BEFORE THE

CALIFORNIA CLEAN ENERGY JOBS ACT

CITIZENS OVERSIGHT BOARD

CALIFORNIA ENERGY COMMISSION ROSENFELD HEARING ROOM - FIRST FLOOR 1516 NINTH STREET SACRAMENTO, CALIFORNIA

This meeting of the Citizens Oversight Board will include teleconference participation by one or more Board Members. Per Government Code section 11123(b) (2), the teleconference locations, in addition to the address above, are:

> UNIVERSITY OF CALIFORNIA, LOS ANGELES GEOLOGY CONFERENCE ROOM 4608 595 CHARLES E. YOUNG DRIVE LOS ANGELES, CA 90095

LOS ANGELES CLEANTECH INCUBATOR CONFERENCE ROOM 108 525 S. HEWITT STREET LOS ANGELES, CA 90065

FRIDAY, FEBRUARY 23, 2018

1:00 P.M.

Reported by: Gigi Lastra

### APPEARANCES

BOARD MEMBERS PRESENT (\*Via telephone and/or WebEx)

Kate Gordon, Chair

Mark Gold, Vice Chair (appointed Vice Chair in the meeting)

Heather Rosenberg, Board Member

Barbara Lloyd, Board Member

Randall Martinez, Board Member

Chelina Odbert, Board Member

David Dias, Board Member

## COMMISSIONERS PRESENT

Andrew McAllister, California Energy Commission, Commissioner

### CEC STAFF PRESENT

Michael Murza, Law & Policy Advisor to Chair Weisenmiller

Jack Bastida

James Bartridge

Haile Bucaneg

#### ALSO PRESENT

James Holland, California Energy Commission

## APPEARANCES (Cont.)

ALSO PRESENT (Cont.)

Carlos Montoya, California Community College Chancellor's Office

Bill McNamara, California Conservation Corps

Sarah White, California, Workforce Development Board

PUBLIC COMMENT: (\*Via telephone and/or WebEx)

# I N D E X

THE BOARD WILL CONSIDER AND MAY TAKE ACTION ON THE FOLLOWING ITEMS:

- 1. INTRODUCTION AND ROLL CALL OF BOARD MEMBERS 6 TO DETERMINE QUORUM. (Chair Gordon)
- 2. APPROVAL OF MINUTES FROM JULY 13th, 2017 9 CITIZENS OVERSIGHT BOARD MEETING. (Chair Gordon)
- 3. DISCUSSION AND POSSIBLE VOTE ON THE CITIZENS 12 OVERSIGHT BOARD VICE CHAIR POSITION. (Chair Gordon)
- 4. OVERVIEW AND DISCUSSION OF SENATE BILL 110 (2017) 16 CHANGES TO THE CLEAN ENERGY JOBS ACT. (Jim Bartridge, Citizens Oversight Board)
- 5. PRESENTATION AND POSSIBLE VOTE ON ANNUAL REPORT 30 FROM THE CALIFORNIA ENERGY COMMISSION. (Jim Holland, California Energy Commission)
- 6. PRESENTATION AND POSSIBLE VOTE ON ANNUAL REPORT 54 FROM THE CALIFORNIA COMMUNITY COLLEGE CHANCELLOR'S OFFICE. (Carlos Montoya, California Community College Chancellor's Office)
- 7. PRESENTATION AND POSSIBLE VOTE ON ANNUAL REPORT 64 FROM THE CALIFORNIA CONSERVATION CORPS- ENERGY CORPS PROGRAM. (Bill McNamara, California Conservation Corps)

	TNDEV (Cont)	
	<u>I N D E X (Cont.)</u>	
8.	PRESENTATION AND POSSIBLE VOTE ON ANNUAL REPORT FROM THE CALIFORNIA WORKFORCE DEVELOPMENT BOARD. (Sarah White, California Workforce Development Board)	84
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PROCEEDINGS 1 2 FEBRUARY 23, 2018 1:08 P.M. 3 CHAIR GORDON: We will call the roll in just a 4 I just want to remind Board Members to turn on second. 5 your microphone when you're speaking, so that everything 6 you say can be recorded. 7 And Jim, can we do the roll, please? 8 (Off mic colloquy.) 9 MR. BARTRIDGE: Okay. So let's go ahead and do 10 the roll. 11 Kate Gordon? CHAIR GORDON: Here 12 13 MR. BARTRIDGE: Heather Joy Rosenberg? 14 BOARD MEMBER ROSENBERG: Here. Can you hear me? 15 MR. BARTRIDGE: We can hear you. Thank you. 16 Barbara Lloyd? 17 BOARD MEMBER LLOYD: Here. MR. BARTRIDGE: Chelina Odbert? 18 19 BOARD MEMBER ODBERT: Here. 20 MR. BARTRIDGE: Randall Martinez? 21 BOARD MEMBER MARTINEZ: Yes. I'm here. 2.2 MR. BARTRIDGE: David Dias? 23 BOARD MEMBER DIAS: Here. 24 MR. BARTRIDGE: And Mark Gold? 25 BOARD MEMBER GOLD: Here.

CHAIR GORDON: Great. Thank you.

1

2 And I just want to say welcome to our newest 3 Board members. As folks know, we've had a little bit of 4 turnover with people's terms ending and new appointments to 5 the Board, so really excited to have Barbara Lloyd and Heather Rosenberg on the phone. And I don't know if 6 7 Barbara and Heather, do you want to take a minute to just say a quick word about who you are? Heather, you want to 8 9 start? 10 BOARD MEMBER ROSENBERG: Sure. My name is 11 Heather Rosenberg. And I work -- I actually have an 12 independent consulting firm that works very extensively with the U.S. Green Building Council, both nationally and 13 14 in Los Angeles. I've developed a resilience program, 15 working with organizations to build resilience processes. And have a 20-year background in sustainability. 16 17 CHAIR GORDON: Wonderful. We're thrilled to have 18 you and that expertise on the Board. 19 Barbara? 20 BOARD MEMBER LLOYD: Yes, Barbara Lloyd. I also 21 have an independent consulting practice and I'm a former 2.2 Chief Deputy State Director in California. I've got a lot 23 of echo. I've had about a 25 plus year career in public finance. And I'm also focused on various clean energy 24 25 programs as Chair of the California Clean Energy Fund

1 Innovations Board.

2 CHAIR GORDON: Fantastic. And Barbara is -- we 3 always have someone on the Board with a finance background, 4 really because of the audit that we do every year. And Barbara, we're thrilled to have you. That is just such a 5 hugely important role to fill on this Board. 6 7 I just wanted to also recognize that we have Commissioner McAllister with us today. And Commissioner, I 8 9 don't know if you wanted to say anything before we get 10 started. 11 COMMISSIONER MCALLISTER: Yeah, no. We're just 12 happy to host this and really just want to thank all the 13 members for contributing your time and expertise to this 14 process, especially as the program begins to change as a 15 result of new legislation and all that. So we really 16 appreciate it. 17 And of course we sit here during the meetings, but we are non-voting members, so I'm basically here for 18 19 Chair Weisenmiller, as is his advisor, Michael Murza. Do 20 you want to say something, Michael? 21 MR. MURZA: Thank you. I am Michael Murza, the 2.2 Chair's Law and Policy Advisor. And Chair Weisenmiller is 23 sorry that he is unable to be here today, but he wanted me 24 to emphasize how important this program is for achieving 25 energy savings, which frees up additional money for

1 education.

2 He's also been very impressed with all of the 3 amazing progress over the last year. And he wanted to 4 thank the Board for their public service to ensure the CEC 5 provides proper stewardship of the program. Finally, he wanted to extend his thanks to the 6 7 CEC staff for their great efforts and to everyone who's worked so hard to ensure this program continues to be a 8 9 success for California. 10 CHAIR GORDON: Thank you, Chair Weisenmiller's 11 proxy. No, that's great. Thank you so much. It has been 12 a great year. I just realized that I'm sort of doing Item 3. 13 14 But I'll come back to it after Item 2, which is approval of 15 minutes from the last meeting, which was quite a long time ago. So do we have a motion? There are the meetings in 16 17 front of you, if you have a computer in front you, you can see it. Look at them if you haven't before and I would 18 like a motion. 19 20 BOARD MEMBER MARTINEZ: I move to accept the 21 minutes from July, wow, 13, 2017. 2.2 BOARD MEMBER DIAS: Second. 23 CHAIR GORDON: Could we do a roll call, just 24 because of people on the phone? 25 MR. BARTRIDGE: Chair Gordon?

1 CHAIR GORDON: Yes. 2 MR. BARTRIDGE: Heather Rosenberg? 3 BOARD MEMBER ROSENBERG: Should I abstain since I 4 wasn't at the meeting? 5 CHAIR GORDON: Yeah. I think that's right. MR. BARTRIDGE: Chelina? 6 7 BOARD MEMBER ODBERT: Yes. MR. BARTRIDGE: Randall? 8 9 MR. BARTRIDGE: Yes. 10 MR. BARTRIDGE: David? 11 BOARD MEMBER DIAS: Yes. 12 MR. BARTRIDGE: And Mark Gold? BOARD MEMBER GOLD: 13 Yes. 14 MR. BARTRIDGE: And Barbara Lloyd, I assume you 15 want to abstain as well? 16 BOARD MEMBER LLOYD: Yes, thank you. I would 17 abstain. 18 CHAIR GORDON: Great, thank you. Minutes 19 approved, appreciate that. 20 We did already just talk about Board composition, 21 which is Item 3, so I jumped the gun on that a bit, but 2.2 just again really excited about new members. It's actually 23 a good moment to have that Heather and Barbara -- and we have one open slot still I should say. There's still one 24 25 vacant spot on this Board, and I know that -- I can't

remember who's that is. Is it the AG's office? They're
 working on filling that slot.

3 This is a good moment actually to have new 4 membership and because we have sort of a bunch of changes 5 happening in the program. As you know from the last meeting some new legislation and some new program, kind of 6 7 -- all kinds of different things are happening: the end of the current program, some interim steps and some things on 8 9 the new program, so we're actually going to get an update 10 on that right now from Jim. And for those who haven't met 11 Jim Bartridge yet, Jim is right there. You all know Jack 12 who's in here too.

And Jim and Jack are working together. And Jim is ultimately sort of taking on the bulk of the work of staffing this Board, while Jack moves to other opportunities within the Energy Commission. And so thank you, Jack, for all your service at the Board. We really appreciate it.

And Jim, welcome. We are thrilled to have you. Jim has a lot of experience in staffing at the Energy Commission and some substantive experience on these issues, and has been already very helpful in helping navigate some of the very confusing changes that are happening and making them simple for us. So I will turn it over to him, to do that.

1 MR. BARTRIDGE: Thank you very much. 2 And real quick, since we're in the room let me 3 just go over the housekeeping, just in case. The bathrooms 4 out to your left or back to the right, you have the snack 5 bar on the second floor. And lastly, in the event of an 6 emergency follow staff across the street to Roosevelt Park. 7 And we'll come back to the building once the emergency ends. And with that, let me -- oh, and there is an Item 8 9 Number 3 and possible vote of the Vice Chair position. 10 CHAIR GORDON: I do not have that in front of me 11 in my binder, so that is good to know. Do we need to --12 could you just talk to me about protocol. I don't know 13 whether it's a public minutes that would not have had that 14 item? 15 BOARD MEMBER ROSENBERG: The public agenda did 16 have it. 17 MR. BARTRIDGE: It did. 18 CHAIR GORDON: Great. Okay, then, we can talk 19 about it. 20 MR. BARTRIDGE: And I put it up on the screen in 21 front of you, in yellow, so the Board shall elect a Chair 2.2 and Vice Chair the first meeting of the Board each year. 23 CHAIR GORDON: Great. Thank you. I'm sorry 24 about that. Yes, now I see it. All right, well going back 25 on -- I am just doing everything out of order today, sorry

1 about that.

2	Going back yes, so one of the things that
3	happened in terms of Board composition is that Walkie Ray,
4	who is the current Vice Chair, who was the Vice Chair of
5	the Board, his term ended and he decided for business
6	reasons that he had too much going on to renew. So we are
7	without a Vice Chair at this moment.
8	So this is a moment where I would love to have a
9	Vice Chair. And I would love people to step up and say
10	they want to be the Vice Chair. Otherwise, I may have to
11	start nominating people. So if anybody on the Board is
12	willing to take on that position and would like to self-
13	nominate this is the time to do it. It's a very exciting
14	job. You get to work with me and write reports.
15	No, it's actually great. You get a lot of kind
16	of visibility on the inner-workings of the program and it's
17	a very useful position for me. So I would love to hear if
18	anyone wants to nominate themselves.
19	BOARD MEMBER MARTINEZ: Did Walkie step down?
20	CHAIR GORDON: His term ended. He decided not to
21	renew it, so he decided not to get re
22	BOARD MEMBER MARTINEZ: Is he still a member of
23	the COB?
24	CHAIR GORDON: No.
25	BOARD MEMBER MARTINEZ: Okay, so he stepped down

1 completely? 2 CHAIR GORDON: Yeah, he's off the Board 3 completely I should have said earlier, I'm sorry. 4 BOARD MEMBER MARTINEZ: Okay. 5 BOARD MEMBER LLOYD: I'd like to nominate Mark б Gold. 7 CHAIR GORDON: Mark, how do you feel about that? BOARD MEMBER GOLD: If I get to work more with 8 9 you, I'm all for it. CHAIR GORDON: Oh, I did not pay Mark to say 10 11 that. 12 Does anybody else want to be nominated or want to self-nominate? I'm staring down people in the room. 13 Well, 14 that's great. If we can vote on that? I don't know how we 15 do this. Do we accept the nomination and then vote on the 16 nomination? 17 MR. BARTRIDGE: Correct. 18 CHAIR GORDON: Great, so it's two separate motions? 19 20 MR. BARTRIDGE: Two separate motions. 21 CHAIR GORDON: Okay. So folks, can we have a 2.2 motion on Mark Gold's nomination for Vice Chair of the 23 Board? 2.4 BOARD MEMBER MARTINEZ: So moved. 25 BOARD MEMBER ODBERT: Second.

1 BOARD MEMBER LLOYD: Second. 2 CHAIR GORDON: Great, moved. Mark has been 3 nominated. Thank you, Mark. I would like to just go 4 immediately to a vote on this, because I would love to 5 resolve it if we can, so can we have a motion on a vote? BOARD MEMBER LLOYD: So moved from Barbara. 6 7 BOARD MEMBER ODBERT: Second. CHAIR GORDON: All right. Let's do a roll call. 8 9 MR. BARTRIDGE: Let's do a roll call. 10 Chair Gordon? 11 CHAIR GORDON: Yes. 12 MR. BARTRIDGE: Heather Rosenberg? BOARD MEMBER ROSENBERG: Yes. 13 14 MR. BARTRIDGE: Barbara Lloyd moved. 15 BOARD MEMBER LLOYD: Yes. MR. BARTRIDGE: Chelina? 16 17 BOARD MEMBER ODBERT: Yes. MR. BARTRIDGE: Randall Martinez? 18 19 BOARD MEMBER MARTINEZ: Yes. 20 MR. BARTRIDGE: David Dias? 21 BOARD MEMBER DIAS: Yes. 2.2 MR. BARTRIDGE: Mark, how do you feel? 23 VICE CHAIR GOLD: I'll abstain. I'll let the 24 rest of you guys vote. 25 CHAIR GORDON: Great, thank you. And I'm very

happy to have representation from both Northern and Southern California. Actually I think that's a good thing, so thank you, Mark. And you should see the audible sighs of relief from the people here in room that I didn't start poking them to self-nominate. Thank you very much and thanks for stepping up.

All right. Now I have the correct agenda in front of me, so now I am back to being clear on what we're doing. Now, we're going to hear from Jim on the current status of the program and the changes that are happening, because of the recent legislative action. So Jim, I turn it over to you.

MR. BARTRIDGE: Thank you.

13

So good afternoon, I'm Jim Bartridge. I've been working with you for about a month now and really got up to speed from Jack. So just thanks to Jack for all that you do, I really appreciate your help in all of this.

18 Also again we have two new Board Members, Heather 19 Joy Rosenberg, appointed in January; and Barbara Lloyd, 20 appointed in February by the State Treasurer's Office.

I'll just walk through the Clean Energy Jobs Act legislation. I won't spend a lot of time on this. But just as a quick overview, here's the legislation that provides the support for so many important energy efficiency and clean energy projects at public schools and

community colleges in California over the last five years,
 while supporting job training, workforce development and
 creating jobs.

I won't go into detail again, other than to note that last year's SB 110 extended the Prop 39 Program, so additional schools could benefit from long-term energy savings, more jobs would be created and greater greenhouse gas emission reductions could be realized in the years ahead.

10 SB 110 creates program changes for 2018 and 11 beyond, creates new programs for the remaining Prop 39 12 funds, and removes the sunset date for the Board, so it can 13 continue to provide program oversight and accountability.

14 Here's a look at the objectives of the Clean 15 Energy Act, The Clean Energy Jobs Act. The program was 16 intended to create energy efficiency jobs and provide workforce training, save energy, reduce energy costs and 17 18 greenhouse gas emissions by investing in energy efficiency 19 improvements and onsite clean energy generation in 20 California's schools and community colleges, in order to 21 improve classroom learning environments for both students 2.2 and educators.

Here's a look at the overall program funding.
I'll note that we're at about halfway through 2017-2018.
But this was the allocations for the program.

