seventy seems like a really high
7 number and for a building, it's done in different
8 phases, so how would that really be enforced?
9 You could end up with a building that should have
10 been looked at, but is not because of how it was
11 done in a project standpoint.

12 Our last point was around the automatic
13 daylight controls. The number did change from 20
14 in a primary day lit zone down to 10 before it's
15 enforced, but it's in a per space atmosphere. So
16 one space may have two day lit zones, a primary
17 and a secondary, and the primary day lit zone,
18 it's not often that a space has 10 luminaires in
19 that zone. So you might end up with a lot of
20 spaces, take a typical office building may have,
21 let's say, 30 spaces in it, four of those spaces
22 may meet that requirement where you could be
23 taking advantage of daylighting throughout the
24 whole building and end up with a lot of savings
25 from daylighting. So we would urge that that's

1 looked at either -- if it's done by spaces by
2 wattage, and if it's not been by spaces, by maybe
3 a project level. That way, you're taking
4 advantage of all the natural light that is coming
5 into a building and taking that in consideration
6 when you're looking at it as a whole, not just by
7 a space. But overall we're very happy with
8 what's here and we urge everyone to approve it.

9 CHAIRMAN WEISENMILLER: Thank you.

10 Again, I would encourage after we get all the
11 comments. Meg Walther, NRDC.

12 MS. WALTHER: Hi. This is Meg Walther.
13 Can you hear me?

14 CHAIRMAN WEISENMILLER: Yes, we can.

15 MS. WALTHER: Great. Thank you so much.
16 This is Meg Walther from NRDC. Sorry I can't be
17 there in person today, but just wanted to voice
18 NRDC's support for the 15-day language. As other
19 stakeholders have mentioned, this is the result
20 of many months of discussion and hard work by the
21 CEC staff, particularly Mazi, and we think that
22 this version of the language is the best to date.
23 As Mazi documented, it will result in energy
24 savings compared to the current Code, while
25 resolving many of the stakeholder concerns.

1 In particular, we were happy to see the
2 increase to 50 percent production for the high
3 occupancy building types. And so with that, just
4 wanted to say that we urge you to adopt the
5 language today and thank you, Commissioners and
6 staff, for your hard work on this language.

7 CHAIRMAN WEISENMILLER: Thank you for
8 NRDC's participation. Don Link, Controlled
9 Energy? On the line?

10 MR. LINK: Yes, hello. Can you hear me?

11 CHAIRMAN WEISENMILLER: Yes, we can.

12 MR. LINK: Yeah. My name is Don Link.
13 I'm with Controlled Energy, a company that's been
14 in business doing lighting retrofits since 1986.
15 We're a C10 contracting company for all those 29
16 years. In 2014, because of the market disruption
17 caused by the 2013 Title 24 Standards, my
18 company's business declined by 79 percent
19 relative to the average annual sales levels of
20 the previous six years. In 2015 it went down 78
21 percent. So I had to lay off 80 percent of my
22 lighting technicians in 2014. None has been
23 rehired and I've had no new hires during that
24 time. It's fair to say that my company has
25 basically been on life support and we've kept it

1 there in the hope that there would be changes
2 such as the ones being proposed in the 15-day
3 language. We support that and we feel that it's
4 vital that it happen if you want a lighting
5 retrofit industry available at all. And one of
6 the important reasons for having a lighting
7 retrofit industry vital is that it serves a small
8 marketplace that the IBEW-NECA people will not
9 and basically cannot serve. They don't have the
10 sales background, they don't have the sales
11 techniques, and frankly a lot of these projects
12 are way too small to be of any interest to them.
13 So in fairness to the marketplace, if the smaller
14 and some of the medium-sized customers are going
15 to get any service at all in energy efficiency,
16 it's going to come from my industry. So I
17 support these modifications of the 15-day
18 language and strongly recommend that they become
19 effective immediately, certainly no later than
20 the start of 2016. It's going to take probably
21 six or eight months to get the sales cycle up and
22 running again. It has been basically out of
23 order since 2014, as Gene Thomas has attested to,
24 my colleagues, most of my competitors, in fact,
25 are gone. One of them actually took a job in

1 another field in another business to support his
2 company which has no compulsion for the time
3 being in hope for these modifications. So I urge
4 you to adopt them today and to have them go into
5 effect absolutely as soon as possible. They're a
6 great compromise. And thank you for all the
7 great work that the staff has done. I've been
8 involved in following this and commenting on it
9 since early in 2015 and it's been quite a
10 process. Thank you much.

11 COMMISSIONER MCALLISTER: Great, thank
12 you. We're done with the cards both from in this
13 room and on line. Is there anybody else who
14 would like to make a comment? Gene, do you want
15 to come back up briefly?

16 MR. THOMAS: Just very briefly. Just to
17 follow-up on what several people have said, like
18 Don, talking about adopting it as soon as
19 possible. You know, we know that if it's adopted
20 today, it goes into effect January 1 of 2017, and
21 I think what Don and others have said is many of
22 them won't be around on that date if we can't
23 start running in some way under these provisions
24 sooner than that. So I'm just wondering if this
25 might be taken up under the 15 MISC02

1 proceedings, it's basically improved compliance
2 with the current Energy Code, maybe there's a
3 path forward there. Or if not, I'd highly
4 suggest convening a docket to find out ways that
5 people can start complying with the new better
6 Codes instead of the current ones.

7 COMMISSIONER MCALLISTER: Great, thanks a
8 lot. So I want to -- I think, Mazi, you've been
9 making a list there of the various issues that
10 have come up. I wanted to ask you to respond to
11 the ones that you feel need it, and definitely
12 this one in terms of sort of what the options
13 might be or how to address that issue of getting
14 rid of that --

15 MR. SHIRAKH: Early --

16 COMMISSIONER MCALLISTER: Yeah.

17 MR. SHIRAKH: So one of the comments that
18 keeps coming up, I think it's probably worth
19 mentioning, is the enforcement concerns that, you
20 know, if the power reductions are relative to the
21 existing fixtures, once you remove those existing
22 fixtures and take them to the landfill, how do
23 you verify that? So this is something we're very
24 aware of. In fact, I think later this month or
25 next week we're going to convene a workshop here,

1 we're going to ask all the stakeholders,
2 including and prominently the CALBO members,
3 officials, along with retrofitters with IBWs,
4 they were going to participate. We think there
5 are ways of action doing this without
6 compromising enforcement, you know, there's
7 people that have to document and most of these
8 projects actually go through these incentives so
9 they have to document both to the Building
10 Departments and the IOUs, they have to establish
11 what the existing baseline even to take pictures
12 of the existing baseline, there's right of ways,
13 you know, we can ensure to establish the power of
14 the existing systems. But again, this will be
15 the subject of our next focus after the adoption
16 and we'll be addressing that.

17 Some of the other concerns are lighting
18 controls, like wiring controls that do not
19 trigger demand response controls. You know, we
20 talk about this and the problem is that many of
21 the wiring alterations, you know, they're just
22 small operations to an existing building that
23 you're extending an additional wire between a
24 branch circuit to add to another luminaire or to
25 a switch, and to trigger DR response for that,

1 that seems like overbearing. For Demand Response
2 to be effective, it actually needs to impact most
3 of the lighting system in the building. You
4 know, we think this is more appropriate for the
5 kind of projects we have, which is already
6 covered and requires DR. And because many of the
7 wiring alterations are just small extensions of
8 the existing wiring system, it doesn't add much
9 benefit to only add controls in one or two
10 luminaires.

11 COMMISSIONER MCALLISTER: I want to just
12 highlight that one point. So if you are busting
13 up walls, moving walls, doing a really serious
14 rehab of the space, and that wouldn't even be the
15 case in ten improvements, the times at least,
16 then all of the controls are actually required.

17 MR. SHIRAKH: Exactly. You don't even
18 have a choice, you have to do that. The way the
19 language is written, when you move walls, or you
20 work on ceilings, it forces you into Option 1
21 that I just described, but full regiment of the
22 controls, including DR controls. Many of the
23 wiring alterations are much smaller in scope and
24 is not a good fit for that.

25 MR. STRAIT: And there's one other point

1 I'd like to add onto that, which is part of the
2 reason that we didn't include DR in that section
3 is that section speaks to alterations that are
4 solely of wiring and don't have to retouch
5 luminaires or the lights in any other sense. A
6 DR control requires compatible lighting, it
7 requires either that it be lowered by 10 or 15
8 percent to hit that target and not simply shut
9 off. If we were to require DR in a wiring only
10 project, that would essentially force in many
11 cases people to then expand the scope of their
12 project to also change their luminaires, so we
13 were sensitive to that. But like Mazi said, any
14 time you do have a project that involves changing
15 the lighting and changing the controls, and
16 certainly there are rehab projects that are
17 likely to be the projects that use 10,000 square
18 feet of space, those will be held to the
19 requirements under the current Option 1 and 2,
20 actually.

21 MR. SHIRAKH: So the other comment was
22 reducing the trigger for lamps and ballasts from
23 70 back to 40. Again, this is not a big change
24 considering that we're saving over 100 gigawatt
25 hours of savings, even with this change. It

1 doesn't really impact the energy savings that
2 much. And again, both 40 and 70 represent a huge
3 improvement over historic practice. And the 70
4 was something that the retrofiters really
5 insisted that basically they need to have this to
6 make their projects economical.

7 COMMISSIONER MCALLISTER: Could you
8 mention the serial aspect so I think there is a
9 time limitation of how many times you can do
10 this.

11 MR. SHIRAKH: This is limited to 70
12 luminaires per year, per floor, which is
13 identical language to 2013, except for from the
14 40 it went to 70. So the concern is that, you
15 know, you can go in there and do 69 luminaires at
16 a time and whether it's 40 or 70, that is the
17 same problem, you could have that, but we think
18 that most people when they make a business
19 decision they make rational decisions, they want
20 to go in their building and change the lighting
21 system once and get it over with, and they're not
22 going to circumvent the Standards by doing 69,
23 69, 69, 69. So we don't think that is going to
24 happen, and if it's a problem it's the same for
25 40, except they'll do it 39 at a time. Do you

1 want to add something to that, Peter?

2 MR. STRAIT: Yeah. The other thing we
3 looked at was that original 40 number was based
4 largely on considering a space like an office
5 complex that has uniform distribution of 2 X 4
6 lighting wherein a lot of things, the lighting is
7 a lot more diverse and can include a lot more
8 small lighting. If you walk into a retail
9 establishment, for example, you'll have a lot of
10 spotlighting, a lot of display lighting. You
11 might have individual recessed cans. Those will
12 add to that number very very quickly and so we
13 did see that the original number that we froze in
14 2013 of 40 was not appropriate for all projects,
15 and it really did end up with a lot of small
16 projects that was intended to address actually
17 still not being able to fit under that threshold.
18 So I just wanted to say, this is a relatively
19 small increase to go from no limit at all to a
20 threshold of 40, we're just changing that
21 threshold to be more in line with small projects
22 that use diverse types of lighting and use things
23 like display lighting in their projects.

24 MR. SHIRAKH: So the last comment I heard
25 was that the 10 luminaire within the day lit

1 zone, you know, this number bounced around,
2 started with about 75, and we ended up with 10.
3 And basically what the requirement is, is that if
4 you're doing wiring alterations in a day lit zone
5 that impacts 10 luminaires or more, then you have
6 to put in the daylighting controls within that
7 zone. Ten luminaires is not a lot of luminaires.
8 So the rule of thumb is that each luminaire
9 illuminates an area between 75 to 100, so we're
10 talking about between 750 and 1,000 square feet.
11 So this is not a very large space and we thought
12 it was reasonable and most stakeholders agreed to
13 that, so that's where we landed on that.

14 COMMISSIONER MCALLISTER: Thanks a lot.
15 I want to ask the Chief Counsel, so the issue
16 came up a couple times of the desire by some
17 stakeholders to try to kind of iron out our path
18 here so that we don't have a big discontinuity at
19 January 1, 2017. So in the meantime the 2013
20 Code applies, it is what it is, the new Code will
21 be adopted today, we'll apply January 1, 2017, so
22 what are your thoughts on the existing buildings
23 frame, just this piece that we're going on today
24 for the nonres lighting alterations. If you
25 don't have an answer now, that's okay, but I want

1 to sort of get it on the radar to look at options
2 that are legal and doable for addressing those
3 concerns.

4 MS. VACCARO: So I think it's a
5 reasonable question. I can sit here and tell you
6 I have not thought at all about that question.
7 Galen Lemei is the attorney who has been chiefly
8 involved in this project, I don't know if he has
9 considered it either, but if neither of us have,
10 we certainly will add it to our list of things to
11 do.

12 COMMISSIONER MCALLISTER: Okay.

13 MR. SHIRAKH: I believe on their 10-109
14 there is a path, but we can explore it.

15 CHAIRMAN WEISENMILLER: Okay, so do you
16 have anything to contribute or will you get back
17 to us either way it looks?

18 MR. LEMEI: Yeah, I have nothing to add
19 at this time. The request for perhaps another
20 path wasn't something that was previously brought
21 up, so we'll look forward to looking at the
22 options and working with the staff and the
23 stakeholders.

24 MR. STRAIT: I should clarify, it was
25 brought up to staff, but it wasn't brought up as

1 a legal question, it will be brought to legal
2 counsel on the question. So once -- and this is
3 simply a matter of sequence -- once we have the
4 language adopted, then we can pursue with Legal
5 ways in which we might effectively implement it
6 more quickly, but we felt it would be premature
7 to start discussing prior to having us adopt
8 language.

9 COMMISSIONER MCALLISTER: So I think
10 right now we're sort of keeping on that
11 conversation assuming the vote goes out. So I'll
12 just use that as a segue to my comments. I
13 really appreciate everybody being here to comment
14 on this, it's a really complex set of issues, and
15 I think one thing we learned after 2013 was that
16 it's an incredibly diverse marketplace with lots
17 of different types of projects, many many
18 different sizes and flavors of projects and
19 different building types of different vintages,
20 with different existing equipment, complex. And
21 I think we heard loud and clear from the
22 stakeholders, I certainly did, that it was
23 creating barriers out there in the world for them
24 trying to actually lead projects and bring energy
25 savings to their clients, thus impeding the

1 sales, making it more difficult. I mean, I think
2 we heard -- the evangelist is out there trying to
3 explain Code to stakeholders and customers and
4 not really being able to because it was just not
5 plain language enough for people to even
6 understand, apart from the substance of what's
7 actually a plot, what's actually required.

8 So, you know, my strong desire was to
9 clarify at a minimum and unpack what we were
10 requiring and make sure it made sense, whereas
11 many of the types of projects that we possibly
12 could and make the kind of level of requirements
13 and conditional costs of those requirements --
14 get those to be as commensurate as possible with
15 this intended scale and scope of the project.

16 So I think staff has done a fabulous job
17 working with stakeholders to get to that point,
18 there's been a lot of I think, you know,
19 everybody probably isn't fully satisfied, which I
20 think maybe means we thread the needle very well,
21 perfectly, probably not perfectly, but I think
22 it's a great improvement, it saves a lot of
23 energy, the technology we have at our disposal is
24 incredible, really, and it's getting better all
25 the time.

1 I do have a couple specific points. I
2 think I want to just make sure that people
3 understand that this is an evolution. The
4 lighting marketplace is undergoing incredible
5 evolution right now. And we absolutely want to
6 do everything we can to encourage that evolution
7 and apply it out there in the marketplace. The
8 cost benefit is something we must take into
9 account in order to justify our standards, and so
10 that also, sometimes it goes along with more
11 residential energy savings, sometimes it makes us
12 have to stop and think and sort of plan ahead for
13 some future that we think might happen, but might
14 not be cost-effective right now at this moment.
15 So those conversations have really informed this
16 end result.

17 You know, the one-size-fits-all is
18 problematic, so we kind of need to unpack that,
19 but I think my MO in general, and I think staff
20 has really responded well to this, is we need to
21 create more pathways. You know, this is not the
22 only area where we've been trying to do this.
23 The 8758 Action Plan and energy efficiency
24 generally, we've been trying to build in flex
25 building to approaches that we enable for

1 purposes of compliance or program design, etc.,
2 as long as they, you know, and for other parts of
3 Title 24, hoping that options helps the
4 marketplace figure out how to get to the
5 performance-based result. And I think that's
6 really where we've come with this part, as well.
7 So you get massive deep savings based on
8 equipment change-out at a relatively low cost?
9 That's great for the state and it's great for the
10 project owner.

11 And I wanted to acknowledge the
12 enforcement issue and certainly we're committed
13 to convening that discussion. I mean, I want to
14 make sure that moves forward with all
15 stakeholders present, certainly Building
16 Departments, Building Officials have a big voice
17 in this, and we want to make sure this happens on
18 the ground, we want to make sure we get it right
19 and that that documentation is appropriate and
20 not hugely onerous if we can avoid it, but
21 creates that accountability that I think we all
22 want.

23 On the Demand Response front, I feel,
24 again, this innovation that's happening
25 incredibly fast, very quickly, and 350 mentions

1 Demand Response, it says, you know, we need to
2 look at it and get it in the marketplace where it
3 is cost-effective and feasible. So that phrase,
4 where feasible and cost-effective, is an
5 important one, right? And I want to sort of
6 again put this in a continuum in context of where
7 we've been and where we think we're going,
8 certainly as SB 350 moves toward implementation.
9 You know, when the value proposition for Demand
10 Response is more generalized and clearer, I would
11 say, we'll have a lot better sense of those
12 controls and what they mean in a given project.

13 You know, the PUC is working actively on
14 developing Demand Response in their proceeding
15 and figuring out how much it's going to be worth,
16 same with the ISO, there's bifurcation, parts of
17 the discussion are each of the other agencies,
18 ISO also has a wholesale level in Demand Response
19 and market that they're developing, but the
20 economic value proposition that is still under
21 development, we actually don't know when a given
22 customer or aggregator, etc., when they actually
23 will be paid for participating in those markets.
24 We know that they want a much better idea of the
25 sort of cost benefit of incorporating, actually

1 incorporating control as a requirement, but in
2 any type of project. So I, when I anticipated if
3 it's a knock it out of the park value proposition
4 that we'll want to let everybody know that
5 potentially, or we definitely would want to help
6 the marketplace understand that so that regular
7 bidders and project developers can help sell that
8 in a voluntary way. And the next time when we go
9 around and look at updating the 2019, we want an
10 opportunity to revisit this issue as a potential
11 requirement.

12 So I want to just put it in that kind of
13 a continuum, you know, we do this update every
14 three years and three years from now things are
15 going to look different, we know things are going
16 to look very different from what they do today,
17 we don't have a crystal ball to know exactly what
18 they're going to look like.

19 I agree totally, and everyone has
20 highlighted demand-response, that this has a
21 really great potential large resource for the
22 state to reach our 350 goals and just to help
23 customers optimize their energy consumption, but
24 given the fact that we have rate redesign going
25 on actively, we have a lot of shifting sands, I

1 think as that stuff shakes out we will know a lot
2 more moving forward, so we want to definitely
3 make sure people know that I certainly and staff
4 are really thinking about the strategies to
5 approach the evolution of the marketplace in that
6 respect, too.

7 On other controls, you know, I think we
8 absolutely heard you. I think controls are,
9 again, technology development is just incredibly
10 fast right now, but I want to just highlight the
11 fact that a couple people, several people
12 mentioned a rebate environment. A lot of these
13 smaller projects, a lot of projects generally,
14 participate in the utility rebates and I think
15 we're all kind of conditioned to think, oh, well,
16 you know, the voluntary above Code, you know,
17 outside of mandatory Code kind of projects are
18 the ones that are eligible for the utility
19 rebates. And so that has been the case,
20 absolutely. I think with the 8802, we may see
21 some shifting on that environment if the
22 utilities are actually able to look at existing
23 conditions and incentivize projects up to and
24 beyond Code, then the landscape might look a
25 little bit different. And I think that actually

1 will probably incentivize more documentation of
2 existing conditions rather than less. So I
3 think, again, we need to kind of evolve the
4 discussion in this building alongside what's
5 going on at the PUC and the POU utilities, the
6 ratepayer programs, funding incentive programs.

7 So anyway, lots of topics here that are
8 rolling throughout this and I have to just sum up
9 by saying, you know, I think this is an
10 incredibly big step forward, I really am looking
11 forward to seeing how the marketplace embraces
12 it, certainly want to keep tabs on the discussion
13 of how we can potentially solve some of the
14 issues near term as we lead up to January 1,
15 2017.

16 And with that, I think I have some staff
17 I want to thank. I wanted to just pile on to the
18 kudos to Mazi for sure, and the management of
19 this discussion, just in good faith and with
20 sleeves rolled up and working hard, and the
21 return has been quite impressive, so I'm really
22 thankful to have the staff that we have on this.
23 And let me just, Peter also, Peter has been
24 invaluable in this, just unpacking these issues
25 in a very analytical way, he's been very helpful.

1 Bill Pennington has been incredibly helpful with
2 his historical knowledge and the process
3 knowledge, and as well as technical. And then in
4 addition, Simon Lee and Dave Taylor and Eurllyne
5 Geisler who is sitting back there nodding, "Yes,
6 my team is great," she says. So, you know, big
7 team effort. So I want to again thank all the
8 staff involved in this and the stakeholders, many
9 of you are in the room, but many are not. This
10 is a really big deal for the state and I
11 anticipate and hope, believe that this is going
12 to enable economic activity in the state that
13 would not otherwise have existed. And that's the
14 jobs aspect of something we cannot ignore, it's a
15 big big deal. So we want people out there doing
16 retrofits in lighting in our existing buildings,
17 and doing the best new construction as we
18 possibly can, and this whole Title 24 Update is a
19 big step in that direction and I'm really
20 thankful to be able to kind of shepherd this
21 process and get to a point where I think we're
22 headed in an extremely good direction with good
23 collaboration with all the industry stakeholders
24 and all the advocates that have been involved in
25 this. So with that, I appreciate your bearing

1 with me on my extensive comments, but I think it
2 just shows that there are a lot of people in this
3 state who are trying to do the right thing and
4 headed in a direction to help leverage all the
5 energy efficiency that we possibly can in our
6 buildings, and it's just now more important than
7 ever and a lot of it starts in this building and
8 it's really exciting to be leading this effort
9 here in California and have a lot of people look
10 at us and hopefully build on what we do.

