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Andrew McAllister
Janea Scott
David Hochschild

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 - e. Matter pending with the Department of Industrial Relations
 - f. *Energy Commission v. Electricore, Inc. and ZeroTruck* (Sacramento County Superior Court #34-2016-00204586)

Pursuant to Government Code section 11126(e), the Energy Commission may also discuss any judicial or administrative proceeding that was formally initiated after this agenda was published; or determine whether facts and circumstances exist that warrant the initiation of litigation, or that constitute a significant exposure to litigation against the Commission, which might include:

- a. Claims filed at, and rejected by, the Victim Compensation and Government Claims Board against a number of defendants including the Energy Commission relating to the gas leak at Aliso

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P R O C E E D I N G S

JANUARY 25, 2017 10:04 a.m.

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

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

CHAIRMAN WEISENMILLER: Good morning, welcome to the Business Meeting. We will -- and again we'll hold Item 2, but we're covering everything else. Let's start with the Consent Calendar.

COMMISSIONER DOUGLAS: Move the Consent Calendar.

COMMISSIONER MCALLISTER: Second.

CHAIRMAN WEISENMILLER: All those in favor? (Ayes.)

CHAIRMAN WEISENMILLER: The Consent Calendar passes 5-0.

Let's go to Item Number 3, Southern California Public Power Authority. Staff? Michael? Certainly anyone from -- yeah, why don't you come up, please.

MR. NYBERG: Good Morning Chair Weisenmiller, Commissioners. My name is Michael Nyberg and I am the Program Manager for the Emission

1 Performance Standard in the Energy Assessments
2 Division.

3 The Emission Performance Standard was
4 established under Senate Bill 1368 by Senator
5 Perata, Chapter 598 of the 2006 Statutes. The EPS
6 limits long-term investments in baseload generation
7 by the state's utilities to power plants that meet
8 an emission performance standard for carbon dioxide.
9 The standard was jointly established by the
10 California Energy Commission and the California
11 Public Utilities Commission and is set at 1,100
12 pounds per megawatt-hour.

13 On December 28th, 2016 the Southern
14 California Public Power Authority, SCPPA, submitted
15 a compliance filing requesting a determination that
16 their Power Purchase Agreement is in compliance with
17 the Greenhouse Gases Emission Performance Standard,
18 pursuant to Title 20 of the California Code of
19 Regulations, beginning with Section 2900. SCPPA is
20 a joint power agency whose membership is comprised
21 of 11 cities and one irrigation district, each of
22 which own and operate an electric utility.

23 This compliance filing is for the
24 procurement of 35 megawatts of power under a Power
25 Purchase Agreement with Ormesa, LLC to be delivered

1 from the Ormesa Geothermal Complex Energy Facility
2 for two of SCPPA's members, the Los Angeles
3 Department of Water and Power, LADWP, and the
4 Imperial Irrigation District, IID.

5 The Power Purchase Agreement, originally
6 approved on February 18th, 2016 by the SCPPA Board
7 of Directors, was executed on December 22, 2016
8 after the corresponding power sales agreements were
9 signed by LADWP and IID. LADWP will take 86
10 percent, or 30 megawatts, and IID will take the
11 remaining 14 percent, or 5 megawatts of the contract
12 total 35 megawatts. The term of the contract is for
13 25 years beginning January 1st, 2018.

14 The Ormesa Geothermal Complex Energy
15 Facility is comprised of the following seven
16 geothermal plants: Geo East Mesa 2, Geo East Mesa 3,
17 Geo East Mesa Bottoming Unit, Ormesa 1, Ormesa 1E,
18 Ormesa 1H, and Ormesa 2. It is expected that only
19 three of these seven plants will be active in the
20 provision of the 35 megawatts of capacity on the
21 delivery commencement date.

22 Staff confirmed with the Renewable Energy
23 Division that the Ormesa Geothermal Complex Energy
24 Facility is certified under the Renewable Portfolio
25 Standard as RPS-eligible. The certification

1 includes all seven of the above-mentioned geothermal
2 power plants; the facility's RPS Certification ID is
3 61431A.

4 Staff has evaluated SCPPA's compliance
5 filing and concludes that the Power Purchase
6 Agreement with Ormesa LLC is compliant with the EPS
7 pursuant to Section 2903(b) (1). Specifically, that
8 the geothermal power plants listed in the PPA are
9 determined to be compliant with the EPS as they meet
10 the criteria of renewable electricity generation
11 facilities as defined in Chapter 8.6 of Division 15
12 of the Public Resources Code.

13 Therefore, staff recommends the Energy
14 Commission find that the covered procurement
15 described in the SCPPA compliance filing complies
16 with the Energy Commission's Greenhouse Gases
17 Emission Performance Standard.

18 A representative from SCPPA is here to
19 provide a summary statement concerning the
20 compliance filing.

21 Thank you.

22 CHAIRMAN WEISENMILLER: Please introduce
23 yourself for the court reporter and go ahead.

24 MR. HASHIMI: Thank you Mr. Commissioner,
25 Commission, my name is Daniel Hashimi. I'm the

1 Senior Assistant General Counsel with the Southern
2 California Public Power Authority. I'm here to
3 present the Ormesa compliance filing for your
4 consideration and approval. A lot of the comments
5 that I was intending on making were covered by Mr.
6 Nyberg very, very well, so I'll keep it brief.

7 The Ormesa Geothermal Project was submitted
8 into the SCPPA 2014 Renewable RFP. It was one of
9 117 different projects, some in which there were 12
10 geothermal projects. The Los Angeles Department of
11 Water and Power, and Imperial Irrigation District,
12 members of SCPPA together with SCPPA identified this
13 project as a suitable project for them to make a
14 procurement to meet their RPS requirements.

15 And SCPPA together with those two members,
16 negotiated the terms of a Power Purchase Agreement
17 with Ormesa LLC, a subsidiary of Ormat Nevada. And
18 in early 2016 completed the negotiations and also
19 negotiated the terms of a Power Sales Agreement with
20 LADWP and IID to deliver the energy to them. IID
21 will be taking 5 megawatts as Mr. Nyberg indicated,
22 of the energy from SCPPA. LADWP will be taking 30
23 megawatts. The project itself is 35 megawatts net
24 of Parasitic Load, which includes station use.

25 And on February 10th, 2016 SCPPA submitted

1 a notice to the Commission and to the Master
2 Distribution List that the Commission maintains, to
3 inform them that the Authority will be considering
4 the project and a compliance filing for the project
5 during its regular Board meeting on February 18th,
6 2016.

7 On February 18th, 2016 the Authority
8 considered the project, approved the project
9 agreements, and approved the compliance filing. And
10 on December 22nd SCPPA entered into the Power
11 Purchase Agreement with Ormesa LLC for the purchase
12 of energy for 25 years to be delivered to its
13 members, mainly IID and LADWP. And within ten days,
14 in compliance with the California Code of
15 Regulations, submitted the compliance filing to the
16 Commission for your consideration and your approval.

17 And I'm pleased to submit to you to approve
18 the compliance filing to deliver clean baseload
19 renewable energy to the cities of IID and the
20 Imperial Irrigation District and I appreciate your
21 consideration.

22 And if there are any questions, I have a
23 representative here from Ormat in Nevada, and also a
24 representative from IID. If there are any questions
25 we'd be happy to answer them. Otherwise we

1 appreciate you considering and approving the
2 compliance filing.

3 CHAIRMAN WEISENMILLER: Well, thank you.
4 Thanks, sir.

5 Certainly either Ormat or IID have come a
6 long way, if you want to say anything you're welcome
7 to do that. It's up to you. Obviously we're happy
8 to see contracts between POU's and renewables and
9 certainly happy to see renewable development in
10 Imperial Valley. So I certainly keep encouraging
11 both SCPPA and particularly IID to do more contracts
12 as far as moving forward.

13 But please, introduce yourself and go ahead
14 and speak.

15 MR. VELASQUEZ: Good morning, ladies and
16 gentlemen of the Board. My name is Daniel
17 Velasquez, Imperial Irrigation District. I'm the
18 Officer of Strategic Business.

19 And Mr. Hashimi pretty much said everything
20 that needed to be said, however IID is really happy
21 to enter into this contract. Ormesa is in the IID
22 Balancing Authority area, so we are familiar. We've
23 been balancing the export of that energy for years
24 now and going through SoCal Edison, which is part of
25 the CAISO footprint.

1 And the benefits we're getting is a
2 renewable portfolio standard, reducing our
3 greenhouse emissions, and hopefully in the future we
4 can participate in other power purchase agreements
5 for green energy. For now it's just the 5
6 megawatts.

7 CHAIRMAN WEISENMILLER: Now, this figure --
8 well yesterday we had a workshop on Economics and
9 Demographics, so we were looking at unemployment
10 rates throughout the state. And unfortunately, IID
11 is sort of at the top of the unemployment rate as in
12 contrast stage of funding San Francisco, which was
13 about 2 percent. So certainly it's good to see
14 project development there, and as you said certainly
15 IID as it expands its commitment to geothermal can
16 basically get the renewable power, reduce greenhouse
17 gas emissions, and keep the jobs.

18 So that's very good, and again I encourage
19 you to keep doing more.

20 MR. HASHIMI: If I may? Sorry.

21 CHAIRMAN WEISENMILLER: Sure.

22 MR. HASHIMI: There are representatives of
23 the Los Angeles Department of Water and Power here
24 as well. They're here on an unrelated matter, but
25 if they're willing to make a comment or are

1 interested.

2 CHAIRMAN WEISENMILLER: Yeah, certainly.
3 Come on up if you have a comment, and again the same
4 invitation to Ormat.

5 MR. TING: I just want to tell the
6 Commission, and also the staff of CEC, continue
7 support of our renewable portfolio standard efforts
8 and to meet the California goals and mandates. So
9 everything that Daniel has presented, and the staff
10 has already presented is absolutely true.

11 And then we appreciate the fact that
12 rather, Mr. Weisenmiller, you appreciate the fact
13 that POU's come together and working through SCPPA
14 will continue to do so.

15 CHAIRMAN WEISENMILLER: Good, could you
16 introduce yourself for the court reporter?

17 MR. TING: Oh, I'm sorry about that.

18 CHAIRMAN WEISENMILLER: Sure.

19 MR. TING: I didn't want to take my three
20 minutes, so my name is Louis Ting. I'm with the Los
21 Angeles Department of Water and Power, I'm the
22 Director of Power Planning and Development.

23 CHAIRMAN WEISENMILLER: Okay. Thank you.

24 Okay. Any comments or questions from the
25 other Commissioners?

1 (No audible response.)

2 A motion?

3 COMMISSIONER MCALLISTER: I'll move the
4 item.

5 COMMISSIONER DOUGLAS: Second.

6 MS. VACCARO: Excuse me, before you go
7 further, I didn't -- I might have missed it if you
8 did any requests for public comment?

9 CHAIRMAN WEISENMILLER: No. Let's ask the
10 question if there are any public comments, thank
11 you.

12 Any public comments, either in the room or
13 on the line on this?

14 (No audible response.)

15 Okay, so now?

16 COMMISSIONER MCALLISTER: Again, I'll move
17 this item.

18 COMMISSIONER DOUGLAS: Second.

19 CHAIRMAN WEISENMILLER: All those in favor?

20 (Ayes.)

21 CHAIRMAN WEISENMILLER: So this item also
22 passes 5-0.

23 Thank you. Thanks for being here, and
24 thanks for coming.

25 CHAIRMAN WEISENMILLER: Let's go on to

1 Item Number 4, proposed adoption of revisions to the
2 Renewable Portfolio Standards Eligibility Guidebook.
3 Staff?

4 MS. REMY-OBAD: Good morning Commissioners,
5 Commissioner staff, stakeholders and members of the
6 public. My name is Camille Remy-Obad. And I am the
7 Supervisor for the Certification Unit of the
8 Renewable Portfolio Standard, or RPS. With me.

9 MS. CAMPAGNA: Good morning, I'm Jennifer
10 Campagna, Supervisor for the RPS Verification Unit.

11 MS. REMY-OBAD: We're also joined today by
12 Mona Badie, who is Energy Commission Staff Council,
13 and we have Renewable Energy Division Lead staff and
14 Management also available for any questions.

15 In this brief presentation, we would like
16 to provide an overview of the updates included in
17 the proposed Ninth Edition of the RPS Eligibility
18 Guidebook. As we will discuss, one of the major
19 updates is the transition to the RPS Online System .
20 An online resource developed to streamline the
21 certification and reporting requirements required by
22 California's RPS Program.

23 The Ninth Edition of the RPS Eligibility
24 Guidebook implements changes required by recent
25 legislation, and reflects resolutions adopted by the

1 Commission in 2016. Highlights of the Guidebook
2 Update include Senate Bills 350 and 1393, which
3 increase RPS procurement goals for retail sellers
4 and local publicly owned utilities, POUs, to 50
5 percent by 2030. And amending Guidebook language to
6 address the use of surplus retired Renewable Energy
7 Credits, or RECs. The update also transitions to
8 the new RPS Online System for application and
9 reporting, processing and verification. And also
10 provides minor updates and text corrections.

11 The RPS Guidebook's transition to an online
12 system was developed in coordination with
13 stakeholders through a multi-step process that
14 included multiple comment periods. The RPS Online
15 System replaces previous manual hard copy
16 application and report submittals to a web-based
17 system.

