

DOCKETED

Docket Number:	19-BUSMTG-01
Project Title:	2019 Business Meeting Transcripts
TN #:	227260
Document Title:	Transcript of 02202019 Business Meeting
Description:	N/A
Filer:	Cody Goldthrite
Organization:	California Energy Commission
Submitter Role:	Commission Staff
Submission Date:	3/4/2019 2:47:28 PM
Docketed Date:	3/4/2019

BUSINESS MEETING
BEFORE THE
CALIFORNIA ENERGY COMMISSION

In the Matter of:)
) 19-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, FEBRUARY 20, 2019
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
David Hochschild

Staff Present: (* Via WebEx)

Drew Bohan, Executive Director
Kourtney Vaccaro, Chief Counsel
Alana Mathews, Public Adviser
Dorothy Murimi, Public Adviser's Office
Cody Goldthrite, Secretariat
Jared Babula, Staff Attorney
Matt Layton, Engineering Office
Deborah Dyer, Chief Counsel's Office

	Agenda Item
Laurie ten Hope	1
Shawn Pittard	1
Siva Gunda	1
Natalie Lee	1
Kristen Mitsu Driskell	1
Kevin Barker	1
Paul Jacobs	1
Rob Cook	1
John Heiser	2
Eric Veerkamp	3
Alana Mathews	4
Heather Raitt	1, 5
Paul Deaver	6
Phil Cazal	7
James Friedrich	8
Kevin Uy	9

APPEARANCES (Cont.)

Others Present (* Via WebEx)

Interested Parties

Agenda Item

Samantha Neumyer, Ellison, Schneider, Harris & Donlan	2
Barbara McBride, Calpine	2
Eli Goldstein, SkyCool Systems, Inc.	8
Darrin Monteiro, California Dairies, Inc.	9
Hector Garcia, Smithfield Packaged Meats Corp.	9

Public Comment

Fran Inman, California Transportation Commission	1
Kirk Marckwald, California Environmental Associates	1
Rob Oglesby, Former Executive Director, CEC	1
Catherine Elder, Aspen Environmental Group	1
Dennis Peters, CAISO	1
Mark Krausse, PG&E	1
Edith Moreno, SoCalGas	5
Lauren Cullum, Sierra Club	5
Melissa Traugh, BizFed Central Valley	5
Gary Passmore, Congress of California Seniors	5
Nina Kapoor, Coalition for Renewable Natural Gas	5
Jeli Gavric, California Association of Realtors	5
*Joy Alafia, Western Propane Gas Association	5
Larry McLaughlin, Doing What Matters Initiative in Action	15

I N D E X

	Page
Proceedings	7
Items	
1. ROBERT WEISENMILLER. Proposed resolution recognizing and commending Chair Weisenmiller for his extraordinary professional contributions to the wellbeing of Californians and their environment and for being a consummate public servant.	7
2. RUSSELL CITY ENERGY CENTER PETITION TO AMEND BACKUP GENERATING FACILITY PROJECT (17-SPPE-01).	52
3. DELEGATE CHIEF BUILDING OFFICIAL (DCBO) FOR THE BLYTHE SOLAR POWER PROJECT (BSPP), PHASE 2, UNITS 3 & 4 (09-AFC-06C).	57
4. APPLIANCE EFFICIENCY REGULATIONS RULEMAKING FOR APPROVAL OF DISADVANTAGED COMMUNITIES ADVISORY GROUP (DACAG) NEW MEMBER	59
5. 2018 INTEGRATED ENERGY POLICY REPORT UPDATE, VOLUME II	61
6. ADOPTING ENERGY COMMISSION DETERMINATION FINDING ANAHEIM PUBLIC UTILITIES' INTEGRATED RESOURCE PLAN CONSISTENT WITH THE REQUIREMENTS OF SB 350.	82
7. ITM POWER, INC.	92

I N D E X (Cont.)

8.	BRINGING RAPID INNOVATION DEVELOPMENT TO GREEN ENERGY (BRIDGE)	94
	a. SKYCOOL SYSTEMS, INC.	
	b. MICROBIO ENGINEERING, INC.	
9.	FOOD PRODUCTION INVESTMENT PROGRAM	99
	a. BAKER COMMODITIES, INC. Agreement FPI-18-001	
	b. BAKER COMMODITIES, INC. Agreement FPI-18-013	
	c. SUN-MAID GROWERS OF CALIFORNIA	
	d. PACIFIC COAST PRODUCERS	
	e. THE NEIL JONES FOOD COMPANY	
	f. IMPERIAL WESTERN PRODUCTS, INC., A CALIFORNIA CORPORATION	
	g. SMITHFIELD PACKAGED MEATS CORP.	
	h. FOSTER POULTRY FARMS Agreement FPI-18-003	
	i. FOSTER POULTRY FARMS Agreement FPI-18-012	
	j. LAND O' LAKES, INC.	
	k. OLAM WEST COAST, INC. Agreement FPI-18-004	
	l. CALIFORNIA DAIRIES, INC.	
	m. OLAM WEST COAST, INC. Agreement FPI-18-007	

I N D E X (Cont.)

10. Minutes	110
11. Lead Commissioner or Presiding Member Reports	110
12. Chief Counsel's Report	82
a. Pursuant to Government Code Section 11126(e), the Energy Commission may adjourn to closed session with its legal counsel to discuss any of the following matters to which the Energy Commission is a party:	
i. <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>	
ii. <i>Communities for a Better Environment and Center for Biological Diversity v. Energy Resources Conservation and Development Commission, and California State Controller, (Alameda County Superior Court, Case No. RG13681262)</i>	
iii. <i>State Energy Resources Conservation and Development Commission v. Electricore, Inc. and ZeroTruck (Sacramento County Superior Court #34-2016-00204586)</i>	
iv. <i>Natural Resources Defense Council, Inc., et al. v. United States Department of Energy (Federal District Court, Northern District of California, #17-cv03404).</i>	
v. <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>	
vi. <i>Helping Hand Tools v. California Energy Commission, and Vantage Data Centers LLC. (Sacramento Superior Court, Case No. 34-2018-80003026).</i>	

I N D E X (Cont.)

12. Chief Counsel's Report (Cont.)	82
<i>vii. In re: PG&E Corporation and In re: Pacific Gas and Electric Company</i> (United States Bankruptcy Court, Northern District of California, San Francisco Division, Case No. 19-30088)	
b. 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.	
i. Alternative and Renewable Fuel and Vehicle Technology Program grant ARV-14-011 with HyGen Industries, Inc.	
13. Executive Director's Report	122
14. Public Adviser's Report	123
15. Public Comment	39, 69, 123
Adjournment	128
Reporter's Certificate	129
Transcriber's Certificate	130

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

P R O C E E D I N G S

FEBRUARY 20, 2019 10:03 a.m.

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

(Whereupon the Pledge is recited)

CHAIR WEISENMILLER: Good morning. Let's start with the first item. In terms of looking at the flow this -- I'm not sure if it's going to take a half hour or forty-five minutes, but if anyone for other business wants to step out for coffee, go ahead. (Laughter.)

MR. BOHAN: Judging by the crowd I think it's probably going to be closer to an hour. We'll see how it goes.

CHAIR WEISENMILLER: All right.

MR. BOHAN: Good morning, Bob. For the last eight years you have presided over innumerable items on our Business Meeting agenda. And this one's for you, Bob, this morning. We've got a resolution your colleagues are going to read, take turns reading in a minute or two here. The original version was 27 pages long, because that's what it took to describe all your accomplishments, but we've managed to trim it down to just a couple of pages. And so we've asked each of them to read it and then each would like to say a few words about you, followed by our deputies who are going to each come up and also say a few words.

1 And then there are obviously as you can tell
2 folks in the audience that would also like to share a "Bob"
3 story or two and thank you for your tenure here.

4 You, Bob, are as committed a person as I've ever
5 worked with and it's really been a pleasure to work with
6 you over the years. Your commitment is like nobody else's
7 I've met before. You are as committed to making this place
8 that we all love as great as it is it is, as good as
9 anybody I know.

10 You're also genuinely tireless. It's a word
11 that's used a lot, but I think it really applies to you in
12 this case. You and I have exchanged frequent emails in the
13 middle of the night and on weekends. And I recall a
14 lengthy conversation we had on Christmas Eve. You've been
15 a terrific boss and while you've been willing to discuss
16 just about any issue I've brought your way, you've not
17 micromanaged. You've been a Commissioner and let staff do
18 staff work and I've really appreciated that.

19 And last, I just want to say everyone who knows
20 you, knows you're brilliant. But not everyone knows that
21 you've got a heart of gold and you really care about the
22 people that are around you and that you work with and that
23 are in your orbit. And I want to thank you for that and
24 for your support, your guidance and direction and
25 everything you've done for the Commission. And with that,

1 I'll turn it over to your colleagues.

2 COMMISSIONER HOCHSCHILD: Well thank you, Drew,
3 and my profound gratitude to you, Bob. Really, I think as
4 I said at the EPIC Symposium yesterday there is a debate in
5 our country today about whether government can even work.
6 And government, at the end of the day is the things that we
7 do together to make society better for the next generation.
8 And you are passing on to me as Chair and to our
9 colleagues, an agency that it's in a healthy place and it's
10 doing a lot of good. And I just want to thank you
11 profoundly for that, because I think California is needed
12 more than ever now. And the light that we shine here can
13 spread around the country; it can spread around the world,
14 and already has. And that's a tribute also to all of the
15 good staff here. And I just want to say from the bottom of
16 my heart how grateful I am for your service in the role as
17 Chair and going back even to the early days of starting
18 this agency.

19 It's an honor to work here. It's been an honor
20 to work with you. So I am going to read a resolution that
21 Grant put together, apparently without any editing, because
22 it's really long, I want to say. But when you've had a
23 long career, you get a long resolution, so get comfortable.
24 There's a lot to acknowledge here, so.

25 "Whereas, Robert B. Weisenmiller, an East Coast

1 native, was lured to California by the unique educational
2 opportunities at the University of California Berkeley
3 where he earned his PhD in chemistry and a Master's of
4 Science in the Energy and Resources Group, were Dr. John
5 Holdren was his Thesis Advisor. Bob is synonymous with
6 being a long time Berkeley resident; and

7 Whereas, Bob began serving the State of
8 California between 1977 and 1982 at the California Energy
9 Commission and served in several positions including
10 adviser to Commissioner Ron Doctor, Manager of the Special
11 Projects Office and Director of the Office of Policy and
12 Program Evaluation; and

13 Whereas, during this time Bob was instrumental in
14 shaping the development of California's pioneering energy
15 policies and at addressing exponential electricity growth,
16 cause and environmental impacts through the creative
17 solutions including cost effective building and appliance
18 efficiency standards, innovative cogeneration of renewable
19 energy projects, and the state's electricity demand
20 forecast, which is the foundation for California's highly
21 analytical and comprehensive electric system planning
22 processes; and

23 Whereas, Bob left state service to co-found and
24 act as Executive Vice President of the Independent Power
25 Corporation where he championed cutting-edge approaches to

1 reduce energy production costs by introducing and
2 developing independent energy producers throughout
3 California; and

4 Whereas, Bob went on to co-found and manage MRW
5 and Associates as Executive Vice President using his
6 expertise to assist businesses, financial institutions and
7 public regulatory agencies in strategic planning, policy
8 development, energy market analysis and regulation, power
9 pricing for qualifying facility projects, marginal cost
10 analysis, rate design and implications of utility mergers;

11 I'm just getting started, just so you know.

12 Whereas, Bob was an expert witness in more than
13 100 state and federal public regulatory agency and court
14 proceedings and authored numerous publications on
15 electricity and natural gas markets.

16 COMMISSIONER SCOTT: And whereas, in 2010 Bob was
17 appointed by Governor Arnold Schwarzenegger as the
18 Scientist Engineer Member of the Energy Commission. In
19 2011, he was appointed by Governor Edmond G. Brown, Jr. as
20 Chair of the Energy Commission where he paved a path for
21 first-of-their-kind renewable energy projects as the Lead
22 Commissioner Presiding. During his first year the Energy
23 Commission approved a record-setting amount of electric
24 generation capacity including more than 4,300 megawatts of
25 renewable projects supported by the Federal American

1 Recovery and Reinvestment Act funds, to stimulate the
2 nation's economy during one its worst economic recessions;
3 and

4 Whereas, Bob influenced several major electric
5 transmission planning processes including the Renewable
6 Energy Transmission Initiative 2.0, which reduced
7 transmission planning and permitting timelines to encourage
8 large renewable energy developments in California aimed at
9 achieving the state's renewable portfolio standard; and

10 Whereas, Bob has lead and enhanced the
11 Electricity Demand Forecast by directing the inclusion of
12 climate change impacts, behind-the-meter solar voltaic
13 generation, energy efficiency and electric vehicle load on
14 electricity consumption. He also pushed for further
15 disaggregation of data inputs into the forecast; and

16 Whereas, Bob fostered collaboration among the
17 California Independent System Operator, the California
18 Public Utilities Commission and the California Air
19 Resources Board to create an integrated and highly
20 coordinated electric system planning framework consisting
21 of the Electricity Demand Forecast, energy resource
22 procurement and transmission infrastructure development;
23 and

24 Whereas, as part of the Integrated Energy Policy
25 Report Bob led a multi-agency taskforce to ensure electric

1 service reliability in Southern California after the
2 unplanned closure of the San Onofre Nuclear Generating
3 Station and planned retirements of aging once-through
4 cooling electric generation plants. Taskforce members
5 included the Governor's Office, the CPUC, the California
6 Air Resourced Board, U.S. Department of the Navy, U.S.
7 States Marine Corps, California State Water Resources
8 Control Board, San Diego Air Pollution Control District,
9 South Coast Air Quality Management District and local
10 utilities;

11 COMMISSIONER MCALLISTER: And whereas, Bob led
12 the development and implementation of the Electric Program
13 Investment Charge Program and the Natural Gas Research and
14 Development Program, the largest state-funded energy
15 research and development programs in the nation to advance
16 energy research, technology and innovation by investing in
17 geographically diverse projects with funds awarded to the
18 state's creative entrepreneurs and research institutions;
19 and

20 Whereas, Bob shaped the development and
21 compilation of eight IEPRs -- wow -- California's primary
22 energy policy document report that discusses the state's
23 energy challenges and offers thoughtful, comprehensive
24 solutions; and

25 Whereas, Bob participated in the state's effort

1 to address the methane leak at the Aliso Canyon Natural Gas
2 Storage Facility and mobilized the Energy Commission's
3 expertise to analyze the reliability impact on natural gas
4 and electric service in Southern California, because of the
5 closure and eventual limited use of the facility. These
6 analyses were essential in developing mitigation measures
7 to strategically ensure ongoing natural gas and electric
8 service to the impacted region; and

9 Whereas, on behalf of Governor Brown, Bob led
10 California's International Energy Cooperation Initiatives
11 aimed at fostering clean energy trade and investment
12 opportunities and sharing best practices, especially with
13 China, Germany and Mexico. This collaboration established
14 several memorandums of understanding, new business
15 opportunities, advances in clean energy technology and
16 strategic relationships; and

17 Whereas Bob served as California's Nuclear
18 Liaison to the Federal Nuclear Regulatory Commission and
19 was the state's core expert on the operations, safety and
20 decommissioning of California's last remaining nuclear
21 electric generation facility; and

22 Whereas, Bob led the Climate Action Team Research
23 Working Group that researched the impacts of climate change
24 on California, improved research coordination among state
25 departments, identified gaps in opportunities for

1 collaboration and provided a forum to discuss future state
2 climate change research opportunities.

3 COMMISSIONER DOUGLAS: And whereas Bob served on
4 the California ISO Energy Imbalance Market Transitional
5 Committee providing invaluable expertise and guidance to
6 design a governance framework to oversee the implementation
7 and management of the first real-time Western Energy
8 Trading Market in the nation. As of January 2019, the
9 Energy Imbalance Market delivered close to 565 million in
10 cost savings and renewable energy benefits to market
11 participants; and

12 Whereas, Bob advanced the Energy Commission's
13 commitment to strengthen opportunities for all
14 Californian's to participate in and benefit from the
15 agency's programs and services recognizing that
16 California's promise, successes and innovations stem from
17 the rich and diverse qualities and abilities of its people;
18 and

19 Whereas, Bob has invested decades in defending
20 and improving California's environment and economy often at
21 the expense of precious time with family and loved ones who
22 also deserve our deep gratitude for their generosity; and

23 Whereas Bob is an energy thought leader, pioneer,
24 expert, role model and mentor to many in California's
25 energy sector; and

1 Now, therefore be it resolved that the Energy
2 Commission recognizes and commends Robert D. Weisenmiller
3 for his extraordinary diligence and professional
4 contributions to the wellbeing of Californians and their
5 environment and for reminding us, by his profound example,
6 that being a public servant is an honorable practice and
7 aspiration and wishes him good health and all the best in
8 his future endeavors. (Applause.)

9 CHAIR WEISENMILLER: Certainly, thank you. I
10 understand the deputies have a few words?

11 COMMISSIONER DOUGLAS: I think we were going to
12 right to pictures first.

13 CHAIR WEISENMILLER: And do a picture.

14 (Off mic colloquy.)

15 COMMISSIONER SCOTT: Okay. So Bob, things that I
16 always say about you when I'm asked about the Commission or
17 what it's like to be on the Commission or to be a
18 Commissioner is that you know something about everything
19 related to energy and a little bit of everyone who's part
20 of this field. Your expertise, your mastery of esoteric
21 details and ability to forge a solution and make progress
22 on thorny issues is unparalleled.

23 You lead by example, quietly, consistently,
24 relentlessly, tackling seaming intractable topics and
25 always making progress. And in doing so, you inspire me

1 and inspire all of us to roll up our sleeves and do the
2 same.

3 I appreciate your vision, your thoughtful
4 leadership, your dedication to facilitation excellent
5 climate and energy solutions, on behalf of the people of
6 California. You are incredibly smart and you always take
7 the time to share your knowledge with others.