11 So with that, I'll see if there are any
12 comments from the dais.

13 CHAIRMAN WEISENMILLER: Great.

14 COMMISSIONER HOCHSCHILD: So I just want
15 to offer my congratulations to Commissioner
16 McAllister and to Mazi and Peter and your team
17 for this item. A good example, I think, of the
18 Code getting better as a result of a lot of
19 public input and dialogue and I think it's
20 emblematic. And you're never going to lead
21 everybody, but I think you've charted a very
22 emblematic middle ground. I will note, we're now
23 at the point where it's literally testing the
24 remnants of one versus ability to actually hold
25 all that Code at one time, and it is a compliment

1 which is all necessary, but I do think it goes to
2 the next challenge, which is really around
3 enforcement as I see it, and just if you put
4 yourself in the shoes of a Building Inspector who
5 has come up while I'm talking about renewables
6 all the time, all over the state, I get a lot of
7 public comments on this issue, you know, and if
8 you put yourself in the shoes of a Building
9 Inspector walking through a building and your
10 first job is seismic and fire and just building
11 access and structural integrity, energy is really
12 at the bottom of a very long list, and when we
13 get to that, then you have all of this, it's so
14 complicated that, you know, I think it's a real
15 challenge actually to enforce. And so for us to
16 begin as an agency to really focus on making the
17 enforcement easy and practical for people who
18 have that job, you know, there are ultimately
19 diminishing returns with this Code, where you go
20 down to Zero Energy and really the action is
21 going to move more and more into enforcement.
22 And I'm just curious at a high level right now,
23 Mazi here, and Commissioner McAllister, what
24 would you guess in terms of existing Code roughly
25 how much is not being enforced in the Code today,

1 just ballpark, from what you know? I have heard
2 around 20 percent, but I don't know if you have
3 any other data on that.

4 MR. SHIRAKH: I don't have any. Maybe
5 Bill Pennington has more information about that.

6 MR. PENNINGTON: It's a hard question to
7 answer and we don't have good data, and we should
8 have better data and it's kind of a shame that we
9 don't. So we need to try to figure out that in
10 the future. It depends on what kind of building
11 you're talking about, it depends on what kind of
12 alteration you're talking about. For HVAC
13 change-outs, the sort of consensus perception is
14 that only about 10 percent of projects are
15 pulling permits, and so the whole rest of
16 projects are on their own and don't get any
17 scrutiny from the Building Department, and maybe
18 they do satisfactory job in some cases and in
19 other cases probably not. We really don't know
20 what's going on with other kinds of alterations
21 like lighting alterations, or like re-roofing,
22 it's kind of -- we really lack data. And
23 hopefully under AB 758 Action Plan and in
24 response to SB 350, maybe we'll get some more
25 data and be able to come back to your question

1 with a much better answer in the future.

2 CHAIRMAN WEISENMILLER: I was just going
3 to follow-up a little bit on that. I was going
4 to note that the good news is on the better data
5 side, that on Item 7 we are looking at starting
6 on 802 that will really be a quantum step up on
7 data. I think people have been nervous about
8 alterations and the degree of compliance there.
9 I think the reality, when you look at Socolow's
10 work at Princeton, there's a lot of individuality
11 or differences in buildings, you know, and again
12 a lot of it is the construction practices can
13 really influence how well these translate. And
14 though I would note, and you may have had the
15 same experience, that when I did a major
16 alteration at Berkeley, that's certainly one of
17 the requirements was that we had someone file a
18 report on Title 24 compliance as part of that.
19 So that means it's not ignored, although we both
20 know that certainly General Code stuff, without
21 the issue to Berkeley. So again, it's how well
22 the theoretical, the permitting translated to
23 actual construction.

24 MR. SHIRAKH: Just may I add, I looked
25 into this a couple years ago and from new

1 construction I think we're in pretty good shape,
2 especially when we're talking about Residential
3 production builders, same thing with the
4 Nonresidential alterations in both sector, and
5 one thing that's going to be helpful, especially
6 on the residential sector is the existence of the
7 electronic data registries, that's going to help
8 us act, we can go in there and look and see how
9 buildings are complying because they have to
10 upload the entire forms, CF1Rs, 2Rs, and 3Rs. So
11 again, on new construction we're probably okay,
12 it's alteration that's the challenge.

13 COMMISSIONER MCALLISTER: Yeah, I wanted
14 to kind of chime in here too. So there are a
15 number of places where, I agree, different parts
16 of the alterations are where we have the biggest
17 issue, you know, we live in a big state with a
18 lot of incredible variety, every project is
19 different, right? Every Building Department is
20 different. When I got my PD system inspected at
21 Davis, they actually letter of the law complied
22 with Code, I mean, they checked my toilets to
23 make sure I had the efficiency, everything they
24 could possibly do while they were in the house,
25 they went ahead and did. Well, that's not --

1 Berkeley is probably somewhat like that, as well,
2 but a lot of jurisdictions aren't. And so in
3 some respects, this is sort of a local/state
4 relations issue, you know, it's sort of a
5 state/local dynamic that, you know, it's not
6 actually within our power to dictate exactly what
7 they have in every locale. We establish the law
8 and then enforcement happens down there at each
9 local level. So you know, we're moving
10 aggressively towards energy efficiency as we must
11 and it's the right thing, we know that it's cost-
12 effective, on a portfolio basis, and the vast
13 majority of places in the state, but each locale
14 is going to have its own dynamic and we do need
15 to understand that better, and I think the AB 758
16 Action Plan has a number of places where we
17 create the data resources and the data flows to
18 really understand what the baseline is for
19 compliance, then we can pick off the best
20 opportunities to improve compliance where it's
21 falling short and develop the programs that
22 attacked that in an effective way, particularly
23 on the HVAC retrofits, you know, we need better
24 information about what's coming into the state,
25 who is installing it, where they're installing

1 it, and whether it's getting a permit. I mean,
2 that's just a basic data need, but there is a
3 dynamic definitely with that industry that may or
4 may not, you know, different actors within that
5 industry are good or not so good with that kind
6 of an approach from the state. And it's a
7 resource issue, too. So a lot of issues to
8 unpack with compliance and enforcement, which are
9 two different things, actually, you know,
10 compliance and then, you know, permitting and
11 compliance, a lot of people loop them into the
12 same bucket, but are actually two different
13 things. So it gets, you know, as we have more
14 information coming in, as we implement 758, I'm
15 hopeful we'll be able to identify the biggest
16 bang for the buck kinds of issues on the
17 compliance side. But, yeah, ongoing, ongoing
18 issue, not just in the energy field, but across
19 the board, that's not just about the energy, it's
20 about safety, lots of different things, so
21 certainly this area is not unique in that
22 respect.

23 COMMISSIONER SCOTT: I had a couple
24 higher-level comments, I think, here. I say this
25 relatively often, actually, when we're talking

1 about Title 24, and as the public member of the
2 Commission, I'm just delighted to do so. I
3 really want to express how appreciative I am of
4 the team's proactive and diligent outreach to all
5 the engaged stakeholders in the space, and yours
6 as well, I mean, it makes a difference. You
7 mentioned at the beginning of your remarks what a
8 diverse and complex space this is, and to be able
9 to get this type of public outreach partnership
10 and collaboration as we put these together, I
11 think is invaluable.

12 I wanted to say thank you to Mazi and
13 Peter and the team, they gave me an excellent
14 detailed briefing on the topic, so I could be
15 prepared and also for all their hard work in this
16 space, and thank you to you for your leadership
17 in this space, as well.

18 COMMISSIONER MCALLISTER: Absolutely.

19 COMMISSIONER DOUGLAS: I just want to
20 also speak up and thank Commissioner McAllister
21 for his leadership in this space, and the team.
22 I know that these issues are factually extremely
23 complex and they come down to a great many small
24 details that actually make a really big
25 difference to people on the ground, both in terms

1 of energy savings and in terms of how the
2 projects actually work, and which projects
3 actually pencil out. And so I just want to thank
4 you, the team, and also all the stakeholders for
5 helping us work through a very challenging issue.

6 CHAIRMAN WEISENMILLER: Yeah. I want to
7 make two comments, one is that certainly I think
8 all of us really appreciate Commissioner
9 McAllister's effort, along with the staff, and
10 all of the parties to really work through this
11 issue. It wasn't easy, I know. But again, it
12 took a lot of creativity, a lot of hard work to
13 get to where we are, and certainly hats off. I
14 will note that there's only two of us on the dais
15 who voted the existing lane requirement which has
16 gotten some description on its complexity or
17 confusion, so thank you for cleaning that part
18 up. But anyway...

19 COMMISSIONER MCALLISTER: So I wanted to
20 just finalize my comments and suggest -- I really
21 like the table that you came up and you put up in
22 your presentation that said, you know, this is
23 not in the Standards, but it's just a comparison.
24 I think that is a great resource to have, you
25 know, and the cues and kind of as we're

1 explaining the changes in the updates.

2 MR. SHIRAKH: Well, we're putting that
3 table in the Compliance Manual, by the way.

4 COMMISSIONER MCALLISTER: Okay, great.
5 So with that, again, I think this has been a
6 great process and actually kind of precedent
7 setting hopefully as we move forward towards
8 speaking about the 2019 update, you know, all of
9 the same stakeholders are going to be really
10 critical to figuring out how to get us to that
11 next level that we're looking for. So I vastly
12 prefer a collaborative approach that really on
13 the merits figured out what the problem is and
14 how to solve it, and I think it just gets to a
15 better place generally.

16 With that, I think I'll move this item.

17 CHAIRMAN WEISENMILLER: Just as a quick
18 reminder -

19 COMMISSIONER MCALLISTER: Oh, right, 4a
20 and 4b. I move 4a and 4b.

21 COMMISSIONER HOCHSCHILD: Second.

22 CHAIRMAN WEISENMILLER: All those in
23 favor?

24 (Ayes.) So both items passed 5-0. Thank
25 you. Thanks again, great job.

1 CHAIRMAN WEISENMILLER: Let's go on to
2 Item 5, iRobot Corporation. Kristen Driskell,
3 please.

4 MS. DRISKELL: Good morning, Chair and
5 Commissioners, just barely.

6 CHAIRMAN WEISENMILLER: Right.

7 MS. DRISKELL: My name is Kristin
8 Driskell, I am the Supervisor of the Appliance
9 Efficiency Program in the Efficiency Division and
10 I'm here to present Item 5, a Post-Settlement
11 Agreement with iRobot Corporation. And as Kerri
12 Willis, my attorney to the left is dutifully
13 reminding me, it says "Resolution" in the agenda
14 item, but it's actually a Proposed Order to adopt
15 the settlement.

16 The Energy Commission sets Appliance
17 Efficiency Standards for many types of products,
18 including lighting fixtures and lamps, home
19 appliances and consumer electronics. In January
20 of 2012, the Commission adopted Appliance
21 Efficiency Standards for Battery Charger Systems
22 which took effect on February 1, 2013. These
23 Standards are expected to save 2,200 gigawatt
24 hours a year with enough energy to power 350,000
25 California households.

1 iRobot Corporation manufactures several
2 models of robotic cleaning devices, including the
3 Roomba, the Braava, the Create, the Looj, and the
4 Scoomba. The Energy Commission staff has alleged
5 that these products are subject to its Battery
6 Charger System Efficiency Standards and iRobots'
7 products do not meet those energy efficiency
8 standards.

9 iRobot has sold or offered for sale these
10 products in California between February 1, 2013
11 and today. These products were not tested,
12 marked, or certified before they were sold, or
13 offered for sale in California. While iRobot
14 admits that the products do not meet the energy
15 efficiency standards, iRobot does not agree that
16 California's Efficiency Standards apply to their
17 products in the first place.

18 Nonetheless, iRobot responded promptly to
19 the Energy Commission's investigation of their
20 products, invested more than 2,500 engineering
21 hours to redesign its products to meet the
22 Standards. As of today, several iRobot product
23 models are certified to the Appliance Efficiency
24 Database, including the Roomba 600, 700, 800, and
25 900 series, the Braava's 300 series, and the Looj

1 330. These models will be manufactured with the
2 same battery charging system for worldwide sales.

3 The Energy Commission and iRobot have
4 negotiated a Settlement Agreement to resolve the
5 matter. Under the Settlement Agreement, iRobot
6 will manufacture - I'm going to go through a long
7 list - will manufacture products that comply with
8 California Standards by December 1, 2015 for
9 sales throughout North America. They will not
10 directly ship to California customers' products
11 that are not certified to the Appliance
12 Efficiency Database, however, products
13 manufactured before December 1, 2015 may continue
14 to be sold by distributors and retailers.

15 iRobot will certify all models
16 manufactured on or after December 1st that are
17 being sold or offered for sale in California.
18 iRobot will administer a rebate program. In
19 simple terms, this rebate program will offer a
20 \$20.00 rebate to registered owners of products
21 that do not meet the standards. To receive a
22 rebate, the product must be purchased between
23 February 1, 2013 and November 1, 2015. The
24 product must be one that is not listed in the
25 Appliance Efficiency Database at the time of

1 purchase. The owner must have registered their
2 product and provided a valid mailing address in
3 California by November 19, 2015. iRobot will
4 then send a rebate request form to those
5 registered owners which they need to complete and
6 send back to iRobot by January 31, 2016.

7 iRobot will also provide the Commission
8 instructions to help identify the newly
9 manufactured products. And finally, iRobot will
10 submit a sum of \$1 million to the Energy
11 Commission's Appliance Enforcement Subaccount
12 within three business days of approval at this
13 Business Meeting, assuming it's approved.

14 Once iRobot has completed these
15 obligations, the Energy Commission will accept
16 iRobot's performance in lieu of taking an
17 enforcement action against iRobot or any person
18 or entity who sold or offered to sell product
19 units before December 1, 2015, or to potential
20 noncompliance resulting from the allegations.

21 The Settlement Agreement contains
22 additional terms and conditions agreed to between
23 staff and iRobot including, but not limited to,
24 provisions regarding dispute resolution, what
25 happens in the event of preemption, non-

1 disqualification of Commissioners and the
2 Executive Director, applicable law and venue,
3 waiver of confidentiality, and providing notice
4 of public statements.

5 So to summarize, this agreement will
6 require iRobot to manufacture products that meet
7 our standards by a date certain, by December 1,
8 2015. The efficient products will be available
9 for sale throughout North America, and some even
10 worldwide, so people beyond our borders will also
11 benefit from our Energy Efficiency Standards.
12 The Agreement will provide restitution to
13 customers who purchased a product that did not
14 meet the efficiency standards, and when staff
15 considered all of the factors, including these
16 agreements, iRobot's cooperation, and the
17 estimated amount of excess energy use, we agreed
18 that \$1 million was an appropriate payment to
19 resolve the matter without further litigation.

20 I ask for your approval of this item and
21 I'm happy to answer any questions that you may
22 have. I'll also note that iRobot's attorney,
23 Rick Rothman, is sitting to my right if you have
24 any questions for him.

25 CHAIRMAN WEISENMILLER: Thank you.

1 First, I was going to give him the opportunity to
2 make any comments.

3 MR. ROTHMAN: iRobot supports the
4 proposed resolution and we're here really just to
5 answer any questions you might have.

6 CHAIRMAN WEISENMILLER: Okay, thank you.
7 Does anyone else either in the room or on the
8 line have any comments on this item? If not,
9 then I'll turn it to my fellow Commissioners.

10 COMMISSIONER MCALLISTER: So as lead on
11 the Appliance Efficiency Standards with Energy
12 Efficiency, I certainly support this settlement.
13 I want to just again, you know, in keeping with
14 the last theme, I think working things out,
15 discussion, staff knowing what the facts actually
16 are and doing sort of due diligence on all
17 fronts, on both sides, and then coming together
18 in a civil fashion to avoid sort of long costly
19 processes is certainly the best resolution. I
20 will note that our enforcement authority is in
21 full effect, you know, this is sort of the first
22 public manifestation of it, really, but we have
23 Regs and we're implementing them as we go
24 forward. So those are really the only comments
25 that I have. I want to thank David's office for

1 their leadership, as well.

2 COMMISSIONER DOUGLAS: I'll just make a
3 brief comment. I got a detailed briefing on this
4 agreement, or proposed agreement, and I've looked
5 pretty closely at it. It's an interesting one to
6 look at as a first settlement under these
7 Regulations for a number of reasons, but even
8 stepping back from that, I think from my
9 standpoint the number one goal of this is to
10 achieve compliance with the Regulations and
11 pleased that we have an agreement in front of us
12 that will do that and will achieve compliance
13 with the Regulations to benefit not only the
14 California energy efficiency goals, but also the
15 broader market where this product is sold even
16 outside of California, it's not something that's
17 officially in our Regulations, but it's
18 definitely a public benefit of the proposed
19 settlement. So I am prepared to support the
20 agreement today. I'm interested in any other
21 comments or questions Commissioners may have.

22 COMMISSIONER MCALLISTER: I want to
23 reiterate that, again, in the spirit of this
24 collaboration and for transparent market
25 operation, you know, compliance is our goal, it's

1 not exercising an action, we really prefer to get
2 compliance. And I think all of the stakeholders
3 have heard that over and over again, it's true.
4 So I think this is a very judicious application
5 of our authority and Reg. 454, and appreciate
6 iRobot for really collaborating on finding an
7 agreement here. So with that, I'll move Item 5.

8 COMMISSIONER DOUGLAS: Second.

9 CHAIRMAN WEISENMILLER: All those in
10 favor?

11 (Ayes.) This item passes 5-0. Thank
12 you.

13 CHAIRMAN WEISENMILLER: Let's go on to
14 Item 6 and after Item 6, we'll break for lunch.
15 So good afternoon, Item 6 is the Mendota
16 Bioenergy LLC, and this is a possible order
17 terminating Agreement ARV-12-033 with Mendota
18 Bioenergy LLC. Staff is recommending termination
19 with cause pursuant to agreement term and
20 condition Section 13.a.

21 I understand that today the staff is
22 ready to present on this item and has submitted a
23 fairly detailed background memo with its
24 recommendation for the Commission to vote today
25 to terminate the Commission's Grant Agreement

1 with Mendota Bioenergy, or in the future just
2 refer to here as Mendota, and detailing the many
3 opportunities we gave Mendota to avoid
4 termination.

5 I understand staff gave Mendota advanced
6 notice of today's meeting and staff's intended
7 course of action. I also understand that earlier
8 this week Mendota requested that the Commission
9 delay hearing this matter to the December
10 Business Meeting so that they could replace their
11 existing legal panel and so that new legal
12 counsel could come up to speed and then represent
13 them before this Commission. My understanding is
14 that at this point such a delay would not have
15 any financial consequences to us, so in some
16 respects it sounds reasonable; on the other hand,
17 this request would be further delay on what the
18 staff's background memo has described as many
19 months of providing them the opportunity to show
20 that this has been in compliance with the Grant
21 Agreement.

22 Now, I would like to hear from the
23 parties on this. I would make a couple of
24 observations. I mean, first that these are
25 pretty serious allegations, you know, we're

1 talking about a substantial amount of money,
2 certainly the staff has put together extensive
3 documentation, including an audit. And all of us
4 realize that we have obligations to California to
5 its citizens to make sure that the funds that the
6 Energy Commission encumbers are all well spent.
7 Now, again, I'm not going to pre-judge this
8 particular issue, but I would say it's pretty
9 serious and I think there's been a lot of time on
10 this so far. But what I'd like to do is first
11 ask for assurances from Mendota that this is a
12 good faith request and that they will be prepared
13 to address the Commission on this matter in
14 December with or without legal counsel. And if
15 in the meantime Mendota and staff can't resolve
16 -- we will deal with this in December if in the
17 meantime Mendota and staff cannot resolve the
18 matter without Commission intervention.

19 MR. PUCHEU: How do I turn this on?

20 CHAIRMAN WEISENMILLER: The green light.

21 MR. PUCHEU: My name is William Pucheu.
22 I'm the General Manager of Mendota Bioenergy and
23 I would be very grateful if we could postpone
24 this until December. I did not receive the staff
25 write-up, if you will, until Tuesday, and our

1 group met on Thursday to decide what to do and
2 we've prepared our request on Friday which I
3 understand you received on Monday. We have not
4 had time to prepare a proper response.

5 CHAIRMAN WEISENMILLER: Would you please
6 identify yourself to the other gentleman? Again,
7 the Court Reporter will need one of your cards,
8 etc.

9 MR. DIENER: I'm John Diener and I'm a
10 Board Member of Mendota Bioenergy. And we're
11 here to answer questions. We have met with your
12 staff and we have made our presentation and, as
13 such, we didn't feel like we've had adequate
14 accommodation for what we felt were errors in
15 that, so I guess that's why we want to have a
16 little time to build up a better presentation for
17 you with the new counsel.

18 CHAIRMAN WEISENMILLER: Yeah, well again,
19 these are pretty serious and, as I understand it,
20 you're asking for the opportunity to substitute
21 counsel, get them up to speed and respond. But
22 again, I just want to reiterate that if the
23 Commission decides to delay, we will take it up
24 in December.

25 MR. DIENER: Yes.

1 CHAIRMAN WEISENMILLER: Okay, and you
2 will be prepared at that stage. Staff, do you
3 have comments on this request?

4 MR. DIENER: No comment from staff. My
5 name is John Butler. I'm with the Fuels and
6 Transportation Division. So we are prepared to
7 present today or in December, as the Commission
8 desires.

