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David Hochschild
Andrew McAllister
Janea Scott

Staff Present:

Rob Oglesby, Executive Director
Kourtney Vaccaro, Chief Counsel
Rosemary Avalos, Public Adviser's Office
Cody Goldthrite, Secretariat
Chester Hong, Legal Assistant

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Diana Gonzalez	11
Rob Oglesby	12
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Pursuant to Government Code section 11126(e), the Energy Commission may also discuss any judicial or administrative proceeding that was formally initiated after this agenda was published; or determine whether

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P R O C E E D I N G S

AUGUST 10, 2016 10:06 a.m.

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

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

CHAIR WEISENMILLER: Good morning. In terms of the agenda flow, first Item 2 will be held. Second, we're going to move Item 5 up and we're actually going to start with a resolution, Mr. Hochschild?

COMMISSIONER HOCHSCHILD: Well, good morning and thank you, Chair Weisenmiller. We've been really blessed this summer to have the inaugural class of Stanford Summer Fellows with us and I see Dian Grueneich is here from Stanford. I had the opportunity to visit her and her colleagues just earlier this week and I just want to say personally how gratified I am at how this has played out.

We are only as good as the quality of people we can bring in here at the end of the day. And that's true for all public agencies and having, I think a new very promising pipeline of the top talent to come in, get in the trenches of the

1 challenge of building a clean energy future is just
2 really exciting. I would just say personally having
3 a couple of these fellows in my office, the work
4 they're doing is exemplary.

5 So with that let me read a resolution on
6 behalf of the entire Energy Commission for this
7 program.

8 "Whereas Stanford University is committed
9 to helping tackle climate change by integrating the
10 best students into California's energy and climate
11 public policy discussions through Stanford Energy
12 Internships in California and energy-related summer
13 internship program for undergraduate and graduate
14 students,

15 "And whereas Stanford Energy Internships in
16 California, which is in its inaugural year, placed
17 ten students in California government at the
18 California Energy Commission, California Air
19 Resources Board and the California Department of
20 Water Resources as well as the CAISO,

21 "And whereas Stanford Energy Internships in
22 California is managed by the Precourt Institute for
23 Energy and provides energy-related public service
24 internships connecting academic study with public
25 service to strengthen communities and develop

1 effective public leaders,

2 "And whereas, as a partnership between the
3 Precourt Institute for Energy, the Bill Lane Center
4 for the American West, Stanford In Government -- a
5 student-led affiliate for the Haas Center for Public
6 Service, the Stanford Energy Internships in
7 California Program inspires Stanford University
8 students to realize a just and sustainable world
9 through service, scholarship and community
10 partnerships.

11 "And whereas the Energy Commission, the
12 State's primary energy policy and planning agency
13 provided 2016 public service summer fellowships to
14 students Alexandria Smith, Esteban Guerrero, Jeff
15 Lin and Terra Weeks,

16 "And whereas Alexandria Smith, an intern in
17 the office of Energy Commission Chair Bob
18 Weisenmiller assisted with the reviewing and editing
19 of a number of Energy Commission distributed energy
20 resource reports as well as coordination and
21 providing assistance to the California Public
22 Utilities Commission in More Than Smart Initiative,
23 which considers a changing energy sector to a modern
24 flexible distributed energy system,

25 "And whereas Terra Weeks, an intern in the

1 office of Commissioner David Hochschild assisted in
2 developing local community renewable strategies and
3 provided analysis to improve the award-winning New
4 Solar Homes Partnership Program, and assisted with
5 stakeholder engagement,

6 "And whereas Jeff Lin, an intern in the
7 office of Commissioner Andrew McAllister worked on
8 the California Clean Energy Jobs Act, also known as
9 Prop 39, deploying data analytics to evaluate energy
10 consumption at school sites and worked on the 2019
11 California Building Energy Efficiency Standards
12 analyzing Zero Net Energy features in new
13 construction,

14 "And whereas Esteban Guerrero, an intern in
15 the office of Commissioner Hochschild supported the
16 implementation of new laws, regulations and programs
17 such as SB 350 in implementation of Governor Brown's
18 California Memorandum of Understanding,

19 "And whereas Dian Grueneich, Senior
20 Research Scholar at Stanford University; Sally
21 Benson, Co-Director of the Precourt Institute for
22 Energy; Bruce Cain, Director of the Bill Lane Center
23 for the American West; and Sunny Wang, Program
24 Director for the Precourt Institute for Energy
25 helped initiate the Stanford Energy Internships.

1 This comes as California aims to reduce its
2 greenhouse gas emissions to 80 percent below 1990
3 levels by 2015, increase the use of renewable
4 energy, reduce petroleum use in cars and trucks and
5 double energy efficiency of existing buildings by
6 2030.

7 "Therefore be it resolved that the Energy
8 Commission recognizes and thanks the Stanford Energy
9 Internships in California Program."

10 (Applause.)

11 MS. GRUENEICH: Good morning. I'm
12 Dian Grueneich and I just want to, on behalf of
13 Stanford, the Precourt Institute for Energy, the
14 Bill Lane Center for the West, and our students to
15 very much thank you for the resolution. This was
16 our inaugural year.

17 I want to recognize Commissioner Scott, who
18 is a Stanford alumnus as well as Commissioner
19 Douglas who is also a Stanford alumnus, but we love
20 all the educational institutions in California.

21 And our goal was really to help connect the
22 students with the real world of what's going on as
23 we're marching ahead on clean energy. We will be
24 continuing the program. This was the inaugural year
25 and we hope that this is just the first of many

1 classes to be working with the Energy Commission.

2 Thank you. (Applause.)

3 COMMISSIONER MCALLISTER: So thanks for
4 that, this is a great program. I'm absolutely
5 looking forward to having it continue, Jeff Lin in
6 my office has done a fabulous job. So thanks, Jeff,
7 for all your hard work and quickly -- it's just
8 mind-bogglingly fast in getting a handle on data.

9 And I guess I'm also hopeful that Stanford
10 can also fund a similar program over at Cal.

11 (Laughter) Although my wife is a Stanford alumnus
12 too, but you know -- right, Chair Weisenmiller?

13 CHAIRMAN WEISENMILLER: Yeah. We need
14 competition.

15 CHAIRMAN WEISENMILLER: Exactly.

16 CHAIRMAN WEISENMILLER: We need Cal to
17 decide to send more interns here than Stanford.

18 CHAIRMAN WEISENMILLER: Yeah. In any case
19 obviously very supportive in continuing, and thanks
20 David, for your leadership on this as well. So
21 let's -- are we going to have some photos? Yeah,
22 great, all right.

23 MS. GRUENEICH: We do want to post it on
24 the website to continue the program, so a photo
25 would be great.

1 COMMISSIONER HOCHSCHILD: If we could
2 invite all the Stanford fellows to come up here
3 we'll do a photo together right in front of the
4 dais.

5 (Stanford Group photos taken.)

6 COMMISSIONER HOCHSCHILD: And Dian, just to
7 be clear when I was talking about promising young
8 leaders I'm including you in that group.

9 COMMISSIONER MCCALLISTER: Yeah, as an
10 annuitant maybe, yeah that'd be great.

11 CHAIRMAN WEISENMILLER: Okay. Now, let's
12 follow on that with Item 5.

13 Commissioner Scott, do you want to set this
14 up?

15 COMMISSIONER SCOTT: Yes.

16 Well, following the theme of bringing
17 excellent students into the Energy Commission for a
18 summer internship, I'd really like to take a moment
19 this morning to welcome the students from the Florin
20 High School Law Academy. These young men and women
21 spent two weeks this summer learning from, and
22 working with Energy Commission staff, as part of the
23 Energy Commission's Summer Institute in Energy Law
24 and Policy. The Summer Institute provides high
25 school students an opportunity to learn about

1 California's energy policies and laws and potential
2 career opportunities in the energy field.

3 We would like to acknowledge the teachers
4 from the Florin High School Law Academy that
5 participated in the Summer Institute: Carlos Garcia
6 and Benny Rich. So maybe you guys can wave, so
7 folks can see you. Thank you, so much. Your
8 leadership and dedication to these students is
9 highly commended, very laudable. We appreciate you
10 bringing them over to us each day this summer.

11 I'd also like to acknowledge the Energy
12 Commission's Public Adviser, Alana Mathews, who
13 organized the Summer Institute and hosted the
14 students during their time here at the Commission.
15 So a big thanks to Alana as well.

16 So this morning, the students would like to
17 give a presentation about what they learned during
18 their two weeks and how they plan to apply those
19 lessons at their school and within their community,
20 so welcome students. And we will kick off your
21 presentation.

22 CHAIRMAN WEISENMILLER: Please. Please
23 come up.

24 MS. SANTOS: Good morning, Chair and
25 Commissioners, my name is Felisa Santos.

1 As you may all know we are from Florin High
2 School located in South Sacramento. Being in South
3 Sacramento we are all part of a disadvantaged
4 community. All of us joined this institute to
5 educate ourselves and others on matters such as
6 energy efficiency and how it affects disadvantaged
7 communities such as ours. All of us here today are
8 seniors, part of the law academy. Our law academy
9 is only one of a dozen that is an official partner
10 of the California State Bar Association.

11 Today we will be presenting what we have
12 experienced and learned here. As we enter this
13 program we are presented with SB 350. Today, we
14 will be presenting what the bill is, the barriers
15 that are presented in disadvantaged communities, how
16 we can overcome those barriers and last, but not
17 least, the Instagram Campaign Senate Bill 350.

18 MS. NAVARRO: My name is Jacky Navarro and
19 this summer we gained many opportunities and
20 advantages by this program. We came across many
21 inspiring people here and they educated us on how
22 meaningful it is to be efficient and conservative
23 towards our energy.

24 Also from this internship we valued all of
25 the advice we got from everybody. But we also noted

15

1 how passionate you all are for California and we
2 really appreciate that.

3 This program led us to discover new ways to
4 better the environment, so that in the future we can
5 have cleaner energy and less pollution.

6 MS. AVILA: My name is Karen Avila. And
7 throughout California's history we've relied on
8 nonrenewable power sources like coal and it's
9 produced greenhouse gases and contributed to climate
10 change and global warming.

11 And moving on to what we learned about
12 renewable energy that includes solar, wind,
13 geothermal, biomass and hydropower. And then unlike
14 nonrenewable energy, renewable energy is replenished
15 naturally meaning it could be used multiple times
16 and doesn't give out nasty gases like nonrenewable
17 energy does.

18 And some drawbacks is it does start up very
19 costly, and sometimes it may leave out disadvantaged
20 communities like ours. And depending on location
21 natural elements might not be provided.

22 But some benefits is that it does save a
23 lot of money in the long run compared to what you'd
24 be spending without nonrenewable energy.

25 Less fossil fuels are being burned, that

1 means lower greenhouse gases, climate change and
2 overall it's a very clean energy.

3 MR. NAMMAVONG: My name is Anthony
4 Nammavong.

5 As of right now California is using 25
6 percent renewable energy. For California our goal
7 for the future is by 2020 California must be running
8 on 33 percent renewable energy and have all
9 residential buildings be Zero Net Energy. By 2030,
10 we must be running on 50 percent energy and have all
11 new commercial buildings by 2030 be Zero Net Energy.

12 Our future depends on these goals and if we
13 don't reach 50 percent by 2030 then the future will
14 be unpredictable. The climate and the lives of our
15 future children will be unpredictable. There's
16 about 40 million people who live in California that
17 will be affected some way, somehow.

18 If you think it's hot right now then
19 imagine how hot global warming will be in the
20 future. That's why it's important for us to reach
21 our goals and go beyond that.

22 MR. RODRIGUEZ: Good morning. My name is
23 Ramsses Rodriguez.

24 Barriers towards renewables: so barriers,
25 we all have them and they're blocking our path

1 toward success, and they're also in the way of
2 renewables. Some barriers prevent disadvantaged
3 communities from participation in renewables. And
4 these barriers are divided into two parts, business
5 and household.

6 So the three issues for small businesses
7 are financial restraint, lack of proper permitting
8 and lack of information. Getting to renewable
9 energy is too expensive for small businesses in
10 disadvantaged communities. Some small businesses
11 are run by people without the proper permits to be
12 even running a business.

13 Small business owners are often unaware of
14 where their electricity comes from. They simply
15 just pay the bill and move on with their lives.
16 They may lack information about renewables, the
17 money that they could potentially be saving,
18 California's Clean Energy Advancement, and how much
19 they'd be helping the environment by making the
20 switch.

21 Without this knowledge how are they
22 supposed to make the switch?

23 NATASHA: Good morning. My name is
24 Natasha. And there are four barriers that low-
25 income households face and which prevents people to

1 become energy efficient: language barrier, lack of
2 information, low income and apathy.

3 Language barrier: In our country there are
4 a lot of people from different countries and they
5 speak different languages. And this makes it hard
6 for us to explain what renewables are.

7 Lack of information: Many consumers are
8 unaware of the importance of being energy efficient.
9 Since they don't know, they aren't looking into
10 renewables and weatherization. (phonetic)

11 Low Income: Because of the poverty people
12 are unable to purchase renewables.

13 Apathy: Some people are unconcerned with
14 environment and energy efficiency and this is why
15 they aren't interested in renewable energy. So it
16 is also important for us to motivate and educate
17 them to become partners in California's renewable
18 energy future.

19 So we can see the connection between these
20 barriers. If people don't understand our languages,
21 they don't have proper information. And if they
22 don't have the proper information they don't have
23 apathy averted. Thank you.

24 MS. LOVE: My name is Jessica Love. And
25 I'm going to be talking about overcoming barriers

1 for small businesses.

2 And the first barrier that I wanted to talk
3 about was lack of information. And in order to
4 overcome this barrier we kind of want to introduce
5 small businesses to the world of electricity,
6 because as was previously mentioned, a lot of small
7 businesses don't know where their electricity is
8 coming from. They simply just pay the bill and move
9 on.

10 And with talking about where their
11 electricity comes from we need to slowly introduce
12 the idea of renewables and talk about the money-
13 saving potential. Because there are small
14 businesses, they probably don't have a lot of money
15 and they aren't completely willing to invest this
16 money into something as expensive as renewable
17 energy.

18 We also want to put a lot of emphasis on
19 the long-term benefits, just because again trying to
20 convince them to actually want to put the money
21 forward to get into renewable energy. And lastly,
22 you want to create a long-term plan with the
23 business owners.

24 The second barrier posed for small
25 businesses with renewable energy are legal issues.

1 And what we need to do to encourage these businesses
2 to get into renewable energy is to encourage them to
3 get legal help, so they can get proper permitting,
4 so that they can get into renewable energy. We also
5 want to provide resources for them to get that help
6 in case they don't have the information of where to
7 get the help. And we also want to put a lot of
8 emphasis on the future to further convince them to
9 get the help.

10 And the final barrier for small businesses
11 are financial issues. So we want to place a lot of
12 emphasis on lower start-up costs for small
13 businesses. And also talk about the money saving
14 potential, because again not willing to make the
15 investment, because of the fact that they don't have
16 a lot of money already.

17 You also want to talk about the future and
18 tell them they don't want to be left behind in
19 California's advancement in renewable energy. And
20 we also want to talk about the spread of renewable
21 energy in their community, but also in California.

22 You want to talk about loans, because they
23 have access to loans, and just try to get them
24 access to the information, so that they know where
25 to get the loans from. And as well as the idea that

1 these changes will pay for themselves over time.

2 MS. ATTKEN: My name is Laurel Attken.
3 I'll be talking about how we can bridge the gap
4 between low-income households and being energy
5 efficient, because I think it's really important
6 that we acknowledge that though there are federal
7 weatherization programs. They look only at income
8 as a factor of eligibility when I think that we need
9 to be looking at the communities themselves and the
10 accumulated disadvantage that they have.

11 So in order to create equity I think that
12 we need to look at the air quality of communities,
13 the average income, the amount of people working
14 minimum wage jobs, and also just the concentration
15 of minorities, because the least energy-efficient
16 areas, and the areas with the most pollution, tend
17 to be low-income areas with a high concentration of
18 minorities.

19 And lastly, we need to look at the age of
20 buildings, because older buildings are a lot less
21 energy efficient than newer buildings, due to
22 different code changes.

23 Then there's lack of information, which is
24 a really big problem, because it encompasses both
25 apathy as well as language barriers. If you don't

1 have a lot of money and you think that being energy
2 efficient can be expensive, then you don't really
3 care. And then if you don't speak the language
4 obviously you can't get the information.

5 So we need to be asking ourselves how do we
6 provide this information in a way that is accessible
7 and easy to understand. And in order to do that, we
8 need to reach out to communities and work with
9 community outreach organizations. It was even
10 suggested that there be community barbecues that
11 people can go to just to get this information.

12 Then we need to put these meetings in other
13 languages, so people can understand it. As well as
14 schedule it around their work hours, because they're
15 working minimum-wage jobs and they're working long
16 hours. And we need to take their lives into
17 consideration, so they can get this information.