And your mandate as the Citizens Oversight Board, most of you know this, but review the Job Creation Fund expenditures, do an independent audit of the fund, assess projects selected for their effectiveness. And publish a complete accounting of expenditures and put that up on the Web. And then submit an evaluation to the Legislature identifying changes needed to the program.

And on the report to the Legislature, the annual 8 9 legislative report is due 90 days after the first of the 10 year, which is the end of March. So we'll be working that 11 very soon. We've already started to draft some things. We 12 also to report on Board activity during the previous year, findings and recommendations based on annual reports from 13 14 our other cooperating agencies: the Energy Commission, 15 community colleges, the Workforce Investment Board and the California Conservation Corps. And findings on quantifying 16 17 total employment from the Workforce Investment Board.

So the audit, we have an interagency agreement, with the State Controller's Office to produce an independent audit and program audit of the Job Creation Fund to determine if projects are consistent with the program guidelines.

And now let me walk through some of the SB 110 Program changes. As you know, the Clean Air Jobs Act was a five-year program. Projects funded through 2017-2018

1 continue until construction is complete and we have 12
2 months of utility data and the Board will continue to
3 oversee these projects. SB 110, as I mentioned, removed
4 the sunset data and now continues indefinitely and 110 does
5 not otherwise change the duties of Board.

6 110 created three new programs for the Board to 7 oversee and beginning in 2018-19, if the SB 110 8 appropriates any remaining funds from the Prop 39 K-12 9 Grant Program to these new programs. And then, in 2018-10 2019, it also establishes the Clean Energy Job Creation 11 Program, which is ongoing, but subject to annual 12 appropriations from the Legislature.

And I'll just talk a little bit about the program 13 14 funding briefly. My understanding is that we've seen at 15 least in the Prop 39 Program an increase in applications. We expect final numbers about a week after final energy 16 17 expenditure plans or revisions are submitted. And that due 18 date is February 26th. So about a week after that, the 19 Energy Commission works with the Department of Education to 20 figure out what that number is. As of February 12th we had 21 about \$236 million remaining, but we expect that number 2.2 would decrease significantly.

Okay. Of those new programs the first one, the
School Bus Replacement Program, would be funded up to 75
million for school districts and county offices of

education again funded by remaining Prop 39 K-12 funds.
Administered by the Energy Commission in consultation with
the Air Resources Board and funding for replacements
prioritized by the oldest school buses for those operating
in disadvantaged communities. And areas where the majority
of students are eligible for free or reduced priced meals.

And I'll just say that the old school buses must
be scrapped. It's not a retrofit. They just need to be
scrapped and the Energy Commission can also work with local
air districts to administer some of that funding.

11 New program two is the ECCA-Ed Competitive Loan 12 Program. It's up to \$100 million funded out of the 13 remaining Prop 39 K-12 Program dollars, support for low and 14 no interest revolving loans. And again, administered by 15 the Energy Commission, this time is a competitive program 16 as well.

The funding prioritized percentage of students for free or reduced price meals, energy savings, geographic diversity and diversity and size of student population.

And then program three, a Prop 39 Competitive K-12 Grant Program for local education agencies, funded again out of the original remaining program dollars, administered by the Energy Commission.

And on the development of these three programs --25 so first of all the program funding is a mix between the

size of the school districts and the other points that I
 noted in the last slide, which was percentage of students
 eligible for free or reduced priced meals, energy savings,
 geographic diversity, so formula-based programs.

5 The Energy Commission staff has already had three 6 workshops on this, on the conceptual design of these 7 programs. I think the comments due back is February 28th, 8 so they had workshops on the 14th, the 20th and the 21st, 9 to talk with stakeholders about how these programs might 10 roll out, asking for input and ideas. Again, feedback by 11 February 28th.

And then SB 110 new programs, I call them new programs, but really they depend on whether future funding from the Legislature materializes. And if it does, the Energy Commission program would become competitive while projects at community colleges would still be at the discretion of the Chancellor.

And that's all I have. What I did put in the background for you was the existing program and responsibilities of other agencies here. And of course loaded throughout are pictures of actual projects that have gone on at schools that have been a success so far.

And so here's the state agency rolls of current programs. And I'll just put that out there for you. You can review it at your leisure. And that's what I have for

1 you today.

2	CHAIR GORDON: Thank you, Jim. That was a great
3	refresher on some things and a reminder about new things.
4	And I have a couple of questions, but I'm going to let
5	others jump in first, because I'm sure there are some.
б	Chelina?
7	BOARD MEMBER ODBERT: Can you just clarify, is
8	the School Bus Program competitive or is there a formula
9	allocation?
10	MR. BARTRIDGE: It's both. It prioritizes by
11	certain areas and then it's also competitive as well. It's
12	a mix.
13	CHAIR GORDON: So do people do those LEAs get
14	extra points or something on the application if they meet
15	these criteria or do we know?
16	MR. BARTRIDGE: There was an entire presentation
17	I can give you that staff went through that was pretty
18	recent that talked about the geographic diversity, how they
19	split up the geographic diversity and then the school
20	districts. So I can provide that to you.
21	CHAIR GORDON: And also just because this took me
22	a really long time to understand, so I'm going to just
23	clarify it again for everyone else. So the school buses
24	and EECA are guaranteed well, they're guaranteed up to a
25	certain amount of money. So 75 million for the buses and

100 million for EECA of the remaining money from the first 1 2 phase of this whole thing, right? We don't actually know 3 how much remaining money there will be. So one of the 4 questions I have that I don't think we know yet is what happens if there's less than \$175 million remaining? 5 Is that prorated between those two? Is one prioritized over 6 7 the other? No, we don't probably know, right? MR. BARTRIDGE: I don't think I have the answer for that. 8 9 MR. BUCANEG: I do. 10 MR. BARTRIDGE: Go ahead. 11 CHAIR GORDON: Yes. Please step in staff who are 12 in the room, if you know. 13 MR. BUCANEG: No problem. This is Haile Bucaneq, 14 I'm with the California Energy Commission. So the way that 15 the legislation was written out is that the first 75 16 million goes to the grant program and then after the next 17 100 million -- or I'm sorry, the first 75 million goes to 18 the Bus Program and then the next 100 million goes to the 19 grant program, so they'll be funded in that order. 20 CHAIR GORDON: Okay. Randall, David? 21 COMMISSIONER MCALLISTER: So you really meant 2.2 that the next 100 goes to the loan program and then the 23 third, if there's any money left over then all of that goes 24 to the new grant program? 25 CHAIR GORDON: Right. Thank you for clarifying,

1 Commissioner.

2	Randall, David, questions at this moment?
3	BOARD MEMBER MARTINEZ: No.
4	CHAIR GORDON: On the phone?
5	BOARD MEMBER LLOYD: That was my question.
6	VICE CHAIR GOLD: No further questions.
7	BOARD MEMBER ROSENBERG: No.
8	CHAIR GORDON: Okay, so just to the extent, just
9	to put a point on our role here as the Board. Jim made the
10	point as I think we've said several times that our
11	oversight role doesn't change. So our requirements are
12	still the audit and the report to the Legislature.
13	MR. BARTRIDGE: Correct.
14	CHAIR GORDON: Two things about that. One, on
15	the audit, we've been having a number of conversations just
16	to ensure that the money for the audit is still in the
17	budget, because so much of the budget is becoming annual
18	appropriations. And my understanding is we do still have.
19	MR. BARTRIDGE: My understanding is we do still
20	the 300.
21	CHAIR GORDON: The 300,000 for the audit.
22	MR. BARTRIDGE: To support that. Correct.
23	CHAIR GORDON: And the second question, or the
24	second point that I just wanted to make, is that because
25	this becomes an annual appropriation the report to the

1 Legislature is actually that much more relevant. Because 2 the Legislature will actually be decided to appropriate it 3 now on an annual basis instead of having a specific amount 4 that automatically goes into this program. 5 MR. BARTRIDGE: Right. 6 BOARD MEMBER MARTINEZ: Jan, I have question --7 excuse me, Kate. CHAIR GORDON: That's okay. It's a great name. 8 9 (Laughter.) 10 BOARD MEMBER MARTINEZ: I have a question. Excuse me, Kate. 11 12 CHAIR GORDON: That's okay. Kate is a great 13 name. 14 BOARD MEMBER MARTINEZ: On the subject of the 15 audit I recall that we spent a little bit of time scoping out the scope of work for the audit under the previous 16 17 system. With these three new programs in place, will we 18 require an additional scoping session for the audit? 19 CHAIR GORDON: That is a great guestion. We have 20 a current, and please Jack or Jim, join in on this if I get 21 this wrong. We have a current three-year contract with the 2.2 Controller's Office on our audit, which ends kind of 23 coincident with the ending of the first phase. So they're 24 doing the audit we always said they were going to do, 25 right?

1 But it's a great question on both what the scope 2 will be on the next audit, I think, and whether we want to 3 put it out for bid. So Jack, do you want to add anything? 4 MR. BASTIDA: Yeah. Our scope of work goes three 5 years, so we're in year two right now. We have one more 6 year left, but we can always change our scope of work this 7 year or next year, with the auditor, so CHAIR GORDON: But am I right? I'm right that 8 9 the three year, in their third year, they will be auditing 10 what's happening now. 11 MR. BASTIDA: Yes. Yes. 12 CHAIR GORDON: Which is prior to the bus (indiscernible) --13 14 MR. BASTIDA: Right. I don't think they'll be 15 able to roll out the Bus Program until next year. CHAIR GORDON: Right. Until the next -- until 16 17 after their three year. Yeah, so we should -- well, we 18 should just make a note that after we get through this 19 craziness of the legislative report phase we should have 20 the meeting after that focus on this question, because it's 21 a really good question. Because this will change, I mean 2.2 there are many, many questions that come up with that. So 23 how do we -- does the SIR, does everything apply to the Bus 24 Program, for instance? How do we evaluate that? I think 25 that's the place where I, at least am the least educated,

1 so great question.

2	MR. BASTIDA: Thank you.
3	COMMISSIONER MCALLISTER: Just as a point of
4	information, we are having a series of workshops to talk
5	about program design on the two new phases, the two new
б	programs. Well, actually all three, because they're all
7	new, but I think we have two of those happened already?
8	MR. BARTRIDGE: There's three, all three of them?
9	COMMISSIONER MCALLISTER: No. All three of them
10	have happened already, so we have had the series already.
11	They were the week before last, or last week. So depending
12	on how this sort of program designs shake out then some of
13	those, I think, will have clearer understanding of what the
14	needs of the Board are.
15	BOARD MEMBER ODBERT: Is it still too early to
16	know exactly when applications would be open on these three
17	new programs? I know, because they're still in design, but
18	is there like a
19	MR. BARTRIDGE: We, Jack and I attended the first
20	workshop, staff workshop and they were looking towards the
21	end of the year. So time to design the program, time to
22	get it out there, they're taking feedback and comments on
23	design. There were a number of questions from school
24	districts about the buses themselves.
25	And so I think they're looking towards the fall

1 to get those programs out and going, to actually put out 2 the funding opportunity. Yeah. 3 BOARD MEMBER ODBERT: Okay, thanks. 4 MR. BASTIDA: We were planning on having the Bus 5 Program come speak to the Board at the March meeting, 6 perhaps. 7 MR. BARTRIDGE: Okay. MR. BASTIDA: So we're kind of geared towards 8 9 answering some of those questions then. 10 CHAIR GORDON: Great. This is really helpful. 11 So I think we're all laser focused today and at our next 12 meeting on this year's report to the Legislature, but these are all things that we will have to turn our minds to 13 14 pretty quickly after that report is in the bag. 15 So just as a reminder as we go on to the next 16 item, every year we do a report to the Legislature. It's 17 one of our primary responsibilities. That's the place 18 where this Board provides recommendations. We provide an 19 overview. Essentially it's a summary report that goes on 20 top of all of the agency reports that we attach as 21 appendices, which we'll be talking about today. And then 2.2 we provide a set of -- I sort of would say a summary of all 23 those and a set of recommendations. And those recommendations -- that section is an important section for 24 25 the Board to engage on.

The first, we always every spring have two 1 2 meetings in a row. And the first is today's and it's the 3 meeting where we hear from each of the agencies about what 4 they have found in the last year, what they have included 5 in their report. And it give us the opportunity to ask them for any changes or to approve their report as part of 6 7 our -- essentially as an appendix to our final report. We can approve with amendments, which is often what we end up 8 9 doing. 10 So that's today's meeting. 11 And then the meeting we're going to have on March 12 something? MR. BARTRIDGE: 22nd. 13 14 CHAIR GORDON: The 22nd, I think, yeah. 15 MR. BARTRIDGE: It's the 22nd. We've been so focused on this one that --16 17 CHAIR GORDON: I think that's right. 18 MR. BARTRIDGE: -- we did get the other one 19 scheduled, but I don't know the date off of the top of my 20 head. 21 CHAIR GORDON: It should be in your calendars. Ι 2.2 think it's the 22nd. That meeting will be the meeting 23 where we review our own report and ideally approve it. A reminder to the Board that our report is due on the 30th of 24 25 March; it's due 90 days after the beginning of the year,

1 which is March 30th. And so it is a bit of a scramble. So
2 these two meetings are very, very important. We have to
3 have a quorum, we have to have engagement, people have to
4 prepare for them. They are sort of our more important
5 meetings of the year.

6 So with all that said, going to Item 5 what we're 7 going to do now is start hearing from the agencies on their 8 reports.

9 And we will start with the Energy Commission on10 the K-12 Program.

MR. HOLLAND: So good afternoon Board Members and guests. My name is Jim Holland. I'm with the Local Assistance and Financing Office of The Efficiency Division here at the Energy Commission.

15 For your consideration and possible approval on behalf of the Energy Commission and the Prop 39 staff, I'll 16 17 present an overview of the Energy Commission's third annual 18 report to the Citizens Oversight Board. For your 19 information today, I will give a brief overview of the 20 Energy Commission's report to the COB. My presentation 21 will begin with a report overview then transition to 2.2 highlights of our three programs: the Prop 39 K-12 Program, 23 the Energy Conservation Assistance Act, Education 24 Subaccount Loan Program and our Bright Schools program. 25 Then wrap up the presentation with some time for questions.

1 First, I'd like to begin with the report 2 overview. The Energy Commission administers three 3 components of the California Clean Energy Jobs Act 4 including the grant program called the Prop 39 K-12 5 Program; a revolving loan program, the Energy Conservation Assistance Act Education Subaccount Program also known as 6 ECCA-Ed; and a technical assistance program called the 7 Bright Schools Program. 8

9 All three programs receive funds from the Clean10 Energy Jobs Creation Fund, created by Prop 39.

11 Our report to the Citizens Oversight Board 12 provides progress on all three programs. This is the 13 Energy Commission's third progress report to the Citizens 14 Oversight Board. The most recent report summarizes results 15 from the start of the Prop 39 K-12 Program in December of 16 2013 through June 30th, 2017.

17 Before discussing the program's status it's 18 helpful to review the appropriations for this reporting This slide summarizes the 2013-'14, '14-'15, '15-19 period. 20 '16 and '16-'17 fiscal years' Clean Energy Job Creation 21 Fund Appropriations for the Energy Commission's programs. 2.2 The K-12 Program has a total appropriation or 23 nearly \$1.4 billion. The ECCA-Ed Program has a total appropriations of 56 million for the 2013-'14 and '14-'15 24

25 fiscal years. The ECCA-ED Program did not receive

1 additional funding in fiscal years 2015-'16, or 2016-'17.

The first program I'll discuss is the Prop 39 K-12 Program, which provides grant funding for the installation of eligible energy efficiency and clean energy generation measures at K-12 schools. The Energy Commission is primarily responsible for administering the Prop 39 K-12 Program by receiving, reviewing and approving energy expenditure plan applications.

9 I would like to give a brief description of how 10 the Prop 39 funding application process works. First, a 11 local education agency or LEA completes an energy 12 expenditure plan by using the Energy Commission's Energy Expenditure Plan Online System. Once all of the necessary 13 14 information is entered and the supporting documents are 15 uploaded, the LEA submits the plan to the Energy Commission. 16

17 Once the Energy Commission receives the LEA's energy expenditure plan, a staff member in the Local 18 19 Assistance and Finance Office reviews the plan for accuracy 20 and completeness. Once this review is complete, the staff 21 person approves the plan. After approving the plan, the 2.2 Energy Commission notifies the California Department of 23 Education that the plan has been approved. This notification of approved plans occurs on a weekly basis. 24 25 Once the California Department of Education gets the

approval notification from the Energy Commission, it
 distributes funding on a quarterly basis.

During the first four years of the Prop 39 K-12 Program, nearly \$1.4 billion was appropriated for the program. Of this amount, 1.1 billion went to public schools, 254 million went to charter schools, and 15 million went to county offices of education. Just under 500,000 was allocated to three state special schools.

9 For the reporting period covered by this report, 10 there were 2,176 LEAs eligible to participate in the Prop 11 39 K-12 Program. Of this number, 1,177 were charter 12 schools, 938 were public school districts, 58 were county 13 offices of education and 3 were state special schools.

As of June 30th, 2017 1,058 million had been approved for the Energy Expenditure Plan through efficiency and renewable energy projects. And 154 million had been allocated by the Department Of Education for project planning purposes.

This slide summarizes the amount of funds approved and the reported amount spent, as of June 30th, 2017. At the end of the most recent reporting period, 1,212 million in Prop 39 funds had been approved through energy expenditure plans and distributed as planning funds and 669 million had been reported spent by local education agencies. These values are about double of what was

reported in the previous reporting period that ended June
 30th, 2016.