8 On a personal note, you have been a steadfast
9 friend. I am so grateful for how you always carve out time
10 in the midst of a hectic schedule and multiple competing
11 demands on your time to brainstorm with me when I need
12 advice. And I also know that you always have my back.
13 Thank you so much for that. It means a lot to me. And I
14 hope you know that I will always have yours. I'm so glad,
15 that in addition to being colleagues, we are also friends.

16 I wanted to read a quote to you from Theodore
17 Roosevelt's speech about being in the arena. Maybe some of
18 you have heard it before.

19 "It is not the critic who counts, not the man who
20 points out how the strong man stumbles or where the doer of
21 deeds could have done them better. The credit belongs to
22 the man who is actually in the arena, whose face is marred
23 by dust and sweat and blood, who strives valiantly, who
24 errs. Who comes short again and again, because there is no
25 effort without error and shortcoming, but who actually does

18

1 strive to do the deeds. Who knows great enthusiasms, the
2 great devotions, who spends himself in a worthy cause. Who
3 at the best knows, that in the end the triumph of high
4 achievement and who at the worst, if he fails, at least
5 fails while daring greatly, so that his place shall never
6 be with those cold and timid soles who neither know victory
7 or defeat."

8 So I want to thank you for being in the arena for
9 the people of California and really for the world. I am
10 truly honored to have had the privilege of being in the
11 arena with you. And I really wish you the very best as you
12 step away from the Commission and into your next set of
13 amazing opportunities. (Applause.)

14 COMMISSIONER MCALLISTER: We have some Kleenex
15 around somewhere I think, probably? (Laughter.) Yeah, I
16 might need one here. I'm already starting.

17 Boy, this is a really momentous transition for
18 the State of California. Public servants like Bob are just
19 not very common. They're just -- you know we need more of
20 them. We need more in all the states and certainly beyond,
21 but the example is just so precious for all of us. And I
22 consider you, Bob, to be really with your example, all the
23 way through. I don't know, I seem to have stepped on a lot
24 of the tracks that you left and only found that out once we
25 really started to work together. But from the Energy and

19

1 Resources Group onward, I feel like I've just had you to
2 look to as just really the North Star for me.

3 So just an example of what people can do in a
4 career with a dedicated professional vision, doing things
5 for the right reasons, but highly, highly informed so that
6 -- and committed to process, so that we can get to a place
7 that really works for everyone. I think that's just you're
8 the best example I've ever seen of that.

9 For me personally I do consider you just a
10 fantastic friend and a mentor and booster. And also sort
11 of a set of bumpers to make sure that we are thinking about
12 all the different perspectives and an alarm, sometimes, is
13 that's necessary. You know, are you sure you really want
14 to do that? And that's just been invaluable for me. And
15 every interaction is a learning experience. So really just
16 you are the best of public service.

17 In the Commission you're down there in the
18 boilers and the engine room. I think that's what people --
19 you know, you're Chair and it's a fantastic example just of
20 being Chair and orchestrating all these discussions. But
21 also just the heavy lifting that you have done every day is
22 also -- you're at the boiler room and at the bridge of the
23 ship at the same time. And it's just amazing. All the
24 forecasts with the analytical work that the Commission
25 does, nobody knows it better than you. And that

1 institutional memory I hope to have access to going
2 forward, so absolutely so I'll be reaching out for lunch.

3 And that memory is just unbelievable. Maybe it's
4 that I have two kids, but I just cannot pretend to have a
5 memory like Bob's. And that rolodex also; you know
6 everybody. So and past and present and no doubt you're
7 going to have a big impact on California and beyond going
8 forward.

9 I think state service has limitations. There are
10 lots of rules. There are lots of things that you can't do.
11 And I'm looking at Kourtney. She steers us perfectly well
12 on that. But the way we make decisions is highly
13 accountable and Bob has always taken that very seriously,
14 and rightly so. And I'm actually kind of hopeful, once
15 those kind of barriers come down and you can really share
16 your gifts well beyond the Commission. And with a vision
17 that can be stated kind of with -- you can state what you
18 think in all of its glory and all of its detail and all of
19 its complexity. I think that's going to lead to great
20 things. And no doubt, I think you're going to have huge
21 opportunities to do that if you want.

22 Personally, in my family I went through a tough
23 time. And you had my back at work. And you had my back on
24 the personal level. And that meant the world.

25 Finally, I also wanted to read a quote or recite

1 a quote. And it's from a Spanish poet, Antonio Machado.
2 It's in Spanish, actually. Antonio Machado, this is part
3 of a larger poem he wrote.

4 (Recites quote in Spanish)
5 *Caminante, no hay camino, se hace camino al*
6 *andar.*

7 "When you're on a journey, and there's no path in
8 front of you, you make the path."

9 And I think that's you've helped California do is
10 create a path toward a better future for all of us. And I
11 think we all owe you to the infinite debt of gratitude. So
12 thank you. (Applause.)

13 COMMISSIONER DOUGLAS: So it's funny. This
14 morning I chatted with my kids and what are you doing
15 today? And I said well, "I'm saying goodbye to a friend in
16 his current role. And that's hard to do."

17 But I wanted to say a couple of things about Bob.
18 First of all, the example that he has shown to all of us
19 has been so tremendous from day one. The level of
20 commitment that Bob has shown, day in and day out, coming
21 into the office, flying to China, coming back, doing his
22 meetings, the intensity of his schedule, his caring. You
23 know, the capacity that he has had to, in the midst of so
24 much responsibility, take the time to be concerned about
25 personal details of what somebody's going through and maybe

1 at many levels, at any level within the organization. And
2 that's been pretty amazing, the incredible level of ethics,
3 just the fact that you knew that we had a leader here in
4 the Commission, who was taking it very seriously. Just
5 highly ethical.

6 His incredible depth of knowledge. We work with
7 lots of knowledgeable people and everyone sitting here on
8 this dais and everyone sitting here in this room is pretty
9 knowledgeable about a whole lot of things. But very few of
10 us are going to reach the level of depth that Bob has
11 reached. And having access to somebody with this memory
12 that can, as Andrew mentioned, both perfectly capture what
13 happened last week and also go back to something that
14 happened in 1978 with a very high degree of accuracy is
15 something that is irreplaceable. It's something that we're
16 going to miss.

17 Of course, we're not going to leave Bob alone.
18 We're still going to be after him for some of that, because
19 I don't know what we would do without it sometimes.

20 His achievements are many and we read about them
21 in the resolution. And they were so many that we might
22 have lost some folks in it. But he's achieved a tremendous
23 amount here. And of course, my memory and my opportunity
24 to really get to know him first was when he first came on
25 the Commission. And I was Chair then and I had my hands

1 full with many, many, many things including one child under
2 one and one under three. And the recession and the
3 Recovery Act and I really needed, more than anything,
4 somebody to come on the Commission who I could count on to
5 take big things and get them done.

6 And when Bob came on and I just said you know,
7 well how about siting? We've got all these projects. And
8 it's really hard. And I'll be there, but anything you can
9 do. And he really took on and did tremendous work on that.
10 And it was awesome to have him come on.

11 And let's see, the capacity of doing work and
12 keeping many things in his head. You know, as someone who
13 has been Chair I know something about what your life is
14 like when you're Chair. And it's a combination of both, as
15 I think Andrew was saying of being on the bridge and
16 charting the course and sending out the messaging and doing
17 the high level, every day interaction and diplomacy with
18 everyone who we interact with. And it's dealing with
19 dozens of low profile, but very important things, all of
20 which can go wrong. And the attention to detail that it
21 takes. And the things that he dealt with day after day for
22 eight years that will never make interesting story telling,
23 but that were essential to us to get our job done, are
24 certainly some of the things that I will always appreciate.
25 And his diligence in doing them.

1 And of course I can't -- I guess I'll end this on
2 saying that I also want to thank Bob for his support and
3 for his friendship over the past eight years. It's been
4 tremendous. (Applause.)

5 COMMISSIONER HOCHSCHILD: Well, let me also just
6 thank my colleagues for such heartfelt responses. It's
7 very clear we all put our heart into the work and that's as
8 it should be.

9 You leave very big shoes to fill, Bob. And I
10 know I won't be able to fill them entirely, because in 1978
11 I was seven years old, so what I remember from that era may
12 not be as interesting. But with your permission, or
13 perhaps with your forgiveness what I have to say can best
14 be expressed musically. (Laughter.)

15 (Off mic colloquy.)

16 COMMISSIONER HOCHSCHILD: Not a lot of people are
17 going to ask me to quit my day job after this. (Laughter.)

18 COMMISSIONER DOUGLAS: Did I mention I have a bit
19 of a cold. I'm not so sure about that.

20 COMMISSIONER HOCHSCHILD: I was actually meaning
21 to do high fidelity and (indiscernible) --

22 (Whereupon Commissioners Douglas and Hochschild
23 sing a song.)

24 "Come and listen to a story about a man named
25 Bob. Chairs the CEC, and stayed for eight years in the

1 job.

2 "Steering the ship of state through the terribly
3 rough seas, known to all as California Energy Policy.

4 "Reliability.

5 "Keep it green.

6 "Reduce carbon.

7 "Well, the first thing that you know San Onofre
8 went kaput. Bob took care of that then Aliso Canyon shut.
9 Southern California is the place he had to be, to wrap up
10 with CC&E (phonetic) into bankruptcy.

11 "Bad, that is.

12 "A new crisis.

13 "Big change is coming.

14 "Well, now is time to say goodbye to Bob for he
15 must go and leave us in good shape to meet our climate
16 goals. You're all invited back next week to this locality
17 to have another heaping helping of energy policy."

18 "Acronym soup it is.

19 "ECCA and ERPA

20 "EPIC and GRDA

21 "And it's ARFVTP, VP-a what?

22 "We've got to change that name." (Laughter.)

23 (Applause)

24 COMMISSIONER SCOTT: So as they're making their
25 way back up, that was awesome. (Laughter.) We have a gift

26

1 for you from the Commissioners. This is one year of
2 personal carbon offsets, which we thought would be just
3 symbolic of all of the amazing work that you have done to
4 reduce carbon for the State of California, so we wanted to
5 present this to you. (Applause.)

6 (Photos taken.)

7 MS. MATHEWS: And on behalf of the Public
8 Adviser's Office I have another presentation. So I wanted
9 to say thank you for your leadership obviously in the
10 Commission and your support and a new vision to kind of
11 expand the role and really make sure we're serving. So I'm
12 pleased to give you your own personalized blue card and it
13 will allow you to give public comment for an unlimited
14 amount of time. (Laughter and applause.)

15 COMMISSIONER MCALLISTER: And we have some actual
16 blue cards as well, so your job's not over yet, Bob.

17 MS. TEN HOPE: I didn't know I needed tissues
18 today. I just want to personally thank you for your
19 leadership. I started in my role as Deputy about the same
20 time you started as Chair. And it was a challenging time
21 with the final legislative hearings on the PIER Program and
22 that program not being reauthorized. But out of those
23 ashes and your leadership, Governor Brown's prodding, and
24 the CPUC's decision, I think we have created a program and
25 a legacy that is in no short measure your legacy.

1 And I want to thank you for many things. One is
2 as the Scientific Member, perfect oversight of a program to
3 make sure that the program is credible, that it's grounded
4 in science and engineering. And you were so insightful at
5 different times to point out things like have you thought
6 about this? Or we tried that before or people to talk to,
7 to make sure that our lens and our network extended, not as
8 broad as yours, but to take advantage of the network you
9 had. And the diligence that you apply to everything, I
10 think, was applied to this program.

11 And there are a couple of things I just wanted to
12 particularly take note of. One is the Climate Program.
13 And two, really focus our Climate Program on science. I
14 mean science matters in California and that science becomes
15 the foundation for energy decisions. And you wanted to
16 make sure that first the science was done, second that we
17 applied that science. What have we learned that is going
18 to be applied to our energy system and how do we
19 incorporate that into business? And make sure that there
20 were strong connections to the CPUC, strong connections to
21 how the utilities could utilize the information.

22 And then the regional workshops that you wanted
23 to make sure were done, that turned out to be really
24 fantastic in translating what was learned to boots on the
25 ground and how climate science could be adopted.

1 I just wanted to also kind of mention a couple of
2 the partnerships that you were foundational in, creating
3 the partnership with the military, creating the partnership
4 with ARPA-E. I think yesterday at the Symposium I mean
5 that came to kind of full fruition. In our fireside chat
6 we were having a conversation with ARPA-E and with
7 Breakthrough Ventures about a community around energy
8 innovation. Breakthrough wouldn't have been there without
9 your personal relationship and commitment. Relationship
10 and reputation is what brought them to the table.

11 I think yesterday was kind of a nice part of your
12 farewell week in terms of the growth of the program, the
13 excitement around innovation, and the idea that we can do
14 more.

15 A couple of things that other people have
16 mentioned the issues that you took on and then wanted to
17 make sure that they were reflected in the research program,
18 so that the research program was always relevant. I mean
19 we keep an eye on the long term in terms of what our
20 climate and energy goals are, but then things happened like
21 San Bruno or Aliso or the wild fires. And then your
22 questions would be, "What are we going to do about that?
23 What can we learn? How can we be forward thinking about
24 taking these situations and trying to mitigate them or
25 prevent them in the future?"

1 On equity, before we had AB 523 we had you
2 telling us that equity was important and that we really
3 needed to think about that, in terms of how we did business
4 and what our outreach was and what are we doing to make
5 sure that all Californians benefit from a clean energy
6 transition. And I think you constantly reminded us of
7 that. I think we all believed it, but you reminded us of
8 how are we operationalizing that?

9 And finally, I want to thank you and kind of use
10 the words of one of my colleagues when we had the last LCB.
11 And Linda Spiegel's comments were that she feels proud to
12 come to work every day, proud to come to work and be part
13 of something that matters. And that we are here, part of a
14 transition in our energy system that we are trying to do
15 something about climate, and that that's just a tremendous
16 gift to the staff here and to the people of California that
17 what we do matters.

18 So thank you so much for your leadership, for
19 your mentorship of me personally, and the mentorship for
20 our research program. (Applause.)

21 MR. PITTARD: Good morning Chair and
22 Commissioners. It's my pleasure to represent the Siting,
23 Transmission and Environmental Protection Division and to
24 thank you for your leadership and support. I think we're
25 going hear the word leadership a lot today.

1 You've served as Presiding Member of the Siting
2 Committee, and on several committees that guided our staff,
3 the public and other stakeholders through application for
4 certification proceedings for utility scale solar projects.
5 We benefitted from your knowledge of our energy
6 infrastructure when developing maps that identify wild fire
7 and mudslide risks.

8 But what we're most grateful to you for is the
9 confidence in Energy Commission staff that you showed
10 through the development of an interagency agreement with
11 the CPUC. An agreement through which our scientists,
12 engineers and planners serve as consultants to our sister
13 agency. You championed the use of civil servants to
14 perform work that was being done by outside consultants.

15 We will continue to build the relationship that
16 you fostered. We wish you the very best. Thank you.

17 (Applause.)

18 MR. GUNDA: Good morning, Chair Weisenmiller and
19 the Commissioners. On behalf of the Energy Assessments
20 Division I would like to extend our sincere gratitude for
21 your leadership and support to the Division over the last
22 ten years. Thank you.

23 Your deep knowledge of the electricity and
24 natural gas system is very intimidating for a lot of our
25 staff. But thank you for your mentorship and rigorous

1 vetting of all the work that we've done. You've laid the
2 ground for both fostering a group of core subject matter
3 experts in the Division today and also what we could do and
4 achieve moving forward into the future.

5 We'll miss your steady guidance, your presence,
6 and we wish you and your family all the very best moving
7 forward.

8 On a personal note I received an email from you
9 at 4:56 this morning. (Laughter.) Unfortunately, because
10 of my baby I had to wake up around that time and I'm like,
11 "Oh, no. Chair's email, I have to read through it." So it
12 has been incredibly awesome for me as a Deputy only for the
13 last five months, but to have the opportunity to sit in
14 your presence and discuss some of the critical aspects that
15 I have been dealing with. And you've shown nothing but
16 generosity and kindness and a spirit of mentorship towards
17 me to help me do a better job for the Commission and for
18 the state. And for that I will be very, very thankful. So
19 thank you. (Applause.)

20 MS. LEE: Good morning, Dr. Weisenmiller and
21 Commissioners. I am also one of the newer deputies to your
22 team. And I am honored to have this opportunity to thank
23 you personally and on behalf of the entire Renewable Energy
24 Division for again those consistent themes that you keep
25 hearing; your leadership and your support, but also for the

1 Renewable Energy Division for your vision.

2 We are the youngest division in the agency. And
3 your efforts to integrate renewable energy policy and
4 programs within this agency, and to champion the message of
5 renewable energy, and to solicit new programs and new
6 policies for us to implement have been key in building our
7 Division and in our success. But you have championed those
8 messages not only here, but throughout the country and
9 internationally. And it's your efforts that have created
10 collaboration that will help us to continue to grow, help
11 us to spread our experience, our knowledge and gain from
12 others' experience and knowledge.

13 And so I look forward to what we will be able to
14 accomplish from the foundation you have provided for us. I
15 also personally want to convey having joined this agency
16 just a few years ago, you greeted me with a warm smile on
17 the day I walked in the door. That smile has always been
18 present. You've supported me in my growth. I've never
19 left a meeting with you where I didn't feel that I had
20 grown, I had learned something. You had challenged me to
21 look thoughtfully at something I may have not considered,
22 so your investment in me and in the staff is invaluable.

23 I thank you personally and again on behalf of my
24 entire team and we wish you all the best. (Applause.)

25 MS. DRISKELL: Good morning. So I'm here on

1 behalf of the Efficiency Division, but I also had the good
2 fortune of working as an advisor for you, Bob. So I
3 thought I'd talk a little bit about both, starting with
4 being an advisor.