18 And of course lastly, we need to include
19 information that they may qualify for -- for
20 programs they may qualify for.

21 MR. LAM: Good morning. My name is Eric
22 Lam. So with the information we gathered during our
23 two-week stay at the Energy Commission, there are a
24 few things we're going to do for the future.

25 We want to inform the students and staff at

1 Florin High School and the community around us about
2 energy efficiency and renewable energy. We want to
3 tap into Prop 39 in order to help pay for
4 accessibility and installation of solar roof panels
5 at Florin High. Having this will enable our school
6 to become more energy efficient and make use of
7 renewable energy.

8 We also want to implement an electric
9 vehicle charging station at our school for teachers
10 and students to use during their stay. This will
11 prove to our community and the ones around us that
12 we're serious about changing the environment for the
13 better.

14 Lastly, we want to purchase an electric
15 vehicle kit for our school's automotive program.
16 Doing this will set a standard and push other
17 schools to do the same. Not only are electric
18 vehicles friendly to the environment, the process
19 the students go through to build them will empower
20 the skills and training to pursue rewarding careers
21 in electric vehicle technology.

22 MR. PADILLA: Good morning. My name is Leo
23 Padilla. I'm really excited to announce our
24 Instagram Campaign. Everybody should all follow us
25 at Senate Bill 350.

1 We also recommend you to use our hashtag,
2 we are 350. Our main goal is to grab the attention
3 of formerly uninterested individuals as well as
4 reach out to our younger demographic. It will
5 benefit Section 7 of SB 350 of access to renewable
6 energy in disadvantaged communities.

7 And lastly it informs diverse communities
8 about our 2020 and 2030 goals.

9 MS. GARCIA: Good morning. My name is
10 Yadira Garcia. An idea we had to post on the
11 Instagram page was to encourage people to have power
12 strips in their homes. Some of these power strips
13 have a master device setting, which allows you to
14 set a timer on the power strip to automatically turn
15 itself off along with everything that it is
16 connected to. This may be a small task to do, but
17 as Leo was mentioning, the purpose of the page is to
18 reach out to uninterested individuals and inform
19 them about things they could do to be more energy
20 efficient.

21 On behalf of Florin High Law Academy we'd
22 like to especially thank Alana Mathews and her
23 student interns Adriana, Jocelyn and Julia.
24 Additionally, we'd like to express our gratitude to
25 the Commissioners, guest speakers, along with

1 everyone in the Energy Commission, who has given us
2 this opportunity to learn about energy and share the
3 passions inspiring us to take charge of the future
4 of California's energy and climate. Thank you.

5 And we would be happy to answer any
6 questions you might have for us.

7 COMMISSIONER SCOTT: Thank you very much
8 for that excellent presentation.

9 (Applause.)

10 I don't have any questions, do you all have
11 questions?

12 (No audible response.)

13 We would love to take a photo with all of
14 you though, so if you'll come up front just like we
15 did a minute ago, we'll get some pictures.

16 CHAIRMAN WEISENMILLER: The faculty too.

17 COMMISSIONER SCOTT: What, yes, of course,
18 and your teachers should come up too, please.

19 (Florin High School Law Academy photos taken.)

20 (Applause.)

21 COMMISSIONER MCALLISTER: So I will get a
22 couple of disclosures out of the way.

23 Let's see, UC Davis is involved in Item 1b
24 as a subcontractor and as the prime on Item 9a. And
25 my wife is a professor at the UC Davis Law School,

26

1 King Hall, so I'm just disclosing that. There is no
2 conflict here, so I'm not recusing.

3 CHAIRMAN WEISENMILLER: Okay. Do we have a
4 motion on the Consent Calendar?

5 COMMISSIONER SCOTT: I move Consent
6 Calendar.

7 COMMISSIONER MCALLISTER: I second.

8 CHAIRMAN WEISENMILLER: All those in favor?

9 (Ayes.)

10 CHAIRMAN WEISENMILLER: So it's 4-0.

11 Commissioner Douglas is absent today.

12 So let's go on to Item Number 3, Russell
13 City Energy Center, staff?

14 MR. VEERCAMP: Good morning Mr. Chair,
15 Commissioners. My name is Eric Veerkamp and I'm the
16 Compliance Project Manager for the Russell City
17 Energy Center. I believe we have representatives
18 from the project owner here in the room as well.

19 The Petition to Amend, submitted by the
20 Russell City Energy Company, LLC requests that the
21 Energy Commission approve the installation of a new
22 demineralization system designed to produce
23 demineralized water from the recycled water supply,
24 which would be used for steam cycle makeup water and
25 combustion turbine inlet air cooling.

1 Installation of the new demineralization
2 system would include new filtration skids and Feed
3 water tanks installed within a new enclosure. The
4 system would include structures that are
5 approximately 10 to 15-feet tall and would be
6 located within the existing Russell City site.
7 The request is anticipated to address shortcomings
8 in the zero liquid discharge system that were
9 unanticipated during project licensing, that have
10 led to water chemistry disruptions, resulting in an
11 unacceptable number of forced outages.

12 Staff reviewed the petition for potential
13 environmental effects and consistency with
14 applicable laws, ordinances, regulations and
15 standards and has determined that the proposed
16 changes would not cause significant impacts on the
17 environment or cause the project to not comply with
18 applicable LORS.

19 For the technical area of geology and
20 paleontology, staff proposes a new Condition of
21 Certification GEO-3, and the elimination of GEO-1
22 and GEO-2. LORS have been updated since Russell
23 City was certified in 2002, so the changes to the
24 Conditions and Certification would ensure use of the
25 most recent version of the California Building Code.

1 A notice of receipt was mailed to the
2 project post-certification mail list, docketed, and
3 posted to the web on February 5th, of 2016. Staff's
4 analysis was docketed on July 15th, 2016 and it was
5 mailed to the project post-certification list on
6 July 18th.

7 One public comment from Mr. Charlie Cameron
8 was docketed yesterday afternoon August 9th, that I
9 would like to address with you shortly. However
10 staff does recommend the Energy Commission approve
11 the request to install a recycled water
12 demineralization system at the Russell City Energy
13 Center.

14 So regarding the comment that we received
15 yesterday, I have gone through that. And I've
16 talked with our technical staff about it and I have
17 been in discussions with the project owner. And as
18 best we can tell, it is a handwritten comment on our
19 document. The individual appears to be neutral on
20 the project, although they do highlight a concern
21 about public transit, particularly traffic and
22 transportation, public transit, a bus line. However
23 this project would not impact public transit.

24 If there was a phone number or an email I
25 would have attempted to contact the individual

1 already, but unfortunately there is not. I don't
2 think they have called in.

3 So if you have any questions about that, as
4 I said we do have a representative from the project
5 owner. I would also be happy to answer any
6 questions you might have. And that concludes my
7 presentation.

8 CHAIRMAN WEISENMILLER: Thank you.
9 Project Owner?

10 MR. WHEATLAND: Good morning, I'm Gregg
11 Wheatland, outside Counsel for Calpine. And with me
12 this morning is Katherine Piper, Senior Counsel for
13 Calpine.

14 We'd like to thank the staff for its
15 recommendation and we support the recommendation, of
16 course. We are here and available to answer any
17 questions you may have.

18 CHAIRMAN WEISENMILLER: Thank you.

19 Anyone in the room or on the phone that has
20 comments on this?

21 (No audible response.)

22 Then let's transition to the Commissioners.
23 With Commissioner Douglas absent, I'm going to just
24 say a few words, which is that obviously when the
25 staff reviews the amendments the question is the

1 environmental impact to the extent you've done the
2 analysis. And have concluded this indeed complies
3 with the intent of the conditions and does it in an
4 acceptable way.

5 And at that point, we accept those, so with
6 that I'm looking for a motion unless anyone has any
7 comments?

8 COMMISSIONER MCALLISTER: Any comments?

9 (No audible response.)

10 All right, I'll move Item 3.

11 COMMISSIONER SCOTT: Second

12 CHAIRMAN WEISENMILLER: All those in favor?

13 (Ayes.)

14 CHAIRMAN WEISENMILLER: This also passes 4-
15 0. Thank you.

16 MR. WHEATLAND: Thank you

17 MS. PIPER: Thank you.

18 CHAIRMAN WEISENMILLER: Let's go on to Item
19 Number 4, the CSU's Chico Research Foundation, Tom
20 Gates?

21 MR. GATES: Good morning. My name is
22 Thomas Gates. I'm the Supervisor of the Cultural
23 Resources Unit of the Siting Transmission and
24 Environmental Protection Division.

25 The Genesis Solar Energy Project sited in

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1 the Chuckawalla Valley, Riverside County, was
2 licensed in September 2010. During project
3 construction in 2011 an archeological site discovery
4 was made by cultural resources and Native American
5 project monitors and it was determined that site
6 avoidance was not feasible. And therefore the
7 ensuing damage to the archeological site was
8 mitigated through compensation.

9 The mitigation package was negotiated among
10 the project owner, the Bureau of Land Management,
11 and the California Energy Commission and in
12 consultation with 16 culturally-affiliated tribes.
13 The mitigation package, totaling \$3.04 million
14 involved three broad categories of compensatory
15 mitigation activities: archeological, ethnographic
16 and public outreach.

17 It was also agreed between the two
18 licensing agencies that the archeological mitigation
19 would be overseen by both agencies, that
20 ethnographic mitigation would be overseen by the
21 Bureau of Land Management, and that the Energy
22 Commission would oversee the public outreach
23 mitigation.

24 Tribes were included in the mitigation
25 negotiation and implementation via a tribal working

1 group that met on a quarterly basis and deliberated
2 on the three categories of mitigation, and
3 particularly the public outreach component.

4 As the various public outreach mitigation
5 pieces moved towards completion two pieces
6 languished. As a result of the tribal agency
7 working group deliberations the languishing
8 mitigations were transferred to the Energy
9 Commission via an Energy Commission and NextEra set
10 of correspondences. Funds were transferred from
11 NextEra to the Energy Commission in November 2015.

12 With the majority of the various mitigation
13 pieces completed, this contract would the public
14 outreach mitigation further towards completion by
15 providing the public with a public broadcasting
16 quality video that explores the issues related to
17 archeological investigation, the curation of
18 thousands of artifacts that provide insights to
19 tribal life ways in the desert environment. And the
20 tribal values placed upon those artifacts.

21 Staff requests that the Commission pass the
22 proposed resolution approving Agreement 700-16-002
23 with the CSU, Chico Research Foundation for a
24 \$75,000 contract to produce a 26-minute documentary,
25 highlighting the rich pre-history of the Ford Dry

1 Lake area. That concludes my presentation and I'm
2 available for questions.

3 CHAIRMAN WEISENMILLER: Okay. Thank you.

4 First, any comments from anyone in the room
5 or on the phone?

6 (No audible response.)

7 No, okay then again we'll have a discussion
8 among the Commissioners.

9 Actually, I was on the Genesis Project
10 initially on that case. And certainly there was
11 always a concern on the cultural resources, so a
12 fear we'd run into something. And I think certainly
13 it's a good idea to sort of document what was there
14 for posterity. So with that, I'll go on to see if
15 any of the other Commissioners have comments?

16 (No audible response.)

17 I also need a motion?

18 COMMISSIONER SCOTT: I move approval of
19 Item 4.

20 COMMISSIONER MCALLISTER: I'll second

21 CHAIRMAN WEISENMILLER: All those in favor?

22 (Ayes.)

23 CHAIRMAN WEISENMILLER: So Item 4 passes,
24 4-0. Thank you.

25 MR. GATES: Thank you.

1 CHAIRMAN WEISENMILLER: We've already
2 covered Item 5, so let's go on to Item 6, California
3 Sustainable Freight Action Plan.

4 MR. FREEMAN: So good morning,
5 Commissioners. My name is Andre Freeman from the
6 California Energy Commission Fuels and
7 Transportation Division. Today, I'm going to give
8 an overview of the California Sustainable Freight
9 Action Plan that has just been released to the
10 public.

11 I didn't know, Commissioner Scott, did you
12 want to say a few words before I got started with
13 the presentation?

14 COMMISSIONER SCOTT: I'll let you get going
15 and then I'll add in at the end.

16 MR. FREEMAN: Okay. Thank you.

17 So this effort was initiated by Governor
18 Brown's Executive Order in July of 2015, which
19 directed the Secretaries of the Natural Resources,
20 Transportation and Environmental Protection Agencies
21 to lead the California Energy Commission, Air
22 Resources Board, Caltrans and Governor's Office of
23 Business and Economic Development, in developing an
24 action plan that would lay out the steps California
25 can take to improve overall system efficiency of the

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1 freight sector, accelerate transition to zero
2 emission technologies, and increase the economic
3 competitiveness of California's freight sector as a
4 whole.

5 With such a broad-reaching scope for this
6 plan it was essential to convene stakeholder work
7 groups to advise the state agencies on these topics.
8 Through this process staff has hosted and
9 participated in outreach events throughout the State
10 that brought together stakeholders representing
11 industry and business groups, community groups,
12 environmental justice advocates, regional planning
13 entities, academia, technology providers and many
14 other interested parties.

15 After gathering extensive information from
16 these groups several iterations of the plan were
17 developed and the structure of the plan was
18 established to address the areas of highest
19 importance that were identified.

20 I will go into detail on each of these
21 sections, but in general the plan sought to identify
22 where we are today, where we would like to go, the
23 challenges and opportunities that we will come
24 across, and how the State will strategically move
25 forward to achieve our goals.

1 The over-arching vision for sustainable
2 freight describes the important considerations for
3 transitioning to a sustainable freight system and
4 tries to embody the mission that was established
5 through the Executive Order.

6 As we drill down into how to reach the
7 vision for sustainable freight, guiding principles
8 were established to highlight the breadth of
9 concerns that need to be addressed when looking at
10 the freight system. These principles will also be
11 used to prioritize State resources that will support
12 the actions that are necessarily to achieve the
13 sustainable freight vision.

14 Per the Executive Order's direction the
15 State agencies established targets for these three
16 areas. An efficiency target of 25 percent was
17 established to indicate overall state-wide success
18 towards the goal of improving freight transport
19 system efficiency while simultaneously reducing
20 greenhouse gas emissions. Success in this area will
21 be measured not only by this metric, but also by
22 statics on throughput, reliability, speed and delay
23 reduction of freight moving throughout the State.

24 Zero emission technology goal was
25 established to both identify a goal for zero

1 emission vehicle and equipment deployment as well as
2 acknowledge the need for near-zero emission
3 transmission technologies for certain applications.
4 The state agencies will be focused on promoting
5 these advanced technologies, where technologically
6 and economically feasible.

7 The economic target has been established to
8 highlight the need for economic analysis and
9 consideration of the importance of the freight
10 sector when state agencies develop new policies,
11 regulations, funding opportunities that may impact
12 this sector and any other opportunities to promote
13 the economy in this important portion of
14 California's overall economy.

15 So how do we achieve these targets? We do
16 that through real world activities, activities which
17 will require financial support through public and
18 private partnerships. The Action Plan expresses the
19 need to coordinate and leverage investments from the
20 private sector and investments at the Federal, state
21 and local levels to make this vision a reality.

22 To further flesh out real world projects to
23 help achieve the vision, stakeholders were provided
24 an opportunity to submit specific concepts that they
25 would like to see funded in the future that tie to

1 sustainable freight vision. Staff received over 50
2 comments that could represent sustainable freight
3 projects throughout California. This slide shows
4 three projects that were included as representative
5 examples of project concepts that could be
6 implemented later in the years.

7 Although there was no funding directly
8 allocated to the Sustainable Freight Action Plan, a
9 large majority of the pilot project concepts that
10 were submitted fall in line with the missions of
11 existing funding programs. Energy Commission staff
12 have already begun utilizing information gathered
13 through this effort to advise our freight-related
14 funding efforts.

15 The Action Plan also identified additional
16 higher level discussion concept activities that can
17 support sustainable freight goals. As you can see
18 here, it references a wide variety of activities,
19 some of which are likely to be included in proposals
20 for Energy Commission funding opportunities.

21 A major part of the Action Plan was not
22 only to talk conceptually about where we want to go
23 and how to get there, but also to identify specific
24 implementation steps that will be undertaken by each
25 agency. These nine action item categories summarize

1 the numerous implementation steps that will follow
2 over the coming years. The Action Plan includes a
3 list of more than 70 individual implementation steps
4 and staff reviews the sustainable freight outreach
5 opportunities to let interested parties know how
6 they can be more involved with each of those
7 efforts.

8 Focusing on Energy Commission actions,
9 staff will take the information provided through the
10 Sustainable Freight Action Plan and integrate it
11 into the research and development, demonstration,
12 and other funding activities that will support zero
13 and near zero emission technologies. Also,
14 renewable fuels production and renewable energy
15 generation that will support the plug-in vehicles
16 that are being deployed in this sector.