18 The system is designed to streamline the
19 RPS application and reporting processes by allowing
20 authorized users to submit and attest to all
21 applications and verification reporting requirements
22 in a secure electronic platform that meets all
23 strict California online security requirements. And
24 provides for 99 percent system reliability as a
25 certified Tier 3 data center.

1 MS. CAMPAGNA: The RPS Online System will
2 provide several benefits. It will provide an
3 overall streamlining of our business processes. Not
4 just for the external participants, but also for RPS
5 staff. Part of the streamlining was our attempt to
6 streamline processes in response to stakeholders'
7 requests. Also, we will be streamlining the ability
8 as already noted, to attest electronically, which
9 will greatly reduce time for our stakeholders. The
10 system also provides real time updates. So status
11 updates will go to our participants notifying them
12 of progress on their applications or their reports,
13 and if there are corrections needed, and will also
14 notify them of final results.

15 The online system also minimizes computer
16 or software compatibility issues. That we'd had
17 some issues in the past with compatibility with
18 certain types of software. And also this will
19 greatly reduce errors, because users will be
20 required to fill out all fields before submittal.

21 And it also will provide a centralized
22 location for documents such as applications,
23 letters, certificates and notifications.

24 Pending the adoption today, the use of the
25 RPS Online System will begin today. Staff worked

1 closely with the program participants to prepare the
2 data and merge it from the prior Legacy System into
3 the new system. Account users will be able to log
4 in today when the system goes live and start adding
5 authorized users and setting permission levels for
6 those users. And in addition, they will start using
7 the system to submit precertification or
8 certification applications for facilities seeking
9 RPS eligibility. And they will begin to use it as a
10 reporting tool for RPS verification.

11 As part of our online transition planning,
12 the Energy Commission will be hosting training
13 seminars in February on system administration and
14 certification. And we will be doing further
15 outreach on verification and compliance in the
16 spring.

17 Overall, we are implementing a host of
18 strategies to help make this a smooth transition.
19 Once the system goes live, staff will be available
20 during business hours to provide assistance to our
21 users. The contractor will be onsite for six months
22 to provide technical support. An IT will provide
23 technical support after that six month period ends.

24 There's also a comprehensive training
25 manual that is available in the online system and

1 each page will have a help link in the right-hand
2 corner that will take the user to a specific topic
3 area where help is needed.

4 So overall, we want to thank some key
5 players throughout this process. For one, we'd like
6 to thank the IT staff, especially Cheryl Kettlewell,
7 Dennis Yagen and Gil Hernandez, who have provided
8 their support and commitment for this project
9 throughout.

10 We also want to thank our contractor,
11 Trinity Technology Group, for their dedication,
12 patience and high quality work on the system.

13 Of course, the biggest thank you goes to, I
14 think the RPS staff, who have dedicated numerous
15 hours to this project over the past several years,
16 since it was just a concept four years ago and
17 brought us to where we are today. It's been a real
18 pleasure working with this entire team and the
19 teamwork has really lead to this success of this
20 project.

21 With that, we are very excited to launch
22 this new system today. And we respectfully request
23 your approval of the Ninth Edition Guidebook that
24 will launch the new RPS Online System. And we are
25 happy to answer any questions that you may have.

1 Thank you.

2 CHAIRMAN WEISENMILLER: Thank you.

3 Let's start with public comment, LADWP, Mr.
4 Ting? Hi.

5 MS. TING: Good morning again,
6 Commissioners. Chair Weisenmiller and
7 Commissioners, I'm Louis Ting with the Los Angeles
8 Department of Water and Power. I am Director of
9 Planning and Development.

10 First, I'd like to thank the Commission,
11 the leadership and the CEC staff for their continued
12 support of the California renewable energy goals and
13 compliance. I would like to give a special shout
14 out to the CEC staff for the tremendous effort to
15 bring RPS Eligibility Guidebook Ninth Edition, to
16 the Commission for approval today.

17 And LA greatly appreciate CEC staff efforts
18 on stakeholder outreach, workshops for the newly
19 developed RPS Online Reporting System, and more
20 importantly the relationship developed between the
21 staff members of CEC and LA during the process.

22 As with any newly developed IT system to
23 increase security, efficiency, standardization and
24 to improve the overall user experience, certain
25 aspects of the RPS Online Reporting System may not

1 be ready for prime time. Although workshops were
2 held in progression during the development phase,
3 and LA participated in all of hands-on sessions, we
4 issued comments regarding potential cyber security
5 issues that CEC staff responded. But may still have
6 outstanding concerns not fully addressed.

7 Understanding that CEC staff may have
8 further developed the RPS Online Reporting System to
9 address the security and visibility concerns, we
10 believe that additional workshops and user training
11 and vetting may alleviate potential reporting
12 missteps.

13 In addition, the proposed RPS Online
14 Reporting System was developed during the middle of
15 a CP 2 or Compliance Period 2 and was introduced
16 during the last year of Compliance Period 2. The
17 proposal to have all stakeholders be mandated to
18 report Compliance Period 2 using this system may be
19 premature. LA believes that with further vetting
20 with the stakeholders, and to address the security
21 concerns, a newly developed reporting system may be
22 ready for reporting year 2017 and for Compliance
23 Periods 3.

24 As L.A. continues to grow and comply with
25 the ever increasing renewable energy goals and

1 mandates, we are encouraged and continue to support
2 CEC's efforts to develop guidelines and regulations
3 that will meet the needs and benefits for all
4 stakeholders. I truly appreciate this opportunity
5 to address.

6 CHAIRMAN WEISENMILLER: Thank you.

7 Well, first is there any other comments for
8 either anyone in the room or on the line?

9 (No audible response.)

10 CHAIRMAN WEISENMILLER: Okay, so let me ask
11 the staff to respond to LADWP.

12 MS. SMITH: Courtney Smith, Deputy Director
13 of the Renewable Energy Division.

14 So Energy Commission staff recognize that
15 transition to this new online system is a large
16 administrative change for the RPS Program. And we
17 really appreciate that LADWP wishes for this to be a
18 smooth transition. As Mr. Ting noted, LADWP staff
19 has issued public comment in December, specifically
20 December 20th, outlining some of their concerns.

21 To respond to that staff sat down with
22 LADWP staff on January 12th. The results of that
23 conversation are summarized in a letter that is now
24 publicly docketed and available for the public to
25 read.

1 But if I may just summarize for folks, so
2 LADWP's concerns in their public comment in December
3 sort of fall into three categories. The first
4 category really has to do with the eligibility of
5 renewable energy resources and some of the criteria
6 and requirements that are associated with that.
7 Second, several of the comments that they make are
8 really regarding the administrative processes that
9 we have in place regarding fraud and
10 misrepresentation. And then lastly, as Mr. Ting
11 noted, they had a few concerns regarding the
12 transition to the online system.

13 We have actually moved on developing a plan
14 to, as my colleagues have alluded to, ensure that
15 this transition is as seamless as possible. So just
16 elevate what those procedures are: Number one, we
17 have the contractor who developed the system in the
18 building for the next six months should any issues
19 arise. We also have IT staff here at the Energy
20 Commission that have been trained to provide on-
21 going maintenance. As my colleagues mentioned, we
22 will be holding a training in February to ensure
23 that -- and subsequent trainings ensure that all
24 participants are comfortable in using the system.

25 But to specifically respond to Mr. Ting's

1 request to delay the system to CP 1. Currently, we
2 would like to -- we're requesting for you to approve
3 it today. Part of that is so that we can really see
4 a lot of the streamlining benefits for the second
5 compliance period, which covers years 2014 and 2016.
6 Delaying it until the third compliance period, would
7 effectively mean delaying it about a year and a
8 half, because they have to report in the summer,
9 following the end of the first year. So that would
10 summer of 2018.

11 So my, I guess my summary is that we feel
12 from a security standpoint, we have -- we followed
13 industry best practices. As Camille mentioned we
14 have this located on an incredibly secure server.
15 And lastly if -- should anything arise, should the
16 site experience malfunctions that prevent users from
17 reporting information we have a process in place
18 that allows us to be notified of any issues and
19 we'll be able to provide alternatives. So that way
20 no stakeholder is penalized in any way from this
21 transition.

22 Really, the point of the system is to bring
23 benefits, streamlined benefits to users, and not to
24 penalize anyone. I mean, so we are absolutely
25 approaching this transition with that mindset.

1 And in summary, as a result of the multi-
2 step public process that we've had, the IT security,
3 and best practices that we have followed in
4 conjunction with our IT department here, as well as
5 several strong transition plans that are in place,
6 staff is confident that we are ready to transition
7 to this new online system.

8 CHAIRMAN WEISENMILLER: Thank you.

9 I was just going to make a couple of very
10 general comments and then transition to Commissioner
11 Hochschild to really dive into the issue.

12 I was just going to say, first of all I
13 just want to thank the staff for really pushing
14 forward on this. It's been a concern I've had
15 actually back when I was involved in the Committee,
16 much less (indiscernible). Is that obviously we're
17 getting into a period where the number of renewable
18 contracts is increasing in an explosive fashion.
19 And so we really need a process enhancement to be
20 able to process these in a timely fashion.

21 Now again, I'm not addressing the specific
22 issues, but saying certainly this is a great step
23 forward. I think having said that, we've all gone
24 through the Building Code cycle of trying to make
25 sure that the software was indeed ready for prime

1 time. And I understand that's the issue today, but
2 again it's certainly very important to make the
3 transition, but to make it in a smooth fashion just
4 for staff's sake and the participants' sake.

5 You know, I remember in the really, really
6 old days when the utilities would print out their
7 files. They would send them to the Energy
8 Commission and then we'd have someone enter the data
9 back into our computer system. And it took about
10 two years to be entered, so about the time it was
11 entered, we would be getting the next batch of
12 printouts. So fortunately those days are decades
13 behind.

14 So anyway moving to the future is very
15 important here. Commissioner Hochschild?

16 COMMISSIONER HOCHSCHILD: Thank you, Mr.
17 Chairman for those comments.

18 And I also want to thank LADWP for sharing
19 your comments and for engaging Mr. Ting in a
20 constructive dialogue with the staff.

21 I would like to ask my colleagues to
22 approve this today. My instruction to the Renewable
23 Team is, every day in every way to streamline
24 anything that we can. We want our process to be
25 friction-free as the number of contracts increases.

1 And this by the way, goes beyond just the RPS, but
2 also into the New Solar Homes Partnership Program.

3 We're going to be coming back to you later
4 this spring with a more comprehensive update of our
5 streamlined activities for the whole Division, but
6 we don't want to be the point of friction in the
7 market, as clean energy continues to grow.

8 And I really want to thank staff for all of
9 the diligence and focus on this. I think it's sort
10 of like bailing out a boat. You're so busy doing
11 it, you actually need to stop bailing to take time
12 to fix the leak. But ultimately it saves energy to
13 address that and make a process that's going to work
14 faster and better for everybody, so thank you.

15 And with that I'd urge us to adopt the
16 motion. I'll move the item.

17 CHAIRMAN WEISENMILLER: Are there any other
18 questions?

19 COMMISSIONER HOCHSCHILD: No, nothing.

20 CHAIRMAN WEISENMILLER: A second?

21 COMMISSIONER DOUGLAS: Second.

22 CHAIRMAN WEISENMILLER: All those in favor?

23 (Ayes.)

24 CHAIRMAN WEISENMILLER: This is approved 5-
25 0. Thank you.

1 Okay. Let's go on to Number 5, which is
2 Renewable Portfolio Standard POU Verification
3 Results report. Staff?

4 MS. DANIELS: Hello, Commissioners. I am
5 Theresa Daniels, Verification Lead for the
6 Renewables Portfolio Standard RPS Program. With me
7 today is Emily Chisholm, the Compliance Lead for the
8 RPS Program.

9 Today, I am requesting adoption of the RPS
10 Verification Results Reports for 42 local public
11 owned electric utilities, or POUs, for Compliance
12 Period 1, which spans 2011 through 2013.

13 California's RPS is one of the most
14 ambitious renewable energy policies in the nation.
15 Legislation in 2011 mandated POUs to comply with the
16 statewide RPS Program. And as such, this is the
17 first issuance of verification results for POUs.

18 Recent legislation has increased the RPS
19 from 33 percent of retail sales by 2020 to 50
20 percent of retail sales by 2030. The RPS includes
21 two major requirements for load-serving entities.
22 Both of these requirements are measured in renewable
23 energy credits or RECs. A REC is equal to a
24 megawatt hour of generation from an eligible
25 renewable energy resource.

1 For the first requirement, entities have to
2 meet a procurement target. The procurement target
3 for Compliance Period 1 was an average of 20 percent
4 for each entity's 2011, 2012 and 2013 retail sales.

5 Second, the RPS sets requirements for the
6 type and amount of renewable energy that can be
7 procured, known as the Portfolio Balance
8 Requirement. The Portfolio Balance Requirement for
9 Compliance Period 1 was that no less than 50 percent
10 of procurement applied must be classified as
11 category one, which are bundled RECs that are either
12 generated instate or scheduled into the state. And
13 no more than 25 percent of procurement may be
14 classified as Category 3, which mostly encompasses
15 unbundled RECs.

