

## DOCKETED

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Commissioners Present

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

Staff Present:

Rob Oglesby, Executive Director  
Kourtney Vaccaro, Chief Counsel  
Alana Mathews, Public Adviser  
Shawn Pittard, Public Adviser's Office  
Cody Goldthrite, Secretariat

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Christine Collopy	11
Anne Fisher	12
Heather Bird	13
Ostap Loredó-Contreras	14
Reynaldo Gonzalez	15
Sarah Williams	16
John Kato	20

Also Present

Interested Parties (\* Via WebEx)

Jeffrey D. Harris, Ellison Schneider & Harris	2, 4
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P R O C E E D I N G S

JANUARY 13, 2016 10:07 a.m.

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

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

CHAIR WEISENMILLER: Good morning, let's start out the business meeting, first, by congratulating Commissioner Scott on her reappointment yesterday.

(Applause)

CHAIR WEISENMILLER: Okay, Items 7 and 13 will be held. So, let's go on to Item 1, the Consent Calendar.

COMMISSIONER DOUGLAS: Move --

COMMISSIONER MC ALLISTER: Move Item 1. No, second.

CHAIR WEISENMILLER: Okay. All those in favor?

(Ayes)

CHAIR WEISENMILLER: So, this passes five to zero.

Let's go on to Item 2, basically, Committee Appointments. Staff, Joe Douglas, you want to start?

MR. DOUGLAS: I will. Good morning, Commissioners. My name's Joe Douglas. I am the Compliance Project Manager for the High Desert Power Project. With me this morning is Staff Counsel Elena Miller. We also have

1 representatives from High Desert Power Plant here, as well.

2           The High Desert Power Project is an 830 megawatt  
3 combined-cycle power plant that was certified by the Energy  
4 Commission on May 3rd, 2000, and began commercial  
5 operations in April of 2003. The facility is located in  
6 the City of Victorville, in San Bernardino County.

7           On October 30th, 2015, High Desert Power Trust,  
8 the owner of the High Desert Power Project, filed a  
9 petition with the California Energy Commission requesting  
10 to amend the final decision for the High Desert Project.  
11 The petition seeks to change the condition of  
12 certification, Soil and Water I, to allow High Desert to  
13 use alternative water supplies, other than State water  
14 project water or recycled water from the Victor Valley  
15 Water Reclamation Authority.

16           At this time, staff is requesting assignment of a  
17 committee to best accommodate public participation in this  
18 amendment proceeding. And you also have an order for your  
19 approval that has been included in the backup material, as  
20 well as has been provided for the public.

21           CHAIR WEISENMILLER: Applicant?

22           MR. HARRIS: Good morning, Jeff Harris here on  
23 behalf of the project owner. And on the phone, as well, is  
24 Brad Heisey, Senior Vice President of Tenaska Capital,  
25 available to answer any questions.

1 I think maybe this is a non-event this morning.  
2 We have an agreement with staff about appointment of a  
3 committee. And I think I will just be brief, but don't let  
4 my brevity be mistaken for lack of importance of this  
5 matter. It's very important to the company and I'm glad to  
6 answer any questions. Thank you.

7 CHAIR WEISENMILLER: Thanks. Anyone else in the  
8 room? Public comment?

9 Let's turn to the Commissioners.

10 COMMISSIONER DOUGLAS: I'll stay with the pattern  
11 and be brief, as well. I think it's a good time to appoint  
12 a committee and we should move to handle this matter with  
13 the speed that we're able to do, while taking a thorough  
14 look at it.

15 CHAIR WEISENMILLER: Great. So, let's have a  
16 committee with you as the chair, or you're the presiding  
17 member and Commissioner Scott as the second.

18 Motion?

19 COMMISSIONER HOCHSCHILD: I move the item.

20 COMMISSIONER MC ALLISTER: I'll second.

21 CHAIR WEISENMILLER: All those in favor?

22 (Ayes)

23 CHAIR WEISENMILLER: This passes five to zero.

24 Great, thanks.

25 MR. HARRIS: Okay, thank you.

1 CHAIR WEISENMILLER: Let's go on to Number 3.

2 MS. MATHEWS: Good morning, Commissioners. I'm  
3 Alana Mathews, the Public Adviser. And as you all will  
4 recall, on November 7, 2013, Chair Weisenmiller expressed a  
5 public commitment to increase the participation of diverse  
6 business enterprises in the implementation of the EPIC  
7 Program. Commissioner Janea Scott made a similar  
8 commitment for the ARFVTP program.

9 And in February of 2014 the California Energy  
10 Commission formed a Diversity Working Group to create a  
11 Commission-wide approach for this priority and help  
12 coordinate diversity efforts within our agency.

13 On April 8th, 2015, the California Energy  
14 Commission adopted a resolution outlining its commitment to  
15 ensure all Californians have an opportunity to participate  
16 in and benefit from Energy Commission programs that can  
17 lead to job creation and training, improved air quality,  
18 and energy efficiency and environmental gains.

19 The resolution recognizes that California's  
20 energy goals can best be met by tapping into the diversity  
21 of thought, talent and perspective evident in its many  
22 communities, and to encourage disadvantaged and under-  
23 represented businesses and communities, including disabled  
24 veteran, women, LGBT, and minority-owned businesses to  
25 engage in and benefit from our many programs.

1           The Diversity Working Group meets monthly to  
2 develop tools and strategies to enhance the Energy  
3 Commission's diversity efforts. These tools have included  
4 a CalEnviroScreen Resource Guide to help quickly identify  
5 disadvantaged communities, a Diversity Survey template that  
6 tracks participation of diverse business enterprises,  
7 training and outreach to disadvantaged communities, and a  
8 Commitment to Diversity PowerPoint slide which is  
9 incorporated and presented in our public workshops and  
10 meetings.

11           The Diversity Working Group also works on  
12 measuring the effectiveness of our diversity outreach  
13 efforts and helping turn lessons learned into best  
14 practices.

15           Since June 2014, we have tracked our diversity  
16 activities to establish a baseline. And I am pleased to  
17 report the following highlights from our diversity efforts.  
18 Within the Energy Efficiency Division, the Bright Schools  
19 Program, they have had a contract provide energy  
20 efficiency, technical assistance reports to local  
21 educational agencies was awarded to a firm with five  
22 percent of the subcontractors designated as disabled  
23 veteran business enterprise.

24           Under Prop. 39, of the \$498 million of funds in  
25 this program, approved to date, \$229 million represents

1 approved funding for local educational agencies in the top  
2 seven counties with the highest use of free or reduced meal  
3 programs, which is approximately 46 percent.

4 Under our Energy Research and Development  
5 Division, the EPIC Program made 81 awards in 2015, 12 of  
6 which were located in disadvantaged communities. Numerous  
7 other awards had project site locations in disadvantaged  
8 communities, bringing investment and opportunity to all  
9 regions of the State.

10 Staff in this division also held eight public  
11 workshops throughout the State to solicit feedback on power  
12 in California communities, and six were located in  
13 disadvantaged communities.

14 Of the over 250 participants of these workshops,  
15 over 40 were identified as individuals from a small  
16 business, woman-owned business, minority-owned business,  
17 disabled veteran-owned business, or LGBT-owned business.

18 Staff attended 23 events hosted by small  
19 businesses, women-owned businesses, minority-owned  
20 businesses, and disabled veteran and LGBT-owned businesses  
21 enterprise organizations.

22 The Division also launched a Linked-In group page  
23 titled "The California Energy Commission's Research and  
24 Development Networking Hub". And this group is open to all  
25 and currently has 755 members, which is a -- which guides

1 and provides our user-to-room platform to help all  
2 potential applicants, including our diverse business  
3 enterprises.

4           Lastly, staff has also developed a comprehensive  
5 outreach tool that is being adopted for use in all  
6 divisions. Among these tools include the funding  
7 opportunities translated into five languages, a Commitment  
8 to Diversity PowerPoint slide, which is available and I  
9 just mentioned, and the Diversity Survey.

10           In our Fuels and Transportation Division, the  
11 Natural Gas Program, Fueling Infrastructure, made 13 awards  
12 and 11 were located in disadvantaged communities.

13           The Hydrogen Program, the Infrastructure  
14 Operation and Maintenance Grants, made 13 awards. Four  
15 went to disadvantaged communities.

16           And the Fuels and Transportation Division  
17 sponsored a table at the Disabled American Veteran  
18 Recruitment, Military and Veterans Career Fair, and  
19 provided information to over 300 veterans.

20           In our Renewable Energy Division, the New Solar  
21 Homes Program has provided funding, in funds or incentives,  
22 totaling \$207,000 and \$190,000.

23           In our Siting and Transmission, and Environmental  
24 Division, they identified minority populations for the HECA  
25 application for certification in the Palmdale petition to

1 amend, which resulted in translating eight documents in  
2 Spanish. That division has also performed 148 Tribal  
3 consultations on 11 projects from April 2015 through  
4 December 2015, as well as participated in four Tribal  
5 Liaison meetings from July to December last year.

6           Going forward, the Energy Commission's commitment  
7 to diversity will now have an expanded goal and perspective  
8 with the implementation of AB 865 and SB 350.

9           Pursuant to AB 865, the Energy Commission will  
10 continue to develop an outreach plan and strategy to  
11 increase participation of diverse business enterprises in  
12 its funding programs, and establish a Diversity Task Force  
13 to consider and make recommendations about diversity in the  
14 energy industry.

15           The development of the task force will include  
16 input from energy stakeholders, diverse business enterprise  
17 representatives, disadvantaged community and environmental  
18 justice representatives in a very public process.

19           Pursuant to SB 350, the California Energy  
20 Commission, with input from relevant State agencies and the  
21 public, will prepare a report addressing the following  
22 three areas. Barriers to opportunities for and access to  
23 renewable energy by low-income customers, barriers to  
24 contracting opportunities for local, small businesses in  
25 disadvantaged communities, and barriers to low-income

1 customers to energy efficiency and weatherization  
2 investments, including those in disadvantaged communities,  
3 as well as recommendations on how to increase access to  
4 energy efficiency and weatherization investments to low-  
5 income customers.

6 We will hold a series of public workshops to  
7 invite and incorporate input from disadvantaged community  
8 and environmental justice representatives, industry  
9 stakeholders, and small business owners.

10 I am happy to answer any questions.

11 CHAIR WEISENMILLER: Thank you for the report.  
12 And indicate, obviously, this is a high priority for me and  
13 for all the Commissions. And particularly, now, with the  
14 new legislation. You know, we have a lot to do in this  
15 area and, you know, appreciate all the staff and your  
16 commitment to really move on this.

17 But again, I think we just really need to keep  
18 focused on it. We're certainly going to look forward to  
19 periodic reports from you on our progress to date.

20 COMMISSIONER MC ALLISTER: I want to just  
21 highlight the statistic about the Prop. 39 Program, and  
22 it's a big percentage of the overall outflow to the LEAs.  
23 And that's a key purpose that the Legislature had in mind,  
24 and the voters, I think, when they passed the initiative in  
25 the first place that, you know, we would be helping the

1 schools that need it most, and those are the ones in  
2 disadvantaged communities.

3 So, that's a \$200 million plus dollars big deal  
4 and it's going to continue to be a big deal.

5 And then on just energy efficiency generally, you  
6 know, 350, big goals for energy efficiency. Disadvantaged  
7 communities are where probably the houses that, yeah, I  
8 think we know, and the homes and businesses that need the  
9 most work and have the most potential for efficiency  
10 upgrades exist. And also, the ones that have the least  
11 available capital to make those improvements.

12 And so, in the implementation of the AB 758  
13 Action Plan, and SB 350, I think we will be working with  
14 stakeholders and, you know, definitely want your  
15 participation in that, Alana, and the Public Adviser's  
16 Office to make sure that we're having the full breadth of  
17 the conversation we need to direct resources towards the  
18 buildings that can provide the most benefit to the State,  
19 but can also do the most, and more broad good for the  
20 people that live and work in them.

21 So, you know, this is a really good initiative.  
22 I want to thank you for your initiative on making it  
23 happen.

24 COMMISSIONER SCOTT: I'll just underscore what a  
25 high priority this is for the Energy Commission. And I

1 also wanted to thank you for your enthusiasm and your  
2 leadership in this space. It's been terrific. I think  
3 we've got a really great start. I think we've got some  
4 good data, some good statistics, some good meeting  
5 schedules, you know, in terms of the monthly meetings for  
6 also taking on our new responsibilities under the Assembly  
7 Bill.

8           And I also just wanted to thank all of our staff,  
9 who have been working really diligently and hard with you,  
10 both to help provide the information, but also to think  
11 through how we include diversity into just kind of like our  
12 business as usual. And making sure that it gets into  
13 solicitations, into outreach meetings and sessions. And  
14 so, I really appreciate all of the work that has gone on to  
15 help us with this priority for the Commission. So, thank  
16 you.

17           MS. MATHEWS: Thank you.

18           COMMISSIONER DOUGLAS: I was just going to add, I  
19 think on behalf of all of us, we all appreciate your work  
20 on this, Alana, so thank you.

21           CHAIR WEISENMILLER: Let's go onto Item 4,  
22 which -- or actually, first, let me ask if there's any  
23 public comments on Item 3.

24           Let's go on to Item 4, Jared.

25           MR. BABULA: Thank you. This is Jared Babula,

1 Staff Counsel.

2 Staff seeks approval of an order directing the  
3 Commission on the implementation of the updated process,  
4 procedure and siting regulations.

5 On September 9th, 2015, the Commission adopted  
6 updates to its process, procedure and siting regulations  
7 primarily found in the 1200's and 1700's of Title 20,  
8 California Code of Regulations.

9 On December 21st, 2015, the Office of  
10 Administrative Law approved the regulations and submitted  
11 them to the Secretary of State for publication, with an  
12 effective date of January 1st, 2016.

13 This order provides direction to existing  
14 committees on the implementation of the updated  
15 regulations. The order confirms that all proceedings are  
16 subject to the updated regulations, but that already  
17 completed elements of a proceeding shall not be repeated  
18 under the updated regulations.

19 For example, in the old regulations service of  
20 documents was performed by the parties, primarily by mail.  
21 The updated regulations moved service of documents to  
22 dockets as a feature of the electronic filing system. This  
23 order clarifies that prior service would not have to be  
24 repeated by the Docket Unit, but that future service of  
25 documents would be performed by dockets consistent with the

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1 new regulations.

2 In 2011 and in 2013, the Executive Director  
3 issued standing orders relating to document filing that  
4 were necessary to accommodate technological changes of the  
5 Commission. Portions of these standing orders have now  
6 been superseded by the updated regulations or updated  
7 regulatory language, which reformed the filing and service  
8 procedures to include electronic document management  
9 technologies.

10 This order directs the Executive Director to  
11 update or repeal, as necessary, the standing orders to  
12 comport with the updated regulations.

13 Finally, as part of the development of the  
14 regulatory language, the Commission staff committed to  
15 establishing a docket to receive filings related to  
16 jurisdictional determinations to ensure transparency. This  
17 order directs the establishment of a jurisdictional  
18 determinations docket, which allows the public to sign up  
19 on a list serve to receive docketed items or notices of  
20 such items.

21 I'm available to answer any questions, thank you.

22 CHAIR WEISENMILLER: Thank you. We have one  
23 public comment on this item. So, I think let's take Jeff  
24 Harris.

25 MR. HARRIS: Good morning, again, thank you.

1 Jeff Harris, I'm here on behalf of IEP, the Independent  
2 Energy Producers Association, a large trade association.

3 I have one bit of praise and then some questions  
4 on another part. So, let's start with the questions,  
5 first.

6 The jurisdictional determination docket, I think  
7 generally that sounds okay to the IEP's membership. We are  
8 a little concerned about potential chilling effects. If  
9 people want to come in and talk to your staff, kind of  
10 candidly about projects, we're just going to want to make  
11 sure that things aren't docketed without some understanding  
12 about those things.

13 And there's a sort of a balance there between  
14 transparency, which I know you all value and insist upon,  
15 correctly, and then also the ability for someone who's not  
16 jurisdictional, or not sure if they're jurisdictional, to  
17 come in and have a candid conversation. And put into the  
18 public or put into the discussion things that are not  
19 generally public, already. So, just look for that balance  
20 is all we're concerned about.

21 So, this is the first time I've seen the  
22 supporting material, so that's just sort of my initial  
23 reactions. I don't have an opinion from IEP generally  
24 about that, but I wanted to share those thoughts on that  
25 one, as well.