5 So I learned a lot working for Bob. As Bob's
6 advisor, people would frequently ask, "What do you think
7 Bob will think? What do you think Bob will do?" And the
8 first thing I learned was never to answer that question.
9 (Laughter.) Because Bob's thoughts and beliefs on energy
10 policy were informed by a much greater depth of knowledge
11 and consideration than I possess and that most of us here
12 have. And so Bob always had the right answer to that
13 question, but I'll be honest I never knew the answer ahead
14 of time.

15 I also learned how to implement energy policy,
16 which is I think why I ended up here today as the Deputy
17 Director of Efficiency. Bob gave us a lot of latitude to
18 implement his ideas and his direction and learn how to
19 solve problems and work with stakeholders to move our
20 policies forward. He never micromanaged us, he just let us
21 figure it out on our own whether we succeeded or failed,
22 but we always succeeded. And so I learned a lot about
23 working with other stakeholders and with staff on making
24 progress on our energy and climate goals.

25 Something I unfortunately never learned was how

1 to read your handwriting. (Laughter.)

2 So from the Efficiency Division prospective we
3 don't have a lot of opportunities to work with the Chair's
4 Office, because our Lead Commissioner is Commissioner
5 McAllister. But nonetheless you have always been
6 consistently supportive of our work to increase energy
7 efficiency in the state through our Building and Appliance
8 Standards, to challenge other states and countries to
9 increase their energy efficiency, and to develop innovative
10 policies to ensure that energy efficiency is enjoyed by
11 everyone in California regardless of their social or
12 economic status.

13 I really appreciate your attention to our issues,
14 your guidance on our policies and your really timely and
15 quick reviews when we inevitably jammed your office on our
16 approvals.

17 Chair Weisenmiller, in addition to being one of
18 the great minds on energy policy you have been a mentor and
19 teacher to me as your advisor and now as a Deputy Director,
20 and to many of us here in the room. I'm grateful for the
21 time you've given to me, to this Commission, and to the
22 people of California. And thank you and congratulations on
23 your retirement. (Applause.)

24 MR. COOK: Good morning Chairman Weisenmiller and
25 Commission. Rob Cook, I have the good fortune of

1 representing the Administration Division. And since we
2 don't actually do policy down there, we just make things
3 happen, we don't have a lot of interaction with Commission
4 members.

5 But one of the things I've noted is I've had the
6 great good fortune of working for and with some great -- a
7 very few number of great wise souls. It's a label I don't
8 dispense cheaply. And you're on the list, so anyway my all
9 the best to you in your next adventure. (Applause.)

10 MR. BARKER: Sorry, hey Bob, so I'm going to try
11 and be short, because it's going to be difficult. Today's
12 a real sad day for the Energy Commission. But personally
13 it's much more devastating to me to see you leave, Bob.
14 What's interesting, on May 10th, 2010, my sister gave birth
15 to my beautiful niece, Lucy. And interesting enough that
16 was the same day that I think was the birth of my career in
17 energy. That was the first day I got to start working for
18 you, Bob and little did I know the impact that that would
19 have on my life.

20 Bob, you've been the greatest role model,
21 teacher, mentor and man that anyone could strive to look up
22 to. I don't need to talk about any of your accomplishments
23 throughout the time we've had together. You've heard
24 enough of them and you'll hear a lot more. I just really
25 wanted to take this time in front of everyone just to thank

36

1 you from the bottom of my heart for everything.

2 Working for you really, and with you, has really
3 meant just everything to me and has been truly the greatest
4 privilege of my life. And I just thank you Bob.

5 (Applause.)

6 MS. VACCARO: So I told you, Bob, yesterday that
7 I wasn't planning on speaking and I don't have prepared
8 remarks. And I've already said to you what I needed to say
9 in private. But I think as with Kevin it's important for
10 you to hear and for everyone to hear what I feel about you.
11 You have touched my heart. You have changed my life. Your
12 trust in me has enabled me to do so many things,
13 professionally, and with my office. I will be forever
14 grateful to you for all that you've done for me.

15 (Applause.)

16 CHAIR WEISENMILLER: I have some blue cards too.
17 So let's start with Fran Inman. Or actually, come on.
18 Sorry, actually hold off a minute, Fran.

19 MS. INMAN: Oh, sure.

20 CHAIR WEISENMILLER: We have more, sorry,
21 Compliance yeah.

22 MR. JACOBS: Good morning Chairman Weisenmiller
23 and Commissioners, Paul Jacobs, representing the Office of
24 Compliance Assistance and Enforcement.

25 When I joined the Energy Commission in late 2015

1 after approximately 30 years at the Air Resources Board
2 where I had built their enforcement program and ran it I
3 was asked by Bob and Drew to come over and build a similar
4 program here. And initially, I was very hesitant as I knew
5 I'd be out of my comfort zone.

6 Upon arrival I was warmly welcomed by all of you.
7 And immediately felt that I was back in college, at UC
8 Berkeley learning energy policy from the best like I did in
9 the early 1980s from the Energy and Resource Group
10 professors at Berkeley. I know that you, Chairman
11 Weisenmiller and Commissioner McAllister, are products of
12 this program and that inspired me to dig in and learn all I
13 could.

14 Chairman Weisenmiller, thank you for your
15 leadership and inspiration over the years. California is
16 recognized as a worldwide leader in energy policy and
17 environmental protection. And your work has helped play a
18 critical role in this. You are leaving a legacy for all of
19 us to follow. And please know that your work has made a
20 huge difference to the 40 million of us in California and
21 the earth's seven billion inhabitants, making our planet
22 more sustainable for generations to come.

23 Thank you from the bottom of my heart and I wish
24 you continued success in the next phase of your career,
25 which I will follow and continue to learn from. Thank you.

1 (Applause.)

2 MS. INMAN: Good morning. I'm Fran Inman,
3 Chairman of the California Transportation Commission and a
4 business leader in Southern California, former Chair of the
5 L.A. Chambers, so I'm wearing both those hats when I speak
6 today.

7 But first I'm going to start and tell you, Drew,
8 you might have been working on Christmas Eve, but I got a
9 little email with an article I should read on Christmas
10 Day. So there you go, gang.

11 What I'm hearing this morning and all these
12 thoughts running through and you think oh I thought I was
13 the only one that that was happening. And it's pretty
14 obvious to all of us that there's some common threads here.
15 And I just want to add that the world would be a much
16 better place if we had more leaders and more visionaries
17 like Bob Weisenmiller, so here we go.

18 So thinking about, Bob, I think for me really is
19 just a knowledge broker and coming in to the world of
20 energy as an outsider, not speaking energy, to have a
21 mentor -- I too got to be mentored -- with someone with
22 such breadth of knowledge and such patience for all of us
23 that didn't learn quite so fast. But for me, truly, Bob
24 has been dedicated to making a difference and really
25 committed to serving others. And I think there wasn't one

39

1 day when anybody had any thought that it was from a self-
2 serving perspective. It was totally about serving others
3 and our state and our nation and our world.

4 So I think also what I truly appreciate is Bob
5 really appreciates the importance of involving others in
6 the decisions, to really -- those thorough decisions. And
7 I love the staffer's comment about would never answer what
8 Bob was thinking, because he has this wonderful ability to
9 take in all of this information and then help us all think
10 about all of those different perspectives and go forward
11 together.

12 And as a business leader, there were some when we
13 all felt some tough love, but it was always with respect
14 and with caring and with a hand reaching out to moving
15 forward together. And I think that we're really all better
16 for that. So appreciate for your work on the federal level
17 and your policy sharing. I think we're all better before
18 that and we have a lot more work to do. So I think as we
19 all go forward, may we each every day think what would Bob
20 do and how would Bob look at this. And have we done enough
21 homework, because I don't think there's anybody who's
22 better read than Bob Weisenmiller.

23 And also I think other words, of collaborative.
24 And I'll use my favorite example is really the work that
25 Commissioner Scott is leading with the Port Initiative.

1 And I might add that that started, following up on a dinner
2 that we'd had in SoCal with the business leaders and the
3 Port folks. And it was after SONGS went out of service.
4 And Bob was making the rounds, helping us all understand
5 with CAISO that it was going to be a tough summer perhaps,
6 and we might have some rolling blackouts.

7 And this was following up on our initial work and
8 our efforts around shore powering. So let's just say that
9 meeting wasn't exactly the best cordial meeting we ever
10 had. But right behind that, we started the collaborative
11 and I think it really is a wonderful example of a
12 partnership that we can all have together working together
13 in the energy and transportation fields.

14 So I think also just in closing the future
15 leaders, and I've had the opportunity of really being part
16 of the extended Energy Commission family over the years,
17 and to see all of these rising stars are really investments
18 in the future. So from the business community, Bob, and
19 the Transportation Commission I just want to say thank you
20 for helping us build a future that we'll all be proud of.
21 Thank you. (Applause.)

22 CHAIR WEISENMILLER: Please, Heather, yeah.

23 MS. RAITT: Sorry I didn't jump up before. I
24 think you all know I'm not a big fan of public speaking and
25 to do it twice in one day is a lot. But I'm happy to do

41

1 it, to try to express my appreciation for the Chair. Chair
2 Weisenmiller, as a lot of people have mentioned, is an
3 intellectual powerhouse. He never ceases to amaze me with
4 his ability to provide detailed thoughtful review of the
5 many, many documents I've given you over the years, over
6 the past eight years.

7 You always seemed to be the first to send back
8 comments, often in breakneck speed. And for one report I
9 checked, you provided an impressive 244 comments. And that
10 was just on the first draft and between trips to China, so
11 it was very impressive. And I've learned to enjoy and
12 almost look forward to the occasional comments that were
13 simply an "argh" and the ones that were written in all
14 caps, because I knew the frustration came from your working
15 so hard and knowing the issues so well.

16 I also got pretty good at interpreting "Bob-
17 speak" which sometimes felt like its own high-performance
18 sport. And I often -- I learned from Kevin. And of course
19 there were also the emails with kind words that just made
20 my week and mean so much to me.

21 So I learned so much from you, Chair
22 Weisenmiller. Thank you for your guidance. It's been a
23 real privilege. Thank you.

24 (Applause.)

25 CHAIR WEISENMILLER: Kirk?

1 MR. MARCKWALD: Good morning. I can see you're
2 really enjoying this up there. Yeah, can you think and
3 imagine anything more painful for Bob Weisenmiller to be
4 praised? (Laughter.)

5 So my name is Kirk Marckwald. I have an
6 environmental consulting firm in San Francisco. I've known
7 Bob since David was watching Sesame Street back in Brown 1.
8 And for sure, Bob, public servant extraordinaire, sublime,
9 superb, focused mentor, policy wonk. Wonk, anybody think
10 Bob is a policy wonk? (Laughter.) Yeah. Yeah. Have you
11 gotten those emails with that article that you, as Fran
12 pointed out, you thought it only came to you? Well,
13 actually he's got that blind sense, he has a BCC, like he
14 sends it to 400 people. And you get it and you say, "I
15 don't even understand what this is about, but I know I need
16 to read it because Bob sent it to me and he thought I
17 needed to." And then you ask him about it and he explains
18 how it fits in.

19 Bob is incredible about how it fits in. And
20 that's one of the things I've really learned over the years
21 from Bob.

22 But beyond that, and people noted some of this,
23 and I just want to re-state some of the words, because
24 standing alone they are even more powerful than woven
25 together: generous, kind, available, playful, committed,

1 respectful and committed to staff development and growth.
2 Those are really extraordinary combinations of being an
3 amazing boss, being an amazing leader, and also having all
4 those attributes. And how he has time, energy and focus to
5 be able to do both sides of that is really, truly
6 extraordinary.

7 I have to say one of the earliest times that Bob
8 and I spent any time together is I was managing something
9 called the Energy Resources Fund for the Resources Agency,
10 \$500 million going for really important, innovative, big
11 picture Jerry Brown 1 ideas. Bob comes to my office and he
12 says, "We have a program. We, the Energy Commission has a
13 program that we'd like to have considered." It was
14 coordinated traffic signals.

15 Coordinated traffic signals, like what's that?
16 And Bob, of course had sheets, graphs, charts. And after
17 about five minutes I said, "That's a great idea". And but
18 at that point in time there weren't a lot of people in
19 Brown 1 talking about coordinated traffic signals, I assure
20 you. But it was Bob's focus, attention to detail,
21 mastering facts, and being persuasive.

22 Beyond that he was the seminal work at MRW of
23 creating cogeneration at state facilities. Karen alluded
24 to the dirtiest trick of all that she perpetrated on him to
25 clean up, to make happen the incredible solar facilities in

1 the Schwarzenegger Administration, which were
2 underappreciated in terms of really changing the arc of
3 California.

4 So as he passes the torch to David's capable
5 leadership, it's worth reflecting a little bit. These
6 moments have not been without sacrifice. He's been away
7 from his family, because he felt to be in that job he
8 needed to be here. And then he also has had to deal with
9 something no one else has talked about, which is the JBM
10 Program; Jerry Brown Management.

11 I don't know how many times that Bob and I would
12 have a conversation, go on a walk, have a dinner and just
13 casually it comes out that when Jerry Brown latches on to
14 somebody who he trusts, who he believes will bring him
15 information, he sort of over does it sometimes. And Bob,
16 patiently, was able to work with the Governor quietly,
17 intensely. And if you think midnight emails are
18 extraordinary try the midnight phone calls that I'm sure
19 that Bob sat on for hours on end trying to sort out a new
20 program or dissuade him from doing something. And so
21 that's all behind the scenes.

22 Here's somebody who works endlessly, tirelessly.
23 I don't think he sleeps, actually. I think he just
24 doesn't. He just turns his email off for a little while,
25 but he doesn't actually sleep, because he gets these things

1 done. So as a friend, as a colleague, as a mentor and
2 above all a true gentleman for all seasons, well done.
3 (Applause.)

4 CHAIR WEISENMILLER: Okay, Rob

5 MR. OGLESBY: Good morning, Mr. Chair. It's so
6 good to say that again. Rob Oglesby, a Executive Director
7 Alumnus and just came here to say a few brief words for
8 such a long and distinguished career, amazing career. And
9 one adage came to mind. An old adage that said that notes
10 the difference between knowledge and wisdom. And is says
11 that wisdom cannot be taught. It has to be earned through
12 experience.

13 And I think everyone is clearly aware of the
14 knowledge he brought to this position, based on your
15 education and your long career in energy. But I want to
16 recognize and note the wisdom that you brought to
17 California and to energy policy at a critical time, a
18 pivotal time of transition to cleaner, sustainable energy
19 and more equitable energy policies as well.

20 Clearly your role in this transition to more
21 sustainable energy and more renewable energy is admired by
22 everyone. And your role in advising the Governor and other
23 policy members was vital and important.

24 And then I also would note your impact
25 internationally, because you brought the message outside,

1 not only nationally, but outside the United States to
2 places like China and Europe. And helped move the ball
3 forward, helped move the ball down the field in those
4 arenas as well.

5 But I want to return to shortly after your
6 assuming chairmanship of the Energy Commission, a couple of
7 instances, just a couple where your wisdom played a key
8 role. And the first that I was with you on was when San
9 Onofre failed. And that was in January of 2012. And most
10 people outside of this close community of energy had no
11 idea of the significance and the threat that that posed on
12 California's energy grid. But you knew. You knew right
13 away.

14 And when the group was put together to deal with
15 this crisis with only a few months before the summer air
16 conditioning season, when the load would be extraordinary
17 on the system in Southern California, you along with others
18 addressed that issue and the lights stayed on.

19 One other example real briefly is the loss of the
20 state's largest natural gas storage facility in Aliso
21 Canyon. And again, most Californians have no idea what the
22 role of that storage facility was in keeping the energy
23 flowing and the lights on and the air conditioning going in
24 the summer and heating homes in the winter. But you knew.
25 And you had the wisdom and the breadth of experience to

1 help lead the partnership that helped address that energy
2 crisis and prevented it from becoming being managed in a
3 way that prevented it from becoming a much more severe
4 energy crisis. And for that California and the state owes
5 a great deal of gratitude to you for your leadership and
6 especially your wisdom.

7 And finally, on a personal note I want to thank
8 you for the opportunity you gave me to come here and work
9 in partnership with you as Executive Director. We have a
10 lot of memories over the nearly seven years that we've
11 worked together and addressed many, many problems and
12 challenges that faced the organization and energy world at
13 large. But you also gave me the opportunity to be mentored
14 by you, to have personal, professional growth and also to
15 become one of your friends and to know, as Drew was saying,
16 your heart of gold and your recognition for the challenges
17 that I faced personally and as we dealt with all the
18 struggles of life that we deal with as we go forward over
19 that span of time.

20 So for all of that I want to thank you and let
21 you know that I feel honored to have had that opportunity
22 to work with you. (Applause.)

23 CHAIR WEISENMILLER: Katie?

24 MS. ELDER: Good morning. And I think I really
25 got the Chair going here. It's been ten whole years since

1 I joined Aspen and little did I think when my phone rang,
2 and Melissa Jones asked me one day if I could help try to
3 sort through what was going on in the Siting Division, and
4 could we process ARRA cases more quickly, little did I have
5 any expectation that one of my old bosses was about to be
6 appointed to the California Energy Commission.

7 And when I thought about it I felt well he's a
8 perfect choice. He knows all the policy issues. He knows
9 the analysis. He knows the modeling. Good choice.

10 Then, little did I expect that these big issues
11 with natural gas were going to happen. So I really wanted
12 to thank you for giving me the opportunity to be useful and
13 to thank you for your confidence in me. And I guess I will
14 stop jumping every time my email bings at a late hour,
15 because it just had a certain sound. Just like I knew if
16 it was after a certain hour, if my email bings it must be
17 Bob. Something must be up. I must need to go check and
18 see what's going on.

19 I also had some experience, as Kevin said,
20 interpreting "Bob-speak." Staff seemed to be really
21 confused by it. Maybe at first, I think they've kind of
22 gotten the hang of it. So on behalf of Aspen and my
23 colleagues there as well as our subcontractors, and in even
24 I might be the only person in the room who's both worked
25 with you here at the Energy Commission and at MRW, so on

1 behalf of the MRW alumni gang thank you very much.

