

## DOCKETED

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BUSINESS MEETING  
BEFORE THE  
CALIFORNIA ENERGY COMMISSION

In the Matter of: )  
 ) 18-BUSMTG-01  
 *Business Meeting* )  
 \_\_\_\_\_ )

CALIFORNIA ENERGY COMMISSION  
THE WARREN-ALQUIST STATE ENERGY BUILDING  
ART ROSENFELD HEARING ROOM - FIRST FLOOR  
1516 NINTH STREET  
SACRAMENTO, CALIFORNIA 95814

WEDNESDAY, MARCH 21, 2018

10:00 A.M.

Reported by:  
Peter Petty

**CALIFORNIA REPORTING, LLC**  
**229 Napa Street, Rodeo, California 94572 (510) 224-4476**

APPEARANCES

Commissioners

Robert Weisenmiller, Chair  
Karen Douglas  
Janea Scott  
Andrew McAllister

Staff Present: (\* Via WebEx)

Courtney Smith, Deputy Executive Director  
Kourtney Vaccaro, Chief Counsel  
Eunice Murimi, Public Adviser's Office  
Cody Goldthrite, Secretariat

Agenda Item

Gina Barkalow	2
Mike Gravely	3
Katharina Snyder	4
Nicholas Blair	5
Colin Corby	6
Chuck Gentry	6
Michael Sokol	7

Others Present (\* Via WebEx)

Interested Parties

Melinda Barrett, Mariposa County Resource Conservation District	2
Jay Johnson, Mariposa Biomass Project	2
*Steve Engfer, Mariposa County Planning Department	2
Christine Houston, Port of Long Beach	3
*Col. Jason Woodworth, Commanding Officer, Marine Corps Air Station at Miramar	3
*Greg Vallery, PE, UUSAG Fort Hunter Liggett	3
Theresa E. Pistochni, MS, Western Cooling Efficiency Center UC Davis	

Public Comment(\* Via WebEx)

I N D E X

	Page
Proceedings	6
Items	
1. CONSENT CALENDAR	6
a. SUBPOENA FOR PROVISION OF DATA	
b. SOUTHERN CALIFORNIA EDISON (SCE) REQUEST TO USE THE DATA COLLECTION AND ANALYSES COMPLIANCE OPTION	
c. SACRAMENTO MUNICIPAL UTILITY DISTRICT	
2. MARIPOSA COUNTY RESOURCE CONSERVATION DISTRICT	6
i. CALIFORNIA ENVIRONMENTAL QUALITY ACT FINDINGS FOR NONCOMPLIANCE WITH THE RENEWABLES PORTFOLIO STANDARD (18-RPS-01)	
ii. Proposed resolution approving Agreement EPC-17-021 with Mariposa County Resource Conservation District for a \$5,000,000 grant to fund the design and construction of a forest waste thermochemical biomass- to-energy conversion facility that will annually produce between 15,000-18,500 MWh of renewable, community-scale, grid connected electricity.	
3. DEMONSTRATE BUSINESS CASE FOR ADVANCED MICROGRIDS IN SUPPORT OF CALIFORNIA'S ENERGY AND GHG POLICIES, GFO-17-302	12
a. CITY OF LONG BEACH HARBOR DEPARTMENT (PORT OF LONG BEACH)	
b. UNIVERSITY OF CALIFORNIA, SAN DIEGO	
c. LAWRENCE BERKELEY NATIONAL LABORATORY	

I N D E X (Cont.)

4.     ADVANCING THE RESILIENCE AND ENVIRONMENTAL PERFORMANCE OF CALIFORNIA'S ELECTRICITY SYSTEM, GFO-16-311 26
- a.     UNIVERSITY OF CALIFORNIA, BERKELEY
- b.     LAWRENCE BERKELEY NATIONAL LABORATORY
- c.     CAL POLY CORPORATION
- d.     UNIVERSITY OF CALIFORNIA, BERKELEY
5.     INCREASING ADOPTION OF EMERGING CLEAN ENERGY TECHNOLOGIES THROUGH PROCUREMENT, GFO-17-301 30
- a.     COHEN VENTURES INC. DBA ENERGY SOLUTIONS
- b.     LAWRENCE BERKELEY NATIONAL LABORATORY
- c.     PROSPECT SILICON VALLEY
- d.     UNIVERSITY OF CALIFORNIA, DAVIS
6.     IMPROVING NATURAL GAS ENERGY EFFICIENCY, WASTE HEAT-TO-POWER, AND NEAR-ZERO EMISSION DISTRIBUTED GENERATION SYSTEMS, GFO-17-501 35
- a.     ELEMENT 16 TECHNOLOGIES, INC.
- b.     UNIVERSITY OF CALIFORNIA, RIVERSIDE
- c.     LAWRENCE BERKELEY NATIONAL LABORATORY
- d.     T2M GLOBAL LLC
- e.     ALTEX TECHNOLOGIES CORPORATION
- f.     INSTITUTE OF GAS TECHNOLOGY
- g.     ETAGEN, INC

I N D E X (Cont.)

7.	DISCUSSION OF ENERGY COMMISSION PROGRESS RE: IMPLEMENTATION OF THE CLEAN ENERGY AND POLLUTION REDUCTION ACT OF 2015 (SB 350)	41
8.	Minutes	57
9.	Lead Commissioner or Presiding Member Reports	57
10.	Chief Counsel's Report	74
	a. <i>In the Matter of U.S. Department of Energy (High Level Waste Repository) (Atomic Safety Licensing Board, CAB-04, 63-001-HLW); State of California v. United States Department of Energy (9th Cir. Docket No. 09-71014)</i>	
	b. <i>Communities for a Better Environment and Center for Biological Diversity v. Energy Commission (Court of Appeal, First Appellate District, #A141299)</i>	
	c. <i>Energy Commission v. Electricore, Inc. and ZeroTruck (Sacramento County Superior Court #34-2016-00204586)</i>	
	d. <i>National Electrical Manufacturers Association v. Energy Commission (Federal District Court, Eastern District of California, #2:17-cv-01625)</i>	
	e. <i>Energy Commission v. United States Department of Energy (Federal District Court, Northern District of California, #17-cv-03404)</i>	
	e. <i>City of Los Angeles, acting by and through, its Department of Water and Power v. Energy Commission (Los Angeles Superior Court, Case No. BS171477).</i>	

I N D E X (Cont.)

10. Chief Counsel's Report (Cont.)	74
<p>Pursuant to Government Code section 11126(e), the Energy Commission may also discuss any judicial or administrative proceeding that was formally initiated after this agenda was published; or determine whether facts and circumstances exist that warrant the initiation of litigation, or that constitute a significant exposure to litigation against the Commission, which might include:</p>	
<p>a. The licensing process for a nuclear waste storage repository at Yucca Mountain, Nevada.</p>	
<p>d. Alternative and Renewable Fuel and Vehicle Technology Program grant ARV-10-016 with the City of San Jose, including its subcontractor JUM Global, and the lawsuit between the two (5:16-cv-01462-HRL, United States District Court, Northern District of California [San Jose]).</p>	
11. Executive Director's Report	75
12. Public Adviser's Report	75
13. Public Comment	--
Adjournment	75
Reporter's Certificate	76
Transcriber's Certificate	77

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P R O C E E D I N G S

MARCH 21, 2018 10:05 a.m.

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

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

CHAIRMAN WEISENMILLER: Good morning. Let's start with the Consent Calendar.

COMMISSIONER DOUGLAS: Move Consent.

COMMISSIONER SCOTT: Second.

CHAIRMAN WEISENMILLER: All those in favor?

(Ayes.)

CHAIRMAN WEISENMILLER: Aye. Consent is passed 4-0.

Commissioner Hochschild is absent today, so let's go on to Item 2, Mariposa County Resource Conservation District.

MS. BARKALOW: Hello Chair and Commissioners, my name is Gina Barkalow and I'm with the Research and Development Division. I am requesting approval today for a technology demonstration research and development project recommended for award under the EPIC Bioenergy Competitive Solicitation. This project addresses the Governor's Proclamation of a State of Emergency to protect communities against the unprecedented tree die-off.



1           According to a new aerial survey data, from the  
2 U. S. Forest Service, 27 million trees died in California  
3 last year due to the lingering effects of the drought.  
4 This brings the total number of trees killed statewide to  
5 129 million since 2010. Mariposa County is known as Ground  
6 Zero for the tree mortality crisis. According to Mariposa  
7 County, in the area most severely impacted by tree  
8 mortality, 65 percent of the homes are at risk of damage  
9 from dead trees.

10           This community-scale facility will be built in a  
11 designated industrial zone. The technology uses an  
12 innovative, low-emission gasification process to convert  
13 approximately 12,000 bone-dry tons a year, most of which  
14 will be sustainably harvested forest biomass from CAL FIRE  
15 designated high-hazard zones, to up to 2.4 megawatts of  
16 renewable electricity. The project will provide local  
17 capacity and improved grid reliability in hard-to-serve  
18 rural areas.

19           Mariposa County approved a resolution last month  
20 for the Conditional Use Permit and Mitigated Negative  
21 Declaration for the project. Staff's analysis found that  
22 this EPIC project will not have impacts greater than what  
23 was already covered under the County's CEQA determination.

24           We request approval of the proposed resolution  
25 adopting CEQA Findings for the Mariposa Biomass Project and

1 the grant agreement for its design and construction.

2 I am happy to answer any questions and staff from  
3 the Mariposa Biomass Project is here in person and staff  
4 from Mariposa County should be on the phone. Thank you.

5 CHAIRMAN WEISENMILLER: Thank you.

6 Let's start with the comments from anyone in the  
7 room. Please, Mariposa Biomass Project, why don't you step  
8 forward?

9 MS. BARRETT: Is it okay if I stand?

10 CHAIRMAN WEISENMILLER: Sure, sure.

11 MS. BARRETT: I can pull it closer.

12 CHAIRMAN WEISENMILLER: Yes, please. Go ahead.

13 MS. BARRETT: Good morning, Chair and  
14 Commissioners. My name is Melinda Barrett. I am with the  
15 Mariposa County Resource Conservation District. And on  
16 behalf of our Board, I'd like to thank you so much for this  
17 opportunity. It allows us to build on the \$224,000 wood  
18 innovations grant that we got from the Forest Service, that  
19 we used to go through the permitting process and do all the  
20 preliminary work. I'd also like to thank you on behalf of  
21 the Yosemite Mariposa Integrated Regional Water Management  
22 Group. This project has been part of the watershed plan  
23 since 2014 when it was first sort of conceived, because it  
24 provides so many benefits for the watershed as a whole. So  
25 thank you very much and if you have any questions, I'll be

9

1 happy to answer them.

2 CHAIRMAN WEISENMILLER: Okay. Thank you.

3 Anyone else in the room? Let's go to the phone  
4 lines.

5 (Colloquy off mic.)

6 CHAIRMAN WEISENMILLER: Oh, please go ahead.

7 MR. JOHNSON: I'm Jay Johnson. I'm the CEO for  
8 the Mariposa Biomass Project, non-profit. I'm really here  
9 to thank you for this opportunity to receive this grant.