Allocations to local education agencies are primarily based on the prior year's average daily attendance with four tier levels designed to cover the various attendance numbers. Tier 1 LEAs have 100 or less students. Tier 2 LEAs have 101 to 1,000 students. Tier 3 LEAs have 1,001 to 1,999 students. And Tier 4 LEAs have 9 2,000 or more students.

This slide summarizes the participation by the 10 LEAs according to their tier levels. Tier 3 LEAs have the 11 12 smallest participation number, at 123. And Tier 2 LEAs have the largest participation number at 694. The total 13 14 participation of LEAs across all tier levels was 1,374, as 15 of June 30th, 2017. The 1,374 participating LEAs received approval for 1,452 energy expenditure plans representing 16 17 5,238 sites as of June 30th, 2017.

18 There are a variety of energy efficiency and 19 renewable energy measures that are eligible for Prop 39 20 funding. These measures include but are not limited to 21 lighting systems; heating and cooling systems; control 2.2 systems for lighting and HVAC, which is heating, 23 ventilation and air conditioning; pumps and motors; building insulation and energy generation, which is 24 25 typically photovoltaic systems.

1 Here, I'd like to discuss the types of energy 2 measures that have been funded. Each approved EEP, or 3 energy expenditure plan, can represent multiple energy 4 efficiency and clean energy measures at multiple school sites within an LEA. This table shows the breakdown of 5 measure quantity and the project costs associated with each 6 7 category of approved energy measures: 51 percent of the approved energy measures are for lighting, 21 percent fall 8 9 into the category of control measures for both lighting and 10 HVAC, 15 percent are HVAC measures and 10 percent are for 11 other energy efficiency measures.

Self-generation, primarily photovoltaic accountsfor 2 percent of our approved measures.

In regards to the project costs associated with the energy measure categories the lighting category had the highest percentage of total project costs, comprising over 38 percent of the total Prop 39 funding amount. HVAC measures came in second most costly at 36 percent.

19 The next section of the Prop 39 K-12 presentation 20 summarizes the program's accomplishments. This is just a 21 small representation of the thousands of energy measures 22 being installed throughout California as a result of this 23 program.

This slide shows the cumulative results of the final project completion reports for the three reporting

periods. Looking at the right-hand most column: 174 completed EEPs where final project completion reports have been submitted, represent \$116 million in total project costs and \$97 million in Prop 39 grant funds.

5 The reported annual energy savings for these 6 completed projects is nearly 43,000 megawatt hours in 7 electricity and over 146,000 therms of natural gas. The 8 reported energy cost savings is \$7.8 million.

9 Most of the 174 LEAs with completed energy 10 projects experienced a decrease in energy use intensity, also known as EUI. The EUI is a metric that measures the 11 12 annual rate of energy use per square foot of building 13 space, per year. It can be compared to a miles per gallon 14 used to measure vehicle fuel economy. Overall, this group 15 of 174 EEPs saved an average of 14.4 thousand Btus per 16 square foot. This was calculated by comparing the 12 months of energy usage data reported on an EEP application 17 18 to 12 months of post energy measure installation, energy 19 usage data, reported on the final project completion 20 reports.

As previously indicated 1,374 LEAs had participated in the Prop 39 Program as of the end date of the most recent reporting period, which was June 30th, 24 2017. Since that data, the total number of LEAs participating in the Prop 39 Program has jumped to 1,608 as

of January 28th, of 2018. That is an additional 234 LEAs
 prior or that added on after the June 30th cut of date for
 this report.

4 ECCA-Ed includes a revolving loan program funded by the Job Creation Fund that provides zero percent loans 5 to K-12 LEAs and community college districts for energy 6 7 efficiency and clean energy generation projects, with loan repayments being based on energy cost savings. ECCA-Ed 8 9 receives \$28 million in fiscal years 2013 and 2014 and 2014-2015 fiscal years for a total of \$56 million. 10 No 11 funding was allocated in fiscal year 2015-'16 or 2016-'17.

Also included on this slide is funding for our Bright Schools Program. Public Resources Code authorizes the Energy Commission to set aside 10 percent of the Job Creation Fund for school technical assistance to identify Prop 39 energy projects. Therefore, the Bright Schools Program received just over \$5.5 million of the \$56 million allocation.

As of June 30th, 2017, 32 ECCA-Ed loans were approved by the Energy Commission. This represents a total of 49.1 million in approved loan funds and \$46.1 in spent loan funds. EECA-Ed loan recipients request loan funds on a reimbursement basis, based on invoices submitted to the Energy Commission. Of the 32 loans, 25 recipients have completed projects and 10 of these have submitted the final

project completion report. The remaining 7 loans are still
 in the construction phase.

Like the Prop 39 Grant Program, ECCA-Ed loans fund energy efficiency and renewable energy projects. Each loan can represent multiple energy measures. Of the 32 loans, 7 funded energy efficiency measures, 13 funded renewable energy measures and 12 loans funded a combination of both energy efficiency and renewable energy measures.

9 The third program administered by the Energy 10 Commission is the Bright Schools Program. Again, this 11 program operates through the Prop 39 ECCA-Ed funding. The 12 Bright Schools Program assists LEAs in identifying energy saving projects in existing school facilities. The program 13 14 provides a range of technical assistant services, including 15 energy audits, third-party proposal review and professional 16 engineering support services.

17 The Energy Commission, through a competitive contract solicitation selected a prime contractor for the 18 19 team of professional engineers and analysts to provide 20 technical assistance and support for the Bright Schools Program. As of June 30th, 2017, nearly \$3 million had been 21 2.2 spent for technical assistance out of a total of 5.6 23 million that had been allocated to the program. This leaves the Bright Schools Program balance of just over \$2.5 24 million to be used for future technical assistance. 25

The Bright Schools Program provided technical 1 2 assistance to 165 LEAs and community college districts 3 during the reporting period, identifying energy measure 4 opportunities at 311 school sites. These energy measure recommendations represent an estimated annual electrical 5 savings of 27,000 megawatt hours and natural gas savings of 6 7 over 304,000 therms, with total estimated energy cost savings of more than \$4.4 million. 8 9 This concludes my presentation and I thank you 10 for your time. And if you have any questions I will

11 attempt to answer them. Thank you.

12

CHAIR GORDON: Great. I'm sure we do.

So I will look in the room first to see if 13 14 anybody wants to jump in. This is the largest chunk of 15 money, as we all know, from the program. And I will just 16 say it's very impressive how much more uptake of the 17 schools have been participating, which is amazing. A lot 18 more participation it seems like from the smaller schools, 19 which is really great. Didn't we had that concern last 20 year, I remember? So is that your sense as well? 21 MR. HOLLAND: Yeah. The Tiers 2 and 3, I think 2.2 their numbers were -- Tier 2 had the highest participation 23 and that tier is 101 to 1,000 students.

24 CHAIR GORDON: Right. That's a huge change from25 last year for those of you who remember.

1 MR. HOLLAND: Almost the smallest. 2 CHAIR GORDON: Last year we'd put in our report, 3 for those new to the Board, that we were a little concerned 4 about the smaller schools last year, because of the lack of participation. But it looks like they've rallied, which is 5 great. And those savings numbers are really impressive. 6 7 So thank you, as always, for your great work. Randall, you look like you have a question? 8 9 BOARD MEMBER MARTINEZ: I do, just following your 10 same train of thought on how you've broken up the schools 11 by tier, which is very helpful. 12 MR. HOLLAND: Sure. BOARD MEMBER MARTINEZ: I'm curious about the 13 14 geographic disbursement of the tiers. Were they mostly 15 located in a certain area or were they pretty disbursed 16 throughout the state? 17 MR. HOLLAND: I don't believe that, I mean just 18 by the way the state is populated I would imagine a lot of 19 the smaller LEAs are in the northeast part of the state. 20 But we do in the main report, have a geographical map of 21 participation. It's not in my presentation, but I can 2.2 certainly --23 CHAIR GORDON: It's on page six of the --24 MR. HOLLAND: -- get you that. Yeah, page six of 25 the main report, under the geographical distribution of

1 participation. 2 BOARD MEMBER MARTINEZ: Yes. I have it now. 3 Thank you. 4 MR. HOLLAND: And there were two counties, I believe, that had 100 percent. Actually three: Plumas, 5 Sierra and Calaveras counties had 100 percent 6 7 participation. CHAIR GORDON: Cleary, we need to send someone to 8 9 Alpine County to talk to the 1,100 people that live there. 10 That's not right. 11 MR. HOLLAND: We may actually have gotten input 12 since the report date. Did we get Alpine County? UNIDENTIFIED SPEAKER: I've been having contact 13 14 with them and they're (indiscernible). 15 COMMISSIONER MCALLISTER: One thing that we -yeah it's actually gratifying, the last six months, to kind 16 17 of see how things have moved forward, because early on we 18 sort of imagined a trajectory of applications. You know? And we were thinking, "Well, gosh. How many?" 19 We were 20 thinking we were assuming or presuming that since schools 21 have so much going on and they wear lots of hats, 2.2 especially the medium and small ones, that they might wait 23 as they're permitted to do, until the last year and apply for the whole multiple years of funding at once, right at 24 25 the end. That's the most efficient thing to do.

And so the numbers kind of reflected that for a long time. And then we were sort of on the edge of our seats, "Okay. Is that really going to happen?" And it appears that that is what has happened. And so those middle-sized schools kind of strategically said, "Okay. Well, when we have all the money ready to be asked for, we'll ask for it."

And so I think that's partly the reason of what's been going on. So I've seen very strong in the last few months, right up until the end of the program, very strong submittals. Large numbers of submittals, including by schools that have never submitted before.

BOARD MEMBER MARTINEZ: One more question. As I reflect on our new programs, especially those programs and funds that are going to be competitive in nature, I think it's important for us to keep in mind the geographic disbursement that we have enjoyed so far. And make sure that we ensure that's the case when it becomes more competitive.

20 CHAIR GORDON: That's a great point. And I think 21 there are -- am I right that there are regulations within 22 the new legislation that look at that?

23 COMMISSIONER MCALLISTER: Yeah, the statute
24 requires that of all of them.

25

CHAIR GORDON: Okay. So the statute requires a

1 certain amount of geographic dispersal, I think. It's 2 competitive, but within tiers I think still, right. Am I 3 right? 4 COMMISSIONER MCALLISTER: Yes. The areas and 5 then size --6 CHAIR GORDON: Can you use your microphone just 7 because --COMMISSIONER MCALLISTER: It's competitive. 8 Ι 9 mean, staff can answer all these too, I think, but 10 competitive within both geographic area and within school size tiers. 11 12 But it does introduce some complexity in that it turns into a lot of buckets across the state, depending how 13 14 big the school is and where it is. And so it's got to be 15 competitive within each bucket, and so because of it the program design actually becomes pretty interesting when you 16 17 have to take all that into account. 18 BOARD MEMBER LLOYD: Hi. This is Barbara Lloyd. 19 CHAIR GORDON: Go ahead, Barbara. 20 MR. HOLLAND: Yes, ma'am? 21 BOARD MEMBER LLOYD: Thank you. I noticed that 2.2 SIRs, a savings investment ratio, seems pretty important. 23 But I only see aggregate-based (indiscernible) --2.4 CHAIR GORDON: Barbara, you're breaking up. I'm 25 so sorry. I wonder if that's an issue on your end or ours?

1 UNIDENTIFIED SPEAKER: She should get off 2 speaker. 3 CHAIR GORDON: If you're on speaker, can you get 4 off it? Just ask the question. VICE CHAIR GOLD: It's a speaker phone though. 5 CHAIR GORDON: All right. Well, try again. 6 We 7 heard you were asking about the savings investment ratio. Go ahead. 8 9 BOARD MEMBER LLOYD: Yes. Is there a way to see 10 the SIR for each category of expenditures, rather than just 11 aggregate? So know which type of expenditures provide the 12 most bang for the buck? 13 MR. HOLLAND: Well, I'm sure there's ways that we 14 can parse out those numbers. I don't have various 15 breakouts like that at this point, but if we have any requests to break out SIR by different categories we can 16 17 certainly do that. But right now I only have them 18 aggregate for the entire reporting period. 19 CHAIR GORDON: So by category, Barbara, you mean 20 by like lighting and HVAC and those categories? 21 BOARD MEMBER LLOYD: That's what I would suggest 2.2 at the front end. If there's some reason why that's too 23 granular, at least at the broader categories. I don't 24 think it's -- you should be able to get it for categories. 25 MR. HOLLAND: Yes, ma'am. I think we can. We

just need to know what the request would be and we can run the numbers I'm sure, by various efficiency measure types or by tier levels, pretty much anything.

4 CHAIR GORDON: So Barbara, we have an opportunity 5 to suggest some amendments. So if it's possible for you to 6 look in the main report and identify where, what kind of 7 section you're talking about, and we can figure out what 8 makes the most sense.

9 BOARD MEMBER LLOYD: My first suggestion would be 10 to look at the summary of information on the presentation 11 on slide 15 and simply add an SIR measure in each of those 12 categories. And then let that flow through to the proper 13 place in the report, which I think might be page 17 of the 14 main report.

VICE CHAIR GOLD: But you do bring up an interesting point, Kate, on (indiscernible) by tier (indiscernible) --

18 CHAIR GORDON: Oh. We always have problems with 19 this L.A. phone connection. I'm so sorry. Mark, hold on 20 one second. Do we have any idea why they're breaking up so 21 much? Is it a noise on our end problem?

22 COMMISSIONER MCALLISTER: Yeah, if you -- whoever 23 is speaking gets close to the mic and enunciates and speaks 24 a little bit more loudly, I think maybe that could solve 25 the problem depending on which (indiscernible)

CHAIR GORDON: Yeah, Mark. Can you start again
 really close to the mic?

VICE CHAIR GOLD: Yeah, I was just adding to what you previously said (indiscernible). I thought it was an interesting idea that even if there's differences by tier of the LEAs, and whether or not -- how they're doing in performance matters (indiscernible).

8 MR. HOLLAND: Certainly, I think we can run 9 numbers for pretty much any category that that is 10 requested. We'll just need to get it. And certainly, if 11 anyone wants to email me I can certainly work on getting 12 those numbers for the Board.

13 CHAIR GORDON: Thanks. I think ideally, because 14 of the vote we have to take today, we have to be able to 15 vote on approving with amendments. So to the extent we can 16 be very clear today on what those amendments are, what we 17 need from you, that would be good.

So it sounds like it is possible to look at the SIR by those categories, which I understand the impetus for the question. We always want to know why people do the things they do. So --

22 MR. HOLLAND: Sure. I believe it's possible to 23 run SIRs for tier levels, for measure categories and so on. 24 UNIDENTIFIED SPEAKER: What we can do is we can 25 run the SIR for different categories and then bucket them

1 out by tiers.

2	Just kind of one things to address kind of the
3	question that was on the line is why certain measures seem
4	to have a higher number of measures being implemented. And
5	it just is that lighting, we typically see that lighting
6	measures have a higher SIR, so a lot of LEAs are using the
7	higher SIR lighting to help balance out lower SIR projects,
8	so.
9	BOARD MEMBER LLOYD: I think the specific request
10	that I would have is that the table found on page 15 of
11	your presentation, be added to the report in the section
12	that starts on Page 16, which is identify
13	CHAIR GORDON: Of page 16, which is where I think
14	it is now. So it's currently on page 16 of the main report
15	is the same table.
16	BOARD MEMBER LLOYD: Oh, I'm sorry. I was going
17	down below. Just add the column to that Table 9 that
18	indicates the SIRs for each of these categories. If it's
19	feasible to add a supplemental table that includes
20	information by tier amongst these categories, I certainly
21	don't object.
22	MR. HOLLAND: I believe we can do that.
23	CHAIR GORDON: So definitely a column of SIR to
24	this table would make sense to you, Seth? (phonetic)
25	UNIDENTIFIED SPEAKER: Yeah.