2 CHAIR WEISENMILLER: Thank you. Dennis Peters.
3 Dennis? Dennis Peters, yeah.

4 MR. PETERS: I was actually signed up for Item 2
5 and I was going to say a few words there, but I'll say it
6 here now. It's probably more the appropriate time.

7 So just on behalf of the California ISO, it's
8 really, truly been an honor and a privilege to have the
9 opportunity to have worked with you, Bob. We appreciate
10 all of your leadership for all your collaborations with the
11 ISO over the past eight years. And we want to thank you
12 for your public service, wish you all the best and you will
13 truly be missed. (Applause.)

14 CHAIR WEISENMILLER: Mark Krausse?

15 MR. KRAUSSE: Chairman Weisenmiller and
16 Commissioners, Mark Krausse on behalf of Pacific Gas and
17 Electric, mostly though on behalf of Mark Krausse. I
18 wanted to come and say what a pleasure it's been working
19 with you, Chairman. I say Chairman, because everybody else
20 has said Bob. That's the kind of relationship you have
21 with staff and the regulated community and others. And I
22 think you've heard it from everyone, but I want to thank
23 you in particular for, as the company -- my employer for
24 the last 12 years has gone through difficult times, but
25 you've always been a comfort and never taken cheap shots.

50

1 And I think that's true of everybody that comes up to this
2 podium that you treat the public with respect and that's
3 important at this time when it's difficult for people to
4 participate in the public debate.

5 So I appreciate that and I appreciate that while
6 you have called out some of the missteps that the company
7 has made in the past that I hadn't known about, because of
8 your great history, you've never gone back as far as the
9 1913 Raker Act that many in San Francisco will. So thank
10 you very much, Mr. Chairman. Congratulations.

11 CHAIR WEISENMILLER: Thanks, Mark. (Applause.)

12 I think that's all the comments on Item 1 that
13 we've had, think I'd guess 45 minutes. And anyway it
14 certainly has taken longer.

15 Again, I really want to thank everyone for their kind words
16 and certainly want to thank the staff for their public
17 service.

18 Obviously many of you have made a career here at
19 the Energy Commission. It's a great place. It's certainly
20 been a real opportunity. I think in the first time around
21 when I left state service, Governor Brown sent me a letter
22 saying the Energy Commission was known for its great work.
23 And I believe that's the current perspective too, certainly
24 with Governor Brown, I think with the Legislature and
25 certainly we've made a great effort to get the information

1 out to the public. And to really help transform California
2 and transform the world.

3 And again, I certainly could not have
4 accomplished what I've accomplished without the hard work
5 of all of you and certainly encourage everyone to really
6 continue that effort going forward. As I said it's a great
7 place to work. Certainly I encourage you to continue to
8 grow and focus on stuff. And for my fellow Commissioners,
9 I always remind them of Governor Brown's perennial refrain,
10 I guess I'll clean it up a little bit, about don't screw
11 up. (Laughter.) Okay. Step up.

12 COMMISSIONER HOCHSCHILD: I move the resolution.

13 COMMISSIONER DOUGLAS: Second.

14 CHAIR WEISENMILLER: All those in favor?

15 (Ayes.)

16 CHAIR WEISENMILLER: The resolution passes 5-0.

17 (Whereupon there is a standing ovation and photos
18 are taken)

19 CHAIR WEISENMILLER: So, Item 2, Russell City.

20 MR. HEISER: Good morning, Chairman Weisenmiller,
21 Commissioners. My name is John Heiser. I work in the
22 Siting, Transmission and Environmental Protection Division.
23 I am the Project Manager overseeing this Russell City
24 Petition to Amend. To echo the sentiments of everyone,
25 Chairman Weisenmiller, we thank you for your services and

1 wish you the best.

2 With me today is Staff Counsel Jared Babula and
3 Engineering Office Manager Matt Layton. Available on the
4 phone will be Dennis Jang and Zuna Ky (phonetic) from the
5 Bay Area Air Quality Management District.

6 Russell City Energy Center is a combined cycle
7 natural gas-fired 600 megawatt facility located in Hayward,
8 Alameda County. The facility began commercial operation on
9 August 2013. Russell City Energy Company filed a Petition
10 to Amend the Final Decision requesting installation of a
11 battery energy storage system and associated equipment for
12 black start capabilities. If approved this will be the
13 first battery technology used for black start capabilities
14 for a facility that is under the Energy Commission's
15 jurisdiction.

16 The Petition to Amend is in response to the
17 California Independent System Operators' need to add black
18 start capabilities to the greater San Francisco Bay Area.
19 CAISO selected Russell City as one of two facilities to
20 provide response to grid emergencies. CAISO developed
21 their system restoration orders, which included black start
22 capabilities to address both the Federal Energy Regulatory
23 Commission, known as FERC, and the North American Electric
24 Reliability Corporation, also known as NERC, that developed
25 standards to implement restoration plans in the event of

1 power or system outages.

2 The Petition to Amend modification would consist
3 of installing between 6 to 10 megawatts of lithium-ion
4 batteries in three metal containers, or enclosures. The
5 battery system would have the capability of starting either
6 combustion turbine generator during an emergency or
7 blackout. Once the turbine generator is operational it
8 would be able to energize the 230 kilovolt bus as part of
9 the directed recovery during a partial or total grid
10 blackout.

11 Rather than using diesel generators to restart
12 the turbines, traditionally the modified Russell City
13 facility would use lithium-ion batteries. These batteries
14 would provide a safe, reliable and cleaner alternative to
15 diesel generators associated with black start capabilities.

16 As stated in the staff analysis new and revised
17 Conditions of Certification are proposed in the following
18 technical areas. Five new air quality conditions are
19 proposed related to construction and operational emission
20 limits. Four conditions would be amended to exempt the
21 black start-related operations from normal operational
22 emission limits. Additional changes would be made to
23 Conditions of Certification for consistency with Title V
24 permit changes.

25 Because of the addition of lithium-ion batteries

1 to the project site, staff proposed a new Condition of
2 Certification for worker safety and fire protection
3 requiring that the local fire department review, and the
4 delegate building official review and approve submittals
5 related to the lithium battery installation.

6 The petitioner docketed comments on staff's
7 analysis, regarding staff's proposed Condition of
8 Certification for worker safety. Staff is in agreement
9 with the proposed changes.

10 Energy Commission technical staff reviewed the
11 petition for potential environmental effects in consistency
12 with applicable regulations. Staff has determined that all
13 potential impacts associated with the project changes would
14 be less than significant. And the new and revised air
15 quality and worker safety and fire protection Conditions of
16 Certification, the project would remain in compliance with
17 all applicable regulations.

18 The resulting project modification would not
19 affect any population including the environmental justice
20 population.

21 Staff is requesting that the Commission approve
22 this petition to add the battery energy storage system.
23 Thank you. If you have any questions, staff is available.

24 CHAIR WEISENMILLER: Thank you. Applicant?

25 MS. NEUMYER: Sorry, I'm still new at this. Good

1 morning. Samantha Neumyer with Ellison, Schneider Harris &
2 Donlan and before I begin I just want to say thank you to
3 Commissioner Weisenmiller, Chairman Weisenmiller. Good
4 luck, going forward.

5 MS. MCBRIDE: I just wanted to say on behalf of
6 Calpine, thank so much for your years of service and
7 leadership, truly inspirational and exemplary and
8 congratulations and all the luck to you in the future.

9 MS. NEUMYER: We don't have much to add to the
10 written comments that we submitted. We do want to thank
11 staff for agreeing to our proposed changes to the Worker
12 Safety Condition of Certification. We request approval of
13 this petition and we're available to answer any questions
14 that you may have.

15 CHAIR WEISENMILLER: Great. Let's go to public
16 comment. Dennis?

17 MR. PETERS: Great, thanks. Chair Weisenmiller,
18 Commissioners, just some brief comments here. So approval
19 of this Petition to Amend is a critical regulatory
20 milestone needed for the ISO's effort to secure additional
21 black start capability from the Russell City Energy Center.
22 It allows us to comply with mandatory federal reliability
23 standards as well as ensuring that restoration time and the
24 greater Bay Area is consistent with that of the other major
25 population centers within the state.

1 We'd just like to really thank staff for all of
2 their efforts, coordination with the ISO, with the owner
3 and with the Bay Area Air Quality Management District and
4 we would urge your approval. Thank you.

5 CHAIR WEISENMILLER: Any other public comment in
6 the room? Anyone on the line? Let's transition to the
7 Commissioners.

8 COMMISSIONER DOUGLAS: So I recommend this item
9 for the Commission's approval. I think it's a very sound
10 and valuable amendment and so I will move Item 2.

11 COMMISSIONER MCALLISTER: Second.

12 CHAIR WEISENMILLER: All those in favor?

13 (Ayes.)

14 CHAIR WEISENMILLER: Item 2 passes 5-0. Thank
15 you.

16 Let's go on to Item 3.

17 MR. VEERKAMP: Good morning, Commissioners. My
18 name is Eric Veerkamp. I work in the Compliance Unit of
19 the Siting, Transmission and Environmental Protection
20 Division. I'm the Project Manager for the Blyth Solar
21 Power Project request for qualifications for delegate chief
22 building official services. Here, also this morning is
23 Deborah Dyer, Chief Counsel. I believe we have Andrea
24 Hoppe from our Contracts, Grants and Loans Office. I also
25 think we have -- fairly certain we have a representative

1 from the Project Owner on the line and there's a
2 representative from the winning firm here as well.

3 Today, staff is seeking approval of the proposed
4 resolution approving the agreement with West Coast
5 Consultants, Inc., or WC3, for a zero sum contract with the
6 Energy Commission to provide delegate chief building
7 official services for the Blythe Solar Power Project Phase
8 2 Units 3 and 4 construction. If approved WC3 will enter
9 into a separate agreement with NextEra Energy Resources,
10 the project owner, for payment.

11 The Energy Commission is the Chief Building
12 Official or the CBO for all plants under the Energy
13 Commission's jurisdiction, all power plants. And is
14 authorized to designate a Delegate CEO to assist with the
15 Energy Commission's CBO responsibilities. To delegate this
16 authority, the Energy Commission released a request for
17 qualifications to select the most qualified firms to
18 provide DCBO services for Blythe Solar.

19 Through this process, three firms provided bids
20 with WC3, receiving the highest score through the
21 competitive bid process.

22 The Energy Commission has also established hourly
23 rates, through a rate negotiation process. If the
24 agreement is approved today WC3 and NextEra will negotiate
25 a separate contract for payment with the rate staff has

1 established in our agreement with WC3. The Energy
2 Commission will be named as a third-party beneficiary to
3 that agreement, to ensure enforcement rights by the Energy
4 Commission.

5 At this time staff is requesting approval of the
6 contract and the assignment of WC3 to do the DCBO for the
7 Blythe Solar Construction. I'm available to answer any
8 questions that you may have. Thank you.

9 CHAIR WEISENMILLER: Great, thank you.

10 Let's start, are there any comments from anyone
11 in the room? Any comments from anyone on the line? Okay,
12 then transition over to the Commissioners.

13 COMMISSIONER DOUGLAS: I also recommend this item
14 to the Commission's approval. This is a really important
15 evolution of our processes with DCBOs. And I appreciate
16 staff getting this to us in a timely way, so that we can
17 act on it. So I'll move approval of Item 3.

18 COMMISSIONER SCOTT: Second.

19 CHAIR WEISENMILLER: All those in favor?

20 (Ayes.)

21 CHAIR WEISENMILLER: This item passes 5-0. Thank you.
22 Let's go on to Item 4.

23 MS. MATHEWS: Good afternoon. You have already
24 previously been provided with Resolution Number 190220-04.
25 And that is with regards to the proposed resolution

1 approving a Disadvantaged Community Advisory Group Member.
2 As you know we had a vacancy created and we're pleased that
3 that has been filled and the new appointee is Mr. Joseph
4 Williams. He has committed himself to serving
5 disadvantaged communities for nearly 20 years. He
6 currently serves as President of the San Bernardino
7 Community College District Board of Trustees and is the
8 President of the African American Community College
9 Trustees Association.

10 Mr. Williams is the founder and CEO of a social
11 enterprise called Youth Action Project. And their mission
12 is to empower youth and young adults in the development of
13 the skills and habits to experience economic and social
14 success. He also has experience serving on extensive
15 committees as well as being an appointee of Governor Jerry
16 Brown, to the California Workforce Development Board, and
17 the California Committee on Employment of People with
18 Disabilities, and is a member of the San Bernardino County
19 Workforce Development Board.

20 I am happy to answer any questions if you have
21 them, but I submit the resolution for your approval.

22 CHAIR WEISENMILLER: Great. Thank you.

23 First, are there any public comments from anyone
24 in the room? Anyone on the line? We'll transition to the
25 Commissioners. Commissioner Scott.

1 COMMISSIONER SCOTT: Yeah, so I just want to
2 warmly welcome Mr. Williams to the Disadvantaged Community
3 Advisory Group. We're looking forward to working with him
4 in that capacity. And if there is no questions I will move
5 approval of Item 4.

6 COMMISSIONER HOCHSCHILD: Second.

7 CHAIR WEISENMILLER: All those in favor?

8 (Ayes.)

9 CHAIR WEISENMILLER: This item passes 5-0. Thank you.
10 Let's go on to Item 5.

11 MS. RAITT: Good morning again, Commissioners.
12 I'm Heather Raitt, the Assistant Executive Director for
13 Policy Development. And I'm requesting that you adopt the
14 2018 Integrated Energy Policy Report, Volume II. The
15 Energy Commission prepares an IEPR every two years with
16 updates on alternate years provide energy policy
17 recommendations to the Governor and Legislature.

18 Under Commission Hochschild's leadership the 2018
19 IEPR Update is composed of two volumes. The first was
20 adopted August 1st to provide a high-level overview of
21 California's energy policies. And so under consideration
22 today is Volume II, I might've said Volume I, anyway this
23 is Volume II which follows up on several energy issues
24 examined under the 2017 IEPR.

25 The report draws on information going from 16

1 public workshops and webinars. The draft was posted
2 October 9th, 2018 and revised in response to public comment
3 and reflect market developments.

4 The final version was posted January 28th and an
5 errata reflecting updates and edits in response to comments
6 and a list posted yesterday. So Commissioners, you should
7 have a copy of the errata in your binders and there are
8 copies at the entrance in the back of the room.

9 And I should just mention that yesterday we
10 received over 500 comments, which are posted online, the
11 vast majority of which support the report.

12 On a very high level the IEPR continues to focus
13 on transforming California's energy system to reduce
14 greenhouse gas emissions and to increase the resiliency of
15 the state's energy system to climate change.

16 In August 2018, the Governor's Office of Planning
17 and Research, the California Natural Resources Agency, and
18 the Energy Commission released California's Fourth Climate
19 Change Assessment. The Fourth Assessment translates global
20 climate modeling into regionally-relevant reports to help
21 identify and plan for the impacts of a changing climate on
22 a local scale. The results of the Fourth Assessment are
23 sobering and show a future punctuated by severe wild fires,
24 rising sea levels, increased flooding, coastal erosion,
25 extreme heat events and more frequent and longer droughts.

1 California is already experiencing the early
2 stages of these impacts. And in response to the wild fires
3 in 2017 and 2018, this IEPR Update undertook a deeper
4 look at opportunities to reduce wild fire risks and
5 increase the resiliency of our energy system.

6 California has a history of leadership in climate
7 policy with a few key pieces of legislation listed on this
8 slide. AB 32 called for reducing greenhouse gas emissions
9 to 1990 levels by 2020. SB 32 calls for a 40 percent
10 reduction below 1990 levels by 2030.

11 Achieving these goals requires changing our
12 transportation and electricity systems, increasing
13 efficiency and reducing methane and other potent greenhouse
14 gas emissions. SB 350 helps advance these goals and
15 ensures that the benefits of clean energy are realized by
16 low-income and disadvantaged communities.

17 In 2018, former Governor Brown signed SB 100,
18 which calls for a 100 percent zero carbon electricity
19 resources by 2045 and increasing the 2030 renewal target
20 from 50 percent to 60 percent. He also signed Executive
21 Order B-5518, which set the statewide goal of achieving
22 carbon neutrality by 2045 and maintaining that negative
23 emissions thereafter.

24 The Executive Order is consistent with the IPCC
25 findings that avoiding the catastrophic consequences of

1 global warming will require limiting it to less than 1.5
2 degrees Celsius.

3 California is leading by example and is active in
4 the international stage and calling for greater emissions
5 globally

6 California's electricity sector has made the most
7 progress in the state's efforts to reduce greenhouse gas
8 emissions. In 2016, greenhouse gas emissions from the
9 electricity sector were 37.6 percent below 1990 levels.
10 Although California's greenhouse gas goals are statewide,
11 in 2016 the electricity sector surpassed the greenhouse gas
12 reduction goal for 2020 and nearly met the 2030 goal.

13 Renewable energy continues to grow. And in 2018,
14 about 34 percent of California's electricity was served
15 with renewables. Further work is needed to manage the
16 daily, hourly and minute-to-minute variation of renewable
17 generation, but substantial advancements have been made
18 since the 2017 IEPR.

19 There's been progress in developing performance
20 standards for solar and wind power plants that help improve
21 reliability and provide benefits to the grid. Energy
22 storage is being rapidly deployed, but more is needed. One
23 opportunity is to repurpose used electrical vehicle
24 batteries for the grid. Grid visualization is a solution
25 that has only just begun to be tapped. The Western Energy

1 and Balance Market allows for real time energy transfers
2 across the west, reducing renewable curtailments and saving
3 more than 324,000 metric tons of CO2 since 2015. It is
4 growing in may encompass 70 percent of the Western U.S.
5 demand by 2022.

6 Increasing the flexibility of loads is also
7 necessary. Time-of-use rates encourage energy use to be
8 better aligned with resource availability. Another key is
9 realizing the potential for demand response as a fully
10 integrated grid resource that participates in real time and
11 day ahead markets.