16 AS part of its administrative
17 responsibilities, the Energy Commission verifies the
18 procurement claims made by both retail sellers and
19 POUs. The Retail Seller Verification Report for the
20 first compliance period was adopted in July 2016,
21 and issued to the California Public Utilities
22 Commission, who has regulatory authority over retail
23 sellers' compliance.

24 The reports before you today represent the
25 verification results for POUs for the first

1 compliance period. These results are not a
2 compliance determination. Should the Energy
3 Commission adopt the RPS Verification Results
4 Reports, the process for determining POU compliance
5 will begin.

6 The verification reports before you include
7 the results for 42 POUs. POUs not included are
8 Hercules Municipal Utility, which transitioned its
9 service area to PG&E in 2014; Trinity Public
10 Utilities District, which is exempt from the
11 procurement requirements; and Los Angeles Department
12 of Water and Power, which is currently in an appeal
13 hearing. Upon conclusion of the hearing, staff will
14 bring LADWP's verification results to the Commission
15 for approval as a standalone item.

16 Each RPS Verification Results Report
17 provides the amount of eligible renewable energy
18 procured by the POU along with information on any
19 claims that were determined to be ineligible.

20 The total eligible renewable energy
21 verified in these reports represents over 22,000
22 gigawatt hours of generation. The reports also
23 provide category classifications of the eligible
24 renewable energy. The POU's procurement target and
25 portfolio balance requirements. And information on

1 if the POU has applied optional compliance measures,
2 or has additional procurement above requirements.

3 During the verification process, staff
4 works closely with the POUs to resolve any issues
5 that arose and to keep them updated on verification
6 results.

7 Of the 42 POUs with an RPS Verification
8 Results Report being considered for adoption today,
9 26 POUs successfully met all of their RPS
10 requirements. Of these, 11 exceeded the 20 percent
11 procurement target with one achieving 42 percent.
12 Fifteen POUs have historic carryover procurement,
13 which is pre-2011 procurement exceeding the targets
14 for that period that can be used in meeting its RPS
15 requirements. Ten POUs have RPS eligible RECs that
16 exceeded their first compliance period procurement
17 target, which qualifies as excess procurement and
18 can be used in any future compliance period.

19 Sixteen POUs did not meet one or more of
20 their procurement requirements for Compliance Period
21 1. These 16 POUs represent 3 percent of the total
22 POU retail sales, however these 16 POUs have each
23 applied one or more of the statutorily-established
24 optional compliance measures to excuse their REC
25 deficits.

1 These POU results are a success story. The
2 overall renewable percentage for these 42 POU's was
3 19 percent for 2011 through 2013, showing that the
4 POU's are an important part of California's clean
5 energy progress.

6 As I mentioned each POU that did not meet
7 their RPS procurement requirements for the first
8 compliance period has applied one or more optional
9 compliance measures to excuse their REC deficits.
10 The three optional compliance measures listed on
11 this slide can be applied by POU's if they encounter
12 certain situations preventing them from meeting
13 their RPS procurement requirements.

14 The three optional compliance measures
15 include cost limitations, which limit what the POU
16 will pay for renewable generation to avoid
17 disproportionate rate impacts; delay of timely
18 compliance, which excuses all or a portion of the
19 POU's RPS shortfall due to the circumstances outside
20 the POU's control; portfolio balance requirement
21 reduction, which allows a POU to reduce its minimum
22 procurement requirement of Category 1 electricity
23 products if a Category 1 shortfall is due to one or
24 more circumstances outside the POU's control.

25 These optional compliance measures will be

1 evaluated by Energy Commission staff as part of the
2 compliance determination process to ensure
3 regulatory requirements are met.

4 Following potential adoption of the RPS POU
5 Verification Results Reports, Energy Commission
6 staff will notify each POU that met all RPS
7 requirements of its compliance determination. For
8 the POUs that did not meet one or more procurement
9 requirements, Energy Commission staff will begin
10 evaluating optional compliance measures. Following
11 the evaluation staff will make a recommendation to
12 the Executive Director, who will issue a compliance
13 determination for each POU.

14 If a POU is found to be out of compliance,
15 a hearing process will be held before the full
16 Commission or a Committee of Commissioners. A
17 decision to issue a Notice of Violation will be sent
18 to the Air Resources Board for enforcement
19 activities.

20 Without evidence to the contrary, Energy
21 Commission staff find that the procurement claim
22 amounts listed in the RPS Verification Results
23 Reports are eligible to count toward meeting POUs
24 RPS procurement requirements.

25 With that, I ask that the Energy Commission

1 adopt these RPS Verification Results Reports with
2 minor non-substantive changes to the reports -- for
3 example, to change it from a Lead Commissioner Draft
4 to a Final Commission Report. Thank you, and I'd be
5 happy to answer any questions.

6 CHAIRMAN WEISENMILLER: Thank you.

7 First, any public comment, either in the
8 room or on the line?

9 (No audible response.)

10 CHAIRMAN WEISENMILLER: Great. Let's
11 transition to Commissioners.

12 MS. VACCARO: Chair Weisenmiller, before
13 you go to the Committee Members, I was hoping that
14 Ms. Daniels could identify what any other changes
15 might be? She said for example --

16 CHAIRMAN WEISENMILLER: That's good --

17 MS. VACCARO: -- we did one change, but I
18 think on the record we need to be clear on any --

19 CHAIRMAN WEISENMILLER: Precisely.

20 MS. VACCARO: -- and all changes that would
21 be made.

22 CHAIRMAN WEISENMILLER: Okay, precisely.

23 Go ahead.

24 MS. DANIELS: There's actually no other
25 changes. That's all the only thing, we're just

1 going to change it like the -- to a Final Commission
2 Report.

3 CHAIRMAN WEISENMILLER: Thank you.

4 Okay. Commissioner Hochschild?

5 COMMISSIONER HOCHSCHILD: Thank you,
6 Mr. Chair.

7 Yeah. I just wanted to note we're earlier
8 this month entering the beginning of the third
9 compliance period, out of six altogether, that'll
10 get us to 50 percent renewables. And I for the most
11 part think this is a success story, if you treat all
12 of the POU's as sort of one cohort or one utility.

13 The amount of renewable energy that we're
14 short altogether is basically the equivalent of one
15 200 megawatt solar power plant, just as a way to
16 think about where we are. And actually that's I
17 think a very reasonable amount.

18 So I want to thank all the POU's who are
19 here in the room who've been working to help the
20 state meet our goals. And thank staff for their
21 diligence. And I'd ask my colleagues to approve --
22 do we need to actually move this, do we need a
23 motion? I'll move the item.

24 COMMISSIONER SCOTT: Second.

25 CHAIRMAN WEISENMILLER: All those in favor?

1 (Ayes.)

2 CHAIRMAN WEISENMILLER: This also passes 5-
3 0. Thank you.

4 Let's go on to Item 6.

5 MR. KAVALEC: Good morning, I'm Chris
6 Kavalec from the Energy Assessments Division at the
7 Energy Commission. And I'm here to propose adoption
8 of the California Energy Demand Updated Forecast,
9 covering the period 2017 to 2027, or as we refer to
10 it CEDU 2016 for short. And I will note that this
11 is an update, as opposed to the full forecast we do
12 every odd year. And such as the 2017 forecast we're
13 preparing already for later this year.

14 So I'm going to talk about the purpose of
15 the forecast, the process we went through, summarize
16 the results and talk a little bit about our work
17 going forward.

18 This update came about because the three
19 agencies: the CPUC, the ISO and the Energy
20 Commission, recognized a need for a forecast update,
21 a refresher in even numbered years. More
22 specifically, this serves as an update for the
23 California ISO's Transmission planning process,
24 which is an annual process as well as CPUC's
25 procurement process. And because of the timing it

39

1 also serves as a reference forecast for the latest
2 CPUC Efficiency Potential and Goal Studies, from
3 which we derive our additional achievable energy
4 efficiency that goes into our forecast.

5 So this is a limited update, in that we're
6 updating the economic demographic projections and
7 the historical data for electricity sales
8 consumption and peak demand, including the latest
9 numbers on photovoltaic adoptions. But we're not
10 updating any other demand related factors including,
11 for example, electric vehicles and other
12 electrification efficiency and demand response. And
13 the update is for electricity only.

14 We started this process back in September,
15 updating our historical data. We developed the
16 forecast in October and November. We vetted the
17 forecast with stakeholders through demand analysis
18 working group meetings in November, including the
19 treacherous weather normalization issue. And we
20 developed the final report and demand forms, which
21 we've posted.

22 And the resulting product gives us first an
23 updated baseline forecast for electricity sales
24 consumption and peak demand for eight planning areas
25 within the state, and 20 climate zones within those

1 planning areas. And by baseline I mean a forecast
2 that does not include additional achievable energy
3 efficiency.

4 As usual we did three demand scenarios:
5 high, mid and low. And in addition to the baseline
6 forecast, we adjusted that forecast using estimates
7 of additional achievable energy efficiency to give
8 us what we call managed forecasts for the IOUs and
9 for two of the POUs. We include, at this point, the
10 two big POUs in our AAEE Analysis. And we're
11 planning on expanding that coverage in 2017
12 forecast.

13 So we have a forecast report that's posted
14 along with demand forms, which means spreadsheets
15 with a whole bunch of numbers, more than you could
16 ever want, that describes our forecast. And there's
17 a link shown there.

18 A real quick summary of results at the
19 statewide level. There's basically two major
20 effects to discuss. These graphs, the next three
21 graphs show statewide results for electricity
22 consumption, electricity sales, and electricity non-
23 coincident peak demand at the statewide level.

24 They show the high, mid and low cases for
25 our new forecast. And most importantly they show

1 the comparison between the mid baseline case from
2 2015 and our new mid baseline case.

3 So for consumption, that's the comparison
4 of the two forecasts as shown by the red curve,
5 which is the 2015 mid baseline forecast and the dark
6 blue, which is our new mid baseline forecast.

7 First major effect, the economic and
8 demographic growth is projected to be slower in the
9 short time, which reduces consumption relative to
10 the 2015 forecast. And faster in the long term,
11 which increases the growth rate relative to the 2015
12 forecast. And by the end of the 10 years we end up
13 basically at the same point, in the mid baseline
14 case.

15 For electricity sales and for peak demand,
16 we have the additional impact of an adjustment for
17 our photovoltaic adoptions in 2015 and 2016, which
18 were higher than we projected, we had projected, in
19 the previous forecast. So rescaling that
20 photovoltaic forecast reduces electricity sales and
21 that coincident peak demand, shown here, by more
22 than consumption. So you see that affect coming
23 from the adjustment for PV and rescaling our PV
24 forecasting model.

25 In addition to our baseline forecast, we

1 produce a managed forecast by incorporating
2 additional achievable energy efficiency, defined
3 there. It's basically estimated savings, reasonably
4 likely to occur from future programs and future
5 updates to our Appliance and Building Standards. As
6 opposed to the efficiency impacts that are in the
7 baseline forecasts, which we refer to as committed
8 savings and reflect programs and standards that have
9 been approved, finalized and/or implemented already.

10 We developed the AAEE numbers for -- as I
11 said -- for the IOUs and to POU's, LADWP and SMUD.
12 For IOUs, we define our managed forecast in two
13 ways. The mid baseline case, which I showed you
14 before at the statewide level, combined with mid-
15 AAEE estimates, for system planning. And to be more
16 conservative for more local analysis we combined the
17 mid baseline with a lower amount of AAEE. And as I
18 mentioned before efficiency including AAEE is
19 unchanged from the 2015 forecast.

20 These two graphs show the impact of
21 accounting for additional achievable energy
22 efficiency for electricity sales and non-coincident
23 peak demand for the three IOUs combined. Applying
24 the mid AAEE cast to the mid baseline case reduces
25 electricity sales by around 8.5 percent by the end

1 of the forecast period, 2027. And reduce as non-
2 coincident peak demand by a little bit more 9.5
3 percent by 2027.

4 This shows the LADWP and SMUD combined
5 results. We only have one AAEE case to apply to our
6 mid baseline case, unlike the IOUs where we had two
7 managed forecasts.

8 Similar reductions in sales in peak demand,
9 sales down by around 8.5 percent, peak 9 percent by
10 the end of the forecast period.

11 And we did an additional analysis for this
12 forecast update, which we refer to as a Peak Shift
13 Analysis. And peak shift basically means demand
14 modifiers, such as photovoltaics, may affect hourly
15 loads that are served by the utilities, to the
16 extent that this LSE-served load may shift to a
17 later hour in the day. In other words, you could
18 have so much PV at the conventional peak hours, say
19 3:00 to 4:00 o'clock, or 4:00 to 5:00 o'clock, that
20 you significantly reduce the peak served by
21 utilities.

22 Then two hours later or so, for example,
23 you have a huge drop off in PV and the actual amount
24 of load that has to be served by utilities in that
25 hour goes up. So that's what we refer to as the

1 peak shift.

2 Other factors, including PV, include
3 additional achievable energy efficiency, electric
4 vehicles and time of use pricing. For this
5 preliminary peak shift analysis we only included PV
6 and AAEE. We'll be covering electric vehicles and
7 time of use pricing in the 2017 forecast.

8 So to do this Peak Shift Analysis we
9 developed an hourly load forecasting model, using
10 regression analysis, based on temperatures and
11 calendar effects like weekday versus weekend or
12 holiday. Then we developed a set of weather
13 normalized hourly temperatures going out ten years,
14 when we applied the model.

