BEFORE THE

CALIFORNIA CLEAN ENERGY JOBS ACT

CITIZENS OVERSIGHT BOARD

### 1516 NINTH STREET

ROSENFELD HEARING ROOM - FIRST FLOOR

SACRAMENTO, CALIFORNIA

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

> UNIVERSITY OF CALIFORNIA, LOS ANGELES 4608 GEOLOGY BUILDING LOS ANGELES, CA 90095

> > THURSDAY, FEBRUARY 9, 2017

1:00 P.M.

Reported by Peter Petty

#### APPEARANCES

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

Kate Gordon, Chair

James (Walkie) Ray, Vice Chair

David Dias, Board Member

Randall Martinez, Board Member

\*Chelina Odbert, Board Member

\*Arno Harris, Board Member

\*Mark Gold, Board Member

EX OFFICIO MEMBER PRESENT

Robert B. Weisenmiller

#### CEC STAFF PRESENT

Jack Bastida

Elizabeth Shirakh

#### ALSO PRESENT:

Hoang Nguyen, Calif Community College Chancellor's Office Mario Rodriguez Calif Community College Chancellor's Office Carlos Montoya, Calif Community College Chancellor's Office Bill McNamara, California Conservation Corps Sarah White, California Workforce Development <u>PUBLIC COMMENT:</u>

Rick Brown, Terra Verde Renewable Partners

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

- 1. INTRODUCTION AND ROLL CALL OF BOARD MEMBERS TO DETERMINE QUORUM. (Board Chair Kate Gordon)
- APPROVAL OF MINUTES FROM SEPTEMBER 22ND, 2016 CITIZENS OVERSIGHT BOARD MEETING. (Board Chair Kate Gordon)
- 3. DISCUSSION AND POSSIBLE VOTE ON A CONFLICT OF INTEREST CODE FOR THE CALIFORNIA CITIZEN OVERSIGHT BOARD. The law requires that every state agency have a conflict of interest code, which identifies all agency officials and employees who make or participate in making governmental decisions. (Staff Member Jack Bastida)
- PRESENATATION AND POSSIBLE VOTE ON ANNUAL REPORT
   FROM THE CALIFORNIA ENERGY COMMISSION (Liz Shirakh, California Energy Commission)
- 5. PRESENTATION AND POSSIBLE VOTE ON ANNUAL REPORT 46 FROM THE CALIFORNIA COMMUNITY COLLEGE CHANCELLOR'S OFFICE. (Carlos Montoya, California Community College Chancellor's Office)
- 6. PRESENTATION AND POSSIBLE VOTE ON ANNUAL REPORT 58 FROM THE CALIFORNIA CONSERVATION CORPS- ENERGY CORP PROGRAM. (Bill McNamara, California Conservation Corps)
- 7. PRESENTATION AND POSSIBLE VOTE ON ANNUAL REPORT 97 FROM THE CALIFORNIA WORKFORCE DEVELOPMENT BOARD. (Sarah White, California Workforce Development)

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1 PROCEEDINGS 2 FEBRUARY 9, 2017 1:00 P.M. CHAIR GORDON: Okay, hi everybody. 3 4 Welcome. I feel very far away from you all. 5 Welcome to the California Clean Energy Jobs Act/ 6 Prop 39 Citizens Oversight Board meeting. Let us 7 call the meeting to order. Jack, do you want to call the roll? 8 MR. BASTIDA: Of course. 9 First off, can everyone hear me online? 10 BOARD MEMBER HARRIS: 11 Yes. 12 MR. BASTIDA: Okay. 13 BOARD MEMBER ODBERT: Yes. 14 MR. BASTIDA: Just wanted to check and make 15 sure of that. 16 Okay, call roll now. 17 Board Member Gordon? 18 CHAIR GORDON: Present. 19 MR. BASTIDA: Board Member Ray? VICE CHAIR RAY: Here. 20 MR. BASTIDA: Board Member Kremen? 21 No. 2.2 Board Member Harris? 23 BOARD MEMBER HARRIS: Yes. MR. BASTIDA: Board Member Odbert? 24 BOARD MEMBER ODBERT: 25 Here.