10 When I got started on this project when I retired  
11 -- I'm an engineer and I've worked on a lot of power plants  
12 over the last 20 years and actually had several projects in  
13 California, one of which first one I worked on was the Elk  
14 Grove Carson Ice-Gen Project, which was one of the Energy  
15 Commission's projects, you might recall.

16 And anyway, so when I got involved in the  
17 project, first thing I did is I looked at the financial  
18 viability of this, of these small scale bioenergy plants.  
19 And it was pretty clear to me that this new technology is  
20 going to be very difficult to finance, unless a market  
21 developed for biochar, which is something we thoroughly  
22 investigated. Or if we were able to obtain some sort of  
23 subsidy to help for this initial project.

24 Well, we looked at the biochar market and it just  
25 hadn't been established yet. So we were unable to get any

10

1 kind of long-term contracts that would secure the financing  
2 for the project. So we turned to other sources of funding  
3 and that's where we turned to the Energy Commission. And  
4 again, I don't think that we'd be able to be where we are  
5 today without your support. So that's why I'm here, just  
6 to thank you.

7 CHAIRMAN WEISENMILLER: Thank you.

8 Anyone else in the room? Let's go on to the  
9 telephone line.

10 (Off mic colloquy.)

11 Hello. Do you have any comments? Mr. Engfer.

12 MR. ENGFER: This is -- are you speaking to me,  
13 Steve Engfer from Mariposa County Planning Department?

14 CHAIRMAN WEISENMILLER: Yes.

15 MR. ENGFER: Oh, okay. It's just kind of hard  
16 hearing that.

17 CHAIRMAN WEISENMILLER: Okay. Sorry.

18 MR. ENGFER: I'm just here to answer any  
19 questions. If there's any questions I processed the  
20 permitting application for the use permit and the initial  
21 study for the project here. So I'm on standby if you have  
22 any questions.

23 CHAIRMAN WEISENMILLER: Okay. That's great.  
24 We're going to transition over to the Commissioners. And  
25 we'll see what questions we have. So thanks for being on

1 the call.

2 MR. ENGFER: You're welcome. Thank you.

3 CHAIRMAN WEISENMILLER: Commissioners, I think  
4 all of us know that with the climate change, one of the  
5 consequences has been really a lot of dead trees, a lot of  
6 high fire-risk areas. And this is part of the approach  
7 that we've been pursuing is obviously trying to see if  
8 there's some way to make some of the stuff economic to  
9 convert into power or other applications. So this is an  
10 interesting application. Certainly, I don't know if anyone  
11 else has any questions on this one?

12 COMMISSIONER DOUGLAS: I'll just make a brief  
13 comment, which is to agree with you completely and say that  
14 I'm really happy to see this project move forward. And I  
15 strongly support it. I'll go ahead and move approval of  
16 this item.

17 COMMISSIONER MCALLISTER: Second.

18 CHAIRMAN WEISENMILLER: All those in favor?

19 (Ayes.)

20 CHAIRMAN WEISENMILLER: So this item passes 4-0.

21 Thank you.

22 And let's go on to Item 3.

23 MR. GRAVELY: Good morning, sir. I'm Mike  
24 Gravely from the R&D Division. Commissioner Weisenmiller  
25 and other Commissioners, I'm here today to request approval

12

1 for first three grants that were competitively selected  
2 under the --

3 CHAIRMAN WEISENMILLER: Mike, is your mic on?

4 MR. GRAVELY: It shows it's on, I'll move a  
5 little closer. Okay. I'll try again.

6 So good morning, Chair Weisenmiller and the  
7 Commissioners. I'm Mike Gravelly from the R&D Division and  
8 I'm here to request approval for three grants that were  
9 competitively selected under the recent Grant Funding  
10 Opportunity-17-302.

11 For this particular GFO we received 60 proposals,  
12 of which 33 received passing scores. There were three  
13 different groups, of which we are awarding grants in. The  
14 first group was military bases, California ports and Native  
15 American tribes. The second was disadvantaged communities.  
16 And the third were groups that met the requirements of the  
17 GFO, but didn't meet the requirements of group one or two;  
18 groups such as universities, local communities and  
19 industrial complexes.

20 For this GFO, there were quite a few specific  
21 requirements. The ultimate goal we're looking for is the  
22 commercialization of microgrids, so these proposals, each  
23 had to demonstrate that they had a repeatable and a  
24 commercially viable microgrid. And as part of the process,  
25 they will be providing us lessons learned on their

1 interconnections with their local utility and the  
2 challenges and successes that they had in that process, so  
3 we can use that to develop a smoother and more cost  
4 effective process in the future. They will develop a  
5 commercial business plan as to how their microgrid can be  
6 repeated into similar areas and how they can demonstrate  
7 the values and the benefits that their microgrid has. And  
8 then later they'll be actually doing a measure and  
9 verification to validate those benefits.

10           Each proposal had to have a minimum of three  
11 different DER systems, integrated into a single system.  
12 Many had four and five different systems. We're talking  
13 about renewables, energy storage, vehicle-to-grid, demand  
14 response and energy efficiency.

15           Finally, they had to provide a non-confidential  
16 cyber security plan to let us know how this microgrid was  
17 going to address the cyber security challenges of the  
18 future.

19           Overall, we have announced nine grants will be  
20 awarded under this solicitation. You will see three today  
21 and the other six will be coming in future business  
22 meetings.

23           The first grant is from the Port of Long Beach.  
24 And this one here, the microgrid will be supporting the  
25 critical facilities at their joint command and control

1 center. It will be providing reliability, resiliency and  
2 energy security to the Port. And one of the benefits for  
3 us is the microgrid and this team will help us, and you'll  
4 hear this from the other ones, help us define what does  
5 reliability, resiliency and energy security mean to these  
6 different customers. So we can develop metrics and ways to  
7 measure and recognize that capability.

8           They had a real strong effort to reach out to  
9 their community. They are surrounded by a disadvantaged  
10 communities and local communities and work with labor  
11 unions on employment opportunities and training  
12 opportunities for the new high technology that they'll be  
13 applying to the Port.

14           One unique element of this particular grant was  
15 they also, in addition to stationary energy storage,  
16 they're using a portable energy storage system that they  
17 can move around during contingencies and during weather  
18 changes, so they can put the capability where it's most  
19 productive and will stay within the Port area, but will  
20 move to areas that have the most challenge.

21           And ultimately, they'll be demonstrating a  
22 microgrid that they feel, and we feel will be repeatable by  
23 other ports, in California and throughout the country.

24           The second grant today is for University of  
25 California, San Diego. The microgrid customer is Miramar



1 Marine Corps Air Station. This particular microgrid will  
2 be an integrated process with an existing microgrid that  
3 the DOE started and it will allow them to add additional  
4 renewables, energy storage and demand response to allow  
5 them to build a highly-integrated capable base level  
6 microgrid system.

7           Again, they will be helping us understand what  
8 military-grade reliability, resiliency and energy security  
9 means. And they, in this case, will be integrating all  
10 five different types of DER systems. And also, they'll be  
11 supporting to critical military operations of the flight  
12 line and areas that support the flight line.

13           This is a case where they're also using energy  
14 storage and additional renewables, with a goal of reducing  
15 or eliminating future needs for diesel generators, natural  
16 gas fossil fuel systems and also to make -- they operate  
17 currently with the landfill under use of the City of San  
18 Diego. And this energy storage system will allow the  
19 combination to be highly more reliable for the base  
20 operations in the future. And again, they'll be developing  
21 a business plan for large military bases, that they  
22 anticipate other military bases (indiscernible) in  
23 California and throughout the country have been able to  
24 use.

25           The third one is from the Army Parks Reserve

1 Training Area, called Camp Parks. This is another case  
2 where they're integrating a microgrid with some existing  
3 DOE funded. And they'll be demonstrating a base level  
4 microgrid and also, because of the training capability, up  
5 to 15 smaller modules of microgrids. And they can  
6 integrate those small systems into the big system or  
7 separately, so that that if they have a contingency and  
8 they're into training mode, with each training system will  
9 have its own capability for reliability and resiliency.  
10 And this will help us understand the business case for  
11 these types of areas where they have a central focus and  
12 many little small systems operating at the same time.

13 Many of you have had the chance to visit other  
14 bases like 29 Palms and Pendleton. And you know that  
15 basically too, they have a lot. They have a central  
16 function and then they go out and deploy to the field. And  
17 the military has become very high technology, where energy  
18 is a critical element of their system.

19 So today, we do have three speakers who'll be  
20 joining me after your questions and answers and as from the  
21 Port of L.A., Christine Houston is here in the building and  
22 will be talking. She's the Manager of Sustainability  
23 Practices. Online from Miramar is Colonel Jason Woodworth,  
24 who is the Commanding Officer from Miramar. And from Camp  
25 Parks, we have Greg Vallery who is a Director of Public

1 Works.

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

3 CHAIRMAN WEISENMILLER: Thanks, Mike.

4 Let's hear from the public and then we may have  
5 questions for you, so let's start out. Please. Long  
6 Beach?

7 MS. HOUSTON: Good morning, Chair Weisenmiller,  
8 Commissioners and staff. I'm Christine Houston, the  
9 Manager of Sustainable Practices for the Port of Long  
10 Beach. On behalf of the Long Beach Board of Harbor  
11 Commissioners and our Executive Director, I would like  
12 express our gratitude for your favorable consideration of  
13 our microgrid project.

14 I would especially like to thank Commissioner  
15 Scott for convening the Port's working group and to Mike  
16 for making sure the opportunity was on the group's radar.  
17 CEC leadership and understanding of these challenges  
18 related to transportation electrification are critical to  
19 meeting the state's GHG reduction goals and the individual  
20 goals of the California ports.

21 Port of Long Beach aspires to be a zero emission  
22 port by 2030, with zero emission on-road trucking following  
23 in 2035. However, achieving this goal operationally is not  
24 just a matter of equipment and infrastructure. It's also  
25 energy reliability, particularly if the grid is a single

1 potential point of failure. CEC's foresight in promoting  
2 microgrid technologies will help us integrate resiliency  
3 into our energy systems as we design the marine terminals  
4 of the future.

5 As a Project Manager, I'm excited to learn about  
6 microgrid technologies firsthand and to exchange knowledge  
7 with others. The Port of Long Beach is committed to  
8 delivering the project with the highest level of effort and  
9 expertise. And I look forward to reporting to you again at  
10 the important milestones and the successful completion. So  
11 thank you very much.

12 CHAIRMAN WEISENMILLER: Thank you.

13 Let's go on to the Colonel. Well, actually let's  
14 first, is there anyone else in the room? So not, so let's  
15 go the phone lines to the Colonel.

16 COLONEL WOODWORTH: Good morning Chair  
17 Weisenmiller and fellow Commissioners. My name is Colonel  
18 Jason Woodworth. I'm the Commanding Officer of Miramar.  
19 Thank you for the opportunity to speak today.

20 Miramar is a proud leader in energy innovation  
21 and is excited to participate in this opportunity. We've  
22 been entrusted with \$20 million from the Marine Corps to  
23 implement a complex microgrid for total energy resilience  
24 at the air station.