9 CHAIRMAN WEISENMILLER: Okay. Now, is
10 there any public comment on this issue either in
11 the room or on the line? Okay, then let's
12 transition over to Commissioner discussion. I'll
13 start with Commissioner Scott.

14 COMMISSIONER SCOTT: Thank you. So I'd
15 like to echo the Chair's observation that it
16 appears that staff and Mendota has spent many
17 months attempting resolution of issues arising
18 from the Grant Agreement. I would also note
19 that, according to the staff materials, that it's
20 time for the Commission to evaluate the facts and
21 take action. According to the staff's background
22 materials, Mendota has not accounted for about a
23 million dollars in funding that it received from
24 the Commission, among other acts alleged by
25 staff. Another remark that the Chair made, that

1 these are serious allegations. I'm very
2 interested in hearing more about this from both
3 staff and Mendota. If this item is postponed, it
4 is my expectation that the staff will bring it
5 back in December for Commission consideration and
6 action, and while I anticipate Mendota appearing
7 before the Commission in December with legal
8 counsel present, I expect this matter to move
9 forward for Commission evaluation, decision and
10 consideration of the next steps and remedies if
11 appropriate, even if Mendota does not appear or
12 does not appear with legal counsel. So that's my
13 thoughts on this.

14 CHAIRMAN WEISENMILLER: Any comments from
15 any other Commissioners.

16 COMMISSIONER MCALLISTER: I would agree
17 with what's been said. I got a detailed briefing
18 on this from staff, I really appreciate that. I
19 have the understanding that there's been a lot of
20 back and forth, many requests, repeated requests,
21 certainly lots of due diligence and, you know, a
22 certain amount of dissatisfaction with replies.
23 So I feel obviously this is a very serious
24 situation, the Commission does not do this
25 lightly. On the process and the optimal path

1 forward, I'm certainly open to either option, you
2 know, doing it now or waiting until December if
3 we think there's some value in that.

4 COMMISSIONER DOUGLAS: I'll just briefly
5 add, I also got a detailed briefing on this
6 matter and I also have seen that it has played
7 out over a period of months. I think there's on
8 one hand not a lot of sympathy for the argument
9 that Mendota needs more time to put information
10 together, at least for me, but on the other hand
11 I do think that there is potential benefit to
12 Mendota in us accommodating the request that you
13 have another month to get legal counsel up to
14 speed and I don't see harm to the Commission in
15 accommodating that, so I'm willing to go along
16 with that. I would encourage you to not only get
17 legal counsel up to speed, but to communicate
18 with staff and see what level of information
19 exchange you're able to have so that when we do
20 take this matter up to the extent possible
21 there's agreement on basic facts. I think that
22 will be very helpful.

23 COMMISSIONER HOCHSCHILD: I'm fine with
24 the delay until December.

25 CHAIRMAN WEISENMILLER: So would you make

1 a motion?

2 COMMISSIONER SCOTT: I will make a
3 motion. Based on the discussion today, which I
4 believe includes representation from Mendota that
5 it's a good faith request, not intended to cause
6 further delay, and the expectation that staff
7 will bring this item to the Commission in
8 December for consideration for action, as a
9 courtesy to Mendota, I move that the Commission
10 postpone this matter to the December 2015
11 Business Meeting.

12 COMMISSIONER HOCHSCHILD: Second.

13 CHAIRMAN WEISENMILLER: All those in
14 favor?

15 (Ayes.) This passes 5-0. Thank you.

16 MR. PUCHEU: I'd like to express our
17 thanks to you for the extra time.

18 CHAIRMAN WEISENMILLER: Great. Okay, so
19 we're adjourned for an hour. We'll be back at
20 1:15. Thanks.

21 (Adjourned at 12:15 p.m.)

22 (Reconvened at 1:15 p.m.)

23 CHAIRMAN WEISENMILLER: Okay, let's go
24 back on to the Agenda, let's go back to Item 7,
25 Building Energy Use Benchmarking and Public

1 Disclosure Program. Erik Jensen, please.

2 MR. JENSEN: Thank you. Good afternoon.
3 My name is Erik Jensen. I'm here from the
4 Appliances and Existing Buildings Office and I'm
5 going to be giving an overview of Assembly Bill
6 802 and proposing an Order Instituting Rulemaking
7 for the benchmarking portions of AB 802. Next
8 slide, please.

9 AB 802 creates some new sections of state
10 law which I'll go over now. Firstly, it requires
11 the Public Utilities Commission to use the
12 existing building condition baseline for Building
13 Efficiency savings in Utility Incentive Programs.
14 So until now, IOUs have only been allowed to
15 claim credit and provide incentives for savings
16 above the current Code, and the gap in
17 performance between whatever state a current
18 building is in, in current Code, has been
19 entirely the responsibility of the building owner
20 and the utility has only been allowed to provide
21 incentives for improvements above current Code,
22 and this bill will change that.

23 Secondly, this bill repeals the existing
24 Nonresidential Building Energy Use Disclosure
25 Program created under AB 1103 in 2007 and

1 requires the Energy Commission to establish a new
2 benchmarking and public disclosure program, and
3 that will be the focus of the OIR, which I'll
4 talk about later.

5 Lastly, it gives owners of covered
6 business access to energy use data for their
7 buildings, and that's regardless of the reason
8 for their request, whether it's a statewide or
9 local program or for their own benchmarking
10 purposes. Next slide, please.

11 So AB 802 works together with SB 350
12 which was also passed recently to pursue Governor
13 Brown's goals to go with the double energy
14 efficiency firstly by providing access to utility
15 customer usage data, and there are two important
16 levels of access and I'll talk about that later;
17 requiring studies of the potential for new and
18 accelerated energy efficiency measure savings, so
19 as I mentioned earlier, we'll need to look at not
20 just the distance between current Code and above
21 Code, but from wherever buildings are below Code,
22 either up to current Code or beyond; and lastly,
23 requiring adjustments to Demand Forecasts for new
24 programs so we may see due to allowing the
25 existing condition baseline rather than a current

1 Code baseline, we might see higher program
2 participation and so we'll need to recalibrate
3 our forecasting research to take that into
4 effect. Next slide, please.

5 So a couple new requirements for the CPUC
6 as a result of this bill. By January 1, 2016,
7 the IOUs will be authorized to use the existing
8 condition baselines for high opportunity projects
9 or programs, and by September 1 of next year,
10 that will apply to all programs and also meter-
11 based savings will be considered, rather than
12 just using databases of assumed savings. And so
13 there's a move both in the building condition
14 from rather than assuming a current Code to
15 looking at what the actual state of buildings and
16 rather than using databases of assumed savings to
17 meter-based actual measured savings. And so that
18 creates an increasingly critical role for Demand
19 Forecasting staff. Next slide, please.

20 So speaking of which, so there are a
21 couple of new forecasting activities for Energy
22 Commission staff, firstly they'll be obtaining
23 utility customer usage and other building-related
24 data, and this is customer level energy usage
25 data which is distinct from building level data,

1 which I'll be talking about under the
2 benchmarking program, and they'll conduct studies
3 to understand the efficiency of existing
4 buildings. And the bill lists nine other State
5 agencies that we are to collaborate with in doing
6 this and any other agencies as necessary, I won't
7 read all of them here, but the point is that we
8 won't just be doing this in a silo, we'll be
9 cooperating with other agencies in doing this
10 research. Next slide, please.

11 So this brings us to the Benchmarking and
12 Disclosure Provisions. Firstly, as I mentioned,
13 this bill repeals the transaction-based pivot
14 disclosure program created under 1103. The bill
15 provides whole building data access to owners of
16 all non-residential buildings and multi-family
17 and mixed-use buildings with five or more utility
18 accounts. Those two categories, that's the
19 definition of a covered building provided by the
20 statute, and this will be building-level
21 aggregated data, so it's distinct from the
22 customer-level data I mentioned previously for
23 forecasting purposes.

24 Lastly, we'll be required to create a
25 time certain commercial and multi-family

1 benchmarking program with public disclosure, and
2 that will be for a subset of the covered
3 buildings and it's yet to be determined exactly
4 what data will be provided publicly and how it
5 will be displayed. Next slide, please.

6 So there are a couple of new utility
7 requirements under this bill. Starting January
8 1, 2016, utilities are required to maintain
9 energy usage data for all buildings they provide
10 service to, and on or before January 1, 2017,
11 utilities will be required to provide energy
12 usage data to owners and agents of covered
13 buildings on request, and so the Energy
14 Commission's goal is to have Regulations in place
15 prior to 2017 to give the utilities and other
16 stakeholders guidance on how to implement the
17 requirements of this bill. Next slide, please.

18 So this brings me to the Proposed Order
19 Instituting Rulemaking and these are some of the
20 activities that the Energy Commission will
21 conduct during this rulemaking: define the scope
22 of buildings subject to the program, so within I
23 gave the definition of covered buildings earlier,
24 there's further clarification that needs to
25 happen to the definition of buildings, and so

1 that's something that we'll be doing; establish
2 the infrastructure to securely collect energy
3 usage data, analyze it, and publicly report
4 selected metrics, determine whether compliance
5 with a local or county benchmarking program
6 fulfills the statewide requirements, and this is
7 for a building that's covered by both the
8 statewide program and a local ordinance, we don't
9 want a building owner having to complete multiple
10 reporting actions, we just want them to report to
11 one entity and have the data get where it needs
12 to go, and so that happens with our
13 infrastructure development. Hopefully that will
14 all be seamless and behind the seams as far as
15 the building owner is concerned. And lastly,
16 clarify how compliance will be enforced.

17 So that concludes my presentation. And
18 I'll take any questions regarding either AB 802
19 or the OIR at this time.

20 CHAIRMAN WEISENMILLER: Okay. Let me
21 start with a comment. I don't think there's
22 anyone in the room that has public comment, but I
23 believe we have one person on the line. Randy
24 Walsh, please.

25 MR. WALSH: This is Randy.

1 CHAIRMAN WEISENMILLER: Please go ahead.

2 MR. WALSH: Randy Walsh, San Diego Energy
3 Desk. I'll submit some written comments, but I
4 wanted to pull some pieces out of it and read
5 that to you. "As a citizen, a taxpayer, a
6 utility ratepayer, a small business owner, and a
7 key stakeholder, for many years in the
8 development and implementation of the Statewide
9 Commercial Building Energy Use Disclosure
10 Program, I submit these comments in order to put
11 forth my complete opposition to the repeal of AB
12 1103, register my grave concern about the
13 appropriateness of recent actions and decisions
14 by Commissioner McAllister on behalf of
15 California Energy Commission, resulting in repeal
16 of AB 1103, and causing immediate economic
17 hardship to a number of small business owners
18 across the State of California.

19 To express my vote of no confidence in
20 the ability of the California Energy Commission
21 to effectively manage any longer our collective
22 resources and bringing to market a viable
23 commercial building energy use disclosure
24 program. And finally, request the immediate
25 defunding and dismantling of any internal

1 organizational structures devoted to any energy
2 use disclosure programming and immediate
3 resignation of Commissioner McAllister." I
4 wanted a distinction between the language in the
5 legislation of AB 1103 and the language in the
6 regulations put forth by Commissioner McAllister
7 and his staff. I could do more with three
8 motivated owners complying with AB 1103, the
9 language of 1103 from the Legislature that I
10 would be able to do with 30 building owners under
11 the regulatory language that you've put out. I
12 would suggest the direction you're heading in
13 would put that number closer to 300. You're
14 taking us in the wrong direction. I'm watching
15 my time here. I love watching Jason Straithern
16 movies, he had a great line in one of his movies
17 of when you took the wrong fight, make sure you
18 take the right weapon. I understand that I'm
19 picking the wrong fight here, but I believe I'm
20 doing it for the right reasons. And before I
21 even post my picture up on CrazyPerson.com, I
22 would suggest you do a little bit of research to
23 see that I've been contributing comments, making
24 suggestions, I've been a full participant in this
25 process for a number of years, but I think my

1 positioning on this has been pretty consistent.
2 And finally, I would say that at this point, an
3 opportunity has been created for us to step back
4 and assess the competency of the California
5 Energy Commission and grade their performance on
6 their responsibilities regarding this issue
7 today. Thank you.

8 CHAIRMAN WEISENMILLER: Well, I was just
9 going to say, certainly we appreciate your
10 ability to express your opinion frankly. The
11 reality is that this, the legislation is
12 remarkably consistent, with 758, it is certainly
13 the full Commission, not just Commissioner
14 McAllister adopted 758 based upon an extensive
15 stakeholder process, and at the same time,
16 though, the Legislature then adopted this
17 legislation with pretty broad support, and it was
18 signed by the Governor. So again, I think -- and
19 you're welcome to your opinion on the issue, but
20 I think it's pretty clear where the direction of
21 the state is.

22 COMMISSIONER MCALLISTER: This is
23 Commissioner McAllister. So first, let me
24 certainly obviously take exception to personal
25 attacks. I think my record actually speaks for

1 itself, as well, it's not just here at the
2 Commission, but throughout my career pushing
3 energy efficiency. So certainly it's deep,
4 broad, and highly experienced, so I certainly
5 don't have to be defensive about that. I guess,
6 you know, there seems to be a misconception that
7 somehow here at the Commission an individual
8 Commissioner could actually somehow dictate
9 legislation and exactly what happens in
10 legislation, and that's absolutely not the case,
11 maybe I should be flattered at being ascribed
12 that power, but that is not the case.

13 The many many interested parties informed
14 the discussion around AB 802, not just how it
15 deals with 1103, but in all of its detail. So
16 it's a relatively complex conversation, you know,
17 the list of supporters of that legislation were
18 about as long as my arm, but to include the
19 California Energy Efficiency Industries Council,
20 which I would encourage you to join, and many
21 other stakeholders who are knowledgeable about
22 the landscape in energy efficiency, who
23 understand the real estate marketplace, who had
24 also been involved, as you have, on the 1103
25 proceeding, and who were very clear that 802 was

1 in its entirety an improvement.

2 Now, no one stakeholder dictated any one
3 clause, right? This is an ongoing discussion
4 that's led by folks outside of this building;
5 certainly I would submit that Das Williams, the
6 author of AB 802, deserves a lot of credit for
7 leading the discussion. I am very confident that
8 802 is going to have a big impact by de-linking
9 benchmarking and disclosure from the transaction
10 itself, but actually making it cover the entire
11 commercial building landscape, including multi-
12 family, which 1103 did not, and for buildings
13 that are large enough to warrant it, have a time
14 certain benchmarking and public disclosure
15 associated with it. Smaller buildings will have
16 the data infrastructure that, if they want it,
17 the owners can ask for that information and they
18 have to get it. So it solves the data access
19 problems that have been hamstringing this effort
20 and it puts in place I think a much more simple,
21 clear and workable solution to the broader
22 benchmarking discussion. And I'm really not
23 going to get into the merits of transaction-based
24 versus other, and I think there were a number of
25 points where legal and Mr. Walsh disagreed on

1 that issue, but on what we could do and what we
2 couldn't do in terms of the disclosure related to
3 1103. But be that as it may, you know, the
4 legislation is what it is, and we're going to do
5 a very good job, I'm confident, in developing
6 Regulations and putting that program into place.

7 Public disclosure is something we didn't
8 have with 1103 and we will have now, and that is
9 huge, that's a huge distinction because it will
10 condition the marketplace with information. You
11 know, if you could imagine having some metric
12 associated with energy performance of every
13 building above 50,000 square feet in the state
14 for all to see, that will move the marketplace.
15 It already is happening in other parts of the
16 country, in major cities across the country, and
17 none of them with the exception of one that
18 copied California links that to any transaction
19 per se.

20 So having said all this, I want to give
21 Lori Saldaña some significant credit for
22 developing 1103 in the first place. She showed a
23 lot of vision at that time, I think we're in a
24 fairly different place now, but at that time she
25 led that discussion and got a law put in place

1 that the nation paid attention to, that got the
2 ball rolling for benchmarking in the country.
3 And since then, New York City, Chicago, Boston,
4 Seattle, San Francisco, any number of other
5 cities have adopted benchmarking resolutions and
6 put in place programs. So the Institute for
7 Market Transformation, that's one of the leading
8 places where expertise resides on this issue,
9 I've been working with all of those programs, and
10 also we're a stakeholder in the California
11 discussion and will continue to be. So I'm very
12 confident in the policy direction we're going,
13 certainly there are areas where not all
14 stakeholders agree, certainly this is not
15 personal at all. You know, I think to the extent
16 there's a perception that I'm somehow against
17 energy consultants, I'll just point out that I
18 was one for much of my career, and believe that
19 they are essential to getting the job done and
20 bringing quality information to customers across
21 the built environment, to clients across
22 residential and nonresidential and multi-family.
23 And they will certainly be essential to getting
24 where we need to go in California, they are
25 essential. But that's very different than

1 setting off a program that kind of, you know, is
2 similar to the discussion we had on the Nonres
3 lighting where you have to sort of impose
4 transaction costs, impose compliance costs,
5 commensurate with the situation, and larger
6 buildings can shoulder some of those burdens, but
7 even there we want to make it as streamlined as
8 possible we want to make it as simple as
9 possible, and as impactful as possible. So I
10 think that's what we've done, that's what we aim
11 to do with implementing this legislation.
12 Certainly that is very in line with what AB 758
13 Action Plan lays out. And you know, the
14 relationship with 1103 is something that panned
15 out in the legislation as it proceeded and that
16 ended up in a place that actually is different
17 from AB 758 Action Plan, which given that we're
18 an agency that does not develop legislation, that
19 was existing law when we developed the Action
20 Plan and that's what we proposed to coexist with,
21 with this new program. That's not -- things
22 changed and that's not where we ended up. But
23 I'm very confident that we have the conditions
24 now to develop in relatively short amount of
25 time, expeditiously, the regulations to implement

1 AB 758. In effect, staff has already been
2 meeting with the utilities on the first milestone
3 that we have to reach which is developing the
4 data infrastructure by January of next year, a
5 very short order for that. Meter matching is a
6 big deal, the aggregation threshold is low enough
7 where I think we're going to end up covering
8 orders of magnitude more commercial and multi-
9 family square footage than we would have covered
10 over even many years in 1003. So we're going to
11 hit a majority of the marketplace in
12 Nonresidential and Multi-family buildings.

13 All of that is to say that this program,
14 I believe, is going to have a huge impact. I
15 know that we've standardized on Energy Star
16 Portfolio Manager as we did with 1103, the
17 legislation actually calls out that tool, and
18 there are some very interesting developments on
19 that front. I know that staff that works with
20 portfolio manager in the EPA actually was
21 listening to the discussion on the last day of
22 the session, and were very interested in where
23 802 came down because they know that it's going
24 to vastly increase the usage of their tool and
25 the square footage covered and the types of

1 buildings covered. And they're really raring to
2 work with us on making that tool all it can be in
3 the California context and certainly other states
4 and cities are interested in that same discussion
5 and the new data management kinds of
6 functionalities that exist, data exchanges with
7 other tools, and that exist now and will be
8 improved in the future, I think will have a big
9 impact on the marketplace, as well. It would
10 open up all sorts of opportunity for innovative
11 analytical tools to come to the Nonresidential
12 and Multi-Family space.

13 So all that is to say I'm super-
14 optimistic about what we can accomplish with this
15 OIR, obviously very in support of opening it now,
16 really look forward to great workshops to define
17 the details of the program, there are many
18 details that need to be worked out. We can build
19 on the experience with 1103 to the extent that
20 it's relevant, certainly, and really looking
21 forward to getting those discussions going with
22 staff. So thanks, Erik and the team, the
23 Existing Buildings Unit, really looking forward
24 to the rubber hitting the road on this program
25 and to having a big impact on the Commercial and

1 Multi-Family space in California.

2 So I will move -- does anybody else have
3 any comments? No. Okay, great. So I'll move
4 Item 7.

5 COMMISSIONER DOUGLAS: Second.

6 CHAIRMAN WEISENMILLER: All those in
7 favor?

8 (Ayes.) This passes 5-0. Thank you.

9 MR. JENSEN: Thank you.

10 CHAIRMAN WEISENMILLER: Let's go to Item
11 9, 2012 Residential and Nonresidential Building
12 Energy Efficiency Standard Compliance Tools.
13 We're going to go through the presentation, so
14 I'll take comments after that and we'll ask the
15 staff to respond to the comments at the end.
16 Thanks.

17 MR. BOZORGCHAMI: Good afternoon, Chair
18 and Commissioners. My name is Payam Bozorgchami
19 with the Building Standards Office, Project
20 Manager of the development of the 2016
21 Residential and Nonresidential Compliance Manual
22 and Compliance Documents.

23 On June 10th, the Commission adopted the
24 2016 Building Energy Efficiency Standards with an
25 exception of the Nonresidential Lighting

1 Alteration language. Since that time, staff
2 worked with our technical support contractors,
3 our Codes and Standards Enhancement Team,
4 consisting of Consortium of California Utility
5 Providers, including Pacific Gas & Electric,
6 Southern California Edison, San Diego Gas &
7 Electric, Southern California Gas, Sacramento
8 Municipal Utility District, and the Los Angeles
9 Department of Water and Power to update the
10 Compliance Manuals and Compliance Documents to
11 reflect the changes to the Standards that were
12 adopted for 2016.

13 By requesting your approval today on
14 these items, the Building industry will have the
15 tools needed to demonstrate compliance with the
16 2016 standards over one year in advance of the
17 effective date of January 1, 2017.

18 Public Resources Code Section 25402.1
19 requires updating the Compliance Manuals and
20 Compliance Documents with each adoption of the
21 Building Energy Efficiency Standards. The
22 Compliance Manuals are designed to help owners,
23 designers, builders, inspectors, plans examiners,
24 and energy consultants to comply with and enforce
25 California's energy efficiency standards for both

1 Residential and Nonresidential Building.

2 Written as both a reference and an
3 instructional guide, these manuals can be helpful
4 for anyone directly or indirectly involved in the
5 design and construction of energy efficient
6 buildings.