1           I want to go back to the second item, to existing  
2 proceedings, this language is something that IEP and others  
3 requested in the rulemaking. And, really, concerned about  
4 retroactivity, trying to balance that with the idea that  
5 the Commission wanted to operate under one set of rules.

6           I think this ends up being a pretty good  
7 compromise in that respect. I'm particularly happy about  
8 the language that the updated regulations are not intended  
9 to be applied retroactively.

10           We realize this is going to be as much art --  
11 more art, than science, so it is going to require some  
12 discretion from the presiding members in these various  
13 proceedings. But all in all, we really want to thank  
14 Commissioner Douglas, in particular, and Jared, for working  
15 to put together, really, with important statement of intent  
16 for those regulations and giving us the opportunity to  
17 further memorialize that intent here today.

18           And I'll answer any questions and say thank you  
19 at this point.

20           CHAIR WEISENMILLER: Thank you. First, let's  
21 see, any other public comment?

22           Then, let's go to the Commissioners.

23           COMMISSIONER DOUGLAS: Well, just briefly, you  
24 know, I appreciate Mr. Harris's comments. I think he  
25 highlighted probably the most important, substantive

1 statement of intent in the order Jared brought forward.  
2 Which is that the siting regulations are not meant to be  
3 applied retroactively. And so, to the extent that under  
4 the new regulations, that are now in effect, something  
5 happened, for example an informational hearing might be  
6 done differently in the future, that doesn't mean we, you  
7 know, stop everything, go back and redo.

8           So, of course, where it comes to art, rather than  
9 science, that are processes sometimes are not completely  
10 linear and you find yourself going back because something  
11 changed in a project, for example, or there's some other  
12 significant change.

13           And so, I think there is going to be a need for  
14 the committee to take an active role in managing that,  
15 where there can be some gray area. But I think the concept  
16 that this is not retroactive and this is meant to be  
17 forward-looking, as it pertains to existing cases, is a  
18 really important one to emphasize.

19           Beyond that, you know, the order is largely  
20 procedural and it's important to have in place as we move  
21 forward and implement the new regulations.

22           So with that, I'm sorry, I move approval of this  
23 item.

24           COMMISSIONER SCOTT: Second.

25           CHAIR WEISENMILLER: All those in favor?

1 (Ayes)

2 CHAIR WEISENMILLER: This item passes five to  
3 zero. Thank you.

4 Let's go on to Item 5, general rulemaking  
5 proceeding for SB 350 and AB 802. Sylvia?

6 MS. BENDER: Good morning, Commissioners. I'm  
7 Sylvia Bender, Deputy Director for the Energy Assessments  
8 Division, and I'm here with Suzanne Korosec. And we have  
9 Christine Collopy in the audience, from the Energy  
10 Efficiency Division.

11 And we're here to ask your approval to institute  
12 a rulemaking proceeding to implement changes in law under  
13 SB 350 and AB 802.

14 In our presentation this morning, we'll be  
15 summarizing for you the key purpose of the rulemaking, the  
16 three main sub-proceedings that are envisioned for the  
17 rulemaking and the overall proceeding structure. And we do  
18 have a slide presentation that, hopefully, will come along  
19 to illustrate what we're talking about here. But we'll  
20 just keep on moving here.

21 The purpose of the rulemaking will be to  
22 consider, develop and implement amendments to the existing  
23 Commission regulations and guidelines that can support  
24 California's energy efficiency, renewable energy, and  
25 greenhouse reduction goals as outlined in those two pieces

22

1 of legislation, SB 350 and 802.

2           The rulemaking is envisioned to encompass several  
3 separate, but related sub-proceedings. Most prominently,  
4 these three, which we will describe in more detail. Those  
5 three are integrated resource planning guidelines for  
6 publicly-owned utilities, Title 20 data collection related  
7 to demand forecasting, and how to track the doubling of  
8 energy efficiency through realized energy use reductions.  
9 And third, changes to the Renewable Portfolio Standard.

10           You notice I haven't mentioned energy efficiency  
11 as a subcomponent here. While energy efficiency is a major  
12 part of AB 350 -- or SB 350, a separate sub-proceeding for  
13 energy efficiency is not planned at this moment, but one  
14 could be added later, if such is necessitated.

15           Integrated resource plans. SB 350 envisions  
16 integrated resource plans as a framework within which to  
17 see how utilities intend to meet both their resource and  
18 their greenhouse gas reduction policy goals, to identify  
19 any physical or operational constraints they may face, and  
20 to describe their future priorities and choices, both for  
21 their supply side and customer side resources.

22           The legislation defines a set of publicly-owned  
23 utilities that will be required to file these plans with  
24 the Energy Commission. And they are those with three-year  
25 average electrical demand exceeding 700 gigawatt hours.

1 This amounts to approximately 16 publicly-owned utilities.

2           The plans will be filed at least once every five  
3 years, starting in 2019. This is two years after the  
4 investor-owned utilities begin filing theirs at the CPUC.  
5 And these plans must do several things. Describe how  
6 greenhouse gas reduction targets will be achieved, how 50  
7 percent of eligible renewable resources will be procured by  
8 2030, address the procurement of other preferred resources,  
9 such as energy efficiency, demand response, storage,  
10 transportation electrification. And, finally, how each  
11 will maintain supply reliability and minimize customer bill  
12 impacts.

13           The rulemaking we're proposing will focus on a  
14 public process in which the Energy Commission will develop  
15 guidelines for submitting the information, the data and  
16 reports needed for the Commission's review of these plans,  
17 and any recommendations we may make to correct deficiencies  
18 if the plans prove inconsistent with the requirements set  
19 forward in SB 350.

20           So, now we're going to turn to some of the  
21 changes that AB 802 makes, specifically, for data  
22 collection. This is the second major component of this  
23 rulemaking.

24           The two bills, together, make several very  
25 important changes in the Energy Commission's data

1 collection authority and data analysis responsibilities. A  
2 separate rulemaking, to establish regulations for the  
3 Efficiency Division's AB 802 benchmarking program, is  
4 already underway. You've approved that.

5           This rulemaking, for which we are seeking  
6 approval today, focuses on three different data  
7 requirements in AB 802. First, AB 802 establishes  
8 authority for the Energy Commission to collect individual  
9 customer usage and billing data. This data will be used in  
10 studies to improve demand forecasting and to add to our  
11 knowledge about the role energy efficiency plays in both  
12 reducing demand and in changing characteristics of that  
13 demand.

14           AB 802 also requires reasonable policies and  
15 procedures to protect this customer information from  
16 unauthorized disclosure. This rulemaking will review and  
17 expand upon our current data confidentiality and security  
18 provisions.

19           And finally, AB 802 requires the Energy  
20 Commission to consider how changes in existing baselines  
21 for energy efficiency savings may necessitate adjustments  
22 to our electricity, natural gas, and transportation energy  
23 demand forecasts and models to correctly analyze these  
24 impacts.

25           Now, I'm going to turn to the data collection

1 changes that SB 350 entails. SB 350 also makes several  
2 significant changes in the ways the Energy Commission is  
3 required to track realized energy use reductions from  
4 energy efficiency over both time and geography.

5 First, the Energy Commission is given the lead  
6 for setting new annual energy efficiency savings targets,  
7 by November 1st, 2017, that will achieve a doubling of  
8 statewide energy efficiency savings. These savings targets  
9 are to be derived from all electricity and natural gas  
10 retail end uses.

11 In a public process, the Commission may consider  
12 whether a method to aggregate electricity natural gas  
13 savings into targets may also be useful.

14 SB 350 contains very specific changes for how  
15 impacts of these targets will be measured. We will be  
16 required to assess the hourly and the seasonal impacts of  
17 efficiency targets on both statewide and local demand.

18 These assessments of overall reduction are to be  
19 made using normalized, metered electricity and natural gas  
20 consumption data, where feasible and cost effective. This  
21 is a major, new undertaking for the Commission.

22 Beginning in 2019, each IEPR will provide  
23 recommendations and an update on the progress that we're  
24 making towards doubling this energy efficiency, along with  
25 assessments of impacts on statewide demand, in local

1 service territories, and disadvantaged communities and,  
2 again, from an hourly and seasonal perspective.

3 So, with the conclusion of that slide, I'm going  
4 to turn the presentation over to Suzanne Korosec, Deputy  
5 for the Renewables Energy Division, who will talk about the  
6 specific changes to the RPS.

7 MS. KOROSEC: Great, thank you. The next slide,  
8 please.

9 So, in addition to the new Integrated Resource  
10 Plan and data collection requirements in 350, the bill  
11 codifies Governor Brown's landmark renewable policy goal,  
12 which was laid out in his January 2015 inaugural address,  
13 to generate half of the State's electricity from renewable  
14 resources by 2030.

15 So, SB 350 sets new, post-2020 RPS procurement  
16 targets for all load-serving entities to procure 40 percent  
17 renewables by the end of 2024, 45 percent by the end of  
18 2027, and 50 percent by 2030 and thereafter.

19 Next, SB 350 revises the conditions for delay of  
20 timely compliance, which is one of the optional compliance  
21 measures that can excuse a shortfall in meeting the RPS  
22 target. The change adds unanticipated increases in retail  
23 sales due to transportation electrification as one of the  
24 existing conditions that can allow for a delay of timely  
25 compliance waiver. The existing conditions also include

1 things like unanticipated curtailment or not enough  
2 transmission capacity.

3 SB 350 also specifies that unanticipated  
4 curtailment only qualifies for a delay of timely compliance  
5 waiver if the waiver wouldn't result in increased  
6 greenhouse gas emissions.

7 The next slide, please. SB 350 also revises the  
8 requirements for another optional compliance measure, which  
9 is cost limitation. This limits what a utility will pay  
10 for renewable generation in order to avoid excessive rate  
11 impacts from the RPS.

12 The expenditures that are used to determine the  
13 cost limitation are no longer required to rely on a  
14 utility's most recent procurement plan or to exclude  
15 indirect expenses, which are things like imbalance energy  
16 charges, the costs of transmission upgrades, or costs of  
17 relicensing utility-owned hydro facilities.

18 SB 350 also changes RPS eligibility requirements  
19 by excluding any municipal solid waste combustion facility  
20 for being eligible for the RPS, with the exception of  
21 contracts entered into before January 1, of 2017, for  
22 generation from a facility located in Stanislaus County  
23 that was operational before September of 1996. Very  
24 precise there.

25 Finally, on this slide, SB 350 also requires

1 load-serving entities to procure more renewables through  
2 long-term contracts. So that beginning in January of 2021,  
3 renewable procurement counted towards an LSE's requirement  
4 for each compliance period must be from contracts or  
5 ownership agreements of 10 years or longer.

6 The next slide, please. Next, SB 350 revises the  
7 rules for load-serving entities to accumulate and use  
8 excess renewable procurement from one compliance period for  
9 a subsequent compliance period. So, starting at the 2021,  
10 LSE's can now bank their portfolio content category one  
11 products that are procured under contracts of any length,  
12 that are in excess of their RPS target, and count that as  
13 excess procurement. But they cannot count portfolio  
14 content category two or three as excess procurement.

15 Also, SB 350 now allows a publicly-owned utility  
16 to exclude retail sales that are served by a voluntary  
17 green pricing program or a shared renewables program from  
18 their calculation of retail sales for RPS procurement. And  
19 this changes, actually, retroactive to January 1, of 2014.

20 The next slide, please. And finally, SB 350  
21 creates two procurement exemptions specifically for  
22 publicly-owned utilities. The first is for POUs that  
23 procure more than half of their retail sales from  
24 qualifying large hydro generation in any given year of a  
25 compliance period.

1           This exemption prevents the combination of large  
2 hydro and the POU's required renewable procurement from  
3 being more than the POU's retail sales during years when  
4 the hydro years are high.

5           The second exemption is for POU's with what is  
6 called unavoidable long-term coal contracts, or ownership  
7 agreements with coal plants that are located out of state.  
8 If the conditions specified in the bill are satisfied, a  
9 POU can adjust its RPS procurement target for one  
10 compliance period, the 2021 to 2024 period. So that, like  
11 the hydro exemption, the combination of renewable  
12 procurement and the unavoidable coal procurement doesn't  
13 exceed their retail sales.

14           To demonstrate that it's unavoidable, they have  
15 to show that any cancelation or divestment of the agreement  
16 would result in significant economic harm to the retail  
17 customers that cannot be mitigated.

18           And I'll turn it back over to Sylvia to finish  
19 the next slide.

20           MS. BENDER: For our final slide. In our final  
21 slide, we want to just give you a brief summary of the  
22 overall proceeding structure that is proposed here.

23           Because the content of this rulemaking is quite  
24 broad and impacts multiple policy areas, a committee is not  
25 proposed to be appointed to preside over the rulemaking at

1 the outset, but could be in the future.

2 Commission staff will, instead, be responsible  
3 for taking the appropriate actions with policy guidance  
4 from the Chair and the relevant lead Commissioners in the  
5 specific subject areas.

6 The overall proceeding will be divided into three  
7 sub-proceedings, as we have described here, each with its  
8 own docket. Additional sub-proceedings may be added, as  
9 necessary, as we move through the proceeding.

10 Collaboration with CPUC NARB staff will be  
11 continued throughout the rulemaking.

12 Scoping workshops will be held, as necessary, in  
13 each of these sub-proceedings. But the sub-proceedings,  
14 themselves, may move ahead on different schedules. As you  
15 can see, some may be more precise in terms of what they're  
16 required to do, than others.

17 Finally, we anticipate that there will be a great  
18 deal of stakeholder interest in this rulemaking and we  
19 encourage very active public participation as we move  
20 forward in 2016.

21 So with that, we ask for your approval to open  
22 this rulemaking, and answer any questions you may have.

23 CHAIR WEISENMILLER: Great. First, any public  
24 comment? None on the line.

25 So, Commissioners.

1 COMMISSIONER HOCHSCHILD: I would move the item.

2 COMMISSIONER MC ALLISTER: You know, I think,  
3 when your blood gets pumping for opening a rulemaking on  
4 these topics, so I'm just going to cop to that, I guess.

5 (Laughter)

6 COMMISSIONER MC ALLISTER: But in particular, you  
7 know, there's a lot of reasons why this is groundbreaking  
8 and I think has huge implications for our climate and  
9 energy policy going forward. Obviously, SB 350, a big, big  
10 deal, we all know that.

11 But dividing it up and really drilling into the  
12 concrete issues that are needed to implement is a  
13 necessary, I think, critical step. I really have a lot of  
14 faith in the staff that's guiding this, across the  
15 divisions that are involved.

16 I also wanted to say that the fact that there's  
17 not sort of a substantive, specific, energy-efficiency sub-  
18 proceeding at this moment is, as Sylvia I think implied and  
19 explained, is by no-- by no means means that it's not at  
20 the highest priority level. Because we have so much going  
21 on, on energy efficiency that, really, this is more of  
22 foundational work to guide, to inform, to make sure that we  
23 have the right data and the right tools to be able to  
24 really exploit the energy-efficiency opportunities to their  
25 fullest extent. And we all know that there are many, many

32

1 opportunities and they're critical ones to keep our grid  
2 planning moving forward in the right direction, to make  
3 sure we harvest all of the efficiency we can.

4           So, particularly on the data front, you know,  
5 it's 2016, we're in California, we've got Silicon Valley,  
6 we have the biggest companies that are doing the most big  
7 data work. We have expertise in this State. And we need  
8 to bring it to bear on these problems of energy and  
9 environment.

10           And that's really been -- it's a big focus of  
11 mine. I think there's, you know, so much outside to  
12 bringing the foundational data tools and analytics to the  
13 way we establish policy and monitor our progress going  
14 forward. And this is a great opportunity the Legislature  
15 has given us, and direction they've given us to move in  
16 that direction, and it's all rubber-hits-the-road with  
17 these proceedings that are on this item. And in the 802  
18 workshop or the proceeding that we've already got going.

19           So, thanks, Sylvia, Suzanne, Christine, and all  
20 of your staffs for pushing forward on this. And the other  
21 Commissioners, I think, for seeing all the value in this,  
22 as well. The Chair, certainly, has provided a lot of  
23 leadership on this. And I'm very excited to get moving.