25 As you know, resilience is critical to military

1 installations. With this California Energy Commission  
2 funding, we will be able to expand that microgrid  
3 capability greatly, reduce greenhouse gas emissions and  
4 demonstrate a business case for microgrids in California  
5 and other military bases.

6 We look forward to full implementation, which  
7 will demonstrate value for the base, the local community,  
8 San Diego Gas and Electric and the California Energy  
9 Commission. We appreciate the confidence that the  
10 Commission has placed in the University of California San  
11 Diego and Miramar.

12 I understand the current plan is to hold the next  
13 Department of Navy and California Energy Commission Working  
14 Group meeting here at Miramar in the fall of this year. We  
15 look forward to hosting you all and showcasing the creative  
16 energy initiatives on Miramar. We're happy to take  
17 questions at this time and thank you for the opportunity.

18 CHAIRMAN WEISENMILLER: Thank you.

19 Let's go on to Greg Vallery with Fort Hunter  
20 Liggett. Is he on the line?

21 MR. GRAVELY: He may not have called in. We'll  
22 see.

23 CHAIRMAN WEISENMILLER: Okay. Let's transition  
24 over to the Commissioners and see if there're questions.

25 I was going to just start out by indicating that

1 obviously, on this theme of climate change impacts of  
2 California and how to address those. And certainly one of  
3 the things that's fairly clear is that we need to worry  
4 about resilience of the central facilities, dealing with  
5 basically the fire hazards and certainly generally moving  
6 forward on climate change. And so certainly microgrids are  
7 the obvious tool to address the resiliency needs of many of  
8 our facilities, such as military bases and others. So this  
9 is really an exciting effort to move forward in this  
10 direction and actually get some stuff out in the field, as  
11 we really need those.

12 I would note that basically I recently got a  
13 report from Dorothy Robyn. And I had met Dorothy and  
14 Jackie with Secretary Mabus a while back. And Dorothy had  
15 sort of a similar role as Jackie had, an Assistant  
16 Secretary for the energy stuff, but I think it -- I forgot  
17 whether it was the Air Force or the Army, but anyway. And  
18 she is obviously no longer with the Department of Defense.  
19 She went from there to GSA. And she and the Pew Foundation  
20 did a report on the business case for microgrids in  
21 military bases.

22 And a lot of the military bases have diesel gen  
23 sets, more for building-to-building or I would say  
24 facility-to-facility. So certainly with a microgrid, you  
25 can really save a lot of money and increase resilience if

1 you're really interconnecting more on a, say base level.  
2 So anyway, it's pretty interesting. I think it's sort of  
3 the first really strong study that goes through the large  
4 savings potentially with microgrids on the bases and dollar  
5 of it all, so obviously pollution, resilience, all a number  
6 of issues. So it's good to try to convert that study into  
7 some real data.

8 MR. GRAVELY: I understand that Greg Vallery is  
9 on the line now.

10 CHAIRMAN WEISENMILLER: Oh, please, go ahead.

11 MR. GRAVELY: Go ahead, Greg.

12 MR. VALLERY: This is Greg Vallery, happy to be  
13 on the call. And I'd like to say specifically that our  
14 microgrid project up at Camp Parks, we were very fortunate  
15 and glad that we were able to work through Lawrence  
16 Berkeley National Lab to qualify for this CEC grant. It  
17 certainly will help us leverage all the work that we have  
18 ongoing, up at Camp Parks. Camp Parks is one of the Army's  
19 net zero energy demonstration sites. It already has a lot  
20 of funding that has been invested into the existing 2  
21 megawatt PV array, as well as some infrastructure build-out  
22 of a medium voltage distribution system that will allow us  
23 to actually implement a microgrid. So I think it aligns  
24 very well with the California Energy Commission goals and  
25 initiatives.

1           But it also assists us with meeting the Army's  
2 Energy Security and Sustainability Initiative. They call  
3 that the ES2, so we piggybacked on that with our Resilient  
4 Replicable Modular Microgrid concept, R2M2, so.

5           CHAIRMAN WEISENMILLER: Okay. We're looking  
6 forward to your project moving forward and the results.

7           So let me transition to my fellow Commissioners.

8           COMMISSIONER SCOTT: Sure. I just wanted to add  
9 to this. It's a really exciting set of projects. I got a  
10 fantastic briefing from Mike and his team on what they've  
11 put together. I really appreciate the components that are  
12 part of each of these to lead towards commercialization of  
13 microgrids. I think that's an important part.

14           I think the Long Beach one that has kind the  
15 employment and training component that goes along with it,  
16 is really important as well to make sure that we have a  
17 well-trained workforce that can earn a living wage on these  
18 clean energy technologies.

19           And I really just wanted to acknowledge the great  
20 partnerships and innovation that the Energy Commission has  
21 with both the ports. We do have a port collaborative with  
22 the Port of Long Beach, the Port of San Diego, L.A.,  
23 Hueneme, Stockton and Oakland. And they've just been great  
24 partners with us whether it's trying to demonstrate  
25 vehicles, or microgrids, or lighting or any number of



1 things, as have our military partners. So I want to say  
2 thanks so much to the Colonel and to Greg for dialing in  
3 and also many thanks to Christine and her team for the  
4 great partnership. And thank you for coming up to be here  
5 in person.

6 So yeah, I'm strongly supportive of these  
7 projects, excited about them.

8 COMMISSIONER MCALLISTER: Yeah, just I'm very  
9 supportive of these projects. And I think part of the  
10 challenge with microgrids is sort of knowing certainly what  
11 the best applications of them are and understanding the  
12 cost of those and just sort of the ecosystems that's  
13 necessary to make them function properly.

14 But also knowing sort of where that level of  
15 reliability is maybe not needed and where they may be not  
16 applicable. And certainly as we get costs down, the  
17 applicability of microgrids will get broader, hopefully so.  
18 Because everybody wants the highest reliability they can  
19 reasonably have. But what problem are we solving and how  
20 are we investing obviously in military, obviously big  
21 institutions, you know, where you have lots of people that  
22 need reliability. The grid goes down they've got to have a  
23 solution. But also you know not everybody needs that level  
24 of reliability and so where are we going to end up where we  
25 have high reliability and a lot of these technologies

24

1 permeating through the economy, but maybe not even having  
2 to call them microgrids anymore because it's just sort of  
3 part of the distribution grid.

4           And so I think we're actually -- the work that  
5 we've been doing for the last you know couple of decades  
6 really, that Mike has been leading incredibly ably, I think  
7 has a real trajectory. Where we're still at that front  
8 end, where the applications where we really need that  
9 incremental reliability are pretty specific. And we can  
10 characterize them, because it implies significant costs.  
11 But you know we're moving down that market transformation  
12 curve, you know where we have -- we'll hopefully get scale  
13 and we'll have technologies that really take off and  
14 permeate.

15           So very supportive, I think this is a big step  
16 forward and congratulations on all the winners.

17           COMMISSIONER DOUGLAS: You know, I'll just add  
18 I'm very supportive as well and I won't repeat what folks  
19 have said, but I'll just join in on it.

20           So with that, Commissioner Scott, do you want to  
21 make a motion?

22           COMMISSIONER SCOTT: Sure. I will move approval  
23 of Item 3.

24           COMMISSIONER DOUGLAS: Second.

25           CHAIRMAN WEISENMILLER: All those in favor?

1 (Ayes.)

2 CHAIRMAN WEISENMILLER: So this item passes 4-0.  
3 Thanks, Mike.

4 Let's go on to Item 4.

5 Let's go on to Number 4, Advancing the Resilience  
6 and Environmental Performance of California's Electricity  
7 System.

8 MS. SNYDER: Good Morning Chair Weisenmiller and  
9 Commissioners. I'm Katharina Snyder of the Research and  
10 Development Division. And today we seek your approval for  
11 four proposed grant agreements from the competitive EPIC  
12 solicitation.

13 The first proposed agreement is with UC Berkeley  
14 and it will build on previous work funded by the Energy  
15 Commission and will analyze impacts of rising temperatures  
16 due to climate change on electricity supply and demand and  
17 also on the related air pollutant levels from existing  
18 generation stations.

19 The analysis will be performed at the zip code  
20 level to estimate impacts on generation, electricity costs,  
21 and emission levels in both disadvantaged and non-  
22 disadvantaged communities. Results from this project will  
23 inform the policy decision makers in developing a climate  
24 adaptation program supporting SB 246. And it will also

1 support cities and counties in their efforts to build  
2 resilience plans, supporting SB 379.

3           The second project is with Lawrence Berkeley  
4 National Laboratory and it will essentially yield a high-  
5 resolution framework and mapping tool enabling selection of  
6 location and technologies for bioenergy projects, to cost  
7 effectively minimize air quality impacts in disadvantaged  
8 communities. And specifically, this project will focus on  
9 ozone-forming precursors from existing and potential  
10 bioenergy projects in San Joaquin Valley and develop site  
11 specific ozone mitigation strategies.

12           The third project with Cal Poly Corporation  
13 advances and automates the classification of marine species  
14 and environment using artificial intelligence. A specific  
15 focus of this project will be to augment scientists'  
16 capabilities for more rapid and cost-effective analysis of  
17 thousands of hours of underwater videos and monitoring data  
18 to streamline their workflows. The results will help to  
19 reduce costs and improve quality of existing manual  
20 environmental assessments for permitting of offshore  
21 renewable energy technologies in California. The developed  
22 cloud-enabled software will be provided to the public as an  
23 open source.

24           The fourth project with UC Berkeley will enhance  
25 the Cal-Adapt platform by integrating new tools, data

1 services, and visualizations that will support IOUs, local  
2 government, CAISO and other stakeholders in decision making  
3 processes with considerations to the climate-related  
4 vulnerability of the electricity system.

5 Priority tools will focus on sea level rise and  
6 wildfire. The New Wildfire Tool will allow users to compare  
7 projected increase area burned with baseline historical  
8 values, visualize projections for wildfire severity and  
9 number of fires at the monthly time steps. And it will  
10 enable users to see projected changes to their fire season.  
11 The New Sea Level Rise Tool will enable users to compare  
12 impacts associated with different sea level rise  
13 projections from different hydrodynamic models.

14 Staff recommends the approval for all the  
15 proposed agreements and I am happy to take your questions.

16 CHAIRMAN WEISENMILLER: Thank you.

17 First, are there any comments from anyone in the  
18 room? Anyone on the line?

19 (No audible response.)

20 CHAIRMAN WEISENMILLER: So again transitioning  
21 over to the Commissioners.

22 Again, this is our third straight item on  
23 resilience. And again, it certainly emphasizes the  
24 priority we're putting on addressing that issue. I think  
25 certainly one of the -- all of these are pretty

1 interesting, although one of the ones I was going to focus  
2 on was Cal-Adapt, which is becoming more and more a tool  
3 moving it from the lab into the hands of planners and  
4 builders. You know, at this stage certainly the new OPR  
5 Guidelines, basically are trying to make sure that city  
6 planners are using Cal-Adapt to better understand how our  
7 changing climate will affect their plans and new buildings,  
8 new facilities.