12 As California's electricity system and policy
13 goals evolve, so does the Energy Commission's forecasting
14 capabilities. The Commission adopted the update to the
15 2017 IEPR Forecast last month, including refreshed
16 projections for PV adoption, plug-in electric vehicle
17 adoption, community choice aggregators and time of use rate
18 impacts.

19 Leadership at the Energy Commission, CPUC and
20 California ISO continue their commitment to using a single
21 set of managed forecasts from the adopted forecast in their
22 planning forms, including the CPUC's integrated resource
23 planning and resource adequacy proceedings and the
24 California ISO's transmission planning process.

25 As California aims to reduce greenhouse gas

1 emissions it must address emissions from buildings, which
2 are second only to the transportation sector. The report
3 puts forward the goal of achieving zero emission buildings.
4 This means reducing greenhouse gas emissions from the
5 entire building including from the use of electricity,
6 natural gas, other fuels and refrigerants that typically
7 use highly potent greenhouse gasses.

8 Electrification is a key strategy. With
9 electrification achieving zero emission buildings requires
10 the recognition that emissions from the electricity system
11 are not same each hour of the day. Emissions are lowest
12 during peak solar generation.

13 This electrification must be coupled with load
14 management strategies such as time-of-use rates and demand
15 response to shift when energy is consumed and maximize the
16 use of renewable energy.

17 Increasing energy efficiency is a key part of
18 decarbonizing buildings and achieving the state's goal to
19 double energy efficiency savings by 2030. Investments made
20 during new construction, retrofitting buildings and
21 replacing appliances, provide valuable opportunities for
22 increased energy efficiency and have long term implications
23 for the state's ability to meet its climate goals.

24 The agriculture and manufacturing sectors are
25 areas of increased focus, that expanded and innovative

1 efforts are needed across all sectors of the economy.

2 In 2018 the Energy Commission took an important
3 step towards reducing emissions from buildings and
4 increasing energy efficiency by adopting the first in the
5 nation Building Standards that require solar on new homes
6 starting in 2020.

7 Integral to the state's energy goals is
8 increasing the equitable distribution of benefits of clean
9 energy and to create an inclusive clean energy economy.
10 Programs implementing the recommendations in the two-part
11 multi-agency Barrier Study is underway. For example, in
12 June 2018 the Energy Commission launched the Energy Equity
13 Indicators Webpage to identify opportunities for improving
14 clean energy access, investments and resilience in
15 California's low-income and disadvantaged communities.

16 In November 2018 the Energy Commission adopted
17 the Clean Energy and Low-Income Multifamily Buildings
18 Action Plan. And CARB's efforts concentrate on expanding
19 education and outreach in developing a one-stop shop pilot
20 project for CARB's low-carbon transportation equity
21 projects.

22 We're working to advance California's energy
23 system. The state continues to grapple with ensuring
24 energy reliability given the challenges of an aging
25 infrastructure, particularly in Southern California.

1 The Energy Commission, CPUC, and the California
2 ISO continue to jointly address reliability issues related
3 to the 2012 closure of the San Onofre Nuclear Generating
4 Station and the closure of several coastal natural gas
5 power plants that used once-through cooling.

6 Delays of a large transmission project that will
7 increase the capability to import electricity into the
8 region, the Mesa Loop-in Project bear watching. The second
9 reliability issue is related to the 2015 massive leak at
10 the Alison Canyon Natural Gas Storage Facility compounded
11 by long-term outages of key pipelines in Southern
12 California.

13 This report includes findings from the third year
14 that the joint agency team in partnership with LADWP
15 analyzed the reliability risks of the natural gas and
16 electricity system in the greater Los Angeles area. They
17 found that pipeline capacity was more constrained, meaning
18 that reliability risks had increased in summer 2018 and
19 this winter due to the pipeline outages.

20 In January 2019 the Energy Commission and CPUC
21 held a joint workshop to discuss the natural gas price
22 spikes in Southern California due to constraints on the
23 natural gas system.

24 So I'd like to conclude by saying that
25 California's leadership continues to be critical as climate

1 changes is a global problem with impacts being felt in
2 California and worsening. That's why we're advancing the
3 science to increase our resilience to climate change and
4 setting ground-breaking goals to reduce greenhouse gas
5 emissions. And the recommendations in the IEPR will help
6 us meet our climate and energy goals.

7 So that concludes my presentation. Again, staff
8 requests that you adopt the 2018 IEPR Update Volume II
9 incorporating the changes detailed in the errata. Thank
10 you.

11 CHAIR WEISENMILLER: Thank you.

12 Let's go to public comment. I have some blue
13 cards, so we'll do those first. SoCalGas?

14 MS. MORENO: Good morning. Well, I want to start
15 off by congratulating Chair Weisenmiller for his eight
16 years of service. Thank you for your contributions to the
17 State of California and its residents. We wish you the
18 best in your future endeavors.

19 My name is Edith Moreno. And I work for the
20 Southern California Gas Company. I'm here to express some
21 concerns with the IEPR Update, which identifies
22 electrification of space and water heating as one of the
23 main strategies to reduce or eliminate greenhouse gas
24 emissions from buildings to meet the state's 2030
25 and 2050 goals. I want to stress that the IEPR and further

69

1 Commission proceedings should not be mandating one
2 technology over all others without full research and
3 analysis. Instead, the Commission should set emission
4 standards and conduct scientific and fact-based studies to
5 inform decisions that will help achieve the states' climate
6 objectives, safely and affordably.

7 Last year we shared a study by Navigant
8 Consulting showing that replacing just 16 to 20 percent of
9 natural gas we deliver through our pipelines with renewable
10 natural gas could achieve similar greenhouse gas emission
11 reduction targets as building electrification.

12 As the Navigant study shows, renewable natural
13 gas can provide a cost-effective path to achieving 2030
14 climate goals. We need to look more closely at the costs
15 of RNG and look at RNG can play a critical role in meeting
16 California's long-term climate goals.

17 We ask the CEC to support building
18 decarbonization strategies that include renewable gas as
19 well as hydrogen production to decarbonize our gas supply.
20 The state needs balanced and sensible building
21 decarbonization policies to keep repair costs down, support
22 energy reliability in the state and enable customer choice.
23 Thank you for your time.

24 CHAIR WEISENMILLER: Thank you.

25 Sierra Club?

1 MS. CULLUM: Hello, Lauren Cullum, on behalf of
2 Sierra Club California. Thank you for the opportunity to
3 comment today.

4 We commend the Energy Commission and its final
5 2018 IEPR Update. We are happy to see the strong focus on
6 the electrification of buildings. We agree with the
7 Commission that electrification is the most viable path to
8 zero emission buildings and will be key to integrating
9 higher levels of renewable energy into the grid. This path
10 is critical to phase out gas and curb the impacts of
11 climate change as well as air pollution.

12 Building electrification is decades behind
13 electric vehicles and solar energy, even though the
14 technology is commercially available. Therefore we urge
15 the Commission to pursue building electrification goals in
16 the IEPR in a manner that expediently accelerates the
17 electrification market while prioritizing California's most
18 vulnerable and disadvantaged communities. Thank you.

19 CHAIR WEISENMILLER: Thank you.

20 BizFed Central Valley?

21 MS. TRAUGH: Hi. Good morning, my name is
22 Melissa Traugh. And I represent a growing organization
23 called BizFed Central Valley. We have over 50 members that
24 collectively represent 20,000 Valley businesses employing
25 more than 300,000 workers.

1 Our members are very concerned that the CEC is
2 proposing to set guidelines, which will be used to inform
3 building codes throughout the state that cease to allow
4 renewable natural gas as an option for heating and cooking
5 as well as for electric generation. The CEC guidelines
6 focus solely on renewable energy through wind and solar,
7 neglecting to consider renewable natural gas, which the
8 Valley is an a abundant source of, and can actually be
9 carbon negative. And it doesn't forces us, as consumers,
10 to retrofit our homes and our businesses and to buy costly
11 new appliances.

12 Hard-working Californians and business owners who
13 already pay a premium to conduct business in the state
14 cannot afford the proposed mandate that will unfairly
15 increase our already sky-high electric bills. Given the
16 prevalence of disadvantaged communities in the Valley we
17 need energy to be accessible and affordable.

18 Furthermore, this mandate goes against the
19 requirement for the update policy recommendations,
20 specifically diverse energy supplies and forces us to put
21 all our eggs in one basket.

22 BizFed Central Valley members urge the CEC to
23 help move California forward towards meeting our aggressive
24 climate goals in a thoughtful and cost-effective way that
25 doesn't rob business owners and residents of choice, and

1 take a more balanced approach that allows for multiple
2 technologies and multiple fuels. Thank you.

3 CHAIR WEISENMILLER: Thank you.
4 Congress of California Seniors?

5 MR. PASSMORE: Good morning Mr. Chair and Mr.
6 Chairman Designate and Commissioners. I'm Gary Passmore,
7 President of the Congress of California Seniors. We are a
8 progressive, non-partisan advocacy group for older seniors,
9 older Californians and their families. This July we will
10 have spoken on behalf seniors for 42 years since 1977 in
11 California. And we are here today to promote an energy
12 system that is affordable, that is attainable and that is
13 safe.

14 The proposed 2018 IEPR Update fails to
15 sufficiently recognize the changing demographics in
16 California. Let me remind you that 70 years ago California
17 experienced a population explosion that was fueled in part
18 by the development of new industries such as aerospace and
19 entertainment. Millions of new homes and shopping malls,
20 schools and freeways, all of the features that define life
21 in modern America came into reality in this state. We were
22 a young state.

23 But those families decided to stay. And today we
24 have a future with a population that is older than that of
25 many states. Our over-65 population is the fastest growing

1 part of our population. And the very fastest growing
2 segment of that over-65 group is people over 85 years old.
3 We outnumber or soon will outnumber the number of school-
4 aged children in California. So you're looking at a
5 different California over the next three or four decades
6 than the California of today or of the past. And we think
7 that this update fails to acknowledge that sufficiently.

8 First the poverty rate in this group is growing
9 and it fails to recognize the skyrocketing cost of housing
10 and accompanying utilities. I tell you this, because today
11 millions of seniors are struggling to get by. And millions
12 more will join them in coming decades. Energy
13 affordability is of paramount importance and so is safety.
14 And we are highly tuned. I could fill a room like this ten
15 times over with seniors whose concerns need to be
16 recognized as you develop proposals to respond to our
17 energy needs.

18 The front-end costs of converting existing homes
19 to all- electric to achieve decarbonization are not
20 reasonable. And they cannot be shifted to the eight
21 million Californians that we will soon see in California.
22 You must accomplish massive subsidies to accomplish it and
23 I mean subsidies in the billions of dollars, to achieve
24 this conversion. And you need to pursue options that
25 involve much lower costs, less disruption and are more cost

1 effective.

2 Mandating one technology without full research
3 and analysis dooms the update report to failure. And we
4 will make these issues known in part of the Governor's
5 upcoming proposed Master Plan for Aging in California.
6 Thanks for paying attention.

7 CHAIR WEISENMILLER: Okay. Thank you.

8 Next, we go to Coalition for Renewable Natural
9 Gas.

10 MS. KAPOOR: Good morning, Commissioners. My
11 name is Nina Kapoor representing the Coalition for
12 Renewable Natural Gas. I'm here today in support of
13 adoption of Volume II of the 2018 IEPR Update. We commend
14 the Commission for focusing on the critical needs to
15 increase the rate of decarbonization in California's
16 buildings.

17 The report correctly points to the doables of
18 improving the efficiency of existing buildings including
19 their electrification, where cost effective while
20 simultaneously making heating fuels used in buildings
21 cleaner. We understand the desire to focus on
22 electrification as an exciting new emerging technology
23 opportunity. But we also believe that RNG has a
24 significant role to play in this sector.

25 RNG is available today for use in existing, long-

1 lived capital stock that was built to use natural gas. The
2 most recent Scoping Plan from the Air Resource Board
3 explicitly states that moving towards renewable natural gas
4 will help California achieve its
5 2030 climate target. It goes on to recommend decreasing
6 the usage of fossil natural gas through a combination of
7 energy efficiency programs, fuel switching, and the
8 development and use of renewable natural gas in the
9 residential, commercial and industrial sectors in order to
10 achieve our long-term climate goals.

11 Development of the renewable natural gas research
12 is also critical if we are going to hit the state's short-
13 lived climate pollutant and waste diversion goals.

14 Scenario work by Navigant Consulting clearly
15 shows that employing R&D in conjunction with
16 electrification where appropriate, can lead to more cost-
17 effective outcomes in the building sector, up to three
18 times more cost effective to be specific, at a time when
19 housing affordability is critical.

20 We applaud the currently strong incentives for
21 the use of RNG in transportation fuel applications, but
22 note that little to no incentive for use in buildings or in
23 industrial applications exists.

24 Through the robust response of our member
25 companies, to the incentives on the transportation side, we

1 are now close to supplying all of California's natural gas
2 vehicles with renewable natural gas.

3 We would like the opportunity to continue the
4 positive stories associated with growth in RNG supply, both
5 by expanding the use of RNG in the building and industrial
6 sectors and through additional policy support for the
7 development and deployment of new CNG vehicles.

8 We encourage the CEC to work closely with the
9 CPUC and the Air Resources Board to prioritize the
10 development of renewable natural gas procurement standard,
11 per the direction in SB 1440 from last year. Either it's
12 part of the building decarbonization discussion or in a
13 separate rulemaking. Thank you.

14 CHAIR WEISENMILLER: Thank you. Anyone else in
15 the room with comments? Please come up.

16 MS. GAVRIC: I apologize for that. I did fill
17 out a blue card, so I'm not sure where that had ended up.
18 And so my name is Jeli Gavric. I'm with the California
19 Association of Realtors. And I'm here to add on to the
20 concerns about the proposal for decarbonization and
21 electrification of existing California homes.

22 As everyone knows, in this room and what we've
23 heard, we are in a housing crisis. I just came to remind
24 everyone of a couple of facts that are very important that
25 should be considered as we move forward. The median price

1 for a home in California right now is over \$538,000. And
2 to be able to achieve the purchase of a home of that value
3 you would have to have a median -- the median income is
4 around \$89,000. That's not what the actual median income
5 is of California earners. It's actually quite less than
6 that. It's at \$72,000. So our housing supply is already
7 outrageously overpriced and people are struggling to afford
8 shelter at this point.

9 And so why is this relevant to the
10 electrification? According to that report that everyone
11 keeps referencing from Navigant we understand that the cost
12 to retrofit a home to electrification is around \$7,200.
13 And that's for basic equipment and a panel upgrade. And
14 that doesn't include any excessive energy use or time-of-
15 use rates that would come with increasing your electrical
16 use.

17 And from what I've learned at the EPIC Symposium
18 yesterday as well, the heat pump technology that we have
19 will also require some additional technology and equipment
20 in the home to actually maximize the comfort and livability
21 of homes. And so those features were not included in that
22 Navigant study. And so from that \$7,200 proposal for the
23 retrofit, we know that that number is actually going to
24 increase.

25 And so this is a huge ask, for families that are

1 barely making their house payments as it is or they're
2 being compromised in their lifestyle and their home
3 choices.

4 So at the bottom line what we're asking for here
5 is that in pursuit of fulfilling the obligations under AB-
6 3232 we're asking the Commission to not just look at what
7 the operational costs are and what the costs are to the
8 electrical system for changing California towards an
9 electrification, but we really want there to be a keen
10 focus on what the true economic impacts will be in the
11 median income earners of California who will neither
12 qualify for some of the programs where they will be able to
13 get free assistance for electrification, nor will they be
14 able to afford the outright upfront costs. Thank you.

15 CHAIR WEISENMILLER: Thank you.

16 Anyone else in the room? Let's go to the line
17 and we'll start with the Western Propane Gas Association.

18 MS. ALAFIA: Joy Alafia, again with the Western
19 Propane Gas Association. And we are very proud that our
20 industry has a part to play in California's clean building
21 energy goals whether it's backup power for generators used
22 to complement solar-powered homes or backup power at times
23 of electrical power outages.

24 Our industry is transitioning to renewable
25 propane including next generation technologies. Renewable

1 propane for those who may not be aware comes from a variety
2 of sources, some with even ultra-low or negative carbon
3 footprints or carbon sink if you will and so all consumers
4 can benefit from the carbon displacement, if you will, from
5 renewable propane.

6 So while we support the effort to decarbonize
7 buildings we want to make sure there's recognition for the
8 role of efficient appliances, specifically looking at water
9 heaters and furnaces that in more rural low-income areas
10 run on propane. And we also would like to highlight some
11 of the value of looking at this from a fuel neutral
12 scientific, more balanced approach.

13 Thank you for your time and the opportunity to
14 provide our input.

15 CHAIR WEISENMILLER: Thank you. Anyone else on
16 the line?

17 Okay. So let's transition over to the
18 Commissioners, but before I turn it over to Commissioner
19 Hochschild I was just going to point out that one of the
20 things I think will become more an emerging issue is we
21 have about a million homes. I think it's more like a
22 million-and-a-half in high fire-risk areas. So the
23 question is going to be how do we make those homes more
24 resilient? And that's also going to be true for new
25 construction, just to deal with fire hazards. So that's

1 another factor we have to build into our thinking, going
2 forward.

3 COMMISSIONER HOCHSCHILD: Thank you, Mr.
4 Chairman. And let me thank Heather and your team for great
5 work on this IEPR, and all the stakeholders for your
6 comments. I think the IEPR speaks for itself, so I don't
7 have much more to add except to thank everyone who worked
8 so hard and all the folks over the last months who've been
9 participating. And unless there are other comments I'm
10 happy to move the item.

11 COMMISSIONER MCALLISTER: I'll second.

12 CHAIR WEISENMILLER: Okay, all in favor?

13 (Ayes.)

14 CHAIR WEISENMILLER: This item passes 5-0. Thank
15 you.

16 Let's take a break for a closed session. Let me
17 find the right piece of paper. The Commission will now go
18 into closed session as specified in Agenda Item 12.a.iii,
19 which provides notice the Commission will adjourn to closed
20 session with Legal Counsel pursuant to Government Code
21 Section 11126(e) to discuss the following litigation to
22 which the Energy Commission is a party. State Energy
23 Resources Conservation Development Commission versus
24 Electricore, Inc. and ZeroTruck.