1 MR. BASTIDA: Board Member Martinez? 2 BOARD MEMBER MARTINEZ: Here. 3 MR. BASTIDA: Board Member Dias? 4 BOARD MEMBER DIAS: Here. 5 MR. BASTIDA: Board Member Gold? BOARD MEMBER GOLD: 6 Here. 7 MR. BASTIDA: We have a quorum established. 8 CHAIR GORDON: And welcome to the newest Board Member Mark Gold, who I have not yet met in 9 10 person, but we're glad to have you here on the phone 11 and thank you for joining us for the oversight 12 board, Mark. 13 BOARD MEMBER GOLD: Thank you. I'm sorry I 14 couldn't make up. I'll make it up for the next one 15 for sure. 16 CHAIR GORDON: Great. We have an item to 17 approve the minutes from the last meeting, which was 18 September, long time ago, September 22nd. Has 19 everyone looked at the minutes? Do we have a motion 20 to approve? 21 BOARD MEMBER DIAS: I motion to approve the 2.2 minutes. 23 BOARD MEMBER MARTINEZ: Second. CHAIR GORDON: Great. All in favor? 24 25 IN UNISON: Aye.

1 CHAIR GORDON: Anyone opposed? Sorry, aye. 2 Anyone opposed? Any abstentions? 3 Great, the minutes are approved 4 unanimously. 5 I am going to turn to Staff Member Jack Bastida to talk to us about something we talked 6 7 about last time and we tabled and held over to this meeting, which is the Conflict of Interest Code for 8 9 the Board. 10 Jack, do you want to take that? 11 MR. BASTIDA: Yeah. Is it okay if I speak 12 over here or you want me to... CHAIR GORDON: Yes, it is. 13 14 MR. BASTIDA: All right. It'll be easier, 15 to control everything. So as you probably know, each state agency 16 17 has to have a Conflict of Interest Code established 18 with the FPPC. This code is part of the Political Reform Act and it's kind of in service to make sure 19 20 that all the different designated positions are spelled out for Form 700. 21 2.2 Last meeting we were looking at the 23 Conflict of Interest Code and it was expressed by Board Member Kremen to look at it a little bit in 2.4 25 more detail, see if we can limit some of the

categories that must be disclosed by the Board
 Members, so we looked at that.

3 The Board Members are, if you look at your 4 Page 2 here, the Board Members are designated in Position 1 Disclosure Category. What this means is 5 that they need to disclose any investment or 6 7 business positions in a business entity and source of income, which includes receipt of loans, gifts 8 9 and travel payments if the business entity or source 10 is an energy provider or energy related entity, or 11 it has applied to receive funds from the Clean 12 Energy Fund. They also need to disclose if they have any real property located within the boundaries 13 or not more than two miles outside the boundaries of 14 15 a local education agency school campus. This includes public school districts, individual charter 16 17 schools and county offices of education. So that's the first position which deals with Board Members. 18 Second position deals with our assistant 19

20 general counsel and myself, the associated 21 governmental program analyst. We have to disclose 22 any investments, business position or business 23 entities or sources of income from any gifts, loans 24 or travel payments if the entity or source is the 25 type that provides leased facilities, products, equipment, vehicles, machinery or services,
 including training and consulting services of the
 type utilized by the Board.

4 So these disclosure categories, the first one is a little bit more narrow than what is usually 5 a disclosure category for the FPPC. Last year for 6 7 your Form 700 you probably had to disclose any and all businesses you had over a certain amount. 8 This 9 is a little bit more narrow of a disclosure. We 10 went through with FPPC lawyers to make sure that 11 this is something that is in line with your duties 12 as Board Members for this Board.

13 CHAIR GORDON: Jack, members here and then 14 I'll turn to the phone, questions about this or 15 discussion? This is narrower than the last version 16 we saw, so thank you, Jack, for going back and 17 working on that. Do we have concerns, questions? 18 We are going to vote on this today, so Jack?