17 This plan will also support the ongoing
18 transportation and energy planning efforts that the
19 Energy Commission and Public Utility Commissions are
20 working on, and also highlighted the need for
21 expanding our outreach and education efforts to get
22 more parties that are interested in this involved.

23 We will not be engaging in these activities
24 alone. The expanded freight sector stakeholder
25 group that has been established through this effort,

1 will play a major role in guiding and implementing
2 the actions that we need to move the freight sector
3 forward.

4 Although the Action Plan is now done, the
5 effort will continue. This slide shows the major
6 time points where the interagency team of state
7 agencies will provide updates on the implementation
8 of the Action Plan. As the process evolves, the
9 schedule may change, but we want to remind
10 stakeholders that this is an iterative process and
11 their continued participation in this effort is
12 crucial.

13 With that, I'm available to take any
14 questions. And we also have representatives from
15 Caltrans, the Air Resources Board, and the
16 Governor's Office of Business and Economic
17 Development able to answer your questions as well.

18 CHAIRMAN WEISENMILLER: First, I want to
19 ask if any of the other state agencies want to say a
20 few words about this, particularly the Air Board?

21 MS. ARIAS: Good morning, Commissioners.
22 My name is Heather Arias from the Air Resources
23 Board.

24 I don't have any formal remarks, but I do
25 want to just reiterate that we from the Air

1 Resources Board look at this as a great opportunity
2 to continue and expand on the successful partnership
3 that our agencies have already built. And we really
4 appreciate the effort that the Energy Commission has
5 put forward, along with our agency and the others,
6 to really help set us up as a State to be in a
7 situation where we can reach the sustainable freight
8 system. We all believe, as I know you do, that we
9 can have our environmental and economic objectives
10 met.

11 And certainly the work that you do here is
12 extremely critical and crucial for that success. So
13 we look forward to continuing moving forward with
14 you and appreciate the partnership that is going to
15 continue on.

16 CHAIRMAN WEISENMILLER: Great. Thank you.

17 GO-Biz, please?

18 MR. RAMIREZ: Good morning, Frank Ramirez
19 with the Governor's Office of Business and Economic
20 Development.

21 As Andre pointed out we don't have a
22 quantitative metric for improving the
23 competitiveness of the freight system yet. That's
24 one of the actions involved in the Action Plan.
25 We're going to be convening a work group of agencies

1 and private sector folks, and other academic folks
2 to try to come up with the silver bullet of how we
3 increase the economic competitiveness of the freight
4 industry.

5 And we look forward to your participation
6 and support as well as your staff and I do want to
7 thank your staff, Andre in particular, for being
8 involved in this process. So far he's been a very
9 big help. Thank you very much and we look forward
10 to working with you.

11 CHAIRMAN WEISENMILLER: Great. And
12 certainly send my regards to Mike Rossi.

13 MR. RAMIREZ: Absolutely. I will.

14 CHAIRMAN WEISENMILLER: I appreciate his
15 involvement in this effort here.

16 As you know, the goods movement is about --
17 I've heard anywhere from 20 to 30 percent of the
18 economy in the Los Angeles Basin -- and it's also
19 (indiscernible)directed by, I forgot to say,
20 probably a very, very high percentage of the
21 pollutants in Los Angeles Basin. So trying to come
22 up with a way to deal with that nexus of maintaining
23 the economic competitiveness there, but doing it in
24 a more sustainable fashion is really critical for
25 California's future.

1 MR. RAMIREZ: Absolutely. I will pass
2 along your regards to Mr. Rossi.

3 CHAIRMAN WEISENMILLER: Great.

4 And I guess we have Caltrans on the phone.
5 Please, do you want to say a few words and identify
6 yourself? Thanks.

7 MR. SCHMIDT: Hi this is --

8 CHAIRMAN WEISENMILLER: Uh-oh, we lost you.
9 Try again?

10 MR. SCHMIDT: Hi. This is Chris Schmidt
11 from Caltrans; can you hear me?

12 CHAIRMAN WEISENMILLER: Yes.

13 MR. SCHMIDT: Thank you.

14 I just want to reiterate what my partners
15 have said in their remarks already; the
16 collaboration has been incredibly valuable to us.
17 We intend to continue this dialogue with each other.

18 One of the key things that we're keying up,
19 as far as our responsibilities, are to bring this
20 item to our Freight Advisory Committee in September.
21 We are also reenergizing our efficiency group to
22 work with industry stakeholders on some of the
23 efficiency ideas that have been brought forth as
24 part of that plan.

25 And in the very near term, we'll also be

1 going to the California Transportation Commission on
2 August 17th to brief them as well.

3 So we continue to implement the plan. We
4 continue to want to work in partnership. And I just
5 want to thank all of you for all of your support and
6 the ability to work with your staff. It's been
7 really a very production collaboration. Thank you.

8 CHAIRMAN WEISENMILLER: Thank you.

9 Any public comment either in the room or on
10 the phone; please identify yourself.

11 MR. MAGAVERN: Good morning, Commissioners.
12 My name is Bill Magavern. I'm with the Coalition
13 for Clean Air.

14 And we've been working for many years
15 trying to clean up the freight system. And that's
16 because, as the Chairman referenced a couple of
17 minutes ago, we really have to clean up our freight
18 system in order to reach air quality attainment in
19 California. The movement of goods accounts for
20 about half of all the diesel particulate matter in
21 the State and about 45 percent of nitrogen oxide
22 emissions.

23 And I would add that a transformation of
24 the freight sector is also critical to reaching our
25 goals for reducing greenhouse gas emissions and also

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1 for reducing our reliance on petroleum. So because
2 of that, we've participated in this process of
3 formulating the Sustainable Freight Action Plan. We
4 sit on the Freight Advisory Committee with
5 Mr. Oglesby, among many others. And we are members
6 of the California Clean Air Freight Coalition, a
7 broad coalition of groups: community, regional,
8 national groups that's been engaged in this process
9 over the years.

10 So I want to thank the Commission and your
11 staff for the hard work that you've put into
12 developing this plan. And also for your years of
13 dedicating funding to demonstrating zero emission
14 technologies in the freight sector and that's going
15 to continue to be crucial. In fact, we think
16 there's a need for a lot more of incentive funding
17 and hope the Commission will work with others in the
18 Legislature and in the Administration to try to come
19 up with that funding over the years.

20 We strongly support the vision in the
21 Freight Plan of deploying zero emission technologies
22 wherever they are available. And where they're not
23 available, deploying near zero emission technologies
24 combined with low carbon renewable fuels.

25 And we agree, as the Chairman had talked

1 about, and I think the Governor's vision is also,
2 that we can continue to have this important economic
3 driver in the state. And for it to grow and prosper
4 and continue to create jobs, while at the same time
5 protecting our air quality and our climate.

6 We think that the target of 100,000 zero
7 emission pieces of equipment is actually not very
8 ambitious. We think we can do better, especially
9 when you consider the fact that that category
10 includes forklifts. And we already have many, many
11 thousands of forklifts that are powered by either
12 batteries or fuel cells. So we would urge you in
13 implementing the plan to come back in three years
14 and see whether we can raise that target and be more
15 ambitious.

16 So thank you for listening to my comments.

17 CHAIRMAN WEISENMILLER: Thank you.

18 Anyone else in the audience or on the
19 phone?

20 (No audible response.)

21 Okay, Commissioners? Commissioner Scott,
22 do you have comments or questions?

23 COMMISSIONER SCOTT: Sure. I had just a
24 few things to underscore that you pretty much have
25 heard already between our fellow agencies and

1 Andre's presentation, and also what Bill said. But
2 it may bear repeating.

3 I want to say how much I appreciate Andre's
4 leadership here for the Energy Commission. He and
5 the team have been fantastic at engaging and really
6 helping to pull together the Sustainable Freight
7 Action Plan. And I'm really pleased that we had an
8 opportunity to do this informational item today,
9 because I know we don't always have a chance to
10 really dig into some of the outside activities, into
11 activities outside of our subject areas. And this
12 is a big one for the Governor and for the state, so
13 I wanted you guys to have the kind of firsthand
14 information.

15 You heard already California's freight
16 sector accounts for about \$740 billion in gross
17 domestic product and over five million jobs in 2014.

18 But it also accounts for about half of the
19 diesel particulate matter, almost half of our NOx
20 emissions, and about 6 percent of the greenhouse gas
21 emissions in the state. And so a large portion of
22 these emissions contribute to the high levels of
23 local pollution or hot spots, particularly in places
24 where we have some of the State's worst air quality.
25 Reducing emissions from the freight sector will be

1 critical to helping achieve California's Federal
2 Clean Air Standards in our ambitious climate goals,
3 particularly the target of reducing greenhouse gas
4 emissions 40 percent below 1990 levels by 2030.

5 I wanted highlight that we recognize that
6 there are already a number of ongoing freight-
7 related planning activities across the various
8 agencies. But this Action Plan is unique in that
9 it's the first time that these agencies have come
10 together aligning all of those efforts to develop a
11 comprehensive statewide strategy for moving towards
12 a more efficient and sustainable sector in
13 California.

14 I also wanted to highlight that the
15 interagency group tasked with this has engaged with
16 a broad range of stakeholders. You saw that in
17 Andre's presentation, and that was including but not
18 limited to industry, to labor, to regional and local
19 governments and community and environmental groups
20 to really get input and feedback on the plan that
21 we've put together. And they worked really hard to
22 incorporate that feedback into the final plan.

23 However, as you heard Andre mention the
24 plan is kind of the first step. And now the real
25 work begins. We've got to get out there and get

1 implementing.

2 So I just wanted to say thank you to our
3 partners. It really has been a fantastic
4 collaboration. I appreciate having the Air
5 Resources Board and GO-Biz here in the audience and
6 Caltrans on the phone. I think our agencies have
7 worked really well together, so I appreciate the
8 good partnership and collaboration we look forward
9 to continuing and as we implement this plan.

10 And also to all of the engaged stakeholders
11 who provided such really good feedback for us as we
12 went along.

13 And then again, just a hearty thanks to
14 Andre again for his leadership and to our Energy
15 Commission Transportation team for the great work
16 that they did helping put this plan together.

17 CHAIRMAN WEISENMILLER: Okay. Great,
18 thanks again.

19 Let's go on to Item 7, DOE National
20 Renewable Energy Laboratory, staff?

21 MR. AHMAD: Good morning, Chairman and
22 Commissioners. My name is Adeel Ahmad from the Zero
23 Emission Vehicle and Infrastructure Office of the
24 Fuels and Transportation Division.

25 I am presenting to seek approval for an

1 amendment to contract 600-15-001 with the Department
2 of Energy, National Renewable Energy Laboratory.
3 The contract provides technical support to the
4 California Energy Commission Alternative and
5 Renewable Fuel and Vehicle Technology Program. The
6 objective of this amendment is to incorporate Task 8
7 real-time data collection for alternative fueling
8 stations.

9 In March 2012, Governor Brown issued
10 Executive Order B-16-12 laying the foundation to
11 support 1.5 million zero-emission vehicles by 2025.
12 As a near-term goal the Executive Order specifies
13 that infrastructure be built to support the fueling
14 of one million zero-emission vehicles by 2020 for
15 all-electric, hydrogen fuel-cell, and plug-in hybrid
16 vehicles.

17 The Alternative and Renewable Fuel and
18 Vehicle Technology Program has funded numerous
19 electric vehicle charging and hydrogen refueling
20 stations to create the infrastructure and promote
21 the adoption of zero-emission vehicles in
22 California. In an ongoing effort, ARFVTP has funded
23 over 8,000 electric vehicle charging stations and 49
24 hydrogen refueling stations so far. These stations
25 are continuously generating data on refueling events

1 and in return the Energy Commission requests this
2 data be provided by the grant recipients before the
3 agreement end date. The data provided is only a
4 small glimpse in time of a station's use and
5 overtime the station's utilization evolves.

6 The amendment will add Task 8 to create an
7 automated data collection repository of networked
8 electric vehicle charging and hydrogen refueling
9 stations operating in California. It will help the
10 Energy Commission access data beyond an agreement
11 end date and will assist electric and hydrogen
12 refueling station providers to share data in a more
13 streamlined method.

14 The Energy Commission staff will analyze
15 the data by individual stations to strategically
16 plan for additional stations that will increase the
17 rate of zero-emission vehicle adoption towards the
18 goal of 1.5 million vehicles by 2025.

19 If approved, the Energy Commission will
20 augment the budget with \$299,752 from the ARFVTP
21 technical assistance funding allocation. Staff is
22 requesting the Commission's support and approval of
23 this proposed amendment.

24 With me today, on the phone today, is
25 Mr. Andrew Hudgins, Project Leader for the Energy

1 Systems Integration at the National Renewable Energy
2 Laboratory, to speak briefly about this Task. If
3 you have any questions, we will be happy to answer
4 them. Thank you.

5 CHAIRMAN WEISENMILLER: Great.

6 Let's first start, is there anyone in the
7 room who has any comment?

8 (No audible response.)

9 Then let's go to the line, please.

10 MR. HUDGINS: Can everyone hear me?

11 CHAIRMAN WEISENMILLER: Yes.

12 MR. HUDGINS: Great, thank you. And thank
13 you Adeel, Chairman and Commissioners. NREL manages
14 the Department of Energy's Alternative Fueling
15 Station Locator and Database. And through this
16 effort we collect and disseminate data for all
17 public and private electric vehicle charging
18 stations and hydrogen fueling stations across the
19 country.

20 We have robust partnerships and agreements
21 with charging station installers and network
22 providers, which will enable us to execute this task
23 by enhancing our data collection and sharing
24 capacity. We also have a partnership with the
25 California Fuel Cell Partnership to collect and

1 share hydrogen station data. NREL's robust analysis
2 capabilities will help CEC meet the goals of the
3 proposed project and we look forward to working
4 alongside CEC staff. And we feel that this will be
5 a state-of-the-art project and a critical tool for
6 meeting the goals of the Executive Order.

7 So we appreciate the consideration, Adeel's
8 work to bring this to this meeting, and I'm happy to
9 answer any questions that may come up.

10 CHAIRMAN WEISENMILLER: Thank you.

11 Let's transition to the Commissioners,

12 COMMISSIONER SCOTT: I highly recommend
13 this project. I think the data collection
14 capabilities it will give us will be really handy as
15 we're looking forward to understand more about how
16 the chargers are being utilized, how the fueling
17 stations are being utilized. And you can never have
18 enough data, especially in a newish technology like
19 this.

20 So if you guys don't have questions I will
21 move approval of -- oh, are you sure? I will move
22 approval of Item 7.

23 COMMISSIONER HOCHSCHILD: Second.

24 CHAIRMAN WEISENMILLER: All those in favor?

25 (Ayes.)

1 CHAIRMAN WEISENMILLER: So this item passes
2 4-0.

3 Thank you.

4 MR. AHMAD: Thank you.

5 CHAIRMAN WEISENMILLER: Let's go on to Item
6 8, City of Santa Monica. Staff?

7 MS. SALAZAR: Good Morning, Chair
8 Weisenmiller and Commissioners. My name is Rachel
9 Salazar and I work in the Energy Research and
10 Development Division. I am here today seeking
11 approval of an agreement with the City of Santa
12 Monica for approximately \$1.5 million in EPIC
13 funding.

14 This is one of the projects that was
15 selected as the -- I'm sorry, is part of the "EPIC
16 Challenge." As you may recall the EPIC Challenge is
17 a two-phase competition, which challenges teams to
18 develop innovative approaches to accelerate the
19 deployment of advanced energy communities.

20 Phase I focuses on the planning and design,
21 while Phase II will provide funding to three
22 projects for the build-out of the communities. Only
23 recipients from Phase I will be invited to compete
24 for Phase II. This agreement will be for activities
25 funded out of Phase I.

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1 The City of Santa Monica will plan and
2 design a multiuser micro grid, which will integrate
3 renewable energy, energy storage, and electric
4 vehicle charging. The micro grid will provide
5 service to the City Yards, which was built on top of
6 a landfill, as well as neighboring private and
7 public properties. Participants of the micro grid
8 will include the City's municipal buildings and
9 fleet, a fire department training center, a public
10 park, an affordable housing mobile home park, as
11 well as the Bergamont Arts Center, which is being
12 planned for private redevelopment.

13 The project team will work with
14 stakeholders and investors to fund and permit the
15 designed advanced energy community working through
16 public and private partnerships.

17 Additionally, a replicable model for the
18 policy and financial frameworks will be developed
19 and shared with the public.

20 Staff recommends approval of this
21 agreement. And I'm happy to answer any questions
22 you have at this time.

23 CHAIRMAN WEISENMILLER: Thank you.

24 First, is there anyone in the room or on
25 the line who has comments on this?

1 (No audible response.)