1 CHAIR GORDON: And then if feasible, I think just 2 if feasible by tier. The point you just made, I think, 3 also if it's not in here it would be good to put in here, 4 if you are adding the SIR by category, to make the point 5 that you see projects evening out their SIR by taking on lighting measures, for instance. And then being able to do 6 7 other projects that are lower SIR and balancing that out. I think that's actually a really important point, so it 8 9 would be great to have that in here. 10 COMMISSIONER MCALLISTER: Which is, in fact the 11 best practice in program design, right? So you want to 12 have the longest reasonable payback that you can have, 13 because that enables you to do more. 14 I wanted to just point out these are the reported 15 -- or I wanted to ask staff actually, these are the reported savings in the final report. Correct? 16 17 MR. HOLLAND: Yes, sir. 18 COMMISSIONER MCALLISTER: Okay. So these have not had evaluation? 19 20 MR. HOLLAND: Correct. 21 COMMISSIONER MCALLISTER: They're not going 2.2 through formal evaluation to affirm or to put out these 23 (indiscernible)? MR. HOLLAND: Correct. There have been no 2.4 25 follow-up like site visits or data logging or anything like

1 that. This is based on their pre-installation energy use 2 and then the post-installation energy use. And these 3 energy savings are the result of that. 4 COMMISSIONER MCALLISTER: So they have actually 5 used their pre and post data to come up with these savings? UNIDENTIFIED SPEAKER: For the final project 6 7 completion reports, we asked them to report energy savings. And we give them number of ways to do that. And one of 8 9 them is to do measurement and verification. Most LEAs 10 don't do that due to costs of doing that. We also allow them to calculate it based on 11 12 equipment, pre and post-equipment. And we also allow them 13 to use pre and post-data to do straight comparison. 14 COMMISSIONER MCALLISTER: Okay. So it's up to 15 them? 16 UNIDENTIFIED SPEAKER: Yes. 17 COMMISSIONER MCALLISTER: All right. Thanks. BOARD MEMBER LLOYD: This is Barbara with a 18 19 clarification question. Does the fact that people may be 20 doing multiple measures make it difficult to assign an SIR 21 by categories for projects that have multiple measures? 2.2 UNIDENTIFIED SPEAKER: We do require the required 23 LEAs to report savings and cost savings information as well 24 as project costs by individual measure. So we should be 25 able to tease that out and get the SIR by measures. It's

1 just we're going to have to go through that application to 2 do that and just kind of combine everything together as 3 lighting instead of the way that their combined now, which 4 is SIR per LEA application. So it's just going to take a little bit of time 5 to massage the information that we do have. 6 7 CHAIR GORDON: Chelina, I know you had a question? 8 9 BOARD MEMBER ODBERT: Sure. This question is a 10 bit in the weeds, but I think it's relevant. In the report 11 it's Table 10, you also showed it on one of the slides. 12 It's a cumulative summary of final project completion 13 reports? MR. HOLLAND: Right. Let's see which one is it? 14 15 CHAIR GORDON: It's on page 19. 16 BOARD MEMBER ODBERT: On page 19 in the report. 17 MR. HOLLAND: Right. Is it this? BOARD MEMBER ODBERT: 18 That's the one. Yes. 19 MR. HOLLAND: Okay. 20 BOARD MEMBER ODBERT: So given that one of the 21 overarching goals of the program is to free up money 2.2 through energy savings to be used for other expenses that 23 the schools have, I just want to ask if I'm understanding what that savings might be per school. So is it 24 25 appropriate to take this 7.8 million total cost saving

1 number and divide it by this 174 projects to -- is that 2 number a representative number of let's say money that 3 could be freed up to be used for other expenses? 4 MR. HOLLAND: That would be a very -- a simple way of doing it, but of those 174 projects it could vary 5 widely. 6 7 BOARD MEMBER ODBERT: Sure. MR. HOLLAND: Some of the sites may have saved a 8 lot less than 1/174th of that. 9 10 BOARD MEMBER ODBERT: Sure. 11 MR. HOLLAND: And some may have saved more, but 12 certainly the simplest way to do it would be to divide the 7.8 million by 174. 13 14 BOARD MEMBER ODBERT: And this represents an 15 annual number. So one would -- again, I know that this is 16 just a very simplified way of doing it, but you would 17 whatever that number is, something like 45,000 is an annual 18 savings? 19 MR. HOLLAND: Correct. 20 BOARD MEMBER ODBERT: Thank you. 21 CHAIR GORDON: Other questions, Randall, Dave on 2.2 the phone? 23 BOARD MEMBER DIAS: No, actually (indiscernible) CHAIR GORDON: Great. The one question I had was 24 25 on your slide about the tiers, the participation by tier is

1 like one of your first slides. I was interested in 2 whether, and maybe it's in the report, whether you indicate anywhere what the breakdown is of the number. What 3 4 percentage of those schools in the tier is that, do you know what I mean? 5 Sure. And I actually do have the 6 MR. HOLLAND: 7 totals that I worked up after I generated this slide show. So for example, for Tier 1 there were 137 participants. 8 9 The total eligible at the time was 255. 10 CHAIR GORDON: Would it be easy -- it sounds like 11 it would -- for you to add to -- actually I don't think 12 this chart is in the report, is it? Am I wrong? 13 MR. HOLLAND: Yes. This chart or something very 14 similar to it is in the report. 15 CHAIR GORDON: Okay. I don't know. I just 16 didn't see it, but I'm sure it is. Wherever it is in the 17 report, would it be easy to add just a parenthetical or 18 something showing the percent of the eligible schools that 19 applied? 20 MR. BARTRIDGE: Certainly. I can have a number 21 participating versus the total number. 2.2 CHAIR GORDON: That would be great. MR. BARTRIDGE: Sure. 23 24 CHAIR GORDON: Thank you. All right, that was my 25 only question.

Great, so it sounds like if we were to have the 1 2 ideal motion on this it would be to approve with the 3 amendment of adding a column on the SIR by category to the 4 chart on page 19. And adding information about the percent 5 of eligible schools by tier to the chart on -- where is it 6 in the report? 7 MR. HOLLAND: If it's not, it will. CHAIR GORDON: Okay, so to add this chart to the 8 9 report and to add the number on percentages. 10 BOARD MEMBER MARTINEZ: So moved. 11 CHAIR GORDON: Oh, great. 12 BOARD MEMBER ODBERT: Second. 13 CHAIR GORDON: All right. Perfect. All right, 14 let's have a vote on, again approving the report with those 15 two amendments. Can we do a roll call, Jim? 16 MR. BARTRIDGE: Okay. Chair Gordon? 17 CHAIR GORDON: Yes. 18 MR. BARTRIDGE: Heather Rosenberg? 19 BOARD MEMBER ROSENBERG: Yes. 20 MR. BARTRIDGE: Barbara Lloyd? 21 BOARD MEMBER LLOYD: Yes. 2.2 MR. BARTRIDGE: Chelina? 23 BOARD MEMBER ODBERT: Yes. MR. BARTRIDGE: Randall? 24 25 BOARD MEMBER MARTINEZ: Yes.

MR. BARTRIDGE: And David? 1 2 BOARD MEMBER DIAS: Yes. 3 MR. BARTRIDGE: And Mark? 4 VICE CHAIR GOLD: Yes. CHAIR GORDON: Great. And to the folks from CEC 5 I just -- we say this every year, but always just thrilled 6 7 to work with you on this. I know it's a huge amount of work for your agency, as it is for all the agencies. You 8 9 guys have the bulk of this work. And we've obviously 10 learned a lot from three years of doing this report 11 together, because this is probably the easiest approval 12 we've ever had, so nice job. Thank you so much. 13 So we are going to turn to Carlos from the 14 community college system with a report on the funds that go 15 to that critical part of the infrastructure here. And it's 16 nice to see you, Carlos. 17 MR. MONTOYA: All right. Thank you, Members of 18 the Board. I'm Carlos Montoya from the California Community College Chancellor's Office. I'm going to go briefly over 19 20 the Proposition 39 Report for Year 4 for us. And so with 21 that I do want to just start off by saying that our system 2.2 continues to demonstrate a level of success and engagement 23 with all of our districts, as well as all of the IOUs and our partners, including NAM who is our technical consultant 24 25 on the implementation of this program.

And so with that our report this year reflects 1 2 Year 4 of our program, which is the fiscal year 2016-'17. During this period, we actually received \$49.2 million that 3 4 has been distributed across both our facility projects as well as our Workforce and Economic Development Division. 5 And so with it you can see the allocation percentages 6 7 between the two of 12.8 percent for workforce and 87.2 percent for our actual construction projects that goes 8 9 directly to each of the districts allocated on an FTEs 10 basis. 11 So with that, during the '16-'17 fiscal year, the 12 funding resulted in a total of 578 projects, 123 of those 13 have actually been completed and closed out, 455 are still 14 in progress. 15 And of those projects that have actually been 16 completed and closed out they represent 38 of our 72 17 districts, 17.5 million in total project costs representing 8.8 million in kilowatt hours of savings, 251,000 in therm 18 19 savings as well for 1.4 million in annual energy cost 20 savings. In addition, we also calculate out the workforce 21 2.2 and economic component of that. So those projects 23 represent 97.7 direct job years in full-time equivalent, 24 2.7 training job years, as well as 203,000 direct job 25 hours.

Now, for the workforce component we're actually reporting Year 3 of the data. I believe one of the challenges on the workforce side is we've had some turnover at the local level. And so we're actually going to be submitting an addendum with some updated information to our report, which I'll speak to a little bit later.

7 Now, similar to the previous report from the CEC, you'll notice a similar trend in how our projects break 8 9 down over the various categories. Again, this is in part 10 by our districts following the loading order and looking 11 for some high savings to investment ratio projects. So 12 what you'll see if 51 percent of our projects for the 13 closed out projects represent lighting type projects, 27 14 percent being HVAC. And then controls, MBCx/RCx and self-15 generation representing progressively lower and lower 16 amounts.

Those projects also take a little longer to implement as well. So as our districts look to try to work with each individual year of Prop 39, they're constantly looking at this as a consecutive one year programs as opposed to one lump sum dollar amount. And so this is kind of how they've been able to implement this so far pretty successfully.

Now, for our projects that are still in progress,
the 455 projects, 69 districts are represented there.

1 There's \$144 million in total project costs showing that 2 the districts themselves are also pitching in to complete 3 these projects, beyond just the Prop 39 allocation amount. 4 Those projects represent 59 million in kilowatt hour savings, 11,295 kilowatt savings and then a million in 5 therm savings. Annual energy cost savings are \$8.9 6 7 million. And then we can see the FTEs in terms of direct job years for our apprenticeship program are 751 with the 8 9 training job years being 20 million or 20.85.

Now, the Workforce Development Program had received 12.8 percent of the \$49 million, so that's 6.2 million. And their focus is creating and improving curriculum, providing professional development for faculty and support for regional collaboration, as well as developing partnerships and networks for continued student and faculty success in energy savings.

17 And so with the 6.2 million they've been actually 18 able to generate more than 3.4 thousand students completing 19 degrees, certificates, or industry certificates in Year 3 20 breaking it down to 199 AA degrees, 580 certificates that 21 are in that 6 to 18 unit range, over 1,000 certificates 2.2 above 18 units and 1,600 industry apprenticeship 23 certificates in the energy efficiency realm. And I believe with that I just want to say thank 24

25 you and I'm happy to answer any questions. The first one

1 I'm probably sure is to add the SIR column to that table. 2 (Laughter.) CHAIR GORDON: Sure of that? 3 4 BOARD MEMBER LLOYD: You read our minds. 5 CHAIR GORDON: Exactly. Barbara was just waiting I always have questions, but we'll let others 6 to say that. 7 jump in first. Heather or Mark or Barbara? BOARD MEMBER LLOYD: Carlos anticipated my 8 9 question. CHAIR GORDON: Perfect. Just for Heather and 10 11 Barbara just because you're new to the Board, if it isn't 12 clear one big difference between the Community College 13 Program and the K-12 Program is that the community colleges 14 run their whole program centrally, through the Chancellor's 15 Office whereas the K-12 Program is run through individual 16 LEAs, so just so that you know that difference. They are 17 run differently. 18 Heather, did you have any questions. 19 BOARD MEMBER LLOYD: No. Just the one question -20 - sorry I have a really echo-y -- is whether there is 21 budget or training or anything put into place as these 2.2 measures are getting for ongoing maintenance? 23 MR. MONTOYA: Yeah, we --24 BOARD MEMBER LLOYD: Did you hear that? 25 MR. MONTOYA: Yeah. We have, as part of our --

well, short answer is I'm not 100 percent sure that we've
officially established anything. Well, we haven't
officially established anything through our Prop 39 Program
for maintenance. But our districts are constantly
evaluating scheduled maintenance type projects as part of
our -- what we get in the budget allocation each year.

7 And I know this year, as we look to -- since there was no Prop 39 funding in what would be Year 6 of the 8 9 program, one of the things that we've asked is that with our scheduled maintenance dollar allocation that we 10 11 normally get is that we consider or the Department of 12 Finance consider adding maybe an energy efficiency type 13 category, specifically. So that districts can take that 14 into consideration as they kind of move forward, both for 15 either some projects that maybe just didn't get done to 16 making sure that the projects and the investments that we 17 have made are continuously invested into, so.

BOARD MEMBER LLOYD: That's great. I mean the biggest challenge I've seen on a lot of these projects is they come in with really great ideas and engineers put them in. And then no one how to use them, so they get shut off, so as long as that's built in somewhere.

23 MR. MONTOYA: Yeah. And with our Workforce and 24 Economic Development Division one of the things that we've 25 actively been looking at, throughout the program, is trying

1 to -- as they've developed curriculum and enhanced some of 2 their apprenticeship programs, we've also been looking at 3 building operator training, as part of those 4 apprenticeship-type programs that we've looked at. 5 Right now, we're trying to discuss as part of the Year

6 4 and 5 dollar amount that they have, is there a way to 7 kind of expand that and train additional people? Because that is a question that we get a lot and it's an ongoing 8 concern, which is especially if you start implementing a 9 10 lot of buildings and systems controls. That's a little 11 different to maintain. That requires a different level of 12 training than some of our staff currently, so we're trying to look at that as well. 13

BOARD MEMBER LLOYD: Thank you.

15 CHAIR GORDON: You just said, Carlos, just I 16 wanted to clarify, you said something about Year 6 not 17 having funding? Theoretically, you do have 11 percent of 18 the funding from SB 110 if money is appropriated though, 19 correct?

20 MR. MONTOYA: Yes.

14

21 CHAIR GORDON: Okay. We just don't know how much 22 that is for.

23 MR. MONTOYA: Yeah. Right now, I don't think 24 there is anything being proposed for Prop 39, other than 25 those taking some of the left over K-12 component and

1 putting in the 75 million specifically in buses and then 2 the \$100 million in the loan program. I think the way that 3 SB 110 was written most of those are actually in the K-12 4 subcomponent, which we are separated out of that. So if 5 there's no new money allocated, which there isn't at this 6 point. CHAIR GORDON: Meaning that the Governor's budget 7 doesn't have anything for this category. Is that what you 8 9 mean by that? 10 MR. MONTOYA: Correct. Yeah. 11 CHAIR GORDON: Yeah, so just FYI to everybody 12 there is nothing in the Governor's budget for the year 13 after this program ends at this moment. 14 MR. MONTOYA: Yeah. So for us, right now we're 15 currently working with Year 5. We're operating with Year 5 16 dollars trying to get all of that spent as the last year 17 essentially of the program. 18 CHAIR GORDON: Okay. Thank you. That's helpful 19 to know how you're planning. I ask you this every year, so 20 I have to do it again. Do you have any way to share any 21 placement data from the workforce program? 2.2 MR. MONTOYA: Part of that data is still, because 23 we're taking a very regional approach, it's a little harder 24 to get that done. And this year I think we were trying to 25 make that happen. And then with the turnover, a lot of

1 this money goes out kind of on a competitive basis through 2 some of our regional workforce investment boards and these 3 regional consortium partnerships, which is really great to 4 get a lot of people engaged, not necessarily the best for sharing data. Our office is undergoing a lot of work in 5 this area to try to get systems in place, so we can 6 7 actually do the placement data. But it's still a little early for some of that. 8

9 CHAIR GORDON: Well this goes, just as we're all 10 looking toward so next year's report to the Legislature 11 will be the last report to the Legislature of this first 12 set of programs, of the first five years of the program. And to the extent possible this is sort of a blanket 13 14 comment to you and CEC that we can -- or you and the 15 Workforce Board, I guess, to the extent that we can find 16 out anything about placement that'll be really useful, 17 because it will be able to make the case that this is 18 actually leading to jobs out in the world. So thank you. 19 MR. MONTOYA: Sounds good. CHAIR GORDON: So what I have -- any other 20 21 questions in the room, Chelina? 2.2 BOARD MEMBER ODBERT: Yeah. I'm wondering if 23 it's possible and if the rest of the Board thinks it would 24 be useful to include some sort of a map of geographic distribution for the work here? 25

MR. MONTOYA: Oh yeah. We should be able to get 1 2 that for you. Yes. 3 BOARD MEMBER ODBERT: Okay. CHAIR GORDON: That's a great question. 4 MR. MONTOYA: At a district level, correct? 5 BOARD MEMBER ODBERT: Yes. 6 7 MR. MONTOYA: Yeah. We should be able to get that for you. 8 9 CHAIR GORDON: That is a great point. Thank you. 10 And I was going to ask about savings by campus, 11 but it's in here, so thank you for already putting that in 12 here. But that is great, any more regional granularity we 13 can get the better. MR. MONTOYA: 14 Okay. 15 CHAIR GORDON: Other questions in the room or additions? 16 17 So what I have as two amendments here, again with 18 a goal for a motion to accept this report as input to our 19 report, with amendments. The two that I have are adding 20 the SIR column again, to the list of measures and then 21 including the map with geographic participation. 2.2 Can I get a motion with those two amendments? 23 BOARD MEMBER MARTINEZ: So moved. BOARD MEMBER DIAS: Second. 24 25 CHAIR GORDON: Roll?

1 MR. BARTRIDGE: Chair Gordon? 2 CHAIR GORDON: Yes. 3 MR. BARTRIDGE: Heather Rosenberg? 4 BOARD MEMBER ROSENBERG: Yes. 5 MR. BARTRIDGE: Barbara Lloyd? BOARD MEMBER LLOYD: Yes. 6 7 MR. BARTRIDGE: Chelina? BOARD MEMBER ODBERT: Yes. 8 9 MR. BARTRIDGE: Randall? 10 BOARD MEMBER MARTINEZ: Yes. 11 MR. BARTRIDGE: David? 12 BOARD MEMBER DIAS: Yes. MR. BARTRIDGE: And Mark Gold? 13 14 VICE CHAIR GOLD: Yes. 15 CHAIR GORDON: Fantastic. Thank you everybody. 16 This is -- so going through (indiscernible) here. 17 Bill, you've been so patient. Bill McNamara from the 18 California Conservation Corps next up. MR. MCNAMARA: First of all, thank you again for 19 inviting us to speak today, great to see you all again here 20 21 in the room. And those of you I can't see on the phone, 2.2 again greetings to you all. 23 So the California Conservation Corps, this report 24 is relatively brief. I won't say it's too brief, because 25 it's about 17 or 18 slides. But I'm only going to hit on

1 some highlights from each one. The California Conservation Corps itself is pretty much aligned with all of the goals 2 3 of Proposition 39 from the standpoint of creating job 4 opportunities within the energy industry and elsewhere in associated industries. As well as conserving energy, 5 reducing greenhouse gas emissions and making direct 6 7 contributions in partnerships with a variety of energy efficiency and renewable energy companies throughout the 8 9 state, all of which are in direct service to K-12 LEAs 10 throughout the state.