15 That gave us a sort of reference set of
16 hourly loads for each IOU planning area. Then we
17 adjusted those hourly loads for our estimates of
18 hourly generation of photovoltaics and hourly
19 impacts of additional achievable energy efficiency
20 and calculated the system peak.

21 We compare that peak, which occurred at a
22 later hour according to our modeling, with our
23 traditional managed peak that we produce on an
24 annual level from our forecast update. The
25 difference between those two gives you the impact of

1 the peak shift. The increase in peak, in other
2 words, that occurs because the peak is shifting to a
3 later hour.

4 Here's the impact for the combined IOUs and
5 you'll see that it's not trivial. By 2027, we have
6 an increase in peak served by the three IOUs of
7 around 3,500 megawatts by 2027. And so we're
8 basically going from a downward sloping declining
9 projection for annual peak demand to one that is
10 flat or slightly upward sloping, because of the peak
11 shift.

12 And because this is a preliminary analysis,
13 we were cautious in how this should be used and this
14 is the wording that's in our forecast report,
15 wording agreed to with ISO. And we're saying
16 basically that this peak shift analysis should be
17 used, "...to review previously-approved projects or
18 procurement of existing resource adequacy
19 resources," but should not be used in the
20 identification of new needs for transmission
21 projects.

22 Okay. A little about our upcoming work for
23 the 2017 IEPR Forecast, which is a full forecast.
24 We're continuing to work on this hourly load model,
25 developing a more complete comprehensive model to

1 look at things like the peak shift and other
2 important demand modifiers, like time of use
3 pricing.

4 And we'll be incorporating along with time
5 of use pricing, electric vehicles, additional
6 achievable energy efficiency and, of course,
7 photovoltaics. W

8 e will have new additional achievable
9 energy efficiency estimates from ongoing potential
10 studies, both for the IOUs and the POUs.

11 Of course, we're updating the committed
12 efficiency that's in the forecast, because we've had
13 two sets of standards updates approved recently: the
14 2016 Building Standards and the 2016 Appliance
15 Standards updates.

16 And SB 350 and AB 802 impacts, that
17 presents a challenge, because we're in the middle of
18 the process and we haven't yet developed the final
19 targets. And after those targets, of course, we
20 would have to wait for utilities and others to
21 provide specific plans.

22 So the way that we're planning to handle SB
23 350 and AB 802 is through developing different
24 scenarios through the IOU and POU potential study
25 work. And through discussion with stakeholders and

1 the Commissioners, we'll decide on which of those
2 scenarios would be most appropriate to go into the
3 baseline and managed forecast for 2107.

4 And we're continuing, since PV has become
5 so important, we're continuing to attempt to improve
6 our modeling for PV. And this is not to mention all
7 the other updates we do to our models between full
8 IEPR forecasts.

9 So with that, I will ask the Commissioners
10 for any comments or questions.

11 CHAIRMAN WEISENMILLER: Thanks, Chris.

12 Let's start with are there any public
13 comments, Catherine?

14 MS. HACKNEY: Good morning Chair
15 Weisenmiller, Commissioners, Catherine Hackney,
16 Southern California Edison.

17 We obviously are here in support of the
18 update before you today. But more importantly, we
19 wanted to thank you and Chris and his team for the
20 ongoing efforts to continue to refine and enhance
21 the forecast.

22 As was mentioned earlier, it truly is the
23 foundation for billions of dollars of procurement
24 and infrastructure investment. And these
25 refinements reflected in this update, including the

1 peak shift, are really critical to inform those
2 decisions.

3 We've made really significant progress,
4 Chair, thanks to your admonitions over the last
5 several years to narrow the gap between the Utility
6 Forecast and the Commission's, and we very much
7 appreciate that.

8 We still have more discussions ahead on
9 that treacherous weather normalization to deal with.
10 Those instances where the highest demand doesn't
11 necessarily coincide with the highest temperature.
12 And also to kind of look at, if we're able to
13 capture impacts of climate change within a 10 year
14 forward look, perhaps we should rethink our 30 year
15 look back, in order to capture that timing and
16 magnitude of those changes.

17 The other kind of interesting thing is yeah
18 PV was a big deal to kind of get our arms around,
19 but EV may be the next big thing to get our arms
20 around. I thought it was so interesting in Monday's
21 joint agency workshop on double down on EE. When
22 transportation electrification was mentioned a clear
23 distinction was drawn between fuel switching and
24 fuel substitution.

25 So with respect to EVs, when does fuel

1 switching become fuel substitution when you're not
2 relying on gas, right? Okay, well that's good, but
3 you can approach that a lot of different ways. Do
4 you look at the overall utility portfolio, what
5 percent of the RPS, or do you look at a more
6 granular basis and say, okay so if the EV is
7 charging when we have an overabundance of PV, that's
8 a good thing, right? And maybe that's substitution
9 and not switching, right? Okay. That's a good
10 thing.

11 So obviously, in our view, the forecast not
12 only provides kind of big picture information, in
13 terms of how do we invest procurement and
14 infrastructure dollars, but it provides a very
15 unique lens into looking at a more granular level.
16 And how we capture synergies among PV, EE, EV and
17 then storage, right? All of these things are moving
18 in a very way.

19 And really I think it all begins here, at
20 the Energy Commission, because you have the ability
21 to look across all the technologies, all the various
22 sectors, and say how do we optimize investments in
23 each one of these resources, so we really can
24 achieve our overarching carbon goals?

25 So thank you for that. Thanks for the on-

1 going collaboration and we look forward to seeing
2 you soon.

3 CHAIRMAN WEISENMILLER: Great, thank you.
4 Thanks for being here and certainly thanks for
5 Edison's help in working on this with us. It's not
6 easy, but as you said, it's really critical to get
7 this right and really think through the longer-term
8 trends. I mean, that's why Commissioner McAllister
9 knows we've been struggling with the data questions,
10 rethinking that. Certainly struggling as we're
11 going through the IEPR.

12 And a big question, you know, as we're
13 looking through those sort of issues is how
14 electrification transportation is counted is going
15 to make a big difference on stuff.

16 So yeah, a lot to do this year in this IEPR
17 and thanks for your help.

18 MR. KAVALEC: If I could just add,
19 Chairman, we're planning on having a workshop in
20 February to discuss our inputs and assumptions for
21 the 2017 Forecast as well as a Demand Analysis
22 Working Group meeting in early March for the same
23 purpose.

24 CHAIRMAN WEISENMILLER: Great.

25 (Brief colloquy aside.)

1 Sure, go ahead, David. Go ahead both of
2 you.

3 COMMISSIONER HOCHSCHILD: Well, first of
4 all I wanted to thank you, Chris, for that
5 presentation.

6 And, Catherine, I concur with your remarks
7 about EVs. In fact I've said before, I think
8 actually the most important thing we can do -- one
9 of the most important things to help with renewables
10 -- is actually accelerate our deployment of EVs. It
11 really does become an instrument to help integrate.
12 What we really want is workplace charging to soak up
13 some of the surplus energy generation during the
14 peak hours of the day.

15 I wanted to thank my colleague today,
16 Commissioner Scott, for her perseverance on this
17 issue. And I'm excited for what's to come.

18 I had a question, which may be for the
19 Chair as much as Chris, which is you mentioned in
20 your presentation that the information should not be
21 regarded as sufficient enough for the basis to make
22 decisions around transmission. I mean, what is the
23 threshold that's needed for transmission decisions,
24 I guess?

25 CHAIRMAN WEISENMILLER: Well, again I think

1 the distinction we're making -- so Commissioner
2 McAllister and I told everyone this year,
3 forecasting, we're looking at long-term, we weren't
4 going to update, right? And we weren't even quite
5 finished with that speech when the ISO and the
6 utilities banged on door and said, "Well, wait a
7 minute. We need you to do something this year,
8 however " -- I'm going to say kludgy in nature it
9 was going to be -- "to try to reflect the
10 particularly the impacts of PV."

11 And at the same time as we've had this
12 long-standing issue on weather normalization that we
13 had to deal with.

14 So what we've crafted is something that
15 says look, there are some projects which have
16 started. They're somewhere in the middle of the PUC
17 review process or ISO review process. This
18 adjustment will take that into account for those.
19 But for new transmission, let see what we can pump
20 out this year and base it on that.

21 So really we're trying to do a workaround
22 to affect projects where this impact could be
23 important this year. Is there -- just looking at
24 where they are in the regulatory -- as you know,
25 transmission takes forever, roughly eight years. So

1 as you're trying to keep some momentum going on with
2 things, realizing the world's changing how do you --
3 what brackets can you put on when you say, "Enough's
4 enough, let's keep marching."

5 So again that's -- Kourtney's probably
6 looking at me -- and that's not the most precise
7 description of what's going on. But certainly all
8 this stuff is worked out in gory detail between the
9 ISO, PUC and the Energy Commission in the JASC
10 context.

11 MR. KAVALEC: And from a modeling
12 perspective I'll just say what we've put together is
13 a quick and dirty analysis, if you can call two
14 months of work quick and dirty. And what we're
15 working on now is a much more robust model that we
16 have time to test and have more confidence in when
17 we do analyses like this.

18 CHAIRMAN WEISENMILLER: Yeah, I mean Chris
19 had mentioned this hourly peak model, which again is
20 really going to be critical here for this particular
21 analysis. But again that's been more the -- that's
22 really a longer-term activity. And at this point,
23 certainly not quite ready for unveiling, but will be
24 soon, all right?

25 MR. KAVALEC: Yeah, and that model will

1 evolve as we hopefully continue to get more and more
2 data. So what we start off with a more aggregate
3 sort of hourly load forecasting model. And then
4 once data becomes available, we make it more refined
5 and look at individual sectors and more disaggregate
6 geography and so on.

7 COMMISSIONER MCALLISTER: Yeah, so just to
8 build on that. I mean even an hourly -- when you're
9 talking actual peak movement here and there -- we've
10 seen in the conversations about the forecast going
11 forward that at that peak moment, maybe hourly isn't
12 even disaggregated or temporally defined enough.
13 Because when you sort of, "Oh, well that goes from
14 7:29 to 7:31, well now it's in the next hour," and
15 we need sort of a more up-close view of even that in
16 the moments that matter.

17 So yeah, I mean all this is related.

18 I guess I wanted to just point out long-
19 term, 2019 is really kind of where our rubber truly
20 will be on the road, and we'll need to move forward
21 with a SB 350, sort of updated methodology, more
22 granular, more sector-specific.

23 And my hope is that we'll be able to move
24 away from the low AAEE at the local level and get to
25 something that will be more mid case, or a much

1 narrower band of uncertainty at the local level, as
2 we get more and more data in.

3 So I think that's why we're having this
4 sort of sea change a little bit in how we collect
5 data and what we do with it. And I think that
6 really enables better analysis and better policy.
7 So the methodology is really important to get right.
8 And as Catherine said, and others, this really is
9 the bedrock, so we've got to get it right.

10 And I would throw in, in addition to just
11 being able to sharpen our pencils with that
12 information, I wanted to just highlight the
13 problematic around fuel switching and fuel
14 substitution. I think it is pretty difficult, I
15 mean get the accounting right, so we're not double
16 counting, but that we are also counting everything
17 that we have to count. This is really important.
18 So kilowatt hours and BTUs, we have to distinguish
19 as we get more in the natural gas and transportation
20 fuels and electricity shifting roles.

21 And then finally, I would throw in demand
22 response as well. Energy efficiency, in particular,
23 probably is looking more like demand/response. But
24 storage is part of that and EVs are part that. And
25 we have a lot that we can do. Power electronics are

1 really kind of the new frontier. How are we going
2 to use them cost effectively and effectively? To
3 use the Grid itself, and demand as a resource, as
4 well as supply, and really balance all of these
5 things as an orchestra that sounds good.

6 So again, our analytical skills need to be
7 robust to capture all that. I am confident, very
8 confident, that we can do that. But we just need to
9 keep the peddle to the metal. And I'm looking
10 forward to working with Chris and the team. I think
11 you guys do a great job and we're fortunate to have
12 you here. So thanks for that.

13 I will move this item.

14 COMMISSIONER SCOTT: Second.

15 CHAIRMAN WEISENMILLER: All those in favor?

16 (Ayes.)

17 CHAIRMAN WEISENMILLER: So this passes 5-0.

18 Thanks, Chris.

19 Let's go on to Item 7, Bruce Wilcox, staff?

20 MR. OWNBY: Good morning Commissioners, I'm

21 Adrian Ownby, a Commission Agreement Manager with
22 the Building Standards Office in the Efficiency
23 Division.

24 I'm here to request approval of an
25 amendment of our existing residential technical

1 support contract with Bruce Wilcox. The amendment
2 will add \$250,000 of fiscal year 2016-17 funds to
3 the contract.

4 These funds are intended to support
5 existing-building related Standards development, and
6 the Wilcox contract scope of work currently includes
7 tasks relevant to those purposes. The amendment
8 also includes language to assure the spending of
9 these funds can be tracked to those purposes.

10 And I'll simply conclude there and welcome
11 any questions that you might have.

12 CHAIRMAN WEISENMILLER: Thank you.

13 Any public comment either in the room or on
14 the line?

15 (No audible response.)