25 Agenda Item 12.b.1 also provides notice that the

1 Commission will adjourn to closed session with its Legal
2 Counsel pursuant to Government Code Section 11126(e) to
3 discuss Alternative, Renewable Fuel and Vehicle Technology
4 Program Grant ARV-14-011 with HyGen, Inc.

5 We anticipate returning to open session at about
6 1:00 o'clock.

7 (Off the record at 11:59 a.m.)

8 (On the record at 1:05 p.m.)

9 CHAIR WEISENMILLER: Well, we're back in session.
10 Let's go to Item 6.

11 MR. DEEVER: Good morning Chair and
12 Commissioners. My name is Paul Deaver. I'm the Program
13 Manager for Public Owned Utility Integrated Resource Plans.
14 I'm proposing that the Energy Commission adopt the
15 Executive Director Determination finding Anaheim's
16 Integrated Resource Plan consistent with the requirements
17 of Senate Bill 350. Today, I will discuss the Energy
18 Commission's review of Anaheim's Integrated Resource Plan.

19 Before I get to that, a brief overview of Anaheim
20 public utilities. Anaheim is a city-owned electric and
21 water utility in Orange County. They are the sixth largest
22 publicly owned utility in California and they make up about
23 1 percent of total utility load in California. Their
24 average peak is just over 550 megawatts. Their annual
25 energy need is roughly 2,400 megawatt hours.

1 Most of their customers are residential. They
2 have over 100,000 residential customers, about 15,000
3 commercial, and about 300 industrial customers.

4 Anaheim adopted their Integrated Resource Plan in
5 May of 2018. They submitted it to the Energy Commission in
6 June of 2018. And the Energy Commission posted it for
7 public comments that were due in August. We did not
8 receive any public comments on that.

9 Our Integrated Resource Plan Guidelines also call
10 for an Executive Director Determination on the consistency
11 of integrated resource plans for consistency with Senate
12 Bill 350.

13 Well, we posted that for public comment in
14 November. Comments were due in December. Anaheim was the
15 only party that commented and they provided us with updated
16 energy efficiency savings estimates.

17 Now, for our review of some of the requirements
18 for integrated resource plans. The first one, publicly
19 owned utilities had a GHG reduction target for 2030. The
20 California Air Resources Board established GHG reduction
21 ranges for each POU. For Anaheim, their range is between
22 305,000 and 538,000 metric tons of carbon dioxide. Anaheim
23 plans to reduce their greenhouse gasses down to 505,000
24 metric tons by 2030. This is towards the higher end of the
25 range.

1 To achieve their goal for reducing GHG's Anaheim
2 plans to divest from their Intermountain Power Project Coal
3 Plant by 2027. They also plan to reduce natural gas use
4 from their natural gas plants and procure more renewable
5 energy.

6 Another goal for integrated resource plans is the
7 2030 renewables target. So the publicly owned utilities
8 must reach at least 50 percent of renewables by the year
9 2030. For Anaheim's renewable strategy they plan to
10 diversify from primarily baseload resources such as
11 geothermal and biomass and diversify out towards smaller
12 solar and short-term renewable contracts.

13 And as I mentioned again Anaheim adopted and
14 submitted their Integrated Resource Plan before January
15 1st, 2019. Senate Bill 100, which became effective January
16 1st, 2019 increases the RPS goals to 60 percent from 50
17 percent.

18 I'm going to go over some of the planning goals
19 for integrated resource plans. Anaheim's IRP showed that
20 they plan to meet these goals. I'll go through each one.

21 So the first one is that Anaheim must ensure
22 system and local reliability of their system. They do plan
23 for a 15 percent planning reserve margin. And looking at
24 the data reporting tables and through the IRP staff found
25 that they have enough capacity to meet their capacity and

1 energy needs.

2 For the distribution system reliability, Anaheim
3 has a regular maintenance and evaluations of the
4 distribution system as well as upgrades and expansions.
5 They also have emergency planning to help maintain
6 reliability. They described their current programs for the
7 distribution system and some of their current and their
8 future upgrades as well.

9 The next requirement or planning goal here,
10 Anaheim must be able to serve its customers at just and
11 reasonable rates. Anaheim plans for rate increases to be
12 below the long-run rate of inflation, which is about 1.3
13 percent. They compare their monthly customer bills with
14 other Southern California utilities and find that they're
15 the lowest if not one of the lowest.

16 Also, for rates Anaheim does provide rate
17 assistance for low-income and disadvantaged communities, as
18 well as time-of-use charging rates and other rate programs.

19 Another requirement or another planning goal on
20 here is for Anaheim to minimize the impacts on ratepayer
21 bills. Anaheim did evaluate or analyze three portfolios.
22 And these were evaluated for the cost, risk, diversity and
23 reliability. And their preferred portfolio turned out to
24 be the cheapest one or the least cost.

25 Another planning goal, Anaheim must strengthen

1 the diversities, sustainability and resiliency of their
2 transmission and their distribution systems. The
3 California Independent System Operator operates Anaheim's
4 transmission resources, however Anaheim does discuss their
5 current transmission resources and how they're being used.
6 Staff evaluated these Anaheim transmission resources and
7 found that they're adequate, reliably meet annual peak
8 energy and capacity needs.

9 The next planning goal is to enhance the
10 distribution systems and demand side energy management. As
11 I mentioned before, Anaheim plans for regular maintenance
12 and system evaluations on their distribution system. They
13 also monitor impacts from distributed generation and from
14 EV charging loads just to see where to best put those
15 resources at.

16 The last item for the planning goals on this
17 slide, Anaheim must reduce localized air pollutants and
18 other greenhouse gas emissions with an early priority in
19 disadvantaged communities. Anaheim describes both their
20 current and future programs for low-income and
21 disadvantaged communities.

22 So a few of the things they're doing, they're
23 retiring their Anaheim peaking plant by 2025 and the
24 reducing output from Buchanan (phonetic) or they project
25 that they'll reduce output from Buchanan natural gas plant

1 after that as well.

2 Some of the programs they discuss include energy
3 efficiency rebates, public space electric vehicle charging,
4 LED lighting programs and those sort of things as well as
5 time-of-use electric vehicle charging rates.

6 All right, on this slide there are some more
7 planning goals. These items are things that the publicly
8 owned utility must address and/or consider. I'll go
9 through each of these.

10 So Anaheim must address the procurement of energy
11 efficiency and demand response resources. They do describe
12 their current and their future programs. Again, some of
13 these include LED lighting programs, residential home
14 rebates for appliances and other incentives.

15 Anaheim does forecast that they will meet the
16 Senate Bill 350 energy efficiency doubling goals in each
17 year of their planning horizon. And by 2010 they plan to
18 have more than 300 gigawatt hours cumulative of cumulative
19 energy efficiency savings.

20 Next, Anaheim must address procurement of energy
21 storage resources. They currently have a one megawatt
22 pilot project at the Harbor Substation. This may be
23 increased to 11 megawatts by 2026.

24 They currently don't have a strong lead for
25 ramping from storage right now, because they are primarily

1 baseload resources. They do plan to reevaluate energy
2 storage later in the planning horizon when they have more
3 variable generation, so they can look at that for their
4 ramping needs. So currently, what they're using energy
5 storage for is to self-provide ancillary services, so that
6 they can reduce some of the cost of going to the market and
7 procuring those.

8 Next, Anaheim must adjust procurement of
9 transportation electrification resources. They do discuss
10 their programs and how they plan to meet future programs
11 and policy goals. Some of these include time-of-use
12 charging rates, workplace charging programs, electric
13 vehicle charger installation rebates, things like that.
14 And by the end of 2017 Anaheim had installed a total of 69
15 electric vehicle charging stations and they have, within
16 the city limits of Anaheim, they have over 190 electric
17 vehicle charging stations both public and private.

18 By 2030, Anaheim forecasts they will have over
19 16,000 electric vehicles in their service territory and
20 they forecast an incremental EV charging load from this of
21 over 60,000 megawatt hours. When they account for -- when
22 they take account of gasoline vehicle displacement they
23 actually see a net reduction in greenhouse gas emissions of
24 about 12,000 metric tons of carbon dioxide.

25 Next, Anaheim must address procurement of

1 diversified resource portfolio. Anaheim analyzed three
2 different portfolios. They looked at a baseload, a mixed
3 and a variable portfolio. They chose a variable portfolio,
4 which replaces Intermountain Power Coal with Renewable
5 Energy. And once again they found that this is the most
6 cost effective for them, this portfolio.

7 All right, the next thing they must address are
8 resource adequacy requirements. The resource adequacy
9 resources were discussed in the system and local
10 reliability section. Again, they do plan for a 15 percent
11 planning reserve margin. Staff found that they plan for
12 adequate capacity to meet all their resource adequacy
13 needs.

14 The last item on this, this comes from Senate
15 Bill 338. This is an item that Anaheim must consider. And
16 this requires them to consider how existing renewable
17 energy, grid operational efficiencies, energy storage and
18 distributed generation can help meet energy needs during
19 the net peak hours. Anaheim did discuss how their current
20 resources can meet these needs. They looked at historical
21 information to see how existing biomass and geothermal
22 plants can meet the peaks in the summer. Sometimes these
23 plants are degraded because of the temperature.

24 They also looked at hydro and wind availability
25 historically, to see how these are able to meet peak needs.

1 And they also look at how their existing resources are
2 dispatched from CAISO, California Independent System
3 Operator dispatch signals.

4 So Anaheim looks at these when they are planning
5 to use either existing resources of other resources to meet
6 their energy and capacity needs, to be able to use this
7 information for that.

8 Today, I'm requesting the Energy Commission adopt
9 the executive director's determination funding Anaheim's
10 Integrated Resource Plan consistent with Senate Bill 350
11 requirements. Thank you and I'm happy to answer any
12 questions.

13 CHAIR WEISENMILLER: Thank you.

14 First, let's see if there's any public comment.
15 Anyone in the room? Anyone on the phone? Okay. So let's
16 transition over to the Commissioners then.

17 This is a milestone for us. This is the first of
18 the POU IRPs that we have reviewed, under SB 350. We've
19 done a very thorough review of this and really covered all
20 of the requirements. I obviously think we're setting a
21 good framework. I really appreciate Paul really pushing
22 this along and having -- coming up with a -- actually Paul
23 and Sylvia I should say coming up with a very consistent
24 framework and then as we're applying it throughout the
25 division we're getting more and more of the IRPs although

90

1 frankly they're not all in yet. But, again, trying to make
2 sure that we have a consistent approach across all the
3 filings.

4 The interesting thing will be more in the next
5 IEPR when we aggregate them all together and see what the
6 impacts are. But again, at this stage we're sort of
7 marching through the individual ones. This is one which,
8 you know, is a significant entity. And certainly put a lot
9 of time into pulling this together. And I think, again, we
10 certainly appreciate the staff moving forward and coming up
11 with an approach to do this.

12 COMMISSIONER DOUGLAS: I'll just comment briefly.
13 I requested a briefing from staff and it was very helpful
14 to go through their review of the IRP and Anaheim's work on
15 that with them. So I appreciate that.

16 COMMISSIONER HOCHSCHILD: I would move the item
17 unless there's comments.

18 COMMISSIONER SCOTT: I was just going to echo
19 what Commissioner Douglas said. I got an excellent
20 briefing from staff and appreciate walking through the
21 details, especially with this first one as it comes through
22 and also hearing that what a good job you thought Anaheim
23 in putting this together.

24 COMMISSIONER MCALLISTER: I would just add, just
25 echo what the Chair just said about seeing the aggregation,

1 the aggregated sort of what is looks like when they're all
2 put together and we got through all the POU's and then when
3 we combine that with the IRPs from the big IOU, then we
4 sort of get a statewide view. That's going to be very,
5 very telling. And I think we'll be able to do better
6 policy with that basis. So I'll second.

7 CHAIR WEISENMILLER: Okay. All those in favor?

8 (Ayes.)

9 CHAIR WEISENMILLER: This item passes 5-0. Thank
10 you.

11 MR. DEEVER: Thank you

12 CHAIR WEISENMILLER: Let's go on to 7.

13 MR. CAZEL: Good afternoon. My name is Phil
14 Cazel. I'm with the Energy Commission's Advanced Vehicle
15 Infrastructure Office. I'm presenting a grant agreement
16 for possible approval with ITM Power Incorporated. And
17 it's to complete construction of a hydrogen station in
18 Chino, California.

19 This is an important project, because the station
20 will produce 100 percent renewable hydrogen. And this is
21 significantly more than the 33 percent renewable hydrogen
22 content, which is required under SB 1505. This station
23 will also support 15 fuel cell electric vehicles that will
24 be deployed in the nearby cities of Riverside and Ontario
25 and also in disadvantaged communities nearby.

1 Additionally, the station will support new
2 fueling protocol testing at the Hyundai Kia America
3 Technical Center. And Hyundai has provided the station,
4 the land needed for installation.

5 This hydrogen station project was initiated by a
6 previous agreement under the Alternative and Renewable Fuel
7 and Vehicle Technology Program, which funded the
8 installation of the station's compression, storage and
9 dispensing equipment. Today's proposed agreement will
10 install an onsite electrolyzer and complete the station.

11 The proposed grant agreement with ITM Power
12 includes approximately \$792,000 in Energy Commission funds
13 and approximately \$470,000 in match funding.

14 The proposed grant amount will cover the cost of
15 installing the onsite electrolyzer and will complete the
16 station making it open to the public, producing 100
17 kilograms a day of 100 percent renewable hydrogen.

18 We recommend approval of this proposed agreement
19 to complete the Chino hydrogen station. Steve Jones from
20 ITM Power is available on the phone. And we're both
21 available for answering any questions you may have. Thank
22 you.

23 CHAIR WEISENMILLER: Great, thank you.

24 First, are there any comments from anyone in the
25 room? One the line, do you have any comments? Okay. Then

1 let's transition to the Commissioners. Commissioner Scott.

2 COMMISSIONER SCOTT: All right. Thanks for that
3 great presentation, Phil.

4 I just want to thank the staff for their good
5 work on this project. As Phil mentioned, it originally
6 started out under a previous agreement that was unable to
7 be completed. And they worked hard to come up with a good
8 solution to make sure that this station could get across
9 the finish line. So and it's an important need in an
10 expanding network. And it'll provide coverage in a key
11 market that's kind of been desperately waiting for another
12 hydrogen station.

13 So I am pleased to support this and if there's no
14 questions I will move approval of Item 7.

15 COMMISSIONER DOUGLAS: Second.

16 CHAIR WEISENMILLER: All those in favor?

17 (Ayes.)

18 CHAIR WEISENMILLER: This item passes 5-0. Thank
19 you.

20 Let's go on to 8, BRIDGE?

21 MR. FRIEDRICH: Good afternoon, Commissioners.
22 My name is James Friedrich. I'm with the Energy Research
23 and Development Division. I'm here requesting approval of
24 two new grant agreements resulting from the EPIC
25 solicitation entitled, "Bringing Rapid Innovation

1 Development to Green Energy," or BRIDGE for short.

2 BRIDGE provides follow-on funding to the most
3 promising early stage technologies that received previous
4 funding from an eligible federal agency or Energy
5 Commission research program.

6 The solicitation concept stemmed from ongoing
7 coordination with the Department of Energy's ARPA-E program
8 allowing startup companies to continue development of their
9 technology without having to wait years for a topic-
10 specific solicitation to become available. I will provide
11 a brief overview of the two projects being considered
12 today, both of which we're very excited about.

13 The first item for your consideration is a grant
14 agreement with SkyCool Systems, Incorporated. SkyCool
15 Systems has developed a breakthrough technology that
16 enables new and existing air conditioning and refrigeration
17 systems to run more efficiently. SkyCool's core product is
18 a rooftop mounted panel with a specialized film that cools
19 when outside and exposed to the sky. Radiative sky cooling
20 is not a new concept. It was used by ancient civilizations
21 to make ice at night in the desert.

22 Beginning in 2012 at Stanford University with
23 ARPA-E support SkyCool System's founding team began
24 researching ways to enable radiative sky cooling during the
25 day. In 2014, the first results demonstrating this effect

95

1 were published in the journal "Nature" showing that their
2 specialized film could passively cool up to 20 degrees
3 Fahrenheit below air temperature even under direct
4 sunlight. The panels cool without evaporating water and
5 only require electricity to run a small recirculating pump.

6 SkyCool is now ready to deploy their panels at
7 the pre-commercial pilot scale. In this project, SkyCool
8 panels will be deployed at two sites demonstrating two
9 different applications.

10 The first application will integrate SkyCool
11 panels with a refrigeration system in a commercial super
12 market, and is expected to reduce electricity consumption
13 by 15 percent. The second application will integrate
14 SkyCool panels in a commercial HVAC system and is expected
15 to reduce electricity consumption by 40 percent.

16 The second item for your consideration is a grant
17 agreement with MicroBio Engineering, Incorporated. In this
18 project MicroBio Engineering will further advance their
19 recycle nutrients energy and water technology known as the
20 RNEW technology to the pilot demonstration stage. This
21 project advances and builds on DOE-supported projects on
22 algal biomass and bio-fuels production integrated with
23 wastewater treatment.

24 Many California communities use pond systems,
25 using algae and bacteria for photosynthetic wastewater

1 treatment. The major limitation of current technology is
2 that algal ponds cannot provide sufficient oxygen during
3 winter months, to allow complete removal of nitrogen on a
4 year-round basis.

5 The RNEW technology overcomes the seasonal
6 limitation by the selective use of mechanical aeration to
7 optimize wastewater treatment in winter months and
8 incorporates a two-stage process of biomass settling and
9 filtration for harvesting.

10 The products resulting from this process are
11 unrestricted reuse water and biomass that can be used to
12 generate biofuels and fertilizer.

13 The RNEW technology will be tested at three
14 wastewater treatment facilities, one of which is located in
15 a disadvantaged community in Delhi, California.