7 The Residential and Nonresidential
8 Compliance Manuals and Compliance Documents were
9 posted for a 30-day public comment period on the
10 Energy Commission website. Once the Energy
11 Commission staff received the comments, they
12 worked diligently to update the information and
13 to incorporate the comments where appropriate in
14 order to present the final Manuals and Documents
15 to you today for approval.

16 Additionally, as part of the 2016
17 Residential Compliance Documents, the associated
18 electronics schema and the report generated
19 functions as an essential part of the HERS
20 Registries that have been developed and are now
21 available.

22 Approval of the Compliance Manuals and
23 the Compliance Documents will provide both HERS
24 Providers and the Acceptance Test Technician
25 Providers with the information needed to develop

1 and submit their application for provider
2 approval under these new Standards. I'm
3 available to answer any questions that you have.

4 CHAIRMAN WEISENMILLER: Thank you. Let's
5 go on from a) to b) and, again, we'll get to the
6 very end and then take comments and then
7 questions. So go ahead.

8 MR. FROESS: Good afternoon Chair and
9 Commissioners. My name is Larry Froess and I'm a
10 Senior Mechanical Engineer in the Building
11 Standards Office and Project Manager of the
12 Alternative Calculation Method Manuals, also
13 known as the ACM Reference Manuals. I am here
14 today requesting your approval of the 2016
15 Residential and Nonresidential ACM Reference
16 Manuals. The 2016 Building Energy Efficiency
17 Standards makes references to the Residential and
18 Nonresidential ACM Reference Manuals, which are
19 proposed as a requirement of Public Resources
20 Code Section 25402.1(b). Both of these Manuals
21 provide the descriptions to be used by compliance
22 software to model the energy use of proposed
23 building and compare it to that building standard
24 design energy budget. The standard design is the
25 same as the proposed building with the same floor

1 area, volume and configuration of what the
2 envelope, services, lighting, HVAC, and water
3 heating values change to meet the prescriptive
4 requirements of the 2016 Standards. A
5 building is deemed to pass the performance
6 compliance approach of the proposed energy uses
7 less than or equal to the energy budget
8 established for the Standard design. These
9 documents also establish the Reference Method
10 Testing procedures that all private vendor
11 software is compared to and describes the review
12 process used by the Energy Commission when
13 approving third party compliance software.

14 During the development of the 2016 ACM
15 Reference Manuals, staff presented one non-
16 residential workshop and two residential
17 workshops to the public and comments were
18 received. The majority of the public comments
19 focused on the Residential PV Compliance Credit.
20 Staff believes the PV Compliance Credit in the
21 proposed Residential ACM Reference Manual
22 reflects a reasonable balance between incremental
23 energy efficiency progress in the melding of
24 renewable generation in the Part 6 requirements
25 as we continue to take steps in support of the

1 2020 goal for ZNE of low-rise residential newly
2 constructed buildings. The PV Compliance Credit
3 will also be reanalyzed during the 2019 Standards
4 Update Cycle. I can now move on to 9c if you
5 have no...

6 Again, my name is Larry Froess, Project
7 Manager of the Compliance Software. Staff is
8 seeking your approval of CBECC-Res 2016.1.0 as
9 2016 Residential Standards Compliance Software
10 for newly constructed low rise residential
11 buildings, as well as for alterations and
12 additions to existing homes. As required by the
13 Public Resources Code Section 25402.1(a), CBECC-
14 Res 2016.1.0 incorporates the requirements of the
15 2016 Standards, as well as the descriptions in
16 the 2016 Residential ACM Reference Manuals, which
17 includes TDV Values, Opaque Surface and Window
18 Value, duct insulation values, and HVAC and
19 domestic hot water heating efficiency
20 requirements. It also includes the PV Compliance
21 Credit that has been presented to the public in
22 two previous workshops. The credit can be used
23 to offset other building features to help achieve
24 compliance just like the credit that is gained by
25 installing a solar hot water heating system, or

1 installing higher efficient HVAC equipment. This
2 credit is available when PV panels installed
3 exceed a minimum system size requirement. We are
4 also seeking your approval of CBECC-Com 2016.1.0
5 as the 2016 Nonresidential Standards Compliance
6 Software for newly constructed Nonresidential and
7 High-Rise Residential and Hotel/Motel Buildings,
8 as well as for additions and alterations to
9 existing buildings. CBECC-Com 2016.1.0
10 incorporates the requirements of the 2016
11 Standards, as well as the descriptions in the
12 2016 Nonresidential ACM Reference Manual, which
13 includes TDV Values, Opaque surface and window
14 values, indoor lighting requirements, and HVAC
15 and domestic water heating efficiency
16 requirements. This version also includes an
17 update to the simulation engine, Energy Plus
18 version 8.3, mandatory minimum envelope U-Factor
19 validation check, a water site economizer
20 equipment features, and duct leakage, ceiling, or
21 ducts in unconditioned spaces.

22 By requesting your approval today on
23 these items, the Building Industry will have the
24 software needed to demonstrate compliance with
25 the 2016 Standards over one year in advance of

1 the effective date of January 1, 2017. Thank you
2 and now Jeff would have the next item.

3 MR. MILLER: Good afternoon,
4 Commissioners. I'm Jeff Miller, a Mechanical
5 Engineer with the Building Standards Office. I'm
6 here today to request approval of the 2016 Data
7 Registry Requirements Manual.

8 The 2016 Building Energy Efficiency
9 Standards include requirements for Compliance
10 Documents to be completed electronically and
11 registered by Residential or Nonresidential Data
12 Registries utilizing Energy Commission approved
13 specifications for standardized document layouts,
14 standardized XML-based data inputs, and
15 standardized data transmission protocols.

16 Energy Commission approved Data
17 Registries are expected to provide California
18 Title 24, Part 6 Compliance Document Registration
19 Services to building owners, enforcement
20 agencies, building contractors, energy
21 consultants, and HERS Raters, and retain a copy
22 of each registered document.

23 These retained registered documents are
24 used for demonstrating compliance with the
25 Standards and may also be used by staff for

1 complying with public information requests, or as
2 a resource for building standards research, or as
3 evidence in enforcement proceedings.

4 Compliance documents that are completed
5 and electronically signed by authorized users are
6 subsequently digitally signed by Data Registries
7 enabling use of digital certificate technology to
8 validate the authenticity of these electronic
9 documents after they are submitted to enforcement
10 agencies or other parties to the construction
11 project.

12 The Data Registry Requirements Manual
13 provides detailed guidance needed in addition to
14 the high level functional and technical
15 requirements given in the 2016 reference to Joint
16 Appendix JA7. Taken together, the JA7 Data
17 Registry requirements plus the guidance given in
18 this manual provide the basic software
19 specification that must be used by all data
20 registry providers for document registration
21 procedures and user interface features for their
22 data registries.

23 The data registry requirements provide
24 the following: Standardized criteria for
25 determining approval of the functionality of all

1 data registries, standardized document layouts
2 used by all Data Registries, standardized data
3 integrity across all Data Registries, procedures
4 for version control of all Data Registry
5 software, verification of registered document
6 authenticity using freeware, such as Adobe
7 Acrobat Reader, and TurboTax style document
8 creation that minimizes data entry effort.

9 The full set of required documents for a
10 project is determined for the user automatically,
11 based on the Certificate of Compliance
12 information. Subsequently, all project PDF
13 format compliance documents are produced by a
14 single point web service maintained by the Energy
15 Commission, referred to as the Report Generator.
16 The Report Generator ensures standardization of
17 the document data and output from all data
18 registries. These documents and data can
19 subsequently be combined into one cohesive
20 database that integrates the documents and data
21 based on standard naming and spelling
22 conventions, regardless of which data registry
23 provider created the documents.

24 This data standardization and integrity
25 facilitates efficient information management,

1 which makes queries of the compiled documents and
2 data easier to perform and the results more
3 accurate.

4 The Data Registry Requirements Manual is
5 comprised of written guidance plus Appendices
6 that reference electronic document design files
7 and XML schema files for each individual
8 compliance document. These electronic files are
9 scored in a version controlled repository in the
10 custody of the Energy Commission and are made
11 available to Data Registry providers.

12 For implementation, the information in
13 the Energy Commission's version controlled
14 library of files is configured using the rules
15 given in the Data Registry Requirements Manual
16 and the specifications in Joint Appendix JA7, to
17 work collectively as Data Registry software and
18 Report Generator software. This concludes my
19 summary of this agenda item and I am available to
20 answer any questions that you may have.

21 CHAIRMAN WEISENMILLER: Okay, thank you.
22 So we're going to now take public comment, then
23 after address the staff to respond to those
24 comments. And again, your comments can cover all
25 or some subset of 9. So let's start with Bob

1 Raymer.

2 MR. RAYMER: Thank you, Mr. Chairman and
3 Commissioners. I'm Bob Raymer with the Building
4 Industry Association. And as you can imagine,
5 we're in extremely strong support of approving
6 all of these items today. For years we've been
7 doing what we can to work with the Commission to
8 get these field implementation tools prepared as
9 soon as possible, well in advance of the
10 effective date. And they've certainly come
11 through with that.

12 Having access to these field application
13 tools ahead of time helps with our education
14 training efforts, not just ours but those of the
15 Building Officials, getting that done helps with
16 the field implementation of this and in doing
17 that, it helps ease the transition from one set
18 of Standards to the next. But perhaps right now
19 more importantly, this helps with a robust early
20 adopter program. We have a lot of production
21 builders, as you can imagine, that would prefer
22 not have to change courses in midstream on
23 January 2017. Having these tools available in
24 their entirety, this far in advance, helps a
25 builder who, for example, is going to start with

1 a two to three-year project in May or June, make
2 the decision "why don't I go ahead and just
3 comply with the 2017 Standards now as opposed to
4 waiting until January 2017, resubmitting a ton of
5 updated compliance documentation, resubmitting
6 all the forms, and the fees that go along with
7 it?" It saves them money, they don't have to
8 redo their sales agent brochures and all that,
9 and it makes life a lot easier for everyone. And
10 having been a party to this process for decades,
11 I have to tell you that in my experience, and I
12 think it's been verified, this is without
13 question a historically long period of time prior
14 to the effective date. You haven't just broken a
15 record, you've smashed it. And for that, I think
16 staff and the consultants deserve the recognition
17 of doing an enormous task here. So with that,
18 we're in strong support of this.

19 And lastly, I hadn't intended to speak to
20 the AB 802 issue that you just addressed, but I
21 just wanted to let you know that both Residential
22 Building Industry and the five different
23 Commercial Building Industries are in strong
24 support of 802, we worked on it at the Capitol,
25 and we will be very supportive along with the

1 utilities and the environmental community,
2 working with Commissioner McAllister and the
3 staff in getting this implemented. So thank you
4 very much.

5 CHAIRMAN WEISENMILLER: Thank you. Curt
6 Rich.

7 MR. RICH: Good afternoon. My name is
8 Curt Rich. I'm the President and CEO of the
9 North American Insulation Manufacturers
10 Association. I wanted to speak today in
11 opposition to the feature of the Title 24
12 Residential Update that permits a tradeoff of
13 energy conservation for rooftop PV solar.

14 Our industry has gone on record before
15 the commission and with staff on every occasion
16 that we've been afforded the opportunity to
17 comment on this, registering our strong concern
18 with a policy that trades cost-effective energy
19 conservation measures for distributed generation,
20 in this case, rooftop solar.

21 We're also concerned about the size of
22 this credit. To give you an idea of how it
23 operates, if you look at the increased stringency
24 between the 2016 Code and the 2013 Code, the
25 credit, depending on climate zone, will account

1 for about 50 percent of that increased
2 stringency. So this is not a small targeted
3 credit that provides a nudge to the industry, it
4 is a big credit that really occupies the space.

5 I want to thank Commissioner McAllister.
6 He knows of our concerns and has provided us
7 numerous opportunities to sit down with both him
8 and his staff to talk through this, so I really
9 do appreciate that. That being said, in the
10 public process that was afforded to this topic,
11 energy efficiency advocates including our
12 industry, the environmental community, and the
13 utilities have called for a sunset on this
14 credit. I believe it effectuates the real intent
15 that the Commission gave behind the credit, and
16 that's to provide the industry with a time
17 limited opportunity to get up to speed on new
18 conservation measures. Unfortunately, I think
19 the dye was cast. When this proposal was first
20 serviced to the public in March, it really
21 embodied exactly what the final credit ended up
22 looking like without any substantive change.

23 That being said, I think going forward
24 what I'd ask of the Commission is, as the credit
25 is being implemented, that you take steps to

1 really monitor who is taking advantage of the
2 credit, what energy conservation measures are
3 being traded off against the credit.

4 And then finally, I hope that the
5 Commission by words and deeds going forward over
6 the course of the next three years really do send
7 up a message to the market that this credit is
8 time limited and that energy conservation will
9 continue to be a prominent feature of what the
10 state does in their progress on the Energy
11 Conservation Codes. Thank you.

12 CHAIRMAN WEISENMILLER: Thank you. Let's
13 go on to CalcERTS.

14 MR. BACHAND: Good afternoon, everyone.
15 This is Charlie Bachand representing CalcERTS.
16 First, I'd like to say and echo Mr. Raymer's
17 comments that we're very much in favor of this
18 adoption. We're very grateful to staff for their
19 efforts at outreach, soliciting our feedback, and
20 responding to and incorporating some of our
21 feedback in these existing documents. It's
22 really great that we've been able to have the
23 chance to comment so thoroughly and providing us
24 with these documents so early gives us almost a
25 guarantee of a much smoother transition to the

1 2016 Standards than the one that we experienced
2 in 2013. So I want to express my gratitude to
3 everyone on the staff, there's too many to name.

4 I especially want to call out the fact
5 that the changes to signature authority should
6 provide pretty major relief to HVAC contractors
7 and should remove one of the major impediments to
8 their compliance with Title 24, which is their
9 difficulty and unfamiliarity with providers and
10 HERS Registries.

11 So with all that said, and again
12 expressing my gratitude and thanks, I'd also like
13 to touch briefly on something that was mentioned
14 earlier this morning with regards to .4 on this
15 agenda, HVAC Alterations and Compliance. From
16 our database and from our records, we're able to
17 see that there is some uptick in compliance, and
18 I believe that it's worth some further
19 investigation to determine whether or not
20 compliance is actually increased either by
21 Building Departments themselves individually
22 increasing compliance, or just simply by the fact
23 that more Building Departments are participating.
24 And so we're always very open to the opportunity
25 to analyze that data and discuss it with CEC

1 staff and others if the opportunity provides
2 itself.

3 To close, I'd like to personally thank
4 the Commissioners for finding my sunglasses,
5 thank you very much.

6 CHAIRMAN WEISENMILLER: Great. Now,
7 okay, NECA. Bret Barrow, please.

8 MR. BARROW: Mr. Chair and Commissioners,
9 my name is Bret Barrow with the National
10 Electrical Contractors Association and also
11 representing the IBEW-NECA Statewide Labor
12 Management Cooperation Committee.

13 I just wanted to come before you today on
14 this item and express our appreciation to both
15 the Commission and staff. We did provide
16 extensive comments as it relates to the
17 Nonresidential Guidebook, most of those comments
18 were considered as well as included in the
19 Guidebook, so we do appreciate that and look
20 forward to a partnership with you in the future.
21 Thank you.

22 CHAIRMAN WEISENMILLER: Thank you. I
23 don't think we have any other comments in the
24 room. I think we have one on the line, Steve
25 Irvine from Lutron.

1 MR. IRVINE: Thank you. Are you able to
2 hear me?

3 CHAIRMAN WEISENMILLER: Yes. Go ahead.

4 MR. IRVINE: Excellent, thank you. My
5 name is Steve Irvine and my comments are on
6 behalf of Lutron Electronics.

7 Today I would like to support the
8 adoption of the proposed Residential Compliance
9 Manual for Title 24, especially with regard to
10 fade-in lighting. This is an aesthetic feature
11 that is strongly valued by our customers. The
12 reference test procedure for start time does not
13 adequately address fade-in lighting and the
14 proposed Compliance Manual provides an important
15 clarification that shows how fade-in lighting can
16 qualify as high efficacy lighting under JA8.

17 I'd like to thank the Commissioners and
18 staff for their hard work on this issue. Thank
19 you.

20 CHAIRMAN WEISENMILLER: Great, thank you.
21 Steve, do you have any comments -- I believe that
22 was the last comment, right? Okay, so staff, do
23 you have any comments on any of the comments
24 we've gotten?

25 MR. FROESS: My name is Larry Froess. I

1 can just comment on Curt Rich's comment that we
2 have heard their comments about the credit and we
3 have provided training and workshops for them,
4 and we also in return are offering, well, not
5 offering, but what will happen is training,
6 statewide training to help the builders get up to
7 speed with the high performance walls and high
8 performance attics to have to not rely on a PV
9 credit in the near future.

10 CHAIRMAN WEISENMILLER: Okay, so we'll
11 now transition to the Commissioners for
12 conversation.

13 COMMISSIONER MCALLISTER: Thanks for the
14 presentation and all the comments. So I think
15 it's a measure of the complexity and the lift,
16 really, that it took three people to present
17 this. And also I think we could probably weigh
18 it and measure it in kilograms, as well.

19 But I think this is really impressive,
20 you know, as Bob Raymer said and others have
21 noted, I think we heard loud and clear that we
22 needed to get the materials out there so the
23 stakeholders could use them and get familiar with
24 them well before. We heard that from the
25 Legislature, as well, we really took that to

1 heart and tried to get this done expeditiously.
2 And I really want to thank staff for that. And
3 I'll just go ahead and do that, actually, the
4 whole team, you know, the three of you and
5 Eurlyne, as well, and the whole team. I'm not
6 going to name everybody because if I miss
7 somebody and I don't want to offend anybody, but
8 this is a really big lift on this and just across
9 the board staff has really worked in a very
10 coordinated and concerted fashion to get this
11 done.

12 Really just to highlight some of the
13 benefits here, I think actually there are quite a
14 few benefits of developing these materials
15 alongside the actual development of the
16 Standards, so not sort of doing one and then
17 doing the other. And that allows efficiency in
18 the work and it also just makes sure that they're
19 more uniform and just more consistent throughout.
20 So doing the software work and the compliance
21 materials work in parallel with the development
22 really makes a big difference and helps out a
23 lot.

24 And I want to also highlight sort of the
25 professionalization or the improvements in the

1 Registries themselves. That is going to enable
2 us to track the marketplace better, it's going to
3 enable us to see who is doing what and what the
4 different approach is, you know, one of the
5 things we've tried to do is open up pathways that
6 different builders, talking about the Residential
7 side primarily, the difference builders can fuse
8 according to their workforce and their ability to
9 do it. So some will go down the advanced walls
10 and pathways and some may not, the advanced walls
11 and attics route, and some may not. But we'll
12 know that and we'll be able to see what the
13 marketplace is doing, and I think, you know, we
14 have worked hard with the PUC and with the
15 builders and other stakeholders to make sure that
16 that training is in place and even in the R&D
17 shop, I think we're doing some of that. So the
18 training to move the marketplace over towards
19 these advanced building practices is something
20 we're serious about and we have interagency
21 collaboration, and with the Utilities, the IOUs,
22 to fund a bunch of that work. So that's a big
23 thing I think that kept the marketplace over into
24 more advanced construction techniques because
25 we're going to need all these abilities as we

1 move forward into the 2019 update. You know,
2 we're aiming at very low energy buildings, self-
3 generation as we move forward is a key component,
4 that's why we've included it explicitly in this
5 round, but we need to get the marketplace moving
6 in that direction, albeit with an aggressive
7 backstop on the insulation front, for example.
8 The backstop is still pretty high, so it's not
9 like people can trade off a lot of insulation or
10 anything else, they really need to focus on
11 performance.

12 So I think we're committed to certainly
13 keeping an eye on this and tracking it and, you
14 know, to Curt Rich's points, the future will be
15 different than the present and evaluating the
16 balance between efficiency and renewables in that
17 environment where we really need all of the above
18 is something we're committed to doing as we move
19 forward and develop the 2019 Update. So it's
20 certainly not -- it's not to let anybody sort of
21 off the hook, it's definitely to make sure that
22 we have the diversity and the experience that we
23 can build on going forward across the Climate
24 Zones of the state. We've got a lot of them and
25 they are very different, so that experience is

1 going to pay off, I think, down the road.

2 So with that, I think I'll pass to
3 anybody else who wants to make comments.

4 COMMISSIONER DOUGLAS: I'm just briefly
5 going to say I got a briefing on these topics, as
6 well, and there's a lot more than meets the eye
7 in terms of the level of detail and work that
8 goes into this, so I just want to compliment you
9 and the staff on your work getting to this point.

10 CHAIRMAN WEISENMILLER: Yeah, I have this
11 vague recollection of my first year on the
12 Commission, I think we still have people coming
13 in from the 2009 Standards saying, "Where's the
14 stuff you promised us?" And I was going, "Oh, my
15 God." So thanks for -- obviously tried to do
16 better the last time, but this time I think we're
17 really setting the mark on the way we want these
18 things to proceed in the future. But, as I said,
19 it was really painful hearing, "Oh, my God, how
20 late are we on these things?"

21 COMMISSIONER MCALLISTER: And I'll also
22 point out that, you know, the fact that we've
23 migrated over to a new software that is open
24 source and that has a lot of stakeholders much
25 more knowledgeable about it, I think bodes well

1 for the future, as well, but in particular in
2 this instance, it's enabled this co-evolution of
3 the compliance materials with the development of
4 the standards, and that's the whole idea. So
5 we're now starting to reap the benefits of moving
6 over to more modern tools and that's fantastic.
7 So in just pointing out, you know, we still have
8 to incorporate the Nonres lighting into it, so I
9 just don't want people to forget that, it's not
10 100 percent, but it's mostly done.