11 So the CCC, just some background, some of you 12 will have seen this before. The CCC itself has 26 operating centers throughout the State of California, of 13 14 which 4 of them are designated as energy centers. And 15 those are located in Sacramento, in Norwalk, California and Vista, California and San Jose. This is during the time 16 period of 2016 to -- actually the calendar year of 2016-17 2017. This report is through the end of December in 2017, 18 so it's more current than would be if it ended in the 19 20 fiscal year. And that's also consistent with the report 21 that was generated for 2016 as well.

Again, we're focused on energy training programs for young adults that are considered to be work-learned programs, all partnership based. And focused on making sure that the kinds of work that we train these young

adults in California to perform in the energy industry, are energy industry standard approaches. And so from that standpoint, we selected two main categories of work or actually three: two direct and one indirect.

And the two direct ones are to do energy 5 opportunity surveys, which are ASHRAE compliant energy 6 7 audits at Level 2 and also to do energy efficiency retrofit work, and focusing on lighting initially, and moving into 8 9 some other categories, including HVAC; and also renewable 10 energy. And the third category is educational programs, 11 which actually has quite a range of engagement, which I'll 12 show you shortly.

From a funding standpoint -- pardon me while I 13 14 put my glasses on here -- funding standpoint, in fiscal 15 year 2017-2018, we received an allocation of 5.8 million. 16 And you can see on this particular chart all the allocations from the beginning of the program to date. 17 But 18 the bottom line in this particular slide is simply that our 19 funding is meant to create the programs themselves and then actually implement them on behalf of the LEAs. 20

21 So for in many cases, for example, our energy 22 efficiency retrofit work, has an actually a cost offset to 23 what the LEAs may have spent otherwise -- meaning that we 24 paid for all of the energy efficiency retrofit work that we 25 do through our allocation, which therefore frees up additional funding for the LEAs that actually make use of these services to be used for other purposes. So it's an offset to what would have otherwise have been a cost for that installation of those lighting retrofits.

5 We're focused on again, three main areas: energy 6 opportunity surveys, which are ASHRAE compliant Level 2 7 audits; retrofit projects and then education. And we don't 8 actually have a map, but I can certainly get one for you of 9 the actual distribution, heard the last two requests. But 10 we do have a map here of all the distribution of LEAS 11 throughout the state.

12 So one of the things that was done, and this 13 actually occurred in 2016, was in addition to doing the 14 energy audits or which we call energy opportunity surveys, 15 we actually also created some software, which is used in 16 the data collection process. And this is, in order to 17 capture the full range of activity that's required in the 18 ASHRAE compliant Level 2 audit. And also a platform that's 19 actually easily configurable, so that as we work with 20 various partners throughout the energy industry that we can 21 add or subtract different functionality to what is actually 2.2 measured and observed and recorded, both photographically 23 and also from a data perspective at each location that we work at. 24

25

And our whole building -- our energy opportunity

surveys, are whole building approaches. And you can see here lighting, control systems, internal plug loads, integrated energy management systems, fenestration, O&M best practices. So it's really quite comprehensive, which leads us to another aspect that I'll get to in a moment about the value of the data itself and the size of this data that's been collected.

So since the beginning of the program, actually 8 9 in 2017 we have a total of three of our crews, which are 10 divided into both energy opportunity surveys being three 11 crews, and seven of our crews performing energy efficiency 12 retrofits. And that particular funding actually is actually used to fund a total of 100 corps members. 13 And a 14 number of staff associated with each of the corps members, 15 in order to go out and actually implement these things in 16 this particular work.

17 So you can see that from a program to date 18 perspective, we have actually serviced 439 LEAs. And we 19 have performed from a survey perspective, about 1,429 sites 20 of which we've completed, meaning there's still things in 21 progress, 1,327 energy audits for LEAs. And each audit 2.2 represents an entire school or multiples of schools. So 23 the energy surveys completed again from a building perspective it's 13,822 buildings and about 79 million 24 25 square feet of conditioned space.

And again, these surveys are very comprehensive. And so the data that's associated with all of those facilities that have been audited represent a very substantial sample of the entire state of California from a school system perspective. It's about 20 percent.

6 In terms of distribution of that particular work 7 from an ADA perspective, 5,000 and above, it's about 20 8 percent for 81; 5,000 and below it's about 80 percent, 9 334. And in terms of over 50 percent free and reduced 10 price meals, it's about 64 percent.

I have mentioned about the value of the data 11 12 itself, so one of the constructs that we were working on --13 or at least from a project perspective from the beginning -14 - was to make sure that we captured this broad range of 15 data and made it available first of all to the actual LEAs that requested the service; and secondly also made it 16 17 available to partners of their choice and also of ours, in terms of the provision of the data digitally. 18

And the collective of all that data represents a very substantial body of information about all the schools at a great level of detail. Much larger, in terms of its scope and capacity than what the LEAs have actually done with that information to date. So that information is actually representative and very useful for the LEAs from the standpoint of a physical inventory of their particular operational facilities and many other aspects that they are
 finding to be very useful from an operations O&M
 perspective.

In terms of lighting and controls retrofits, we chose again to start with lighting. And so again we've done a total of 93 projects. The actual retrofit project didn't start until about the middle or towards late of 2015. And during that time we've done 93 projects and gain, a total of 124,000 lighting retrofits and about 8,500 of the controls for those lighting retrofits.

And again an estimation for the KWH reduction on 11 12 the conservative side for all of those is about 7.599 million kWh. And we used the simple calculation for the 13 14 estimated reduction of greenhouse gas emissions on the CO2 15 side, which is about 1.8 thousand metric tons. Distribution again over 5,000 ADA, about 39 percent, under 16 17 5,000 ADA, 61 percent of all the services delivered and from an FRPM perspective, 54 percent. 18

And one of the things that I wanted to point out here as we go along is that the California Conservation Corps actually, as a workforce development program the Corps members, who are young adults, between 18 and 25, sign up for a period of a year. They can stay up to three years, but the net effect is we have an essentially a 100 FTE equivalent for Corps members. And that population goes up and down with some great frequency. And we've noted in the last two years, that the frequency of the population getting shorter in terms of the duration, has been getting shorter in terms of duration, but from a very positive perspective, because the Corps members have been hired away into the energy industry. And I've got some data on that to show you at the end.

This chart is just showing basically another 8 9 reiteration of the actual effects. These are cumulative 10 effects of the work that we've performed so far. And 11 again, in the red corner up here the annual kWh savings at 12 7.599 million kWh. Estimated cost savings, one little bit 13 over a million dollars per year and the greenhouse gas 14 reduction about 1.807 metric tons. This is, of course only 15 through the end of 2017. So there's still another, from 16 this date of this report another six months of funded work 17 that we'll be performing until the end of the fiscal year, '17-'18. 18

19 The actual development of the program itself and 20 again being a work learned and workforce development 21 program, there are many different aspects. Everything from 22 recruitment of Corps members from every part of the State 23 of California to basic training; Corps member training, 24 which is the COMET training; the CORE training; to working 25 with partners for online university educational component

1 parts, which we use.

2 We work with Schneider Electric and their energy 3 university for online. This is work, the training that 4 Corps members go through before they actually enter the classroom and laboratory training. And then the online 5 that leads to the actual in classroom. And we work in the 6 7 north with the community college system, with Sierra College. And in the south with Cerritos College, which is 8 9 an addition since last year's report. 10 And then all of those Corps members are then 11 deployed out into the field, professionally supervised. 12 And the education that they receive is an unbroken continuum meaning the actual classroom training leads to 13 14 lab training, which leads to in-field on-the-job training. 15 And constant measurement of that particular performance and 16 evaluation to help build strong work ethics and also 17 produce what we think is a very marketable set of skills 18 within the energy industry, which has been borne out pretty 19 substantially by the numbers of Corps members that are 20 being hired indo the energy industry. 21 From a training perspective, you can see that in 2.2 each year, you'll notice the graph on the left side with 23 the green bars there. So in the very first year there were 24 172 corps members that we trained up during that period of

25 time to be both for energy opportunity surveys and

retrofits. And that number steadily increased until 2015.
 At that point in time, there were a lot of Corps members. A
 very large number of those Corps members were extending
 durations beyond a year. And then they cycled out and new
 Corps members came in, so that's why there's a dip in 2016.

In 2017, there was a pretty substantial increase as the 100 Corps member FTE refilled a couple of times. And more Corps members came in to be trained and move out into the energy industry and others.

The same is true on the staff side with a large bump, although the staff tends to be of course a longer duration. But within the CCC there are many categories of functional work and so some of those supervisors may move from center to another or one area of work to another.

15 From an educational standpoint, we've trained a total of 708 individual CCC corps members and 48 CCC staff 16 17 to perform energy opportunity surveys. And 408 of those corps members have been trained and 24 of the staff have 18 19 been trained to do LED in particular, but mostly lighting 20 retrofit installations. So there are a very substantial 21 number of folks that we have trained, both on the Corps 2.2 member side and on the staff side.

On the educational side, we do individual
presentations for LEAs and also in more public sectors in
meetings, get-togethers by a variety of folks in the

industry and especially in the K-12 educational world.

1

2 Then this particular example is one that started 3 in 2016 and has recently concluded. And this is with the 4 L.A. Unified School District and this was a program that actually brought together several parties. First was the 5 L.A. Unified itself, its school system itself, where they 6 7 would select high school students to be trained to do energy opportunity surveys. That we also worked with the 8 9 local conservation corps in Los Angeles, which is called 10 the Los Angeles Conservation Corps. And they worked 11 directly. We trained all of the folks from the LACC and 12 also all of the students that joined the program from L.A. Unified. 13

And we then conducted additional classes for 14 15 They then went out into the field and worked on a them. 16 co-joined basis, so that the high school students would work within -- trained to do audits, would work actually 17 18 within the school system and it's many schools. And to 19 perform these ASHRAE Level 2 compliant energy opportunity 20 surveys using our technology: our tablet technology, our 21 software technology, our processes, our approaches, 2.2 etcetera.

And then to produce the data set and work with a third party entity that in this particular case was First Fuel, to do actually something greater than a Level 2 ASHRAE compliant audit in a sense that it was a massively
 data-informed version of what the no touch audit or
 software-driven audit might actually have been otherwise.
 And that created a pretty substantial result.

And in terms of a -- during the year 2017, this 5 particular set of data showing that in the beginning of 6 7 January 2017 we had a population -- out of the 100 FTE we only had 53 of these positions are actually filled. 8 And 9 this was happened to be one of the troughs of Corps members 10 that have been leaving and new Corps members coming in. So 11 you can see how that cycle, as a workforce development 12 program, oscillates back and forth over time.

In terms of program status and measured 13 14 employment, so the CCC itself doesn't have an official 15 mechanism that we can track Corps members in terms of what they do after they leave the CCC. But we do have an 16 17 exiting process, an interview process. And according to the self-reported aspects of that, so far there have been 18 19 61 energy corps members who have completed their tenure 20 successfully with the CCC and been hired directly into 21 energy industry companies.

We have 59 of the Energy Corps, Corps members, that self-reported that they accepted employment offers, but they didn't say with what particular companies. So we think that these are probably associated to the energy

1 industry, but we're not saying that they are, because we 2 don't have that data.

And then there are 77 that did not self-report their actual or intended employment status.

5 So we don't have a mechanism to track them beyond 6 that at present. But we do know both anecdotally and 7 otherwise -- these photos you see here on the bottom have 8 been many of our partners, Energy Corps partners -- who 9 have been so pleased with the result that they have hired 10 individuals and collective of individuals directly into 11 their companies.

12 And they also have put up effectively scholarships on their own that help to support who they 13 14 determine to be perhaps a star performer working on a 15 project. And this is an example, these two particular 16 photographs are examples of a contractor that they work co-17 jointly with who were so pleased with the result that they were able to provide additional educational incentives in 18 19 the form of scholarships.

And so it's been I think a very successful implementation of all the different phases of the Prop 39 program in terms of the manifest condition of those things. And that's it for the presentation. I'll be happy to answer any questions or if you have any requests I'd be glad to try to fulfill them.

1 CHAIR GORDON: Great. Thank you. That was 2 really comprehensive. The only question I had on the 3 placement, which is not something to add to your report, 4 it's just curiosity whether you have any alumni network or 5 anything. Do you do anything like that?

6 MR. MCNAMARA: Well, we do have two forms of 7 that. One is the actually CCC Foundation, which does 8 maintain that kind of -- or tries to maintain that sort of 9 information. It is not conclusive, you know, like in the 10 sense of all the Corps members who leave actually would be 11 participants in it. But there is more data and we 12 certainly could do more as well.

The CCC itself has developed strong relationships 13 14 with many, many of the Corps members. And those Corps 15 members tend to keep in touch with us to let us know that their doing, but we don't have a formalized mechanism that 16 17 would be -- would not only provide that information, but 18 would also give assurance that that information was 19 correct. Of the ones that I'm reporting here, we do have 20 confirmation of those. 21 CHAIR GORDON: Thank you. That's helpful. 2.2 Questions from you guys? Chelina, anything? 23 BOARD MEMBER ODBERT: I just have a really minor

24 one and it's just a clarification for my own understanding.
25 On the table, it's on page 8 in the report you say total

1 number of lighting retrofits and it's 124,000. Is that 2 number representative of like one unit of lighting? 3 MR. MCNAMARA: So those would be actual 4 retrofitted lighting fixtures. BOARD MEMBER ODBERT: Yeah, so 124 fixtures? 5 MR. MCNAMARA: Yeah, those are units. I'm sorry. 6 7 Now there is something -- that's a great question though for another reason, which is so part of the push by 8 9 LEAs toward the end of the program that, you know, we were 10 commenting earlier in other presentations about the fact 11 that there is more uptick now, especially smaller LEAs? 12 Well one of the things that's happened is that in the beginning, in 2016 we did a lot more retrofits that 13 14 were entire lighting fixture exchanges. And so now and 15 during this time to try to -- not by our choice, but by the LEAs choice -- there's an awful lot of bulb replacement or 16 17 like LEDs that are agnostic to whether they're using a 18 ballast or not, to try to get as much of those savings at 19 the lowest cost possible on a broader scale. 20 So we've found that there's less focus on the control side. We noticed that in 2017, we did zero on the

21 control side. We noticed that in 2017, we did zero on the 22 controls, lighting controls retrofits. That was a choice 23 of the LEAs. In other words, they wanted to focus on 24 actual replacement of bulbs and fixtures and that sort of 25 thing, as opposed to on the control side. So I would

1 consider them to be somewhat less comprehensive approaches, 2 certainly not achieving the same levels of energy 3 efficiency as had been achieved on an individual basis 4 before that. 5 BOARD MEMBER ODBERT: Thank you. MR. MCNAMARA: You're welcome. 6 7 CHAIR GORDON: On the phone any questions from Barbara or Heather or Mark? 8 9 BOARD MEMBER LLOYD: Not for me. 10 MR. MCNAMARA: Very good. Well thank you very 11 much. 12 BOARD MEMBER ROSENBERG: Sorry. I actually was 13 on mute by accident. CHAIR GORDON: No worries. Go ahead. 14 15 BOARD MEMBER ROSENBERG: Is the information available regarding the demographic dispersion of these 16 17 participants in this program, geographic and/or any other sort of relevant data that might be fact? 18 MR. MCNAMARA: Certainly, we have records of, and 19 20 that can be produced in whatever form may be desirable, of 21 all the LEAs that have requested our service, the ones 2.2 we've serviced to date, and where all of the different 23 projects were in terms of surveys performed or retrofits 24 performed. 25 CHAIR GORDON: I think you --

1 BOARD MEMBER ROSENBERG: I was actually speaking 2 about the CCC program interns, the Corps members. 3 MR. MCNAMARA: Oh, you mean, I'm sorry geographic 4 or? 5 BOARD MEMBER ROSENBERG: Yeah, where they are located geographically and any other data. 6 7 MR. MCNAMARA: Sure, I can actually -- so I would refer to -- and it's also in the report, I don't have the 8 9 thing right in front of me. But so there's a geographic, 10 there's a map in there that shows where all of the Corps 11 members are based out of. If you are referring to where 12 they work from it's on page 3 of the annual report. Thank 13 you. 14 BOARD MEMBER ROSENBERG: Okay. I'll go back up 15 there. I had passed it somehow. MR. MCNAMARA: That's all right. It shows the 16 State of California and some little lightning bolts there 17 18 that show --19 BOARD MEMBER ROSENBERG: Yes. 20 MR. MCNAMARA: -- perhaps not that creative on 21 our part, but nevertheless that show where the energy 2.2 centers are all located. The only one is that Fresno 23 Center is a co-joined CCC functional, so it's both natural 24 resource work and energy work. So that's where they all 25 operate from.