24           COMMISSIONER HOCHSCHILD: I would concur with  
25 Commissioner McAllister. And just would add, other states

1 are looking not just at the policy, but on our approach to  
2 implementation of it. On the renewables side, New York has  
3 followed suit, now, doing 50 percent renewables by 2030.  
4 Oregon just introduced a similar proposal, and other  
5 states. So, there's a lot of eyes on us from around the  
6 country.

7 And so with that, I'd move the item unless  
8 there's other comments.

9 COMMISSIONER MC ALLISTER: I'll second.

10 CHAIR WEISENMILLER: All those in favor?

11 (Ayes)

12 CHAIR WEISENMILLER: The item passes five to  
13 zero. Thank you.

14 COMMISSIONER MC ALLISTER: Thanks.

15 CHAIR WEISENMILLER: Let's go on to Item 6, Order  
16 Instituting Rulemaking Procedure. Kristen Driskell,  
17 please.

18 MS. DRISKELL: Good morning, Chair and  
19 Commissioners. I am Kristen Driskell, and I am the  
20 Supervisor of the Appliance Efficiency Program in the  
21 Efficiency Division.

22 I am here, today, to request your approval of an  
23 Order Instituting Rulemaking, or OIR, to update the  
24 Appliance Efficiency Regulations.

25 The OIR would focus on five tasks. One, updating

1 the appliance standards, test procedures definitions and  
2 certification requirements as a result of changes in the  
3 Federal Appliance Standards.

4 Two, ensure consistency with the Title 24  
5 California Building Energy Efficiency Code.

6 Three, remove certain references or certification  
7 requirements that were made obsolete due to changes in law  
8 or technology.

9 Four, updating Section 1606, our reporting  
10 requirements, to harmonize with the improvements made in  
11 certification as a result of the modernized Appliance  
12 Efficiency Database System, which launched earlier, or late  
13 last year.

14 And five, removing battery charger subsystems  
15 from the scope of the battery charger standards, where a  
16 battery charger subsystem is contained completely within  
17 the larger product and is not capable of operating normal  
18 operation of the parent product when the power is removed.

19 We may also make other minor clarifying changes  
20 to improve the readability and functionality of the  
21 Appliance Efficiency Regulations.

22 This rulemaking would not make changes that  
23 affect the underlying Appliance Efficiency Standards  
24 except, of course, where those changes are designed to  
25 comply with the Federal Appliance Standards, or conform.

1           We anticipate releasing a Notice of Proposed  
2 Action this summer, with potential adoption in early fall.

3           Thank you for your consideration of this item.  
4 I'm happy to answer any questions that you may have.

5           CHAIR WEISENMILLER: Great. First, any public  
6 comment in the room or on the line?

7           Let's go to Commissioner discussions.

8           COMMISSIONER MC ALLISTER: So, thanks, Kristen.  
9 I mean this is for the most part, as Kristen said, sort of  
10 housekeeping, and cleanup, and doing some things that are  
11 needed to keep the trains running on time and conformance  
12 with Federal Standards is kind of one of the things we have  
13 to keep an eye on. And, when it's needed, we have to do  
14 it. So, these are very straight forward.

15           So, I'll move this item.

16           COMMISSIONER SCOTT: Second.

17           CHAIR WEISENMILLER: All those in favor?

18           (Ayes)

19           CHAIR WEISENMILLER: This item also passes five  
20 to zero.

21           Okay, Item 7 is held.

22           So, we'll go on to Item 8, Agreement Streamlining  
23 Update. Rachel Grant Kiley, please.

24           MS. GRANT KILEY: Good morning, Chair and  
25 Commissioners. My name is Rachel Grant Kiley. I'm the

1 Manager of -- I have a very strong voice, sorry. I'm the  
2 Manager of the Contracts, Grants and Loans Office, here at  
3 the Energy Commission. And today, I'm here to speak to you  
4 about the Agreement Streamlining activities and  
5 accomplishments from 2015.

6 The next slide, please. Recognizing the need to  
7 streamline our funding solicitation selection, agreement  
8 and management processes, we established the Agreement  
9 Streamlining Team in 2012. The purpose of the team was to  
10 allow for quicker changes to agreements, which benefits our  
11 contractors and recipients, who will not have unnecessary  
12 delays, as well as staff, who will be able to spend less  
13 time making these changes.

14 The tasks of the team also include decreasing the  
15 number of items on Energy Commission Business meetings, so  
16 that the focus of the Commissioners can be on policy  
17 decisions and less on the day-to-day management of  
18 agreement changes.

19 This was accomplished with the December 2013  
20 resolution, delegating changes to the Executive Director.  
21 The Agreement Streamlining Team has continued meeting in  
22 different capacities for a couple of years, now. But 2015  
23 proved to be a very productive year for improvements to our  
24 processes and procedures.

25 The next slide. The Agreement Streamlining Team

1 here was originally convened for the Energy Commission's  
2 Lean 6-Sigma Greenbelt Project. The team currently  
3 consists of at least the following individuals. First,  
4 myself, as the representative from the Administrative  
5 Services Division. Next, Allan Ward from the Chief  
6 Counsel's Office. Then, program representatives from the  
7 two programs that have the most agreements here, at the  
8 Energy Commission, which is John Butler and Kyle Emigh,  
9 from the Fuels and Transportation Division. And Virginia  
10 Lew and Alicia Gutierrez from the Research and Development  
11 Division.

12           And then, we've had a lot of support from Drew  
13 Bowen, Mark Hutchison, Laurie ten Hope, and the existing  
14 Randy Roesser.

15           The next slide. One of the biggest  
16 accomplishments in 2015 was the finalization of new budget  
17 templates for use in our contracts and grants. These new  
18 templates were created in an effort to make the budgets  
19 easier for our applicants to complete during the  
20 solicitation phase. The changes will allow for more  
21 flexibility, which decreases the number of formal changes  
22 that must be processed and, therefore, brought to a  
23 Business meeting. And overall, the new templates will be  
24 easier for awardees and Energy Commission staff. They will  
25 save time for all parties and reduce errors.

1           Another large accomplishment was the development  
2 of new invoice templates. These templates are simplified.  
3 They have fewer pages, from 24 down to 2, which is huge,  
4 especially from the applicant's perspective. And they're  
5 easier and less tedious for our contractors and recipients  
6 to complete.

7           These new templates will streamline the invoice  
8 review process and will allow for more consistency for our  
9 contractors and recipients. This consistency, as well as  
10 the fewer pages, will allow for quicker internal review and  
11 the payment of invoices.

12           The next slide. An additional accomplishment was  
13 simply improved planning. The Annual Solicitation Master  
14 Plans for each program area will allow for better planning  
15 and coordination of the Contracts, Grants and Loan's Office  
16 resources to ensure documents and solicitations move  
17 through the process quickly and efficiently.

18           Agreements and solicitations are now better  
19 staggered throughout the entire fiscal year, resulting in  
20 fewer agreements pressing for a June 2016 encumbrance.

21           This year, ARFVPT, the Alternatives and  
22 Renewables and Fuels and Vehicle Technology Program -- why  
23 I can say that better, I don't know -- will have very few  
24 agreements pressed up against the June deadline. And EPIC  
25 is well on its way to meeting this in 2017.

1           The next slide. Other agreement streamlining  
2 efforts include improved and expanded training, and a new  
3 process for audit finding resolutions. We added more  
4 modules, in addition to the standard Commission Agreement  
5 Manager training, and included, and added a solicitation-  
6 specific training, invoice training, and training on  
7 budgets.

8           We also increased the frequency of our main CAM  
9 training course, which is now offered quarterly, instead of  
10 just annually.

11           The new process for audit finding resolutions was  
12 recently developed to complement the efforts by the Energy  
13 Commission's Audits, Investigations and Program Review  
14 Unit. This process addresses what to do after an audit  
15 finding has been made, and outlines clear expectations with  
16 roles and responsibilities for staff, from the various  
17 offices that need to be involved.

18           The next slide. Then, there's the new process  
19 for large equipment purchases, which is a result of some  
20 recent issues we've had with a couple of awardees. We  
21 recognized a need for standard practices for additional  
22 follow up and verification requirements. These processes  
23 will help agreement managers and officers recognize  
24 problems earlier. The process outlines roles and  
25 responsibilities for follow up and verification, as well as

1 a team approach for addressing these problems.

2 The next slide. In an effort to continue our  
3 streamlining efforts, we recently sent out a Solicitation  
4 Process Survey to get input from Energy Commission  
5 stakeholders on items of our solicitation process that need  
6 to be addressed in the future.

7 So far, we have received 121 responses. The  
8 responses from this survey will be used to focus our  
9 attention on key areas to address in 2016.

10 One specific question asked the respondents if  
11 they had ever chosen not to apply to an Energy Commission  
12 solicitation that fit their subject area and, if so, why?

13 Of the 102 responses that we got to this  
14 question, nearly 30 identified that they would not have had  
15 enough time to respond. And an additional 30 identified a  
16 concern for the complexity of our response requirements.

17 Additional surveys are anticipated to be drafted  
18 on other topic areas.

19 The next slide. Probably the biggest  
20 accomplishment and definitely the most noteworthy is the  
21 Grant Solicitation System. This web-based system allows  
22 for electronic submittal of grant applications. A system  
23 for electronic applications has been requested by many  
24 different stakeholders over the last few years.

25 The system that we have developed is very similar

1 to the Energy Commission's e-Filing System, and it was  
2 developed and implemented in a very short time frame,  
3 thanks to our IT Department. This similarity to e-Filing  
4 and the limited number of screens and options makes the  
5 system very easy to navigate.

6           The next slide. The system should prove to be  
7 easier for applicants than the previous hard-copy submittal  
8 requirements. It will reduce the number of late and  
9 rejected applications due to various delivery problems and  
10 it eliminates hard copies, which is a significant step in  
11 saving paper. Although we will still have to print a copy  
12 or two here, it will still be far fewer than the five to  
13 seven copies required in the past. Assuming around 300  
14 pages per application, at five copies, and 10 to 30  
15 applicants, even double-sided this is thousands of pieces  
16 of paper per solicitation.

17           The system will also eliminate delivery expenses  
18 for applicants which, in addition to the printing costs,  
19 significantly reduces the cost for developing an  
20 application to one of our solicitations. The reduction in  
21 cost, as well as the move into the electronic age, should  
22 make our solicitations more appealing for small businesses,  
23 as well as businesses from disadvantaged communities.

24           The next slide. The first run of the Grant  
25 Solicitation System was per GFO-15-306, the Regional Energy

1 Innovation Clusters from the EPIC Program. Twelve  
2 applications were received electronically for the  
3 solicitation and zero were submitted in hard copy, even  
4 though the option was still available.

5 Only one applicant contacted us with uploading  
6 issues. And after the run, only minor issues have been  
7 identified by Commission staff that were using the system  
8 from this end. After these issues are addressed, we expect  
9 to roll out the electronic submittal process to all grant  
10 solicitations early this year.

11 The next slide. So, this is just going to be a  
12 quick walk through of the system, itself, from the  
13 applicant's perspective. Is it not playing?

14 All right, improvisation. I can either pull the  
15 system up or we can skip this. It's really easy. If  
16 you're familiar with the e-Filing System, it's the same  
17 basic setup. It's a three-step process. They enter their  
18 basic information. They register for the system so that  
19 they can use it going forward in the future.

20 That's not it. That's okay. Do you want me to  
21 pull up the system?

22 CHAIR WEISENMILLER: No, that's okay.

23 MS. DRISKELL: That's okay. If you guys want to  
24 walk through it at another time, it's very easy. And you  
25 can try it on your own, honestly.

1           But the system is an uploading system and not a  
2 fill-out-the-form system. So, instead of going through and  
3 filling out questions to answers, or something along those  
4 lines, they fill out their documents separate from the  
5 system and then they upload them to the system, and that's  
6 their submission of their application.

7           So, we'll move on to this slide. That's okay.  
8 Go on to the colored slide. There you go.

9           So, in 2014, I participated in the Lean 6-Sigma  
10 Greenbelt Training Program, with the Governor's Office of  
11 Planning and Research, along with 14 other departments and  
12 agencies. We all gave our presentations at the State  
13 Capitol, in the summer of 2014.

14           The goal of our particular project was to reduce  
15 the processing time of our grant agreements such that 95  
16 percent of our grants are awarded in less than 12 months.  
17 One of the biggest achievements of this project was the  
18 identification of expectations for each step in the  
19 process, which is what this is. It breaks up the 12-month  
20 process into each component of the agreement process.

21           The next slide. This chart shows how we are  
22 doing in several of the agreement processing steps. The  
23 blue lines are where we were before the Lean 6-Sigma  
24 Program and the red lines are our expectations that were  
25 set as a result of the Lean 6-Sigma Project. The green

1 lines are how we did in 2015.

2           The biggest improvement is step six, agreement  
3 drafting. Although we are not meeting our expectation of  
4 one and a half months, we have dropped the average drafting  
5 time down from nearly four and a half months to under two  
6 and a half months.

7           Another notable processing step is step five,  
8 proposal evaluations, which has dropped from an average of  
9 over two and a half months to down to just over one and a  
10 half months, which is also under our expected time frame.

11           This chart shows improvements in most steps,  
12 except signatures, which is really out of our hands because  
13 that's when the applicant has it. And, as well as the time  
14 when the solicitation is posted, which has actually  
15 increased. And this is due to various factors, and we do  
16 this as a courtesy to our applicants as issues arise during  
17 the solicitation phase.

18           One of the things that the Agreement Streamlining  
19 Team will assess this upcoming year is whether some of our  
20 expectations should be adjusted based on the outcomes of  
21 this year.

22           The next slide. Finally, although we have made  
23 great progress this year, we are not stopping. It is very  
24 clear to Energy Commission management that the Streamlining  
25 Team is working. In 2016, we'll push for even more.

1           We will begin with invoice training for all  
2 active Commission Agreement Managers and Officers. We will  
3 continue to update the Agreement Manual and training  
4 modules to further detail all roles and responsibilities  
5 for all individuals involved in the agreement process, not  
6 just the CAMs.

7           These updates will also include further clarity  
8 on making various changes to agreements, including what  
9 levels of approvals are required for each. We will also  
10 seek other updates or modifications per the findings of our  
11 Solicitation Survey and any other future surveys.

12           With that, I am happy to answer any questions you  
13 may have. And as always, we are happy to include any  
14 Commissioners' concerns or comments in any future update.

15           CHAIR WEISENMILLER: Great, thanks. I guess we  
16 have one public comment on this. Nehemiah, go ahead.

17           MR. STONE: Nehemiah Stone, with the Stone Energy  
18 Associates. I want to thank you very much for doing this.  
19 I've worked at the Commission before, I worked for two  
20 Commissioners, and both times both Commissioners asked me  
21 to work on this issue. Not much got done. And this is the  
22 first significant improvement and I want to thank you very  
23 much for doing it.

24           Secondly, the California Energy Efficiency  
25 Industry Council met with Rachel, and Allan, and Laurie,

1 and Virginia, in 2014, and made a number of  
2 recommendations. None of which I actually see were  
3 accomplished here. And I would like to offer that the  
4 CEEIC would like to work with you to help streamline the  
5 process, so it works better for the consultants that give  
6 you the work that you're looking for.

7           One of the activities or one of the things that  
8 the CEEIC was looking for was a critical look at what  
9 information you actually need from consultants in order to  
10 do your public duty of making sure that you're using public  
11 funds correctly. That, to us, is a critical element. We  
12 don't like having to give information that is not that  
13 useful. It's interesting to Commission staff, but it  
14 doesn't really change whether you get good product out of  
15 consultants. So, that's one area I'd like to see worked on  
16 a little bit more.

17           And again, the CEEIC offered and still offers to  
18 help you with that process.

19           CHAIR WEISENMILLER: Well, certainly, thanks for  
20 being here. I think, again, I also -- sort of one of the  
21 things that amazed me when I came was the sort of process  
22 problems on contracts. So, basically, we really want to  
23 applaud the staff's movement. Obviously, we're not where  
24 we need to be. But, you know, basically, these are good  
25 steps. We need to do more.

1                   COMMISSIONER HOCHSCHILD:  If I could just chime  
2  in as well, to add to the Chair's comments.  I know earlier  
3  Commissioner McAllister said he really got his heart  
4  beating with the new rulemaking.  And I've got to tell you,  
5  this kind of barrier-busting gets my heart beating.  And  
6  so, Rachel, I really want to thank you and congratulate  
7  you.