2 Okay. Then let's transition to the
3 Commissioners.

4 I'm the Lead on the Research Program and
5 obviously this is a good example of what we're
6 trying to do in terms of really at the community
7 level. It's interesting, when you look at China
8 their programs seem to be the Emissions Training
9 System, which are going in nationwide. And also
10 zero carbon cities is an activity that they have 30
11 or 40. So again, it's good to -- and there are
12 (indiscernible) Chinese cities. As you know there
13 are cities that are -- actually at least one's
14 probably bigger than California, but having said
15 that there are lots of very large cities in China.

16 So certainly always trying to really see
17 what sort of creativity and imagination we get at a
18 local level, particularly in the renewables space.
19 So thanks.

20 Anyone else have comments or questions?

21 COMMISSIONER SCOTT: I'd underscore the
22 creativity and innovation at the local level. I
23 think the EPIC Challenge is really a fantastic set
24 of projects that we've had a chance to review. And
25 I've challenged the Transportation team to see if we

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1 can come up with something similar to that on the
2 Transportation space. So I think these are great, I
3 can't wait to see how the projects turn out.

4 COMMISSIONER MCALLISTER: You know, I would
5 just echo on the energy efficiency side, local
6 governments are really all the action is, 90 percent
7 of the action is there. And so anything we can do
8 to help them think creatively, give them some
9 resources, so that they can forge these solutions.
10 We have a diverse state, maybe not quite as diverse
11 or certainly as populous as China, but maybe. And
12 the local government is really where we need to
13 learn from, so we can then know what to do at the
14 state level.

15 So this is an example of that and I'm very
16 supportive. Okay, so I'll move Item 8.

17 COMMISSIONER SCOTT: Second.

18 CHAIRMAN WEISENMILLER: All those in favor?

19 (Ayes.)

20 CHAIRMAN WEISENMILLER: So thank you.

21 Item 8 passes 4-0.

22 Let's go on to Item 9, Advancing Water and
23 Energy Efficient Strategies and Technologies in
24 California. Staff?

25 MR. MORI: Good Morning, Commissioners.

1 I'm Kevin Mori of the Energy Efficiency Research
2 Office and with me is Brad Williams of the same
3 office. Together we are going to present five items
4 recommended by staff. The five apply to research
5 agreements focused on water and energy efficiency.

6 MR. WILLIAMS: Thanks, Kevin.

7 And the first item, Item A is "Improving
8 Water and Energy Efficiency in California's Dairy
9 Industry" with UC Davis.

10 As the nation's largest milk producer,
11 California dairies constitute one of the most
12 important sectors of the state's economy. The
13 California Dairy industry has continued to suffer
14 significant financial loss each year due to
15 decreased milk production and increased disease as a
16 result of heat stress during the summer months.

17 It is estimated that keeping cows cool
18 during the summer months in California consumes an
19 estimated 21 billion gallons of water -- and uses
20 and uses an estimated 253,000 Megawatt-hours of
21 electricity annually.

22 In this project UC Davis will test two
23 innovative cow-cooling technologies. The first
24 approach will cool cows using cooling mats embedded
25 in the ground under their pens. In the second

1 approach cows will be cooled by targeting air
2 directly at individual cows through a ducted system.

3 After pilot tests are complete at the UC
4 Davis Dairy, the more promising of the two
5 technologies will be demonstrated on a larger scale
6 at a dairy in Tulare. These technologies have the
7 potential to reduce energy consumption by
8 approximately 40 percent and water consumption by
9 approximately 85 percent compared to conventional
10 methods.

11 MR. MORI: Thanks, Brad.

12 Item B is "Testing a Low-Energy Water
13 Treatment System for Fail-Safe Direct Potable Reuse"
14 with Porifera, Inc.

15 California has not allowed permitting of
16 direct potable reuse projects due to health risks
17 and the lack of real-time fail-safe methods.

18 Porifera will test a membrane breach detecting
19 technology that will provide a fail-safe measure for
20 treating wastewater to direct potable water reuse.

21 This technology has the potential to reduce
22 energy use by 75 percent compared to conventional
23 methods and directly provide potable water. This
24 project will be demonstrated in a disadvantaged
25 community in Hayward.

1 MR. WILLIAMS: And Item C is "Power and
2 Water Saving Advanced Hybrid Air/Wet Cooling System"
3 with Altex Technologies Corporation. Conventional
4 hybrid air/wet cooling systems tend to have high
5 capital and electric power costs, which constrain
6 their use in commercial and industrial buildings.
7 In this project, Altex will design and test an
8 advanced hybrid air/wet cooling system at their
9 commercial facility located in Sunnyvale,
10 California.

11 The advanced cooling system will utilize an
12 advanced heat exchanger with improved cooling
13 performance and lower power requirements compared to
14 traditional heat exchangers. By leveraging the
15 improved dry performance characteristics, the system
16 will be able to operate under dry conditions for a
17 majority of the time, and reduce wet cooling cycles.

18 This reduction in wet cooling mode will
19 produce several benefits including: reduced
20 maintenance, elimination of water carry over and
21 plumes, and elimination of water biocide treatment
22 problems.

23 This technology has the potential to save
24 approximately 260,000 megawatt hours and 20 billion
25 gallons of water annually.

1 MR. MORI: Thanks, Brad.

2 Item D is "A New Solution to California's
3 Energy and Water Challenges: Reducing the Cost of
4 Desalination and Increasing Water Reuse" with
5 Lawrence Livermore National Security, LLC. Lawrence
6 Livermore will be testing a flow-through electrode
7 capacitive desalination system on brackish water.

8 This system uses electric fields to attract
9 salt ions to the electrodes, thus desalinating the
10 water. This technology will be tested in the Delta
11 Diablo water treatment plant in Antioch, CA and at a
12 facility in Los Angeles County.

13 This system has the potential to save
14 approximately 8.3 gigawatt hours per year compared
15 to the conventional desalination method for brackish
16 water.

17 MR. MORI: Item E is "Novel Membrane
18 Technology to Improve Energy Efficiency and Water
19 Savings in Wastewater Treatment Operations" with
20 Kennedy/Jenks Consultants.

21 Water filtration using membranes can be
22 energy intensive due to fouling of the membranes.
23 Kennedy/Jenks will be testing a novel self-cleaning
24 membrane filtration system that will minimize the
25 fouling and increase efficiency. The test will

1 occur at the Northeast Bakersfield Water Treatment
2 Plant in Bakersfield, California.

3 This technology has the potential to reduce
4 energy use by 40 percent and save approximately 50
5 percent of water associated with backwashing the
6 filters.

7 Thank you, and we are happy to answer any
8 of your questions.

9 CHAIRMAN WEISENMILLER: Thank you.

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

12 Okay, so transitioning to the
13 Commissioners. Obviously, as the Lead on Research I
14 think we all know the important nexus for California
15 between water and energy. I mean, obviously in
16 Southern California we're in the fifth year of our
17 drought and certainly any number of eminent climate
18 scientists are concerned that we could be looking at
19 decadal-long droughts in California in our future.

20 So it's really important that we look at
21 ways, we basically bring some of the innovation that
22 we've done so well within the energy space, to bring
23 that into the water space. And remind folks when
24 the Governor signed his Executive Order on Water,
25 one of the things that he really wanted to do was

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1 bring the Energy Commission more in to water issues.
2 Particularly to really focus on innovation and
3 efficiency, so again I think that these are
4 important in programs or research activities for
5 California's future.

6 COMMISSIONER MCALLISTER: Yeah. I guess
7 they do both water and energy, and therefore it's
8 incumbent upon us to pay attention to what happens
9 with the water savings and the energy savings. So
10 I'm obviously very interested in the performance of
11 evaporative technologies that we've got here in
12 terms of the energy side of it, independent in some
13 way from the water side of it.

14 And hopefully we can have our cake and eat
15 it and we just want to make sure that actually
16 happens. So I look forward to seeing how the
17 performance evolves.

18 Okay. I'll move Item 9.

19 COMMISSIONER SCOTT: Second.

20 CHAIRMAN WEISENMILLER: All those in favor?

21 (Ayes.)

22 Item 9 passes 4-0.

23 Thank you.

24 MR. MORI: Thank you.

25 CHAIRMAN WEISENMILLER: Let's go on to Item

1 10, University of California Berkeley. Staff?

2 MR. SULEIMAN: Good morning, Chairman and
3 Commissioners. My name is Adel Suleiman. I'm with
4 the Energy Efficiency Research Office.

5 This research grant, for approximately \$1.9
6 million to the Regents of the University of
7 California, Berkeley, is to develop, demonstrate and
8 to evaluate an innovative technology solution to
9 reduce heating and cooling energy use in residential
10 and commercial buildings.

11 Heating and cooling consumes up to 40
12 percent of the energy used in residential and
13 commercial buildings. This technology like this
14 will help California meet its energy and climate
15 goals. And can be implemented without major
16 replacement of HVAC systems and has the potential of
17 reducing energy use by up to 37 percent in cooling
18 and 15 percent in heating. And this solution
19 combines advanced ceiling fans with automated
20 controls, with programmable learning thermostats to
21 control fan speed and HVAC schedules based on
22 occupancy, space conditions, and thermal comfort.

23 This technology will be demonstrated in six
24 low-income multifamily housing units buildings, all
25 located in disadvantage communities in Newman,

1 Madera, Fresno, El Monte and San Diego.

2 The research project will demonstrate and
3 quantify energy savings, assesses occupant comfort,
4 identify and address market barriers to advance
5 wider acceptance and adoption, develop tools
6 currently unavailable for designers to size, select,
7 and position ceiling fans, and make the tools
8 available to the public, provide guidance on how to
9 implement this technology into energy efficiency
10 retrofit programs and policies, and to develop
11 standard rating methods and energy-code language to
12 facilitate more widespread implementation.

13 In addition to UC Berkeley, project
14 partners include Center for the Built Environment
15 and Haiku fan manufacturers. More than \$300,000 in
16 match funding is being provided on this project. I
17 am seeking your approval on this item, and I will be
18 happy to answer any questions you might have.

19 CHAIRMAN WEISENMILLER: Thank you.

20 First, any comments from anyone in the room
21 or on the phone?

22 (No audible response.)

23 No, let's transition to the Commissioners
24 then.

25 Again, this is another one of our research

1 projects. I think it's a pretty exciting one as we
2 go forward. Obviously, we've talked about how the
3 existing buildings are a key part of our energy use
4 in greenhouse gas emissions. So it's good to get
5 some research, particularly in the low-income
6 multifamily area, need options there.

7 COMMISSIONER MCALLISTER: Yeah. Heat
8 exchangers are a key piece of a lot of different
9 systems, so figuring out what works and how we can
10 improve the efficiency is pretty critical all
11 around, so not just here but in other places too and
12 so I'm very supportive.

13 So I'll move Item 10.

14 COMMISSIONER SCOTT: Second.

15 CHAIRMAN WEISENMILLER: All those in favor?

16 (Ayes.)

17 CHAIRMAN WEISENMILLER: So, Item 10 passes
18 4-0. Thank you.

19 Let's go on to Item 11, Los Angeles
20 Cleantech Incubator. Staff, good morning.

21 MS. GONZALEZ: Good morning, Chair
22 Weisenmiller and Commissioners. My name is Diana
23 Gonzalez with the Energy Deployment and Market
24 Facilitation Office.

25 I am seeking Commission approval today for

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1 the Los Angeles Regional Energy Innovation Cluster
2 Project. The purpose of this solicitation is to
3 support the development and commercialization of
4 promising new energy innovations to benefit electric
5 ratepayers in the Investor-Owned Utility Service
6 Territories. Three additional regional energy
7 innovation cluster agreements were previously
8 approved at the April Business meeting.

9 As new energy policies are adopted,
10 entrepreneurs must conceptualize and develop
11 innovative new solutions for a cleaner, safer, more
12 affordable, more reliable and more resilient
13 electric grid. However, entrepreneurs often lack
14 viable market strategies, business expertise, access
15 to laboratory facilities, or merely just
16 understanding the needs of their potential
17 customers, making commercialization difficult. This
18 grant addresses that critical gap in the path-to-
19 market for energy entrepreneurs by providing key
20 resources to the entrepreneurs in the Los Angeles
21 Region.

22 This agreement, for approximately \$5
23 million, will be managed by the Los Angeles
24 Cleantech Incubator, also known as LACI, who
25 proposes to create a Los Angeles Regional Energy

1 Innovation Cluster by bringing together the region's
2 key clean energy stakeholders in the four counties,
3 which are Los Angeles, Santa Barbara, Orange and
4 Ventura.

5 LACI will act as the central coordinating
6 organization for this Los Angeles Cluster. They
7 will conduct research and document the region's
8 energy needs, and develop an outreach and
9 commercialization support program for energy
10 entrepreneurs. Furthermore, they will develop the
11 cluster-driven economic development approach to
12 accelerate innovation, job creation, and time-to-
13 market for new products.

14 Staff is seeking approval for this item and
15 I can answer any questions at this time. Thank you.

16 CHAIRMAN WEISENMILLER: Thank you.

17 First, is there anyone either in the room
18 or on the line who has comments on this item?

19 (No audible response.)

20 So let's transition to the Commissioners.
21 I've actually visited the L.A. Cleantech Incubator a
22 couple of times. And it's certainly an interesting
23 program trying to pull together across the various
24 universities in Los Angeles. And also sort of
25 provide that space to really again start moving

1 things from research into the market.

2 And one of the really exciting parts of the
3 transition from PIER to EPIC is to have us more
4 focused on that sort of commercialization programs.
5 And I think the incubator programs that we're doing
6 are certainly a key part of that. It's great to see
7 the Los Angeles part filled in.

8 And I think we're all looking forward to
9 getting progress reports over the next couple of
10 years as this piece marches along. So again, I'm
11 certainly happy to transition on this.

12 COMMISSIONER MCALLISTER: Yes, and L.A. got
13 a recent federal award for some significant funding
14 as well, which is great. And there's just so much
15 good stuff happening in the L.A. area.

16 Actually back in the day, when they were in
17 a tiny little building with just a few cubes in it,
18 the place I used to work actually sat a person down
19 in the incubator and used it and really got value
20 out of the previous version of this. And now
21 they've really gone big with it, so it's really
22 fabulous.

23 So I'm very supportive, so anybody? No?
24 I'll move Item 11.

25 COMMISSIONER SCOTT: Second.

1 CHAIRMAN WEISENMILLER: All those in favor?

2 (Ayes.)

3 CHAIRMAN WEISENMILLER: So this passes 4-0.

4 Thank you.

5 Let's go on to Item 16. (sic) This is a
6 discussion of Energy Commission progress re
7 implementation in the Clean Energy and Pollution Act
8 of -- oh excuse me, it's 12, thank you. I'm jumping
9 ahead.

10 Anyways, so we're going to talk about what
11 we're doing on 350. Just to remind everyone, 350
12 really is moving away sort of our individual program
13 silos and forcing us to tie things together.
14 There's the very important Barriers Study, which
15 we'll get another upcoming report and then to talk
16 about IRP. But this is a unique opportunity for all
17 of us to talk about it as opposed to our normal
18 Bagley-Keene constraints.

19 So let's start with the Barriers Study,
20 Rob?

21 MR. OGLESBY: Great.

22 I'll start by mentioning this is going to
23 be a standing item on all of the business meetings
24 going forward, because of such an important project.
25 It involves a lot of work to implement SB 350.

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1 We've included a few minimal updates as we've done
2 Public Adviser reports, but because of the
3 importance of this it'll be a noticed standing item
4 and we'll keep you appraised of what's going on.

5 Also, I'd start off by observing that the
6 project involves coordination across the Divisional
7 lines of the Energy Commission, as well as
8 engagement with other agencies and government. And
9 so we've set up an interior structure, a management
10 structure, that'll help us manage it effectively.

11 And we've appointed an assigned an existing
12 staff member that's very talented to help be the
13 Project Leader and the point of contact and kind of
14 the person who's responsible for dealing with the
15 management of this program before they have their
16 first cup of coffee in the morning. So I'd like to
17 introduce and ask Mike Sokol to stand up, who's over
18 there. So he's joined the team and is formally
19 going to be the Project Leader on this.

20 The management of the implementation of the
21 program has involved a series of meetings. We have
22 weekly oversight meetings at a high level within the
23 agency and we have a number of subgroups that meet
24 periodically and frequently, both to coordinate the
25 internal and also the external coordination with the

1 other agencies.

2 So having said that I'm going to start with
3 an overview of the program. I'll move on to a
4 provide an update of the activities related to the
5 Barriers Report. Normally, that report would be
6 done by our Public Adviser, Alana Mathews, she's
7 otherwise on the road today and so I'll be giving
8 her report for her. After that, Sylvia Bender will
9 be doing a report, a PowerPoint, on the Integrated
10 Resource Plan aspects of SB 350. So let me start by
11 talking about the overall role of 350 and what we're
12 doing to implement it.