11 COMMISSIONER SCOTT: I wanted to
12 highlight that during my briefing on this one,
13 they brought all of these books into my office
14 and I asked the question, you know, "How are
15 people going to know what to do here?" And I
16 appreciate that Larry mentioned and you, as well,
17 the trainings that we're going to do to make sure
18 folks really know how to utilize this. I was
19 happy to hear that this is literally everything,
20 I guess except the lighting piece. But once you
21 have picked your pathway, you don't literally
22 need every single one of these forms, there's
23 different forms that you need, and so I thought
24 that was very interesting, so it maybe looks more
25 intimidating than it is. You know, and also

1 during the briefing I was really impressed, too,
2 to hear how early we are with getting this out.
3 I just think that's invaluable. I want to thank
4 staff for their really hard work in getting that
5 done because that's just going to help us
6 facilitate a smooth transition and the compliance
7 with this, so I appreciate that, too. Thank you,
8 guys.

9 COMMISSIONER MCALLISTER: Well, great.
10 So very happy to move Item 9.

11 COMMISSIONER DOUGLAS: Second.

12 CHAIRMAN WEISENMILLER: All those in
13 favor?

14 (Ayes.) Item 9 passes 5-0. Thank you.
15 Thanks for your work on this.

16 CHAIRMAN WEISENMILLER: Item 10, Lawrence
17 Berkeley National Lab. Kiel, please.

18 MR. PRATT: Good afternoon Chair and
19 Commissioners. I'm Kiel Pratt from the Energy
20 Systems Research Office. This Amendment proposed
21 for Lawrence Berkeley National Laboratories' work
22 for the Los Angeles Air Force Base Vehicle to
23 Grid Demonstration will allow the project to
24 produce viable critical data to support current
25 and future deployments of Vehicle to Grid, or

1 V2G, and associated technologies in California.
2 It includes a time extension and budget
3 augmentation and additionally, after working out
4 key issues, the project team has identified
5 improvements that will enhance the value of this
6 demonstration and assessment. I'll describe
7 those improvements later in the presentation, but
8 for now some background on the need for the
9 amendment.

10 As you are aware, unanticipated staff
11 time from LBNL and time from the overall project
12 schedule has been required for negotiations
13 between parties regarding the Interconnection
14 Agreements and ancillary services market
15 participation.

16 This groundbreaking demonstration sets a
17 large precedent and the stakeholders, including
18 the Airforce, the California ISO, and Southern
19 California Edison have had diverse interests and
20 priorities. LBNL, as the entity responsible for
21 carrying out many of the technical elements of
22 the demonstration has had a key role in these
23 contentious and important negotiations.

24 Importantly, recently the Los Angeles Air
25 Force Base V2G project achieved a significant

1 milestone in mid-October when the ISO ancillary
2 services resource certification testing was
3 successfully performed. That validated the
4 functionality of the communications. And
5 subsequently, later tests have established the
6 resource size and the ramp rate capabilities.

7 The proposed extension overall will allow
8 for a much more substantial and necessary
9 performance evaluation. I'll go over a few of
10 the suggested improvements and the scope. First
11 of all, the project team identified the
12 opportunity to improve uncertainty analysis, it's
13 very difficult to technically implement V2G when
14 you have vehicles that are needed for mobility
15 and they're checked out at certain times, and
16 there are uncertainties with late or early
17 reservations or cancellations as far as what
18 services those vehicles are able to provide.

19 With improved uncertainty analysis, the
20 optimization software can be improved. Currently
21 -- now this is a little technical -- currently it
22 relies on frequent re-optimizations, so it's
23 slightly unbalanced. With this iterative
24 improvement regarding the uncertainty analysis
25 and software optimization, this will allow the

1 software to have more of a look ahead capability
2 and improved run time and reliability.

3 Secondly, the project team is proposing
4 to collect and statistically analyze data to
5 estimate the impacts of V2G on battery health and
6 lifetime. Of course, you're aware there's a
7 separate contract with Concurrent Technologies
8 Corporation for a portion of the work at Los
9 Angeles Air Force Base. That other contract
10 involves laboratory-based accelerated battery
11 testing. This proposed statistical battery
12 impact analysis by LBNL will be a useful
13 complementary dataset to help address any
14 concerns of the impacts of V2G on battery life.

15 Finally, the final report would include a
16 new standalone chapter presenting best practices
17 that California Military-based fleet managers can
18 use as a resource for implementing and operating
19 V2G Smart Charging, Vehicle to Building, or other
20 capabilities at DOD bases that are adopting PEVs.

21 Finally, more specifically, for us at the
22 Energy Commission, an extension of this
23 demonstration would give very important
24 information to inform other research
25 opportunities and identify gaps as we implement

1 the EPIC Program. I request approval of this
2 item and I'm happy to answer any questions.

3 CHAIRMAN WEISENMILLER: Great, thank you.
4 Does anyone either here or on the line have
5 comments on it? I was going to make the
6 observation, actually I guess the good news is
7 I'm more patient than when I was here originally,
8 but that the reason why we're extending the
9 contract is it took three years for Edison to do
10 the interconnection here and it went through all
11 kinds of trials and tribulations along the way,
12 but anyway, none of us when the contract was
13 scoped anticipated that duration. So we're
14 stretching it now so we can actually have useful
15 data now that we actually have it interconnected
16 and operating.

17 COMMISSIONER SCOTT: I'll move approval
18 of Item 10.

19 COMMISSIONER DOUGLAS: Second.

20 CHAIRMAN WEISENMILLER: All those in
21 favor?

22 (Ayes.) This passes 5-0. Thank you.

23 CHAIRMAN WEISENMILLER: Let's go on to
24 Item 11, Regional Climate Impacts and Adaptation
25 Studies for the Natural Gas System and Other

1 Environmental Issues. Susan, please.

2 MS. VACCARO: Before you move on, Chair
3 Weisenmiller, I believe there are some
4 disclosures that might need to be made from the
5 dais.

6 CHAIRMAN WEISENMILLER: Good, let's do
7 it. Yes, for 11d.

8 MS. VACCARO: Yes. These are disclosures
9 only.

10 COMMISSIONER MCALLISTER: So my wife is a
11 Professor at U.C. Davis Law School, King Hall,
12 there is no conflict here, so I will not recuse,
13 but I wanted to disclose that financial
14 relationship.

15 COMMISSIONER DOUGLAS: And I want to
16 disclose that I sometimes teach a Renewable
17 Energy Law class at U.C. Davis in King Hall, so,
18 again, while this agreement is not with King
19 Hall, nevertheless I want to disclose that.

20 CHAIRMAN WEISENMILLER: Go ahead.

21 MS. WILHELM: Good afternoon. I am Susan
22 Wilhelm of the Energy Generation Research Office.
23 I'm here to present more proposed Grant
24 Agreements from a competitive solicitation
25 entitled Regional Climate Impacts and Adaptation

1 Studies for the Natural Gas System and Other
2 Environment-related Issues.

3 These agreements include two projects to
4 support the energy sector portion of California's
5 fourth Climate Change Assessment, as well as two
6 projects that address other climate-related
7 environmental issues in the natural gas sector.

8 The first project will develop
9 probabilistic seasonal and decadal forecasting
10 for the natural gas system. The Scripps
11 Institute of Oceanography at the University of
12 California San Diego proposes to develop seasonal
13 predictions for temperature and precipitation.
14 These predictions can support planning months in
15 advance of the cool season.

16 This research would also deliver
17 probabilistic predictions of weather and climate
18 fluctuations with a time horizon of 10 to 20
19 years for selective meteorological stations in
20 California. These projections will support
21 natural gas demand forecasts that help the state
22 ensure reliable supplies, even in the changing
23 climate.

24 The second area in which we solicited
25 proposals is Assessment of Fugitive Methane

1 Emissions from the Natural Gas System in
2 Commercial Buildings. To address this area, Gas
3 Technology Institute plans to deploy a state-of-
4 the-art sensor developed by Lawrence Berkeley
5 National Laboratory to measure methane emissions
6 associated with natural gas from at least 40
7 buildings throughout California. Results will
8 support sensor validation and development of a
9 methodology for quantifying baseline emissions,
10 as well as identifying leaks from commercial
11 buildings in the state.

12 The third project calls for Regional
13 Studies to Investigate Climate Vulnerability of
14 the Natural Gas Energy System and Identify
15 Resilience Options. ICF Incorporated proposes to
16 partner with San Diego Gas and Electric to
17 conduct a multi-hazard climate change
18 vulnerability assessment and identify adaptation
19 options for natural gas infrastructure. Their
20 assessment will consider sea level rise, as well
21 as inland hazards such as inland flooding,
22 landslides, and wildfire. ICF will draw on
23 improved modeling techniques that incorporate
24 protective structures and coastal processes and
25 to site-specific assessments of risks associated

1 with sea level rise.

2 The research team will engage on-the-
3 ground natural gas system operators to elicit
4 their insights on natural gas infrastructure
5 vulnerability. In addition to identifying
6 adaptation measures and options for incorporating
7 them and to planning and management, the team
8 will investigate potential market impacts of
9 natural gas system disruptions. San Diego Gas &
10 Electric will contribute \$166,290 in match
11 funding.

12 The final project responds to a request
13 for Assessment of Current and Potential
14 Environmental Benefits of Residential Solar Water
15 Heating in California. The University of
16 California Davis will perform a technical
17 analysis of installed performance of solar water
18 heating in single-family homes in California, as
19 well as a social scientific investigation to
20 learn from experiences and insights of residents,
21 contractors, and industry leaders.

22 Although the State of California has made
23 a substantial investment in incentivizing
24 adoption of residential solar thermal water
25 heating to reduce greenhouse gas emissions from

1 residential natural gas consumption, this
2 technology has continued to have low penetration
3 in the marketplace. The proposed project which
4 includes extensive support from key players in
5 California will clarify environmental benefits of
6 current installations, identify technical and
7 human factors that affect performance, delineate
8 opportunities for improving performance, identify
9 specific niches that could provide greater than
10 average benefits, and provide support for
11 integration of achievable benefits into long term
12 simulations of California's energy sector.

13 The Southern California Gas Company has
14 committed \$40,000 in match funding to this
15 project.

16 These agreements will result in benefits
17 to California ratepayers by supporting climate
18 resilient planning, operations and management, as
19 well as supporting development of strategies to
20 reduce environmental impacts of the natural gas
21 system. They're also part of a full range of
22 research development and demonstration activities
23 that are not adequately provided for by
24 competitive and regulated markets.

25 Staff recommends approval of these

1 proposed projects. I'm happy to address any
2 questions you may have. Thank you.

3 CHAIRMAN WEISENMILLER: Thank you. I was
4 going to make sure in terms of context, obviously
5 this goes to the Lead Commissioner on R&D, we've
6 had a joint IEPR workshop with the PUC led by
7 Commissioner Randolph on adaptation, and they're
8 really moving forward on the adaptation issues,
9 obviously they're looking at our research as a
10 basis for it. The reality is we have pretty
11 extensive research on the electric system, we
12 have less comprehensive on the gas system, and
13 this will help beef that up. The reality is the
14 PUC also regulates, as you know,
15 telecommunications, water, rail safety, and in
16 those industries we have not any adaptation
17 studies, you know, under the limitations on our
18 R&D Programs we will not be able to. But that's
19 part of the challenge for the PUC is trying to
20 broaden -- although certainly the Department of
21 Energy has looked at some of extreme climate
22 impacts on infrastructure, which I hope includes
23 rail, water and telecommunications, but I haven't
24 checked. So anyway, with that, I don't have any
25 questions, I don't think we have any comments on

1 this either from the audience or on the line, so,
2 Commissioners, do you have any questions or
3 comments?

4 COMMISSIONER DOUGLAS: I'll just make a
5 brief comment and then a motion. I did get a
6 briefing on these items and it does look very
7 interesting and obviously very relevant to the
8 workshop that you mentioned, Chair Weisenmiller,
9 so with that I'll move approval of this item.

10 COMMISSIONER SCOTT: Second.

11 CHAIRMAN WEISENMILLER: All those in
12 favor?

13 (Ayes.) So this passes 5-0. Thank you.

14 CHAIRMAN WEISENMILLER: Let's go on to
15 Item 12, University of California Berkeley. And
16 this is Susan -- actually, it's not Susan. Go
17 ahead.

18 MS. ZIAJA: Thank you, Chair. My name is
19 Sonya Ziaja, I am substituting for Dr. Susan
20 Wilhelm today.

21 On behalf of the Energy Generation
22 Research Office, I'm requesting approval for
23 funding of a competitively bid agreement entitled
24 Visualizing Climate Related Risks to the
25 Electricity System Using Cal-Adapt. This

1 agreement with the University of California
2 Berkeley would be in the amount of \$400,000 from
3 EPIC funds. California's electricity system is
4 vulnerable to a variety of weather and climate-
5 related risks. The proposed project will
6 leverage Cal-Adapt, a web-based tool developed by
7 the state to convey productive climate change-
8 related risks in a manner that supports planning
9 for electricity sector resilience.

10 The project team will coordinate with
11 electricity sector stakeholders to ensure that
12 deliverables are responsive to stakeholder needs
13 and foster action to protect infrastructure and
14 vulnerable populations.

15 Specific goals of this project include
16 developing of visualizations that portray the
17 vulnerability of California's electricity
18 infrastructure into climate-related risks,
19 including wildfires, sea level rise, and storm
20 events; another goal is development of a
21 customized toolkit to support climate resilient
22 electricity sector planning, management and
23 operation. This will reflect concerns specific
24 to the electricity sector such as vulnerability
25 of generation and transmission to extreme heat,

1 and will link related efforts such as the U.S.
2 Climate Resilience Toolkit.

3 Throughout the contract, the team will
4 conduct outreach and training to elicit needs
5 from electricity sector stakeholders and provide
6 guidance on how to use Agreement products.

7 The Agreement will result in benefit to
8 California ratepayers through greater electricity
9 reliability and increased safety by supporting
10 electricity sector planning, management and
11 adaptation. It is also part of a full range of
12 research development and demonstration activities
13 that are not adequately provided for by
14 competitive and regulated markets, as consistent
15 with Public Resources Code 25620.1(a).

16 Staff recommends approval of this
17 proposed project. I'm happy to address any
18 questions. Thank you.

19 CHAIRMAN WEISENMILLER: Thank you.
20 Again, I'm Lead Commissioner in this area. For
21 context, remember a few years ago John Laird and
22 I doing an event, you know, announcing that the
23 availability of at least that first generation, a
24 Cal-Adapt website, and trying to encourage
25 participation by planners in California on the

1 use of that. You know, as we went through the
2 demonstration, it was at Berkeley, it was pretty
3 impressive on what people would do for given
4 areas to look at the impacts of climate change
5 over the next 50 years or so, 20 or 50 years. So
6 it's a very powerful tool to put stacks of
7 research into something that's usable on a
8 planning level. And so at the same time, it's
9 pretty clear as it's getting operational that it
10 was good to get feedback on how to make it more
11 useful and this is the next step. I mean,
12 ultimately this could fit in well again with the
13 PUC emphasis on trying to look at adaptation and
14 I certainly hope eventually that we also make
15 sure that it's very useable, also across our
16 diversity of communities in California. So
17 anyway, I certainly encourage -- again, we don't
18 have any questions or comments from anyone in the
19 room or on the line, so turning to other
20 Commissioners for comments.

21 COMMISSIONER DOUGLAS: I'll just say
22 briefly I think this kind of tool is a really
23 valuable service to the public and other
24 agencies, and so I'm in strong support. Other
25 comments? I'll just move approval, then.

1 COMMISSIONER MCALLISTER: Second.

2 CHAIRMAN WEISENMILLER: All those in
3 favor?

4 (Ayes.) This passes 5-0. Thank you,
5 Sonya.

6 MS. ZIAJA: Thank you.

7 CHAIRMAN WEISENMILLER: Let's go on to
8 Item 13, Investing in California Communities
9 through Building Energy Efficiency Workforce
10 Development. Rachel?

11 COMMISSIONER MCALLISTER: I think we need
12 to split these in half, split (a) from (b). I
13 have to recuse myself on (b) since I used to be
14 an employee of the proposed recipient on that
15 item, so let's do (a) and then I'll step out for
16 (b).

17 CHAIRMAN WEISENMILLER: Okay, good. So
18 could you cover (a) in your presentation, and
19 then we'll take a vote and he'll recuse himself,
20 and then we'll do (b)?

21 MS. SALAZAR: Okay. Good afternoon,
22 Commissioners. My name is Rachel Salazar. I
23 work in the Energy Research and Development
24 Division and I'm here today to seek approval of
25 two agreements stemming from GFO-15-302. And

1 this is for Investing in California Communities
2 Through Building Energy Efficiency Workforce
3 Development.

4 And I also wanted to point out before I
5 begin that the CEC-270, which was part of the
6 backup materials, was updated this morning. This
7 was to reflect the addition of two CEQA
8 categorical exemptions, 15303 in the common sense
9 exemption, and we also updated the justification
10 and the full subcontractor list is there. So
11 that's available on the back counter and will be
12 available online after today.

13 The purpose of this solicitation was to
14 fund projects that will achieve long term energy
15 efficiency improvements in the building sector by
16 ensuring a properly trained workforce exists.
17 The solicitation included two funding groups, the
18 first was developed in close coordination with
19 the Efficiency Division staff, as well as the
20 CPUC and construction team to address the
21 critical needs for trained personnel to properly
22 install high performance attics and walls that
23 comply with the 2016 Title 24 Standards.

24 Without a properly trained workforce, the
25 rate of adoption may be slow and result in lower

1 than expected energy savings, as well as possible
2 construction defects which could impose safety
3 risks.

4 In response to the solicitation, we
5 received four applications, and staff recommends
6 approval of the top scored applicant for each
7 group. So for Item (a), this will be a four-year
8 project with the California Home Building
9 Foundation, totaling approximately \$4.4 million
10 in program funds, and attracted over \$.6 million
11 in match funding.

12 This project will develop the Workforce
13 Instruction for Standards and Efficiency, or the
14 WISE program, and will provide education and
15 outreach, as well as targeted training to various
16 stakeholders in the new residential construction
17 market.

18 Additionally, this project will support
19 the construction of over 20,000 homes with high
20 performance attics, as well as over 10,000 new
21 homes with high performance walls.

22 Under the proposed agreement, the CHF
23 team will assess the labor market and
24 construction trends by region and conduct 10 to
25 20 educational forums to provide market actors, a

1 chance to ask questions, voice concerns, and work
2 together to find solutions for compliance. It
3 will also engage with the builders individually
4 to address concerns and provide options for the
5 construction process, quality, labor and cost. It
6 will develop training materials and provide
7 customized job site training, and provide
8 technical assistance to the builders based on the
9 options that they choose.

10 Additionally, they will be collaborating
11 with IOU and new construction incentive programs
12 to develop and administer above Code design and
13 product training. They will also expand their
14 existing vocational high school building
15 technology programs to include curriculum on
16 construction practices for meeting high
17 performance attics and walls to prepare the next
18 generation of workforce.

19 And for the HERS Raters, they will be
20 developing and updating the reporting and
21 verification requirements and provide training
22 and certification for insulation installers to
23 meet industry recognized standards.

24 Throughout the builder trainings, the
25 team will be conducting measurement and

1 verification to evaluate the efficacy of the
2 training installation quality and system
3 performance. This date will be relayed back to
4 the trainers, manufacturers, and staff.

5 Finally, the team will be providing
6 various technical and performance materials, as
7 well as how-to videos that will be made available
8 on an informational clearinghouse web portal.
9 This web portal will serve as an online resource
10 for market actors on how to comply with the 2016
11 high performance attics and wall requirements,
12 and will be maintained beyond the term of the
13 agreement.

14 CHAIRMAN WEISENMILLER: Great, thank you.
15 We only have two comments on part (a). Bob
16 Raymer.

17 MR. RAYMER: Thank you, Mr. Chair and
18 Commissioners. Bob Raymer with the California
19 Building Industry Association, one of the many
20 groups that will be assisting CHF on this
21 contract if approved today.

22 In the simplest terms, this contract
23 involves making a movement of two inches. In
24 particular, moving from 2 X 4 construction to
25 2 X 6 construction. While that sounds very

1 small, we date back to the end of World War II
2 where production housing in California just
3 started taking off at that time, and we're about
4 to move away from 2 X 4 construction into 2 X 6.
5 There's a lot of complexities involved with the
6 installation of window frame systems, the
7 installation of doors, corners, you name it,
8 overhangs, and cornices. We're changing the face
9 of construction in California. In order to do
10 that, thousands of people are going to need
11 training. This contract gets us there. While
12 the advanced wall and the high performance attics
13 are prescriptive measures with the current
14 Standards coming into effect in 2017, I strongly
15 believe that they will become mandatory measures
16 for most of the state in 2020. With that, we've
17 got basically three to four years to make this
18 move. So with that, we strongly support adoption
19 of this contract today. Thank you.

20 COMMISSIONER HOCHSCHILD: Mr. Raymer, can
21 I just ask you one question about that real
22 quickly? Just as we move to 2 X 6, I know you go
23 basically from 16" on center to 24" on center, I
24 think?

25 MR. RAYMER: Not necessarily.

1 COMMISSIONER HOCHSCHILD: Okay. So on
2 balance, whatever it is, if you're making the
3 span wider, is the total amount of wood roughly
4 the same? Or does that actually increase? I
5 heard from one builder it increased, and then I
6 heard some other folks saying it doesn't.

7 MR. RAYMER: First off, here's an odd
8 situation. If we go to 24" on center, we could
9 actually run into problems with Cal/OSHA and
10 follow protection requirements. I know that
11 sounds very different, but they would much
12 appreciate if we stayed at 16" on center. I've
13 got to tell you that down the road I see us doing
14 24" on center. With high efficiency measures in
15 the timber industry, I suspect we'll ultimately
16 be using less wood, but there's sort of a roll-
17 out period here and that's a big part of this
18 contract, we're going to be working the bugs out
19 of the system. And so I would suspect in 2021
20 we'll probably be building with less wood.