3 now in your report; is that right? 4 MR. MCNAMARA: No. I haven't provided the 5 granularity of how may Corps members in each one of the centers, but I certainly can do that if you would like to 6 7 see that. VICE CHAIR GOLD: But you were more interested 8 9 sort of in gender and diversity and those sorts of issues 10 as well, not just a raw number, right? 11 BOARD MEMBER ROSENBERG: I mean, I do have an 12 interest in that. I'm not trying to skew the focus of the 13 report away from its effectiveness. I'm just sort of 14 curious for which population is it being most effective, 15 whether it be geographic or gender or something like racial 16 background or whatever. 17 MR. MCNAMARA: Certainly we can show the plot, 18 geographic plot, of where all of these project sites have 19 been located. We speak to that in the aggregate, in the 20 sense that in each --21 BOARD MEMBER ROSENBERG: I'm not (indiscernible) 2.2 \_ \_ 23 CHAIR GORDON: She's asking about the Corps 24 members themselves, so. 25 BOARD MEMBER ROSENBERG: I'm talking about the CALIFORNIA REPORTING, LLC

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BOARD MEMBER ROSENBERG: But there's no

statistical data that corresponds to those locations as of

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81

individual Corps members who benefit from going through
 these programs.

3 MR. MCNAMARA: Okay. So like essentially where4 did they all actually come from?

5 CHAIR GORDON: More demographics, I think is what6 she's talking about too.

7 BOARD MEMBER ROSENBERG: Corps demographics, you know, age range, gender, cultural background, geography, 8 9 anything that you guys already ask for reporting purposes. 10 I'm not asking for something to be newly created. I'm just curious as to whether the information is available. 11 And T 12 say this in part, because there is historically a difficulty reaching (indiscernible) with this kind of 13 14 technical training.

15 MR. MCNAMARA: Understood, so I will provide that 16 demographic data and provide it to you folks. I can say 17 that in general the CCC has a long history of drawing its 18 Corps members, recruiting its Corps members and hiring them from everyplace in the state. And there is a larger number 19 20 of them coming from variously defined economically 21 disadvantaged communities. And the work itself performed 2.2 also reflects the same thing. But I'd be happy to provide 23 that including other demographic factors like gender and those sorts of things. Age range is simple, because it's 24 25 all -- it's 18 to 25.

BOARD MEMBER ROSENBERG: That's right. 1 2 MR. MCNAMARA: That's who CCC actually works 3 with, but we do have more detail on that as well. 4 CHAIR GORDON: That's great. So what I'm hearing 5 as addition -- and this is for the purposes again of a motion -- are you talked earlier, Bill, about a map of 6 7 distribution of projects and also demographic data on the Corps members themselves. 8 9 So does that make sense to everybody as the two? 10 BOARD MEMBER ROSENBERG: I strongly support that. 11 CHAIR GORDON: Great. 12 So with those additions, can we get a motion? 13 Does someone on the phone want to make a motion, just 14 because you haven't had a chance yet? 15 BOARD MEMBER ROSENBERG: Sure, I'll motion. 16 CHAIR GORDON: Do we have a second? 17 BOARD MEMBER MARTINEZ: Second. CHAIR GORDON: Great roll call 18 19 MR. BARTRIDGE: We'll start from the bottom this 20 time. Mark Gold, please? 21 BOARD MEMBER GOLD: Yes. 2.2 MR. BARTRIDGE: David? 23 BOARD MEMBER DIAS: Yes. MR. BARTRIDGE: Randall? 24 25 BOARD MEMBER MARTINEZ: Yes.

1 MR. BARTRIDGE: Chelina? 2 BOARD MEMBER ODBERT: Yes. 3 MR. BARTRIDGE: Barbara? 4 BOARD MEMBER LLOYD: Yes. MR. BARTRIDGE: Heather? 5 Yes. BOARD MEMBER ROSENBERG: 6 7 MR. BARTRIDGE: And Chair Gordon? CHAIR GORDON: Yes. 8 9 MR. BARTRIDGE: Thank you. 10 CHAIR GORDON: Great, thank you. 11 Moving on to Sarah White, who I see in the back 12 of the room there, and Sarah gets to present on both Items 13 8 and 9. So you get to be up here for some time. MS. WHITE: But brief. 14 15 CHAIR GORDON: And Sarah's from the California 16 Workforce Development Board for those who don't know her. 17 BOARD MEMBER MARTINEZ: Did you say she's 18 reporting on 8 and 9? 19 CHAIR GORDON: I think that's right. Yeah, it's 20 the two Workforce Development Board items. 21 BOARD MEMBER MARTINEZ: I've got it. 2.2 (Colloquy to set up presentation.) 23 MS. WHITE: Okay. Madam Chair, Board Members, thanks for inviting me. Delighted to be back again for 24 25 another round of reporting on Prop 39 Jobs and Training

1 Outcomes from the California Workforce Development Board.

2 So the first thing I'm going to talk about is the 3 money that we get, \$3 million a year, to run a pre-4 apprenticeship training program. And what this is, is these have been incredibly successful. We have included 5 our latest update report and in them there are details on 6 7 each one of the projects, so you can look at those more specifically as we go through. But I'll just give you a 8 9 brief overview here and update the performance numbers.

10 So these pre-apprenticeship programs I should say 11 are designed specifically for underserved communities: at-12 risk youth, women, low-income, ex-offenders, lots of folks 13 with barriers to employment. That's the whole point of 14 doing a pre-apprenticeship program is to provide pathways 15 into middle class careers in the building trades for folks 16 who have traditionally been excluded from opportunities. 17 So that's the purpose of this program and to really provide 18 access to those high-quality careers and family-supporting 19 jobs. And we use -- and I'll say more about this -- we use 20 the Multi-Craft Core Curriculum as really the gateway to 21 register apprenticeship in many trades involved in the 2.2 energy efficiency work, depending on local demand and 23 individual skill and interests.

24 So we have 11 projects in two cohorts. I'll give 25 you some details shortly. We give you details in the

report of our 11 training and implementation grants. We also have had over the years a number of development grants, so folks figuring out how and if they should be setting up these programs. And also we do a fair amount of technical assistance of various sorts including building a community of practice for all of the partners and the grantees in this.

I think the big story, I think that you want to 8 9 know when we talk about placement, is that we placed over 10 1,000 individuals, which in terms of pre-apprenticeship if 11 folks know anything about this is really sort of heroic, 12 right? And this is not the amount we recruited and trained, because there are more of those. But to have 13 14 placed, we actually have placed more than 1,000 15 individuals. And I'll talk a little bit about more of 16 those outcomes, but that's number we're very, very excited 17 about.

And then speaking also our report is cumulative through 2017, right? Sort of we didn't break it out year by year, we're tracking over time. So I will talk about those numbers.

Another thing to say that we're excited about is that this has been a model for other programs. So we had money from the state last year, \$3 million to invest in pre-apprenticeships for ex-offenders and we plugged that

right into these programs. We said you know, ex-offenders 1 2 are a very tough population to serve, pre-apprenticeship in 3 the trades very hard to do well. We know how to do both, 4 so we actually lifted up four of our Prop 39 projects to get additional funding to specifically target justice-5 involved populations. And so that's underway now, so we're 6 7 really excited that this is leveraging other money and expanding. 8

9 And we also, starting a year from now we have \$25 million of FD1 funding to invest in construction trades 10 11 pre-apprenticeship. And we are using this model to do 12 that, so this is really continuing as really the model for getting folks opportunities in the building trades. 13 So 14 we're really tremendously excited about some of the 15 interest and the work that is moving ahead based on these pilots. Even though they're a tiny little piece of the 16 17 overall Prop 39 investments, they have been reaping a lot so we're very pleased about that. 18

I did a few slides, just outlining the report. So we expect about 10.8 million through this year in clean energy job creation funds. And as I mentioned earlier these are for training implementation partnerships. Also, the development grants and the technical assistance and capacity building work.

25

The goals have been straightforward, they remain

1 the same, is to deliver clean energy skills to 2 disadvantaged job seekers, to create structured pathways 3 into apprenticeship and to build the energy efficiency 4 workforce. I think that it's important to say, and we say this all the time, but for folks who aren't as familiar 5 with the construction trades, that equity and access to 6 7 good jobs for all kind of clean energy infrastructure investments is the goal. And it works in the other way 8 9 too, it helps to diversify the construction trades 10 workforce. And at the same time provide opportunities for folks who have not had them before. 11

And pre-apprenticeship, I just want to reinforce again to say that it is why pre-apprenticeship? Because apprenticeship is a really high bar, right? Not just familiarity with tools, but a really high bar in math, reading, all kinds of skills. And so it's found that folks need extra training to actually qualify and get into apprenticeship.

And also another thing that this program does and pre-apprenticeship does is it lets people know how to get into apprenticeships, because this for many years was a well-kept secret, right? You either know someone or -- so this way is an introduction to each of the trades and how they hire and how you might get involved in apprenticeships. So it really is building this

comprehensive pipeline to help folks get into what we know
 is probably the best middle class career pathway for folks
 who don't have a four-year degree. So that's the reason we
 do pre-apprenticeship.

5 These are just -- I'm going to show you a couple 6 of lists we had. In our first cohort we have six regional 7 training partnerships that do this work. There's detail as 8 I mention on each in the report. This first cohort, I have 9 some separate numbers for them. They have been doing this 10 since the beginning, from 2014, so they are now in their 11 third year and very (indiscernible).

12 Our second cohort of five grantees, again spread out regionally around the state, have just gotten started. 13 They just finished last fall, their first year of funding. 14 15 And so we have some great outcomes from them, but again they're just starting. So there are pilots too, also to 16 17 show us like what works and what doesn't work. And, you 18 know, so we're tracking them separately, these five. 19 Actually, we have just funded a sixth for this year, which 20 is the North Central Counties Consortium, because they had 21 development grants. And they turned out to be a pretty 2.2 good partnership, so we're funding them as well. 23 So pre-apprenticeship training, we use the local building trades councils and it's based on a nationally-24

25 certified Multi-Craft Core Curriculum. If you have

1 questions I can tell you more about that, but this is a 2 core curriculum in which the building trades came together nationally to decide, look there are dozens of trades, 3 4 right? But all of them have the same baseline of what you might need to do. OSHA standards, right? Tool handling, 5 energy efficiency training, what's different about those 6 7 skills, labor history. All the kinds of things that all the different trades, you know, from carpenters to sheet 8 9 metal workers, to electricians. All came together and 10 said, "Okay. We're not finding qualified candidates, but 11 if they all were going to come in, here's all the things we 12 would like them to know to be successful apprentices."

So the idea was that instead of having an 13 14 individual try and decide without knowing anything about 15 construction trades say, "I want to be an iron worker. I'm afraid of heights, right?" I mean, to decide each one you 16 17 might not know, so it's also very expensive. Apprentices 18 are very expensive on the employer's side and the Joint 19 Apprenticeship Training Council side as well in that, you 20 know, if the apprenticeship washes out, several, up to 21 \$20,000 has already been spent on their training, right? 2.2 So this is the point of helping people succeed in these 23 pathways and helping people open more apprenticeships. 24 So the pre-apprenticeship training projects was

25 designed to help people success through this Multi-Craft

Core Curriculum, which also as I mentioned in part of these 1 2 pre-apprenticeship programs is to introduce both to the 3 different trades. So you show up on one day and you're 4 learning the math that you need and the reading that you 5 need and the blue print reading that you need. And you're also going to learn and get to meet with somebody from each 6 7 of the trades in light of this is what carpenters do. This is what sheet metal does. This is what an electrician 8 9 does, so that you have an idea of what your interests are 10 and you can tie into that. And then here's how you get in 11 and here's the special skills that you need. So it really 12 is giving folks an introduction to the trades.

And then in all of these there are obviouslyrelated energy efficiency skills.

15

(Off mic colloquy re: audio.)

16 MS. WHITE: These pre-apprenticeship partnerships are fascinating and hard and difficult beats. Because they 17 18 are not just -- it's not just a training program, right? 19 It is a partnership, so each partnership involves workforce 20 development boards, building trade councils, joint 21 apprenticeship training committees, community based 2.2 organizations, education and training providers. And our 23 partners, we some are led by unions, some are led by 24 Conservation Corps, some are led by workforce boards, some 25 are led by community colleges. But all of them have all of

1 these partners involved, because what's really hard about 2 doing this work is if you're going to work with underserved 3 populations you need to think not just about training and 4 getting to a credential.

5 But you need to think about how are you going to recruit folks? What supportive services are you going to 6 7 give folks, so they can make it through rent? Do you need a stipend? Because these are working people, you can't --8 9 they can't afford to train and not work at the same time. 10 So are we providing them with tools? Are we providing them 11 with childcare, transportation, addiction counseling? 12 Many, many kinds of services that folks need in order to 13 make it through one of these programs, so that's why we 14 have so many different kinds of partners to even get people 15 successfully through.

16 And the goals though that we measure for these programs are the attainment of an industry value 17 credential, which if you know anything about workforce 18 19 development is sort of the gold standard. It means that 20 you come out of some training with some kind of piece of 21 paper that says to employers all over the state -- not just 2.2 one and not just in one place -- "I learned this stuff. 23 I'm valuable. You can invest in me, "right? That's what 24 an industry value credential is.

25

It's not just sort of like, "I went to a class

and I got this paper." And the employer says, "I have no idea what you know." This says to everyone in the building trades, "This is what I learned. This is what I know. You can invest in me." So attaining an industry value credential is extremely important. And the MC3 certificate that folks get is the credential that's obtained here.

7 We also track placement as I mentioned. And we count a variety of things, so placement in state certified 8 9 apprenticeship certainly, also placement and continuing 10 education. If somebody goes through this project and 11 decides that they want to continue and do an AA degree in 12 one of the things, that's great. We consider that a win as 13 well. And also, placement in construction and energy 14 efficiency employment, if you don't go immediately into an 15 apprenticeship, because there's not necessarily an easy 16 lineup between a cohort who finishes and an apprenticeship 17 slot opens up.

So what happens in the meantime? This is one of the things that our partnerships have been really working to crack. So often people will find jobs on a construction site with a variety of employers and we count that as successful too, if you're going out in the workplace. So those are our metrics. And as I said this is where we have over 1,000 individuals served.

## 25

To give you a little bit about the performance

snapshot here. I gave you the 1,000 as sort of an actual 1 2 body count, right? But we actually look at percentages in 3 the workforce field, because these are actually 4 tremendously high numbers. Even looking at anything over 5 50 percent is considered high, because you're working with folks who have barriers to employment. Getting them into 6 7 and through training and placed is an expensive and timeconsuming endeavor. But what this shows us is that we talk 8 9 about how many people were enrolled. They said they were 10 going to enroll a certain amount of people, did they match 11 those targets? And that's a whole body of work. It's one 12 of the things that a partnership has to do, how do you reach people? How do you get them in the door? That is not 13 14 an easy thing to do and it's sort of something that people 15 spend a lot of time figuring out.

16 Then the next thing is how many of them that came in the door, actually finished training? And there's all 17 18 kinds of reasons that it's very hard to finishing training, 19 right? Especially because of some of the things I 20 mentioned: childcare, transportation, health care, a 21 variety of things. And then of those who completed 2.2 training, how many of those actually got placed? We care 23 about that, so we track all of those things and they're all 24 important metrics.

25

And what it does is we use these metrics not to

1 penalize anyone, these are pilot programs, but just figure 2 out where we need to do better. So for those organizations 3 that are not meeting their enrollment goals, well we're 4 going to need to do technical assistance to figure out how 5 you can do more outreach to get folks in your door.

For those who are getting people in, but they 6 7 don't finish training what's going on in your program that people aren't finishing? What do we need to do there? 8 And 9 maybe it's just something that we need to learn about the 10 nature of pre-apprenticeship. That it's not for everyone 11 and one reason you go through pre-apprenticeship is maybe 12 you find out that this work is not for you. And that's 13 okay.'

And then placement is the trickiest of all, 14 15 right? Because actually getting folks into jobs is complicated. And as I mentioned, especially with these 16 17 programs, and this is one of the biggest lessons learned from all these pilots, is that you might go through a 18 19 cohort. Think of this as a boot camp, a six-week training, full-time training thing. You graduate. You get your 20 21 certificate, but each of the trades has a different hiring 2.2 schedule.

The great thing about apprenticeship as opposed to other kinds of training is that you only get to apprentice if you have a job. It's on-the-job training of

a sort. It's (indiscernible), right? You have classroom 1 2 training and you have on-the-job training, but you don't 3 get to be an apprentice unless there is a slot for you. So 4 it's not coordinated in any way that the industry works that the day that these cohorts finish, there's an 5 apprenticeship waiting for any of them. They have to 6 7 They have to wait before they decide which trade compete. they want to into. The trades may -- an individual may 8 9 open slots only once or twice a year. When do they give 10 the exam that you could qualify for being in an 11 apprenticeship? When do you do the interviews? So there's 12 a big gap between when you graduate and when you can 13 actually move into an apprenticeship.

14 And it also depends on the labor market demand of 15 the jobs out there. So this is one reason we are really 16 working with our programs to tie pre-apprenticeship 17 training to the demand side of the labor market. Because 18 we think that if you want to deliver equity to folks you 19 can't just train them. You have to figure out how they're 20 going to connect to jobs. And so really considering those 21 things is something that we do a lot of work on.