13 The goals set forth by the Governor and the
14 Legislature in SB 350 are very ambitious, but staff
15 is excited about the challenge. And I'm confident
16 that we'll be up to the task. We have a lot of
17 tasks, but I want to highlight some of the key ones
18 this morning.

19 The first goal in identified in SB 350, and
20 I'm quoting the statute is to, "Increase from 33
21 percent to 50 percent the procurement of our
22 electricity from renewable sources." The Energy
23 Commission's Renewables Division is working on
24 amendments to our regulations to accomplish this
25 goal. Our target date to bring regulations to a

1 vote before this Commission is March 2017.

2 The second goal identified in 350 is to,
3 "Double the energy efficiency savings in electricity
4 and natural gas final end uses of retail customers
5 through energy efficiency and conservation." Energy
6 Commission's Energy Assessments and Energy
7 Efficiency Divisions are working closely with our
8 sister agencies including the Public Utilities
9 Commission and the Air Resources Board as well as
10 the California Independent Systems Operator to lay
11 the foundation for this goal.

12 We're working hard to develop an
13 appropriate baseline to measure progress against.
14 And we are seeking public input on how best to set
15 the energy efficiency targets for publicly owned
16 utilities.

17 SB 350 also tasks the larger utilities with
18 developing integrated resource plans. Each
19 utility's plan must address procurement of energy
20 efficiency and demand response, energy storage,
21 transportation electrification, a diversified
22 procurement portfolio and, of course, 50 percent
23 renewables by 2030.

24 The legislation states, "The Energy
25 Commission shall review the Integrated Resource Plan

1 and Plan Updates. If the Energy Commission
2 determines that an Integrated Resource Plan or Plan
3 Update is inconsistent with SB 350 the Energy
4 Commission shall provide recommendations to correct
5 deficiencies."

6 The law gives us authority to adopt
7 guidelines, and the Energy Commission staff are
8 working on those now. The first IRPs for publicly
9 owned utilities are due to the Energy Commission by
10 January 1, 2019. The first IRPs for investor owned
11 utilities are due newer, sooner, and are due to the
12 Public Utilities Commission in 2017. Energy
13 Commission staff and CPUC staff are coordinating
14 efforts.

15 SB 350 also directs the Energy Commission
16 to, by January 1, 2017, conduct and complete a study
17 on both of the following: barriers to and
18 opportunities for solar voltaic energy generation as
19 well as barriers to and opportunities for access to
20 other renewable energy by low-income customers and
21 barriers to contracting opportunities for local
22 small businesses and disadvantaged communities.

23 I'm going to discuss these barriers,
24 activities, right now.

25 First, we began with a literature review.

1 The literature review is complete, over 100 articles
2 and studies have been reviewed to identify the
3 common barriers and solutions to assisting low-
4 income customers access renewables, and energy
5 efficiency and weatherization investments. The
6 writing team is led by Jordan Scavo from the
7 Renewables Division. It includes Bill Pennington
8 from the Energy Efficiency Division and Esteban
9 Guerrero, one of our graduate students from
10 Stanford.

11 We've done a Gap Analysis. The initial Gap
12 Analysis is complete in those identified areas where
13 more research is needed to more adequately identify
14 barriers and assess proposed solutions. The writing
15 team developed a list of Gap questions to help focus
16 the discussions for public engagement on specific
17 inquiries to fill the data gaps.

18 Now, the public engagement process is
19 extensive. It includes three advocate and
20 organizational stakeholder meetings, two
21 Environmental Justice Advisory Committee community
22 meetings in collaboration with the ARB, seven
23 community stakeholder meetings and three public
24 workshops.

25 The majority of the stakeholder meetings

1 were planned and facilitated by the California
2 Environmental Justice Alliance and several of their
3 community partners throughout the State, which
4 includes the Greenlining Institute for Berkeley,
5 Asian-Pacific Environmental Network for the Oakland
6 meeting, Communities for Better Environment in Los
7 Angeles-Huntington Park, the Leadership Alliance for
8 Environmental Justice in Fresno, the California
9 Community Advocates for Environmental Justice for
10 Riverside and San Bernardino and Strategic Concepts
11 in Organizing Policy and Education and Repower also
12 for Los Angeles.

13 Additionally, Alana Mathews has reached out
14 to the Sierra Business Council and Sierra Camp who
15 will host a community stakeholder meeting to discuss
16 the unique barriers faced by low-income customers
17 who live in the Sierra Mountain Range communities.
18 She is also working with the Strategic Growth
19 Council in collaboration with the Air Resources
20 Board to participate in a community stakeholder
21 meeting with the North Star Tribal Housing Authority
22 to discuss barriers faced by low-income customers in
23 tribal communities.

24 Additionally, an invitational letter and
25 survey was sent to all 184 recognized tribes in the

1 State of California to participate in this meeting
2 via webinar. And they were also given formal notice
3 for the upcoming workshop to be held August 12th.

4 The public engagement process includes
5 three public workshops: a scoping workshop, which
6 was held June 3rd to get feedback on the scope
7 approach and schedule for the study; the technical
8 workshop, which will be held August 12th to get
9 input on specific policy recommendations for
10 solutions and opportunities to increase low-income
11 customers' access to renewables and energy
12 efficiency and weatherization investments. And the
13 final workshop will be the draft study workshop,
14 which is scheduled for September 13th to introduce
15 and get public comment.

16 This study is scheduled to be adopted at
17 the December 14 Business Meeting and this ambitious
18 deadline includes review by all Commissioners,
19 relevant agencies, key stakeholders and members of
20 the public. This study will not only fulfill our
21 legislative mandate, but is an opportunity to
22 fulfill our diversity commitment as we are building
23 relationships with environmental justice and equity
24 organizations around the state.

25 Additionally, each community meeting is an

1 opportunity to share the Energy Commission programs
2 that can benefit disadvantaged communities such as
3 Prop 39 and to connect with community members and
4 engage with them on climate change issues.

5 Now, I'd like to turn to Sylvia for her
6 presentation on the --

7 CHAIRMAN WEISENMILLER: Thanks. Let's take
8 a break here just for a second, so we can have a
9 conversation on this piece and then transition to
10 the other one.

11 MR. OGLESBY: Sure.

12 CHAIRMAN WEISENMILLER: I think that
13 probably makes the most sense.

14 So I mean, you were at one of the meetings,
15 so I thought maybe you'd be a good --

16 COMMISSIONER MCALLISTER: Sure, yeah so I
17 was fortunate to go to the first community meeting.
18 And we actually piggybacked a local meeting with
19 some stakeholders meeting nonprofits down there
20 including Communities for Better Environment and
21 others. Just to have an open -- just a kind of a
22 ground-truthing -- I always find it helpful to kind
23 of just go and ask a lot of questions and see what
24 people think about stuff. So the community meetings
25 are certainly good for that.

1 But also program implementers and people
2 who are really on the ground doing this work,
3 implementing these programs, and have a real finger
4 on the pulse of what low-income programs are doing,
5 what sort of the barriers they face in real terms
6 day-to-day actually are. And our goal here as
7 Robbie explained, is really to try to roll, identify
8 the issues, and take the pragmatic sort of realities
9 on the ground. And figure out okay what policy
10 initiatives, what can we recommend to do better, get
11 deeper, get more broad access to energy efficiency
12 and renewables?

13 So I did, way back in the day, a bunch of
14 work for the Department of Housing and Urban
15 Development and worked on some of the environmental
16 justice issues around energy efficiency. And many
17 of those barriers from the early '90s really it was,
18 are still there.

19 I mean, part of it's a matter of just
20 funding, getting more resources to where they need
21 to be, which is its own kind of discussion. But in
22 part there are programmatic and policy ways that we
23 can help the marketplace provide services that
24 people need across the board, but certainly in the
25 disadvantaged communities.

1 So I'm very hopeful about this effort. I
2 think Alana and all of the Advisers really, have
3 been putting in a lot of effort to make sure that
4 everybody who needs to be at the table is at the
5 table. Certainly, that was the case at the L.A.
6 workshop and we got to hear from a lot of community
7 members. And they really gave a very real-world
8 picture of how people see these programs.

9 And communication, one take-away is
10 communication continues to be a big need. You know,
11 people need to understand not just these programs,
12 but just energy in general, so that they can make
13 better choices. Because disadvantaged low-income
14 folks make choices just like the rest of us albeit
15 with more constraints often.

16 So I think this is a great opportunity. I
17 want to thank all of the advisers. I know Emilio
18 has been working a lot on this and Kevin has been
19 really also. And my Adviser, Bryan Early, also has
20 been putting together a workshop that we're going to
21 have on Friday. So I think that's going to be a
22 good one here in Sacramento on sort of some of the
23 policy issues that we're starting to identify and a
24 lot of good stakeholders at the table, so I
25 certainly encourage people to come to that one and

1 participate.

2 So with that I want to thank Rob and Alana
3 and the staff.

4 CHAIRMAN WEISENMILLER: I was going to say
5 the one thing I think you probably should note is
6 that given your Spanish ability -- anyways a lot of
7 Spanish speakers were at your workshop. And I don't
8 know what I was (indiscernible) --

9 COMMISSIONER MCALLISTER: Yeah, that was a
10 really --

11 CHAIRMAN WEISENMILLER: -- but I mean, so
12 to the extent you could really converse with them in
13 their languages, that had to be great.

14 COMMISSIONER MCALLISTER: I mean, that's a
15 big part of the equation here, the multiple
16 languages. You know, obviously Spanish is the big
17 non-English in the State, but there are many others.
18 And so we need to engage with how we deal with non-
19 English speakers I think more broadly as well. But
20 I certainly -- I was thinking about my Peace Corps
21 days when I was doing community organizing in very
22 remote places in South America and Central America.

23 And you know, it's not just about Spanish-
24 speaking people as a group, it's actually there are
25 communities from every country in Latin America in

1 Los Angeles and across the state. And they bring
2 their own cultures, they bring their own ways of
3 speaking, they bring their own idioms and ways of
4 thinking about energy. And it's just such a diverse
5 state it's very exciting, but it's also challenging
6 to figure out how to bring services to those people.

7 And so I think this Barriers Report is
8 going to be a going to be a good step in the right
9 direction. And hopefully we'll get some good policy
10 outcomes as we move forward.

11 CHAIRMAN WEISENMILLER: Yeah, I don't know,
12 Robert if you know, or Janea, I know we have the
13 information sheets in I'm going to say five or six
14 languages for these workshops.

15 MR. OGLESBY: Yeah, it's five or six
16 languages. Staff has done a great job of targeting
17 communities and making sure that the materials are
18 available and that communication is available,
19 translation is available in the language that's
20 dominant. But we've covered a variety of languages
21 for all the materials that we've provided as we go
22 through these community meetings.

23 CHAIRMAN WEISENMILLER: And Janea?

24 COMMISSIONER SCOTT: Sure, I had just a
25 couple of things. It's great to hear how the

1 meeting went, so thank you for sharing the details
2 and insights on that with us.

3 I think in my role from the Public Member,
4 one of the things that Rhetta on my team has done a
5 great job with Alana, trying to help in making sure
6 that we all kind of consistently are getting the
7 same information that we have, the same overview,
8 that we have the same understanding, so that we can
9 get good and consistent feedback from the various
10 community meetings. And figure out how to weave it
11 together.

12 So you probably received from Alana, each
13 one of us received our own packet, which is specific
14 to our community meeting. But we tried to provide
15 also an overview layer to that, which kind of had an
16 overview of the community meetings for each of the
17 Commissioners that had a little bit of detail about
18 the specific community group with which you will
19 have met or we will be meeting; a little bit of the
20 overarching SB 350 goals, just kind of like a little
21 cheat sheet for us to have at hand; the poster
22 boards that will be shown at the meeting, so we have
23 a sense of what else is going on around us while we
24 are there and then an overview of the SB 350
25 Barriers.

1 So Alana sent that out on the same day as
2 the very first community meeting, for all of us to
3 really have a nice kind of overview sense of what's
4 going on.

5 The second thing that I wanted to talk with
6 you all about a little bit is how we take the
7 information that we gather at these community
8 meetings and get it into the report that we're
9 putting together. And my sense of this is that I
10 imagine there will be some themes that come out of
11 each of the community meetings and so we may want to
12 raise those and note that these are kind of themes
13 that are consistent throughout the state, no matter
14 what community you happen to be a part of. And
15 potentially address those themes in the report.

16 And the other thing, I think, is we will
17 have probably some really interesting anecdotes.
18 And the way that I kind of see those potentially in
19 the report is as a side box or an interesting story.
20 We want to really make sure that that comes through
21 even though some of it may be anecdotal and we don't
22 have a footnote with the study that goes along with
23 it. But I think it will be really important to
24 incorporate the voices from our community meetings
25 into the report. And that's the idea that I had for

1 that.

2 And I wanted to talk to you all about it,
3 so if Alana has questions hopefully she doesn't get
4 five different answers and is trying to figure out
5 with all the cooks in the kitchen what to do. But
6 that's my suggestion there and I'd love to know what
7 you all are thinking about how we incorporate the
8 information we receive at these meetings into the
9 report.

10 CHAIRMAN WEISENMILLER: Commissioner
11 McAllister, since you've gone through the first one,
12 do you have a sense of the best way to connect that
13 back? I'll note for everyone, obviously we had this
14 workshop on Friday, which is more the technical
15 report. But anyway, in terms of do you have a sense
16 of the best way to connect back the event you went
17 to into the report?

18 COMMISSIONER MCALLISTER: Yeah, so the
19 discussion actually was wide-ranging, but I think
20 Emilio did a great job facilitating the Spanish-
21 speaking one and everybody was taking notes. And
22 particularly there was a board, we had notes, we all
23 got pictures. I think all the predominant themes of
24 the discussion are well-documented and we need to be
25 rigorous, I think, about collecting all those.

1 Teasing out, as Commissioner Scott said, teasing out
2 the themes and really running down some of the
3 things that get said in these workshops.

4 You know, people have a certain experience
5 with their particular community action agency or
6 their particular WAP provider -- the Weatherization
7 Assistance Program -- or their particular Low Income
8 Energy Assistance Program, ESAP now, the Energy
9 Savings Assistance Program from the rate payer
10 funded side.

11 So we need to sort of true up, I think,
12 some of the things that we hear. Is that experience
13 typical? Is that a real thing that we need to work
14 on or is that just kind of a little bit of an
15 outlier? I think that that's going to generate some
16 work for us, so we need to do that work and work
17 with all of the nonprofits that you mentioned, Rob,
18 our partners on the ground who really are in tune
19 with all this stuff. This is a theme. How big a
20 deal is it? Does it impede delivery and how can we
21 improve and just really have a lot of iterative
22 discussion, but it's a good basis for establishing
23 relationships and gaining trust.

24 I certainly felt that people were sort of
25 surprised and pleasantly so, to have an actual

1 Commissioner at the meeting. You know, that doesn't
2 happen that often and I think it should probably
3 happen more. But it was a good, I think, effort to
4 show that we're serious about this and that's true.

5 So in any case, I think rolling up all the
6 different themes that we get from these workshops
7 into systematically and then approaching the follow-
8 up on this end with our partners is really the way
9 to ensure that that happens.

10 COMMISSIONER HOCHSCHILD: Well, first of
11 all thank you, Commissioner McAllister. It's great
12 you're able to do the meetings in Spanish. I'm
13 still struggling to hold on to my English.

14 So I haven't yet done my first workshop but
15 I did host, about six months ago, a roundtable for
16 about 12 environmental justice groups working on
17 renewables issues around the state. And one of the
18 things that came out of that, that I suspect will
19 come out in these future workshops, is really a
20 strong desire for ombudsman and central point of
21 contact for this mosaic of programs that are
22 available at the state and local level.

23 You think about what's out there and
24 working now, and (indiscernible) we have the MASH
25 Program and the SASH program and our low-income NSHP

1 Allocation and CARE and any other number of
2 programs, also at the local level. And a lot of
3 times the outreach for those is very poor or not at
4 all well known.

5 So there's kind of a desire, I think, for a
6 website and some point of contact who has knowledge
7 of the whole map of available programs. In addition
8 too, I think we're going to get some very concrete
9 new proposals for new renewables policies focused in
10 low-income communities. But that was just what
11 jumped out at me at my first conversation with all
12 the groups together.

13 But I'm very glad we're doing this, and Mr.
14 Chairman, also just really appreciate you making
15 this now a subject of every meeting, because it
16 really is worthy of this kind of continued focus.

17 CHAIRMAN WEISENMILLER: One of the things
18 that you may want to take a look at is so they're
19 trying to have poster boards at these events with
20 the poster board providing some of the information
21 for the participants on some of the resources
22 available to them on energy.

23 So to the extent good alternatives or MASH,
24 just to make sure that people know -- and obviously,
25 Prop 39 -- you've got to make sure that they know to

1 really encourage their schools to participate in
2 those programs. So anyway, the more we can make
3 this concrete, the better.