16 Okay, Commissioners?

17 COMMISSIONER MCALLISTER: Yeah, as the Lead
18 on Efficiency, I've looked at this and know that
19 it's a good thing. We really depend on these
20 contract dollars to keep all the various balls
21 flowing forward, and staff is making a good
22 recommendation here, so I'm in support.

23 COMMISSIONER DOUGLAS: Second.

24 COMMISSIONER MCALLISTER: Okay. I'll
25 consider and have moved Item 7.

1 COMMISSIONER DOUGLAS: Oh, sorry.

2 COMMISSIONER MCALLISTER: No, that's okay.

3 CHAIRMAN WEISENMILLER: And then you were
4 going to second it?

5 COMMISSIONER DOUGLAS: I second it, yes.

6 CHAIRMAN WEISENMILLER: Okay. So all those
7 in favor?

8 (Ayes.)

9 CHAIRMAN WEISENMILLER: This passes 5-0.
10 Let's go on to Item 8, Improving
11 Performance And Cost Effectiveness Of Small Hydro,
12 Geothermal And Wind Energy Technologies. Staff?

13 MS. PALMA-ROJAS: Good morning Chair and
14 Commissioners, My name is Silvia Palma from the
15 Energy Research and Development Division. I'm here
16 to request your approval of two grant agreements
17 recommended for funding under Grant Funding
18 Opportunity GFO-16-301.

19 The purpose of this solicitation was to
20 fund applied research and development projects that
21 develop technologies, tools, and strategies to
22 enable higher penetrations of renewable energy. And
23 that reduce technological and economic barriers to
24 small hydropower, geothermal, and wind powered
25 generation.

1 The agreements I am presenting today are
2 recommended for funding under the in-conduit
3 hydropower group of that solicitation. This group
4 was focused on developing and validating
5 technologies, tools that expand the use of in-
6 conduit hydropower, leading to increased installed
7 capacity and improved understanding of its benefits
8 to the Grid.

9 The first project is with San Gabriel
10 Valley Water Company. The demonstration project
11 will replace an existing pressure-reducing valve at
12 water storage and pumping facility in the City of La
13 Puente in Southern California Edison's service
14 territory.

15 The key objective of this project is to
16 develop a water-to-wire equipment package that will
17 decrease the upfront implementation costs for the
18 sub-100 kW hydropower market by up to 20 percent.

19 To attain the goal, the in-conduit hydro
20 package will be designed to ensure standard
21 compliancy and certification in the design,
22 manufacturing, and quality control. And develop
23 standardized control programs that maximize the
24 "plug and play" approach for cost effectiveness.
25 The methodology, tools, and technology will be

1 validated to ensure the contribution of this project
2 to the expansion of small in-conduit hydropower in
3 California.

4 The second recommended project is with
5 Stantec Consulting firm -- Consulting Services,
6 sorry.

7 For the record, I would like to bring to
8 your attention to our correction that needs to be
9 made in the amount of the grant that appears in the
10 CEC 270 Grant Request Form. The amount should be
11 read 100,000 [sic] not 399,999. The grant amount in
12 the Business Meeting agenda in the proposed
13 resolution correctly states the 400,000 amount.

14 The goals of this Agreement are to develop
15 first, a comprehensive assessment of in-conduit
16 hydropower generation potential. Second, a
17 guidebook that provides the best practices on the
18 critical aspects of an in-conduit hydropower
19 project, including new technology evaluation
20 protocols and procedures. And the third one, a
21 business case assessment tool that assists utilities
22 in assessing the feasibility and cost-benefit
23 analysis of in-conduit hydropower generation
24 projects.

25 The business tool includes, for example, a

1 decision matrix on site selection, a guidance on
2 permitting and regulation, a life cycle cost, life
3 cycle assessment for GHG emissions, case study
4 examples, and a list of best practices.

5 The benefits of this Agreement are to
6 provide guidance to stakeholders on the feasibility
7 and critical aspects of an in-conduit hydropower
8 generation project. Please note that the Notice of
9 Proposed Award, NOPA, for GFO-16-301 listed a
10 proposed award to Applicant MWH Americas. And MWH
11 is merging with another corporation, Stantec
12 Consulting Services. And as a part of the merger,
13 MWH will be dissolved. The staff and work remain
14 identical. Therefore, this proposed award is to
15 recipient Stantec Consultant Services.

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

19 COMMISSIONER DOUGLAS: Thank you.

20 Any questions Commissioners or comments?

21 (No audible response.)

22 COMMISSIONER DOUGLAS: Is there any public
23 comment on this item?

24 (No audible response.)

25 COMMISSIONER DOUGLAS: I don't see any

1 cards. All right, so do we have a motion for Item
2 8?

3 COMMISSIONER SCOTT: Move approval of Item
4 8.

5 COMMISSIONER MCALLISTER: I'll second.

6 COMMISSIONER DOUGLAS: All in favor?

7 (Ayes.)

8 COMMISSIONER DOUGLAS: The item is approved
9 4-0 with Chair Weisenmiller temporarily out of the
10 room.

11 So let's go on to Item 9.

12 MR. DOLL: Good morning, Commissioners. My
13 name is Jeff Doll with the Energy Efficiency
14 Research Office in the Research Division. I am
15 presenting five projects today that resulted from
16 Phase 1 of our recent Natural Gas solicitation. It
17 should be noted that these projects are located in
18 Los Angeles Basin to assist in the Aliso Canyon
19 footprint

20 The first three of these projects are with
21 Gas Technology Institute. The first one, Item 9a,
22 is gas heat pump for integrated hot water and air
23 conditioning in restaurants. Presently the
24 equipment used by restaurants are separate
25 components for domestic hot water and air

1 conditioning.

2 This technology that GTI is presenting is
3 an integrated system for hot water and supplemental
4 air conditioning that could reduce natural gas use
5 for water heating and deliver free cooling to offset
6 air conditioning needs in restaurants. The Gas Heat
7 Pump is a new technology for light commercial
8 applications and it shows strong promise in
9 commercial hot water intensive facilities such as
10 restaurants, where the combined commercial hot water
11 and air conditioning functionality may be
12 particularly advantageous

13 GTI will demonstrating an advanced gas
14 fired heat pump for commercial hot water and space
15 cooling. The technology is going to be installed at
16 two Slater's restaurants in the LA Basin: the first
17 on in Pasadena, and the second one in Anaheim.

18 GTI estimates that natural gas savings of
19 about 40 percent and an additional -- over existing
20 systems an additional 20 percent of electricity
21 savings over existing air conditioning usage in
22 restaurants.

23 They also estimate a potential emissions
24 savings of about 41,000 lbs/yr in NOx and 80,000 MT
25 of CO2e/yr. GTI anticipates an equipment

1 installation of summer 2017.

2 The next project from GTI is 9b, advanced
3 high-efficiency, low HVAC systems with a view
4 towards Zero Net Energy homes in 2020. The GTI is
5 asking the question that -- the question remains how
6 does the community take advantage of improving
7 building thermal performance when it comes to bottom
8 line energy use?

9 To address this question, GTI will couple
10 home performance improvements such as envelope
11 sealing and improved insulation, with advanced low-
12 capacity heating and cooling systems. Or these are
13 HVAC systems without about 15,000 BTU/hr energy use
14 to capture their energy saving opportunities at a
15 systems level.

16 GTI is estimating an annual cost savings of
17 about \$300 per home with a reduction in natural gas
18 use for a single-family home of about 100
19 therms/year and electricity savings of about 1,100
20 kWh/yr.

21 GTI anticipates equipment installation for
22 this project also as being in the summer of this
23 year.

24 The third project from GTI, Item 9c, is a
25 residential heat pump water heater. Over 1.7

1 billion therms of natural gas are consumed each year
2 for residential water heating in California IOU
3 territories. The majority of this consumption
4 occurs in the 95 percent of homes with minimum
5 efficiency storage water heaters. The advancement
6 that GTI is presenting here is a high-efficiency
7 water heating technology, because the technology in
8 this area has stalled.

9 The project will demonstrating a small,
10 gas-fired, single-effect, absorption heat pump with
11 a hot water storage tank. And GTI will be
12 installing in five homes in the Los Angeles Basin
13 with advanced commercialization of technology
14 through extended-life lab testing, modeling tools,
15 codes and standards analysis, and defining market
16 barriers and stakeholder outreach.

17 GTI estimates a savings of 50 percent
18 therms demonstrated over existing systems. For a
19 high usage home of about 84 gal/day they anticipate
20 130 therms/year in savings and an emissions savings
21 of about 1,500 lbs CO₂e/yr. Again, GTI estimates an
22 installation of about summer of this year.

23 The next project is with Advanced Microgrid
24 Solutions. They are demonstrating advanced HVAC
25 technology for reducing natural gas in hospitals.

1 Hospitals in California rely on legacy mechanical
2 ventilation methodologies requiring air changes per
3 hour, that result in energy inefficiency from over-
4 ventilation.

5 AMS is proposing adopting modern, outcome-
6 based ventilation practices and air quality
7 standards, that would create an opportunity for
8 electricity and natural gas savings. AMS will
9 demonstrate an efficient, advanced air-distribution
10 design approach that will reduce natural gas usage
11 through the real time application of indoor air-
12 quality sensor technologies, advanced fault
13 detection, and diagnostic software and monitor-based
14 commissioning.

15 The approach will improve the operational
16 and energy efficiency of air handling units in HVAC
17 systems in hospital. However, the technology can be
18 applied to all commercial buildings.

19 The results of AMS's research will be
20 published in industry publications accessible to
21 national and state code-writing bodies. And will be
22 used by OSHPD in an analysis needed to support
23 adoption of ventilation standards for California
24 hospitals. AMS's research could inform and support
25 revision of state building codes by providing

1 evidence needed for written analysis required by
2 state statute to justify the revisions.

3 AMS is estimating a 40 percent natural gas
4 savings over these existing systems and a 30 percent
5 electricity savings with a resulting emissions
6 savings of about 2,000 MT CO₂e/yr. AMS is
7 estimating an equipment installation of summer of
8 next year.

9 Finally this project with Energx Controls
10 is a comprehensive high-efficiency solution for
11 water heating in multifamily buildings.

12 The multifamily market has been slow in
13 adopting emerging energy efficiency technologies due
14 to lack of technologies in the marketplace and a
15 lack of service providers. Common central water
16 heating systems in multifamily apartments use
17 approximately 200 to 250 therms/apartment/year.

18 Market barriers for these systems include a
19 lack of high-quality field performance data, small
20 trained installer base, under-developed supply chain
21 and uncertainties of system performance.

22 The proposed project will demonstrate the
23 innovative integration of a high efficiency natural
24 gas engine heat pump with a high efficiency solar
25 thermal evacuated tube collector. Additionally,

1 Energx will demonstrate a hot-water controller to
2 assist in the reduction of line losses.

3 Energx will complete technology performance
4 and economic evaluations of the integrated system as
5 well as an analysis of each of the separate systems.
6 AMS [sic: Energx] will address barriers to
7 widespread adoption of both the technologies.

8 AMS [sic] is projecting a saving estimate
9 of 75 percent in natural gas over existing natural
10 gas systems. And an emissions savings of 50 percent
11 in the within South Coast AQMD. They anticipate an
12 equipment installation at the end of this year.

13 This concludes my presentation. I request
14 your approval of these projects. If you have any
15 questions I'm available to answer them. Thank you.

16 CHAIRMAN WEISENMILLER: Thank you.

17 Let's first start with public comment in
18 the room or on the phone, and I think we have a
19 commentator on 9d.

20 MS. SEIDENMAN: Thank you Chairman
21 Weisenmiller and Commissioners, my name is Pam
22 Seidenman and I am the Public Partnerships Director
23 at Advanced Microgrid Solutions.

24 On behalf of Advanced Microgrid Solutions,
25 we would like to thank all of you at the California

1 Energy Commission for making an important investment
2 today to demonstrate a highly efficient advanced air
3 distribution design that would substantially reduce
4 natural gas usage at Kaiser Permanente's large South
5 Bay Medical Center, a medical center and general
6 hospital in Harbor City, California.

7 Hospitals are among the most energy
8 intensive facilities in the nation. And especially
9 large consumers of natural gas here in the
10 California. Reducing natural gas and electricity
11 consumption in a hospital sector offers one of the
12 largest opportunities to achieve the Energy
13 Commission's annual target for statewide energy
14 efficiency savings, more so than any other building
15 sector.

16 The Advanced HVAC Technology Demonstration
17 Project integrated approach to reduce natural gas
18 use in high-consuming commercial buildings will
19 demonstrate efficient and optimal energy management.
20 So an advanced integrated technology platform that
21 offers benefits for both new construction and for
22 existing buildings to protect indoor air quality,
23 maintain occupant comfort, and achieve substantial
24 reductions in natural gas consumption.

25 The project will utilize advanced sensor

1 and fault detection technology to monitor indoor air
2 quality, in conjunction with outcomes-based
3 ventilation practices to enable hospitals to meet
4 stringent air quality and safety standards while
5 reducing unnecessary heating and cooling.

6 This revolutionary solution will result in
7 a reduction of natural gas consumption by 30 to 50
8 percent, electricity consumption by 30 percent and
9 carbon emissions by 33 percent.

10 Again, we want to thank the California
11 Energy Commission, and especially to recognize the
12 hard work and accomplishment of Energy Commission
13 staff for making this and other PIER projects
14 possible. We're honored to partner with the Energy
15 Commission to demonstrate substantial and replicable
16 reductions in natural gas consumption, electricity
17 usage and greenhouse gas emissions. Thank you.