MR. BASTIDA: Yes, just as a side comment to have to do with the Form 700s. So I just got trained by the FPPC as a Form 700 person, I guess, and so I can take all your forms. I know there's a new e-disclosure that you can do online, do the form online, that some members might be interested in. You should have gotten an email from the FPPC with

1 your login information last month. But if you want 2 to do it the old fashioned way just mail me your 3 Form 700 and I will personally deliver it to the 4 building and make a copy for our records as well. CHAIR GORDON: Jack, can you remind us of 5 the due date? 6 7 MR. BASTIDA: It's April 22nd -- April 3rd, okay, April 3rd. Maybe I'm thinking about my 8 anniversary. But yeah, that's the date right there. 9 10 CHAIR GORDON: Questions, Board Members, 11 comments, questions, concerns? 12 VICE CHAIR RAY: I don't recall receiving email from you. Perhaps you could resend that. 13 14 MR. BASTIDA: That came, yeah, it should 15 have come directly from FPPC so it might have gotten filtered out, but I can definitely forward you the 16 17 mail. I've already received your Form 700, Board 18 Member Ray, so you're good. VICE CHAIR RAY: Okay, I filled it out. 19 20 CHAIR GORDON: Wow. You did it without 21 getting the email, that's impressive. 2.2 On the phone since there aren't burning 23 questions in the room, on the phone are there 24 questions or concerns. We are going to vote on this 25 code so questions, concerns before the vote?

1 BOARD MEMBER GOLD: No. BOARD MEMBER ODBERT: No question. 2 BOARD MEMBER HARRIS: None. 3 4 CHAIR GORDON: David, do you have a 5 question? 6 BOARD MEMBER DIAS: Yeah, just really 7 It says not more than two miles outside the quick. boundaries of a local educational agency or 8 9 whatever. Is that I'm assuming air miles, correct? 10 MR. BASTIDA: That's correct, yes. 11 BOARD MEMBER DIAS: Okay. Thank you. 12 CHAIR GORDON: No questions on the phone, it sounded like. Do we have a motion to approve the 13 14 code? 15 BOARD MEMBER MARTINEZ: So moved. 16 BOARD MEMBER DIAS: Second. 17 CHAIR GORDON: Great. Do we have -- can you just call roll on this, actually? 18 19 MR. BASTIDA: Of course, yeah. Board Member Gordon? 20 CHAIR GORDON: Aye. 21 2.2 MR. BASTIDA: Board Member Ray? 23 VICE CHAIR RAY: Yes. MR. BASTIDA: Board Member Harris? 24 25 BOARD MEMBER HARRIS: Aye.

MR. BASTIDA: Board Member Odbert? 1 2 BOARD MEMBER ODBERT: Aye. 3 MR. BASTIDA: Board Member Martinez? BOARD MEMBER MARTINEZ: Yes. 4 MR. BASTIDA: Board Member Dias? 5 BOARD MEMBER DIAS: 6 Yes. 7 MR. BASTIDA: Board Member Gold? BOARD MEMBER GOLD: 8 Ave. 9 CHAIR GORDON: Great, the motion is approved. 10 Thank you, everybody, for getting through 11 that quickly. And again, thank you to staff for 12 getting us back a clearer and narrower code. We are moving to the meat of the agenda. 13 14 Just as context for everyone in the room, I'm sure 15 you all know this, but as you know, this Board is 16 required to give a report every year to the 17 Legislature on the status of the funds and the projects under the Clean Energy Jobs Act. As a part 18 19 of that we request from each of the participating 20 agencies a report to us on the progress and the 21 status and today is our opportunity to hear from, I 2.2 think all -- most -- all of those boards and 23 programs about status, and they will be giving 24 presentations. 25 We do ask that people try to limit their

1 presentations to 15 minutes, I think that's what 2 Jack asked you to do. I know that there will be a 3 lot of questions and I'm sure that some of you will 4 have a hard time with that but please try not to go too far over 15 minutes. 5 6 So we are going to start with the big chunk 7 of money. And I want to say thank you to Chair 8 9 Weisenmiller for being here, too, actually, from the 10 California Energy Commission. 11 So Liz, we are going to hear from you, 12 thank you so much. 13 So my name's Liz Shirakh. MS. SHIRAKH: 14 I'm with the California Energy Commission, the Local 15 Assistance and Financing Office of the Efficiency 16 Division, and I'm the Program Lead for the Prop 39 K-12 Program, and for your consideration and 17 possible approval today on behalf of the Energy 18 Commission and Prop 39 staff, I'll be presenting to 19 20 you our second report to the Citizens Oversight 21 Board. 2.2 Next slide. 23 For your information today I will present a brief overview of the Energy Commission's report and 24 25 my presentation will begin with the report overview

and moving into summary highlights of the three programs, the Prop 39 K-12 Program, the Energy Conservation Assistance Act Education subaccount, and our Bright School Program, and then wrapping up the presentation with time for questions and answers.