4 Yeah, Andrew?

5 COMMISSIONER MCALLISTER: Yeah, I think in
6 my experience in the community meeting was that
7 there were people kind of at all different levels,
8 you know, just sort of people who were active in the
9 community with no special knowledge, but just kind
10 of wanted to be paying attention. Other people who
11 had a particular issue they wanted to talk about.

12 So the messaging, in a way it's almost like
13 okay we've got the local nonprofit that has people's
14 trust, that works with them on maybe toxics issues
15 and air quality issues as well as energy issues.
16 They have a credibility. You know, the Prop 39
17 education maybe is even best through them, sort of a
18 slide and a presentation.

19 But my feeling was it kind of was a little
20 bit abstract for people at some level, you know?
21 Same with like the ECCA Program, we bring low-cost
22 financing and free financing, and free capital
23 essentially, to some of the local governments and
24 public jurisdictions. But the citizenry that was at
25 the meeting that I went to, in any case, was sort of

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1 not fully equipped to take that and run with it.
2 But the local nonprofit absolutely could talk to the
3 local government, stir up some interest, and see
4 what happens.

5 So I think as we think as we think about
6 what our ongoing communication is with the coalition
7 that's kind of developing around the Barriers
8 Report, I think there'll be some good stuff there
9 for our communications.

10 CHAIRMAN WEISENMILLER: Yeah. No, I think
11 again it's really important for us to be listening.
12 I mean, obviously my schedule's nutty enough, it's
13 hard -- anyway, ignoring that problem for a second,
14 but I think it's really great that the mechanism's
15 here. I certainly appreciate Alana and Emilio
16 working to set these up for opportunities for us to
17 listen to people. And to build this in, so it's not
18 just the normal suspects as part of the hearing
19 process here.

20 The one thing that actually -- I thought
21 that was a great presentation from the students this
22 morning.

23 Although the one that struck me was that I
24 guess -- you know, I guess Energy IV (phonetic) was
25 a small business. And it was located in Downtown

1 Oakland from the early '80s to the 2000s, which I'm
2 sure over time was a disadvantaged area, believe me.
3 But why weren't we doing -- we had rented space.
4 It might be old, cheap rented space, but it was
5 rented space, so the notion that you could do
6 something to that space -- not really -- nor was the
7 landlord likely to. So we're back to the issue that
8 Commissioner McAllister and I have struggled with in
9 758 of just how do you deal with rented space? But
10 I guess next year we get to revisit progress under
11 758 and see if we have made any progress on chipping
12 away at that. But again, this is sort of another
13 bite at that apple, tough as it is.

14 COMMISSIONER SCOTT: I would just add,
15 Chair, you mentioned the poster boards? So the
16 email that Alana sent out, I can't remember if it
17 was August 3rd, August 4th, but it was the first
18 day. It had the poster boards attached, so it may
19 be worthwhile for us to take a look if there are
20 changes we would like to make and get those to her.
21 So that she can do that for the upcoming community
22 meetings.

23 And I would follow on Commissioner
24 McAllister, to what you said about the PowerPoint
25 presentation. In that for the community

1 organization it was probably exactly tailored right.
2 But maybe for community members who don't follow
3 this stuff every day -- and if there are suggestions
4 that you have and we should follow up with
5 Commissioner Douglas as well -- again for the
6 upcoming community meetings.

7 I'm sure Alana would warmly welcome those
8 and I think the rest of us, as we do our follow on
9 community meetings, would warmly welcome that as
10 well.

11 CHAIRMAN WEISENMILLER: Well, before we
12 switch to Sylvia I'm just going to give folks in the
13 room or on the line, if they have a comment on this
14 section, this item? Please step forward or...

15 (No audible response.)

16 Well, okay so let's move on now to Sylvia,
17 please.

18 MS. BENDER: Let me get this organized in a
19 way that you can hear me. Let's talk from this
20 side.

21 Good morning Chair Weisenmiller and
22 Commissioners, my name is Sylvia Bender, Deputy
23 Director for the Energy Assessments Division. I'm
24 going to build on Rob's overview, and talk a little
25 more about integrated resource planning for the

1 publicly-owned utilities, and update you on our
2 activities in which we are engaged.

3 The Clean Energy and Pollution Reduction
4 Act introduces a new statewide scale for resource
5 planning to support California's efforts to meet a
6 goal of achieving 40 percent reduction in greenhouse
7 gas emissions below 1990 levels by 2030.

8 Electricity service in California is
9 provided by a diverse array of load-serving entities
10 that includes large investor-owned utilities, small
11 and multi-jurisdictional investor-owned utilities,
12 publicly-owned utilities, community choice
13 aggregators, cooperatives, and energy service
14 providers. Numerous policy mandates, including
15 among them energy efficiency, demand response,
16 renewables, energy storage, and electric vehicles,
17 are already in effect for these entities.

18 SB 350's overall greenhouse gas framework
19 brings multiple entities and policies together in a
20 new planning paradigm.

21 The legislation lays out separate paths for
22 the Energy Commission and the California Public
23 Utilities Commission in guiding resource decisions.
24 Public utilities will submit resource plans, or
25 IRPs, and updates to the Energy Commission, who will

1 review them, provide recommendations if they are not
2 consistent with stated requirements.

3 The Energy Commission may also propose and
4 adopt guidelines for the submission of information
5 and data that we need from these public utilities.

6 In today's update, I would like to focus on
7 the requirements for what has to happen, who is
8 required to comply, and by when, along with giving
9 you a look at some of the next steps moving forward
10 that we are engaged in.

11 SB 350 set a threshold for a filing
12 requirement for public utilities -- an annual
13 electrical demand exceeding 700 gigawatt hours
14 averaged over 3 years. The plans are to be adopted
15 by local public utility boards, and then filed with
16 the Energy Commission on or before January 1st,
17 2019, with a process to update them every five
18 years.

19 Guidance for the CPUC-regulated load
20 serving entities is ongoing in a proceeding there.
21 CPUC staff have just released their initial concept
22 paper, proposing a set of guiding principles and
23 identifying options for the essential elements of
24 the process. All load-serving entities except for
25 the POU's will file their plans with the Public

1 Utilities Commission starting in 2017.

2 There are 16 POU's required to file IRPs
3 under SB 350. Combined, these utilities cover 95
4 percent of the total POU retail sales. Even within
5 this threshold, diversity is apparent among these
6 16. Los Angeles of Department of Water and Power is
7 the largest municipal utility in the country. The
8 City of Vernon is nearly all industrial customers;
9 the City and County of San Francisco is served
10 primarily by hydroelectric resources while Anaheim
11 has coal-fired energy purchase obligations for
12 almost two-thirds of its needs.

13 SB 350 lays out a series of goals that the
14 load-serving entities must demonstrate through their
15 plans how they will reach them. The goals for the
16 IRP processes are the same for all entities and are
17 itemized on this slide. The two key ones at the
18 top, we've talked about pretty much already: the GHG
19 emissions targets, the 50 percent renewables, but we
20 also have goals for just and reasonable rates,
21 minimizing bill impacts, reliability, maintaining
22 diversity, sustainability, resilience of our
23 transmission distribution systems, local
24 communities, and also localized pollutants --
25 especially in disadvantaged communities.

1 SB 350 requires utilities to establish
2 integrated resource plans that combine existing
3 procurement requirements into a common planning
4 process within a framework of greenhouse gas
5 emission reductions targets. POU's will develop a
6 portfolio containing combinations of supply-and
7 demand-side resources to meet those policy goals
8 that were itemized on the previous slide.

9 The IRP documents the choices that each
10 entity makes, given the particular mix of their own
11 available resources and their customer base.
12 Multiple scenarios may be evaluated to see how
13 different portfolios stack up against a set of key
14 objectives and metrics. The required contents of
15 the IRPs are linked and connected to other existing
16 agency proceedings and mandates, such as energy
17 efficiency, such as accelerating electric vehicles,
18 for example.

19 On April 18th, the Energy Commission held a
20 workshop in which we heard presentations from the 16
21 POU's about their current planning processes.

22 Existing plans are quite diverse in scale and
23 content. Roughly half of these utilities file IRPs
24 with the Western Area Power Administration.

25 However, these tend to be quite short, with only a

1 five-year planning horizon, not looking at 2030.
2 And apparently have an unenforced annual update
3 requirement.

4 The planning documents from some of the
5 others are quite well-organized and contain energy
6 forecasts, sufficient technical detail about
7 transmission resources and demand-side programs,
8 even cost/benefit comparisons for a number of
9 possible portfolios.

10 The current IRPs, however, are not
11 comprehensive enough to meet the specific
12 requirements of SB 350, such as the GHG emissions
13 reductions, the doubling of energy efficiency, the
14 50 percent RPS and transportation electrification
15 through 2030.

16 In the workshop comments filed by the POUs
17 after the workshops, these are a summary essentially
18 of what we heard: the POUs would like the Energy
19 Commission to recognize that they do have IRP
20 processes in place now, some quite sophisticated and
21 analytical.

22 In the comments, they provided these points
23 for us to consider about any new submittals or
24 review process: local governing authority
25 jurisdiction and approval processes should remain in

1 place; no one-size fits all template, timelines or
2 procedures will work; IRP is policy direction from
3 governing bodies, not a determinative or detailed
4 roadmap; nothing in the legislation gives the Energy
5 Commission authority to approve, revise, or reject
6 the IRPs, nor to enforce any recommendations or
7 impose any penalty; and lastly, leveraging existing
8 filing requirements, if possible, would really help.

9 So moving forward, staff is discussing
10 several IRP workshops over the next 12 months in
11 which the main activities would be developing
12 baselines, some basic planning assumptions, and
13 metrics, outlining a process for plan review,
14 additional data requests, or clarification and
15 addressing these concerns raised from the April
16 18th. And then finally presenting initial proposals
17 for guideline contents.

18 The goal will be to finalize the POU
19 guidelines by fall 2017, and have these guidelines
20 informed by other Energy Commission SB 350
21 workshops: namely in transportation electrification,
22 renewable procurement, and energy efficiency.

23 Implementing the processes envisioned under
24 SB 350 will also require coordination and
25 collaboration across multiple agencies. This is not

1 just work that's being undertaken by the Energy
2 Commission staff. The process alignment agreement
3 that was started under the Joint Agency Steering
4 Committee for our demand forecast is a good model
5 for SB 350 implementation. The JASC, as it's known,
6 is responsible for keeping multiple agency processes
7 that impact this demand forecast and its
8 availability for use in other proceedings.

9 The current IRP coordination activities are
10 underway on a number of fronts. The Energy
11 Commission is holding ongoing meetings with 16 POUs
12 who are required to file the IRPs. We've had one so
13 far that was quite successful and we plan to keep
14 them in the loop over the process going forward.

15 A technical staff working group that
16 incorporates CEC, CPUC and ARB staff is going to
17 begin working on a set of common assumptions where
18 these are appropriate, and metrics where these are
19 needed. We're hoping that these will ensure data
20 compatibility and comparability across the IRPs and
21 some consistency in their aggregation and review.

22 We also hope that this work will establish
23 GHG emissions baselines against which we can
24 evaluate progress, both by the individual load-
25 serving entities as well as the State. For example,

1 even in the federal Clean Power Plan.

2 Finally, we are moving forward to broaden
3 the JASC process alignment structure to incorporate
4 linkages across the CEC, ARB and CPUC IRP
5 proceedings, transportation electrification, and the
6 renewable proceedings.

7 So that concludes my presentation.

8 CHAIRMAN WEISENMILLER: Thanks, Sylvia.

9 Let's start out with, so part of my focus
10 recently has been on the GHG baseline question. You
11 know, if you look at the ARB they have the sort of
12 average utility numbers, which are for 2014 20
13 percent below the 1990 level. So the good news is
14 for the utility sector they're well on track for the
15 AB 32 goals and probably a good head start for SB
16 350.

17 On having said that, the next interesting
18 question is well what about the components? You
19 know, what about what is the baseline for LADWP or
20 PG&E or whomever? And that's really not there. And
21 certainly, Commissioner Randolph, who is a lead at
22 the PUC on the IRP processes, found out that
23 actually probably a month before I figured it out,
24 that there's no real baseline available at this
25 point. And so one of the initial questions is what

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1 is the baseline there?

2 And obviously that ties into the ARB's Cap
3 and Trade, and any number of accounting issues. And
4 it turns out as you get into the accounting stuff it
5 becomes more and more complicated. A classic
6 example is on the Cap and Trade Program there's a
7 lot of following of imports of dirty stuff into
8 California. There is zero accounting for renewables
9 flowing out of California. Zero. Think about it
10 for a second, which might be more a clean power
11 plan. But having said that certainly most people's
12 forecast now is there's a lot of renewables excess
13 renewables today under EIM flowing out of
14 California. And there'll be progressively more over
15 time, so zero is -- or ignoring it is not a
16 particularly good approach.

17 I guess also into that context geothermal
18 and biomass is assumed as zero emissions, zero. You
19 know, again think about it for a second. I'm not
20 saying at large, but zero's not a good number.

21 So that's probably one of the more
22 fundamental baselines for this activity. As I said
23 it's a good opportunity to tie together our
24 agencies. Also it connects to the ISO, which can
25 track a lot of the coal flows in the west or at

1 least going around California. And that's certainly
2 been a conversation for discussion in the EIM
3 context, although again the accounting can get mind-
4 numbingly complicated.

5 So I mean that's sort of the big one.
6 Having said that you get to the question of well
7 what is the baseline for zero emission vehicles?
8 What is the baseline -- and which we had the
9 workshop on in the IEPR -- was the baseline on
10 energy efficiency. I guess, renewables I don't know
11 if you really have to worry about a baseline. It
12 just says get to the target here, but again you get
13 to that stage a lot of baseline stuff has to be
14 sorted out in a consistent fashion among the
15 agencies to work on the pieces.

16 As Sylvia indicated the ARB has just -- I
17 mean I guess it's actually been out now -- I'm going
18 to say it's been sent out for basically as the
19 compliance plan for California's Clean Power Plan.
20 And so an issue for them is obviously what is the
21 compliance of the various folks with that plan?

22 And similarly in that area, as I talk to
23 WAPA folks over time, I anticipate it would be
24 really good as part of this efficiency part, really
25 consolidate what we're doing with what WAPA is

1 requiring under its IRP part; their review for
2 basically the preference customers. And I would
3 certain anticipate that they will also pick up
4 compliance with the Clean Power Plan as part of
5 their requirements there for review. So again,
6 there's a lot of motion here. A lot of coordination
7 in state and federal, among the state agencies,
8 that's going to have to occur.

9 Also, there's an interesting question I
10 guess, we need to sort out with the PUC is now that
11 the City and County of San Francisco have a CCA are
12 they our headache or Picker's headache, which they
13 may just send Kirkwood our way. I guess the
14 question is whether the City and County of San
15 Francisco goes their way. But anyway that's going
16 to be one of the, I'm sure, many interesting legal
17 questions.

18 Do you want to talk about what's you're
19 planning?

20 COMMISSIONER SCOTT: So, for the
21 transportation electrification component of the IRP
22 Tim Olson is leading that work up for the
23 Transportation team currently. He's working closely
24 with folks on Sylvia's team, David Vidaver and
25 others, as they're also thinking about what needs to

1 go into the forms and those types of things.

2 We are planning to have a workshop in
3 October. I can't remember the exact date off the
4 top of my head. I can maybe look it up while we're
5 talking and let you all know. We will have a -- at
6 the beginning of the workshop we will hear from a
7 sampling of the 16 POU's or SCPPA or someone like
8 that to talk with us about what types of things they
9 are considering including that would help make them
10 compliant SB 350 requirements.

11 Then we will also hear from a series of
12 experts like Nancy Ryan and others in the field, if
13 they were designing what it should look like. What
14 would they include? And so that'll be our initial
15 workshop to really kind of dig into what type of
16 information do we want to gather? How do we want to
17 gather it and what should it look like?

18 We're also hoping to coordinate closely
19 with the Public Utilities Commission on this as well
20 to make sure that even if we end up collecting
21 slightly different types of data the key information
22 can be translated across the documents, so that if
23 you're looking for a specific number you could
24 compare what the City of Burbank does with what PG&E
25 does with what LADWP does with what SMUD or SCE --

1 like that number should have the same units, right?
2 So that you can kind of compare across whatever
3 utility you're looking at.

4 So we're going to be looking at consistency
5 in comparing it to some type of things like that as
6 well. So that's coming up in October. We're still
7 working to design that. We haven't noticed it yet,
8 but I do believe we've held a date on the calendar,
9 so I can let you all know more. But that's where we
10 are in transportation electrification.

11 CHAIRMAN WEISENMILLER: I'm just going to
12 make a couple of comments. I mean, one is I know,
13 in a 350 context Mary Nichols and I had different
14 conversations with the Porifera general managers.
15 And one of the things in the ZEV side that was clear
16 was that for the IOUs you put a charger in, you
17 build rate base. And you build rate base you get
18 more profits for shareholders. Life is good.