9           So, again it's a big step going from something  
10 where you have a few of our research scientists playing  
11 with the tool, to getting it out into a much broader user  
12 base. So certainly the sort of next steps on visualization  
13 and enhancing the tools are really critical, since last  
14 time we want to suddenly getting a bunch of calls about  
15 well we've been there on some of the Building Code issues,  
16 you know, on some of the user experiences. (Laughter.)

17           So anyway, it's very important.

18           COMMISSIONER MCALLISTER: Well, I'll have to  
19 volley that one back, actually. So yeah, we're also doing  
20 really great online electronic tools to streamline the  
21 Building Code, so to make it much easier, sort of like a  
22 TurboTax kind of thing. And so I think this really is,  
23 it's much more possible in many of the realms we operate  
24 in, so obviously this is a great one. And I'm supportive  
25 of this item as well.

1 All right, so I'll move this item.

2 COMMISSIONER DOUGLAS: Second.

3 CHAIRMAN WEISENMILLER: All those in favor?

4 (Ayes.)

5 CHAIRMAN WEISENMILLER: This passes 4-0. Thank  
6 you.

7 Let's go on to Number 5, Increasing Adoption of  
8 Emerging Clean Technologies Through Procurement.

9 MR. BLAIR: Good morning Chair Weisenmiller and -  
10 -

11 COMMISSIONER DOUGLAS: Oh, I'm sorry. Before we  
12 go on, I wanted to make a disclosure, which is that for  
13 Item 5d I will probably be teaching a renewable energy  
14 seminar at UC Davis King Hall this spring. And this  
15 particular grant is not to King Hall, but I still wanted to  
16 make that disclosure. Thank you.

17 MR. BLAIR: Good morning, Chair Weisenmiller and  
18 fellow Commissioners. My name is Nick Blair. I am with  
19 the Energy Employment and Market Facilitation Office in the  
20 R&D Division. I'm seeking Commission approval today for a  
21 resolution of four agreements resulting from GFO-17-301,  
22 increasing adoption of emerging clean energy technologies  
23 through procurement. In total, these agreements sum to  
24 about \$17 million. And a fifth agreement, under this GFO,  
25 will be presented at a future business meeting.

1           Through an Energy Commission public meeting held  
2 in 2014, stakeholders from large procuring entities like  
3 military bases, ports, universities and the Department of  
4 General Services, collectively identified purchasing  
5 problems for adopting distributed energy resources such as  
6 energy efficiency, renewable generation and storage.

7           The problems identified were limited technical  
8 expertise with under-noise, (phonetic) a lack of unbiased  
9 objective information on technology performance, questions  
10 and concerns regarding regulatory issues, a need for  
11 additional tools to streamline procurement processes and a  
12 need to reduce the soft costs of purchasing energy  
13 technologies. So staff wrote this solicitation really  
14 seeking to address these identified problems.

15           So first, Energy Solutions is going to streamline  
16 procurement processes for buyers by developing and  
17 demonstrating the TradePro Connect online platform that  
18 will connect interested buyers with contractors who can  
19 meet their energy needs. Buyers will log onto the platform  
20 and supply green button data. Using the green button data,  
21 Energy Solutions will be able to suggest cost effective,  
22 personalized project options for the buyers. Key pieces of  
23 this platform will include the group purchasing option,  
24 which will coordinate the purchasing power of these members  
25 to negotiate industry discounts for large orders and also

31



1 the large directory of contractors with whom buyers will be  
2 able to have access to.

3 Buyers using this platform will include the  
4 Department of General Services, investor owned utilities,  
5 state agencies and then the California community colleges.

6 The second group today is Lawrence Berkeley  
7 National Lab. They will be developing the MyFleetBuy  
8 procurement analytics system to streamline the buying of  
9 electric vehicles and smart charging infrastructure for  
10 corporate and government fleet managers. MyFleetBuy will  
11 remove the risks and uncertainties of adopting electric  
12 vehicles for fleet managers and also let them know where  
13 the place charging infrastructure to charge their fleets.

14 To do this Lawrence Berkley National Lab will  
15 collect data on individual fleets using data loggers that  
16 are placed in the cars and used to collect data, based on  
17 their travel patterns. Lawrence Berkley National Lab will  
18 conduct pilot testing with Alameda County, City of Oakland  
19 and Caltrans.

20 The next group is Prospect Silicon Valley. They  
21 will be developing the California Opportunities and  
22 Procurement Program to provide technical assistance to  
23 buyers and technology developers to bridge the gap between  
24 them to spur greater adoption of technologies. The program  
25 will help buyers overcome structural barriers to adoption

1 and help the technology developers navigate the complicated  
2 institutional procurement processes by developing services  
3 to provide handholding and matchmaking opportunities.  
4 Prospect Silicon Valley's program will include a new  
5 procurement portal for putting out RFPs, group purchasing  
6 opportunities to lower costs, RFP development assistance to  
7 help buyers get bids that meet their energy needs, and  
8 lastly networking and educational events for both buyers  
9 and technology developers.

10           The last group, with University of California  
11 Davis, they will develop and operate the California Energy  
12 Product Evaluation Hub. The Hub is going to do lab  
13 testings that report on how well commercially-available  
14 technologies are performing, develop a rating system that  
15 will be used to evaluate product performance and record  
16 test results.

17           Davis is going to survey the targeted buyers to  
18 prioritize products that they test through the system.  
19 Test results will be widely displayed on an accessible  
20 online buyer's guide to inform the buyers of technology  
21 performance. Buyers who use this guide are going to see  
22 products that match their energy needs and have them  
23 thoroughly vetted through criteria like cost, quality and  
24 durability. Ultimately, this buyer's guide is going to  
25 increase confidence for the buyers and enable them to make

1 informed decisions.

2 Staff is seeking approval of these four  
3 agreements today. Staff is available for question and  
4 answer if needed. And UC Davis is in the audience today  
5 also for comment.

6 CHAIRMAN WEISENMILLER: Thank you.

7 Let's start with public comment, anyone in the  
8 room? Please, come on up and identify yourself.

9 MS. PISTOCHINI: Good morning. My name is Teresa  
10 Pistochini. I am the Director of Engineering for the  
11 Energy and Efficiency Institute at UC Davis. I am the  
12 Project Manager for the proposed California Energy Product  
13 Evaluation Hub.

14 As Nick described, this project will improve  
15 adoption rates of distributed energy resources by providing  
16 comprehensive product reviews, compiled in an online  
17 buyer's guide and targeted to the needs of institutions and  
18 their procurement staff. Our team which includes multi-  
19 discipline researchers at UC Davis, LDNL, and Energy  
20 Solutions is excited to tackle this challenge. On behalf  
21 of our collective organizations, I wanted to thank you for  
22 your consideration of this grant.

23 CHAIRMAN WEISENMILLER: Thank you. Thanks for  
24 being here.

25 Anyone else in the room? Anyone on the phone?

1 (No audible response.)

2 CHAIRMAN WEISENMILLER: Okay. Well, again  
3 transitioning over to the Commissioners. At this stage, I  
4 think this is a creative approach to pull together some  
5 pieces to help people work through the procurement process.  
6 It's going to encourage UC Davis to also coordinate with  
7 Lacey. (phonetic) Part of the facility at Lacey has a  
8 bunch of test facilities from LADWP for them to test their  
9 innovative products that are developed there. So it'd be  
10 good to coordinate sort of the northern and southern hubs  
11 in that respect. I'm sure that would be possible.

12 Any other comments?

13 COMMISSIONER MCALLISTER: I'll move this item.

14 COMMISSIONER SCOTT: Second.

15 CHAIRMAN WEISENMILLER: All those in favor?

16 (Ayes.)

17 CHAIRMAN WEISENMILLER: This passes 4-0. Thank  
18 you.

19 MR. BLAIR: Thank you.

20 CHAIRMAN WEISENMILLER: Let's go on to Item 6.  
21 Improving Natural Gas Energy Efficiency, Waste Heat-to-  
22 Power and Near-Zero Emission Distributed Generation  
23 Systems.

24 MR. CORBY: Good Morning Chairman and  
25 Commissioners. I'm Colin Corby with the Energy Efficiency

1 Research Office. This is Chuck Gentry with the Energy  
2 Generation Research Office, and we're representing the  
3 Energy Research and Development Division.

4 We are recommending approval of projects  
5 resulting from a joint solicitation for energy, industrial  
6 energy efficiency and advanced generation research that  
7 focus on reducing natural gas use and lowering greenhouse  
8 gas emissions.

9 I will present the recommended awards for the  
10 Energy Efficiency Division and Chuck will present for the  
11 advanced generation.

12 Item a is with Element 16 Technologies. The  
13 recipient will develop a low-temperature waste heat  
14 recovery system that uses an innovative sulfur-based heat  
15 capture technology that could significantly reduce natural  
16 gas use in the chemical processing industry. The project  
17 leverages the phase-change properties of sulfur to capture  
18 and store thermal energy to provide on-demand heat, in this  
19 case in the form of hot water, to improve energy efficiency  
20 in a chemical processing facility.

21 This project will be demonstrated at Searles  
22 Valley Minerals Inc. in Trona, California. And it is worth  
23 noting that this facility is on ARB's capped facility list,  
24 which requires these facilities to reduce emissions or  
25 purchase allowances in quarterly actions that go into the

1 Cap-and-Trade Program.

2           Item b is with the University of California at  
3 Riverside. And the recipient will demonstrate a smart  
4 combustion control system that measures natural gas fuel  
5 quality and makes adjustments to optimize fuel efficiency  
6 in the combustion process.

7           The project team will develop a natural gas fuel  
8 database, based on the variations in the characteristics of  
9 natural gas supplies, then write a sophisticated adaptive  
10 learning and control algorithm in order to relay this  
11 information to a sensor and control system, which will  
12 adjust the fuel mix to maximize the efficiency of  
13 combustion.

14           The goal is to increase combustion efficiency and  
15 reduce Natural Gas usage by 10 percent or more and decrease  
16 the NOx emissions by 30 percent or more.

17           And item c is with Lawrence Berkeley National  
18 Laboratory. And the recipient will conduct a technical  
19 assessment of the chemical and allied products  
20 manufacturing industry in California, to identify energy  
21 efficiency research priorities to reduce both natural gas  
22 use and greenhouse gas emissions. And this assessment will  
23 provide information on priority future research needs.

24           Thank you, I now turn the podium over to Chuck  
25 Gentry to present the Energy Generation Office's proposed

1 projects

2 MR. GENTRY: Good morning. My name is Chuck  
3 Gentry. I'm going to present the remaining four projects.

4 Item d with T2M Global will develop and  
5 demonstrate a waste heat-to-power system using a forward  
6 osmosis power cycle to produce 25 kilowatts of electricity.  
7 The technology promises efficiencies up to 35 percent,  
8 which is over twice the efficiency of conventional waste  
9 heat-to-power technologies.

10 Item e, with Altex Technologies, will design and  
11 demonstrate a cost-effective thermoelectric waste heat-to-  
12 power system by integrating a high-efficiency heat  
13 exchanger with a low-cost thermoelectric generator.  
14 Successful demonstration of this technology will open up  
15 markets with small, low-temperature heat sources which  
16 conventional waste heat-to-power systems cannot access.