21 COMMISSIONER HOCHSCHILD: No, but just so
22 I'm clear, assuming with Cal/OSHA and whatever
23 other parties, if you do move to 24" on center
24 with 2 X 6, is that on average less wood or the
25 same wood?

1 MR. RAYMER: Approximately the same. The
2 problem here is when you cut down the average
3 tree, or whatever, you can get far more 2 X 4s
4 out of it than you can 2 X 6. And so the
5 question here is from the industry, I get
6 conflicting reports, "Will this result in more
7 trees for less wood?" It depends on the size of
8 the tree that gets cut down. So the bottom line
9 here is, we're going to be learning a lot over
10 the next four years, and so ask me in 2020 and
11 I'll give you a real good answer.

12 COMMISSIONER HOCHSCHILD: Thank you.

13 COMMISSIONER MCALLISTER: This is one of
14 the reasons why we opened up multiple pathways,
15 as well, because another option is doing
16 alternated studs, 2 X 4s, but alternate them so
17 that you don't have thermal bridge, and you can
18 insulate more effectively, and so that's another
19 pathway for the walls, at least, to get an
20 official wall with 2 X 4s, but that's thicker.
21 So there are a lot of different ways that
22 builders --

23 MR. RAYMER: We've got two or three ways
24 to still use 2 X 4s, you simply have a larger top
25 and bottom plate, you stagger the studs so you

1 stop that thermal bridge there, and it works
2 well. Once again, it takes a lot of training,
3 you've got to get the carpenters and everybody
4 else, the framers, to get it right. And the
5 other challenge here is about half of our framing
6 crews don't have English as a primary language,
7 and so, you know, these are all things that have
8 been taken into account and we'll be working on
9 it. Once again, ask me in 2020 and I'll have a
10 better answer.

11 COMMISSIONER HOCHSCHILD: Thank you.

12 CHAIRMAN WEISENMILLER: Okay, ConSol.

13 MR. TORVESTAD: Hi there, Garth Torvestad
14 with ConSol. I'm the Senior Project Manager
15 that's overseeing this program for ConSol's role
16 as a technical lead and I'm just really enthused
17 about what we saw in terms of timing that this
18 was being in close communication with builders
19 and the CBIA. We heard a lot of very nervous
20 builders when these changes came out in the Code
21 that were just not knowing what to do, how to do
22 it, and we're very concerned with this
23 transition, so it was really good to see this
24 funding come out and really target a need.

25 The other need that I think maybe is less

1 obvious from the Commission's standpoint, but
2 certainly would be to the Workforce Investment
3 Board, is we have a big lack of trained workers,
4 period, for construction in California. And so
5 it's a real issue right now that the industry is
6 back, home building is back, a lot of people left
7 the industry, left the state but were in the
8 industry when wherever they're going to go after
9 work, and they're not coming back. So we really
10 need to provide the job skills to new workers to
11 come in, not only to sort of safely and
12 effectively meet the Regulations, but simply
13 because there just aren't skilled workers there
14 to supply the home building industry, and it's a
15 very important industry that we want to support.
16 So that's an important point there.

17 Also, I want to sort of make the point
18 that with the amount of work that we did to pull
19 together this team, especially private sector,
20 \$15 million in match funding, luckily there were
21 a couple of delays in the solicitation and we
22 kind of said, okay, we're back bringing more to
23 the table. So the team we ended up with in the
24 end, we have 20 some odd match funding partners
25 from Manufacturers and another 10 or 15 of them

1 that are just supporting partners, manufacturers,
2 home builders, a great consultant team. But I
3 think what's interesting is that this is a full
4 market transformation, really, it's training but
5 we've got to work at all levels because the
6 Building Officials need to get involved. We
7 already have organically tomorrow Payam and Mazi
8 and some of the Efficiency staff, we've been
9 called to a meeting at SVBO, Sacramento Valley
10 Building Officials, they're wanting to understand
11 why we're seeing these new attic designs in
12 advance of the Standards, they don't know the
13 Standards, they don't know moisture concerns, so
14 this is organic, that already happened without
15 this contract, so it's a real clear present need
16 that we're going to need to work on all those
17 levels. But I think pulling this together, that
18 market transformation has already started to
19 occur because we're making these product
20 manufacturers aware, saying, you know, there's a
21 couple of prescriptive options, there's a number
22 of performance ways that you could do walls and
23 attics, what do you have in your repertoire? And
24 they come out and say, oh, well, you know,
25 actually we need to work on some stuff. So

1 they're already moving in that direction to
2 support this program in understanding what the
3 needs are for the state to do the changes to
4 walls and attics. So we're pretty enthused that
5 we've already seen a bit of movement of the
6 market, more or less home builders and product
7 people, to be able to kind of rise to the
8 occasion and meet the new Standards.

9 COMMISSIONER MCALLISTER: Thanks very
10 much. I wanted to make one comment, too, here
11 and just say there's also it's not just about
12 this particular activity under EPIC, but also
13 staff, when we realized this was an issue, and
14 working with the builders and other stakeholders,
15 we reached out to the PUC, staff did, and there
16 was a discussion with them on how can the
17 utilities and some ratepayer funds also be
18 brought to this because they do training and they
19 have their centers, they work with the Building
20 Officials, they work with the stakeholders, as
21 well, and so the PUC actually worked with us
22 quite closely to bring some funding to the table
23 for that and building a portfolio. So we're very
24 committed to getting the marketplace to evolve to
25 be able to build these buildings in a high

1 quality way that meets everybody's needs. And so
2 I think this is a key piece of the puzzle right
3 here, but there are others, as well.

4 MR. TORVESTAD: Yeah, there's a whole
5 task in the scope of work that involves
6 coordination with the PUC and with the Codes and
7 Standards Program, the existing program to
8 prevent overlap. And I think when we sort of
9 engage with them, we realize that there is a
10 pretty distinct line between sort of
11 understanding the requirements and then meeting
12 requirements, and that's where we come in, to
13 sort of fill that gap. But there's a number of
14 individuals already sort of located in that
15 juncture between EPIC and the existing Codes and
16 Standards Program, and they'll be working in
17 close coordination, so that's an important part
18 of what we're doing.

19 COMMISSIONER SCOTT: I have a question
20 for you, Rachel, which is, so you mentioned that
21 this will last for four years and assuming that
22 we decide to approve that, when do you think that
23 the training itself would actually get up and
24 running? Do you have a sense of that, or some of
25 the materials that you mentioned will be

1 developed, do you have a sense of when those will
2 be developed and ready to be put out to the
3 public?

4 MS. SALAZAR: I believe -- I have a
5 couple of individuals here that can help me out
6 with that, but I believe it's going to be -- I'm
7 going to have Garth answer for you.

8 COMMISSIONER SCOTT: No worries.

9 MR. TORVESTAD: Yeah, I mean, there's
10 been a good deal of movement on sort of at least
11 the manufacturers' end of things to come to the
12 table, understand the new requirements, and start
13 developing training around that, and products
14 training around that. So I think it depends on
15 what the product is -- I hate to take such a
16 product-centric approach, but this is sort of how
17 it is, right, in the industry is it's going to be
18 what's your solution, is it a private sector
19 driven industry, a little bit of design stuff,
20 but most of it is going to be product-centric,
21 okay, so there has been some movement already in
22 that. I think December-January is going to
23 probably be time to get everything up and
24 running, and then I think as early as February we
25 could start with engagement -- one of the more

1 important kind of features here is a forum with
2 builders at the local BIAs, so we're pulling in
3 builders, as well as the product people and the
4 Building Officials into one room together, and I
5 think by then -- so that's sort of the highest
6 level of this training and education, it's sort
7 of saying to the builders, "Look, you've got to
8 make this transition, what is it you want to do?"
9 And then we sort of split off and that's when,
10 once they've kind of understood what their
11 options are as far as meeting the Code, that's
12 when we split off and kind of do more targeted
13 training. So it starts at a pretty high level.
14 I think we're already more or less prepared for
15 and we did last year with CBIA at SMUD, it's sort
16 of modeled after the statewide forum that we did
17 around the new Regulations, but on a smaller
18 scale and regional. So I think that can be ready
19 to get moving February of next year. As far as
20 the hands-on field training of the application of
21 these techniques, I think we're going to be
22 looking at middle of next year for the earliest.

23 COMMISSIONER SCOTT: Okay, thanks. I
24 feel like you can't go wrong with a properly
25 trained workforce, right? And I'm really glad

1 that this is something that the Commission can
2 support and help to do, so if there aren't any
3 other questions, I'll move Item 13(a).

4 COMMISSIONER MCALLISTER: I'll second.

5 CHAIRMAN WEISENMILLER: All those in
6 favor?

7 (Ayes.) This passes 5-0. So let's go on
8 to (b) and Commissioner McAllister is recusing
9 himself.

10 MS. VACCARO: Commissioner Douglas, I
11 think you might have a disclosure?

12 CHAIRMAN WEISENMILLER: A disclosure,
13 yes, you do.

14 COMMISSIONER DOUGLAS: Thank you. I want
15 to disclose that I -- I've said this already, of
16 course -- sometimes teach a Renewable Energy Law
17 class at U.C. Davis Law School, King Hall, and so
18 that disclosure is for the record on this item.

19 MS. SALAZAR: Okay, for Item (b) this one
20 would be for the Center for Sustainable Energy.
21 Again, another four-year project totaling
22 approximately \$4.5 million and it includes an
23 additional \$16 million in match funding.

24 The objectives for this project are to
25 bring the benefits of emerging technologies and

1 the accompanying skilled jobs to disadvantaged
2 communities, as well as to develop a workforce
3 that can proficiently retrofit buildings, and be
4 compatible with demand response. Automated
5 demand response equipment and communications
6 standards have evolved significantly over the
7 past decade, however, these advances in the
8 standards have not been adequately translated
9 into the training programs to help facilitate the
10 widespread deployment of automated demand
11 response communication equipment.

12 Under this agreement, the CSE Team would
13 start by developing a brand new training course
14 focused on the proper selection, installation,
15 commissioning, and maintenance of automated
16 demand response communications equipment, as well
17 as to ready the trainers. They would then
18 develop a comprehensive outreach and recruitment
19 plan for 250 individuals into the five-year
20 training program located in disadvantaged
21 communities, as well as an additional 250
22 existing trainees from disadvantaged communities
23 that were already in the program getting them
24 into this new course.

25 Additionally, they would enlist 200 small

1 and medium-sized buildings and public facilities
2 located in disadvantaged communities to be
3 participants in the IOU automated demand response
4 incentive programs, and to serve as on-the-job
5 training sites to the trainees. It would develop
6 and provide each building owner and operator with
7 a customized operational manual, as well as
8 provide technical assistance on the installed
9 equipment to these building and operating
10 personnel.

11 And finally, they would identify and
12 disseminate best practices of the automated
13 demand response training program and workforce
14 development, and demonstrate a plan for long term
15 sustainability in the training, beyond the
16 project term.

17 Staff recommends the approval of both
18 these projects and I'm available to answer any
19 questions you may have.

20 CHAIRMAN WEISENMILLER: Thank you. We
21 have some comments from folks in the room and
22 online, so let's start with Dennis Morin,
23 Sacramento Electrical Training. Please.

24 MR. MORIN: Good afternoon,
25 Commissioners. I'm Dennis Morin, I'm the

1 Director of the Sacramento Electrical Training
2 Center. First, let me say thank you and express
3 our appreciation for you providing this
4 opportunity for us and many others. We've heard
5 of the consistent report of an inadequate supply
6 of contractors available to do this work and
7 that's most probably because there have been
8 limited talented staff to do it. People don't
9 know how to do the work and how to do it well, so
10 installations have been poorly done, and
11 commissioned faultily.

12 So what we hope to do with this project
13 is to develop a skilled workforce to install and
14 deploy market-ready ADR technology. We'll be
15 doing that through adding this particular program
16 to the already successful California Advanced
17 Lighting Controls Training Programs, this would
18 be an additional module to that. And we expect
19 that we'll be addressing or at least have already
20 identified over 82 percent of disadvantaged
21 communities in the State of California that will
22 be touched by this training program.

23 So we speak in favor and we urge you to
24 approve this as we look to increase the
25 participation in ADR throughout the state. Thank

1 you.

2 CHAIRMAN WEISENMILLER: Thank you. Do we
3 have anyone here from Sacramento -- JATC? Oh,
4 that's you. Got it. So online, Lindsay Hawes,
5 Center for Sustainable Energy?

6 MS. HAWES: Hi, yes, this is Lindsay
7 Hawes with the Center for Sustainable Energy.
8 Chair and Commissioners, thanks so much for the
9 opportunity to provide a quick comment today. As
10 a nonprofit organization with roots in clean
11 energy and workforce education and training, the
12 Center for Sustainable Energy is thrilled at the
13 opportunity to lead this work alongside our
14 partners, including the IBEW-NECA, the Labor
15 Management Cooperation Community, the California
16 Labor Federation, California Lighting Technical
17 Center at U.C. Davis, and ASWB Engineering,
18 alongside all of the JATCs in our eight
19 disadvantaged communities.

20 As Rachel and Dennis mentioned, you know,
21 while new construction standards require
22 installation of ADR communications hardware into
23 new buildings, those standards do not require or
24 push that hardware into the existing building
25 sector, and this effort will allow us to bring

1 this innovative ADR communications technology
2 into existing buildings, focusing that work in
3 disadvantaged communities and allowing energy
4 savings from ADR to really benefit those
5 disadvantaged communities across the state. So
6 we're really excited about the opportunity to
7 bring these savings to the disadvantaged
8 communities in California and work with our
9 partners, and as Dennis mentioned, increase the
10 number of skilled workers available to provide
11 these services for years to come. Thanks so
12 much.

13 CHAIRMAN WEISENMILLER: Thank you.
14 Anyone else on the line? Let's transition to
15 Commissioners. Questions or comments?

16 COMMISSIONER SCOTT: I'll just reiterate
17 the comment I made from before, which is you can
18 never go wrong with increasing the workforce
19 development opportunities in disadvantaged
20 communities by delivering training. So with no
21 other questions, I'm happy to move approval of
22 Item 13(b).

23 COMMISSIONER DOUGLAS: Second.

24 CHAIRMAN WEISENMILLER: All those in
25 favor?

1 (Ayes.) So it's 4-0 with one abstention.

2 CHAIRMAN WEISENMILLER: Let's go on to
3 Item 14, Biofuels Early and Pre-Commercial
4 Technology Development. This is Hieu.

5 (Commissioner McAllister returns.)

6 CHAIRMAN WEISENMILLER: So we have
7 disclosures before we start on 14(a).

8 COMMISSIONER DOUGLAS: All right, so for
9 Item 14(a), I also have the same disclosure that
10 I sometimes teach a Renewable Energy Law class at
11 U.C. Davis, King Hall. Item 14(a) involves U.C.
12 Davis, but not King Hall.

13 Commissioner McAllister: And I will do
14 the same disclosure that my wife is a Professor
15 at U.C. Davis, King Hall, and there's no
16 financial interest here, but I wanted to
17 disclose.

18 MR. NGUYEN: Greetings Chair and
19 Commissioners, I am Hieu Nguyen of the Emerging
20 Fuels and Technology Office, part of the Fuels
21 and Transportation Division. I'm here today to
22 seek approval of three agreements for a total of
23 \$2,305,617 recommended for funding through our
24 Alternative and Renewable Fuel and Vehicle
25 Technology Programs, PON-14-602, the Biofuels

1 Early and Pre-Commercial Technology Development
2 solicitation.

3 The purpose of this grant solicitation
4 was to seek out biofuels projects that are in the
5 early to pre-commercial technology development
6 stages, with emphasis on transformative
7 technology solutions to significant biofuels
8 industry problems that increases yields,
9 productivity, or cost-effectiveness of biofuel
10 production and/or that targets a significant
11 unmet need in California's biofuels industry.

12 Staff recommended four projects from this
13 solicitation for grant funding. Three of these
14 projects are being presented today for your
15 approval. The following three projects were
16 demonstrated needed innovation in California's
17 current biofuels industry. Item 14(a), the first
18 agreement, ARV-15-9, is for Altex Technologies
19 Corporation for a \$999,993 grant to develop and
20 demonstrate a one-barrel per day biomass
21 conversion to synthetic gasoline system, also
22 known as BCSGS. This pilot system would utilize
23 forest residue from blogged forestation in
24 Georgetown, California, and purpose-grown energy
25 crops from U.C. Davis to produce renewable

1 gasoline.

2 The produced fill will meet the American
3 Society for Testing and Material Standards for
4 gasoline and it will be a drop-in fuel that is
5 fully fungible with petroleum-based gasoline.
6 Altex will be designing a scaled-up 3,000 barrel
7 per day BCSGS, which will verify the fuel's cost
8 and carbon footprint, estimated to be less than
9 \$2.00 per gallon and less than 30 grams per CO₂
10 per megajoule, respectively.

11 This grant agreement will leverage \$1.8
12 million in match funds.

13 Item 14(b), the second agreement, ARV-50-
14 11, is for San Diego State University Research
15 Foundation for a \$305,624 grant to develop an
16 energy efficient and cost-effective microalgae
17 cell disruption process. The project will
18 utilize elemental copper and copper sulfate on
19 algae samples to enhance lipid extraction. The
20 proposed method requires about one percent of the
21 energy input compared to existing cell disruption
22 methods, lowering the energy needed to extract
23 lipids from algae used as feedstock or biodiesel
24 production.

25 One of the key challenges of making algae

1 biofuels commercially viable is the energy and
2 cost needed to extract the lipids contained
3 inside the algae cell walls. This project aims
4 to bring an innovative solution to address this
5 challenge and to make algae biofuels commercially
6 viable.

7 The benefits of this project include the
8 potential to reduce algae biodiesel production
9 costs by about \$12.00 a gallon. This grant
10 agreement will leverage \$305,624 in match funds.

11 Item 14(c), the last agreement, ARV-15-
12 17, is for West Biofuels, LLC, for a \$1 million
13 grant to improve a thermal chemical process to
14 convert syngas from gasified biomass residue to
15 ethanol and other alcohols for blending of
16 gasoline for transportation fuel.

17 Woody biomass residue is processed in the
18 vast internally circulating fluidized bed
19 gasifier to produce syngas and other byproducts.
20 This syngas carries a small amount of sulfur and
21 when used in tandem with the project partners
22 Albemarle patent, commercially available catalyst
23 that requires sulfur for activation will produce
24 an ethanol without sulfur at a quarter of the
25 carbon intensity of corn ethanol.

1 West Biofuels will develop a temperate
2 control system designed and built at bench scale,
3 mixed alcohol synthesis catalyst system to
4 produce large chain alcohols and calculate an
5 LCFS fuel pathway for woody biomass-based
6 ethanol.

7 The project will also model the economic
8 feasibility for woody biomass-based ethanol fuel
9 production in the State of California.

10 This grant agreement will leverage \$1
11 million in match funds. And I also want to note
12 that the CEC 270 for this agreement for West
13 Biofuels grant award did not include the
14 subcontractor attachments. An updated version of
15 the CEC 270 for this agreement will be provided
16 shortly after this Business Meeting. Thank you
17 for your consideration on this item. Staff would
18 note that a representative from these companies
19 is present to respond to questions.

20 MS. VACCARO: Excuse me, Chair
21 Weisenmiller, just for the record, while this
22 might be available to the public after the
23 meeting, it's my understanding that the
24 Commissioners do have before them this revised
25 document which is referenced in the resolution.

1 CHAIRMAN WEISENMILLER: Yes, yes, we do.

2 MS. VACCARO: Thank you.

3 CHAIRMAN WEISENMILLER: I was just going
4 to start out with Commissioner Scott by saying
5 I've been to the San Diego State University Algae
6 R&D activity and one of the things I've looked,
7 there's an interesting article recently in the
8 *Catalyst*, which is the Berkeley Chemistry
9 Department Alumnae publication, which basically,
10 again, at a very high level says that at this
11 point on the one hand there's a remarkable amount
12 of pessimism on the cell conversion, and optimism
13 on batteries, and the interesting part is things
14 aren't as bad as it sounds on the biomass side,
15 and they're probably much worse than it sounds on
16 the battery side. And particularly on this type
17 of research, in part, obviously one of the big
18 initiatives always with the new building, the big
19 focus with the funding coming in from BP on
20 biofuels, etc., well, BP has terminated the
21 grant, obviously, and the building -- it's a
22 little bit hard to read from it how much it was
23 vacant at this point, or how much of the
24 scrambling, but they were saying at least on the
25 scientific side, while parts of the processes you

1 would need that it's horribly complicated, but
2 there is some progress. And on the battery side,
3 which might be more of a charge for additional
4 R&D there, they were talking about - this thing
5 here are safety questions, you know, that stuff
6 has been known to take down planes, etc. So
7 there's an awful lot of software and other
8 controls and obviously they're trying to push a
9 view where if you changed the solvent, perhaps
10 you'd get there very safe with the ammonium
11 batteries. But again, I certainly will pass it
12 on to you, I don't know if anyone else is
13 interested in it, it's pretty dense chemistry.
14 Go ahead.

15 COMMISSIONER SCOTT: I would just note
16 that I think all three of these projects are kind
17 of exciting for the potential to unlock this
18 space here, especially on the gasoline substitute
19 side, I think the Altex project and the West
20 Biofuels project, when you're looking at either
21 woody biomass residues or forest residues, and
22 figuring out how to turn those into gasoline
23 substitutes at reasonable prices, is a pretty
24 exciting space to be in. And I also think
25 advancing the algal biofuels by addressing some

1 of the key challenges and seeing what we can do
2 is great, as well, so I heartily recommend these
3 projects to you all. If there are no questions,
4 I will move approval of Item 14.