19 You know, for the POUs there's not the same
20 motivation. And so one of the things Mary asked us
21 to focus on is well, what are the incentives that
22 the POUs might need in this area?

23 Going forward, and certainly the other
24 thing that I think President Picker has asked me,
25 that we can focus on, is from his perspective the

1 POU's are a part of local government. So they
2 communicate, connect to their local entities. The
3 IOUs don't have the same connectivity there. I
4 mean, they're as likely to put chargers near
5 substations as opposed to here's a city garage or a
6 transportation plan and you really want to put them
7 there.

8 And so one of the things to look at is
9 potential lessons learned from what the POU's are
10 doing that can then inform better what the IOU
11 programs are in terms of effectiveness.

12 COMMISSIONER MCALLISTER: Well, so thanks
13 Sylvia, for that. I'm very excited about the IRP
14 process kicking off.

15 You know, from I think one of the
16 challenges -- to sort of build on something the
17 Chair said earlier -- we have a lot of different
18 goals for our renewables. One of the easier ones,
19 because we can actually measure it, is efficiency
20 and other demand-side certainly programs that impact
21 what the load shape looks like.

22 Those resources are part of the IRP
23 planning, and so we have a doubling of energy
24 efficiency goal. Well, what does that actually
25 mean? And again we have a baseline issue, but

1 beyond that we actually have a measurement issue.
2 Even if we have a baseline we have a measurement
3 issue. Okay, how do we know what metrics are we
4 using? What monitoring and verification are we
5 using to say, okay energy efficiency has increased
6 by X. Are we meeting our goal?

7 So as we move forward with the IRP
8 discussion and the broader forecasting discussion I
9 think it's really important to make sure that we
10 have the tools we need to be able to really judge
11 how progress is coming along in a reasonably
12 rigorous fashion. And 350 lays out some potential
13 buckets and it's got ten or so sources of energy
14 savings and demand side, small-scale renewable
15 distributed energy, where those resources might come
16 from. We have PACE programs, we have local codes
17 and standards. We have a whole bunch of different
18 buckets that we could say, okay well Prop 39 is
19 called out there.

20 Well, teasing apart what's causing which
21 savings isn't necessarily something we have to do
22 down to every detail, but we do have to say -- I
23 think we do need to know this is a market
24 transformation kind of -- it all adds up to a market
25 transformation that's going to improve efficiency

1 across the State. And we need to be able to
2 quantify that with a reasonable amount of rigor even
3 if we can't unpack every single influence that is a
4 piece of it. And that's true for the IOUs and the
5 POUs both.

6 So I think to the extent that we're going
7 to have this discussion and talk about what
8 information is going to go between all of us to
9 bolster the analysis, what do we have to do to
10 underpin it? We have to be as explicit as we
11 possibly can about what it is we're going to do and
12 what data, what information we're going to need to
13 be able to do it? And I think there's a fair degree
14 of consensus on that.

15 I mean, I saw your slide about what we do
16 and don't have the authority to require. But
17 certainly accountability, I think, is something that
18 we do have to achieve whether it's on our end or the
19 utility's end. So I think that should be sort of
20 something that we all can all accept. But I think
21 the IRP process really lays out the important
22 questions that we need to answer, so I'm pretty
23 excited to get the discussion moving.

24 CHAIRMAN WEISENMILLER: Yeah, just
25 following up on yours, I think the good need to

1 really emphasize the POUs is unlike the PUC's last
2 IOUs we don't have an incentive program. We don't
3 have to go into the EMV nightmare.

4 COMMISSIONER MCALLISTER: Yeah.

5 CHAIRMAN WEISENMILLER: But I think what
6 we're looking for is more like well what's your plan
7 to double energy efficiency? Some way of trying to
8 track it, but again without complicated overlay, and
9 I think the good news from my perspective is there
10 is a lot of creativity and imagination at the local
11 level.

12 So that I think looking at what the POUs
13 are doing in that area could provide a lot of
14 interesting insight to us. And again potentially
15 provide some feedback for the PUC on how they can do
16 their programs better or frankly how we can up our
17 building appliance standards or some of our programs
18 to do this better.

19 COMMISSIONER MCALLISTER: Yeah. Totally
20 agree and I guess the beauty of the flexibility that
21 they have at the local level with the POUs is they
22 don't have to say, "Okay, well exactly this many
23 kilowatt hours or this program or that program." I
24 mean, they'd like to know for process improvement,
25 but fundamentally -- and we actually don't

1 necessarily care all that much about which
2 particular initiative created those particular
3 savings, right? We want a macro view of are the
4 goals being achieved and what are the metrics, you
5 know, the macro metrics.

6 So unpacking it is something the
7 Legislature would like us to do. They called it out
8 in the law, but I think the sort of analytical
9 expectation there is probably lower than okay
10 exactly how many are this or that program? I think
11 if we can make a reasonable narrative that more
12 projects are happening, energy is being saved, and
13 the marketplace is growing for these kinds of
14 projects, then we can clearly link that to a market
15 transformation effort more broadly.

16 And so that, by definition, is a whole
17 bunch of things happening at once that are related
18 and are complimentary and don't necessarily lend
19 themselves to a specific attribution. So I feel
20 like that's kind of the narrative that I have in
21 mind that we want to be able to build over time.
22 And absolutely, agree with you, learn from each
23 local jurisdiction, each POU. If they're doing
24 something that works then we will be in a position
25 to see the differences in reality on the ground over

1 time and highlight them. And that's to everybody's
2 benefit.

3 CHAIRMAN WEISENMILLER: Yeah, I was just
4 going to -- we had the workshop on baseline. We're
5 intending to have a workshop on sort of program
6 design. Certainly one of the things President
7 Picker is very concerned about is this status quo on
8 energy efficiency quotas is not going to represent a
9 doubling. I mean, just let's face it.

10 And basically that's going to require a
11 fairly coordinated effort between the PUC and Energy
12 Commission, again to really put these programs on
13 steroids. And so that's again an opportunity when
14 that's scheduled for the POUs to talk about some of
15 their ideas going forward in this area.

16 COMMISSIONER MCALLISTER: And the AB 758
17 context, I think, is pretty important. We've
18 already got this conversation going on for the last
19 several years. We have an adopted plan. We're
20 going to be doing an update of that plan by the end
21 of the year is the goal to refresh the 758 Action
22 Plan. And that's part of the doubling, a core part
23 of the doubling conversation.

24 And I think you're absolutely right, it's
25 not just going to double itself, which is why -- and

1 I actually don't necessarily think we ought to
2 expect the programs as we have them more or less
3 structured now should be on the hook for the entire
4 doubling. If it happens outside of programs I'm
5 perfectly okay with that. If the marketplace does
6 more projects and doesn't get incentives from
7 programs that's actually better in a lot of ways.
8 But the value proposition has to be there and the
9 marketplace has to kind of come through.

10 So a big part of the discussion is what do
11 we have to do? What policy initiatives can we put
12 in place? What sorts of activities can help the
13 marketplace along when it's trying to grow this
14 sector of the construction industry, you know,
15 retrofitting existing buildings.

16 And so as an ongoing problematic,
17 certainly rented space, multifamily, disadvantaged
18 communities, all of the small business, we've heard
19 a lot of that today but all of these are kind of --
20 different business models are going to be needed to
21 address them. And that's happening to a great
22 extent, I don't want to say that we're starting from
23 zero, because we're not. But we do need to get some
24 scale.

25 Programs are part of that, but they're

1 certainly not the whole story. And doubling is just
2 going to take kind of a lot of different
3 initiatives, everybody rolling up their sleeves.
4 But the goal is that the marketplace finds a way to
5 make some money doing this and can get some scale,
6 and some systematic offerings that have traction
7 enough that they can help us reach our doubling
8 goal.

9 So, you know, I think this IRP discussion
10 and some of the broader discussions in SB 350 will
11 help us frame and develop new approaches going
12 forward in addition to the ones we've been using.

13 COMMISSIONER HOCHSCHILD: Yeah, and to your
14 point, Commissioner, I think that's one of the
15 reasons why the Governor's been so insistent on the
16 PACE Program. You know, you look at that basically
17 doubling in size in the last year and where that can
18 go.

19 But just to restate the obvious, as it
20 pertains to renewables obviously the more successful
21 we are on efficiency the easier the renewables
22 target is to achieve, because it's 50 percent of a
23 smaller number. And to that point, you look at
24 total system power it actually went down half a
25 percent from 2014 to 2015. That's because of our

1 efficiency work and because of the growth in
2 distributed clean energy generation. And so that
3 makes everybody's job easier.

4 We are also planning a Commissioner
5 workshop on POU's and the IRP for the fall. I
6 haven't picked date yet, but I did talk to staff
7 about it. And part of the reason I hadn't wanted to
8 do it earlier, we kind of wanted to wait in case
9 there was SB 350 cleanup language that affected the
10 IRPs, but so probably in the October, November
11 timeframe.

12 And I would say I think one thing about the
13 Energy Commission's ability to help here is really
14 we have a hard power which I think of as our regs
15 and our money. And then there's the soft power,
16 which I think of as thought leadership and
17 convening. And this really falls principally under
18 that convening role.

19 I do think there's a lot of value in
20 gathering the POU's together and having exchange of
21 what's working, how people are thinking, and when
22 there's golden creative thought going on,
23 propagating that. I really think that's critical
24 here and fostering that exchange, I think it will
25 get much more robust in that area.

1 So thank you, Sylvia, for your overview.

2 CHAIRMAN WEISENMILLER: Yeah, just to
3 follow up for a second on that. I think again, we
4 know our relationship with the POUs is different
5 than the PUC's relationship with the IOUs. But it's
6 a fair question to say, "Well, what is your plan to
7 get to 50 percent?"

8 And again realizing there's a lot of
9 variation and creativity. You know, I expect many
10 of you will source it based upon local resources and
11 so you might see Imperial Valley do a lot of
12 geothermal while you might see others do a lot of
13 wind. I'm just saying again, I think this is one
14 where it's a challenge going forward, but again I
15 think we're looking forward to seeing the creativity
16 that's going to come out from the POUs on this
17 level.

18 And part of that I keep messaging people
19 that the world's changing fast. I mean, when you
20 look as we add more and more zero marginal costs on
21 renewables into the system, wholesale prices are
22 going down. I mean, so in terms of the reality on
23 what that means for your revenues unless you're
24 adapting -- and certainly renewables are coming.
25 You can try to be like King Canute and say don't

1 come, but they're here and there are going to be
2 more. So just you need to start rethinking your
3 planning to deal with the realities of what's going
4 on with the resource mix.

5 So again, we're happy to take any public
6 comment?

7 COMMISSIONER SCOTT: May I? I had one more
8 thought on this, which is that I wanted to pick up
9 on something Commissioner Hochschild just said. So
10 as Commissioner McAllister's work on energy
11 efficiency makes his work easier, our work on
12 transportation electrification actually will make
13 your work harder. (Laughter.)

14 And so going forward we really are going to
15 need robust estimates, robust scenarios about how
16 much demand we're expecting from transportation
17 electrification. And I think that's going to be an
18 important component as we put all of these systems
19 together.

20 CHAIRMAN WEISENMILLER: So please, any
21 public comment either in the room or on the phone?
22 Come on up.

23 MS. DERIVI: Good afternoon, Commission.
24 I'm Tanya DeRivi with the Southern California Public
25 Power Authority. Thank you very much for the kind

1 words about Public Power, we're pretty proud of our
2 role in our communities as well.

3 I just wanted to flag a few issues for the
4 staff's and Commission's consideration. One was on
5 the timeline of potentially not seen draft
6 guidelines or final guidelines until fall of 2017.
7 We have a very diverse mix of SCPPA members. Eight
8 of them are the affected utilities, as large as
9 LADWP and IID.

10 These IRP planning processes can take
11 anywhere from 18 to 24 months to do, which means
12 that some of our utilities are going to start this
13 process in hopeful compliance for submitting by
14 January 1st of 2019 early next year. And I don't
15 think they're going to be able to wait too long,
16 because we are entities of the government and it
17 does take quite a bit of time to go through
18 community planning processes. So that's an issue of
19 consideration we'd like the staff to consider.

20 Other issues that we would like help on is
21 a bit more coordination with, particularly the Air
22 Resources Board, on some policies that are being
23 considered. Especially under the 2016 Cap and Trade
24 Program amendments that seem to be a bit
25 contradictory as far as Cap and Trade versus the

1 Renewable Portfolio Standard. So we'd like to get
2 some additional coordination on that front as well,
3 particularly for out-of-state renewables development
4 with the regionalization being considered going
5 forward into next year.

6 One other issue, transportation
7 electrification, there was an amendment in SB 350,
8 which included getting credit through the Cap and
9 Trade Program. We're a little worried that that's
10 going to be delayed until 2020 if not later. And
11 that a potential methodology for counting that could
12 be so difficult that no one would be able to
13 actually get credit for transportation
14 electrification.

15 So to the extent that we can work with the
16 Energy Commission to develop some sort of
17 methodology that would make ARB comfortable, that
18 would also be a really helpful development.

19 We have also already had meetings with Air
20 Resources Board staff about the GHG targets. One of
21 the issues that they had raised was setting ranges
22 rather than specific targets since we are a subset
23 of only one industry, so setting a specific target
24 for a specific utility under the Cap and Trade
25 Program puts us a little bit in the anxiety mode

1 when others don't have those targets.

2 So there's just a few issues we wanted to
3 raise for the Commission.

4 CHAIRMAN WEISENMILLER: No, I appreciate
5 that. I was going to encourage Rob and Sylvia to
6 sit down with you and work out what schedule makes
7 sense. Because that was one of the things that
8 really struck me in the IRP workshop we did have, is
9 that timing was scattered. And some of you don't
10 have -- again, very limited resources -- so it's a
11 one-shot deal between now and the first compliance
12 period. So we need to have a theory that can work
13 on making this -- what do we need to do? And it
14 sounds like we need to push up the timing on the
15 guidelines.

16 I think again, on the ARB, anything you can
17 do to flag the issue. Obviously you've been in
18 pretty close communication with Mary and Picker or
19 actually it's more Leann and Steve on these issues,
20 on where you think there's an issue. I'd like to
21 hear about that. And like I said on the incentives
22 for electrification I think, at least in my
23 interpretation, is Mary wants us to do will with
24 that -- "we."

25 So I'm looking at Janea, so basically if we

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1 can tee that up and make progress on it that'd be
2 great.

3 MS. DERIVI: Thank you.

4 CHAIRMAN WEISENMILLER: Yeah.

5 Anyone else either in the room or on the
6 line?

7 (No audible response.)

8 Okay, great. So let's go on to Item 13,
9 minutes.

10 COMMISSIONER SCOTT: Move approval of the
11 minutes.

12 COMMISSIONER MCALLISTER: Second.

13 CHAIRMAN WEISENMILLER: All those in favor?

14 (Ayes.)

15 CHAIRMAN WEISENMILLER: The minutes are
16 approved 4-0.

17 Let's go on to Lead Commissioner Reports,
18 Commissioner Scott?

19 COMMISSIONER SCOTT: I have one report for
20 you all. It's been a very busy month, but I wanted
21 to highlight the Plug-In Vehicle Collaborative had
22 our in-person meeting just a few weeks ago.

23 And the Plug-In Vehicle Collaborative is
24 working to transition itself from the organization
25 that it is now, which is actually not an

1 organization. It's a bunch of people who love plug-
2 in electric vehicles. And we've been working
3 together for many years, but we're not an entity.
4 We are working to change ourselves into an entity.
5 It'll probably be a 501(c)(3), become incorporated.

6 We're looking for a name folks. We were
7 looking at "Drive California," but that is a -- it's
8 for folks in California who are immigrants who are
9 looking to get driver's licenses. So "Drive
10 California" is already taken, so we need to look for
11 a new name, a new kind of identify for our new
12 entity.

13 The new entity is going to really be
14 focused on the education and outreach component of
15 electric vehicles. Really wanting to make sure --
16 it turns out UC Davis has done a study and most
17 people don't actually know that an electric vehicle
18 is even an option, much less any of the incentives
19 or things that go along with it. So we really want
20 to kind of raise the bar on that.

21 The idea is it would be a nonprofit.
22 Probably the very first -- the two first people that
23 would need to be hired are the Executive Director
24 and the Fundraiser. The Fundraiser would be looking
25 to try and get some big dollars in. We have a

1 request for a proposal on the street right now to
2 try to understand what a \$5 million budget, a \$10
3 million budget, and I can't remember what the high
4 number was, it's not a bunch over \$10 million --
5 what are the types of things that an entity like
6 this could do? What would a campaign look like,
7 where are the best places to start doing that
8 fundraising.

9 And so we're working on this transition.
10 This transition, we're hoping that we'll be able to
11 launch our new entity at the beginning of the year,
12 our first quarter of next year. And they're also
13 still considering whether or not -- a lot of the
14 members really like the idea of the new entity, but
15 they still want to have the member meetings.