17 Item f, with the Institute of Gas Technology,  
18 will develop and demonstrate two near-zero NOx emission,  
19 micro-scale combined heat and power systems. First they  
20 will perform laboratory testing to obtain ARB distributed  
21 generation certification, followed by field demonstrations  
22 to verify real-world performance. If successful, they will  
23 be the first micro-CHP systems in their size range to  
24 achieve ARB distributed generation emissions certification,  
25 making them available for hard-to-reach markets that need

38

1 small, low emissions generation systems.

2           Item g, with EtaGen will demonstrate a packaged  
3 distributed generation technology, which uses an opposed  
4 piston configuration, linear generator technology and a  
5 low-temperature reaction, which allow it to reach up to 45  
6 percent electrical efficiency with very low emissions. The  
7 technology showed great potential in an active Energy  
8 Commission grant, which developed a 100 kilowatt version.  
9 This project will scale the system up to 250 kilowatts and  
10 package it into a commercial product.

11           Staff recommends approval of all these items.  
12 Colin and I are here to answer your questions.

13           CHAIRMAN WEISENMILLER: Thank you.

14           Let's start with is there anyone in the room with  
15 any comments? How about on the phone?

16           (No audible response.)

17           CHAIRMAN WEISENMILLER: So again, let's  
18 transition over to the Commissioners. You know, I think  
19 certainly comparing between the gas side and the power side  
20 where we really need some innovation, in the gas side,  
21 particularly in industry. I'm afraid there's not a lot of  
22 hope on the electric border side of stuff, so it would be  
23 good to come up with some new technologies that can really  
24 reduce gas consumption emissions, by both criteria  
25 pollutants and greenhouse gas.



1           COMMISSIONER DOUGLAS: So I think this is really  
2 interesting too. And I'm really happy to see it. I was  
3 intrigued by the project in Trona in particular. But some  
4 of these other technologies, just really looking at how to  
5 make better use of this waste heat and how to make our  
6 industrial processes more efficient, I think are critically  
7 important.

8           And so I'm in strong support of this as well.  
9 I'll move approval of this item.

10           COMMISSIONER MCALLISTER: I wanted to make one  
11 comment and then I will second. So FYI, really for  
12 everybody, but certainly my colleagues on the dais, the  
13 industrial sector we will be adding, actually to the -- so  
14 we have kind of two reports that have to do with -- or two  
15 sort of plans that have to do with the how to improve the  
16 efficiency of our existing building stock on the one hand  
17 and then SB 350 has a doubling of efficiency on the other  
18 hand. Well, we're going to gold those two together going  
19 forward, and include industry as well as a few other  
20 sectors. And so I think these projects are certainly  
21 relevant for that effort. And industry really depends on  
22 the context and each facility really is different. But as  
23 we engage on a more sort of proactive plan, to target  
24 industry and improve the efficiency of industrial  
25 processes, this just kind of just does jibe perfectly with

1 that, so that's great.

2           And I guess the other thing I wanted to say is  
3 that some of these projects actually are going to become  
4 even more critical when we are using non-fossil gas.  
5 There's a lot of emphasis on electrification and fuel  
6 switching and stuff, but you know we're still going to need  
7 some combustion in some places. And as the uniformity of  
8 gas possibly gets lower its sounding like particularly the  
9 monitoring project is sort of the advanced algorithm to  
10 sort of look at the gas as it comes through and adjust the  
11 combustion accordingly. That's potentially going to be  
12 really relevant when we have different sources of natural  
13 gas that aren't fossil would vary some, but not as much as  
14 would likely will be in the future. So I think some of  
15 these projects really are helping the robustness and  
16 resilience of the gas side.

17           So I'm in strong support and I will second.

18           CHAIRMAN WEISENMILLER: All those in favor?

19           (Ayes.)

20           CHAIRMAN WEISENMILLER: This passes 4-0. Thank  
21 you.

22           Let's go on to Item 7.

23           MR. SOKOL: All right, good morning Chair and  
24 Commissioners. I'm Michael Sokol and I'm here today to  
25 provide the monthly update on SB 350 implementation. And

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1 today I have a brief presentation with a handful of slides  
2 to provide a quick overview on the Energy Equity Indicators  
3 Tracking Progress Report. That draft was recently  
4 published as it relates to the SB 350 Low Income Barriers  
5 Study, so next slide please.

6 So as I mentioned this report actually tracks the  
7 Barrier Study recommendations across the state. It  
8 includes actually 24 figures and a numbers of tables that  
9 display a series of indicators as mapped across the  
10 different regions of the state. And really helps track  
11 performance of both the clean energy programs within low-  
12 income and disadvantaged communities, as well as the  
13 implementation of the Barrier Study recommendations.

14 At the end of the report, there's also a series  
15 of data gaps. And I think one of the key takeaways from  
16 this exercise was realizing the limitations of the  
17 currently available data and where we need to continue to  
18 work with stakeholders, collaborate with our sister  
19 agencies, and build a big picture of performance across a  
20 variety of low-income and disadvantaged community programs  
21 in the state.

22 What you see here on the right side of the  
23 graphic is a map that displays where the low-income census  
24 tracts and locations are across the state, as well as in  
25 the yellow is the disadvantaged communities according to

1 the CalEnviroScreen definition. And so you see there's not  
2 always a clear overlap. There's a lot of low-income areas  
3 that are not in disadvantaged communities. And you see the  
4 red is actually tribal communities, as well. There's just  
5 obviously a variety of definitions of low-income that are  
6 out there. And so we actually mapped different thresholds,  
7 which may be hard to see at this scale, but when you look  
8 at the tracking progress report itself, it has a lot more  
9 detail about how we determined the proper threshold for  
10 this Tracking Progress Report.

11           And I should also note that the publication of  
12 this Tracking Progress Report also represents  
13 implementation of one of the recommendations from the  
14 Barrier Study, which is Recommendation Number 5 to better  
15 use data across programs and track progress. Next slide?

16           There were three core objectives that were stated  
17 in the Energy Equity Indicators Tracking Progress, really  
18 focused around nine indicators that were developed putting  
19 some objectives in place, which we can track progress  
20 towards. Starting with increasing access to clean energy  
21 technologies, including the benefits that are enabled such  
22 as the jobs and small business development opportunities,  
23 as well as access to the financing mechanisms to encourage  
24 increased deployment of clean energy technologies where  
25 numbers served, you see is a key indicator under the access

1 objective.

2           Second is to encourage investments in low-income  
3 and disadvantaged communities on the energy side,  
4 particularly looking at the amount invested by some of the  
5 programs, including our EPIC technology demonstration and  
6 deployment funding. Some of the energy savings or deployed  
7 capacity that are resultant from those investments, as  
8 indicators, and also infrastructure investment more broadly  
9 on the clean energy side and local capacity building  
10 investments that are related to the clean energy economy.

11           Third, and you know this is a theme apparently  
12 today at the business meeting, but one of the key  
13 objectives is to improve local community resilience in low-  
14 income and disadvantaged communities. And so, there are  
15 several indicators focused on tracking resilience, but as  
16 it relates to not only the ability to withstand and recover  
17 from natural disasters, grid outages, climate change  
18 adaptation, but also on the health and safety side and some  
19 of the non-energy side of clean energy looking at, really  
20 the energy burden and August electricity bill as a proxy  
21 for vulnerability within some of the low-income  
22 communities. Next slide.

23           And so I've included just a couple of maps here,  
24 just to highlight some of the work that's contained in the  
25 report. The map you see here is a close-up of the Southern

1 California Edison territory, where it shows the dots are  
2 census tracts within low-income areas that the mean  
3 electricity bill for the month of August is greater than  
4 \$300, which when you look at how that translates from an  
5 income perspective that's a huge energy burden that can be  
6 even greater than 10 percent of a customer's monthly  
7 income. And so you can tell that really that's driving the  
8 importance of this.

9           And in August, in Southern California Edison  
10 territory, you can see that it's likely a lot of that is  
11 air conditioner load. And so there's a layer there where  
12 you can see the kind of crosshatch that represents where  
13 the climate models in Cal-Adapt are projecting a dramatic  
14 increase in the number of cooling degree days, over the  
15 next number of years. And so you can expect that that  
16 energy burden would only continue to increase, which  
17 presents an opportunity for interventions with energy  
18 efficiency, distributed energy, or other ways to reduce the  
19 energy burden within the region.

20           Similarly, as we move forward we would look to  
21 incorporate some better natural gas data, and look at sort  
22 of a high-heating cost similar energy burden indicator for  
23 winter months in some other areas across the state. Next  
24 slide.

25           So this map here shows a close-up of the Los

1 Angeles area. Really, on the research and development side  
2 and for the amount of invested objective, but it's looking  
3 at the EPIC programs technology demonstration and  
4 deployment funding for sites throughout the L.A. area. And  
5 you can see that the brown/yellow/orange dots are sites  
6 located within disadvantaged communities. And the blue are  
7 sites located outside of disadvantaged communities, where  
8 the yellow boundary shows where the disadvantage  
9 communities are actually located across the state. And  
10 then the green is the low-income census tracts.

11           And so really, this is just to highlight again  
12 one of the recommendations from the Barrier Study was to  
13 have at least 25 percent of EPIC technology demonstration  
14 deployment funding going to sites located in disadvantaged  
15 communities. And so and now it was codified last year with  
16 some other requirements by AB 523. And so this just shows  
17 that we're making progress along that trajectory. Of  
18 course this is just one area, but there's data for the  
19 whole state as well. And if you look at the draft report  
20 it has the statewide map. Next slide.

21           So just a quick update on process, we of course  
22 published the Barrier Study at the end of 2016. We put a  
23 draft framework and indicators document out for comment  
24 last year in May, got a number of comments and feedback.  
25 And then basically nose to the grindstone have been working

1 and collaborating and digging into acquiring the necessary  
2 data to put this draft out, which was just published in  
3 early March.

4           We then received comments last Friday, on March  
5 16th. And we got a total of six sets of comments from a  
6 range of stakeholders including Southern California Gas  
7 Company, Brightline Defense and Rising Sun Energy Center,  
8 as well as some just interested individuals, including two  
9 representatives of the Disadvantaged Community Advisory  
10 Group that are eager to get involved and are excited to  
11 contribute to the next steps for the Barrier Study.

12           So there were a range of comments, including  
13 supporting sort of our next steps, and data gaps identified  
14 in the report for strengthening things like the workforce  
15 development indicators and data that we have available to  
16 us, as well as including natural gas data in future updates  
17 of the report, which we do intend to do.

18           And I also want to acknowledge that there is a  
19 broad range of informal comments, discussions, stakeholder  
20 engagement throughout the development process that have  
21 really been critical to getting this to the point it's at  
22 today.

23           So moving forward, we would incorporate the  
24 comments and feedback and put a Final Tracking Progress  
25 Report out within the next month. And then move towards



1 more of an interactive mapping tool by this summer, which  
2 will allow folks to zoom in on different sections of the  
3 state, toggle on and off different layers, and really  
4 conduct their own analysis. And then of course, add  
5 additional data and refine as necessary.