16 By enabling year-round algal treatment of water
17 the RNEW technology is anticipated to reduce electricity
18 consumption at wastewater treatment by 40 percent on
19 average and up to 80 percent. And reduces annualized
20 treatment costs by over 50 percent compared to conventional
21 technologies.

22 So that includes [sic] my presentation. I'm
23 joined by two representatives from MicroBio who are here in
24 the room and potentially one representative from SkyCool
25 Systems on the phone if you have any further questions.

1 Thank you.

2 CHAIR WEISENMILLER: Great.

3 First are there any comments from anyone in the
4 room? Any comments from anyone on the line? Okay, so
5 let's transition to the Commissioners.

6 I think --

7 (Off mic colloquy.)

8 CHAIR WEISENMILLER: Two, the question is whether
9 they have anything they want to say at this stage.

10 (Off mic colloquy.)

11 CHAIR WEISENMILLER: Yeah. If they want to
12 speak, go ahead. Yeah, so the question is -- the two
13 gentlemen from SkyCool, if you want to say anything at this
14 stage, or are you just available for questions?

15 MR. GOLDSTEIN: My name is Eli. I am here from
16 SkyCool and I'll be happy to answer any questions. I'm
17 grateful for the opportunity to participate in this
18 program.

19 CHAIR WEISENMILLER: Great, thank you. So again,
20 we'll transition. I think this is a new approach we're
21 coming up with, which is to again take technologies and try
22 to push them forward by basically taking them to the next
23 step. So quite an interesting concept, you know, basically
24 taking things that have gone through our process or ARPA-E
25 and then trying to move forward, given that you've had that

98

1 validation of the potential for the project.

2 COMMISSIONER SCOTT: I will move approval of Item
3 8.

4 COMMISSIONER MCALLISTER: Second.

5 CHAIR WEISENMILLER: All those in favor?

6 (Ayes.)

7 CHAIR WEISENMILLER: This item passes 5-0. Thank
8 you.

9 Let's go on to Item 9.

10 MR. UY: Hi, good afternoon, Commissioners. My
11 name is Kevin Uy with the Energy Efficiency Research Office
12 in the Research & Development Division. Staff is seeking
13 approval of 13 projects from the Food Production Investment
14 Program. I have a brief presentation, which provides an
15 overview of the solicitation. Following the presentation,
16 I'll go over the projects recommended for award.

17 The purpose of the Food Production Investment
18 Program is to fund drop-in and emerging energy technologies
19 at California food-processing facilities, which reduce
20 energy use and greenhouse gas emissions. Funding for this
21 program is provided through the Cap and Trade Program and
22 administered through California Climate Investments, a
23 statewide initiative which puts Cap and Trade dollars to
24 work.

25 A key requirement of this program, and all

1 California Climate Investment programs, is the reporting of
2 the program benefits. The Energy Commission must report
3 program level and project level benefits twice annually to
4 the administering agency of the California Air Resources
5 Board.

6 Moving on to the solicitation results, there was
7 \$57 million available in two funding tiers. Tier 1 is for
8 drop-in technologies, which are technologically mature and
9 commercially available, but still represent energy and GHG
10 emission reductions above industry standard practice. Tier
11 2 is for emerging technologies, which are not widely used
12 in California and have the potential to significantly
13 reduce or eliminate GHG emissions.

14 The solicitation was released in June of last
15 year with proposals due in September and results announced
16 in November. In total, 25 proposals were received and 13
17 projects recommended for award. The total recommended
18 amount is approximately \$27 million.

19 Estimated GHG reductions from these projects
20 equate to 28,000 metric tons of carbon dioxide equivalent
21 per year. To put that in perspective that's the equivalent
22 of 5,800 passenger vehicles consuming 3 million gallons of
23 gasoline per year.

24 Estimated electricity savings are 3.8 million
25 kilowatt hours, equivalent to the consumption in 300 homes

1 per year. While estimated natural gas savings are 3.3
2 million therms equivalent to the consumption in 1,900 homes
3 per year.

4 Finally, estimated criteria pollution emission
5 reductions from these projects are 27 metric tons of NOx
6 per year, which is equivalent to removing 65 Class 8 heavy-
7 duty trucks from the road.

8 There is a second funding opportunity, which just
9 closed to provide the balance of the funds for 30 million.
10 And the second year's worth of funding for the program, \$60
11 million worth, will come out in a third funding opportunity
12 later this year.

13 This slide shows the technologies eligible for
14 funding under Tier 1 and Tier 2. I won't go through each
15 one, but in general Tier 1 technologies are widely used in
16 food processing facilities and it's common to find very old
17 outdated equipment with poor performance and emissions.
18 The retrofit and replacement of these technologies results
19 in fairly straightforward and often results in significant
20 energy and GHG emission reductions.

21 Tier 2 technologies are not typically seen in
22 food processing facilities and have the potential to
23 significantly reduce GHG emissions or eliminate them
24 entirely. These are the kinds of technologies, which would
25 allow California food processors to meet California's

1 ambitious energy goals.

2 This slide shows the breakdown of technologies
3 proposed for funding. Again, I won't go through each one,
4 but you'll notice that for Tier 1 boilers and economizers
5 are the largest project type being funded. And those
6 represent also the largest natural gas consumers in food
7 processing facilities. Compressors and motors, which are
8 the largest electricity consumers and food processing
9 facilities are a close second. And for Tier 2 there are
10 solar, thermal and fuel switching projects both of which
11 have the potential to significantly reduce or eliminate
12 fossil fuel use.

13 This slide shows the geographic distribution of
14 the projects. Of the 13 projects there are 20 sites total
15 as we allowed applicants to bundle multiple sites owned by
16 the same entity into one application. Of the 20 sites one
17 is Northern California, 14 are in the Central Valley, and 5
18 are in Southern California. And it's worth noting that 19
19 out of these 20 sites are located in disadvantaged or low-
20 income communities.

21 Finally, this slide shows the project recipients.
22 I'll now give a brief overview of each one. The first two
23 projects are with Baker Commodities who will implement
24 energy efficiency upgrades at their Vernon and Kerman food-
25 processing facilities. These upgrades include boiler

1 controls, a condenser upgrade, motor replacements and
2 automation hardware. Boilers, condensers and motors are
3 found in nearly every food processing facility and
4 installation of energy efficient replacements has high
5 potential for replicability in other facilities.

6 The next project is with Sun-Maid Growers who
7 will implement an optimized compressed-air system at their
8 raisin production facility in Kingsburg. Compressed air
9 systems are common in food processing facilities and in
10 this particular facility it is used for production, for
11 processing and packaging of raisins.

12 The optimized compressed air system will feature
13 an energy efficient oilless compressor, which also recovers
14 heat from the compression process that is typically wasted.

15 The next two projects are with tomato-processing
16 facilities, Pacific Coast Producers in Woodland and Neil
17 Jones Food Company in Firebaugh. These facilities are
18 implementing very high efficiency evaporator systems, which
19 are used to evaporate water from tomato juice to produce
20 tomato products. Evaporator systems are common in tomato
21 juice or in tomato processing and juice production
22 facilities, meaning this technology could be implemented in
23 many other facilities.

24 The next project is with Imperial Western
25 Products who are implementing energy efficiency upgrades at

1 four of their food-processing facilities. One facility is
2 in the Central Valley, Selma, while the other three are in
3 Southern California: Coachella, Mira Loma and San
4 Bernardino. These upgrades include high-efficiency
5 compressors and boiler economizers.

6 The next project is with Smithfield who are
7 installing a heat recovery system at their meat processing
8 facility in Vernon. Existing exhaust stacks throughout the
9 facility will have economizers installed on to them, which
10 will recover and recycle heat that is otherwise vented to
11 the atmosphere. This relatively simple solution will
12 result in significant energy savings and could be
13 replicated in many other facilities.

14 The next two projects are with Foster Farms. The
15 first will implement energy efficiency upgrades at five
16 food processing facilities throughout the Central Valley in
17 Livingston, Turlock, Porterville and two in Fresno. These
18 upgrades include boiler replacements, heat recovery and
19 control systems.

20 The second Foster Farms project will implement
21 electrical infrastructure upgrades at Foster Farms
22 Livingston facility. Currently when refrigerated trucks
23 are parked at the facility for loading and unloading the
24 large onboard diesel engines are kept running in order to
25 keep the transportation refrigeration units cold. These

1 electrical upgrades will enable transportation
2 refrigeration units to be switched from diesel to electric
3 when stationary resulting in fuel savings and significant
4 criteria pollutant emission reductions.

5 The next three projects are installing solar
6 thermal systems at three different facilities. Two dairy
7 processing facilities: Land O'Lakes in Tulare and
8 California Dairies in Visalia and one tomato processing
9 facility, Olam West Coast in Leemore. The solar thermal
10 systems installed at each facility will be capable of
11 heating water to much higher temperatures than conventional
12 solar thermal systems with the goal of reducing natural gas
13 use in existing boilers.

14 The final project is with Olam West Coast who
15 will install an electric drying system at their dehydrated
16 food manufacturing facility in Firebaugh. This system will
17 electrify the onion drying and toasting process replacing
18 the existing natural gas fuel system. Both this project
19 and the solar thermal projects discussed previously are
20 early examples of how fossil fuel use may be significantly
21 reduced or eliminated in food processing facilities.

22 Staff recommends approval of these agreements and
23 are available if you have any questions. And
24 representatives from several of the organizations are also
25 present. Thank you.

1 CHAIR WEISENMILLER: Thank you.

2 Let's start with any comments from anyone in the
3 room. We have one from the California Dairies, Inc.
4 Please?

5 MR. MONTEIRO: Good afternoon. My name is Darrin
6 Monteiro. I represent California Dairies, Incorporated and
7 I would like to thank the CEC for awarding this grant thus
8 far. But more importantly, Kevin and the rest of the
9 staff, they've been great to work with. We were kind of
10 dreading the process a little bit as kind of a daunting
11 experience, but they really streamlined it and it went
12 really well.

13 Other than that we appreciate the fact that we're
14 getting some of these Cap and Trade funds back to reduce
15 some of the emissions that are created through the process.
16 And that we think that's an important process. We hope the
17 Cap and Trade funds continue to be used in this manner to
18 help reduce some of these emissions, to reach some of these
19 emission targets.

20 And lastly, this wouldn't have been able to be
21 completed without this grant. So we appreciate the grant
22 and appreciate the CEC for considering it. Thank you.

23 CHAIR WEISENMILLER: Thank you.

24 The Representative from Smithfield Foods, please?

25 MR. GARCIA: Good afternoon. My name is Hector

1 Garcia. I'm the Manager of Environmental Affairs there.
2 First I want to tell thank you to the Energy Commission for
3 this award to Smithfield Foods and to the other honorees
4 here. Our team is extremely honored. Credit has to go to
5 Uy's team. To your liaison people, they worked with us oh
6 so well with us during the last two or three months.

7 Also to go to Smithfield Food, they allowed me to
8 come from Vernon to come here to specifically express our
9 thanks for this visionary project and grant. You don't
10 know how difficult it is sometimes to work with our
11 partners down there trying to figure out funds and monies
12 and still compete in a global market. Thank you.

13 The other thing too is I want to give thanks to
14 our strong, vibrant environmental justice community, which
15 I'm very much a part of. We have about 120 nonprofits
16 within Vernon area and when we told them that we were
17 participating in this in a way to reduce greenhouse gases
18 they were more than pleased. So thank you from them as
19 well for supporting this.

20 This money will go towards obtaining equipment
21 that will basically capture a lot of the waste heat that we
22 would have sent into the air. Now we're going to be able
23 to reuse it, reduce it, and be able to hire more jobs and
24 more people there. So thanks again.

25 CHAIR WEISENMILLER: Thank you.

1 Anyone else in the room? Anyone on the phone?
2 Then I'll transition to the Commissioners.

3 This has been an exciting program. You know, I
4 think certainly I want to give a lot of credit to Laurie
5 and her staff through working through the implementation to
6 make it pretty smooth. I've gotten a lot of feedback from
7 the agricultural community about how well this is going.

8 Obviously, trying to come up with a process that
9 would allow people to deal with the harvest seasons and
10 stuff, so that they could basically do what they have to
11 do, but also come in and get some money. And as I said
12 I've gotten a lot of positive feedback from them, hopefully
13 the program can continue and expand going forward.

14 And the feedback I was getting is it's sort of a
15 model in some respects. I've hear other industries
16 indicating they were interested in similar programs. I
17 think people are finding just these are much easier to
18 participate than some of the PUC rebate programs, which is
19 more this is a particular piece of equipment. Either you
20 take that or nothing and this provides a lot more
21 flexibility and certainly helps.

22 I guess Commissioner McAllister knows that
23 industrial ag is sort of a new area that we have to dig
24 into more, but trying to find the ways to do that is more
25 important.

1 COMMISSIONER SCOTT: And I just want to say,
2 Chair Weisenmiller, again thank you for your tremendous
3 leadership in our R&D programs. I think the last one,
4 Bridge, and this one, the food, just we're continuing to be
5 I think on the cutting edge really digging into things that
6 matter that reduce climate for the state. And I've got a
7 very enthusiastic briefing from Kevin and Colin on this set
8 of projects yesterday.

9 And I must say I'm super-intrigued to see how
10 tomato juice turns into tomato paste through the really
11 cool new drying that will be getting tested out and lots of
12 the other different technologies that are here, so I
13 heartily support this.

14 COMMISSIONER MCALLISTER: Yeah, I definitely
15 agree with the Chair. I mean, Laurie, you know watch out.
16 You're going to have to expand to do more across the
17 industrial sector broadly, so success breeds success. But
18 it is a different ball of wax than sort of mass-market
19 retail kind of energy efficiency. And so these are sort of
20 custom jobs and I really appreciate the fact that you are
21 hand holding each applicant in a direct way and helping
22 them with their specific issues as they move along the
23 process. And I think it's really an example, a good
24 template to follow, going forward.

25 COMMISSIONER HOCHSCHILD: I agree. I was just

1 going to add it's a nice complement as well with our
2 Renewable Energy and Agriculture Program, which we're just
3 putting the finishing touches on. So it's nice to see the
4 full spectrum doing that. Did you want to make comments or
5 I'll move the item then.

6 COMMISSIONER MCALLISTER: I second.

7 CHAIR WEISENMILLER: All those in favor?

8 (Ayes.)

9 CHAIR WEISENMILLER: This item also passes 5-0.
10 Thanks.

11 Let's go to minutes.

12 COMMISSIONER SCOTT: Move approval of the
13 minutes.

14 COMMISSIONER DOUGLAS: Second.

15 CHAIR WEISENMILLER: All those in favor?

16 (Ayes.)

17 CHAIR WEISENMILLER: The minutes are approved 5-
18 0.

19 Let's go to Lead Commissioner and Presiding
20 Member Reports. Commissioner Scott?

21 COMMISSIONER SCOTT: All righty. So a few
22 things, it's been a little while since we met last and I
23 thought I would just start with yesterday, which is the
24 EPIC Symposium. And I won't say too much about that,
25 because I know Chair Weisenmiller, that you will. But I

1 was just delighted to participate. Laurie and your time,
2 thank you so much for inviting me to be part of that. It
3 was really fantastic to see and feel all of the energy that
4 was in the room. The innovation, the creativity, just
5 there was lots of great ideas, lots of great people
6 thinking through what do we need to do in the clean energy
7 space? And so you could just feel it in the room and I
8 thought that was really fantastic.

9 We have had the second Advisory Committee meeting
10 for the Alternative and Renewable Fuel and Vehicle
11 Technology Program, so we're tracking to get the draft
12 Investment Plan as usual to our April Business Meeting.
13 But that meeting we held in Fresno, which was great. We
14 probably needed to do a little more outreach, because we
15 didn't have any members of the public at all, so we need to
16 do better when we -- we're working hard to not always be in
17 Sacramento. But to make sure that when we're not in
18 Sacramento other people are participating.

19 I had a chance to attend the Future of Mobility
20 Conference that Bloomberg New Energy Finance put together.
21 It was really fantastic. It was two days of sort of the
22 cutting edge new mobility work that Bloomberg New Energy
23 Finance is doing.

24 And I'll just throw one thing out there that they
25 are talking about that I've kind of seen and followed up

1 on, which is there's a question about whether or not we've
2 seen the peak sales of internal combustion engines. And if
3 you look at the numbers in China you see that the car sales
4 have -- they ticked up just a teeny-weeny little bit, not
5 very much. But the internal combustion engine sales are
6 going down. It's the electric vehicles that are going up
7 and is that going to be a global trend? Is that going to
8 be a trend that we see continued over the next few years?
9 So that was one thing that they analyzed and highlighted
10 for us.

11 The other thing is that they have, Bloomberg New
12 Energy Finance, you may have seen some of the charts and
13 graphics and information that they put together. They're
14 great at illustrating key findings from their models and
15 their studies in a really digestible format. And so Siva
16 Gunda and Kevin Barker were both at the summit with me.
17 One of the things Siva and I want to think about is are
18 there ways for some of the analysis that he's doing within
19 his shop to be presented in the same way. Because we also
20 have incredibly robust data analytics and information and
21 just kind of thinking about are we able to share them in
22 this sort of Bloomberg New Energy Finance TED Talk
23 beautiful graphic kind of way.

24 We had the VerdeXchange, which was at the end of
25 January. I enjoyed again the opportunity to check in with

1 all of our compatriots in Southern California. It's really
2 a who's who in Southern California and it's I had a nice
3 opportunity, Rhetta had a nice opportunity, to highlight
4 our Ports Collaborative, which was fantastic. And I had a
5 chance to talk about the work the Energy Commission is
6 doing for zero emission vehicle infrastructure.

7 I got to host at the Canadian Consulate a
8 discussion amongst a few Canadian officials about what's
9 going on in Canada. So that was good fun and it's just
10 always a nice chance to really engage in detail with people
11 who are thinking through the energy space just the same way
12 that we are.