And I think this is our second cohort, slightly lower numbers because they're just starting. And in some cases we find for example, with some of our folks they just finished a cohort, so those folks haven't even been placed 1 yet. So you don't have the high placement numbers. And 2 for some of them, they're just figuring out that, "Wow, I 3 actually have to have a relationship with the building 4 trades, because if I don't know the building trades there's no way for me to connect to that demand and get folks in 5 the door to apprenticeship. So we just go out knocking on 6 7 employers doors by ourselves we're not going to figure that out." 8

9 So a lot of these folks, these numbers are a
10 little lower, because you're seeing partnerships figure out
11 how to work together. And so we still think these are
12 encouraging numbers.

And I say the big takeaways, as I've mentioned 13 14 the active involvement with the building trades is 15 absolutely key to placing people in apprenticeships. You 16 can't just train people and then set them lose to go out 17 and figure out how to get into an apprenticeship 18 themselves. It doesn't work that way, so there's a lot of 19 follow-up work helping folks get connected to 20 apprenticeships.

The other thing I mentioned just now, that the placement is not guaranteed. I mean, folks who think about training, and it's a good thing and or want to invest in training, see it like college or high school, all right? But there's just a training program. They're just going to

1 go through and get out and get a job. But it doesn't work
2 like that, right? You come out and you get through and you
3 have the skills. But now you have to figure out how to get
4 into an apprenticeship and that takes time and connections.

And the last thing is that, as I mentioned, the 5 successful program is more than just a curriculum. 6 So we 7 do use the Multi-Craft Core Curriculum, which we think is great. But supportive services are really important and 8 9 that's why we have these complicated partnerships that we 10 set up, because you have to be able to -- we are writing 11 memorandums of understanding with housing departments, so 12 that people don't lose their subsidized housing while 13 they're going through it. And it's just so amazing 14 bringing in all the social service agencies and the 15 community based organizations to make that happen. So that is I think one of the big lessons. 16

And okay, so of course I totally didn't look at my notes and there's a bunch of other stuff I was going to tell you. But I don't roll that way, so I'm happy to take questions. (Laughter.) CHAIR GORDON: Thank you, Sarah.

MS. WHITE: Yes.
CHAIR GORDON: This has been such a -- I just
want to say personally that the single most calls that I

25 get from other states about the Prop 13 -- god, no, 39 --

program is about this program. And actually just the other day the Department of Economic Development of Oregon called and asked about this, because they are looking at incorporating something like it into something they're working on. So it is a model for other states.

In the beginning it was this tiny little piece of the Prop 39 budget and it's just been really, really impressive what you guys have done with it, so kudos to you and the Department. I know it's a -- you're doing it, it's a labor of love. And you're not getting a lot of money to do it that you're not spending on these guys. So it's really impressive, so I just wanted to say that.

13MS. WHITE: Can I add one thing?14CHAIR GORDON: Yeah.

15 MS. WHITE: I hate to interrupt. It was just 16 that I forgot to mention that we do have a best practice report coming out. It should be sometime in the next 17 18 couple of months. We have a draft and we're really working 19 on it, which is really because of precisely other states 20 and other folks for sort of, "This is best practice in pre-21 apprenticeship, "right? A lot of people are trying to do 2.2 this around the country. Only a few places are doing it 23 really well and this is one of them. And so this is really 24 everything you need to know from like setting up a 25 partnership to how it works, to how you connect to the

1 demand side.

2 So everything that we've we are codifying and 3 putting into this accessible piece of work that will be 4 available to all of you, of course. CHAIR GORDON: That's awesome. 5 Thank you. Questions for Sarah on this piece of her 6 7 presentation? I encourage everybody on the Board to look, to read the stories that are in the report, because they 8 9 are very heart-warming. I don't know. They're great 10 stories and it's great to see faces put to this, so thank 11 you for doing that. 12 Poor Sarah has to stay up there, but first we 13 should vote on this report. 14 BOARD MEMBER MARTINEZ: I do have a question? 15 CHAIR GORDON: Yes, please go ahead. 16 BOARD MEMBER MARTINEZ: Okay. Sarah, as I think 17 about what I would call the ecosystem that's involved to 18 support the candidates as they go through the job training 19 program. And then ultimately hopefully get placed even 20 after completion of an apprenticeship program, actually get 21 There are a lot of stakeholders involved and it placed. 2.2 just sounds like a lot of legwork and I've got visions of 23 people writing down lots of things on pieces of paper. And I'm just curious if there's any type of -- as I think about 24 25 best practices and lessons learned and I apply this to the

education space and the burgeoning education technology industry, what technological tools are there or can there be to support that ecosystem that in turn supports the candidates? Or is there one?

5 I just imagine kind of like, I don't know a 6 Facebook if you will, that connects the candidate with the 7 ecosystem that supports them and keeps them in engaged 8 while they're in downtown. And then activates them when 9 there's a need or an opportunity. Or is this all just 10 elbow grease and legwork?

11 MS. WHITE: That's a great question. I mean, I 12 don't think there is an easy technological solution, but I think we could work towards something that was more 13 14 coherent. And one of the challenges is the way the 15 construction industry itself works, right? And you're talking about lots of locals and a lot of it is all based 16 17 on relationships, right? So it's sort of the relationship 18 between one of 16 local trades and one of perhaps 4 or 5 19 local community colleges. And who works together well 20 there and what that looks like and what the local 21 community-based organization is.

I think another way that it's useful too is if there were a way to sort of get those systems we talked about. And I think about this, it comes to mind, the data question, right? Because just even tracking is difficult,

because all these partnerships use different data tracking
 systems and different performance tracking systems, so even
 trying to get coherent data out of it is a challenge.

4 But I hear what you're saying. I think one thing 5 that we are working for and we want to get closer to that. I don't know what the answer is. I do know that we are 6 7 working towards -- one thing we're really working towards is -- and we're planning this for our SB 1 investments 8 9 coming down slightly different, but large transit 10 investments as well as the road repair -- is thinking about 11 how to organize all of this work regionally from the demand 12 side. So that we go in and we know from project labor 13 agreements and others, like there are 20 projects going on 14 in Los Angeles.

Instead of funding a bunch of different workforce partnerships to try and check in to all of that demand side, there could be a single box perhaps or person at the center that says, "Here's where all the demand is and we're going to need to pull from how many programs. And here's how many people we need." And that helps us also solve the supply-demand problem, right? That we're not overtraining.

And one things that I worry about with the success of this program is that of course we want more money, right? But the thing is the Legislature and others get very excited and start saying, "Let's build hundreds of

1 pre-apprenticeship programs." But then you're just going to have stacks of people with a certificate that don't 2 3 actually have connections to jobs. So we want to really 4 make sure that we calibrate these programs to the demand 5 side. And that's another way where we're trying to bring together a sort of unified regional approach in doing that. 6 7 And I think that will require some of this kind of how do we streamline and standardize those conversations, will be 8 9 essential to that.

BOARD MEMBER MARTINEZ: One thing I can assure you is that in spite of all the obstacles these folks have to go through to be able to complete the program, is that they likely have a smart phone.

14

MS. WHITE: Right, right.

BOARD MEMBER MARTINEZ: And there's got to be a way to take advantage of that.

17 MS. WHITE: No, I think that's great. And there 18 has been some investment that go on exactly with the phone based. I know there's a lot of remote learning and apps 19 20 that people are looking at how to do that. We haven't 21 thought about that for this, so we should definitely add it 2.2 to our list of things to look at. I think that's a great 23 idea. 2.4 BOARD MEMBER MARTINEZ: Thank you.

25 CHAIR GORDON: I should have asked earlier, Mark

1 or Heather or Barbara, any questions for Sarah? Any input here before we move to the next item? 2 3 BOARD MEMBER ROSENBERG: I'll just jump in and 4 say that this is a really great presentation. I felt like 5 you're addressing a lot of the issues -- can you hear me? CHAIR GORDON: Yes, we can. 6 7 BOARD MEMBER ROSENBERG: Addressing a lot of the issues, just issues with job-training programs. 8 That 9 sometimes we have job training in space without the full 10 pipeline of jobs and the supporting services around it. If 11 you really think about what are the barriers to jobs? What 12 are the -- and how do you have access to good jobs and that whole piece. So I'm excited to learn more about it. 13 14 MS. WHITE: Great, thanks. 15 CHAIR GORDON: Thank you. Anyone else wanted to 16 weigh in at all? If not we need to do a vote on this first 17 item, before going to the next one. So we need a motion on 18 approving the Report from the California Workforce 19 Development Board on the Pre-Apprenticeship Program for 20 inclusion in our report for input to and inclusion in our 21 report. 2.2 MR. BARTRIDGE: And I didn't hear any changes to 23 the report. 2.4 CHAIR GORDON: No changes. 25 Okay. Very good. MR. BARTRIDGE:

1 Mark Gold? 2 CHAIR GORDON: Mark, did we lose you? Are you on 3 mute? 4 Did we mute him inadvertently? 5 MR. BARTRIDGE: Let's take it from the top. CHAIR GORDON: All right, go for me. 6 I'm here. 7 MR. BARTRIDGE: Chair Gordon? CHAIR GORDON: Yes. 8 9 MR. BARTRIDGE: Heather? 10 BOARD MEMBER ROSENBERG: Here. Yes. 11 MR. BARTRIDGE: Barbara Lloyd? 12 BOARD MEMBER LLOYD: Yes. MR. BARTRIDGE: Chelina Odbert? 13 14 BOARD MEMBER ODBERT: Yes. 15 MR. BARTRIDGE: Randall Martinez? BOARD MEMBER MARTINEZ: Yes. 16 17 MR. BARTRIDGE: David Dias? BOARD MEMBER DIAS: Yes. 18 19 MR. BARTRIDGE: And Mark Gold? 20 BOARD MEMBER GOLD: 21 BOARD MEMBER ROSENBERG: Mark had to step out. 2.2 He'll be back in a minute. 23 MR. BARTRIDGE: Okay. CHAIR GORDON: We can have Mark abstain on this 24 25 one or we can come back to the vote. I don't know what the

1 right action is.

2 MR. BARTRIDGE: When he comes back we can -3 BOARD MEMBER ROSENBERG: I don't know if he'll be
4 able to be back.

5 CHAIR GORDON: Okay. Good to know. All right,6 thank you Barbara.

All right, so as new folks may not know the Workforce Development Board handles both what we just heard about, which is the direct money to them to run the Pre-Apprenticeship Program. They also have the unenviable task of trying to calculate the job impacts from this entire program. And so Sarah's going to talk about that now.

MS. WHITE: All right. Great, thank you. Well, some of the best news right now is that PowerPoint actually has some new designs, so I'm very excited about that. (Laughter.)

17 CHAIR GORDON: We're going to say this is a very18 pretty slide you have here.

MS. WHITE: The other thing I should say is I feel a little awkward. When you guys speak, I'm looking behind me, because the voice is coming out of a speaker back here. It's very disorienting, so I don't want you to think that I'm being disrespectful by suddenly turning from you when you talk to me. So let me get that housekeeping out of the way, I can tell you the jobs numbers that you

1 want to hear about.

2	So Prop 39 in addition to retrofitting the
3	state's educational institutions, was also an investment
4	directly in clean energy workforce. It was intended to
5	increase the number of jobs in California, supporting
6	energy retrofit improvements. And by providing training in
7	sustainable careers to a variety of underserved
8	Californians, I just spoke about the last part, by working
9	with a range of stakeholders: the LEAs, community colleges,
10	the Conservation Corps and others.
11	So the State Workforce Board was tasked with
12	analyzing the jobs data for the K-12 construction jobs. In
13	2016 I came before you and talked about that whole universe
14	of jobs and what that did and didn't include.
15	And then last year we gave you an overview of the
16	methodology and the first jobs numbers. And to do so we
17	had to hire our colleagues at the University of California,
18	Berkeley and their team of national experts in construction
19	data modeling and analysis. And they also used some
20	Department of Industrial Relations data providing a sample
21	of certified payroll records with unique job quality
22	markers. So not just the job creation numbers, which we
23	model through IMPLAN, but also some ways to check on the
24	ground about the job quality of the jobs actually being
25	created.

All of the details on this methodology is in the report. I don't have my labor economist on-call, so I will go to the limits of my knowledge. But we can see if we need some more details, but I think we've been able to summarize it. And the big takeaway is yes, there's jobs, and there's lots of them. So that is what you all want to hear; yeah, so 18,000.

Well, so before I talk to this let me just say a 8 9 few things about this. More than 18,000 jobs have been 10 created from this work. This update that I'm going to talk 11 about right now that we submitted to you is it updated the 12 February 17 Jobs Report, which estimated job creation based 13 on clean energy projects that have been approved by the 14 Energy Commission from the start of the program in 2014 15 through now, the end of calendar year 2017. That's our 16 universe.

And the job estimates as before, are based on the disbursement of grant funds rather than our final program expenditures, because there is a year lag in the program completion. So we base this on the approved energy expenditures.

So a total of 18,571 jobs were created through the end of calendar year 2017. I'm pleased to report this is still on track with Berkeley's mid-range forecast. Before this bill was ever signed into law there were some

job reviews (phonetic) and we are absolutely on track with that, so that's great to know. And I think we're seeing that -- you see it a little heated-up level of job creation last year at 10,000. We're close to double that and I think that's because you've seen also the level of investment going up pretty rapidly.

So the Jobs Report is good. Here's what we know about it. We know that about 8,000 direct jobs were created. This means we're creating about 5.9 jobs per million dollars of investment. That's a good job factor.

11 We know that the spending on Prop 39 projects 12 also has a multiplier effect as the investment stimulates additional economic activity. And in most infrastructure 13 14 investments this is where you get a lot of the job creation, so we see from this an additional 3,500 indirect 15 16 jobs in California. These are jobs in the industry that provide supplies, materials, fuels, other inputs into the 17 18 energy efficiency projects and not the people actually 19 doing the installation or maintenance, but the actual 20 supply chain for this.

In addition, as wages as business income from this work is spent in local communities. You get an additional 7,000, nearly 7,000 jobs in a variety of what we call induced jobs. So what this shows us is that we have a multiplier of 2.3. That means 2.3 indirect and induced

jobs are created for every new direct job created. And
 that's how we get our total of over 18,000 jobs.

3 And the other point that we made last year, and I 4 just want to make this point again, is that this is 5 critical authentic new job creation from Prop 39. Because as we know, this was -- we got the money by closing a tax 6 7 loophole. What you often see in job creation numbers is there's offsets, right? Because if this money had been 8 9 spent somewhere else that would create jobs elsewhere, so 10 it's great that we're creating jobs here, but they don't 11 really count as technically new jobs in the economy. This 12 is actually new jobs in the economy, because we have new monies that would not otherwise have been spent in the 13 14 economy. So this is great, great information, great 15 employment numbers.

These say a little bit more about just the general economic impact. So I should say we do all of this, all of our work in this report is on 2016 dollars. So we had to deflate the 2017 numbers, so that we're talking apples and apples with all of our other reports that we based on 2016.

So the K-12 approved energy expenditure plans based on 2016 dollars had an enormous cumulative economic unemployment impact. So we see that the spending of about 1.4 billion on these K-12 projects stimulated 667 million

in indirect spending. And another 1.1 billion in induced spending, so in addition to our 18,000 jobs that corresponds to a total economic impact of more than \$3 billion, which is a really remarkable feat of leverage on behalf of these investments.

6 Let me say one other word about job quality, 7 because this is something we care about a lot and it 8 specifically says in the legislation that we want to 9 connect people to good quality jobs. So I'm going to 10 return to the quality indicators that we reviewed in the 11 first report that are still contained in this.

12 We see a variety of things that indicate to us 13 job quality, so the prevalence of construction jobs and the 14 more highly skilled trades including HVAC and electricians, 15 others, that is a sign of job quality. In addition, we see the wages have prevailed, so these jobs have really high 16 17 wages and benefits. You know, just confirming what we 18 know, that the building trades is a pathway to middle class 19 careers for underserved Californians. And the average wage 20 rates were between \$36 and \$48 an hour with apprentices 21 pulling in \$25 an hour.

The other thing that we use as a proxy for job quality is apprenticeship and apprenticeship utilization rates. We had about an 18 percent utilization rate, which means about roughly one apprentice to five journeymen,

which is a healthy kind of training ratio. And it means there are a decent number of apprenticeships and that almost every site had jobs with an opportunity for formal training and advancement, which is what apprenticeship delivers.

We don't have any reason to believe that these 6 7 numbers have changed significantly, but we do need to do some updated sampling to get more robust data. 8 And to 9 broker new data sets between CEC and the LEAs. So that's 10 something we can look forward to in the future. That's 11 another thing that we would like to invest more money in. 12 We don't have more money, so I will have to see when that 13 comes. We're hoping we can continue to build that up, but 14 I think we still have enough to say that we're creating 15 jobs and good ones. 16 And I'll leave you with that. 17 CHAIR GORDON: Thank you so much, Sarah. Randall, you might have a question? 18 19 I'm good. BOARD MEMBER MARTINEZ: 20 CHAIR GORDON: Oh. Chelina, you always have a 21 question. 2.2 BOARD MEMBER ODBERT: Not at this time. 23 CHAIR GORDON: This is your world, David, 24 anything? 25 BOARD MEMBER DIAS: Perfect, actually.

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CHAIR GORDON: Oh, look at that.

1

And I think it's just now Heather and Barbara on the phone. This is new to you guys, so any questions about we've all been through a couple of years of this. And so we've all been through the methodology discussion, but do you have questions about methodology? How these numbers came about, how they're approaching them?

BOARD MEMBER ROSENBERG: No. My question just 8 9 really has to do again with sort of the dollars and cents 10 implications. It translates to about \$170,000 per combined 11 job created. And I'm wondering how that compares with 12 other programs that are track similar effects, whether it be tax credit programs, you know, for affordable housing 13 14 where jobs are created, or business and industrial 15 development loans. You know, how does this compare?