8                   Because, as we're modernizing the State's energy  
9  generation fleet, and our energy efficiency measures, we  
10 need to do the exact same thing with our processes.  And to  
11 always be mindful of -- put yourself in the shoes of a  
12 California entrepreneur, who has a good idea, maybe running  
13 a business, doesn't have enough funds to hire a  
14 professional grant writer.  And the difference between a  
15 really lengthy, difficult, protracted application process  
16 and an efficient, timely one can be the difference whether  
17 they choose to apply or not.

18                   Part of my interest, and I think all of us on the  
19 Commission share this, of really making sure we're not just  
20 getting the usual suspects, but getting -- casting as broad  
21 a net around the State as we possibly can.  This kind of  
22 barrier-busting is totally instrumental of that.

23                   And I would welcome, actually, an annual update  
24 or periodic updates on the progress, and this kind of  
25 thing, as we go forward.

1           We tried to do the same thing in our  
2 certification of all of the renewable projects and I am  
3 just very encouraged to see this progress. So, thank you.

4           COMMISSIONER SCOTT: Yeah, I would just add to  
5 that. I know how much time the contracting staff and  
6 especially the Fuels and Transportation Team spend on the  
7 contracts, the invoices, all of that. And so, anything I  
8 think that we can put in place that helps streamline that,  
9 make that more efficient and effective, I think is really  
10 important.

11           So, I appreciate you all taking the time, the  
12 thought, the care to really dig in and start getting this  
13 moving. I think this is great for everyone and I  
14 appreciate your leadership there.

15           You know, and as the public member, I'll echo  
16 some of what Commissioner Hochschild just said, in terms of  
17 making the process easier for a broader set of interested  
18 folks to apply, and be able to join in on the Commission's  
19 programs I think is really important. So, I appreciate the  
20 effort there.

21           And also, would warmly welcome additional updates  
22 as you guys continue to make progress, but thank you very  
23 much.

24           COMMISSIONER HOCHSCHILD: I would make -- oh,  
25 it's informational only and I don't need to.

1 CHAIR WEISENMILLER: Again, thanks.

2 Let's go on to Item 9, EnergyPro 7 2016  
3 Residential Compliance Software.

4 MR. FROESS: Good morning, Chair and  
5 Commissioners. My name is Larry Froess and I'm a Senior  
6 Mechanical Engineer in the Building Standards Office, and  
7 Project Manager of the Private Vendor Software Approvals.

8 I'm here to ask for approval of EnergySoft's  
9 EnergyPro Version 7.0 software as an alternative  
10 calculation method for showing compliance with the 2016  
11 residential standards for newly constructed low-rise  
12 residential buildings, additions, and alternations to  
13 existing homes.

14 I'm also seeking your approval of the resolution  
15 you have before you on this item.

16 EnergyPro Version 7.0 has met the approval  
17 requirements, as outlined in the 2016 Residential ACM  
18 Reference Manual that was approved on November 12th, 2015,  
19 which includes the 2016 updates to TDV values, opaque  
20 surface and window values, duct installation values, NHVAC  
21 and domestic hot water heating equipment efficiency  
22 requirements.

23 By approving EnergyPro 7.0, the building industry  
24 will have another choice of software to demonstrate  
25 compliance with the 2016 standards before the effective

1 date of January 1st, 2017.

2 I'm available to answer any questions you may  
3 have.

4 CHAIR WEISENMILLER: Great, thank you.

5 Any public comment?

6 All right, Commissioners?

7 COMMISSIONER MC ALLISTER: So, I just want to put  
8 a little context, thanks Larry, a little context here. So,  
9 historically, I think we've struggled a little bit to get  
10 everything done very much ahead of time for updates for our  
11 new building standards. And I think, you know, the fact  
12 that we're very much ahead of the game for 2016 and kind of  
13 have shown the world that sort of there's a process that's  
14 working, and we're getting to the end points, we're  
15 approving things more than a year ahead of time. And then,  
16 that enables us to engage with the service providers that  
17 support the implementation of the code, that the trains are  
18 really running nicely on time, now, and that's terrific.  
19 It's a real testament to the effort that staff has put into  
20 this.

21 So, you know, I think that's very important. Now  
22 that we're sort of really rigorously in line with the  
23 Building Standards Commission, and the three-year cycle,  
24 and we're really trying to make sure that early on we dot  
25 our I's and get our T's crossed, and get everything to the

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1 Commission that needs to come to us, it sends a great  
2 message of efficiency. And just like sort of what we  
3 talked about in the last item. And it is important for the  
4 Building Standards Commission and all of our agency  
5 partners, as well, to keep in line with what they're doing  
6 and send the message to the industry stakeholders and  
7 marketplace that this happening, and that's just the way  
8 things are.

9           So, this is an example of the marketplace able to  
10 engage with us very early on, so way ahead of the effective  
11 date of the new standards everything is in place. So, I  
12 want to thank EnergyPro for getting on board, and moving  
13 forward, and for staff for helping them do that.

14           So with that, I'll -- let's see, this is Item 9.  
15 Yeah, I'll move Item 9.

16           COMMISSIONER SCOTT: Second.

17           CHAIR WEISENMILLER: All those in favor?

18           (Ayes)

19           CHAIR WEISENMILLER: Item 9 passes five to zero.

20           Thank you.

21           Let's go on to Item Number 10, Mechanical  
22 Acceptance Test Technician Certification Provider  
23 Application from the National Environmental Balancing  
24 Bureau. Joe.

25           MR. LOYER: Good morning, Chair and

1 Commissioners. I'm Joe Loyer, from the California Energy  
2 Commission, Senior Mechanical Engineer.

3 I'm here to present, for your consideration, the  
4 National Environmental Balancing Bureau, or NEBB  
5 application to be approved as a nonresidential mechanical  
6 acceptance test technician certification provider, or  
7 ATTCP.

8 A mechanical acceptance test is a set of  
9 functional tests that ensures nonresidential mechanical  
10 systems work as designed after they are installed.

11 The Energy Commission's 2005 standards, Building  
12 Energy Efficiency Standards, adopted requirements that  
13 nonresidential mechanical installers perform acceptance  
14 testing on newly-installed mechanical systems to help  
15 ensure these systems perform as intended.

16 The 2013 standards established new requirements  
17 to ensure technicians receive training and certification to  
18 perform acceptance testing. These new standards allow  
19 organizations to apply to the Energy Commission to become  
20 an ATTCP.

21 The applicant seeking approval as an ATTCP must  
22 submit a complete application to the Energy Commission for  
23 staff review and validation, and determine compliance with  
24 all requirements in the California Code of Regulations,  
25 Title 24 Part 1, Section 10-103-B(c).

1                   On June 17th, 2015, NEBB submitted its  
2 application for approval as a mechanical ATTCP. Energy  
3 Commission staff, working with the applicant, completed  
4 review and validation of the NEBB application and  
5 determined the application meets the requirements.

6                   Staff recommends four conditions of approval for  
7 the NEBB application to ensure proper initial  
8 implementation and ongoing monitoring of the proposed NEBB  
9 program.

10                  Under the first condition of approval, NEBB shall  
11 demonstrate its proposed registry is operational to the  
12 satisfaction of Energy Commission staff not more than 90  
13 days following the Energy Commission's approval of NEBB as  
14 an ATTCP.

15                  Under the next two conditions of approval, NEBB  
16 shall demonstrate within 90 days that they have agreements  
17 in place to provide the necessary laboratory facilities,  
18 and that these facilities are adequate to perform all of  
19 the training and testing required under Section 10-103-  
20 B(c) (3a).

21                  Under the last condition of approval NEBB shall,  
22 on an ongoing basis, verify it continues to have sufficient  
23 laboratory facilities to complete the required training and  
24 testing.

25                  Energy Commission staff has documented their

1 review and findings in the staff report, which was posted  
2 on the website and made available for public comment on  
3 December 21st, 2015.

4           With the approval of the NEBB application, the  
5 Energy Commission can consider the decision to make  
6 certification mandatory for all technicians performing  
7 acceptance testing on newly installed mechanical systems in  
8 nonresidential buildings.

9           The minimum requirements for this decision are  
10 that there are a minimum of 300 certified technicians for  
11 all acceptance tests, that all qualified technicians have  
12 access to certification training. Additionally, the Energy  
13 Commission is concerned about the distribution of available  
14 certified technicians by county, throughout California.

15           Staff has scheduled a workshop on February 29th,  
16 2016, which is open to the public, to discuss the  
17 requirements for the Energy Commission decision to make  
18 certification mandatory for all technicians performing the  
19 acceptance testing on newly installed mechanical systems in  
20 nonresidential buildings.

21           Staff requests the Commission confirm the  
22 Executive Director's findings, adopt his recommendation and  
23 approve NEBB as a mechanical ATTCP to administer the  
24 program described in its application, subject to the four  
25 conditions of approval.

1           Thank you for your consideration and I am  
2 available to answer any questions.

3           CHAIR WEISENMILLER: Great, thanks.

4           Let's go to public comment. Let's start with  
5 NEBB and your comments.

6           MR. HUBER: Good morning, Commissioners. My name  
7 is Jim Humber, I'm the immediate past president of NEBB. I  
8 am currently a member of the board of directors. I have  
9 with me Ms. Amber Ryman, who is also currently one of our  
10 directors.

11           NEBB has been involved in this for 45 years.  
12 We've been certifying firms, individuals, companies from  
13 single-person shops to multiple hundreds of people working  
14 for them. So, we are experienced in implementing a program  
15 like this the way it needs to be done.

16           I've been involved in this industry for 31  
17 years. I hold multiple certifications, from multiple  
18 organizations. I can tell you that one of the reasons that  
19 I'm a believer in NEBB is because NEBB is the only  
20 organization that ever made me really prove that I knew  
21 what I was doing.

22           And that would be our approach to what you are  
23 doing with Title 24. We have a very aggressive approach  
24 that we've taken to making sure that our people are  
25 training, that they can prove that they've done the work,

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1 and then the compliance portion of it, which is very  
2 important for Title 24 to be effective.

3 NEBB is probably the only organization I know of,  
4 in 2015 we de-certified 28 of our firms because they were  
5 not complying with our requirements. No other organization  
6 can make that claim.

7 So, when we look at the Title 24 program, the way  
8 we've proposed to implement it on behalf of California, in  
9 conjunction with ESCO, and with North American Training  
10 Centers, and Brownson University, you know, it seems like a  
11 very good fit because it allows you to let the small firms  
12 continue to do business, specialize in what it is that they  
13 do. It allows the large firms to still do what they do.  
14 And I think our modular approach that we've taken is  
15 actually the most effective way for you to spread this  
16 throughout California.

17 And I'm open for questions.

18 CHAIR WEISENMILLER: Thank you. Ms. Ryman, do  
19 you have comments?

20 MS. RYMAN: I am here for questions, as well.

21 And, no, I do not. Thank you.

22 CHAIR WEISENMILLER: Okay, great.

23 So, let's go to -- we have two public comments in  
24 the room. First, the Sheet Metal Workers.

25 MR. DIAS: Good morning, Commissioners. I'm

1 David Dias. I'm representing the Sheet Metal Workers,  
2 Local 104, here in California.

3 I don't have an issue at all with NEBB making  
4 applications. What I have an issue with is some of the way  
5 it's done, the modular approach, or whatever you want to  
6 call it. The way it's written, that I see, is that if you  
7 pass one of the acceptance testing you're an acceptance  
8 tested -- or an acceptance testing technician.

9 Where NEMIC, when they did their application, had  
10 to do all 18.

11 So, basically, what you're doing is you're  
12 favoring one over the other. NEMIC had to do all 18, and  
13 every technician that we have done and trained through  
14 Sheet Metal Workers has done all 18, not just one. So, our  
15 guys can say they're an acceptance testing technician, but  
16 they've done all 18.

17 If you have to only do one is that the same? Is  
18 that fair?

19 I'm a person that sits on the -- I'm a Board  
20 Member of the Contractor State License Board. I know you  
21 cannot be favored, over one over another. I sit on the  
22 Board and I've been there for six years, now, so I know  
23 that.

24 So, I have an issue with this. I can't see this  
25 happening unless you play apples to apples. If you're

1 going to pass this, you would have to let NEMIC's  
2 application change to where they could actually do the same  
3 thing.

4 And from what I understand by NEMIC, because I  
5 just was in contact with them, they are not allowed to do  
6 that. So, I don't understand how that can be fair. And  
7 tell me I'm wrong?

8 CHAIR WEISENMILLER: No, actually, we'll actually  
9 ask the staff to comment on your question and, obviously,  
10 ask the applicant, too.

11 MR. LOYER: Okay, Joe Loyer, Energy Commission.  
12 there are several issues with the problem that you're  
13 bringing up. First and foremost, you know, it is true that  
14 NEMIC requires you to pass all 17 tests. And NEBB, you  
15 could possibly submit your application and only pass only  
16 one test and declare yourself an acceptance test -- an ATT.  
17 However, you would be extremely ineffectual.

18 The requirements on the mechanical acceptance  
19 testing are that most installations require far more than  
20 one test. So, if you're going to be an acceptance tester,  
21 only, you are much better off using the NEMIC approach and  
22 getting all 17.

23 If you are, on the other hand, an installation  
24 firm that simply wants to do the acceptance testing for  
25 that business that they are already in, then you can pick

1 and choose the correct acceptance tests that you want to  
2 become certified in and simply offer that to the builder.

3 The program that NEBB is proposing has a software  
4 failsafe. As a technician, you are not allowed to sign off  
5 on any acceptance tests that you are not certified on.

6 Additionally, the general contractor goes into  
7 the system, or can go into the system and look for those  
8 technicians that have that certification that that general  
9 contractor needs.

10 So, in my personal view, and my personal opinion,  
11 the approach that NEBB is taking is far more difficult than  
12 what NEMIC has done. They have to keep track of not only  
13 all of the test results, all of the technicians that have  
14 all the various levels of testing, they have to also take  
15 care of making sure that those tests are actually  
16 performed, recorded in their system.

17 Whereas NEMIC can take the technician through all  
18 of the exams, all the training, and simply declare them  
19 that they have the training that is necessary to do every  
20 acceptance test.

21 MR. DIAS: No, I understand everything that  
22 you're saying. I knew that coming in. What I'm getting at  
23 is basically, again, a guy could take one, two, three,  
24 four, ten tests and have the same name as the guy that did  
25 18 tests.

1           MR. LOYER: Yes, but he would not be able to  
2 actually do the same thing as the guy who has all 18.

3           MR. DIAS: I understand that. But we have over  
4 8,000 members working in California right now, that could  
5 come down and take one test and, you know --

6           MR. LOYER: And they'd be limited to that one  
7 test.

8           MR. DIAS: But they would also be certified.

9           MR. LOYER: They'd be certified, but limited.

10          MR. DIAS: But we can't do that because we're  
11 not --

12          MR. LOYER: Well, that's another issue that you  
13 do raise that is not exactly true. NEMIC is allowed to  
14 come in and change their program, if they so desire.

15          MR. DIAS: That's not what they were told.  
16 That's what the --

17          CHAIR WEISENMILLER: Okay, let's hear from the  
18 applicant, now.

19          MR. LOYER: They're allowed to.

20          MR. DIAS: Anyhow, that's my comments. Thank  
21 you.

22          CHAIR WEISENMILLER: Okay, sure, thank you.  
23 Thanks for being here.

24          Applicant, do you have a response on this?

25          MR. HUBER: Yes, Jim Huber with NEBB.

1           And I'd like to thank Mr. Dias for his comment.  
2 I think he illustrated, perfectly, the reason we think that  
3 this is a better approach for California. And just for the  
4 record, we'd be happy to take your people, 8,000 of them to  
5 come down and we're certify them in the one form.

6           How many of you have passed a course, taken a  
7 class in college ten years ago, but you never use the  
8 material anymore; could you go do it right now? Probably  
9 not.

10           And one of the advantages to a modular approach  
11 is it lets the people who are specializing in rooftop  
12 equipment, small commercial, light commercial systems, it  
13 allows them to get certified in the stuff that they are  
14 actually practicing.

15           And part of our application, part of our process  
16 is that if they are not actively doing this work for a  
17 period of two years, they're no longer certified. They  
18 have to come back through the program, again.

19           Now, I could send everybody to take 17 forms,  
20 they could go study thermal storage, they could pass that  
21 exam. They're never going to touch a thermal storage  
22 system in the rest of their life. How does that benefit  
23 your constituents? How does that benefit the State of  
24 California? It really doesn't.