18 CHAIRMAN WEISENMILLER: Thank you.

19 Let's switch over to Commissioner
20 conversation. So obviously, Aliso Canyon, the
21 challenge there gave us an opportunity to try to
22 come up with some innovative solutions. And I
23 appreciate the staff moving quickly to pull together
24 these options. You know, and I think it's an
25 interesting group of projects.

1 I mean, certainly looking at the hospital
2 project with Advanced Microgrid Solutions, if you
3 look roughly around 2000 hospitals and commercial
4 buildings had roughly the same energy use. So
5 energy intensity is probably a better way of
6 characterizing it. The hospitals are exempted from
7 our Title 24, so if you look now hospitals are still
8 roughly the 2000 numbers of our commercial buildings
9 are much, much lower.

10 A lot of that is ventilations, so this
11 could be a really groundbreaking project to help us
12 there. But again, I want to congratulate everyone
13 on their creativity.

14 I should note that on Aliso Canyon we have
15 a cold spell in Southern California this week. It's
16 actually cold throughout the Southwest and I think
17 it's going to continue to be cold for a couple of
18 more days. SoCalGas started withdrawing gas from
19 the field on Monday. I believe it's withdrawing it
20 today. I wouldn't be surprised if that doesn't
21 continue for a couple more days, but again I'm
22 throwing it in to emphasize certainly we will
23 continue to try to figure out looking for more
24 options in the PIER space to come up with creative
25 solutions here.

1 COMMISSIONER MCALLISTER: Yeah, I want to
2 congratulate the EPIC staff and the Chair on this
3 PIER, I guess we're still talking about, natural
4 gas. But it's a great group of projects. I
5 definitely agree with all the opportunity in the
6 hospitals. And in fact, the Building Standards
7 staff together with OSHPD and other stakeholders in
8 the hospital arena, we're having conversations about
9 how we might work together to look at applying some
10 standards or developing some practices alongside our
11 standards for the hospitals.

12 So I think that's overdue and could be very
13 helpful. And Diana Dooley's been incredibly helpful
14 there to get that conversation rolling.

15 And then just very quickly, the other
16 projects here are great too. I think I'm really
17 happy to see this integration approach, multiple
18 technologies. And these are relatively complex
19 systems, you know, there's a lot of talk about
20 electrification. And that's, I think, a very
21 important conversation. But also we have to figure
22 out ways to save natural gas, which is the kind of
23 default traditional fuel in many of these
24 applications.

25 I will be interested in what the outcomes

1 of these pilots are just in terms of costs. You
2 know, the relative absorption chillers, I think the
3 air absorption technology is great. Technically
4 it's very interesting, but can be complex and can be
5 pretty pricey. And so when you combine that with
6 other technologies, I'm interested to see how they
7 get the cost down. Looking at market potential, so
8 I'll be really looking at these projects for that
9 kind of learning.

10 We need all of the help we can get to get
11 to our doubling goal, and I think this is a good set
12 of projects to move that discussion forward. And
13 then I'm especially happy to see that, pushing into
14 the residential space. So thanks for all the hard
15 work putting this together. It looks like a really
16 good package.

17 All right, so if no other comments I'll
18 move this item.

19 COMMISSIONER SCOTT: Second.

20 CHAIRMAN WEISENMILLER: All those in favor?

21 (Ayes.)

22 CHAIRMAN WEISENMILLER: So this passed 5-0.

23 As per the Chief Counsel for the last item,
24 I had stepped out. Obviously, I was familiar with
25 it and there was no public comment. So if

1 (indiscernible) add in, but otherwise 4-0, okay.

2 MS. VACCARO: (Indiscernible)

3 CHAIRMAN WEISENMILLER: Okay, so let's go
4 on to Item 10, a Discussion of Energy Commission
5 Progress Re Implementation of the Clean Energy and
6 Pollution Reduction Act of 2015, Senate Bill 350.
7 Michael?

8 MR. SOKOL: Good morning, Chair and
9 Commissioners. I'm Michael Sokol, and I'm here
10 today to provide an update on the Energy
11 Commission's implementation of Senate Bill 350, the
12 Clean Energy and Pollution Reduction Act of 2015.
13 I'll provide a high-level overview on some of the
14 major activities in support of SB 350 and Assembly
15 Bill 802, the Building Energy Use Benchmarking and
16 Disclosure Program.

17 Then Tim Olson, from our Fuels and
18 Transportation Division, will dive in to more
19 specific details about the Energy Commission's
20 activities that support widespread transportation
21 electrification, as called for in SB 350.

22 As we enter a new year, and changes are
23 taking place at various levels of government,
24 there's a new uncertainty about the future of
25 climate change mitigation and clean energy programs

1 across the country. However, this uncertainty puts
2 more of a spotlight on the important work that
3 California is undertaking to protect the future of
4 our planet, and has led to a renewed sense of
5 importance and urgency in ramping up our clean
6 energy goals. We should all be proud to live in
7 this great state that's willing to take on such a
8 huge leadership role in this important space, with
9 SB 350 being the torch that lights the way for the
10 next phase of the energy transition.

11 As we heard at the December meeting, the
12 Energy Commission has made some significant progress
13 in support of SB 350 implementation, highlighted by
14 adoption of the Existing Building Energy Efficiency
15 Action Plan Update and the Low-Income Barriers
16 Study. However, the adoption of these documents
17 only represents a step forward, and we still have a
18 long way to go to reach our 2030 goals.

19 To continue this march towards a cleaner
20 energy future, the Energy Commission needs to hit
21 the ground running to start the new year, and staff
22 has already been busy on a number of fronts.

23 Internal conversations are ongoing to firm
24 up the details for implementation of the
25 recommendations included in the Barriers Study to

1 increase low-income customers' access to clean
2 energy technologies and the associated benefits.

3 In support of the energy efficiency
4 doubling target setting effort, conversations have
5 been taking place with publicly-owned utilities on
6 their expected contributions towards meeting these
7 targets. And staff also recently published a paper
8 that outlines the proposed framework we'll be using
9 to set these targets by November of this year. And
10 held a workshop to discuss this framework with
11 stakeholders and the public.

12 In support of integrated resource planning,
13 staff has been working to finalize a discussion
14 paper that will inform the development of guidelines
15 for publicly-owned utilities to submit IRPs to the
16 Energy Commission for review.

17 And Efficiency Division staff has also been
18 working to finalize a rulemaking package for the AB
19 802 Benchmarking and Disclosure Program. As of
20 January 1, 2017 building owners for large commercial
21 and multi-family buildings are now able to request
22 aggregated energy use data from their utility. This
23 program has a high potential to drive new energy
24 efficiency programs in support of the SB 350 energy
25 efficiency doubling targets.

1 Staff has also continued to coordinate with
2 other agencies and stakeholder groups on a variety
3 of topics. These discussions have focused on the
4 energy efficiency doubling efforts, establishing
5 greenhouse gas emission reduction targets, and
6 methodologies for integrated resource planning, and
7 Title 20 Data Collection efforts to support SB 350,
8 along with a variety of other topics.

9 I also wanted to note that there are a
10 couple of other items on this month's Business
11 Meeting agenda that are important in the context of
12 SB 350. Both are related to the Energy Commission's
13 oversight of the Renewables Portfolio Standard
14 Program. The publicly-owned utility RPS
15 verification results are a critical piece for
16 tracking progress towards meeting the 50 percent by
17 2030 goal. And the RPS guidebook revisions include
18 important changes as we move forward towards
19 achieving these goals.

20 And now, I'll hand off to Tim Olson to
21 provide an update --

22 CHAIRMAN WEISENMILLER: Listen, before you
23 do, let me make an announcement.

24 So during the adoption of the Barriers
25 Report at the December Business Meeting we pledged

1 to continue working on the barriers, resolving the
2 barriers to clean energy for those disadvantaged
3 communities and low-income people of California.
4 I'd like to announce today that Commissioner Scott
5 has stepped up to be our champion on these issues
6 and will be the Lead Commissioner for
7 Implementation.

8 I know that she's already conducted
9 internal meetings to brainstorm these next steps,
10 and I encourage all staff to work with her on
11 solutions in this area. Go ahead.

12 COMMISSIONER SCOTT: Thank you, I'm looking
13 forward to working with everyone on this.

14 MR. SOKOL: All right, congratulations
15 Commissioner and thank you.

16 Now, I'll had off to Tim Olson to provide
17 an overview of the transportation electrification
18 pieces of SB 350.

19 MR. OLSON: Thanks a lot, thanks Michael.

20 For the record my name is Tim Olson, I'm
21 with the Fuels and Transportation Division and I'd
22 like to provide a summary of the Energy Commission
23 Senate Bill 350 electric transportation activities
24 to date.

25 As you remember, SB 350 requires publicly

1 owned utilities to include procurement for electric
2 transportation in integrated resource plans and
3 adopt those plans by January 1st, 2019. And a key
4 part of that Energy Commission role is we're
5 responsible for providing implementation guidelines
6 and may make comments on those POU IRPs.

7 During 2016, the Energy Commission
8 conducted workshops to gather information from
9 publicly owned utilities and other stakeholders to
10 discuss electric transportation infrastructure as
11 part of that integrated resource planning. And
12 address challenges associated with vehicle grid
13 integration.

14 On April 18th, 2016 Chairman Weisenmiller
15 led a workshop to hear the status of publicly owned
16 utilities efforts to develop integrated resource
17 plans.

18 On October 5th, 2016, Commissioner Janea
19 Scott led a workshop to discuss efforts of publicly
20 owned utilities to include transportation
21 electrification in integrated resource planning.
22 This workshop also highlighted successful POU
23 programs, challenges encountered, and insights about
24 factors to consider in planning and deploying
25 electric transportation charging systems.

1 Additionally, this workshop sought information about
2 utility investment and electric transportation
3 infrastructure as context for future Energy
4 Commission actions to deploy funding from the
5 Alternative and Renewable Fuel and Vehicle
6 Technology Program. We refer to that as the ARFVTP
7 for similar projects.

8 And then on December 7th, 2016, the Energy
9 Commission staff conducted a workshop to discuss
10 vehicle-to-grid communication standards. And this
11 was complemented by another staff workshop on
12 December 12, 2016 to review the progress of multi-
13 agency research activities regarding vehicle grid
14 integration.

15 Running parallel to these workshops and
16 meetings with stakeholders, the staff participated
17 in several multi-agency workgroup meetings that
18 included the ARB, California Public Utilities
19 Commission, Commission staff and Commissioner and
20 CAISO representatives. And those meetings were to
21 explore complementary activities to achieve the SB
22 350 transportation electrification objectives for
23 investor owned and publicly owned utilities.

24 Key outcomes from the workshops provide
25 insights about the growing complexity and

1 interdependence of electric transportation and
2 electric utilities. Some of the findings, which
3 will need additional verification here going forward
4 include:

5 Without zero emission vehicle growth,
6 including electric transportation, California will
7 not meet overall greenhouse emission reduction goals
8 of 40 percent below 1990 levels in 2030 and 80
9 percent below those levels by 2050. The
10 transportation sector represents 38 percent of the
11 state's greenhouse gas emission inventory. And
12 electric transportation is a significant contributor
13 to reduce greenhouse gas emissions, particularly
14 after 2030 with rapid zero emission vehicle growth
15 as projected by the Air Resources Board.

16 In addition, electric transportation growth
17 supports the efforts of California POUs to achieve
18 50 percent renewable electricity goals under the
19 Renewable Portfolio Standard by 2030. Workshop
20 testimony concluded that electric transportation
21 charging flexibility presents the ability to respond
22 to utility price and wholesale market signals
23 related to the availability of intermittent
24 renewable electricity sources.

25 POUs noted they expect to experience

1 declining or flat load growth up to 2030, but
2 electric vehicle growth could increase that electric
3 load. Testimony noted that electric transportation
4 growth will represent anywhere from 2 to 5 percent
5 of total electricity consumption by 20130. But
6 between 28 percent to 67 percent of annual
7 electricity load growth by that date, which make
8 electric vehicles an important consideration for
9 utility system planning.

10 Although POU's share common issues and
11 objectives, each POU had unique characteristics and
12 progress in planning for electric transportation.
13 And they also face unique challenges. All of the
14 POU's noted they have limitations in generating
15 revenue from rate-based investments for their
16 electric vehicle charging systems. And are open to
17 partnerships with private EVSE companies and state
18 government agencies to complement their investment.

19 Data gathering and analysis requires
20 networking of chargers, vehicles and utility
21 infrastructure to enhance the timing of electric
22 vehicle charging to the availability of intermittent
23 renewable electricity sources, wholesale electricity
24 dispatching, and affordable rates. Vehicle grid
25 integration rates coupled with enabling technology

1 appear to offer the best design to accomplish these
2 objectives.

3 One of the other findings, interoperability
4 of electric charging systems including charging,
5 accessing data, and billing remain a challenge to
6 ensure that EV customers -- electric vehicle
7 customers -- can use any type of equipment or access
8 system.

9 The POU's identified the following
10 transportation electrification activities planned
11 under the POU IRP adoption in order of importance:
12 Develop tariff design to balance electric vehicle
13 charging signals at times of the day to take
14 advantage of renewable over-generation, and reliable
15 system operation with affordability and convenience
16 of charging during work hours or at home. All POU's
17 will be migrating toward some type of time of use
18 pricing and demand response tariffs during the next
19 few years.