13 And then my farthest travels so far, I had an
14 opportunity to go to China. It was in Beijing, China at
15 the China EV100 Conference and I had a chance to speak
16 before about 1,100 people. Again, about what work
17 California is carrying out to clean up our transportation
18 sector. Dan Sperling from the California Air Resources
19 Board was also there, so I talked a lot about the
20 incentives and he talked a lot about the regulations. So
21 kind of the two together and how that's moving California
22 forward.

23 And it was very interesting to hear what is going
24 on in China. It's kind of interesting, and Chair
25 Weisenmiller you know this because you've been there, but

1 we -- California, like we're on the cutting edge. And
2 we're doing great work and it's so exciting. And I go
3 there and I say, "California has 512 million electric
4 vehicles," and they're like, "We have 2 million." Oh,
5 okay. And we have 156 electric buses and they're like,
6 "Oh, we've got 16,000 in one city." So they're really
7 moving forward very fast and in really big numbers on a lot
8 of this technology. And it's exciting to see.

9 I missed the trip to Shenzhen, which is too bad,
10 because what I really wanted to know is how are they
11 charging up? They have 40,000 electric trucks and 16,000
12 electric buses and how are they charging those up, right?
13 Because that is charging at scale and what does that look
14 like? So hopefully I'll have a chance to share some data
15 and information with folks, so that we can thinking about
16 that as we're rolling out our dollars as well.

17 So that was really fantastic. I had a chance to
18 learn a ton and also experience the dreaded Chinese air
19 quality. It was one of the days we were there the air
20 quality index was 500, which I didn't realize an air
21 quality index could be. When we had the fires here in
22 California this October and November our air quality index
23 was in the high 300s. So this was just a regular day in
24 China up to 500, so the solutions that they're working to
25 put in place can't come fast enough in terms of helping

1 with the air quality for the people there.

2 And that's it. That's my report.

3 COMMISSIONER MCALLISTER: Great, really just a
4 couple of things. I spent basically an entire week a
5 couple of weeks ago in D.C. It's always a mixed bag, you
6 know, but really for two reasons. One, the main reason was
7 to go to the NASEO Energy Policy Outlook Conference, which
8 is an annual thing and it's like a who's who of states
9 certainly and then a lot of sort of trade allies and folks
10 who are interested in state-level energy policy. And
11 certainly that are facilitating flows of federal money into
12 the states, so just a great agenda and lots of substance.

13 And so we'll have a western meeting actually in
14 couple of months in Seattle, so I'm looking forward to
15 taking a few staff up there and sharing.

16 And then the annual meeting, NASEO's annual
17 meeting is going to be in September in Manhattan Beach, so
18 we're going to get to host that. So we'll have all the
19 states' energy officials and a few hundred people here, all
20 of who make decisions in their respective places. So it's
21 a good way to show off California and certainly everything
22 that's happening in L.A., which we saw at VerdeXchange.
23 The future kind of -- in a lot of ways the future of land
24 use and other issues comes first L.A., so that's a good
25 one.

1 I tacked on to that trip a day-long meeting of
2 the U.S. Climate Alliance, looking at appliance efficiency
3 standards and state strategies to essentially prevent
4 backsliding that's happening at the federal level from
5 percolating down to the states. So there's a huge amount
6 of interest in what we're doing. I mean, we have to be in
7 that conversation, because our infrastructure is what's
8 going to allow other states in many cases to adopt model
9 bills that essentially either refer to our standards or in
10 some way utilize our databases of enforcement.

11 So really we're a key cog in that machine and
12 it's a good discussion. And I took advantage to get that
13 conversation kind of integrated with the rest of the U.S.
14 Climate Alliance team across the agencies and Governor's
15 Office.

16 While I was in D.C. the Department of Energy
17 dropped a couple of proposed rules; one about the process
18 standard, so giving themselves more leeway and less
19 pressure to finish rules, to do rules and finish rules.
20 And then also on lighting essentially backsliding on the
21 commitment that we understood and have already put in place
22 in this state. So it could knock the legs out from under
23 our lighting standard. We're figuring that out.

24 So anyway, there's a lot of work to be done to
25 prevent bad things from happening as well as doing good

1 things.

2 I guess the last thing I'll say, well a couple of
3 more things. There are a couple of intergroup working task
4 forces between NASEO and NARUC actually and so it's kind of
5 a good way to socialize some of the issues that we're
6 dealing with here with the PUCs across the country. And so
7 the respective state energy offices and PUCs need to work
8 much better together and I think the state energy offices
9 that do policy, that do high-level policy and advise the
10 administrations in each state don't always interact all
11 that much or that well with their PSC, their Public Service
12 Commission or their Public Utility Commission. And so the
13 goal is to look at a couple of different issues in a joint
14 way between the state energy offices and the public service
15 commissions.

16 And the topics are grid interactive buildings, so
17 we're really looking at -- they both have to do with
18 distribution level issues. So grid interactive buildings
19 is a topic of interest across many states. And then
20 distribution system planning, so each of those are a dozen
21 or dozen-and-a-half states that have opted in that are
22 working on those issues. So it's really good to have sort
23 of NARUC and NASEO working together on that. So hopefully
24 it'll develop relationships and we'll be able to do much
25 more in the future.

1 So let's see, hopefully next week -- fingers
2 crossed -- I don't want to predict what's going to happen
3 at the City of Davis, but I'm about to get my permit closed
4 for my passive house, zero net energy, all electric, gray
5 water and rainwater catchment system so very low-water
6 house. So I'm just taking the opportunity to invite you
7 all for the tour. I don't know when the ribbon cutting is
8 going to be, but I'll give each of you a personal tour of
9 my house. So it's been a long time coming. I know I've
10 talked about it a lot, but it's finally done.

11 So anyway, I'm pretty excited to move in and my
12 kids are very excited. So we'll see and we're going to be
13 logging a lot of data. There's going to be a heavy data-
14 logging element to this, so we're going to know the
15 performance inside and out. And look at our behavior
16 patterns and see how we can shift around demand and do all
17 the things that we're expecting to happen in the state.
18 And automating as much of that as possible, so I think for
19 me personally it will sort of help understand what might be
20 appropriate to incorporate into our policies and what might
21 not be, so.

22 And then finally I just wanted to say thank you
23 again to Chair Weisenmiller. We heard all these comments
24 today and it kind of all rolls up into one word and that's
25 grace. You know, just your way. Yeah, that's -- I'll just

1 leave it at that. The word, just your graceful approach to
2 things I think just speaks volumes about who are you and
3 thank you.

4 COMMISSIONER DOUGLAS: So I have a brief report
5 and the ukulele's upstairs, so nothing to worry about, Bob.
6 (Laughter.)

7 So on let's see here, well on -- I didn't write
8 down the date but a week before February 6th, I went to the
9 Western Indian Gaming Conference and spoke there. And it's
10 a very good, well-attended conference on my topic. And
11 it's attended obviously by tribal elected governmental
12 officials and also tribal staff, many of whom are involved
13 in the casino operations on tribal lands.

14 And so the panel topic I was on was talking about
15 how advanced energy technologies like renewables and
16 efficiency and microgrids and alternative charging and so
17 on can be incorporated into designs, and how tribes can
18 work with the Energy Commission and with the state. And
19 obviously that builds very directly on the Tribal Energy
20 Summit. That was February 6th.

21 And then the week after that on February 14th I
22 had an opportunity to speak at the Microgrid Workshop for
23 California Native American Tribes that was pulled together
24 by the Public Utilities Commission and San Diego State
25 University. And again, it was very well attended. There

119

1 was a lot of enthusiasm and a lot of interest from the
2 tribes present. Thank you.

3 COMMISSIONER HOCHSCHILD: Great. Well, I also
4 especially want to thank the Chair for the last few weeks.
5 We've been doing a lot of downloading on many, many topics
6 and I appreciate all his help in getting me prepared and
7 also to Drew for all the dialogue in the Governor's Office
8 as well.

9 Yeah, two highlights for me. One is Mary Nichols
10 and I had a great meeting with Schwarzenegger two weeks
11 ago. This is on this Veloz outreach campaign for electric
12 vehicles. And I got to hold his Conan the Barbarian sword,
13 which fulfilled a childhood fantasy of mine. And he's been
14 actually very helpful on this effort and is actually doing
15 quite a lot on climate and also democracy repair. It was a
16 really good dialogue with him and I think we can do some
17 great things together.

18 But the other highlight, I organized a tour.
19 Through the NHSP Program we worked with a lot of
20 homebuilders over the state and I did a tour in Oakland
21 with City Ventures, which is the largest all-electric
22 homebuilder in California. They just did 700 units infill
23 solar electric homes. We had the Sierra Club and NRDC and
24 Energy Foundation, these big clean energy, PG&E, a bunch of
25 other stakeholders joined.

1 And the feedback is outstanding. Basically at
2 this point with the appliances they're not getting any
3 negative feedback, particularly about the cooktops.
4 Induction cooktops was really the sticking point and the
5 technologies there. And so they're just seeing great
6 success with the adoption. And of course, it's several
7 thousand dollars of avoided costs not having to run gas
8 pipes in the home and so forth, so we learned all about
9 that. And it's really good to see that and I especially
10 thank Aaron Johnson from PG&E who came with a few other
11 staff for engaging.

12 And yeah, other than that those are the only two
13 items.

14 CHAIR WEISENMILLER: Yeah, two things that are
15 flagged is obviously VerdeXchange and the EPIC Symposium.
16 VerdeXchange is actually a remarkable event in the sense of
17 just about everyone from Southern California is really
18 there. And as we all know about half the state is below
19 the Wilshire Boulevard, so for us it's we really need to
20 work at deepening our connections there. And it's a good
21 forum to catch up with. You know, I think many of us were
22 there for those events. Obviously a very strong connection
23 too with the Japanese companies, the consulate there, so
24 again a couple of parts.

25 I think I gave one talk, which was more like

1 Fourth Climate Change, you know what that means on
2 resilience. And I think I would encourage folks in the
3 future to think about how to deepen our roots in L.A. and
4 to use that as a venue for it.

5 The EPIC Symposium this year, again Laurie's in
6 the audience, I think again it went very well. I think
7 most of us were there for part of it. But again the
8 attendees have been growing in leaps and bounds up to a
9 thousand people. A lot of energy and enthusiasm there, it
10 was very well staffed and prepared, which is important. So
11 I think in terms of again trying to move things from the
12 sort of research where it can be dry at times to really
13 connecting out to the general public. That was quite good.

14 And I think again, certainly a lot of inspiring
15 talks. I think Senator Stern really got people on their
16 feet early on, so that was good. So anyway I'm looking
17 forward to the continual growth in that area.

18 So let's go on to the Chief Counsel's Report.

19 MS. VACCARO: (Indiscernible.)

20 CHAIR WEISENMILLER: Executive Director's Report.

21 MR. BOHAN: Well, just two things. I want to
22 once again formally say thank you, Bob, for everything
23 you've done for the organization and for the Executive
24 Office. And to let everybody on the dais know we'll be
25 sending around an "all staff" when this meeting concludes

1 to alert staff that everybody's invited to come down to the
2 atrium. And we've got food and drinks and so forth and
3 have a more informal celebration of Bob.

4 CHAIR WEISENMILLER: Great, thanks.

5 And Public Adviser Report?

6 MS. MURIMI: Public Adviser has nothing to report
7 at this time.

8 CHAIR WEISENMILLER: Public comments? Yes, Mr.
9 McLaughlin, please?

10 MR. MCLAUGHLIN: Thank you, very much. I'll just
11 dispense with the jacket. Thank you and thank you for the
12 EPIC Symposium. I was there yesterday and enjoyed the
13 speakers and attended a couple of very interesting breakout
14 sessions. It was very good. Thank you very much.

15 My name is Larry McLaughlin. I am a Regional
16 Director in the Doing What Matters for Jobs and the Economy
17 Initiative, which is an initiative of the Chancellor's
18 Office Community College System. So we've created a
19 program in the Economic and Workforce Development Division
20 called Doing What Matters for Jobs and the Economy. And it
21 is a sector strategy to have us work more closely with
22 industry to determine what their education and skill
23 training needs are and to better align our community
24 college programs with those needs.

25 The sector group I'm representing is the Energy

1 Construction and Utilities Group. And I want to take a
2 couple of minutes during the public comment period to
3 update you on the microgrid workshops we've been
4 conducting. I stopped in about a year-and-a-half ago with
5 my obligatory binder and gave you some information about a
6 workshop, training and information that we were developing,
7 to provide basic microgrid training. We were doing so in
8 partnership with the Stone Edge Farm Microgrid and other
9 industry partners.

10 Since then the workshops have become quite
11 popular and we've conducted three to date. The past two
12 have been conducted in partnership with Pacific Gas and
13 Electric and with Stone Edge Farm. These have been
14 conducted for the Bay Area and Sonoma. We have had a third
15 scheduled with PG&E now for this coming April 11th.
16 They're running about 55 to 60 participants in those
17 workshops.

18 And I refer to them as microgrid workshops for
19 the nontechnical professionals. We have opportunities for
20 people who have a more technical background to learn about
21 the advanced technologies and the EPIC Symposium is a good
22 example of that. But we feel that there is an audience out
23 there of people who don't have quite the background that
24 those folks have, but could use the information if it's
25 given to them.

1 So the purpose of the workshops that we've been
2 doing are twofold. One is to provide introductory level
3 information and training on microgrids to professionals who
4 can consider microgrid development in future projects. And
5 two, to provide college faculty with training in
6 instructional resources for introducing microgrid concepts
7 and their construction, architecture, building management
8 and electrical programs. So we're bringing these two
9 groups together to learn the basics of microgrids.

10 The typical agenda consists of an overview in
11 Microgrid 101. We then get into the value of microgrids
12 based on case studies. There's discussion and
13 presentations on how to assess the value of microgrids,
14 again using case studies. The energy systems integration
15 and controls is kind of the heart of the systems and so we
16 acquaint people with the control systems as well as the
17 typical DERs that are incorporated in microgrids, cover
18 California policy and incentives. And we also have
19 featured speakers who will come and speak about their own
20 applications and the value propositions that they derive
21 from their microgrids.

22 We've also had CEC staff come and give us some
23 policy updates. And we're looking forward to the microgrid
24 roadmap. We'll certainly want to cover that in our
25 workshops.

1 So we're in the process of scheduling a couple of
2 workshops in Southern California now. And have had
3 conversations with Southern California now and have had
4 conversations with Southern California Edison and the
5 Association of Energy Engineers. And it looks like we're
6 going to be set to do our first one in June and possibly
7 the second one November.

8 And Commissioner Scott, we're really excited
9 about a series of five workshops to be conducted for port
10 administrators under the EPIC-funded Port of Long Beach
11 Demonstration Project to be at the five major ports.

12 So the point I'd like to underscore is that for
13 this type of training these workshops are designed for
14 professionals who are in a position to consider microgrid
15 development in their next commercial building project or
16 their next office park or school campus or whatever the
17 next project might be. So we're really trying to make an
18 effort to reach out to people like commercial real estate
19 developers, architects, building operator engineers, city
20 planners, permitting, inspection staff, campus facility
21 administrators, residential builders, electrical contracts
22 and the list goes on.

23 These are the people that we're marketing to, not
24 necessarily the engineering types, which always tend to
25 show up. We always get a few, but really we're trying to

1 get people who know a little bit. Maybe they've heard
2 something. Maybe they've read a little bit about the
3 subject and are curious and want to learn more.

4 And I believe the point of this is that we're
5 providing some basic information and training on the
6 various applications and value propositions. And by doing
7 so not only enhancing our workforce training programs,
8 because we bring like I said faculty into the mix as well,
9 but we're enhancing the knowledge and comfort level of key
10 decision makers in the marketplace. And we think that has
11 value for facilitating market adoption.

12 So that's about it. I just wanted again to
13 update you and let you know that we've really turned this
14 into a whole series of training activities and it's going
15 to be keeping us busy this spring and summer. So do you
16 have any questions for me?

17 CHAIR WEISENMILLER: No, just this is very good.
18 This is very good to hear about that I'm sure. One of the
19 questions is obviously trying to reach out to some of the
20 tribes (indiscernible) --

21 MR. MCLAUGHLIN: We could do that and I was
22 interested to learn that you've had one with was it San
23 Diego State that conducted that?

24 CHAIR WEISENMILLER: Yeah.

25 MR. MCLAUGHLIN: So I think that's the level of

1 information and training we're talking about. It's to
2 introduce them to the concepts and we've I believe put
3 together a nice agenda for doing that and some great
4 materials for it as well. So there's plenty of instruction
5 going on and I think it really is an educational
6 opportunity. We'd be happy to work with you on tribe
7 outreach and some workshops.

8 CHAIR WEISENMILLER: Right. There's also a lot
9 of interest, I think the Public Adviser can help you in
10 terms of the disadvantaged communities also have a lot of
11 interest in microgrids. And so if you can provide her some
12 information on the training programs, those sessions, they
13 can get that out too.

14 MR. MCLAUGHLIN: That's very good.

15 CHAIR WEISENMILLER: Okay. Thank you.

16 MR. MCLAUGHLIN: Absolutely, thank you.

17 CHAIR WEISENMILLER: Thanks for coming.

18 MR. MCLAUGHLIN: Thank you.

19 CHAIR WEISENMILLER: Well, we now have a gavel,
20 so we can hand over the gavel. I'm just going to use this
21 and hope nothing happens. This meeting's adjourned.

22 (Laughter.) (Applause.)

23 (Adjourned the Business Meeting at 2:10 p.m.)

24 --oOo--

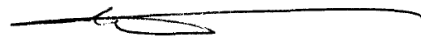
25

REPORTER' S CERTIFICATE

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

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

IN WITNESS WHEREOF, I have hereunto set my hand this 4th day of March, 2019.



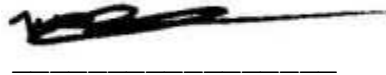
PETER PETTY
CER**D-493
Notary Public

TRANSCRIBER'S CERTIFICATE

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

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

IN WITNESS WHEREOF, I have hereunto set my hand this 4th day of March, 2019.



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

1
2
3