25           What you're looking for and what we're looking

1 for is people who are qualified, have demonstrated that  
2 competency in the equipment that they're dealing with.  
3 Your small firms, this is what they need. It's cost-  
4 prohibitive for them to go and get certified in 17 forms,  
5 when they're only going to use 5 or 6 of them. It just  
6 doesn't make sense to me.

7 MS. RYMAN: I'd like to comment, as well. I  
8 currently work for a large mechanical firm, and am  
9 affiliated with both NEBB and NEMIC in Title 24. I do see  
10 the benefit of breaking it out for the simple fact that as  
11 the large mechanical firm that I work for, we rarely see  
12 several of those forms. And providing that I will be  
13 wanting to get my technician certified in every form that  
14 they can, I would like them to be certified in forms that  
15 they're only going to be needed, and also the ones that we  
16 will be required to actually be doing.

17 We quite often do not use several of those forms.  
18 And to be able to be certified in only the ones that would  
19 be required is a benefit that, as a contractor, we would  
20 like to see.

21 CHAIR WEISENMILLER: Thank you.

22 We have one other comment, Chris Walker from  
23 CALSMACNA.

24 MR. WALKER: Good morning, Commissioners. This  
25 is Chris Walker on behalf of the California Association of

1 Sheet Metal and Air Conditioning Contractors, representing  
2 300 contractors throughout the State of California,  
3 employing over 25,000 men and women.

4 We'd just like to express our general support for  
5 having more players in the game to provide certification to  
6 acceptance test technicians. We need more folks to be  
7 certified.

8 I will acknowledge some reservations about the  
9 equity issue. NEMIC definitely did come in and was held to  
10 a higher standard in having to certify all 18. And this is  
11 kind of a modular approach. So, we do understand the  
12 frustrations that NEMIC and others would have in this  
13 regard.

14 Now, as contractors, we're really concerned, when  
15 this program is turned on, with not just the quality of  
16 technician, but also the quantity and the ability to cover  
17 the State. And in this case, having more certification  
18 providers helps us get to those numbers.

19 At the same time, we do not want to sacrifice  
20 quality and we get concerned about that. So, it's a tricky  
21 balance. We look forward to participating on the 29th, for  
22 the workshop.

23 I do want to note, for the Commissioners, that  
24 the 173 people that we have already certified and are all  
25 ready to go, are already fully subscribed in their current

1 air balance work, right. So, when we think about a 300-  
2 technician threshold, and it really is kind of an arbitrary  
3 threshold. That's why we're looking forward to the 29th to  
4 figure what would be appropriate.

5 But please know that the technicians that are  
6 being certified are already fully employed. And this is  
7 going to be additional work when you turn it on. So, we  
8 are concerned about that. We do want more people at the  
9 table, but we don't want to sacrifice quality. Thank you.

10 CHAIR WEISENMILLER: Thank you.

11 Anyone else in the room or on the line?

12 Then, let's go to the Commissioners.

13 COMMISSIONER MC ALLISTER: So, thanks, Joe. So,  
14 as lead Commissioner on efficiency, you know, we've had a  
15 lot of back and forth about this. And I think it's helpful  
16 to sort of raise the level a little bit and provide some  
17 context, right. We're leading the charge on Title 24.  
18 Residential, which we voted on some stuff earlier.  
19 Nonresidential, which we're talking about now.

20 Mechanical systems are getting more and more  
21 sophisticated as we want to squeeze more efficiency out of  
22 them and get better performance, use less energy and  
23 provide comfort in our buildings, and this is new and  
24 retrofit. We really need to up the game in terms of how --  
25 quality installations, as everybody said they're interested

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1 in, at reasonable cost. And a true, deep understanding of  
2 these systems is really important to make sure that these  
3 systems are installed properly, commissioned properly,  
4 operate well and there's knowledge about that, and that  
5 there's resources that building owners can go to, to make  
6 sure that their systems are operating well.

7           So, fundamental to where we're moving in the  
8 State. And so, we're really at that cutting edge, I think.  
9 And which is why, you know, obviously, naturally, there's a  
10 little bit of disagreement about some of the details.

11           It's a big State and we need coverage for the  
12 most common, you know, and for, really, all the different  
13 types of systems. Some of them are very, very common and  
14 others less so, as we've heard.

15           And so, as we move forward to the February  
16 workshop and determining when we pull the trigger, and turn  
17 the trigger on, and require acceptance testing for all  
18 systems, we really need to make sure that we're not  
19 imposing undue transaction costs in the marketplace. And  
20 that is places like Bakersfield and Fresno. It's places  
21 like, you know, rural areas. There need to be acceptance  
22 test technicians nearby, or reasonably dispatchable at a  
23 relatively short time to all of the above.

24           And so, I think the tenor of the discussion that  
25 I'd like to see in February is that. What's practically,

1 really, the need of the marketplace and how can we make  
2 sure that this program satisfies it at a reasonable cost,  
3 that really gets people what they need efficiently and  
4 effectively.

5           So, I'm really gratified that we have multiple  
6 entities that are coming up for training and that are  
7 really excited about this. And I think getting the systems  
8 to track and monitor the -- you know, the technicians,  
9 themselves, and the areas they're certified in. But also,  
10 you know, over time the results of the installations that  
11 happen and really understanding how the marketplace is  
12 developing. I think that's really key.

13           So again, thanks to Joe and the staff on this.  
14 And thank you for bringing your application forward.

15           All right, so with that I'll move Item 10.

16           COMMISSIONER DOUGLAS: Second.

17           CHAIR WEISENMILLER: All those in favor?

18           (Ayes)

19           CHAIR WEISENMILLER: Item 10 passes five to zero.

20           Thanks, Joe.

21           MR. LOYER: Thank you.

22           CHAIR WEISENMILLER: Let's go on to Item 11, the  
23 City of Huntington Beach. Now, this is ECCA funding.

24           MS. CAHSSAI: Good morning, Commissioners. My  
25 name's Hally Cahssai and I'm with the Efficiency Division.

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1 I'd like to first note that an incorrect number  
2 was assigned to this loan. The formerly labeled 006-15-ECD  
3 is now designed to read 001-15-ECC. No other changes to  
4 this agreement have been made.

5 The City of Huntington Beach is seeking a \$3  
6 million ECCA loan to replace approximately 11,200 high  
7 pressure sodium street light fixtures with LED technology.  
8 The total cost for this project is estimated to be \$3.6  
9 million, of which \$600,000 will be funded using the  
10 anticipated rebate incentives from the utility company.  
11 And the remainder with the ECCA loan at 1 percent.

12 Upon completion, this project will save  
13 approximately 3,500 megawatt hours of electricity annually  
14 and reduce the City's utility expenses by an estimated  
15 \$291,000 annually.

16 If the Commission approves this loan, the project  
17 will start in the summer of 2016. The simple payback for  
18 this project is 10.3 years, based on the loan amount.

19 Staff has determined that this loan request  
20 complies with all the program requirements. I'm here,  
21 today, to seek your approval. Thank you.

22 CHAIR WEISENMILLER: Thank you.

23 Any public comment, either in the room or on the  
24 line?

25 Okay, so Commissioners.

1                   COMMISSIONER HOCHSCHILD: I just want to ask  
2 Commissioner McAllister, so Marcia Smith has retired from  
3 ECCA, right? So, who is running ECCA, now?

4                   COMMISSIONER MC ALLISTER: Yeah, Christine, come  
5 on up. Yeah, Armand Angulo is his name and he's been --

6                   MS. COLLOPY: Yeah, good morning. Christine  
7 Collopy with the Efficiency Division. We are in the  
8 process of hiring, backfilling behind Marcia Smith. A big  
9 loss to our division. But we are backfilling and currently  
10 Armand Angulo is the acting manager.

11                  COMMISSIONER HOCHSCHILD: Great, thanks.

12                  COMMISSIONER MC ALLISTER: Yeah, so great team as  
13 usual. You know, LEDs are the future. I think that's been  
14 the big message that everybody's very aware of these days.  
15 And, you know, these projects I think will be coming up in  
16 some multitude, hopefully. But this is obviously a good  
17 project, good technology, long lasting, low maintenance,  
18 all sorts of benefits. And a good payback, as you've said.

19                  COMMISSIONER HOCHSCHILD: I'll move the item.

20                  COMMISSIONER MC ALLISTER: I'll second.

21                  CHAIR WEISENMILLER: All those in favor?

22                         (Ayes)

23                  CHAIR WEISENMILLER: This item passes five to  
24 zero.

25                         Thank you.

1           Let's go on to Item 12, County of Sacramento  
2 Department of Transportation, another ECCA loan.

3           MS. FISHER: Good morning, Commissioners. My  
4 name is Anne Fisher and I'm with the Efficiency Division,  
5 Local Assistance and Financing Office.

6           The County of Sacramento Department of  
7 Transportation is requesting a \$3 million loan to retrofit  
8 8,233 high pressure sodium and mercury vapor street lights  
9 with LED streets lights, countywide.

10           It is estimated the project will reduce the  
11 County's energy use by over 3 million kilowatt hours per  
12 year, for a savings of \$226,000 on their annual energy  
13 bills, and reduce greenhouse gas emissions by 1,043 tons.

14           The total project cost is \$3 million and will be  
15 fully funded by an Energy Commission, one percent ECCA  
16 loan. The simple payback for the project is 13 years.

17           Staff has determined that this loan request  
18 complies with all of the program requirements and requests  
19 approval of the loan. Thank you.

20           CHAIR WEISENMILLER: Thank you.

21           Any public comments, either in the room or on the  
22 line?

23           Then let's go to Commissioners.

24           COMMISSIONER HOCHSCHILD: Just a question, I'm  
25 just looking that these projects are nearly identical, but

1 one is a 13-year payback and one is 10 years. Is that just  
2 because of the different utility service area, territory  
3 rate structures, is that the --

4 COMMISSIONER MC ALLISTER: Yeah, I mean you've  
5 got rate structures, you have the baseline technology which  
6 might be a little bit different, the mix. You know, any  
7 number of reasons. And then, actually, there's a share on  
8 one and there's not on the other.

9 COMMISSIONER HOCHSCHILD: Oh, all right, okay.  
10 Okay.

11 MS. FISHER: That's correct. If I can answer  
12 that question, the previous loan, the total project cost is  
13 \$3.6 million. And under the ECCA loan program, they're  
14 allowed to include all of the energy savings for the entire  
15 project to calculate the simple payback. Where this loan  
16 is the total project cost of \$3 million. And so, the  
17 simple payback reflects only that amount of project being  
18 done.

19 COMMISSIONER HOCHSCHILD: Got it.

20 COMMISSIONER MC ALLISTER: I'm so happy just  
21 to -- on the technical front, just so happy to see the  
22 sodium and mercury vapor getting replaced. It's just a  
23 huge win for the quality of the light, as well. So, you  
24 know, just a good project all around. So, I'll move this  
25 item.

1 COMMISSIONER HOCHSCHILD: Second.

2 CHAIR WEISENMILLER: All those in favor?

3 (Ayes)

4 CHAIR WEISENMILLER: This item also passes five  
5 to zero.

6 Thank you.

7 Item 13 is held. It's in the messages. We're  
8 coming forward, I guess -- whenever we go out for an EPIC,  
9 people stipulate that they will deal with the contract  
10 terms and conditions in the package. Obviously, then, EPRI  
11 decided that they'd like to actually change some of them.

12 So again, the basic message is if you have simple  
13 things, okay, otherwise forget it and we'll go on to the  
14 next winner.

15 So, go ahead to Number 14, Energy Storage,  
16 Applied Research and Development.

17 MR. LOREDO-CONTRERAS: Yeah, good morning Chair  
18 and Commissioners. My name is Ostap Loredon-Contreras. I'm  
19 from the Energy Research and Development Division. I'm  
20 here to present four items for consideration. These four  
21 projects were selected from a competitive solicitation.

22 The Notice of Proposal awarded for PON-13-302 was  
23 recently amended to provide additional funding for the  
24 Electric Program investment charge for the purpose of  
25 funding applied research and development projects that will

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1 advance technologies and develop strategies with focus on  
2 developing advanced energy storage technology solutions to  
3 lower cost and achieve California policy goals.

4 In addition, the California Public Utility  
5 Commission has identified energy storage as an important  
6 resource to integrated renewable energy at increasing  
7 penetration levels with demand response.

8 Also, energy storage systems provide high value  
9 ancillary services and load following for the California  
10 Independent Systems Operator markets.

11 The projects seeking approval resolution, Item A,  
12 is a grant with Amber Kinetics, Incorporated to fund and  
13 advance flywheel energy storage technology, primarily  
14 focused on developing and improving raw material  
15 manufacturing processes and shed geometries for higher  
16 performance, lower costs, and improve energy  
17 (indiscernible).

18 The next project, Item B, is a grant with Fuel  
19 Cell Energy, Incorporated to develop an advanced hybrid  
20 battery fuel cell energy storage system to mitigate  
21 intermittent renewable peak demands.

22 The project will be demonstrated at the Orange  
23 County Sanitary District and at the University of  
24 California, Irvine.

25 I would like to clarify something for Item B,

1 Chair and Commissioners. Although the agenda description  
2 places a space between the two words, "Fuel Cell", the  
3 legal name of the company, without spaces, as provided in  
4 the backup materials is the company receiving the grant.

5 CHAIR WEISENMILLER: Right.

6 MR. LOREDO-CONTRERAS: Just I wanted to clarify  
7 that.

8 Item C is a grant with EOS Energy Storage, a  
9 Limited Liability Company, to develop a test behind the  
10 meter, residential and commercial AC, integrated Zenic  
11 (phonetic) battery technology energy storage system. Two 1  
12 to 4 kilowatt residential systems and one 20 to 40 kilowatt  
13 commercial systems will be installed and demonstrated on  
14 both a stand-alone basis and integrated with solar PV. The  
15 systems will be tested on the various applications, such as  
16 demand charge management, solar PV achievement and  
17 frequency regulation on-site at California -- at the  
18 University of California, San Diego.

19 Finally, but not less important, Item D, is a  
20 grant with LightSail Energy to increase the performance and  
21 lower the cost of an isothermal compressed air energy  
22 storage system in a micro grid environment.

23 The isothermal compressed air energy storage  
24 system will utilize waste heat, solar PV, and other  
25 distributed energy generation through the California

1 (indiscernible).

2 Staff seeks proposed resolution for approval of  
3 these four projects. I'm happy to address any questions  
4 you may have.

5 Also, I want to mention that representatives from  
6 Amber Kinetics, FuelCell Energy, and EOS Energy Storage,  
7 and LightSail are on the line to answer any questions.  
8 Thank you.

9 CHAIR WEISENMILLER: Great, thank you. These  
10 projects went through the R&D Committee and have gone  
11 through the projects. I guess the one thing that would be  
12 helpful, either if you or the LightSail gentleman clarify  
13 just the relationship between this project and the one we  
14 funded late last year.

15 MR. LOREDO-CONTRERAS: The first project was  
16 approved on December 9th. This is a pilot demonstration at  
17 UC San Diego. That was to test the performance, the  
18 physical performance for the isothermal compressed unit  
19 with solar PV, and its ability to perform load following  
20 and provide ancillary services.

21 This second project that we're looking -- we're  
22 seeking approval, the main differences will be the unit  
23 from UC San Diego will be tested at the UC and they will be  
24 modified to incorporate waste heat from a fuel cell and a  
25 natural gas turbine. So, this additional heat will improve

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1 the overall efficiency of the actual thermal compressed  
2 energy storage system unit and lower the cost. That's the  
3 main difference.

4 CHAIR WEISENMILLER: Thank you.

5 In terms of the applicants, does anyone want to  
6 make a statement or do you want to wait for questions?  
7 Those on the line.

8 Otherwise, we could transition to the  
9 Commissioners, while they're deciding.

10 UNIDENTIFIED AUDIENCE MEMBER: I still want to  
11 speak.

12 CHAIR WEISENMILLER: Okay, let's start with --  
13 I've got two cards, one from FuelCell Energy and one from  
14 LightSail. So, let's start with FuelCell Energy.