7 I'd first like to begin with the report 8 overview.

9 Energy Commission staff along with other 10 reporting agencies worked with COB staff member Jack 11 Bastida last summary to review lessons learned from 12 the first cycle. As a result, a more standardized 13 report form outline was developed to provide a 14 format consistency as well as a reporting schedule.

15 The Energy Commission administers three 16 components of the California Clean Energy Jobs Act, 17 a grant program called the Prop 39 Program, a revolving loan program, the Energy Conservation 18 19 Assistance Act education subaccount program also 20 known as ECAA-Ed, and a technical assistance program 21 called the Bright School Program. All three 2.2 programs receive funds from the Clean Energy Jobs 23 creation fund created by Prop 39, and this report 24 provides progress on all three programs. 25 This is the Energy Commission's second

1 progress report to the Citizen's Oversight Board. 2 The report summarizes outcomes from the start of the Prop 39 K-12 Program in December 19, 2013 through 3 4 the end of fiscal year 2015/16, June 30, 2016. Our first progress report to the Citizens Oversight 5 Board covered December 19, 2013 through December 31, 6 7 2015, so it's important to note that the second report just covers an additional six months from our 8 9 first report. 10 Before discussing the program status it's 11 helpful to review the appropriations for the 12 reporting period. This slide summarizes the 2013/14, 14/15, and 15/16 Clean Energy Job Fund 13 14 appropriations for the Energy Commission's programs. 15 The K-12 Program has total appropriations of nearly a billion dollars at \$973 million. 16 17 The ECAA-Ed Program has total appropriations of \$56 million for 2013/14 and for 18 19 14/15 fiscal years. The ECAA-Ed Program did not 20 receive funding in fiscal years 15/16. 21 The first program I'd like to discuss is 2.2 the Prop 39 K-12 Program that provides grant funding 23 to install eligible energy efficiency and clean energy generation measures at K-12 schools. The 24 25 Energy Commission is primarily responsible for

administering the Prop 39 K-12 Program, collecting,
 reviewing and approving energy expenditure plan
 applications.

4 The Energy Commission approved the first energy expenditure plans known as EEPs in April 5 2014, and the program has grown rapidly since. As 6 7 of June 30, 2016, the Energy Commission approved \$673 million for eligible energy project funding, 8 9 and that's the blue slice of the pie you see up 10 there. In addition, \$154 million has been approved 11 for planning; that's the pink slice.

Local educational agencies, or LEAS, request planning funds directly from the California Department of Education, so out of the total allocation of \$973 million -- you can see that box at the top right of the slide -- nearly \$827 million in Prop 39 funding has been approved this reporting period.

19 This next slide summarizes the reported 20 cumulative spending as of June 30, 2016. for all 21 approved EEPs, LEAs must provide an annual progress 22 report each fiscal year. Once an EEP is completed, 23 LEAs provide a final project completion report 12-15 24 months after project completion date. This report 25 includes final project cost, estimated energy savings, and 12 months of post-installation energy
 consumption data.

This slide breaks down the amount reported and spent in four categories. At the top of the slide you'll see 52 submitted final project completion reports, and these are the reports that require the 12 months of post-installation energy usage data. These 52 LEAs reported spending \$27 million of Prop 39 funding.

Going down to the next line, the white line, that's 183 EEPs were completed, but they're still collecting their 12 months of postinstallation data, but they did report in their annual reports that they have spent \$104 million.

Going down the table, 733 projects are still in construction and reported \$151 million spent.

18 And finally, at the bottom we have energy 19 planning funds. They reported \$36.5 million 20 reported as being spent.

21 So in total \$318 million has been reported 22 spent in LEAs throughout California, and that's 38 23 percent of that \$827 million that's been approved 24 this reporting period.