6           The Tracking Progress Report itself would be  
7 updated annually, in the December timeframe.

8           And then of course, one of the key takeaways  
9 again is the stakeholder coordination. The data collection  
10 exercises are going to be ongoing to support this effort.  
11 And so things like the Title 20 Data Collection Rulemaking  
12 are really going to be critical to future iterations of  
13 this. So next slide, please.

14           I did include a slide here with links to more  
15 information. And then we'll of course get this posted on  
16 the website for folks, links to the Tracking Progress  
17 Report as well as the Barrier Study and a lot of related  
18 documentation. And last slide please, next.

19           So lastly, I just wanted to make sure that I  
20 acknowledged the key roles played by a number of folks both  
21 within the Energy Commission and externally, starting with  
22 Pam Doughman, Advisor to the Chair, who really is kind of  
23 the mastermind behind developing the framework and  
24 indicators and has just been critical to moving this  
25 forward. Travis David in the Cartography Unit, who

1 developed all these maps, and has just been really great to  
2 work with and really turn things around very quickly. A  
3 number of folks from our Efficiency Division, where we have  
4 Tiffany Mateo, Robert Ridgley, Jorge Gonzales and Hengbing  
5 Zhao (phonetic) that really developed a lot of the content  
6 in here, did some thinking about what the indicators should  
7 look like and where the key data sources would come from.  
8 And then a range of folks from our Research and Development  
9 Division, Energy Assessments Division, and Fuels and  
10 Transportation Division for providing a lot of the data and  
11 input to help shape the draft that you see today.

12           Also, I want to thank Akua McLeod, who spent some  
13 time in the Chair's Office last summer and did a lot of  
14 heavy lifting on helping design the framework and the  
15 original indicators that were posted.

16           Lastly, the media team helped quite a bit with  
17 outreach developing blog posts, etcetera for this.

18           And certainly last, but not least, I want to  
19 thank again all the SB 350 stakeholders and the barrier  
20 study folks that contributed content along the way, because  
21 really this effort would not happen without them.

22           So with that I'll go ahead and stop there and  
23 would answer any questions.

24           CHAIRMAN WEISENMILLER: Yeah. I think it's  
25 useful Mike, could you put back on the screen, the very

1 first slide? Actually, yeah, that one.

2           Yeah, the thing I wanted to point out is the  
3 statistic I heard from Ron Nichols. And obviously when you  
4 look at L.A. you've got service territories, you've got  
5 LADWP, you've got Edison, you have a number of POU's, but  
6 something like 47 percent of DACS or Edison service  
7 territory. And then again you see obviously pretty heavy  
8 concentration in the Central Valley. But it is just  
9 amazing how dominant L.A. is for this, so certainly  
10 encouraging people to again focus on projects in the L.A.  
11 Basin and certainly the Central Valley, which isn't to say  
12 that say the Bay Area there's sort of DACS throughout the  
13 state and travel throughout the state. But it's just  
14 amazing how much the L.A. regionally dominates in that  
15 area.

16           UNIDENTIFIED SPEAKER: The Inland Empire.

17           CHAIRMAN WEISENMILLER: Yeah, and Inland Empire.  
18 So anyway, thank you.

19           COMMISSIONER SCOTT: Thanks, Mike. This is a  
20 great presentation. And it'll be great to, I think to have  
21 our tracking progress indicators out there in final form,  
22 in relatively short order. So that's really exciting.

23           Another topic that I wanted to raise with you all  
24 is, as you know in our upcoming Integrated Energy Policy  
25 Report we are going to be talking through, and setting up

1 some different workshops that are focused on some of these  
2 equity indicators. And I think that this forum, the  
3 discussion time that we have set aside in today's Item  
4 Number 7, but it's usually the very last one, might be a  
5 good place for us to, if nothing else at least provide each  
6 other with updates about what we're doing as all of this  
7 comes together. It gives us just an opportunity to talk  
8 about what we're putting together on both the IEPR side.

9           And then also on the disadvantaged community side  
10 I think we're going to be working to try and do some  
11 follow-up and do some additional workshops in that space as  
12 well.

13           And then I have been working with Commissioner  
14 Rechtschaffen over at the Public Utilities Commission to  
15 put together a -- and Mike Sokol and others -- to put  
16 together probably in July or August, a workshop where we go  
17 through the 12 recommendations that we made as part of our  
18 Low-Income Barrier Study and talk through how far we've  
19 gotten on putting in solutions to those barriers and see  
20 where we are and kind of what needs to be done next. And  
21 so we'll, of course, keep you posted as we get closer to  
22 that and what the agenda looks like and what the topics  
23 are. But this might be a good space for us to kind of keep  
24 each other updated, as we've got so many moving components.

25           CHAIRMAN WEISENMILLER: Yeah, no, that's good. I

1 mean, obviously one of these collectively we struggled with  
2 on the IEPR structure, was to continue to have a way to  
3 have conversations on the low-income area and not get too  
4 solid there since it cuts across everything. So I think I  
5 was also going to encourage you and Cliff to reach out to  
6 the ARB, now that they have their Barriers Report out on  
7 the street, to see if we can approach that more in a  
8 consolidated fashion at that workshop.

9 COMMISSIONER SCOTT: Yes, I can do that.

10 CHAIRMAN WEISENMILLER: Yeah. But I mean again,  
11 I think it's really important that we continue to, under 7  
12 or potentially 8 or 9, but anyway we can continue to have  
13 these conversations on low-income.

14 My other question was just we have gotten what  
15 I'll characterize as an outstanding proposal from  
16 Greenlining to get some one-stop assistance areas around  
17 the state. And that was one of our recommendations. I  
18 don't know if you have a sense of, I think they were  
19 looking from primarily to NGO or foundations for money, but  
20 with some seed money from the state. Do you know where  
21 that stands or?

22 COMMISSIONER SCOTT: We do need to check in on  
23 where that is. We both Cliff Rechtschaffen from the PUC  
24 and I had talked about this on the last little meet-up that  
25 we had together. I need to do a little kind of tracking

1 down to see where we are. And I don't have the answers to  
2 that yet, but hopefully by this time next month, we'll have  
3 some more information where we are there.

4 CHAIRMAN WEISENMILLER: Yeah. And it's either  
5 here or now, but why don't you also describe for people the  
6 Disadvantaged Community Advisory Committee meeting coming  
7 up?

8 COMMISSIONER SCOTT: Sure, so we have coming up,  
9 as you just mentioned, a Disadvantaged Advisory Committee  
10 meeting. We are so delighted to have the group together.  
11 And I'm looking -- is Alana in the room? I think we're  
12 planning to do it on April 4th, but don't quote me on that.  
13 We'll get the notice out and that's what you should follow  
14 for the date that it's going to be.

15 And it's really just going to be getting started,  
16 but we're excited about it. We want to talk with our  
17 Disadvantaged Communities Advisory Group about the  
18 implementation of what we've done with regard to SB 350 so  
19 far, get their best thoughts on that, their best advice.

20 The other part of the meeting for them will be in  
21 -- we want to put it on a date where hopefully the lion's  
22 share of the four of us: Chair Weisenmiller, you and me and  
23 then also Commissioner Guzman-Aceves and Commissioner  
24 Rechtschaffen from the Public Utilities Commission can be  
25 there to welcome the group, let them know how important

1 they are, how excited we are to work with them. And kind  
2 of hear from them their initial feedback about what's taken  
3 place on SB 350 implementation.

4 And then for them, the second half of the meeting  
5 will be exciting things like learning about Bagley-Keene  
6 and how to work with one another under that. So it'll be  
7 kind of a process oriented on the second half of the day.  
8 But we're very much looking forward to it. I think it's  
9 going to be on April 4th, but again please check our  
10 webpage. It'll tell you the exact day when that'll be.

11 CHAIRMAN WEISENMILLER: Yeah, I think it's the  
12 4th. I think it's in Sacramento. And there will be  
13 obviously additional meetings throughout the rest of the  
14 year, although those will be I think one in San Francisco  
15 and one in Los Angeles, so we have some geographical. But  
16 anyway to the extent any of the other Commissioners want to  
17 drop in, this is probably the easiest time to drop in, I  
18 guess is my statement.

19 But again, I think it's the 4th, but I would  
20 encourage everyone to look at the posting when it comes  
21 out.

22 COMMISSIONER SCOTT: Yes. Please do.

23 MS. SMITH: Great. If I could real quick before  
24 we move away from the equity discussion, I just wanted to  
25 confirm that the direction that we're getting is to add an

1 agenda item to all of the business meetings, specifically  
2 to provide an opportunity for you to discuss equity-related  
3 activities in support of the IEPR. Is that correct?

4 CHAIRMAN WEISENMILLER: Yeah. So what you're  
5 suggesting is right now we're having a conversation under  
6 the 350 implementation. And it's probably better to think  
7 about it as under the IEPR, so that would make sense,  
8 right?

9 MS. SMITH: Okay. I think so.

10 CHAIRMAN WEISENMILLER: Okay.

11 MS. SMITH: Great. Thank you for that  
12 clarification.

13 CHAIRMAN WEISENMILLER: Yes. No, thanks for  
14 asking.

15 Minutes?

16 COMMISSIONER MCALLISTER: Do we want sort of give  
17 that -- help people understand that (indiscernible) or why  
18 the agenda is the way it is?

19 CHAIRMAN WEISENMILLER: Sure. Why don't you get  
20 online.

21 COMMISSIONER MCALLISTER: So I guess the -- you  
22 know I think all of the Commissioner offices really see the  
23 primacy of these equity issues, you know? We have  
24 structural developments in the state that really just  
25 demand that we pay more attention to this. You know the



1 housing crisis and divisions of economic -- a division of  
2 wealth, basically.

3           So in the scoping of the IEPR, you know within  
4 the Bagley-Keene limitations that we have, but I can talk  
5 about it here at this meeting, I think everybody expressed  
6 -- all the Commissioners expressed a high desire to  
7 participate in that discussion is my understanding. And  
8 certainly on energy efficiency, which is my lead area I  
9 think there's a lot we are doing. There's a lot that we  
10 need to bring to the table in the IEPR context to make sure  
11 that the disadvantaged community efforts are well  
12 coordinated.

13           So the IEPR has a structure that sort of reflects  
14 that. And a series of workshops that will be coming along  
15 this year will be opportunities I think for all the  
16 Commissioners and all the stakeholders to engage, but in  
17 particular just make sure that the topics get the thorough  
18 treatment that they deserve, whether it's efficiency or  
19 transportation or any other topic.

20           So I think that that's why maybe this IEPR will  
21 look a little bit different, but it's really to give this  
22 effort and a few other efforts, topics, their full due  
23 within the IEPR process.

24           MS. VACCARO: So I think on that, if you don't  
25 mind, I would just ask if there are for the Lead

1 Commissioner Report, something to report out, but we're  
2 sort of transitioning into an IEPR discussion. And we  
3 don't have that agendized for the public, although there  
4 are elements that naturally fit under the 350 discussion.  
5 I think that's exactly why Ms. Smith was asking, "In the  
6 future would you like to have a place at the meetings to  
7 specifically discuss this topic?"