5 COMMISSIONER HOCHSCHILD: Second.

6 CHAIRMAN WEISENMILLER: Oh, go ahead.
7 Certainly if he wants to speak, he or she, go
8 ahead. They should start.

9 COMMISSIONER SCOTT: Alexander Kelly, are
10 you on the line?

11 MR. KELLY: Oh, sorry. Waiting for us?

12 CHAIRMAN WEISENMILLER: Yeah, that's what
13 we've been saying. You know, let's go. It's
14 been a long day so far, so we would like to keep
15 moving.

16 MR. KELLY: We are here in case of any
17 questions. We don't have any comments on this,
18 only question.

19 CHAIRMAN WEISENMILLER: Well, sure. Go
20 ahead. Oh, they don't have any. Okay, so we
21 don't have questions for you. If you have
22 questions for us, go ahead.

23 MR. KELLY: No, we don't have any
24 questions.

25 CHAIRMAN WEISENMILLER: Okay, fine.

1 Well, thank you. Let's go to the vote, then.

2 COMMISSIONER SCOTT: Want me to move it
3 again?

4 COMMISSIONER HOCHSCHILD: I seconded your
5 motion, you already made your motion, and I
6 second it.

7 CHAIRMAN WEISENMILLER: All those in
8 favor?

9 (Ayes.) This passes 5-0.

10 MR. NGUYEN: Thank you.

11 CHAIRMAN WEISENMILLER: Thank you. So
12 let's go on to Item 15, Natural Gas Fueling
13 Infrastructure. Tami, please.

14 MS. HAAS: Good afternoon, Chair and
15 Commissioners. My name is Tami Haas with the
16 Fuels and Transportation Division. Today I'm
17 seeking approval of natural gas fueling
18 infrastructure projects to be funded through the
19 Energy Commission's Alternative and Renewable
20 Fuel and Vehicle Technology Program, PON-14-608.

21 These seven agreements totaling just over
22 \$2.7 million represent projects resulting from
23 the Natural Gas Fueling Infrastructure
24 solicitation that was released on March 19, 2015.

25 The solicitation was tailored to target

1 the highest need entities with an emphasis on
2 deploying projects in areas facing significant
3 environmental challenges. Through this funding
4 opportunity, school districts and other public
5 entities were able to request financial support
6 to construct new or upgrade existing natural gas
7 vehicle fueling facilities.

8 The Agreements presented for your
9 consideration include projects that will serve
10 the fleets of five school districts in two
11 cities. These natural gas fueling stations
12 provide options that can provide criteria
13 pollutant reductions for vehicles in high
14 pollution areas, as well as help California meet
15 its alternative fuel usage goals. With the wide
16 variety of duty cycles in operational locations
17 for natural gas vehicles in regions served by
18 these projects, the benefits of the reduced
19 tailpipe emissions can be felt in areas severely
20 impacted by vehicle air pollution.

21 Getting the significant air pollution
22 issues that are pervasive in many areas
23 throughout California, this funding will provide
24 the much needed support for disadvantaged
25 communities in these regions. Additional

1 benefits can be achieved from the promotion of
2 the natural gas vehicle sector with the further
3 development of low NO_x engines, natural gas
4 electric hybrids, and renewable natural gas
5 production facilities that are currently being
6 funded by the Energy Commission.

7 With that, I would like to thank you for
8 your consideration of this item and I'm available
9 to answer your questions.

10 CHAIRMAN WEISENMILLER: Great, thank you.
11 Do we have any comments from people in the room
12 or online? Okay, Commissioner Scott.

13 COMMISSIONER SCOTT: I would note in this
14 space, we had tailored most of the funding, in
15 fact all of the funding, in the natural gas
16 infrastructure to school districts and to
17 municipalities. In many instances these folks
18 were the leaders, you know, 10, 12, 15 years ago
19 putting that infrastructure in place, and just
20 haven't been able to upgrade it in order to keep
21 their natural gas school buses on the road. And
22 if they're not able to keep their natural gas
23 school buses on the road, they don't have a lot
24 of funding to go buy a brand new super cleanest
25 whenever the next one is, they go back to the

1 really really old diesels that are sitting on the
2 lot. So we found this to be a pretty compelling
3 space to invest in the natural gas
4 infrastructure.

5 COMMISSIONER HOCHSCHILD: And
6 Commissioner Scott, am I right that we are
7 predominantly or exclusively replacing diesel?
8 Are there any other school buses that are not
9 diesel? Or is that the standard?

10 COMMISSIONER SCOTT: Yeah, these are
11 replacing old, in most instances, these natural
12 gas --

13 COMMISSIONER HOCHSCHILD: I know that
14 like the garbage truck fleet has largely
15 transitioned to natural gas in California. What
16 portion of the -- and just roughly -- what
17 portion of the school buses in the state are
18 still diesel? Does anyone know?

19 MS. HAAS: I don't know off the top of my
20 head.

21 COMMISSIONER HOCHSCHILD: Okay. This
22 looks terrific, thank you.

23 COMMISSIONER SCOTT: Great. If there are
24 no other questions, I will move approval of Item
25 15.

1 COMMISSIONER MCALLISTER: Second.

2 CHAIRMAN WEISENMILLER: All those in
3 favor?

4 (Ayes.) This passes 5-0. Thank you.

5 MS. HAAS: Thank you.

6 CHAIRMAN WEISENMILLER: So let's go to
7 Minutes, Item 16. And let's just split this up
8 into, first, September 22nd, and then October
9 14th. Is there a motion on the September 22nd?

10 COMMISSIONER MCALLISTER: So moved.

11 COMMISSIONER SCOTT: Second.

12 CHAIRMAN WEISENMILLER: All those in
13 favor?

14 (Ayes.)

15 So we're now going to have a motion on
16 October 14th. I need to abstain since I wasn't
17 here.

18 COMMISSIONER DOUGLAS: Second.

19 CHAIRMAN WEISENMILLER: All those in
20 favor?

21 (Ayes.) And I abstain. So this one is
22 4-0-1.

23 CHAIRMAN WEISENMILLER: Let's go to Item
24 17, Lead Commissioner, Presiding Member Reports.
25 Commissioner Scott?

1 COMMISSIONER SCOTT: I have a few things
2 to highlight for you all, but I might just pick a
3 couple of them off of my list.

4 On Tuesday we had the Plug-In Vehicle
5 Collaborative Member Meeting which was fantastic,
6 it was in Silicon Valley in Amazon Lab 126,
7 although it was very secret and all we got to see
8 was the conference room and the front door. But
9 it was kind of a neat meeting because one of the
10 things that we did was talk to some of the
11 automakers about what they see coming down the
12 line in terms of technology improvements in the
13 vehicles. And, you know, the Electric Vehicles
14 themselves are kind of an innovative and creative
15 technology and they've got all kinds of things
16 that go along with them. They've got a parking
17 assist feature where it can help you find empty
18 parking spaces so you can just drive directly to
19 one, they have Apple Play, they've got WiFi in
20 the cars now so your kids can be on their iPads
21 if they want to, you know, in the back of the
22 car. There's a lot of really interesting
23 innovation that's going on in that space, so a
24 lot of the automakers came and highlighted that
25 for us at the meeting.

1 And then we had a nice opportunity to
2 hear from some other states like Colorado, New
3 York, Washington, and, oh boy, I'm blanking on
4 the fourth one, but they came and they talked to
5 us a lot about what they're doing in other states
6 to help advance Zero Emission Vehicles and that's
7 really exciting I think for us when we're
8 continuing to think about, in addition to putting
9 money into this space, what else can we do to
10 accelerate the infrastructure, what else can we
11 do to accelerate the cars, because a lot of those
12 states don't have an ARFVTP fund to be able to do
13 that, so they're very creative about -- oh,
14 Orlando -- what they're putting together. And a
15 great example of that is the Orlando folks are
16 working very closely with Enterprise. Enterprise
17 has mostly Chevy Volts, but also some Battery
18 Electric Vehicles, and they've got deals with the
19 local hotels and with Disney World so that when
20 you go to visit Disney World and you rent through
21 Enterprise, you have the opportunity to be
22 exposed to this technology, which is really neat,
23 very creative. So that was fun. So I got to
24 Chair that meeting, unfortunately Chris Kehoe was
25 under the weather and so she was participating by

1 video, so I was a lone ranger up there on
2 Tuesday, but it was a good meeting.

3 I had a chance to visit prior to that
4 Google and also Zero Motorcycles, which Google
5 and Amazon are great because we got to see the
6 amount of workplace charging that they have
7 rolled out in their parking lots and it's
8 astounding. It's pretty amazing how much they
9 have. And even as much charging infrastructure
10 as they have, they can't keep up with the demand
11 that they have for it and they're at a place
12 where they've done all of the easy stuff and the
13 next part would require saving up parking lots,
14 getting new panels, putting in new transformers,
15 and that's very expensive and so they're kind of
16 trying to decide, do you manage parking, or do
17 you figure out how to kind of take that next step
18 to upgrade all of the infrastructure that you
19 would need to go to the next level of charging.
20 So it was great to hear from both of those groups
21 about that.

22 Last Friday we had the Alternative and
23 Renewable Fuel and Vehicle Technology Program
24 Advisory Committee Meeting for our first draft of
25 the Investment Plan. We got great feedback from

1 all of the Committee members around the table,
2 and largely in support of the allocations that we
3 had proposed. There was a space where they were
4 looking for more information. We proposed in our
5 medium- and heavy-duty vehicle category adding a
6 few additional million dollars in order to help
7 address the Governor's Sustainable Freight
8 Executive Order and give us a little bit of
9 flexibility in that space. They were looking for
10 more detail and information on that, so we'll be
11 sure to provide that for the next one. This one
12 was in Sacramento, the next one will either be in
13 L.A. or Fresno, so we'll do it someplace else,
14 but that meeting went well and that was last
15 Friday.

16 I had a chance to participate, I'm a
17 member of the Department of Energy's Hydrogen and
18 Fuel Cell Technology Advisory Committee, and
19 these meetings are -- first of all, the
20 Technology Advisory Committee, we got a letter
21 from Secretary Moniz and he was really interested
22 in the work that we were doing, and the committee
23 was so excited because that's the first time
24 we've gotten a letter from a Secretary of Energy,
25 and he had follow-ups of things that he wants the

1 Committee to do. So that was really wonderful.
2 The Committee is also, it's an interesting space
3 because DOE does a lot of research and California
4 is we're implementing this. And so it's really
5 interesting, we had Tyson Eckerle came out, as
6 well, and talked about where the rubber is
7 meeting the road right now on the hydrogen
8 stations that we are building, and every day the
9 number of those that are open changes and the
10 amount of commissioning and other things that we
11 need to do in this space, we wouldn't be able to
12 do without Tyson's leadership because there's
13 places where, you know, the authority having
14 jurisdiction and the commissioning, they haven't
15 come together yet, they come together in Tyson,
16 he's the one who kind of brings that together to
17 get those across that last finish line. But we
18 had to talk with folks about what we're doing on
19 that, and I think that was really valuable.

20 I also went to the KRPC YRAB meeting
21 which is just the Western Regional State Energy
22 Offices and Air Offices, and I highlight that
23 here for you because we had a chance to talk,
24 Commissioner Florio and I, about RETI 2.0, and
25 work to elicit some partners to work with us. We

1 will have to do some additional considerable
2 outreach. I think that the last time we met this
3 group, we met in April, and the Governor had done
4 his State of the State, but it was not codified
5 into law yet and so I think everyone was just
6 like, "What's happening?" So we need to kind of
7 go back and really talk with folks, talk about
8 how under Clean Air Act 111(d) there's a lot of
9 synergies, there's a lot of ways we may be able
10 to leverage each other and come to really good
11 solutions. So that was great.

12 Just a couple more. CAISO Symposium, I
13 think you guys were all there. I had an
14 opportunity to talk about how electric
15 transportation can fit into the over-generation
16 scenario, so I won't go into that. We also had
17 the California Fuel Cell Partnership Executive
18 Board Meeting, so that was a chance to talk about
19 the hydrogen side of the Zero Emission Vehicle
20 equation.

21 And then two things, this is going back
22 quite a bit, almost to the last Business Meeting,
23 we had our Navy In-Person Meeting with Assistant
24 Secretary McGinn, it was great, it was a follow-
25 on to Drive the Dream, which Commissioner

1 McAllister attended with me and also Rob at
2 Creative Artists Agency down in Southern
3 California, and I think that one of the biggest
4 splash announcements was the announcement that
5 the Navy made about the up to 500 vehicles that
6 they're going to transform into Electric Vehicles
7 in their non-tactical fleet and that's basically
8 the Navy's entire non-tactical fleet across
9 California, so it was an exciting announcement
10 that they made at Drive the Dream. And then we
11 had a chance to follow-up in the Navy in Person
12 Meeting and folks were like, "You know, we've set
13 aside some things that we want to do and to work
14 on together, we feel like they've gone really
15 well, and we're almost done with those. So what
16 are we doing next?" And I thought that was
17 great, so everyone is kind of looking forward to
18 seeing what is the next partnership that we can
19 put together there. On Drive the Dream, I feel
20 like that was a good event, it was successful. I
21 think Governor Brown had fun. He had a chance to
22 look at some of the new charging equipment, he
23 had a chance to see the brand new Chevy Bolt,
24 Bolt with a "B" which is going to be the
25 \$35,000ish all-battery electric vehicle that can

1 go up to about 200 miles in range, so that's
2 going to be a bit of a game changer in the space.
3 There was a Toyota Mirai there, they had the
4 Tesla was there, lots of other vehicles. I had a
5 chance to have a good dialogue with some CEOs in
6 the space and talk about the importance of this,
7 the importance of workplace charging. I don't
8 have sort of the summary of all the commitments
9 that were made yet, but I think there's a lot of
10 energy and momentum in this space and people are
11 willing to roll up their sleeves and kind of
12 think about what do we need to do to get to the
13 next step in workplace charging. And workplace
14 charging matters because if you don't have a
15 place to charge at home, you may have an
16 opportunity to charge at work, or you might have
17 a car that requires you -- you can get from home
18 to work, but you need to get some more juice at
19 work before you can get back home. And so it's
20 an important component to getting more battery
21 electric vehicles out there, and so it was great,
22 I think, to talk with about 50 CEOs around the
23 table. I think it had good press coverage and I
24 think the Governor enjoyed the event, so that was
25 great.

1 CHAIRMAN WEISENMILLER: I was going to
2 ask you, and thank you for really pushing with
3 the Navy on that fleet turnover, I mean, that's
4 taken a lot of activity over the months, but it
5 really feels great to get there.

6 COMMISSIONER SCOTT: It sure does.

7 CHAIRMAN WEISENMILLER: Andrew.

8 COMMISSIONER MCALLISTER: Great, yeah, I
9 wanted to thank you for the invite to the Drive
10 the Dream, that was great and there were also
11 some real estate people there and I think that's
12 behind sort of the future collaboration that I
13 think we're hoping to have across our offices
14 with respect to charging infrastructure and the
15 built environment. In the commercial area, we
16 really do want to make sure that charging is part
17 of the conversation, right? So that
18 infrastructure is important. So over the next
19 year or so, hopefully we can make some progress
20 on that.

21 Just a few things for me. On Monday, I
22 spoke at the Home Performance Coalition's ACI
23 Conference, which is all about -- ACI stands for
24 Affordable Comfort -- they've been doing this for
25 a long time in the residential space and it's

1 mostly small contractors and service providers in
2 the single-family residential existing building
3 space, and so very important stakeholder group
4 for, you know, that's the rubber hits the road
5 people on the ground doing projects and scoping
6 projects. So that's a conference they have in
7 California every year and it was good to see the
8 new technologies and the new business models that
9 are emerging and coordinate with all those folks,
10 they're really important for us achieving our
11 goals long term.

12 The IEPR rolls along, we're in November
13 so we have a draft on the street and comments
14 came in the day before yesterday, I believe, on
15 the 10th, and a lot of good comments.

16 And just a few days ago we had the
17 Natural Gas Outlook Update, so Ivan and crew,
18 they have a tough job predicting natural gas
19 markets, where are they going to go. I don't
20 think anybody has ever done that successfully,
21 but they do a really good job of the fundamentals
22 and presenting us with that kind of information
23 and then getting that out through the IEPR.

24 On the 28th of last month, I did a
25 keynote at the CMUA Annual Policy event up in

1 Roseville, that was interesting, obviously you
2 could imagine the 802, 350, and we had, I think
3 as I always like to have with them, a frank
4 discussion and sort of, look, here's where we're
5 trying to go and how can we really lay down the
6 foundation to get there, and how can we best work
7 with the public utilities to get what we need
8 from them, but also in a way that hopefully can
9 feed back to their purposes and help them, and
10 certainly not require a huge amount of effort and
11 that's always a sticking point with them.

12 Then just a couple of final things. On
13 the 26th I actually went out to the Stockton
14 Habitat for Humanity Subdivision. I don't think
15 anybody has been out there, it's fantastic. It's
16 very humble, they're small houses, generally
17 three bedroom, two bath, single floor, and
18 Habitat is building them one and two at a time,
19 and they have some additional land they're kind
20 of moving into. These are incredibly well-
21 designed, thoughtful, they're going to be
22 incredibly comfortable. There are a number of
23 them already built, but they get better each time
24 with just very thoughtful, compact, low
25 materials, you know, their wood fraction is very

1 low on these things because they're doing some
2 innovative design aspects in their construction
3 techniques. And the Habitat is able to offer a
4 zero percent loan and these houses go for like in
5 the \$150,000 range, and it's a long term loan, so
6 really it's a very modest monthly payment. And
7 the families that are living in the houses that
8 exist already are just -- they're beside
9 themselves, I mean, they're really an amazing
10 activity. A lot of this is due to the local
11 office of Habitat that has a fellow there who
12 just really is doing everything he can to ensure
13 that the design and build is right, but also with
14 a really strict eye towards the cost. And it's
15 really impressive. You know, you kind of can
16 have your cake and eat it too, it turns out on
17 this, build a comfortable high functioning house
18 that uses very little energy and at low cost. So
19 I think they're pushing the envelope quite a bit
20 on that. So I found that quite inspirational
21 actually because the disadvantaged communities
22 and the lower end of the marketplace doesn't get
23 nearly enough play, I think. And there are real
24 solutions there that we need to work to
25 replicate.

1 And then finally, the Behavior and Energy
2 Conservation Conference, I guess it is, which has
3 been going now more than a dozen years, I
4 believe, I was involved in it early on I think at
5 the first one they held in Sacramento. And
6 behavior since then has only gotten more
7 important to understand in terms of how people
8 interact with their buildings, how people buy
9 things that use energy, how people relate to
10 their environment in terms of how they consume or
11 cause energy to be consumed. And so energy
12 itself is several orders removed from the actual
13 choices that people make typically, so that
14 conference I think has got a lot of traction.
15 ACEEE has done a really good job of defining it
16 and evolving it over time. So I was on a panel
17 that actually David Hungerford had put together
18 on a study that we had funded part of, and he did
19 a fine job on that and it was a very good
20 discussion really basically looking at the data
21 issues around what we need to know and what kinds
22 of topics we should be engaging in on behavior,
23 and which ones are going to be most relevant
24 going forward. So it's got the academic level
25 for the most part right now, but hopefully we can

1 get some practical conclusions of all that and it
2 can inform what we do, not just in sort of R&D
3 and the EPIC context, but also in an active
4 policy context.

5 So I'll stop there, but thanks.

6 COMMISSIONER DOUGLAS: So yesterday there
7 was an announcement that I participated in, it
8 was led by the Department of Interior and
9 Secretary Laird at the Resources Agency,
10 announcing that the Bureau of Land Management
11 component of the Desert Renewable Energy
12 Conservation Plan has just been released, it's a
13 big achievement and it represents a tremendous
14 amount of work by the BLM, of course, and by all
15 of the interagency partners, including the Energy
16 Commission and a number of our staff, the
17 California Department of Fish & Wildlife, and the
18 U.S. Fish & Wildlife Service. This has been
19 going on for over seven years, around seven years
20 now, and so it represents many years of work and
21 a really tremendous vision to avoid the conflicts
22 of renewable energy and environment and
23 conservation, not that they won't continue to
24 emerge on specific issues and specific permitting
25 cases, but at a landscape level, at a high level

1 to ensure that we solve for both problems at one
2 time and that we do it in one of the most
3 challenging and important environments in
4 California to do that, which is the California
5 Desert. The Desert has seen the bulk of the new
6 renewable energy brought on line to support the
7 33 percent Renewable Portfolio Standard, there's
8 been a very large amount of development in the
9 desert, and it's also a very fragile and
10 environmentally important area. It's an area
11 that has a high level of endemic species, it's an
12 area that's likely to be very significantly
13 impacted by climate change, and it's an area that
14 has very diverse land ownership, including a
15 significant amount of land ownership by the
16 Federal Government, particularly the Bureau of
17 Land Management which manages 10 million acres of
18 land in the desert.

19 So the final plan put out by the Bureau
20 of Land Management designates a pretty
21 significant amount of land as development focus
22 area, it also protects over five million acres of
23 land that was clearly very important for not only
24 biological reasons, but also cultural and
25 recreational reasons. And so there's a real and

1 I think durable balancing in what the BLM has put
2 out and in what we've all worked on together. So
3 the story is not done, there's a Federal process
4 left to finalize the BLM document, there's a 30-
5 day period called a Protest Period for
6 stakeholders to read the document and consider
7 any protests or that they might want to file
8 that's resolved in Washington, D.C., and we're
9 looking at a probably February or March timeframe
10 for the finalization of the BLM document.