16 Right. I don't know what that MS. WHITE: 17 comparison is. I know that we tend to not think about it like we're buying X number of jobs. Like, it's 170,000 per 18 19 job created. I mean, I think because there's so much else 20 that goes into this impact on the number of jobs. There 21 are a lot of investments that -- a lot of it depends on the 2.2 industry, like how much you are paid. How often they're 23 working. What are the job years?

I think that -- so I don't know the comparison to other industries. I know that based on our estimates for

1 what you can get and what we've seen around the country 2 with job creation through infrastructure investment, that 3 this is a good job number. 4 BOARD MEMBER ODBERT: Okay. I do have a 5 question. CHAIR GORDON: Okay. Go ahead --6 7 Just really quickly on that question. The other thing that I always try to remind myself on jobs for 8 9 million dollars invested, for instance, is that we're not 10 just creating jobs with this program. We're also creating 11 energy savings and we're putting in fixtures and we're 12 doing HVAC systems. So there's a whole bunch of investment happening and then there's this additional co-benefit of 13 14 the jobs. So it's not again (indiscernible) jobs. 15 BOARD MEMBER ROSENBERG: That's true, but these 16 particular dollars invested I thought were for the 17 workforce. So you're saying no, it's for the entirety of 18 the programming? 19 MS. WHITE: Oh, yes. The --20 CHAIR GORDON: Go ahead (indiscernible). 21 MS. WHITE: This is not a training investment per 2.2 I can give you those. If you look at the training dollar. 23 that's from the last presentation that's a different question if I think I hear (indiscernible). And that 24 25 averages between, depending on the program, but about

10,000 per, which is normally with the populations with 1 2 barriers to employment. It's about 15,000 if you want to 3 think about it that. So we're actually getting good bang 4 for our buck on the training side. BOARD MEMBER ROSENBERG: On those program 5 expenditures, and this is the entirety of it? 6 7 MS. WHITE: This is the entirety. This is the employment impact of all the money that's been spent, 8 9 invested in the retrofits. And that comes out to about --10 that's where we think about it the other way -- 5.9 jobs 11 per million dollars invested. 12 BOARD MEMBER ROSENBERG: Yes. 13 MS. WHITE: And there's a rate. You know, 14 sometimes you can find them ten, that's very high per 15 million invested. It just depends on the nature of the local construction market. So yeah, this is for the entire 16 17 investment of all the projects. 18 BOARD MEMBER ROSENBERG: Exactly. 19 MS. WHITE: And not even connected to the training at all, right? 20 21 BOARD MEMBER ROSENBERG: Right. 2.2 MS. WHITE: This is like --23 BOARD MEMBER ROSENBERG: Right. You're just 24 looking at the training impact. I understand where you're 25 coming from and like you said, you've got both numbers, but

1 just this part of different reporting metrics. Thank you. 2 CHAIR GORDON: Even though it's a different, so 3 they're literally -- let me see if I can explain this, 4 because it is confusing. 5 BOARD MEMBER ROSENBERG: I totally understand (indiscernible) fund. 6 7 CHAIR GORDON: You do, okay. Got it, okay. Got it. 8 MS. WHITE: Yeah, I think to say we're good. 9 Ι 10 just want to reemphasize that so the Board had two tasks. 11 One was to set up this training program. The other 12 unrelated to that was to measure the jobs created by investments in clean energy retrofits, all right? 13 14 CHAIR GORDON: All right, Chelina. 15 BOARD MEMBER ODBERT: Mine was just a curiosity 16 about the transition from apprentice to the full-time labor 17 force. Is there, I guess a standard amount of time that 18 one who's placed in an apprenticeship -- I know this is 19 going back. But before like does the apprenticeship have a 20 specific duration? 21 MS. WHITE: Right. 2.2 UNIDENTIFIED SPEAKER: Five years. 23 MS. WHITE: Yeah, it can be four years is an 24 average, right and sort of this is the apprenticeship. 25 Also you can think about this as more of a -- I think it's

1 easier to think about it without it going into it -- as a 2 process. Then it will be a series of jobs. You're not 3 just going to have one job where you apprentice on it. 4 It's a matter of learning the skills of a trade, which will 5 take place over -- depending on the trade, right? -- can be from three to seven years in fact. So it's a long-term 6 7 process, which is based on both hours worked and classroom training. 8

9 And your wages go up along with that, so 10 apprenticeship is a really complex beast to measure. And 11 we're talking about a long-term career investment, which is 12 why the pipeline in is so important, because it's a big 13 investment.

14 CHAIR GORDON: You probably don't want to explain 15 this, but just because I was reading through your data limitations section, we know from the beginning of the 16 17 program that your original intention was to be able to use 18 the actual payroll data to estimate the jobs created on 19 this program. And I know that's been a challenge. It's 20 been a challenge every year. It looks like you actually 21 got some payroll data, but it was not organized in any way 2.2 that made it possible for you to work with it. Is that 23 fair? 2.4 MS. WHITE: Yes. (Laughter.) 25 CHAIR GORDON: All right. So we went back to

modeling based on --1 2 MS. WHITE: Yeah, essentially a model. Again, 3 the certified payroll records gave us a sample, problematic 4 though it was, that allowed us to say some things about job 5 quality. CHAIR GORDON: Okay. That's helpful, thank you. 6 7 Any other questions from you guys? Questions on the phone or comments? 8 9 BOARD MEMBER ROSENBERG: I'm good, thank you. 10 CHAIR GORDON: Thank you. 11 BOARD MEMBER ODBERT: I'm good, thanks. 12 CHAIR GORDON: Wonderful, thanks for weighing in. 13 Yeah, I know this -- thank you again. I know 14 this is always a challenge, so we need -- this is our final 15 report motion for the day needs to happen. I didn't hear 16 any changes to this report either. 17 BOARD MEMBER MARTINEZ: So moved. BOARD MEMBER DIAS: Second. 18 19 BOARD MEMBER LLOYD: Second. 20 CHAIR GORDON: Oh, we got a second on the phone, 21 and I'm going to take the second from the phone, just 2.2 because they get a chance to more seconding. And I think 23 that was Heather, was that Heather? 2.4 BOARD MEMBER ROSENBERG: No, it was Barbara. CHAIR GORDON: It was Barbara. Okay. Thank you. 25

Okay. Last roll call on a motion, I think. 1 Go 2 ahead. 3 MR. BARTRIDGE: Here we go. Mark Gold, absent. 4 David Dias? BOARD MEMBER DIAS: Yes. 5 MR. BARTRIDGE: Randall Martinez? 6 7 BOARD MEMBER MARTINEZ: Yes. MR. BARTRIDGE: Chelina Odbert? 8 9 BOARD MEMBER ODBERT: Yes. 10 MR. BARTRIDGE: Barbara Lloyd? 11 BOARD MEMBER LLOYD: Yes. 12 MR. BARTRIDGE: Heather Rosenberg? BOARD MEMBER ROSENBERG: Yes. 13 14 MR. BARTRIDGE: And Chair Gordon? 15 CHAIR GORDON: Great. 16 This is the moment where we call for public comment if there is any, from either the phone or in the 17 18 room. Any coming in? 19 MR. BARTRIDGE: Any blue cards in the room? 20 CHAIR GORDON: No. Very little public in the 21 room today, this is an unusually --2.2 MR. BARTRIDGE: Or is there anybody on WebEx? Τf 23 you have any public comments on the WebEx, please raise your hand? 24 25 CHAIR GORDON: Okay. Hearing none, so just as a

1 reminder before we close, actually a couple of things, one 2 is to correct an earlier mistake that I made. We actually 3 have two open seats on the Board still, not just one. I 4 was wrong, so just as a reminder we have a vacancy from the AG's Office, which I think was Arno Harris's seat. And 5 then we have a vacancy from the Controller, which I think 6 7 was Walkie Ray's seat; is that right? So two vacant seats, it always takes a while to get those filled as you know. 8 9 But they seem to be stepping that up, so that's great. So 10 we will look forward to letting you know who fills those 11 seats.

12 The second thing is again that the staff and I 13 now go into the phase of actually getting our report 14 written based on all this fantastic input and the reports 15 we've heard. And we will be reaching out to you as we 16 always do. We will not be trying our failed experiment of 17 subcommittees again this year, but we will be reaching out 18 individually to folks to ask for help.

Also, if you have any input, something coming out of the meeting, you want to email us. Remember just email individually, we can't all be on one chain. So please email me and Jim and Jack and let us know if there's anything you want us to make sure to include or say. And we will be running -- doing our best to run drafts by folks early, so that at our next meeting where we

1 do ideally need to vote on that report, we will all have 2 seen it. And can have a robust discussion. 3 I did want to remind everybody one more time that 4 unlike other years we're going into it -- this report is 5 going into a political context of not having money for this program in the budget, and the need for an appropriation to 6 7 put money for this program into the budget. So we actually are talking to the Legislature that we could be asking to 8 9 do something fairly specific, so please think about that. 10 BOARD MEMBER ROSENBERG: Can you clarify the time 11 for the March meeting? 12 CHAIR GORDON: Jim, staff? MR. BARTRIDGE: Sure thing, it's 1:00 to 4:00. 13 14 CHAIR GORDON: Is it -- so on March 22nd, 1:00 to 15 4:00, same time. 16 BOARD MEMBER ROSENBERG: Okay. Thanks. 17 CHAIR GORDON: Thank you. No, it's -- and we always welcome our L.A. friends to come for those, of 18 19 course. 20 BOARD MEMBER ROSENBERG: Working on it. 21 CHAIR GORDON: Chairman or Commissioner? 2.2 COMMISSIONER MCALLISTER: Oh, yes. Well, so I 23 know we're going to wrap up and I wanted to sort of catch a 24 minute before we adjourned, before the Chair adjourned this 25 meeting.

1 And really I want to just put in a little bit of 2 context, it won't take long. So this is -- you know, 3 originally the Board (phonetic) thought that this program 4 was about \$2.5 billion, about 500 million a year for five years. It ended up somewhat level with that, lower than 5 that. But if you look at this program in context of all 6 7 the other programs that the State of California has run to promote clean energy, it's right up there near the top. 8 9 You know, the CSI, the California Solar Initiative was in 10 the \$3 billion range.

11 But in terms of programs that the Energy 12 Commission has administered, this is the largest one ever, I believe. And I want to just thank staff doing it. From 13 14 the beginning it's been very clear the commitment from 15 Executive Director on down. I've certainly pitched in my own program experience, being out there in the world doing 16 17 this sort of thing. But state agencies have a whole series 18 of requirements and process needs that are absolutely valid 19 and have to be respected. And they do slow things down.

And so I have to say I'm just proud on behalf of staff that we've gotten thousands of these proposals in. We've processed them in a timely way. We've gotten them through, we've gotten the money out in a reasonable amount of time. You know, there's really very little dissatisfaction with this program. And I want to just --

in the context that we live in today in a complex world,
 that is a pretty remarkable achievement.

3 And certainly goes against some of the rhetoric 4 about government's role in the world these days and I 5 think, you know, a transparent process with stakeholders who we listen to and we are flexible enough to respond to 6 7 and make changes to the program for. And efficiently get through the work that needs to be done in a collective way, 8 I think it's really remarkable. And a very positive 9 outcome for California and so I think that message is 10 11 something that won't just sort of percolate around on the 12 natural. And so it's worth highlighting when we all go out 13 into the world and say, "Hey, now. Wait a second, here's 14 what we did to improve the lives of our kids and our 15 schools."

16 And so thank the people for voting for it. You know, thank the Legislature for putting it through in its 17 18 form and funding it through the budgeting process. We'll 19 see what happens going forward. I think the good news is 20 that a lot of applications are coming in now. You know, 21 right up to the last day they're going to be coming in 2.2 apparently, so we may have 40 go in, we may have 0, right? 23 We don't know what that number is going to be and it really 24 depends.

25

Just yesterday we had a whole ton of applications

1 come in, so a couple of weeks ago it was 60 million. I
2 think more recently it was 40 million and it's dropping.
3 So we don't know what the final numbers' going to be. We
4 won't know until the second week of March, but in a sense
5 that's a good thing, because it means the program worked.
6 And people applied and they got their money.

7 So in any case I just wanted to highlight that, because I think it sort of gets lost in the business. 8 But 9 it's really a quite inspiring message of a program where 10 everything basically went well and went right. And 11 obviously we need to keep vigilant. We need to keep doing 12 the audit and we need to make sure that the money goes where it needs to go. And it'll be nice to do some long-13 14 term analysis, once we have complete data, to really learn 15 from the experience.

But anyway, I just wanted to not let that opportunity go by to sum up that message.

18 CHAIR GORDON: Thank you, Commissioner19 McAllister.

BOARD MEMBER LLOYD: This is -CHAIR GORDON: Go ahead on the phone.
BOARD MEMBER LLOYD: Oh, yes. This is Barbara
Lloyd responding to that observation. In particular, the
likelihood of possibly even having a pipeline of projects
in the current application pool or some ability to project

what the demand would be, beyond the current application cycle. And whether or not there's a mechanism for including that in this report to the Legislature, even if we have to survey some of the potential program participants about what needs would be if we had an unconstrained program.

7 COMMISSIONER MCALLISTER: That's a good point. Ι think the community colleges in particular, are in a really 8 9 good spot. Because they have a punch list of projects and 10 they just sort of used their funds, as I understand it, to 11 kind of do everything that they could with the existing 12 funds. And they could continue to do that if they had more And so we would have to sort of gather that 13 funds. information from the school districts and I think we could 14 15 start with the big ones. Just to --

BOARD MEMBER LLOYD: Yeah. I think it's a worthwhile endeavor given what Ms. Gordon said about the political context for this year's report being different. And if folks can identify what their need is and we can compile that and we can break it down by legislative district. And inform all those legislators about the needs in their district, I think that would be helpful.

23 CHAIR GORDON: Thanks, Barbara. That's a great 24 idea and there is an organization called the Coalition for 25 Adequate School Housing, CASH, that works directly with all

of the facilities' managers in the state and would be a
 great place to start for that.

This was a challenge we had at the very beginning of the Prop 39 Program, trying to figure out what the pipeline was actually. It's there's no inventory of those, school facilities' issues in the State of California. So it's something that doesn't exist, but I think there's some ways to at least get some anecdotal evidence.

9 It's a great idea. Thank you for bringing that 10 up.

11 MR. BARTRIDGE: Chair, if I may? I do wonder, 12 Bill and I had talked about the data that he has available. And I'm wondering if there's any way to sort of mine 13 14 through some of that data to understand. I mean, what he 15 mentioned earlier was that that data could eventually -you know, needs to be housed somewhere and whether it could 16 17 be analyzed in some way that is pretty comprehensive. So I 18 would just put that out there as a potential, Bill?

BOARD MEMBER LLOYD: That's all the energy audit information that was done?

21MR. BARTRIDGE: Correct, for the school22districts.

BOARD MEMBER LLOYD: Yeah. I think that's
another great idea and for charters we might be able to use
the California School Finance Authority as a resource for

gathering information from the charter school universe.
 Just as a small subset, but I know they're a part of the
 equation.

MR. MCNAMARA: So on the -- this is Bill McNamara -- on the same topic. The amount of data that's been accumulated through the energy auditing process, represents more than a -- a sample of more than 20 percent of the entire population of school buildings and LEAs in the state. And it's at a tremendous detail level.

10 So there isn't currently a mechanism available in 11 the sense it was one of the things that we were looking 12 originally at doing. And in partnership with UC Davis 13 Energy Efficiency Center and others, we're looking at 14 populating and making an anonymized version of this data. 15 And then, of course, an identified version as well, but at 16 least making the anonymized version available for data 17 mining.

But this, the data itself is also inclusive of 18 19 best practices or should I say O&M practices, current. Not 20 just the technological expression and measurement of all 21 the facilities and across the state. But it certainly 2.2 could help inform a wide range of as these schools are all 23 in a commercial class of building sets. It certainly would 24 help to inform incentivization programs or other aspects 25 that people might look at, in terms of like we know,

through the process of application what people are applying
 to do.

But there's this whole other body of knowledge available as to what hasn't been done. And what actually is identified as opportunity beyond things that maybe perhaps made sense to the decision makers at the time who submitted the EEPs.

CHAIR GORDON: That's a great point, thank you. 8 9 And I know that the Berkeley Center for Cities and Schools 10 also has done some work looking at what an inventory might 11 look like. And actually if Mark were here, he would say 12 one of his colleagues at UCLA has also been doing work on this. So this seems like a fruitful area too, for us as a 13 14 Board, so start sort of talking among each other and 15 figuring out if there's a good -- talking to Bill, talking to others about what is out there, what is possible, and 16 17 really demonstrating the need.

Barbara, thank you for bringing that up; it's a great point. All right, and Barbara I may tap you to help with this specific thing since you brought it -- you had the idea, which means that you get to volunteer to help us figure out how to pursue it.

BOARD MEMBER LLOYD: I'm happy to have a conversation. I'm going to have to get out of the conference room here in UCLA, because they're waiting

outside the door to get in. CHAIR GORDON: Well, we are about to adjourn. So is there any further questions or comments from the Board or from staff? Okay. Thank you all. Thank you so much Commissioner McAllister, for being with us. Welcome again to Barbara and Heather and the meeting is adjourned. (Adjourned at 3:54 p.m.) --000-2.2 

## 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 7th day of March, 2018.

Juines Charto

Eduwiges Lastra CER-915

## 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 7th day of March, 2018.

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