8 CHAIRMAN WEISENMILLER: That's good. And just to  
9 remind everyone that in terms of Lead Commissioner on these  
10 issues, Commissioner Scott is our Lead on these issues  
11 although we didn't go through various contortions to make  
12 sure we can all focus on them.

13 So minutes?

14 COMMISSIONER SCOTT: Move approval of minutes.

15 COMMISSIONER MCALLISTER: Second

16 CHAIRMAN WEISENMILLER: All those in favor?

17 (Ayes.)

18 CHAIRMAN WEISENMILLER: So the minutes are  
19 approved 4-0.

20 Lead Commissioner, Commissioner Scott?

21 COMMISSIONER SCOTT: Sure. I have a couple of  
22 reports for you all. First, last week we had our  
23 Alternative and Renewable Fuel and Vehicle Technology  
24 Program Advisory Committee meeting.

25 I really just want to say, first of all, thank

1 you so much to Jacob Orenberg, who writes that report for  
2 us. He had drafted a version in advance of the January  
3 Governor's budget release. And then with the January  
4 Governor's budgeted release, the proposal is to give the  
5 Energy Commission some additional funds for zero emission  
6 vehicle infrastructure, so Jacob had to go back and rewrite  
7 the report to update it to highlight that. He did a  
8 fantastic job with that and we had a chance to discuss it  
9 with our Advisory Committee last week.

10 For the most part, our stakeholders and our  
11 Advisory Committee are really excited about this increased  
12 investment, going into zero emission vehicle  
13 infrastructure. They're supportive of the proposal that  
14 the Energy Commission has put together about how to kind of  
15 allocate the \$235 million that's proposed between charging  
16 infrastructure and hydrogen infrastructure and then just a  
17 little bit or workforce training and manufacturing. Just  
18 that's kind of our signature things that the Energy  
19 Commission has done within this program. And to get some  
20 of that cutting edge manufacturing here in the state for  
21 those technologies would be fantastic. In addition,  
22 assuring that we have a well-trained workforce who know how  
23 to utilize, help service those technologies is great.

24 So people were really excited about it. Our  
25 friends from Greenlining and the environmental justice

1 community really liked the workforce training component  
2 that goes along with that. They are interested in engaging  
3 with us to make sure we do the best job that we can to get  
4 the infrastructure in key places around all low-income and  
5 disadvantaged communities in the state, so just a lot of  
6 really good, positive energy and excitement.

7           The biofuels industry is not especially happy  
8 with the addition of the funding to the zero emission  
9 vehicle infrastructure. They'd like to see that be sort of  
10 more proportionately divided amongst, I think, all of the  
11 different types of technologies that fit within alternative  
12 and renewable fuels and vehicle technologies. We, of  
13 course support the Governor's budget. And so we will  
14 continue to work with them and also to work with others. I  
15 think that one of the concerns with that they'd like to see  
16 more money of course into the biofuels area.

17           The other concern was that on some of the  
18 emerging technologies like renewable hydrogen, for example,  
19 they might need this type of funding to be able to get up  
20 and running, to be able to make the case to investors that  
21 that -- and so some of the new -- maybe new is not quite  
22 the right word for renewable hydrogen, but some of the more  
23 emerging renewable fuels.

24           So those were some of the concerns that were  
25 raised at the meeting. But I just wanted to highlight it

1 for you, because it's really exciting for us to have this  
2 level of dollars in the zero emission vehicle  
3 infrastructure. This is something the Commission has done,  
4 mostly by itself, until the Public Utilities Commission  
5 allowed the investor owned utilities to get back in the  
6 game, before the VW settlement, all of these things. So  
7 we've really laid a good foundation for the state and are  
8 excited to see investments keeping pace with vehicle  
9 investments.

10 So it's just a little bit different than what  
11 you'll -- what you've normally seen with \$100 million.  
12 This year, we have about \$277 million that are part of that  
13 program. So that's just a heads up, that will come to you  
14 all in the May business meeting, for your consideration.

15 Then the other thing that I wanted to highlight,  
16 or maybe Chair Weisenmiller, I'll let you highlight this,  
17 but we had an in-person meeting with the Department Of  
18 Navy, which was great. It's been a little while to kind of  
19 get back together the partnership that we've had with the  
20 Department of Navy through the change in Administration.  
21 And what they've decided is to have more regional focus  
22 with the Energy Commission, rather than sort of Pentagon  
23 Washington D.C. focus with the Energy Commission.

24 But Admiral Lindsey, who oversees Navy Region  
25 Southwest, and General Killea, who oversees -- I actually

1 forget -- I think his region is somewhat similar for the  
2 Marines. And they're both really gung ho, excited to work  
3 with us, thrilled about the microgrid projects, continuing  
4 to work together on the vehicles. And so just a lot of  
5 energy and enthusiasm, so really excited to pick that up  
6 and continue that partnership together. We talked broader  
7 than vehicles, so maybe I'll let you weigh in on that when  
8 you provide your update, Chair Weisenmiller.

9           And then of course the most exciting part, for me  
10 from this month, is the Alternative and Renewable Fuel and  
11 Vehicle Technology Program, ARFVTP, 10th anniversary, which  
12 this whole year is the 10th anniversary of the program.  
13 But we did a celebration on March 7th, that had a showcase  
14 out front of the Capitol, in between the Capitol on the L  
15 Street side, so in between the Capitol and when everybody  
16 goes out to get coffee or tea or lunch. So we got quite a  
17 few legislators that came through, quite a bit of public,  
18 lots of Energy Commission staff went and attended. And it  
19 was just a great opportunity to showcase a lot of the  
20 accomplishments and successes from ARFVTP.

21           And so we had a really nice range. We had the  
22 Port of San Diego came up and kind of highlighted the Port  
23 Collaborative and the work that they're doing there. We  
24 had some biofuel folks from Crimson Renewable and CR&R talk  
25 about the projects that they have going on. We had the

1 largest -- the folks who did the largest rural deployment  
2 of solar-powered chargers, which is in Fresno County. It's  
3 in 13 of the 15 cities in Fresno County, came and  
4 highlighted the mobile chargers and what they're working on  
5 there. We had Zero Motorcycles and Protera and BYD and  
6 just a whole bunch of people, GTrans came together and made  
7 it a really wonderful showcase.

8           And then we did an event and we had speakers,  
9 Chair Weisenmiller spoke. Secretary Laird and former  
10 Speaker Nunez, who were kind of the key coauthors of AB 118  
11 spoke. Senator Skinner did, with her colleagues Senator  
12 Wieckowski and Assemblymember Bloom, had put together a  
13 resolution celebrating ten years of ARFVTP. So she came  
14 and presented that to us at the event, so just it was a  
15 really wonderful celebration. People are excited about the  
16 program, excited about the progress that we've made,  
17 looking forward to many more years of helping transform  
18 transportation for the people of California.

19           And I really wanted to say thank you to Melissa  
20 Jones-Ferguson on our team. She kind of took the lead in  
21 implementing this, making sure all the logistics and  
22 details got done; Bailey with our awesome logo that went  
23 along with it; and Katy and Vince getting photos and videos  
24 for us. Barry and Sarah and Jose did a terrific job. They  
25 had the idea of the resolution and helped make that come

1 true and helped us secure a room in the Capitol to do the  
2 event. To Tami Haas and John Kato from the Transportation  
3 team, really just helped pull together the projects to get  
4 us in contact with the different project developers. And  
5 Rhetta and Monica on my team just really did a hero's  
6 effort of also helping kind of pull together all the  
7 details to make sure that the whole event went smoothly.

8 And so just thanks a lot to everyone who  
9 participated and thank you for letting me glow about the  
10 event a little bit.

11 CHAIRMAN WEISENMILLER: Yeah, I was just going  
12 add quickly to that, but also obviously a thanks to  
13 ClimateWorks for the food.

14 COMMISSIONER SCOTT: Of course. Yes.

15 CHAIRMAN WEISENMILLER: And also, what was very  
16 nice too, was a lot of the alumni for that program were  
17 there including Commissioners Boyd and Geesman. But since  
18 we -- it's good to see people come back since that whole  
19 thing really reflected a lot of the labors of the staff,  
20 not just the existing.

21 COMMISSIONER MCALLISTER: All right, I'll be  
22 pretty brief. Let's see, I guess I wanted just to sort of  
23 highlight some of the things we've made progress on. I  
24 don't have any great trips or events to -- well, I have one  
25 event -- to highlight too much.



1           But in particular, I've been thinking a lot about  
2 the multifamily, you know, in the context of the barriers,  
3 multifamily housing, and sort of the energy piece of that.  
4 But really just as a topic that's worthy of policy  
5 attention. It just ties up so many themes that are  
6 relevant in California and energy is certainly one of  
7 those. You know the existing building stock, it's  
8 something like 40 percent of the state lives in multifamily  
9 of some type, and many, many of those are low income. And  
10 many, many of those are on care rates. And so it's really  
11 a sector that we need to target and do better and get our  
12 buildings performing better.

13           And it's a particular tough one, because it  
14 generally needs a subsidy to make that happen. And so, I  
15 think buildings as a platform kind of approach with  
16 multifamily, really should be front and center. And we've  
17 been thinking about how to incorporate those into the  
18 Existing Building Action Plan Update and the 350 Efficiency  
19 Update.

20           But if you think about it, buildings are where  
21 the solar on the roof and battery in the basement and  
22 demand responsiveness and charger in the parking lot and  
23 energy efficiency, you know, as a deep retrofit, that's  
24 really where we need to go. And when we're in these  
25 buildings, getting them refinanced every 15 years we really

1 -- that's our opportunity to throw some additional  
2 resources at those projects and really go deep. And so  
3 that's I think really becoming central for a whole bunch of  
4 different reasons for how I think of us needing to move  
5 forward in the buildings area.

6           So maybe a year, a little over a year ago, at an  
7 event here in Sacramento that the Center for Law, Energy  
8 and the Environment put on, CLEE, and they're actually  
9 based in Berkley. And they're a collaboration between UC  
10 Berkeley and UCLA, we talked about and sort of turned them  
11 on to this idea. And they have since put together a really  
12 nice convening on this topic, on multifamily low-income.  
13 Got experts from all over the state together and had sort  
14 of a whole day of brainstorming essentially, about how we  
15 can sort of crack this nut and what the conditions are  
16 needed to what resources are needed, and kind of what the  
17 barriers that we need to look at really are. So you know a  
18 lot of this sort of totally jibes well with the Barriers  
19 Report and the work we did there. But really digging in to  
20 a level, or two or three deeper to figure out what is the  
21 policy prescription that we really need? And so they're  
22 going to be cranking out a report, going to be talking  
23 about this in the various platforms going forward, to do  
24 the updates of these action plans.

25           But I just wanted to kind of get people thinking

1 about that, because I just -- I think it's critical. You  
2 know, it taps into the equity issues that we have and that  
3 housing densification, you know. It gets into settlement  
4 patterns. It just gets into all these issues that are key  
5 for the state. And they're really beyond energy, many of  
6 them, but they're all interrelated. And so that's why this  
7 is such a kind of a hoary problem. So a lot of people need  
8 this effort. And I think time to do it.