15 MR. LOREDO-CONTRERAS: Pinakin, are you on?

16 MR. PATEL: Yes, I'm on the line. Could you  
17 please speak, Pinakin, you're already on the line.

18 MR. PATEL: Yes, this is Pinakin Patel, from  
19 FuelCell Energy. Our project is the new way to combine  
20 battery and fuel cell to provide very comprehensive  
21 solution for energy storage. Our battery will provide  
22 rapid response and fuel cell hydrogen will provide range  
23 extension capacity expansion. It's uniquely suited for  
24 meeting the energy storage requirements.

25 And it is building on the existing investment

1 done in California State, at (indiscernible) site.

2 CHAIR WEISENMILLER: Okay, thank you.

3 LightSail?

4 MR. O'GUIN: Travis O'Guin for LightSail Energy.

5 First of all, I just want to thank the Commissioners and  
6 thank David Chambers for all the work in managing this  
7 process. I really appreciate it.

8 So, yes, this project is really going to focus  
9 heavily on utilizing waste heat to improve our efficiency.  
10 This is a really unique feature to the isothermal case.  
11 Certainly, it's something you don't find in electrochemical  
12 energy storage, where we can actually scavenge waste heat,  
13 and even low-grade waste heat and convert that into usable  
14 electricity.

15 So, we're really going to focus on that and  
16 testing ancillary service -- mimicking ancillary services.  
17 These are features that UC Irvine, and their very advanced  
18 micro grid have the capability to do. So, we're very  
19 excited to be partnering with them and really hope to glean  
20 a lot of information from this project.

21 CHAIR WEISENMILLER: Okay, thank you.

22 I don't know if anyone's on from Amber or from  
23 EOS. Okay, so let's transition to the Commissioners. Any  
24 questions or comments on it?

25 COMMISSIONER MC ALLISTER: It looks like great

1 stuff, storage.

2 CHAIR WEISENMILLER: Okay.

3 COMMISSIONER MC ALLISTER: Is coming down the  
4 road. That's great. Okay, so let's move this item.

5 CHAIR WEISENMILLER: Yeah.

6 COMMISSIONER SCOTT: Second.

7 CHAIR WEISENMILLER: All those in favor?

8 (Ayes)

9 CHAIR WEISENMILLER: This item also passes five  
10 to zero.

11 Thank you.

12 Let's go on to Item 15, Driving the Integration  
13 of Electric Vehicles to Maximize Benefits to the Grid.  
14 Reynaldo, please.

15 MR. GONZALEZ: Good morning, Chair Weisenmiller  
16 and Commissioners. My name is Rey Gonzalez. I'm a  
17 Technical Staff Lead for the Transportation Research and  
18 the Energy Generation Research Office.

19 Staff is requesting approval of a grant agreement  
20 with Andromeda Power. A competitive solicitation was  
21 released December 18th, 2014 to fund applied research and  
22 development projects that advanced technologies and  
23 strategies for smart and efficient charging, and vehicle-  
24 to-grid communication interfaces.

25 The solicitation included two projects groups.

1 Group one was for smart and efficient charging. And group  
2 two for grid communication interface supporting vehicle-to-  
3 grid services.

4 A Notice of Proposed Awards was released on March  
5 16th, and amended on October 1st, of 2015, as additional  
6 EPIC funds were available to extend the number of awards.

7 Three agreements from the solicitation were  
8 approved at the June 10th Business Meeting of 2015. Staff  
9 is requesting approval of a resolution for an additional  
10 agreement today, under group two of the solicitation.

11 The proposed grant agreement with Andromeda Power  
12 will develop a bidirectional fast charging and discharging  
13 station that effectively integrates plug-in electric  
14 vehicles into the utility grid. The grid communication  
15 interface will utilize a virtual machine strategy with the  
16 ability to interconnect with plug-in electric vehicles of  
17 any standard, improving interoperability. Which is a goal  
18 identified in the Vehicle Grid Integration Roadmap which  
19 recommends consistency across technologies.

20 The improved grid communication method will  
21 address the need for scheduled charging and discharging  
22 based on pricing or signals received from third parties,  
23 such as utilities, system operators, or plug-in electric  
24 vehicle service providers, all while maintaining drivers'  
25 mobility, requirements or preferences.

1 Smart charging will be optimized to help reduce  
2 fluctuations in the electricity grid and will have the  
3 ability to absorb excess renewable generation, while  
4 providing economic benefits to plug-in electric vehicle  
5 owners.

6 The smart, fast-charging station will be  
7 developed with a real-time monitor and control feature that  
8 enables quick automated demand response to the electric  
9 utilities.

10 Benefits of this research include reductions in  
11 electricity costs, reductions in grid demand, and increased  
12 grid reliability.

13 Staff recommends approval of this proposed  
14 project. I'm happy to address any questions at this time.

15 CHAIR WEISENMILLER: Thank you. This is, again,  
16 with the R&D Committee. I think it's a good project.  
17 Happy to take any questions or comments on it.

18 COMMISSIONER SCOTT: I think this is one of the  
19 ones where my heart gets beating. I thought this was a  
20 really cool project. Rey, and Alicia, and Laurie came and  
21 gave me a terrific briefing on this one and I just -- I  
22 think anything where we efficiently integrated the plug-in  
23 vehicles into the grid is pretty neat stuff.

24 So, I asked them, you know, when's the project  
25 going to be done? So, I'm already looking forward to

1 hearing what the results are.

2 So, I will move approval of Item 15.

3 COMMISSIONER MC ALLISTER: Second.

4 CHAIR WEISENMILLER: All those in favor?

5 (Ayes)

6 CHAIR WEISENMILLER: This item passed five to  
7 zero.

8 Thanks, Rey.

9 MR. GONZALEZ: Thank you.

10 CHAIR WEISENMILLER: Let's go on to 15, Hydrogen  
11 Refueling Infrastructure.

12 MS. WILLIAMS: Good morning, Chairman,  
13 Commissioners. My name is Sarah Williams. I'm with the  
14 Zero Emissions Vehicle and Infrastructure Office, or ZEVIIO.

15 The most recent hydrogen refueling infrastructure  
16 funding solicitation, PON-13-607, had two goals. One, to  
17 develop California's infrastructure necessary to dispense  
18 hydrogen transportation fuel and, two, to provide operation  
19 and maintenance, or O&M funding, to support the hydrogen  
20 refueling stations prior to the large-scale rollout of fuel  
21 cell electric vehicles.

22 Owners and operators of existing, planned and  
23 proposed hydrogen fueling stations applied for O&M grants.

24 I am here, today, to request approval for four  
25 O&M grants, for a total of up to \$1.02 million, contingent

1 on the operational data of the hydrogen refueling stations.

2           The first grant is -- the first O&M grant is to  
3 ITM Power for \$300,000 to support the station in Riverside.  
4 The Riverside station became operational on October 31st,  
5 2015. And in accordance with PON-13-607 is eligible to  
6 receive the full \$300,000.

7           The other three proposed O&M grants are for  
8 stations that expected to be operational on or before  
9 February 29th, 2016. In accordance with PON-13-607, these  
10 stations are eligible for up to \$80,000 per year, for up to  
11 three years. These grants are for up to \$240,000.

12           There are two for FirstElement Fuels, in La  
13 Canada, Flintridge and Saratoga, and one for HTEC, Hydrogen  
14 Technology and Energy Corporation, for the hydrogen  
15 refueling station in Woodside.

16           In accordance with PON-13-607, actual O&M funding  
17 support for these three stations is contingent on the  
18 operational data of the station. Funding, however, will  
19 not exceed \$240,000 for these stations.

20           I am asking today for two actions by the  
21 Commission. First, to concur with staff's findings that  
22 the proposed projects are CEQA exempt. And second, to  
23 approve the proposed projects and grant funding.

24           I am here for any questions.

25           CHAIR WEISENMILLER: Great, thank you.

1           First, is there any comments from anyone in the  
2 room or on the line?

3           Okay, then Commissioners? Commissioner Scott?

4           COMMISSIONER SCOTT: So, we talked about this a  
5 little bit at last month's meeting, where we had some more  
6 Operations and Maintenance Grants coming through. And it's  
7 an exciting time for the hydrogen stations because that  
8 means they are constructed, and ready to fuel, and they're  
9 waiting for the cars. And so, the operations and  
10 maintenance kind of help to get them across that hurdle  
11 until more and more cars come, so that there can be  
12 successful fueling of the cars, and make money fueling the  
13 cars.

14           So, I think these are great grants and happy to  
15 move approval of Item 16, if there's no other questions.  
16 Okay, I move approval of Item 16.

17           COMMISSIONER MC ALLISTER: I'll second.

18           CHAIR WEISENMILLER: All those in favor?

19           (Ayes)

20           CHAIR WEISENMILLER: This passed five to zero,  
21 again.

22           Thank you.

23           MS. WILLIAMS: Thank you.

24           CHAIR WEISENMILLER: Minutes? These are the  
25 December 9th, Business Meeting Minutes.

1 COMMISSIONER MC ALLISTER: I'll move.

2 COMMISSIONER SCOTT: Second.

3 CHAIR WEISENMILLER: All those in favor?

4 (Ayes)

5 CHAIR WEISENMILLER: This passed five to zero.

6 So, let's go on to the Lead Commissioner Reports.  
7 Commissioner Scott.

8 COMMISSIONER SCOTT: Great. So, there's not too  
9 much to report since I saw you all last. So, maybe I  
10 might just say Happy New Year to you and how much I'm  
11 looking forward -- we've got a lot on our plates for 2016  
12 and I'm very much looking forward to working on all of  
13 that, with all of you, and the Energy Commission staff.

14 We have, next week, the Investment Plan meeting  
15 for the Alternative and Renewable Fuel and Vehicle  
16 Technology Program coming up.

17 And the week after that, several of us will be at  
18 the Verde Coalition, talking about some of the work that  
19 the Energy Commission does with our compatriots down in  
20 Southern California. So, those are a couple of things  
21 coming up.

22 COMMISSIONER MC ALLISTER: Yeah, great, so Happy  
23 New Year, as well. Just a couple of things since the last  
24 meeting. Went to the ASIAN, a bunch of Asian, Southeast  
25 Asian countries get together periodically and there was

1 a -- you know, it's always a group of those countries and  
2 talk about policy issues. The State Department convened a  
3 meeting, in December, with the members in San Francisco.

4 So, I was astonished at how interested, some of  
5 them very innovative stuff, but very interested in learning  
6 from California in their renewables, and efficiency space.  
7 Certainly, electric infrastructure, green management.  
8 Trying to sort of do the "leap frogging", as they can.  
9 Obviously, facing lots of developing country challenges.

10 And so, having done a lot of that work in a past  
11 life, I found the contributions I could make to be good  
12 and, also, it was interesting to hear each country's kind  
13 of versions of the challenges they face with their electric  
14 sector. I mean, reliability is not as good as it is here  
15 and the infrastructure challenges are really large.

16 Anyway, I saw it as an opportunity to reach out,  
17 on behalf of California, to try to provide that  
18 international leadership that the Governor is really trying  
19 to provide. Obviously, in the context of Paris and moving  
20 forward on the climate front. And a really, really very  
21 receptive audience, so I was very encouraged by that.

22 And then, I guess just wanted to mention, you  
23 know, the Federal budget has happened for the most part.  
24 Those discussions were happening when I was out in DC, at  
25 the NASEO meeting in December. And there were -- suffice

1 it to say we dodged a bunch of bullets in terms of the  
2 efficiency. The stuff that could have been in the budget,  
3 that was not there, actually the discussions were a little  
4 bit hairy, actually, if some of the -- if some of the  
5 constraints would have been put on the Federal system in  
6 terms of promoting energy efficiency. Obviously, we got  
7 some good stuff with the extension of the tax credits for  
8 solar and wind, and some other stuff. So, I think that in  
9 sum that's a very positive set of developments.

10 And wanted to just congratulate Laurie ten Hope,  
11 actually, and the EPIC team for a great symposium last  
12 month. And, really a good group, and good discussion, and  
13 a lot of interesting projects that were highlighted in that  
14 event. And I think it really served its purpose very well  
15 and got some -- you know, some stakeholders, their kudos,  
16 and others involved that could see the potential and,  
17 hopefully, will be applying. So, good event. I really  
18 liked that approach.

19 And with that, I guess really looking forward to  
20 a productive 2016, with the Governor's budget. It checks  
21 the right boxes, I think, with its conditions to implement  
22 the legislation that we've talked about earlier, and  
23 opening the rulemaking for 350 and 802, and moving forward  
24 on all the various fronts.

25 So, looking forward to working with you all and

1 congratulations.

2 COMMISSIONER DOUGLAS: You know, I really have no  
3 reports, but it's great to be back, thanks.

4 COMMISSIONER HOCHSCHILD: Well, first of all,  
5 congratulations to Commissioner Scott. Not a surprise, but  
6 kind of like Christmas. You know it's coming, but it's  
7 good news.

8 So, just a few quick updates on mine. I just had  
9 an op-ed that came up today, that I did with Byron Washom,  
10 from UC San Diego, about what's happening in San Diego.  
11 They, obviously, are the largest city in the United States  
12 to do, now, a mandate -- a 100-percent renewable energy  
13 mandate by 2035. And UC San Diego has actually  
14 distinguished itself, really, in the UC system, with  
15 piloting a lot of these very forward thinking, new  
16 technologies.

17 And I think the campuses are showing themselves  
18 to be similar to the military bases, a great way to pilot  
19 the technologies of the future and really prove out what  
20 works and what doesn't.

21 Had a great contact with Commissioner Peterman  
22 last week on what's happening with RPS, and so forth.  
23 Great, great collaboration with her team.

24 I would just point out, you know, I spent the  
25 last 15 years in renewable policy. What's happened, the

1 last six months have really been the most extraordinary in  
2 my tenure in this space, if you just take them together  
3 with the Clean Power Plan that the EPA's implementing,  
4 going into effect this summer, the passage of SB 350 and 50  
5 percent renewables. And, you know, the local and state  
6 progress on other fronts.

7           And then, the extension of the solar and wind tax  
8 credits, to me, somewhat unexpectedly, and that's really  
9 going to more than double the renewable market in the  
10 United States. So, I'm very excited about the new  
11 possibilities that brings.

12           And a lot of interest from other countries. I'm  
13 getting flown out to Australia and Mexico in the next few  
14 months to go talk to various institutes there, that are  
15 interested in what we're doing, and want to learn more.  
16 And, you know, other states are tracking what we're doing  
17 closely, so it feels very exciting.

18           And I did want to -- Mr. Chair, when you get to  
19 your comments, I'd love an update, also, on Aliso Canyon.  
20 That's it for me, thanks.

21           CHAIR WEISENMILLER: Okay. Again, I was going to  
22 thank or congratulate Janea on her reappointment, again.

23           In terms of, yeah, all I was really going to  
24 cover was Aliso Canyon. And the Governor put out an order  
25 on Aliso, and just to hit the points there. I mean, it's

1 sort of a good news -- good news/bad news story. I mean,  
2 in terms of the good news is that we've been pulling gas  
3 out of the field, and in significant levels, and as we have  
4 done that it's really reduced the leak rate substantially.

5           And as we've been pulling gas out, we've done  
6 some tricks of the trade on gas stuff, but basically it's  
7 been cold in Southern California.

8           And again, just to remind everyone that most of  
9 gas storage is used for residential customers. And most of  
10 the gas stored there is for residential. You know, again,  
11 if you look at the overall storage capacity, I think it's  
12 about 120 or so, and about 80 of that is SoCal Gas's  
13 residential. And I think the next largest is Edison, which  
14 is less than 10. So, a lot of smaller pieces there beyond  
15 that, 30 or 40 different companies.

16           But again, you know, you think residential. And  
17 one of the reasons -- and, you know, all of the utilities  
18 have to design their gas system so that you can maintain  
19 absolute reliability for residential customers. And unlike  
20 electric, if you ever have to interrupt gas customers, you  
21 go house by house to relight the pilot lights.

22           And so, actually, when PG&E lost gas service in a  
23 part of its area, recently, they literally went house by  
24 house. So, you really don't want to go there is the bottom  
25 line.

1           So, we pulled down gas substantially. It's  
2 reduced the leak rate substantially.

3           And at the same time, the bad news is some of the  
4 things, which when I talked about it initially, where we  
5 thought might work in terms of injecting stuff in at the  
6 top, didn't work. You know, I mean they -- certainly,  
7 there were stability reasons or reasons that we're just not  
8 going to do that again.

9           So, at this point we have -- the notion is to  
10 drill well down to connect at roughly 8,000 feet and do the  
11 injections there.