20 Another item on their list, co-fund
21 electric vehicle charging infrastructure mainly
22 through initial rate-basing. However, the POU's
23 acknowledged this will not generate enough revenue
24 to cover the costs of an estimated 220,000 public
25 charging connectors needed in California by 2025.

1 And one of the other common things that
2 they identified is conduct education outreach
3 programs, especially targeted to disadvantaged
4 communities.

5 So going forward, the Energy Commission
6 staff expects to participate in the 2017 IEPR as
7 organizer/participant in one or more workshops, and
8 plans to provide a staff report on electric vehicle
9 infrastructure deployment strategy. Interagency
10 workgroup meetings involving the Energy Commission,
11 ARB and the California Public Utilities Commission
12 are expected to lead to proposed complementary
13 actions to coordinate electric vehicle supply and
14 demand analysis each agency could use in various
15 proceedings.

16 Staff will also conduct additional meetings
17 with utilities, automakers, the EVSE companies, and
18 other stakeholders to gather cost and market data.

19 And that concludes my comment.

20 CHAIRMAN WEISENMILLER: Thank you.

21 I was just going to make a couple of
22 comments. First, to remind people not only does the
23 Governor have a greenhouse gas goal for 2030, but he
24 also has a petroleum reduction goal of 50 percent.
25 Obviously, we're not going to reach the greenhouse

1 gas goal of transportation at roughly 40 percent if
2 it doesn't move down. But we're certainly not going
3 to reach the petroleum reduction goal without
4 electrifying transportation.

5 I think that being said I would note that
6 the IOUs have just filed a billion dollar program to
7 deal with heavy-duty vehicles. I guess I would
8 challenge the POUs to jump into action there.
9 Certainly they can't blame the PUC for holding them
10 back for that area, but that's certainly another
11 part of what's going to be important.

12 As Tim indicated, obviously POUs don't care
13 about rate-based and then the shareholders don't
14 benefit by adding additional rate base, so it still
15 comes back to the question I think we need to work
16 with them on what are the incentives there?

17 Yeah, but again it's a hugely important
18 area.

19 I don't know if you have anything?

20 COMMISSIONER SCOTT: Sure, I would just
21 want to say thanks to Tim for that excellent
22 description of where we are in all the work that we
23 have carried out so far in working with the publicly
24 owned utilities and trying to get the type of
25 information that we'll need to put together as part

1 of the -- or not will put together -- but that we'd
2 like to see from them as part of their integrated
3 resource plans.

4 And as Tim mentioned, during some time in
5 the spring we'll have another workshop as part of
6 the IEPR to follow up on many of the topics that he
7 mentioned to you as he went through the summary.
8 And so I really appreciate all of your excellent
9 work there.

10 I also wanted to say thanks a lot to Mike
11 as well for helping put all of this information
12 together on our Barriers. And where we are right
13 now is we've had an initial meeting to kind of think
14 about prioritizing the recommendations that we made
15 within the Barriers Report. But because as you all
16 recall, many of those things are quite large lifts.
17 And so we kind of need to kind of bite them off a
18 little bit at a time, figure out which ones to
19 prioritize, and then set a plan for how to carry
20 those out.

21 And so that's what we're working on right
22 now, so I just want to remind you all Mike is kind
23 of like our Heather on the IEPR. So we need to make
24 sure that you get him information and feedback on
25 what you think the priorities are, to make sure that

1 we're not missing what you all see as priorities.
2 And we'll be sure to loop back to you on that, but
3 that's kind of what we're working on right now.

4 COMMISSIONER MCALLISTER: Just a quick
5 question --

6 (Off mic colloquy.)

7 CHAIRMAN WEISENMILLER: We do have one
8 public comment on 10b --

9 COMMISSIONER SCOTT: Oh, okay.

10 CHAIRMAN WEISENMILLER: -- so please on the
11 line, please come forward.

12 COMMISSIONER SCOTT: Or in the room.

13 CHAIRMAN WEISENMILLER: In the room please,
14 in the room excuse me, okay.

15 MS. MCGHEE: Hi, my name is Lisa McGhee and
16 I'm with the San Diego Airport Parking Company. And
17 I just wanted to echo, first of all just thank you
18 so much to ARB and the CEC as well as CPUC really
19 diving into the zero emission electrification
20 transportation. I am an early adopter and I've had
21 lots of lessons learned. And I share a lot of the
22 comments that both Mike and Tim were making as it
23 relates to electrification. We're a long ways from
24 it.

25 And one of the things I could share with

1 you as it relates to one of the things that we're
2 really in need of, and in support of, is the
3 infrastructure. Infrastructure can be expensive.
4 It's got lots and lots of challenges when it comes
5 to transformers and circuits and loading, and if a
6 property could even have infrastructure. And
7 without infrastructure we're not going to be able to
8 accelerate adoption. And I think there's a great
9 way for us to invest a little bit more in not only
10 infrastructure, but demonstration projects.

11 You've got a private sector that is like
12 myself and when we're investing, we're putting all
13 our own dollars in. And we've got a way. I do
14 20,000 miles a month and I have got a way to help
15 really reduce greenhouse gas emissions. And my goal
16 is to find ways to support it, but I need to be able
17 to share the data in the way that's going to be able
18 to take these lessons learned and move forward
19 instead of waiting two years down the road.

20 And you've got some private sector people
21 like myself that really have had some strong lessons
22 learned. And we can take those experiences and
23 leapfrog us forward much further than what I seem to
24 see in some instances where maybe the private
25 sector's information and experiences aren't moving

1 or being taken into account in a way that costs per
2 mile matters. You've got tariffs and the costs of
3 new -- in some of the SB 350 applications I did see
4 dynamic rates.

5 You know, all of these things are changing
6 how we've already developed infrastructure for fast
7 charging that is new technology as well. And
8 medium-duty is fitting into this category where we
9 need fast charging for a vehicle that does 100
10 miles, no longer doing 250 miles. I can't run my
11 vehicles all day without needing fast charging.

12 And that's -- and these are some of the
13 barrier. I've got a medium-duty vehicle with light-
14 duty technology, and I need to move to fast
15 charging. So I see a lot of opportunities if we
16 could help with more demonstration, so that we could
17 share that data and make good use of it.

18 I, for example, would love to share a hub.
19 We could move into more renewables. There is solar
20 charging out there that could reduce the load during
21 peak times shared with energy storage. There is
22 lots of opportunities and next-generation technology
23 that we really need to move forward with, because
24 that technology does exist today. Thank you.

25 COMMISSIONER MCALLISTER: Can I ask? I

1 would like to ask one quick question.

2 CHAIRMAN WEISENMILLER: Sure.

3 COMMISSIONER MCALLISTER: So just a quick
4 question before you step down, so is SANDAG helping
5 to marshal all this regional discussion in a way
6 that's helpful for you? And I guess looking for
7 just suggestions about how sort of state, local,
8 regional conversations can be facilitated. You
9 know, where we're not the only entity here
10 marshalling this discussion and giving out
11 resources.

12 And I certainly hear your needs, so I think
13 SANDAG given that they're kind of the MPO and the
14 COG in that region could be very helpful to you.
15 And maybe they already are, but I guess I'm
16 interested and curious.

17 MS. MCGHEE: Again, San Diego is a unique
18 territory. I mean everybody wants to move
19 electrification forward. It's one unique territory
20 that happens to have no electric vehicle commercial
21 tariff rate at the moment. It also has the only
22 tariff that's got two demand fees, so it's really
23 double expensive as it relates to moving into that
24 field. There's only one commercial operator and
25 that's myself, right now.

1 And that becomes a concern when you're
2 going down those corridors to find a way, how does
3 that commercial operator move forward? So I think
4 there's some real opportunities to look at what the
5 CPUC can do as it relates to those rates to help
6 adoption, because it's always going to be about
7 costs per mile.

8 CHAIRMAN WEISENMILLER: Thanks. Do we have
9 another --

10 MS. MCGHEE: I probably haven't answered it
11 very well, but --

12 CHAIRMAN WEISENMILLER: That's fine. I
13 would channel Picker and say that in his concern for
14 the utility programs, that SDG&E is the only one
15 that he's comfortable of really connecting into the
16 local planning agencies like SANDAG.

17 COMMISSIONER MCALLISTER: Yeah. Yeah, so I
18 was more curious about SANDAG than SDG&E.
19 Obviously, they're both very important. But SANDAG
20 channels a lot of resources, the Caltrans resources,
21 into that region. And so a lot of infrastructure
22 potentially could be helpful on this.

23 MS. MCGHEE: Yeah, those are things that I
24 have not connected with and I do spend a lot of time
25 trying to connect. So it would be helpful if I

1 probably had some opportunities to find out who that
2 would be. Thank you.

3 CHAIRMAN WEISENMILLER: I think the Port
4 has someone on SANDAG.

5 But anyway another one, SCPPA please?

6 MS. DERIVI: Thank you, Commissioners.
7 Tanya DeRivi, Director of Government Affairs for the
8 Southern California Public Power Authority. Thank
9 you for the recognition of publicly owned utility
10 efforts to electrify heavy-duty fleet vehicles.

11 One issue that we have in Southern
12 California with the South Coast Air Quality
13 Management District are particular rules that only
14 apply to POUs, which make it very difficult to
15 electrify heavy-duty vehicles. Rule 1196 in
16 particular, that is a decade old, and incentivizes
17 or almost mandates procurement of compressed natural
18 gas vehicles in the South Coast Basin. Which were
19 certainly far more emission friendly a decade ago.

20 But now we do have alternatives that are
21 plug-in hybrid diesel vehicles where you can
22 actually run electricity at job sites, and are
23 smaller footprints to be able to navigate heavy-duty
24 vehicles through densely urban areas in Southern
25 California. That is an interim step as we also look

1 at full electrification of heavy-duty vehicles,
2 which is also a difficulty right now. In addition
3 to be able to access natural gas in the Southern
4 California area right now too.

5 So that's just one consideration I wanted
6 to raise. And again, that rule only applies to
7 publicly owned utilities in the South Coast Basin.

8 CHAIRMAN WEISENMILLER: Well, thank you. I
9 think Commissioner Scott was taking notes on that
10 rule, right?

11 COMMISSIONER SCOTT: I do, I did.

12 CHAIRMAN WEISENMILLER: If you want to
13 comment?

14 COMMISSIONER SCOTT: I even put a little
15 star by it.

16 CHAIRMAN WEISENMILLER: Again thanks, we'll
17 see what we can do.

18 Let's go on to Item 11, Minutes.

19 COMMISSIONER SCOTT: Any other Commissioner
20 comments on -- okay.

21 COMMISSIONER MCALLISTER: Oh, yeah I'll
22 move Item 11.

23 COMMISSIONER SCOTT: Second.

24 CHAIRMAN WEISENMILLER: All those in favor?

25 (Ayes.)

1 CHAIRMAN WEISENMILLER: So this passes, the
2 Minutes are approved 5-0.

3 Let's go on to Lead Commissioner/Presiding
4 Member Reports. Commissioner Scott?

5 COMMISSIONER SCOTT: Great. Well, first I
6 just wanted to say even though it's almost the end
7 of January, Happy New Year! So --

8 CHAIRMAN WEISENMILLER: But Happy Chinese
9 New Year.

10 COMMISSIONER SCOTT: Oh, yeah. That's
11 true.

12 Great, I just have two updates for you. I
13 had a chance to go to the NCPA Strategic Issues
14 Conference last week, which was terrific. They're
15 very interested in hearing what the Energy
16 Commission and the State is doing on electric
17 charging infrastructure. And also the zero emission
18 vehicles, so on the hydrogen as well.

19 So I talked a little bit about -- you know,
20 pretty high level -- but what we're doing. How many
21 chargers are out there, 256,000 cars here in
22 California now, about 1,000 of those are fuel-cell
23 electric cars. And provided them with some
24 information about that.

25 They were also interested in learning if

1 there are opportunities where we can work together
2 to really help push the infrastructure and the cars
3 into their territories. And so we brain -- well,
4 maybe brainstormed isn't quite the right word -- but
5 I threw out some just kind of brainstorm thoughts to
6 see if it would tickle anyone's fancy there in the
7 audience.

8 And we talked a little bit about whether
9 there are ways to do something that looks kind of
10 like what the EPIC Challenge. Where you might have
11 a small community, but they're interested in having
12 electric charging. And so you put together the City
13 Hall, the Library, a couple of Mom and Pop
14 businesses or, you know, I'm not quite sure what the
15 right combination would be. And then potentially
16 some funding from their local Air District and some
17 funding from the Energy Commission and how do you
18 kind of make that go? And so were there ways like
19 that, that we could be creative to really help get
20 infrastructure into the NCPA territory.

21 I highlighted for them the work that we're
22 doing on SB 350 and how much we'll value and
23 continue to value the information that they can
24 provide to us. We're open to ideas, we're open to
25 suggestions, so that was a nice chance to get to

1 talk with our friends at NCPA about zero emission
2 cars.

3 The other thing I got to do was visit
4 Proterra, who makes the electric buses. And this
5 was really exciting, because they're getting ready
6 to expand a little bit in California. They've got a
7 new space that they're putting together where
8 they'll do some of the electric motor testing, which
9 is really exciting.