9           And then the other item I just wanted to  
10 highlight is the development of the Commission-wide data  
11 analytics platform. It's coming along. It's a big lift.  
12 But I really think in a couple of years, in a year or two  
13 we're going to be able to do analytics that we're now just  
14 beginning to conceive. We saw some of it in Mike's report,  
15 about the geographical aspects of this and the great  
16 cartography skills that we're building. But we're going to  
17 be having a lot of new and much more detailed data coming  
18 in, in part because we updated our data regs a couple of  
19 business meetings ago. And we'll start on Phase II of that  
20 effort to broaden past just data from the utilities for the  
21 most part, but really try to get data from other sectors as  
22 well, that will help do better policy analysis and move our  
23 SB 350 goals and others forward.

24           And so I'm really excited about that. And you  
25 know I think staff is doing a great job and the Executive

1 Office is just pushing that forward and making sure that  
2 we're acting within our means. But really focusing on the  
3 right things and then in figuring out what collaborations  
4 we need to go forward with to build a tool that's enough  
5 state-of-the-art that it's really going to serve the  
6 Commission well for the long haul.

7 So I wanted to just highlight that effort and  
8 would encourage all of you to get a briefing, if you're not  
9 already getting them. So thanks.

10 COMMISSIONER DOUGLAS: All right, good, well  
11 thank you.

12 I have been spending a lot and maybe even, maybe  
13 without a doubt most of my time working on issues related  
14 to the Desert Renewable Energy Conservation Plan and the  
15 Scoping Order put out by the Bureau of Land Management that  
16 requested comments on the Plan and teed up a potential  
17 reopening of the Plan.

18 I have spent a lot of time talking to key  
19 California stakeholders throughout the desert on really  
20 every side of the issue. I think that while there is never  
21 complete and total agreement on any one thing, I think the  
22 by and far overwhelming balance of the comments and number  
23 of the comments going in, are going to have the message  
24 that the Plan is important and it shouldn't be reopened.  
25 And it should be BLM should really focus on implementation

1 of the Plan in a collaborative way. And the Plan has some  
2 built in flexibility. And we should look at addressing  
3 issues through implementation. And that's really where the  
4 focus needs to be.

5 We are -- the comment deadline closes on  
6 Thursday. So I think at that point, comments will be in  
7 and we will see where we go next. But it has certainly  
8 been a both intensive, and frankly also really rewarding  
9 process, of going back and reengaging with people who put  
10 so much into this eight-plus year effort. And reconnecting  
11 on what we achieved and what we need to hold onto and what  
12 we need to build on, going forward.

13 So in that effort I did on February 27th, have  
14 the opportunity to speak to the Board at Inyo County in  
15 their regular Board meeting. I've had a number of multiple  
16 conversations with different county staff, county  
17 supervisors, certainly quite a lot of the companies that  
18 develop on public lands, utilities and many, many more  
19 stakeholders.

20 In addition to that, I had an opportunity to  
21 speak at the 4th Annual Solar Conference in Riverside,  
22 California and give a key note on March 1st. I had the  
23 opportunity to, or the Energy Commission actually put  
24 together a webinar to help the public catch up on where  
25 discussions have gone on the offshore wind topic. That was

1 March 12th and so we had a webinar with the Department of  
2 Defense and Bureau of Ocean Energy Management and just kind  
3 of walked through what has happened, leading up to this  
4 point and what the likely next steps will be.

5           Those likely next steps will include some focused  
6 outreach in Northern California, because the Redwood Coast  
7 Energy Authority has actually issued an RFP and gotten  
8 four, I think what they view as very strong responses from  
9 companies that all have a strong track record and ability  
10 to build projects. Now, they, I think will make a decision  
11 at some point very soon and are considering moving forward  
12 with the project that would serve mostly or probably  
13 entirely, local load in Humboldt County.

14           Humboldt County is geographically and also  
15 electrically a very isolated part of the state. It is also  
16 obviously not very sunny. And so for a number of reasons  
17 this is a resource that could be very beneficial in a  
18 region that is not seeing a lot of the benefits of the  
19 solar boom in other parts of the state. And, of course,  
20 they do have solar. They are doing some rooftop. They are  
21 doing some smaller scale projects in Humboldt County, but  
22 it's a very different scenario when you have the amount of  
23 fog and rain that they typically have.

24           So I think that will -- I think that's probably  
25 enough report from me at this point.

1           CHAIRMAN WEISENMILLER: Okay. I'm just going to  
2 hit four different things. One is just building off of  
3 what Commissioner Scott said. We've had a really good  
4 working relationship with the Navy and Marines and  
5 obviously they play a key role in California. When we had  
6 the recession, frankly a lot of the -- you know, there's  
7 been this pivot in the military towards Asia and a real  
8 build-out in San Diego in the Navy and the Marines. And so  
9 while the rest of the state's economy was sort of in a  
10 stall, I mean they were constructing a lot of stuff in  
11 Southern California, so that was pretty critical at that  
12 stage. And it continues to be really an area of increasing  
13 focus.

14           And so we have had, I mean part of the change is  
15 that historically we had first with Jackie Pfannenstiel and  
16 then with Denny McGinn we had sort of a top-down, come out  
17 from D.C., Deputy Secretary to meet and talk about energy.  
18 And that's been the Deputy Secretary position there for the  
19 Navy and Marines, I think has been vacant for a long time.  
20 I think they now have someone in there. I'm not sure if  
21 she's confirmed yet. But anyway so at some point recently  
22 they just concluded that yeah instead of waiting for the  
23 new Deputy Secretary to really engage with us it was time  
24 to just start with the base and start working and continue  
25 working on stuff.

1           So this was a good chance to get back together  
2 again. And part of it, it's a two-way flow of information  
3 I guess I would say. Like we were pretty clear to them or  
4 at least provided the new fire maps. You know, it was sort  
5 of one of those meetings where in the middle of it their  
6 appropriate person pulled out on his iPad the 207 fire map  
7 and started showing his boss that. And we're going no,  
8 actually there's worse ones out that you need to look at  
9 and get the GIS one. So there was that, talking about some  
10 of their legislative priorities, and some of the things,  
11 certainly resilience.

12           In fact, what used to be the old Renewable Office  
13 in the Navy is now basically substituted. It keeps the  
14 same acronym, but it substitutes resilience for renewables.  
15 And so there's a real focus on resilience and so again,  
16 that's something which with our focus on resilience, at  
17 this stage I think there's a lot of opportunities to  
18 continue working together, particularly on the microgrid  
19 too.

20           They are a nice test bed in the sense that  
21 Laurie's (phonetic) folks may come up with some new ideas  
22 on technology and then you get to the question of who's  
23 willing to try those? Some of them obviously don't work  
24 and others work marvelously, but the Navy's already been a  
25 good partner to at least try something and see what



1 actually works or what time to retire back to the labs  
2 with. And it's harder to find a private industry that has  
3 that degree of patience or flexibility to try something.  
4 So that's been a good partnership.

5 In addition, I would note on the resilience topic  
6 that the Governor and key legislative leaders issued a  
7 statement reality. You know, the reality is that our  
8 climate has changed. The reality is that it's gone from a  
9 sort of academic question to real-world issues and  
10 certainly it flies with some of the issues that we need to  
11 deal with pretty quickly in terms of ensuring utility  
12 operations going forward.

13 So it was good to get that unanimity and I would  
14 note that the stock market, which kept tanking for  
15 utilities actually did somewhat of a rebound with that  
16 statement. So now we just have to figure out how to get  
17 meaningful legislative action. And unfortunately the  
18 financial markets tend to move much faster than either  
19 regulatory Commissions or legislative bodies, or can move  
20 much faster. So we're hoping to keep focused on that.

21 The other two things I was going to mention, so  
22 we had an event at Caltech for John and Louise Bryson and  
23 John has had a remarkable career. He was one of the  
24 founders of the NRDC, you know, the San Francisco Office.  
25 So Ralph Cavanaugh was one of the speakers. He was at the

1 Water Board in the first Brown Administration and then was  
2 President at the PUC and went from the sort of interactive  
3 law with John in that period, and did a lot of interesting  
4 transformative things at the PUC. He went from there to  
5 Morrison Foerster in telecommunications and went from there  
6 to Edison. And ultimately became the CEO there. And then  
7 in the Obama Administration was the Secretary of Commerce,  
8 so has had a very, very illustrious career.

9           So anyway, this was a celebration. The two  
10 Nichols were there, Mary and Ron, they provided genetic  
11 proof that they're not related. (Laughter.) But anyway  
12 and so it was a good chance to celebrate him and Louise,  
13 his wife.

14           And finally, I went back to the National Academy  
15 of Science has a series of subcommittees and there's one on  
16 energy, so I'm a member now of that committee. Actually  
17 this was last year, but I missed the last year meeting.  
18 And the National Academy actually goes back 150 years.  
19 Abraham Lincoln started it as sort of -- I mean, it's  
20 amazing you have a civil war going on and he basically sets  
21 up an institution for scientists to advise the government  
22 on issues.

23           And their normal operation is for the Congress  
24 basically to put something in statute saying, "Go do a  
25 study of X." And so they've done a lot of studies. I

1 guess it was Klino (phonetic) Act or one of those like 207,  
2 directed them to every five years to do updates on  
3 basically transportation options. You know, so they're  
4 gearing up for the next one, which is like 2020. That will  
5 come out that they do both light vehicle and heavy-duty  
6 vehicle options, basically. So we talked about that.

7           They're obviously struggling at this point, since  
8 you have an Administration that certainly does not place a  
9 high premium on scientific advice nor does Congress. I  
10 guess in terms of the Administration both EPA and the Chair  
11 have directed their staff never to contract with the  
12 National Academy at this stage.

13           So anyway, it's --

14           (Off mic colloquy.)

15           CHAIRMAN WEISENMILLER: Yeah, no so anyway it was  
16 a good chance to talk to people and meet with a number of  
17 folks, talk about next steps. They're going to help us  
18 publicize the results of the Fourth Climate Assessment more  
19 in the D.C. context and provide a little bit of light there  
20 on climate and resilience issues. But anyways, so that was  
21 certainly good. Mary Nichols is on the Environmental  
22 Subcommittee and as I said I'm on the Energy one.

23           So with that, let's go to Chief Counsel's Report.

24           MS. VACCARO: Nothing today. Thank you.

25           CHAIRMAN WEISENMILLER: Okay. Let's go to

1 Executive Director's Report?

2 MS. SMITH: No update this time. Thank you.

3 CHAIRMAN WEISENMILLER: Thank you.

4 Public Advisor Report?

5 MS. MURIMI: Nothing to update at this time.

6 CHAIRMAN WEISENMILLER: Thank you.

7 Any public comment?

8 (No audible response.)

9 CHAIRMAN WEISENMILLER: This meeting's adjourned.

10 (Adjourned the Business Meeting at 11:38 a.m.)

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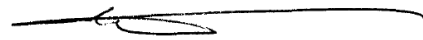
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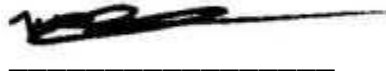
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