11 And at the same time there's continued
12 work, there are seven counties with land in the
13 in the DRECP Plan Area -- I said earlier BLM
14 manages 10 million acres, there are about 22.5
15 million acres in the plan area. Now a lot of
16 that is public land, there's Military, State
17 Parks, National Parks, and monuments, and
18 Preserves, and so on, but there are a number of
19 counties, in particular, many of which have
20 planning grants from the Energy Commission that
21 are doing very relevant and important renewable
22 energy and conservation planning, that's part of
23 what we're calling Phase 2 of the plan. So the
24 work continues, but a major milestone was reached
25 yesterday, so I wanted to let all of you know

1 that.

2 CHAIRMAN WEISENMILLER: We certainly want
3 to congratulate you. Yeah, it's a remarkable
4 achievement, you know, and I think this will
5 certainly be one of the legacy items, at least
6 from my perspective on the environmental side,
7 for the Obama Administration and this
8 Administration. So again, it's huge and we at
9 least have some understanding of the complexity
10 and the challenges you've gone through on that,
11 but obviously have managed to avoid the day-to-
12 day dramas on that. So anyway, again, it's
13 remarkable. Thanks a lot for your activity on
14 this.

15 COMMISSIONER DOUGLAS: Well, thank you.

16 COMMISSIONER HOCHSCHILD: Well, as you
17 know, I've been making the case for a long time
18 that Commissioner Douglas is the most patient of
19 the five of us, and after seven years, I rest my
20 case. So congratulations to you, Karen.

21 So I've been on a plane going somewhere
22 to speak at some conference every week for the
23 last three months in a row, I'm exhausted, and
24 fortunately the next three weeks I don't have to
25 go anywhere, so I am thrilled, but the only place

1 I'm going is Stanford, which is great. I'm eager
2 now to travel so much.

3 Lots going on, much of it just really
4 exciting. A few highlights, I was with the
5 Governor two weeks ago, Amelia and I went down to
6 the Climate Summit at U.C. San Diego, really
7 fruitful discussion and just in talking with the
8 Governor and more from hearing his public
9 addresses right now, it is so exciting where he
10 personally is at. I just feel it's an incredibly
11 bold position and posture and direction that he's
12 going. At this particular conference, he has
13 made clear his ultimate goal is to get off all
14 fossil fuels and by 2030 to have five million
15 Electric Vehicles. Now these things I had not
16 heard him say before and the response he's
17 getting is just incredibly positive and I feel
18 like he's leveraging all that California -- this
19 is a meeting of all 10 of the U.C. campuses,
20 building up to momentum and going into Paris, and
21 he's been working very closely with them. And it
22 just makes me feel very proud to be a part of
23 Governor Brown's Administration and the
24 validation of all the work we're doing. So just
25 super exciting. The best line that came out of

1 this conference was Byron Marshall said we should
2 not use the word "Renewable Over-Generation," he
3 said, "From now on we'll call that "EV Happy
4 Hour."

5 A few other highlights, been working with
6 the NFL on this Green Super Bowl 50 with the
7 Governor's Office, Nancy McBeth has been
8 terrific, and there will be about eight days of
9 activities leading up to the Super Bowl in San
10 Francisco and the goal is to make it sort of the
11 greenest Super Bowl ever. They're going to try
12 to offset all the admissions for all the fans and
13 a number of other activities. Commissioner
14 Florio --

15 CHAIRMAN WEISENMILLER: And no PG&E
16 outages?

17 COMMISSIONER HOCHSCHILD: No PG&E
18 outages; that would be the most important,
19 exactly. Commissioner Florio and I spent a day
20 with this German European delegation, it was kind
21 of a follow-up to the trip that Chair
22 Weisenmiller and I and Carla Peterman and Michael
23 Picker and some others did two years ago, they
24 came and spent a day at the PUC, great
25 roundtable. And I'll just say, you know, the

1 ISO, I really like the direction they're evolving
2 to. I really have just seen them be much more
3 proactive, thinking longer term, reaching out and
4 forming relationships, and I'm just very
5 impressed. I think Steve Berberich is doing a
6 terrific job and these kind of relationship
7 building, lessons learned exchanges are a good
8 example of that.

9 I attended also a Battery Symposium
10 recently at LBNL and a great energy there, too,
11 it feels exactly like the solar industry 10 years
12 ago, and so if the battery industry follows the
13 same trajectory with cost reduction and
14 innovation and growth, we're in good hands.

15 A few of the things that are coming up,
16 Commissioner Scott and I are going to be meeting
17 with a roundtable at the leading 10 or 12
18 Environmental Justice groups in California at the
19 end of the month just reaching out proactively to
20 build a relationship with them, hear their
21 priorities, understand what they're working on,
22 and share what we're doing and I think that's
23 long overdue.

24 And then Commissioner Peterman and I did,
25 I don't know, maybe 18 months ago, I organized a

1 roundtable with all the top Clean Energy
2 investors just to have an exchange and help them
3 understand what we're doing and hear from them,
4 and we're going to do that again, she doesn't
5 know that yet, but I have worked that out with
6 the investors just to have that exchange.

7 And then finally, I spent yesterday with
8 a delegation of sort of small farms actually in
9 the Capay Valley, learning what their priorities
10 are as pertains to renewables. This is a region
11 where the term "watershed," they've actually come
12 up with the term "energy shed" and are really
13 trying to do projects around storage and even
14 mobile biomass generators that could be plugged
15 in the Grid that can serve the whole valley, and
16 they're really thinking as sort of community-
17 scale energy. And Gina Barkalow came from the
18 R&D Division, who is terrific, and part of the
19 thing I think we need is just to encourage them
20 to apply. There's a lot of folks who don't apply
21 to our solicitations, but have great ideas. So
22 Gina was very helpful with that. So I'll stop
23 there.

24 CHAIRMAN WEISENMILLER: Yeah. Actually,
25 it's been a long day, but there are probably a

1 number of things I should cover, so bear with me
2 as I go through those.

3 The first thing I was just going to say
4 is Rob and I were at the CAT yesterday, and in
5 that conversation Wade talked about the sort of
6 potential drought to El Niño flip, and shortly
7 thereafter we got a note from John Laird
8 reminding all of us that, you know, El Niño
9 could, I mean, you go back to '97 or '82, or
10 John's story of when, anyway, they got like 16
11 inches of rain in Santa Cruz when he was there,
12 that all of us need to be thinking about really
13 sort of making sure our emergency stuff is sort
14 of brushed off and that we're sort of reaching
15 out to like the utilities. Everyone needs to be
16 thinking ahead so that if it does flip and we do
17 have sort of the floods or whatever, we're not
18 asking, "Oh, my God, why are our servers in the
19 basement" type of questions. Anyway, that's one
20 thing to just start everyone thinking about it, I
21 guess, is all I'm trying to do and how that might
22 ripple through on what we're doing.

23 Fortunately, well, actually I guess Roger
24 certainly has some, it's not like we have people
25 far flung throughout the state, so certainly in

1 Resources Agency, family, because it's sort of a
2 bigger worry as you think about some of the
3 remote locations with some of the employees.

4 Again, sort of I was going to hit --
5 well, I was going to hit a number of things, so
6 in terms of -- I wanted to -- he's not here, but
7 I was just going to note that I think this was
8 probably Manuel Alvarez's last Business Meeting
9 as an Edison employee, he's retiring. He
10 actually started as an Energy Commission
11 employee, and then he went to the Dark Side, he
12 went actually to the PUC, eventually he went from
13 the PUC to Edison, but anyway roughly 21 years of
14 State service and 19 years of Edison service, so
15 at least I remember him when he was -- we were
16 both much younger in those days. But anyway,
17 he's certainly been more the leader of the
18 utility lobbyists or whatever, but anyway,
19 representatives to the Commission -- Government
20 Affairs, yes. I don't know if he's ever really
21 registered as a lobbyist, but anyway I'm just
22 saying in terms of -- and certainly has helped I
23 think some of the others move forward.

24 COMMISSIONER HOCHSCHILD: He's retiring?

25 CHAIRMAN WEISENMILLER: He's retiring,

1 yeah, from Edison. So the quick stuff, as Janea
2 said, I was also at the symposium, gave a talk
3 there, sort of following up on Energy Imbalance
4 Market, transitional committee stuff. We've had
5 a workshop on RETI 2.0, I want to thank you for
6 helping that get ready, as many of you know I was
7 on vacation for a while, came back, went to the
8 NRC, you know, anyway, and Picker and I and Steve
9 are having a workshop this coming Friday on bulk
10 storage. By that we mean non-electric chemical,
11 but things like pump storage. But there's been a
12 gap in the PUC's program at this stage, so we'll
13 try to understand better some of the issues
14 there.

15 And then in terms of other stuff, I was
16 going to note in my absence, so I actually got an
17 award from the South Coast Air Quality Management
18 District, which Rob picked up for me, and it was
19 at their Annual Clean Energy Air Awards event
20 and, to get it correct, it is the S. Roy Wilson
21 Memorial Award for Leadership in Government,
22 which actually reflects obviously many of the
23 things that all of you have done and certainly
24 the staff at the Energy Commission is what
25 they're pointing to for the leadership we've had,

1 you know, in the areas of Energy Efficiency,
2 Renewables, and trying to deal with minimizing
3 adverse local impacts. So again, it was neat to
4 get that recognition, I was really sorry I
5 couldn't attend the ceremony, but I understand
6 there was a pretty good cross-section there.

7 Other stuff, I would note, so I was at
8 the NRC, I'm the State Safety Liaison to the NRC,
9 they have a gathering of all 38 or whatever the
10 right number of Safety Liaisons are, for two days
11 every couple of years, they cover topics, again,
12 I could go through more or less detail on that,
13 but I would note they actually have a weird
14 regulatory system on decommissioning where they
15 -- their focus so far has been on licensing of
16 construction operating plants. And actually some
17 of them are being shut down, which never entered
18 their thinking for a while. So the way they
19 approach it is they look at their compliance
20 conditions for operating plants and they do
21 exceptions and decide that they don't need the
22 same conditions and just pull some of them out.
23 And one of the things which they're starting to
24 do is try to figure out what's the role of State
25 and local government, you know, should they have

1 something that recognizes more and there's
2 obviously not a sharp fall-out, but right now
3 you've got an operating plant that has all of
4 that set of issues. You stop it operating and
5 obviously some of the safety issues become much
6 less, eventually when you get all the spent fuel
7 out, you know, into the cask and, you know,
8 you've got everything decommissioned, it's
9 probably relatively little things you need to do,
10 but while you still have all the spent fuel in
11 the ponds, the bowls, it's a big deal. And at
12 this point, the Regulations don't really
13 recognize that it is a big deal, it's sort of on
14 or off is how they operate. So there's certainly
15 some indications they might do a little better
16 than they have.

17 I was also going to mention one of the
18 things I spent a lot of time on recently is, so
19 SoCal Gas' largest gas field, Aliso Canyon, has a
20 leak. And it has something like 90 wells and one
21 particular one is quite old, it's at least 50
22 years old and it's pretty small, and that's been
23 identified as the leak. Now, in natural gas,
24 methane is colorless, odorless, but they always
25 put in trace elements and hydrogen sulfites, it

1 just smells like rotten eggs, and you're very
2 sensitive to that really parts per billion. So
3 about a mile from the storage unit there are
4 homes, relatively high level, or high income
5 houses, so anyway people started smelling that
6 and actually SoCal has stepped up, they've got
7 sort of the best oil and gas company, these are
8 the guys that, after the Kuwait war, you know,
9 when the fields were set on fire, these are the
10 ones they sent in to put them out. So anyway,
11 they brought them in to work on it and I think by
12 last Friday it became an issue, it sort of had
13 gotten to the Governor's Office level, so I was
14 pulled in on that. And one of the questions
15 obviously is the methane leakage and the good
16 news is that we have some really cutting edge
17 research equipment on that, you know, we do these
18 plane over flights to try to measure methane
19 emissions. And so we've been working with the
20 ARB, which really has the sort of primary
21 responsibility. I mean, Richard Cory eventually
22 has to say "this is how much leaked." And they
23 have some stationary sources that are measuring
24 methane emissions in that area, the topography is
25 tough, there are some other major leaks, there's

1 a landfill pretty close. So again, what's coming
2 from where? There are certainly some satellite
3 shots. We sent a plane in, now twice, to do some
4 of the spiral stuff and have done some
5 measurements and, again, that will be part of the
6 overall picture that the Air Board has to look
7 at, although the two complications are, 1) you've
8 got like 100 people onsite, this is a gas leak,
9 so if you have a spark or something you could
10 have a lot of, you know, so the safety issue --
11 you also have a pilot flying around where you've
12 got 100-foot cranes, all kinds of field
13 equipment, so just trying to make sure it was
14 safe. But having said that, you know, we've
15 gotten a couple measurements, but the report was
16 like, "Huh, it's different between the two days."
17 And you're going, "Well, yeah, let's see, if
18 there's 100 people poking and prodding this well,
19 do you think it's going to be a constant rate of
20 release? Or do you think -- no. So again, it's
21 cutting edge research, it's fitting into the
22 picture, it's certainly not going to be the
23 determinate part of the picture, but certainly
24 will help the Air Board piece things together.
25 Obviously the other way, you can just mass

1 balance, you know, how much gas was in the well?
2 How much gas was in storage before it started
3 leaking, which you don't quite know, and how much
4 is there now? And so with the Delta. But
5 anyway, they're trying all kinds of sophisticated
6 ways to piece it together. And I think at this
7 point they're hoping -- they're starting to do
8 actions right now to basically cap things which
9 they're hoping by the weekend. Again, I heard
10 that last weekend, so we'll see.

11 And just following up on David's point
12 for a second, when I was in D.C. I met with ARPA-
13 E and the new Director. And what she said is one
14 interesting idea is that the Department of
15 Energy/ARPA-E has been trying to pursue is, as
16 you know, they and we developed these innovative
17 technologies, they go out to venture capitalists,
18 venture capitalists don't do R&D, really. And so
19 what they've been trying to do is organizing a
20 pool of patient investors, you know, CalPERS,
21 that people who want to do clean tech are not
22 necessarily looking at it saying, "Is this a good
23 business decision" as much as what part of the
24 portfolio will they put into to really move the
25 needle longer term, and I think they're like at

1 the \$5 billion level. I have no idea what the
2 criteria are, but again it's a pretty interesting
3 idea of trying to find the socially aware,
4 patient money, again, to try to use that in the
5 clean tech energy space.

6 So anyway, with that, I think I've
7 covered everything I need to cover, although
8 there is certainly more.

9 Chief Counsel's Report?

10 MS. VACCARO: Nothing.

11 CHAIRMAN WEISENMILLER: Nothing?

12 Executive Director Report?

13 MR. OGLESBY: I'll be really efficient,
14 but I also want to do an introduction at the end,
15 but before that, on October 20th I participated
16 in the California Freight Advisory Committee in
17 Southern California. That was mostly dedicated
18 to discussing the Governor's Executive Order on
19 Sustainable Freight and the planning and
20 implementation of that over the next 12 months.

21 On the 4th of November, I presented a
22 report to the Water Board on once-through cooling
23 and the progress report on once-through cooling
24 on behalf of the Advisory Committee that is
25 charged with keeping the Water Board current on

1 progress. The bottom line is that we're ahead of
2 schedule, if anything, and we're watching a
3 couple of plants closely, but the recommendation
4 is no change in the schedule for the phase-out of
5 our plants using once-through cooling. That was
6 Wednesday.

7 On Friday, last Friday the 6th, I
8 participated in a Department of Energy workshop
9 on desalination. This was in San Francisco and
10 included more than half from out of state of the
11 participants, it was a very robust two-day
12 workshop, and I presented on the second day and
13 was there for part of the first day, very
14 informative, very useful, and my topic was three
15 parts downloading about California's recently
16 adopted regulations by the Water Board on the
17 rules under which desal plants need to operate,
18 impacts on the Grid, and the emergency of excess
19 generation through renewables.

20 And finally, I'd like to do an
21 introduction of our new lead on Enforcement and
22 Compliance Assistance, I'm very pleased to
23 introduce Paul Jacobs. Please stand, Paul.

24 MR. JACOBS: Nice to meet you.

25 MR. OGLESBY: Paul joins us after 27

1 years with the California Air Resources Board
2 doing enforcement. There's a great deal of
3 overlap in the similarities between the programs
4 that need to be enforced at the Air Board and our
5 jurisdiction here. At the Air Board, for
6 example, they have a robust Consumer Products
7 enforcement; we have Appliance Efficiency
8 enforcement, many similarities there. But Paul's
9 role is not limited to the Appliance Enforcement
10 arena, we also want to see some improvement,
11 continuity and consistency between the other
12 enforcement obligations that the Energy
13 Commission has, which also includes things like
14 the Renewable Portfolio Standard, Siting, and
15 even Mandated Data Acquisition that we have. So
16 with that, let me just introduce Paul and I feel
17 very fortunate we were able to recruit him over
18 here. And he's making a difference already.

19 CHAIRMAN WEISENMILLER: Welcome.

20 MR. JACOBS: Thank you.

21 CHAIRMAN WEISENMILLER: Public Advisor
22 Report.

23 MS. MATTHEWS: Good afternoon. I have a
24 couple of things that I just wanted to highlight.
25 We receive approximately 60-70, maybe 80 calls a

1 month, but there are two that I wanted to share
2 of note because we've had an inquiry on the
3 Regulation of Commercial Gas Ranges and a person
4 has been very interested in any energy that may
5 be lost once something gets completed cooking or
6 they have issues. So we are following up on
7 that.

8 And then the second, we received a lot of
9 calls from stakeholders and interested parties on
10 the IEPR comment period, and so thank you to
11 Commissioner McAllister for being responsive in
12 allowing the staff to extend that date.

13 Additionally, as far as the events I've
14 attended, last week I was able to attend the
15 California Department of Insurance, they had a
16 Diversity Summit where they were able to bring
17 together all their stakeholders, and they dealt
18 with issues on diversity of not only Supplier
19 diversity, but Governing Boards and issues of
20 governance of diversity there. And I also had
21 the opportunity to attend their annual Task Force
22 meeting and since with the signing of AB 865 and
23 the recommendation that we establish one, I also
24 had the opportunity to meet with the Task Force
25 members, which included statewide representative

1 of Women Owned Businesses, as well as Disabled
2 Veteran Businesses. And so there was a lot of
3 people from L.A. and I was able to get that
4 perspective from them, as well.

5 And I wanted to also give an update on
6 our diversity working group. We had a very, I
7 think, productive training session. We had an
8 expert come in on reaching out to disadvantaged
9 communities and she was actually able to provide
10 a case study and made herself available to any of
11 the Divisions if they want to know how they can
12 be more effective, just to go beyond notices.

13 And also, we have completed our first
14 quarterly report in collecting data so that we
15 can measure our efforts. I want to recognize
16 Sean who is here, we're both in between the staff
17 workshop and the Business meeting, but he was
18 very instrumental in meeting with every Division,
19 finding out what programs they're doing,
20 outreach, finding out how we can track that. And
21 so we are now developing a diversity database for
22 the Energy Commission so that it won't be pulling
23 just one person to come together and collect all
24 that data, but it will all be captured in a
25 database so that we can track how many programs

1 we have benefitting disadvantaged communities,
2 what efforts we're putting forth to have more
3 people participate in our funding opportunities,
4 and even finding a way that we can track
5 increasing diversity here within the Energy
6 Commission, of course, and our own supplier
7 diversity.

8 And there were a couple of other
9 meetings, the IEPR Workshops. One last thing,
10 we've also received inquiries about the RETI 2.0,
11 so at our last meeting there was mention of
12 subcommittees, so there's been a lot of interest,
13 so we've received calls and we're connecting them
14 with staff, people interested in serving on those
15 subcommittees. That's it.

16 CHAIRMAN WEISENMILLER: That's good, very
17 good. Thank you. Okay, any public comment?

18 MS. MATTHEWS: There is one more.

19 CHAIRMAN WEISENMILLER: Okay.

20 MS. MATTHEWS: I also wanted to mention
21 that the EPIC Division is planning a 2015 EPIC
22 Innovations Symposium Agenda and I think that's
23 going to be a very great opportunity because one
24 of the breakout sessions will include a workshop
25 on how to apply for EPIC funding, and so that

1 certainly goes hand in hand with our outreach to
2 ensure more Californians can take advantage of
3 our funding opportunities, and that it's going to
4 be December 3, 2015 at Lake Natoma Inn. This
5 will be posted and it's in conjunction with PG&E,
6 San Diego Gas & Electric, and Southern California
7 Edison.

8 CHAIRMAN WEISENMILLER: Great, thanks.
9 Thanks again for the nudge. Any public comment?
10 Then this meeting is adjourned.

11 (Whereupon, at 3:47 p.m., the Business Meeting
12 was adjourned.)

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REPORTER'S CERTIFICATE

I do hereby certify that the testimony in the foregoing hearing was taken at the time and place therein stated; that the testimony of said witnesses were reported by me, a certified electronic court reporter and a disinterested person, and was under my supervision thereafter transcribed into typewriting.

And I further certify that I am not of counsel or attorney for either or any of the parties to said hearing nor in any way interested in the outcome of the cause named in said caption.

IN WITNESS WHEREOF, I have hereunto set my hand this 19th day of November 2015.

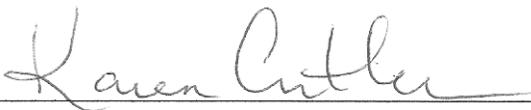
A handwritten signature in black ink that reads "Susan Palmer". The signature is written in a cursive, flowing style.

TRANSCRIBER'S CERTIFICATE

I do hereby certify that the testimony in the foregoing hearing was taken at the time and place therein stated; that the testimony of said witnesses were transcribed by me, a certified transcriber and a disinterested person, and was under my supervision thereafter transcribed into typewriting.

And I further certify that I am not of counsel or attorney for either or any of the parties to said hearing nor in any way interested in the outcome of the cause named in said caption.

IN WITNESS WHEREOF, I have hereunto set my hand this 19th day of November, 2015.



Karen Cutler
Certified Transcriber
AAERT No. CET**D-723