10 One of the great things that the Proterra
11 folks said while we were on the visit was how
12 helpful the Energy Commission grant was to them when
13 they were working with their Board to think about
14 where did they want to do manufacturing of these
15 electric buses. And they said, "We want to do it in
16 California, because California is really standing
17 behind this kind of technology. This is a great
18 place to do it." And our grant kind of helped them
19 continue to convince the Board that they could get
20 going in California.

21 And so I felt really happy about that. I
22 mean, that's the whole point of the Alternative and
23 Renewable Fuel and Vehicle Technology Program, which
24 is --

25 (Off mic colloquy from Board Member.)

1 COMMISSIONER SCOTT: -- yeah, exactly, my
2 Clean Transportation Program, but that's the whole
3 point, right? That is what that program was meant
4 to do and so it's great when I get the feedback that
5 that's what's actually happening. So it was a
6 really nice chance to visit Proterra to learn a
7 little bit more.

8 I can't remember the exact mileage of the
9 new bus that's going to be able to go farther. Some
10 of the DC Fast Charging, they've taken it on
11 themselves. They had to upgrade their box, because
12 they didn't have enough electricity to do the
13 testing and charge-up and they took that on
14 themselves. And so it's exciting to see what's
15 going on in that space, so I just wanted to update
16 you a little on Proterra.

17 COMMISSIONER HOCHSCHILD: Awesome.

18 COMMISSIONER MCALLISTER: All right, I'll
19 be probably briefer than normal today.

20 It occurs to me that we need to engage,
21 Commissioner Scott and I need to engage with media,
22 because the existing Building Energy Efficiency
23 Action Plan also needs a catchy name. And ARFVTP
24 doesn't actually --

25 COMMISSIONER SCOTT: Yeah, yeah.

1 COMMISSIONER MCALLISTER: -- yeah, it
2 doesn't roll off the tongue too well, although at
3 this point maybe so.

4 Let's see, I just have a couple of things
5 to mention. Last month, December, we had a big
6 meeting on efficiency. We did a lot of great stuff
7 on efficiency, so I feel like now we're kind of
8 lifting a lot of things in earnest in the Efficiency
9 Division and just across the board, particularly
10 with the Efficiency Action Plan Update.

11 Lots of good sort of I think individual
12 sort of effort milestones just rolling through. You
13 know, it seems like every week or two we've got
14 another step forward on implementation of 802 or the
15 Local Government Challenge. All the things that
16 staff is keeping and pushing forward.

17 So I just want to thank staff, and
18 certainly my staff Martha and Brian and also the
19 Efficiency Division staff. But we're firing on all
20 cylinders right now, which is really, really great.

21 The other day the Chair and I and
22 Commissioner Peterman from the PUC was over, had a
23 workshop on the doubling of energy efficiency, the
24 350 goal. Really, really I think a great start to
25 that conversation. And I think like some of the

1 other really important conversations we've had in
2 the last couple of years around standards, the Title
3 24 Standards, around the computers and monitors that
4 we did last month. You know, that model of just
5 really active engagement with stakeholders is
6 bearing fruit.

7 And the industry stakeholders for sure, the
8 environmental stakeholders, and all the consumer
9 stakeholders, all of -- I feel like our process is
10 really serving us well. And I'm really happy about
11 that and think it remains a huge priority to make
12 sure that those conversations are as open and
13 transparent and productive as possible.

14 Let's see, I guess I'll just mention with
15 the evolution of federal policy and what we think
16 might happen, I'm going to be engaging more in D.C.
17 on the Appliances Efficiency front. And just on
18 efficiency topics in general. I think it's
19 important, you know, that Team California show the
20 world and the nation what we're doing. And that it
21 can be functional and that it can actually produce a
22 lot of benefits for people and that we feel that
23 every day. And we actually have data to back it up.

24 So I'll be reporting on some of those
25 conversations in the efficiency realm for sure,

1 however they may go. You know, obviously no
2 promises of results, but I certainly will sleep
3 better knowing that we're at least in there in the
4 mix.

5 Also building state collaboration around
6 energy efficiency, you know, there are many states
7 that are pretty progressive on these issues. And
8 that adopt our standards and work together to
9 develop good standards. The Pacific Coast
10 Collaborative has a lot of potential along those
11 lines, but there are other states in the Midwest and
12 on the East Coast that want to continue these
13 discussions, learn from California, and to make
14 their own decisions going forward. So that'll kind
15 of also be a natural evolution of spending more time
16 in D.C. and working with the other states.

17 And then on a personal note, I'm really
18 excited and I'll keep you guys up to date. I guess
19 somehow Bagley-Keene doesn't really apply, but I am
20 working on a home upgrade project. And I want to
21 make it as public as possible, you know, but keep
22 the pressure on myself to actually get to the finish
23 line with ZNE. But also just I'm excited about and
24 learning a lot, with respect to my wife and I bought
25 a house in Davis. And we're going to do a retrofit

1 and do a remodel and a bit of an expansion. But a
2 retrofit and do ZNE and probably all-electric is the
3 goal right now.

4 And really find out about these new
5 technologies and work through a very progressive and
6 proactive Building Department to make sure that Code
7 works properly.

8 COMMISSIONER HOCHSCHILD: I think we'd all
9 like to extend our sympathies to whoever is
10 unfortunate enough to be your contractor and get
11 grilled by you.

12 COMMISSIONER MCALLISTER: (Laughs.) Yeah.

13 CHAIRMAN WEISENMILLER: I was going to say
14 his HERS buddy, right?

15 COMMISSIONER MCALLISTER: Well, it's funny.
16 I've written the HERS, the home inspection, you know
17 the pressure test and the whole deal. I've got a
18 really good deal contractor on that. And hopefully
19 will be participating in PG&E's home upgrade or
20 Advanced Home Upgrade Program, so we'll see how that
21 goes.

22 And actually applying Passive House
23 principles as well. There's a national program
24 really that is about Passive House and there are
25 providers that are trained in Passive House

1 principles and Passive House design. And so I'm
2 using one of those providers as my home designer and
3 a contractor who is very familiar with all that. So
4 certainly I will probably be more detail-oriented
5 than many of his clients, but so far, so good.

6 So anyway, as things move forward I'll keep
7 you guys updated. At least over lunch, maybe not at
8 a Business Meeting, but I'll keep you up to date on
9 how that goes. But definitely will be putting in
10 charging, a big enough PV system to get an electric
11 vehicle and put the charging infrastructure in place
12 for that as well.

13 So anyway, I'm very excited about that.
14 It's always good to put stuff in practice and know
15 what we're imposing on people through Code in a very
16 practical and realistic way. So that's part of the
17 goal as well.

18 Oh, and finally I am just super gratified
19 and humbled to have been reappointed again. I just
20 thank the Governor for that and really happy to be
21 able to work with all of you and staff in this
22 wonderful state at this really momentous time. So
23 thanks to the Governor and really appreciate all of
24 your active collaboration and vision on all the
25 various issues we work on.

1 COMMISSIONER DOUGLAS: I don't really have
2 any update today.

3 CHAIRMAN WEISENMILLER: That's fine.

4 COMMISSIONER DOUGLAS: It's the new year
5 and we came out of the holidays and we're back in
6 the office and starting to move fast. And so I'll
7 move fast.

8 CHAIRMAN WEISENMILLER: No, brief is good.
9 Commissioner Hochschild?

10 COMMISSIONER HOCHSCHILD: Yeah, the same.
11 I would just urge though everyone who has not yet
12 had a chance to watch the Governor's State of the
13 State speech to please go online and do that. And
14 it was just I had the opportunity to be there with a
15 number of colleagues and just what you heard, I
16 think, not just from the Governor, but from the
17 Speaker of the Assembly and the Pro Tem of the
18 Senate and the Lieutenant Governor.

19 But the message is the same, that
20 California is going to put our foot on the
21 accelerator on our goals. And at the heart of that,
22 I think, is energy and climate but also these
23 broader values of civility and fidelity to truth and
24 some of the things that have been, unfortunately
25 questioned, over the course of the last year. And

1 it was really heartening.

2 And I think increasingly the Governor is
3 making his impact through appointments. And so
4 Andrew getting reappointed, Cliff Rechtschaffen and
5 Martha Guzman heading the PUC, Angelina getting
6 reappointed at the ISO and others. This is how the
7 Governor is expressing his policy goals for the
8 state. And it's just a real affirmation, I think of
9 the course we're on to a clean energy future.

10 So no further updates on my end.

11 CHAIRMAN WEISENMILLER: Yeah, I was just
12 going to hit two things. One was certainly, I want
13 to welcome to my staff Mike Murza, who I think many
14 of you knew from the Legal Office. And I'm looking
15 forward to his help. Certainly in just a summary he
16 was JD from Davis, was an Environmental Law Fellow
17 at the California Environmental Law and Policy
18 Center. And has been in the Chief Counsel's Office
19 working primarily in the Efficiency Standards or
20 Appliance and then Building Efficiency Standards.
21 So anyway, I think he's going to be a great
22 addition.

23 And obviously, the flip side of that is
24 we're going to lose Jana, who has certainly been
25 wonderful to work with. She's been very valuable as

1 my Legal Advisor. She's reviewed topics ranging
2 from mitigation, adaptation work, Scoping Plan
3 update, you know, just really great to work with.
4 And I'm sure she's going to be a strong addition to
5 the Chief Counsel's Office. So anyway, certainly I
6 thank her for her help and welcome Michael.

7 So let's go on to Chief Counsel's Report.

8 MS. VACCARO: Thank you. I think that's a
9 perfect segue for me to sit here and beam with pride
10 over some of the accomplishments or successes of the
11 Chief Counsel's Office in attracting really
12 excellent attorneys. And Jana Romero who's here --
13 hi, Jana -- of course has just joined our office and
14 we're just so very thrilled about the experiences
15 and perspective she's going to bring from her work
16 with the Chair as well as her prior work in the
17 Commission in the Office of Governmental Affairs.
18 So we're very, very happy and I'm very proud of that
19 addition.

20 We also have an intern that I'd like to
21 introduce to you today: Heraclio Pimentel. He is at
22 the UC Davis King Hall, he's in their Law School
23 program. In fact, he's taking one of Commissioner
24 Douglas's courses right now, which I think is
25 fantastic. But again, I really appreciate the

1 opportunity that you afford me to let you know about
2 these additions and our efforts to attract really
3 good talent to the agency and to our office.

4 CHAIRMAN WEISENMILLER: Thank you,
5 welcome aboard.

6 Executive Director's Report?

7 MR. OGLESBY: I think I can pass today.

8 CHAIRMAN WEISENMILLER: Public Adviser
9 Report?

10 (No audible response.)

11 CHAIRMAN WEISENMILLER: Let's go to public
12 comment. Well, please come up to the microphone.

13 MR. GREENFADER: Hi, good afternoon. My
14 name is David Greenfader, Head of Business
15 Development for a company called Envision. Thank
16 you very much for all of your work at the Commission
17 and what you've been doing this is terrific and very
18 informative.

19 I simply wanted to make a public comment
20 today about infrastructure for charging electric
21 vehicles, both for light-duty, medium, and heavy-
22 duty.

23 One of the things that I want to emphasize,
24 at least as we go forward in establishing standards
25 and looking at technology is to really think about

1 using renewables and sustainable structures,
2 infrastructure, for providing power for charging
3 that type of transportation requirements.

4 We've been doing this now on the State of
5 California contract with a product called the EV
6 ARC, which is right now deployed around Sacramento
7 at the DGS Headquarters and Caltrans. That's an
8 off-grid system that has batteries and solar, so I'm
9 happy to hear that Commissioner McAllister is doing
10 batteries and solar at his house or is planning to
11 do it on his development.

12 We've now been doing it for about a year
13 and a half on a statewide mandatory contract
14 successfully with Caltrans and other state agencies.
15 So this is the very important step forward in
16 looking at both providing resiliency for our
17 infrastructures that's not entirely Grid-dependent.
18 And at the same time providing 100 percent
19 sustainable technology that can support Governor
20 Brown's ZEV vehicles moving forward.

21 So with the larger structures we're looking
22 at with San Diego Airport Parking for example,
23 deploying a much larger structure with battery
24 storage and solar both as an off-grid and as a grid-
25 buffered solution.

1 So technology is here, we have products
2 that are already rolling out. And just it's going
3 to be a green future and we hope that you guys
4 consider renewable energy first, when looking at
5 solution of this type. Thank you.

6 CHAIRMAN WEISENMILLER: Thank you.

7 COMMISSIONER MCALLISTER: I will clarify,
8 I'm not clear I'm going to put batteries in. But I
9 am going to be Zero Net and then possibly all
10 electric. So (indiscernible) --

11 MR. GREENFADER: (Indiscernible)

12 CHAIRMAN WEISENMILLER: Okay. The
13 meeting's adjourned.

14 (Adjourned at 12:12 P.M.)

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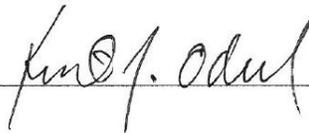
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REPORTER'S CERTIFICATE

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 3rd day of January, 2017.



A handwritten signature in cursive script, appearing to read "Kent Odell", is written over a horizontal line.

Kent Odell
CER**00548

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 3rd day of January, 2017.



Myra Severtson
Certified Transcriber
AAERT No. CET**D-852