16 The member meetings have been really
17 interesting and valuable. They've been a great
18 chance for us to talk about some of the cutting edge
19 activities that are taking place. We had a really
20 good one on Vehicle Grid Integration at the CAISO
21 about a year ago. It's a really good place to kind
22 of get hot-off-the press information.

23 And the members really still appreciate
24 that. And so to run those types of meetings is a
25 little bit different than what your typical

1 nonprofit would do, so when we continue to have it
2 as the nonprofit -- but it'll also have a membership
3 organization component to it, so that we're able to
4 continue those types of meetings. The nonprofit
5 itself however, would have a Board of Directors like
6 a usual Board of Directors and we're still kind of
7 looking through what that structure should look
8 like.

9 But that's what the Plug-In Vehicle
10 Collaborative has been working on that I wanted to
11 highlight for you. So we're making a transition
12 from our sort of loosely affiliated set of folks to
13 an actual entity that again, will be a nonprofit.
14 And it's goal will be to increase outreach and
15 education in the electric vehicles base.

16 CHAIRMAN WEISENMILLER: Great. Any chance
17 you can get them to come up with a new name for the
18 ARFVTP (indiscernible) just a little bit more --

19 COMMISSIONER SCOTT: I'll just add that in,
20 a new task order, yep.

21 And that's my report for you all.

22 COMMISSIONER MCALLISTER: Yeah, just
23 briefly. You know, we've talked about the Barriers
24 workshop. It was a good thing and (indiscernible) a
25 lot to build on.

1 And then I'm assuming, Chair, you'll talk
2 about the Regionalization workshop that we had on SB
3 350 that the ISO drove a couple of weeks ago? I
4 found that very interesting and there've been some
5 developments since then in terms of the plans for
6 even the regionalization, but I'll let you cover
7 that.

8 Let's see, I did have a NASEO Association
9 of State Energy Officials Board Meeting back in D.C.
10 a few weeks ago. And a lot of the topic of
11 conversation in D.C. these days is, "Whoa gosh, what
12 does our Transition Plan look like?" And there's
13 really no way to know really what the transition
14 will look like; two very, very different scenarios.

15 But I'm always heartened at getting all the
16 states together, because we almost always have more
17 in common than differences. Although there's an
18 incredible diversity and I feel like it's
19 particularly important for California to be in the
20 room just helping people understand what's possible,
21 because we're doing so much. And we're putting so
22 many resources into the clean energy sphere and
23 doing proactive policy.

24 But actually when people look past some of
25 the rhetoric they may hear in their own states and

1 actually understand some of the details of what
2 we're doing they actually almost always come around
3 to, "Wow, that's pretty reasonable. It's assertive,
4 but it's reasonable and actually generates a lot of
5 public benefit."

6 So whatever you may think about the Clean
7 Energy Power Plan, and there's obviously lots of
8 diverse opinions about that as well, there's a lot
9 to like on what California is doing. So I feel like
10 that evangelical kind of role is also very, very
11 helpful.

12 You know, the State's official energy
13 agencies are members of NASEO and so it does matter
14 that they hear these things. And I think it's a
15 good organization, very competent organization to be
16 affiliated with.

17 And then similarly about the State Energy
18 Advisory Board, which is a DOE Board, which has had
19 a lot going on as well mostly revolving around the
20 transition. So I think we're making recommendations
21 to DOE about what they could be doing, and from a
22 state's perspective what they ought to be doing to
23 focus on establishing continuity into the next
24 Administration -- is really job number one right now
25 for STEAB. And so any ideas on either front that

1 you all have, I'd love to take them back and get
2 them sort of incorporated as possible into an
3 official statement to DOE on that.

4 So yeah, that's all, my report for now.

5 COMMISSIONER HOCHSCHILD: I'll just touch
6 on briefly what's been happening this week.
7 Obviously, the Chairman has put a lot of effort into
8 the relationship with Mexico and my Chief of Staff,
9 Emilio, has been coordinating with this delegation
10 of about six officials from Mexico including three
11 Commissioners from Cray, (phonetic) which is one of
12 the key energy policy making bodies there. And I
13 participated on Monday. We led them on a tour of
14 SolarCity, Stanford, Google, and Tesla.

15 I've been now on four consecutive tours to
16 the Tesla's factory starting when it was the GM
17 Toyota Plant. And I will just say, I mean even
18 since I was there a year ago, the change is
19 remarkable. It's 15,000 employees now at Tesla.
20 They are on track to do half a million cars annually
21 by 2018. And just the momentum, seeing all the new
22 machinery and the caliber of people they are
23 attracting, it really did fill me with hope. And
24 obviously we've been a part of that with our \$10
25 million grant to Tesla.

1 And I do think it does help officials from
2 other countries to think big when they see the scale
3 that they can get to, and how quickly that can
4 happen. In a lot of my talks I built this slide
5 that just says "GM, which started 107 years ago and
6 it took a century to become a \$50 billion company,
7 right? Tesla started in 2003, they're at \$34
8 billion now." I mean, you kind of play that out
9 over the next few years and you can see the trends
10 and just how quickly this can take hold.

11 So that was really a highlight. We've got
12 a bunch more meetings. Today they were at ISO.
13 We're doing a dinner with Senator de Leon and
14 Commissioner Peterman and Mark Ferron and others
15 tonight.

16 But I really want to thank the Chair for
17 really initiating this relationship with Mexico and
18 the Governor's leadership, because I think it is --
19 first of all, I just want to say, talking to the
20 clean energy companies here in California we talk a
21 lot about job creation and so on. They all --
22 American California-based clean energy all
23 prioritized Mexico. I mean, that's the first
24 country -- the only place outside of the United
25 States where SolarCity opened an office and same

1 with Tesla.

2 And Elon Musk is going next month to open
3 the new showroom for Tesla and SunPower will tell
4 you the same thing and many others.

5 So that relationship, we are doing the very
6 opposite of building a wall. We really are building
7 a bridge and they've been just enormously receptive
8 and I'm very glad that this relationship has had the
9 strength that it's had.

10 CHAIRMAN WEISENMILLER: Thanks. I'll try
11 to be brief too, just a couple of things.

12 One is talking regional issues for awhile,
13 it's just interesting in a way, because there's been
14 this issue, "Gee, can we connect to PacifiCorp for
15 blah-blah-blah?" And obviously one of the things
16 that we've been working with the Governor on is
17 trying to really chase where the carbon is in the
18 world and try to whack it out, be it China or
19 Mexico.

20 And so when people talk about the cultural
21 differences California and Utah you're going, "Guys,
22 you've never been to Beijing. You know, you've
23 never been to Mexico City." I mean, if you're
24 really trying to make progress, you can't just have
25 your little sphere and just talk to people in Marin,

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1 right? You've got to really go where the greenhouse
2 gas emissions are and certainly that's part of it.

3 It's also weird in that as you know,
4 PacifiCorp or Berkshire has invested 17 billion in
5 renewables in California. And they are the largest
6 company in Imperial, so how they're painted as the
7 dark forces -- again (indiscernible) scratching your
8 head going, how did you get yourself in that box
9 right, from a public perception? It's actually sort
10 of a marvelous opportunity to enable the sort of
11 transformation of PacifiCorp.

12 Now, as Andrew said we had a workshop to
13 where basically the ISO -- we had two things. One
14 was sort of a benefit study and the other one was a
15 governance proposal. And this was sort of like the
16 -- anyways, we've had a series of workshops on
17 governance issues since there's sort of a number of
18 issues not to ignore.

19 One of them is what are the benefits? And
20 I'd have to say this is a pretty conservative study
21 that's saying by 2030, as opposed to when you first
22 start -- and this thing is going to start at 2020
23 anyway -- but 2030 is more when you're full bore.
24 And if you really (indiscernible) it's 1.3 or 1.5
25 billion plus, which as Dirksen said a billion here

1 and a billion there is real money. It's a
2 relatively small percentage and certainly from an
3 air quality perspective it reduces power plants in
4 the South Coast and San Joaquin, their emissions by
5 10 percent.

6 Now when you look there are a lot of other
7 things remaining on the South Coast and San Joaquin,
8 and power plants aren't really anywhere close to the
9 dominant source in this goods movement. But still
10 10 percent of power plant savings, if you get to
11 west-to-west end cumulatively from that 11-year
12 period it is equivalent to the utility sector's
13 greenhouse gas emissions for a year. So again,
14 there's a slight bump in 2020, but obviously
15 greenhouse gas issues, the issues are cumulative,
16 not any particular annual number.

17 But so a pretty healthy benefit study, a
18 lot of calls for well we need more time. And it's
19 like, well let's specify the study and actually I
20 did tweak some of our friends just going, "Wait a
21 minute. You didn't sign an NDA. You didn't do any
22 discovery and now you say you need more time. Where
23 have you been since February with the workshops
24 occurring?"

25 And on governance, again it's really a

1 tough issue. There are others, the greenhouse gas
2 accounting is certainly complicated. The RA and the
3 TAC issues are complicated. But really, governance
4 is at the heart of it.

5 And basically the Governor sent a letter to
6 the Legislature saying, "Well, we're not going to
7 try to do it this month," to get it through. And
8 part of the reality is Cap and Trade is a huge issue
9 now. And I think the bandwidth for everyone -- I
10 don't think we're close enough to -- we made a lot
11 of progress on the regional issues. But we're not
12 there yet in terms of consensus. And there's a lot
13 of attention that has to be focused on Cap and Trade
14 this month.

15 So it was pretty clear that this was going
16 to be a next-year issue, frankly. And we'd like to
17 get everything in, going into January and try to
18 deal with it then. But again, it was pretty -- it's
19 just the reality was that just given the timing and
20 everything else it's important to do it right. It's
21 important to do Cap and Trade right. So that part
22 of it was pretty clear.

23 Like I said, I think it's still going to be
24 governance is probably one of the tougher ones to
25 deal with. You know, I think we're still working

1 through the next steps, there may well be a
2 transitional committee to try to bring in a broad
3 base of stakeholders to come to grips with some of
4 these issues. That was sort of a common suggestion.

5 Certainly there's a chance now for some of
6 the groups to get a chance to dig into the benefit
7 studies more. I think frankly as I said I don't
8 have a lot of sympathy for the utilities saying
9 that, but Greenlining and a lot of the EJ groups, I
10 mean this is pretty complicated stuff they don't do
11 for a living. So you sort of understand where they
12 -- some more time there would help. But certainly
13 everyone else could have a chance for more time too.

14 But I think the idea is good progress,
15 there's more to do, I think a lot of focus and
16 certainly a lot of attention on Cap and Trade this
17 month. Again, this is a heavy lift even just with
18 that much less that in regional markets. So it's
19 certainly is a busy time.

20 I also was just going to flag one of the
21 things, which I -- you know Aliso Canyon -- we've
22 got a workshop at the end of the month to talk about
23 Aliso Canyon and winter.

24 And also just WAPA issues, there's been a
25 lot of attention and it's a tough world, but just in

1 terms of there was a GAO Report, there was a WAPA
2 presentation, there was a Rebecca Smith article, all
3 on WAPA in terms of cyber security and physical
4 security issues. Which certainly after the Ukraine
5 and everything else has certainly haunted -- it's
6 not just WAPA, but I mean it's the entire utility
7 industry ranging from Edison down to Kirkwood or
8 whatever (indiscernible) the complexity there. But
9 certain WAPA has, as a government agency with line
10 item budgets, they go through a complicated process
11 for IT budget stuff or whatever. So trying to
12 respond to fast-growing problems has got to be
13 challenging.

14 So anyway that's all I have. Let's go on
15 to Chief Counsel Report.

16 MS. VACCARO: I don't have anything today.

17 CHAIRMAN WEISENMILLER: Okay.

18 Executive Director Report?

19 MR. OGLESBY: Two quick things, just to
20 report that I spoke to the Energy Storage
21 Association in San Francisco and participated on a
22 keynote panel. My role was to talk about the rapid
23 progress of renewables in the state.

24 And I also made a report to the State Water
25 Board on the progress of once-through cooling. And

1 we have a role in the group that advises the Water
2 Board of impacts of the phase out on reliability.
3 And the bottom line recommendation was to stay the
4 course, but keep an eye on a couple of projects that
5 may be lagging a bit.

6 CHAIRMAN WEISENMILLER: Public Adviser
7 Report, please?

8 MS. AVALOS: There's no report for the
9 Public Adviser's Office.

10 CHAIRMAN WEISENMILLER: Thank you.

11 I believe we have one public comment?

12 Mr. McLaughlin, please come on up and
13 introduce yourself.

14 MS. MCLAUGHLIN: Good afternoon,
15 Commissioners. Thank you very much. My name is
16 Larry McLaughlin and I serve as Regional Director
17 for Advanced Transportation and Renewable Energy in
18 the Inland Empire Desert Region. In other words I
19 work the community college system. I work with
20 colleges on transportation and energy-related
21 programs.

22 And Commissioner Scott, I wanted to mention
23 to you, one of the things I have going on with the
24 community colleges is to incorporate electric
25 vehicle, hybrid electric vehicle instruction into

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1 the curriculum for automotive programs. We have
2 quite a number that do not have that technology in
3 their programs yet. And we're working to remedy
4 that, but that's not why I'm here.

5 I'm here to update on you on the energy
6 storage curriculum. I've been leading a team on the
7 development of an energy storage curriculum for our
8 community college faculty to use. And introducing
9 the technologies and a little bit about the
10 policies, the market benefits and so forth, to
11 students. And programs like electrical programs,
12 solar programs, building and even our automotive
13 programs. So I wanted to let you know, using the
14 public comment period, that our energy storage
15 curriculum is now complete.

16 We have an Industry Review Panel that will
17 be meeting in Hayward to review and validate the
18 materials on August 31st. Our plan is to begin
19 training faculty in selected areas of the state
20 beginning in October.

21 And the faculty will be bringing them in
22 from these various programs: electrical, solar,
23 building programs, automotive programs, to go
24 through a train the trainer process. Because we're
25 going to have to acquaint them with the materials,

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1 how they're intended to be used, while we're
2 educating them on the subject matter.

3 So this will be a process and we'll be at
4 this for awhile in order to get this incorporated
5 properly into the programs. This is the kind of
6 thing that our students get very excited about.
7 We're excited about it. You know, they're going to
8 become the future installers and technicians that
9 will maintain this equipment. But we're also
10 training the future contractors and designers and
11 the foremen and the planners and inspectors. And in
12 these programs they'll get the knowledge that they
13 need to understand this emerging technology.

14 This past year has been a great year for
15 the storage industry. We expect another great year
16 and we don't think it's too early to start teaching
17 our students about this technology.

18 I have had delivered for you, a copy of the
19 training materials, your own personal copy to
20 review. And I know that you don't have a lot of
21 time to go through a document like this, so what I
22 wanted to suggest to you is take a look at the table
23 of contents. Choose your favorite topic. And take
24 a look and we'd love to know what you think about
25 it.

1 One of the topics that I know you all will
2 be interested in is the one that we've put together
3 specifically for the EV to Grid integration issues.
4 Because I've heard today, and I know that this is
5 all on your minds, that there's a nexus here.

6 The transportation sector is merging with
7 the energy sector in very interesting ways. And, of
8 course, the cars and trucks that we're currently
9 driving could become a significant source for
10 capturing renewable energy power. And shifting how
11 that power is used on a daily consumption schedule.

12 So please take a look and let us know what
13 you think. My card is in the pocket on the inside
14 of the binder. All right, do you have any
15 questions?

16 CHAIRMAN WEISENMILLER: Okay. No, I was
17 going to point out that when I talked to the
18 utilities -- and they have an aging workforce -- but
19 anyway, bottom line is the community colleges are
20 where most of their workers come from. So certainly
21 educating future utility folks on storage, LED, you
22 name it, is certainly really good.

23 And I think -- I just remember talking to
24 Holdren and he said he and Obama were going back and
25 forth on what was more depressing, either the fact

1 that so few Americans understand climate change or
2 so few Americans believe in evolution. But both of
3 them would like to think that better scientific
4 training might help in both cases.

5 So anyway, thanks for doing the Lord's work
6 there.

7 MR. MCLAUGHLIN: Thank you very much.

8 CHAIRMAN WEISENMILLER: I think we're
9 adjourned. And I'm sure Laurie would love to have a
10 copy of that if you don't want to haul it home,
11 right?

12 (Adjourned at 12:47 P.M.)

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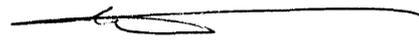
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I do hereby certify that the testimony in the foregoing hearing was taken at the time and place therein stated; that the testimony of said witnesses were reported by me, a certified electronic court reporter and a disinterested person, and was under 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 6th day of April, 2016.



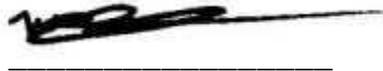
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Myra Severtson
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