12           Now, in thinking about it, you're actually trying  
13 to connect two wells at 8,000 feet. And we have a backup  
14 to that, too.

15           So, but basically, in terms of the Governor's  
16 Executive Order, the top priority is to stop the leak,  
17 right. That's number one. And as part of that, so we're  
18 trying to maximize -- we've done a good job of maximizing  
19 withdrawals. We're now at the point of thinking about  
20 reliability implications. You know, we and the PUC on  
21 that.

22           And the issue, as I said, basically, SoCal Gas  
23 will not be allowed to really inject anymore gas into the  
24 field until we can check -- to the extent there are similar  
25 wells, you know, I'm going to say 40 some. I think it's

1 42. But anyway, a large number of similar wells that are  
2 comparable in age and technology to the one that's failing.  
3 They need to test those before we do reinjection.

4           And so, part of it is the normal process as you  
5 pull down the field by the end of March, and then you start  
6 reinjecting April 1st. So, one of the issues is that  
7 relates to how far we pull the field down now is that we're  
8 not -- I don't see any chance we're going to be starting  
9 reinjections April 1st. I don't know how long it's going  
10 to take to go through what they need to go through.

11           And so, but we need to check and make sure it's  
12 safe. We need to think about it because, ultimately, one  
13 of the things we're going to look for is making sure that  
14 we have reliable gas service in Southern California.

15           We have some -- you know, for this winter, we're  
16 pretty far into the heating season, the levels are down.  
17 But again, I'm not that nervous about January, unless we  
18 have the -- 1948 was like the worst year for a cold spell  
19 in California. So, I actually thought to ask. So, if we  
20 had one of those in January or February, I would be  
21 nervous. But assuming, again, it's more like a 1 in 35, or  
22 something.

23           Okay, so then you get to the summer and to the  
24 extent that gets to part of it back up on the power system,  
25 and we're really just starting to get into analyzing that.

1 And then next winter.

2 So, again, when you look at the specifics, we're  
3 trying to get maximized withdrawals now, with the PUC.  
4 With the PUC, we're working, and the ISO, working on sort  
5 of the reliability and we anticipate this would be similar  
6 to what we were doing -- you know, as soon as we discovered  
7 SONGS was gone. You know, just every week trying to figure  
8 out what in the hell's going on to keep the gas line.

9 And then, there's a third piece we're involved  
10 in. So, number one, stop the leak, protect public safety,  
11 ensuring accountability. There's a lot that the PUC and  
12 DOGGR would do to look at cost and the allocation of cost,  
13 and looking at the root cause.

14 And, certainly, the Air Board will come up with a  
15 mitigation plan as part of that.

16 So, but again, we've certainly helped on  
17 identifying the magnitude of the leak or at least one of  
18 the data points. But Air Board's on point on that.

19 There will be stringent oversight of gas fields,  
20 so a lot of work by DOGGR. And again, we're back in an  
21 activity which combines sort of a soup of agencies that's  
22 going to be looking at longer-term safety issues associated  
23 with health risk, et cetera, with storage located around in  
24 California.

25 COMMISSIONER HOCHSCHILD: Mr. Chairman, if I

1 could just ask, I know you have rightly, I think, pushed  
2 for gas safety as a focus in the gas R&D investments we're  
3 making.

4           One question I had for you, just around what  
5 we've learned, how would you assess our ability to, as a  
6 State, detect leaks when they occur today? You know, I'm  
7 just interested in how much has happened that we're not  
8 aware of or is that pretty --

9           CHAIR WEISENMILLER: That's actually one of the  
10 things that's indicated here is we do want to have  
11 detection capability around sort of the major facilities.  
12 Again, it's sort of -- but it's the Air Board. Basically,  
13 the Air Board will try to figure out what they want.

14           It might be infrared, like you've probably seen  
15 some of the EDF pictures. There might be other ways. I  
16 mean, there is an experimental set up in Southern  
17 California, basically monitoring methane emissions. I  
18 think I indicated, there are sort of towers that are doing  
19 it continuously. It's certainly, probably for the air  
20 regulators, preferable to saying, well, once a week we flew  
21 over it and saw the number was less than we saw the prior  
22 week.

23           But again, they really -- the state of the art  
24 there, we have satellites, we have airplanes, we have --  
25 and we have mobile devices. You've probably seen the PG&E

1 ones. But, basically, I think the Air Board's more  
2 comfortable if they have sort of network of stationary  
3 sources. And again, there's no reason not to have those  
4 in, you know, major fields like this, I'd have to say.

5 COMMISSIONER HOCHSCHILD: Thank you.

6 CHAIR WEISENMILLER: So, yeah -- no, I think it's  
7 just -- at the Verde exchange last year, I mean it was  
8 Mary, and myself, and Dennis. I actually was the one who  
9 got all the questions from Tom Hayden, about saying we  
10 really needed to be on top of safety and mitigating leaks.

11 So, and I think, certainly, that's one of the  
12 things we will roll, as part of this next IEPR, have to  
13 look again at these issues. But again, I think the  
14 threshold issues are safety and mitigating leaks.

15 COMMISSIONER MC ALLISTER: Chair, where's sort of  
16 the priority? Obviously, there's carbon equivalent issues  
17 here, as well. I mean, the leakage rate in the system  
18 really matters in terms of setting policy.

19 CHAIR WEISENMILLER: Right.

20 COMMISSIONER MC ALLISTER: Who's in charge of  
21 sort of figuring out what that looks like in terms of  
22 methane versus carbon? Is that the ARB or do we have a  
23 role in it?

24 CHAIR WEISENMILLER: Well, again, in terms of the  
25 fuel, itself, you know, we're sort of transitioning to

1 reliability -- you know, we've drawn it down enough. And  
2 part of it is there's no mechanical -- for withdrawals,  
3 there's no mechanical system at all. It's all natural.  
4 So, as we reduce the pressure, we also reduce the potential  
5 withdrawal rate.

6 COMMISSIONER MC ALLISTER: Yeah.

7 CHAIR WEISENMILLER: So, you know, it's sort of  
8 one of those for better or worse that's the way it's going  
9 to operate.

10 But I think in terms of against carving up  
11 things, it's probably pretty safe to say that, you know,  
12 DOGGR is wells, you know, and all the safety issue involved  
13 with the wells.

14 COMMISSIONER MC ALLISTER: Uh-hum.

15 CHAIR WEISENMILLER: PUC sort of on the pipe side  
16 of stuff. ARB on the emission side of stuff. And, you  
17 know, actually, health services -- I mean, if you look at,  
18 we've done a very good job of, you know, identifying every  
19 State agency that this touches and pulling us all together  
20 on daily calls. And, you know, obviously, OES, Emergency  
21 Services, has been really critical in this area, too.

22 So, it's been a pretty impressive effort, I  
23 think, on all of us getting organized. A couple, you know,  
24 less than fun calls over the vacation that went on forever,  
25 I'd have to say. You know, but I think we're doing

1 everything we can is the bottom line. And we're seeing  
2 some impacts. But it's certainly frustrating for all  
3 involved.

4 I think, as I indicated the last time, for the  
5 population around there, it's the mercaptans. You know,  
6 that methane is pretty much an odorless quantity, you know.  
7 And so, they put mercaptans in it to, you know, basically  
8 alert people if there's a leak. And so, that's sort of one  
9 thing. It smells like rotten eggs, pretty much. So, if  
10 you spell it, yeah, it's annoying.

11 If you live in an area where it's gone on for  
12 months, it's gotten past annoyance, you know.

13 There are also -- so, SoCal's doing everything  
14 they can. And one of the things they're talking about  
15 doing is trying to put a system to basically collect the  
16 gas, ship it somewhere and flare it. So, you know, again,  
17 while putting filters in people's houses so you can filter  
18 out the mercaptan.

19 Anyway, it's a pretty -- it's gotten everyone's  
20 attention at this point is the bottom line, and people are  
21 certainly looking at a lot of ideas. You know, nothing's  
22 really off the table in terms of going through -- maybe  
23 once you've done the analysis, you drop it off the table.  
24 You know, but there's certainly a full corps effort on it.

25 COMMISSIONER MC ALLISTER: Yeah.

1 CHAIR WEISENMILLER: But, and at this point,  
2 obviously, more legislative attention. I think the package  
3 is close to the Governor's order.

4 The tricky part in the order, frankly, is that  
5 it's not -- you know, as I said, this is really  
6 overwhelming people. But if you were to go through and say  
7 what's the public health consequences, you know, it's  
8 annoyance as opposed to public health. Which is not to  
9 trivialize the annoyance part but, you know, it's not like  
10 there's enormous benzene emissions or something that people  
11 are dealing with every day.

12 Okay, so I think Chief Counsel's report.

13 MS. VACCARO: Good morning. I don't have a  
14 substantive report, but I would like to make an  
15 introduction. It seems as though every meeting we have a  
16 few more people joining the Chief Counsel's Office in some  
17 fashion.

18 And this week we have an intern. And if you'd  
19 please stand? This is Bianca Angulo. She's in her final  
20 year at McGeorge Law School. So, you'll be seeing her face  
21 and she might be working on projects that you have. So,  
22 just so you're able to put a name to a face. And we're  
23 very happy to have her.

24 CHAIR WEISENMILLER: Yes, welcome aboard.

25 The Executive Director Report.

1           MR. OGLESBY: Thank you, Mr. Chair. I have an  
2 introduction, as well. John Kato, could you come forward a  
3 little bit?

4           So, we have a new Director of our Fuels and  
5 Transportation Division. His name's John Kato. And come  
6 on forward.

7           (Laughter)

8           MR. OBLESBY: I want to make sure you have a good  
9 look at you, so they know where to go when there's an  
10 issue.

11           But I'd like to sing John's praises for a minute,  
12 because he comes to us from the Air Resources Board, where  
13 he'd been for several years, and had worked on the  
14 management of several of the complementary programs to our  
15 ARFVTP program, from the ARB side. So, he comes to us  
16 already bringing a wealth of experience, as well as program  
17 knowledge on the Vehicle and Fuels Programs that we're all  
18 striving to implement here at the State.

19           So, with that, if you want to say hello, very  
20 briefly?

21           MR. KATO: Hello, and I'm very humbled to be here  
22 and I look forward to working with all of you. Thank you.

23           CHAIR WEISENMILLER: Welcome.

24           MR. OGLESBY: I do want to spend a couple of  
25 minutes, very briefly, highlighting our budget. The

1 Governor unveiled the budget last week. And the Energy  
2 Commission has a number of proposals that we are advancing  
3 in the Legislature this cycle. We call them BCPs.

4 And I won't go through all 14 of them, but I'll  
5 highlight a few of them so that you know that we're working  
6 on them.

7 Now, let me, as I highlight, these are proposals.  
8 They still need to go through legislative committees and  
9 the whole legislative process with the entire budget. So,  
10 because they are introduced in this form, there's no  
11 assurance that we come out at the other end with the  
12 package, as proposed.

13 But we do have an ambitious package that will  
14 help us achieve our goals in many areas of the priorities  
15 of the organization.

16 One of them, which is probably our largest one in  
17 terms of personnel, are a package of proposals to staff up  
18 to meet the SB 350 and AB 802, in order to implement these  
19 very ambitious items of legislation. In total, we're  
20 looking for about 37 and a half positions, and some  
21 contract funds, as well.

22 But those will -- if we achieve in getting those,  
23 we'll be able to begin implementation of these programs.  
24 We're beginning, now, under existing resource, but we'll be  
25 able to carry through the implementation of these programs.

1 I would also like to highlight some of the  
2 funding proposals under the Greenhouse Gas Reduction Fund  
3 that are also complementary to these programs. A new one  
4 is \$25 million proposed to expand biofuel production in the  
5 State, and this supports the Governor's pillar to reduce  
6 petroleum consumption. It helps with the Low Carbon Fuel  
7 Standard. And, ultimately, contributes to achieving our  
8 greenhouse gas goals.

9 In addition to the biofuels greenhouse gas  
10 reduction proposal, we are re-proposing or continuing the  
11 proposition for the Legislature to approve funds to support  
12 programs to mitigate the drought. Although it has been  
13 raining, as recently as this morning, and we're looking  
14 better, it's important to remember that our reservoirs are  
15 only half of normal as they now stand, and we have multiple  
16 years of depletion in the groundwater throughout the State.

17 And, long-term climate forecasts project that we  
18 will have less snow pack to rely on, as we go forward in  
19 the future.

20 So, it's really important not only for energy  
21 policy reasons, but also for water policy reasons to  
22 continue to look for ways to use this valuable resource as  
23 efficiently as possible.

24 So, having said that, last year we proposed, and  
25 this year we're proposing again because the Legislature

1 failed to act on these two items last year, \$30 million for  
2 the Water Energy Technology Program, which would be  
3 administered by a research division. It's also called the  
4 WET Program. And this is to deploy leading edge  
5 technologies in agricultural, commercial, industrial and  
6 some residential purposes.

7           And also, a rebate program, a direct install  
8 program for energy-efficient appliances, like clothes  
9 washers, in low-income and disadvantaged communities. A  
10 host of other things, like faucets and other fixtures that  
11 use less water.

12           We are also proposing a repurposing of funds that  
13 came in under the ARRA Program, so that we can boost our  
14 investment in State buildings to improve their efficiency  
15 and installation of renewables. But also to lean forward  
16 on local government level programs that would get a jump  
17 start on benchmarking, or other innovative ways to achieve  
18 our energy goals.

19           And we have some funds that came in. They were  
20 repaid from the ARRA program, so we have them. And this is  
21 a repurposing of those to try out some new things that we  
22 think will yield complementary and better results.

23           We are also continuing our efforts to rebuild our  
24 analytic, our energy analytic process in the Energy  
25 Assessments Division. And we are seeking six positions to

1 improve our game in that area. As a result of deregulation  
2 some time ago, our capacity in that area was reduced.  
3 We've been rebuilding it ever since.

4 And finally, we are continuing to back up our  
5 commitment to outreach among the disadvantaged communities  
6 and seeking a position to help us with implementing our  
7 programs related to disadvantaged communities, doing public  
8 outreach and doing some of the assessments and  
9 recommendations that were provided.

10 So with that, any questions on those or other  
11 items, I'd be happy to answer. But that concludes my  
12 report.

13 CHAIR WEISENMILLER: Thank you.

14 Public Adviser?

15 MS. MATHEWS: Good afternoon, again. Usually, I  
16 don't have a lot to report, but with the new year and new  
17 responsibilities, I have a couple of things that I want to  
18 share.

19 The first is on Monday I had the opportunity to  
20 attend the 25th anniversary events dealing with Leadership  
21 California Program. And one of the highlights of that  
22 event included connecting with the Women's Legislative  
23 Caucus leadership and staff, who were very excited to learn  
24 of our outreach efforts to woman-owned businesses, and  
25 offered various resources to help us be successful in that.

1           On Tuesday, I attended the first day of the 2016  
2 California Workforce Association Conference and I got to  
3 speak about our Institute on Energy Law and Policy that we  
4 presented last year. And that's viewed as a model to help  
5 workforce development agencies connect professional  
6 partners to meaningful work experience and career  
7 opportunity exposure.

8           So, I also will be presenting a second workshop  
9 for that conference on Thursday, speaking about how to  
10 engage disadvantaged and disconnected youth.

11           And also on Thursday, I'll be participating in  
12 the Women's Policy Summit. They have a Pathways to Policy  
13 event.

14           So, if you're wondering why are you doing all of  
15 those things, it's because I'm really trying to expand the  
16 network of Californians that we reach to. So, if it deals  
17 with workforce development, we obviously have two major  
18 funding programs that can benefit from that.

19           And there are just so many people who don't know  
20 that the Energy Commission exists and the opportunities.  
21 So, as I am creative, and try to expand my competencies and  
22 credibility in those different sectors, it will reach the  
23 objectives identified under AB 865 and our own diversity  
24 initiatives.

25           In addition, I had an opportunity in December to

1 go speak to the USDA, Yolo County Office, to farming and  
2 agricultural stakeholders about funding opportunities. As  
3 well as I got invited to a Hair Salon event, and they're  
4 interested in being more sustainable and wanting to know if  
5 there's any funding opportunities.

6 So, I guess I'm being branded as the CEC funding  
7 opportunity person. But that's fine with me. I'm happy to  
8 meet with anyone.

9 In addition to our outreach for our funding  
10 opportunities, we've also ramped up our efforts and taken  
11 on new responsibilities, which is reaching out to the  
12 public about how to participate in the procedures here, at  
13 the Energy Commission.

14 So at this time, I'm going to ask Shawn Pittard  
15 to come up. We've created four videos. We have additional  
16 videos that are coming. But I just wanted him to share a  
17 little bit more about what we've accomplished so far.

18 MR. PITTARD: Hello, good afternoon,  
19 Commissioners. Hey, Rick.

20 Rick and I are going to show you where you can  
21 find our new videos. So, what we've done is we've produced  
22 four informational videos to help the public participate in  
23 our processes.

24 And our Media Office has just done a wonderful  
25 job announcing them on social media, so we're anticipating

1 that they'll go viral any moment now.

2 (Laughter)

3 MR. PITTARD: And so, I'll describe very briefly  
4 what they're about. So, basically, we chose topics in  
5 response to frequently asked questions. So, people call us  
6 and they ask how do we use WebEx? Most often during a  
7 meeting, you know, while it's going on.

8 They call us for help submitting an e-comment.  
9 And they also want to know how to participate in a Business  
10 Meeting and, in particular, how to make a public comment in  
11 person.

12 So, we made a little video to kind of take the  
13 mystery out of it for first timers. So, we produced those  
14 three videos, plus a fourth called "The Role of the Public  
15 Adviser", in which we encourage people to call us and we  
16 let them know how we can help.

17 So, Rick will help me show you how to find these  
18 videos. So, they are on our website. And if you scroll  
19 down to the right, you can either get them at our Youtube  
20 page, you can click there, or scroll down to the lower  
21 corner and to the Public Adviser's web page. So, right  
22 there, videos on how to participate.

23 And you can see that the media has helped us  
24 create kind of a look for all of these. And Alana Mathews  
25 is featured in the role of the Public Adviser. Why we

1 chose her for the part, I'm not sure. But I guess it was  
2 just practical.

3 (Laughter)

4 MR. PITTARD: But we have -- then, we tapped into  
5 Rick Alexander, who's our WebEx expert, and he helped us  
6 with how to use WebEx.

7 And then, we went to Paul Kramer, who's our Chief  
8 Hearing Advisor, but he's also the leader of our e-Filing  
9 Working Group. And so, he was our expert for how to e-  
10 comment.

11 So, since we're in a Business Meeting, we'll just  
12 show you the first few seconds of how to participate in a  
13 Business Meeting.

14 So, we have this really great animated logo that  
15 Michael Wilson created, and a big shout out to him. And  
16 this video features Jeff Ogata, in his final appearance  
17 before retiring from the Energy Commission.

18 So, thank you, Rick.

19 MS. MATHEWS: Yeah, we won't play it. We'll just  
20 ask him to go and find it. But we'll move it along.

21 MR. PITTARD: Thank you. Thanks very much, Rick.  
22 Yeah, so this is -- they're up, you can find them. And we  
23 want to -- we're very grateful to Albert Lundeen and the  
24 Media Office. They provided us with tremendous support.  
25 Especially, Katie Kulkulka. She was invaluable. These

1 videos wouldn't exist without her. She was videographer,  
2 editor, hardware and software troubleshooter. And we did a  
3 lot of troubleshooting. As well as my collaborator on  
4 content.

5 So, I'll conclude with previews of coming  
6 attractions. So, the topics that we're going to take on in  
7 2016 are participating in the power plant siting process,  
8 participating in the rulemaking process, and the Energy  
9 Commission funding opportunities.

10 So, thank you very much for listening. If you  
11 have any questions, we'll answer them.

12 CHAIR WEISENMILLER: Thank you.

13 MS. MATHEWS: And then, finally, I have two  
14 introductions. I do have an intern from UC Davis. He's a  
15 Senior in Environmental Policy and Analysis Planning major.  
16 That is Eric Amenimiya.

17 And then, I also have a new volunteer, Demitri  
18 Godamunne, who is also here. And he will be assisting with  
19 the AB 865, in the interim, with those particular efforts.  
20 And he has a BA in Business. So, it's great to have  
21 someone with financial perspective in the Public Adviser's  
22 Office. Thank you.

23 CHAIR WEISENMILLER: Great, thank you.

24 Certainly, welcome aboard, folks.

25 So, now, we're at public comment.

1 MS. MATHEWS: I'm just going to read their names  
2 off.

3 CHAIR WEISENMILLER: Right.

4 MS. MATHEWS: We'll have Anthony Serres -- I'm  
5 sorry, Alex Boesenberg, then Anthony Serres, and then Alex  
6 Baker. In that order, right.

7 MR. BOESENBERG: Good morning, Madams and Mister  
8 Commissioners. I'm Alex Boesenberg. I'm the Manager of  
9 Regulatory Affairs for the National Electrical  
10 Manufacturers Association.

11 And I'm here speaking on behalf of NEMA and our  
12 several dozen members that are manufacturers of solid state  
13 lighting, and LED lighting program -- LED lighting  
14 products, rather.

15 So, I'm actually speaking to Item 7, which I know  
16 is struck, but we are here because we planned to be here  
17 and we have a few concerns we want to raise, and I have a  
18 request to make.

19 So as I noted, our members are investing heavily  
20 in LED lighting. It's hundreds of millions of dollars a  
21 year in research and development.

22 And the public side, what everyone sees, is the  
23 products that make it and the standards that my members,  
24 and technical papers my members write.

25 But there's also the things that don't get

1 written down in the standards because they're not ready,  
2 yet, and there's the products that fail. But all that  
3 fuels our comments and understanding of the technology, and  
4 how deeply complex and interwoven performance parameters,  
5 such as the Commission is seeking to regulate, can be  
6 intertwined.

7           We thank the staff for all the hard work in  
8 responding to those of our comments in the 45-day language,  
9 that they did. But would note that there are still dozens  
10 of comments, both from lighting science industry -- the  
11 lighting science folks, like IES, but then also industry,  
12 like NEMA, that did not get answered.

13           And I think back to the Title 24 proceedings, and  
14 45-day language hearing, where I expressed concern that  
15 because we didn't see the written responses from the staff  
16 sometimes until after adoption, we could not identify areas  
17 where the deeply technical issues were not understood by  
18 the staff. And, thus, an opportunity was missed to improve  
19 the language.

20           So, Commissioner McAllister, I ask again if you  
21 might consider directing the staff to publish their  
22 responses to our comments in a timely manner, such that we  
23 can respond before the closing of the comment period and  
24 the adoption, so that we can take advantage of any  
25 opportunities we identify to clarify the staff's

1 understanding and improve the language. So, thank you.

2 COMMISSIONER MC ALLISTER: Thanks for being here.

3 CHAIR WEISENMILLER: Thanks for being here.

4 Next.

5 MR. SERRES: Good morning -- good afternoon,  
6 Chair and Commissioners. My name is Anthony Serres. I'm  
7 with Philips Lighting.

8 In two weeks, you are scheduled to vote on  
9 revised 15-day language for Title 20. As you may know,  
10 there were many comments submitted by industry, including  
11 Philips, in response to that 45-day language.

12 We appreciate that some of the comments were  
13 addressed to the revised 15-day language, but the vast  
14 majority of comments were summarily dismissed.

15 By doing so, you figured out how to get the  
16 industry's blood pumping.

17 Rather than set minimum performance levels for a  
18 lamp to enter the market, the language sets very aggressive  
19 targets for color, lamp efficacy, and other metrics. If  
20 you pass the language as written, California consumers will  
21 suffer the following consequences. They will only be able  
22 to buy LED lamps that are more expensive and less efficient  
23 than lamps which are available in other states.

24 Because the current language, for all intents and  
25 purposes, mandates LED lamps with a nominal CRI of 90.

1           Connected lamps, which is a technology in its  
2 infancy, offers features to consumers such as color  
3 changing, tunable white and dimming. And this technology  
4 will almost disappear from the California market.

5           This is ironic in a State synonymous with leading  
6 edge design and technology.

7           The availability of small diameter directional  
8 LED lamps, decorative LED lamps, and general service LED  
9 lamps will be reduced as it will be difficult for lamps to  
10 comply with all of the criteria in the proposed language.  
11 Not just efficacy, not just CRI, not just light. But when  
12 you combine them together, it will be more difficult for  
13 them to comply.

14           We are also concerned that the language will  
15 restrict some small diameter directional halogen lamps that  
16 are used for emergency egress lighting. This emergency  
17 egress equipment has very specific lamping requirements.  
18 And when replacement lamps are not available, businesses  
19 will be forced to replace the entire equipment, instead of  
20 just simply changing the lamp.

21           We know that you want to keep the train running  
22 on time. But we believe that these concerns are  
23 significant and can best be resolved by new 45-day  
24 language. And ask the Commission to cancel the hearing on  
25 the 27th and direct staff to revisit these concerns with

1 new 45-day language.

2 We stand ready to work with the Commission to  
3 resolve these issues.

4 Tomorrow we, along with others in the industry,  
5 will begin a collaborative process with CEC staff to start  
6 the 2019 Title 24 rulemaking cycle. It is our hope that  
7 this new way of working will result in language that  
8 benefits all involved. Thank you.

9 CHAIR WEISENMILLER: Thank you.

10 COMMISSIONER MC ALLISTER: Thanks for being here.

11 CHAIR WEISENMILLER: Next.

12 MR. BAKER: Good morning, Commissioners. My  
13 name's Alex Baker. I'm the Director of Standards and  
14 Regulations for Lumileds, which is an LED package  
15 manufacturer located in San Jose.

16 My background is, and I'd like to ask for just a  
17 few more minutes, maybe five total.

18 CHAIR WEISENMILLER: No. No, three minutes.  
19 You'll be back again, I'm sure, in two weeks, so let's just  
20 do it. Submit it in writing.

21 MR. BAKER: Okay. My background is I managed the  
22 Energy Star Lighting Program for five years, before joining  
23 Lumileds in 2012. So, I'm hoping that I can lend some  
24 advice here.

25 To begin, I'd like to thank and applaud the CEC

1 for making normative reference to the American National  
2 Standard for color specifications. Referencing standards  
3 helps to ensure quality and consistency, and to enable high  
4 volume cost reductions that will benefit California  
5 consumers and drive adoption of this energy-saving  
6 technology.

7           This settles the matter of chromaticity.  
8 However, another troubling aspect of the CEC's color  
9 specification remains outstanding.

10           Lumileds strongly encourages the Commission to  
11 reevaluate its proposed color rendering requirements and  
12 offers the following technical guidance.

13           The 15-day language includes the terms CRI, RA,  
14 and R-1 through 8. Lumileds and NEMA have affirmed,  
15 through our discussions with CEC staff, that these  
16 notations refer to the color rendering index as  
17 standardized by the International Commission on  
18 Illumination, also known as the CIE.

19           Title 20 being a regulation that many parties  
20 will reference for years to come, including foreign  
21 manufacturers seeking to understand the regulations in the  
22 State to which they intend to export, it's incumbent upon  
23 the Energy Commission to make proper, normative reference  
24 to CIE 13.1, titled "Method of Measurement of Specifying  
25 Color Rendering Properties of Light Sources".

1           Unless this omission is corrected, the proposed  
2 regulation will include undefined, unenforceable  
3 terminology, which will not withstand legal scrutiny.

4           I'm trying to go as quick as I can here. The  
5 color rendering index --

6           CHAIR WEISENMILLER: Well, again, submit in  
7 writing your comments for the 27th. You don't need to read  
8 it all now.

9           MR. BAKER: I would value a dialogue on this  
10 topic. The color rendering index is essentially a zero to  
11 100 product performance score, and which a score of 100  
12 represents fully optimized performance.

13           Published in 1965, the lighting industry, behind  
14 me, has 50 years' of experience applying this standard.

15           On the docket, NEMA members, other manufacturers,  
16 trade organizations and environmental groups requested that  
17 the CEC adopt a minimum value of 80, which would fully  
18 align with the industry norms and practices for designing  
19 and manufacturing these products.

20           It would also leverage the economies of scale  
21 that manufacturers have been working for years to achieve.

22           The CEC staff did not agree and intends to  
23 regulate a minimum required value of 82, rather than 80.  
24 From this, we are to infer that the Energy Commission  
25 believes there's value in these two additional points of

1 CRI. That value is not there.

2 Technical point number three, assuming the CEC  
3 staff has reviewed the CIE standard, which they presumably  
4 intend to reference, we would like to recast the  
5 Commission's attention to Section 7.2 of that standard,  
6 which states that the metric, itself, is known to have  
7 uncertainty of one to three points.

8 So, two points is necessarily inside the noise of  
9 the metric.

10 CHAIR WEISENMILLER: Okay, so wrap it up.

11 MR. BAKER: There's no statistically significant  
12 difference between 82 and 80 CRI. And, yet, the CEC would  
13 have the entire lighting industry completely overturn its  
14 norms and ways of doing business, and the economies of  
15 scale that have been achieved specifying a min. 80 CRI.

16 CHAIR WEISENMILLER: Okay, thank you.

17 COMMISSIONER MC ALLISTER: Please do submit in  
18 writing. I mean, I think we've heard all of these  
19 arguments before. And if there's something new, definitely  
20 want to hear that. But, you know, there's a lot to unpack  
21 in each of the pieces of this that I think we're very much  
22 aware of.

23 But we really appreciate your being here.  
24 Certainly, want to encourage staff and you to keep meeting  
25 and hashing over some of these issues.

1 CHAIR WEISENMILLER: Go ahead.

2 MR. MC GARAGHAN: Go ahead?

3 CHAIR WEISENMILLER: Please go ahead, identify  
4 yourself and go ahead.

5 I'm going to try -- please go ahead, otherwise  
6 we're going to have to basically adjourn the meeting.

7 MR. MC GARAGHAN: I don't know who you're looking  
8 for comments for. But if you -- when there is an  
9 opportunity to comment, I have one.

10 CHAIR WEISENMILLER: Oh, sure. No, this is a  
11 public comment time, so if you can identify yourself and  
12 comment, please.

13 MR. MC GARAGHAN: Great, thank you. This is Mike  
14 McGaraghan. I am with a company called Energy Solutions,  
15 have done a lot of work over the last several years in the  
16 area of lighting efficiency, lighting standards, LED  
17 standards, and LED performance. And appreciate the chance  
18 to comment today.

19 Mostly just want to provide support for the  
20 Energy Commission and the proposed color standards in Title  
21 20, which are, I understand, not on the agenda today, but  
22 are up for adoption on January 27th.

23 Despite some of the shortcomings of the CRI  
24 metric, the California Energy Commission has actually done  
25 some very interesting and important work here to improve

1 color rendering in light sources, particularly in the way  
2 they set up their standard with minimum performance  
3 requirements for individual color samples, R-1 through R-8.  
4 We believe it helps get around some of the shortcomings in  
5 the CRI standard by requiring improved color in each  
6 individual sample.

7           In particular, the R-8 value is of utmost  
8 importance. It's the reddish, pink hue that often is  
9 missing in high-efficiency lighting. It's missing in low  
10 80's, most low 80's product.

11           So the R-8 score, at 72, is a very important  
12 metric, perhaps the most important in what the Energy  
13 Commission has done to ensure that consumers, if they are  
14 going to make that switch to high-efficacy lighting, they  
15 get a light source that provides adequate color rendering,  
16 something similar to what they're used to, that is not  
17 deficient in reds. Reds are really important for rendition  
18 of skin tones, of fruits and vegetables, wood furniture,  
19 many things found around the home, distinguishing colors in  
20 clothing.

21           So, we just want to reiterate our support. We  
22 think the Commission is on the right track and look forward  
23 to discussing it further on the next time that's set on the  
24 agenda.

25           CHAIR WEISENMILLER: Okay, thank you.

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Anyone else on the line?

Okay, then this meeting's adjourned.

(Whereupon, at 12:35 p.m., the business meeting was adjourned.)

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**REPORTER'S CERTIFICATE**

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

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

IN WITNESS WHEREOF, I have hereunto set my hand this 21st day of January, 2016.



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PETER PETTY  
CER\*\*D-493  
Notary Public

**TRANSCRIBER'S CERTIFICATE**

I do hereby certify that the testimony in the foregoing hearing was taken at the time and place therein stated; that the testimony of said witnesses were transcribed by me, a certified transcriber.

And 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 21st day of January, 2016.

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

Barbara Little  
Certified Transcriber  
AAERT No. CET\*\*D-520