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BOARD MEMBER HARRIS: Hi Liz, one question

1 on that, if I can? 2 MS. SHIRAKH: Sure. BOARD MEMBER HARRIS: This is Arno Harris. 3 4 Just looking at the line for EEPs still in 5 construction, the ratio of dollars to number of projects is sort of different than the others. 6 Ιs 7 that the amount of spending to date on those projects, that's not the total amount eligible or 8 9 anticipated for those projects; is that correct? 10 MS. SHIRAKH: That's correct, that's what 11 was reported spent to date. And again, these were 12 as of June 30, 2016. Does that answer your 13 question? 14 BOARD MEMBER HARRIS: Got it, thank you. 15 MS. SHIRAKH: Yes. 16 So I just wanted to point out that the Energy Commission did receive 99 percent of the 17 reports due, and I wanted to acknowledge and thank 18 both the Energy Commission and the LEAs for this 19 20 high response rate, because without these annual reports and these final project completion reports 21 2.2 we wouldn't have data for this report. 23 Moving to the next slide. This slide summarizes the totals for both 24 25 the Prop 39 amounts spent and the amount approved

1 for this reporting period. The amount spent has 2 nearly tripled in the last six months from \$109 3 million reported in December 2015 to \$318 million 4 now reported in June 2016, so this is a very 5 positive trend.

Next, I'd like to discuss the types ofenergy measures funded.

Each approved EEP can represent multiple 8 9 eligible energy efficiency and clean energy measures 10 at multiple school sites within an LEA. Specific 11 types of eligible energy measures include lighting, 12 HVAC, controls for lighting and HVAC, and other 13 energy measures such as pumps, motors, drives, plug loads, building insulation which is like building 14 15 envelope measures, domestic hot water, kitchen equipment, pool equipment, and clean energy 16 17 generation or solar projects. In total there are 18 about 40 eligible energy measures that are available 19 in an EEP application.

20 So looking at the breakdown, this table 21 summarizes the types of energy measures we've 22 approved and the associated project costs with those 23 categories.

24 So starting at the top, lighting represents 25 about 50 percent of the approved energy measures. Moving down, about 22 percent for controls, then HVAC at 15 percent. And the other categories that I mentioned in the previous slide fall under the category of other energy efficiency measures, and that's at 12 percent.

Solar projects are about 2 percent but 6 7 what's interesting is if you look toward the righthand column that shows the total project costs, 8 9 solar projects actually account for about 12 percent 10 of the total funding approved. And likewise, when 11 you're looking at HVAC, that is actually about 12 almost 40 percent of our total funding. That's because these projects are more expensive and they 13 14 just have higher project costs.

15 CHAIR GORDON: Liz, have you seen any self-16 generation projects that are not solar?

MS. SHIRAKH: I don't believe so.
BOARD MEMBER HARRIS: Quick question. This

19 again is Arno Harris.

I'm just curious on the HVAC. I know that we made a recommendation and I think CEC followed up on in our report from last year. Do these numbers reflect already the changes in the return ratios that were made in that -- after that report, or is this the bought-down portion of the capital cost of 1 HVAC retrofits that schools are submitting to be 2 covered by the Prop 39 Program?

MS. SHIRAKH: If I'm understanding your question, I know the Citizens Oversight Board did make recommendations last cycle to look at HVAC because some LEAs were concerned that it was hard to make the savings to investment ratio.

The Energy Commission did respond to that 8 9 recommendation and we made changes to the guidelines 10 that affected the savings to investment ratio. 11 Specifically, getting into details of that, we 12 changed the maintenance savings allowance from 2 percent to 3 percent, and that greatly affects HVAC 13 14 because that's basically you're getting high 15 efficiency HVAC you're going to have less maintenance cost and therefore it was justified to 16 17 increase that maintenance savings.

Those changes were done in July 2016 and again, this reporting period is through June, so those changes would not be reflected in these numbers. Does that answer your question?

BOARD MEMBER HARRIS: Got it. Yeah, so this is under the original program rules. Yes, that's very helpful, thank you. MS. SHIRAKH: Yes.

1 VICE CHAIR RAY: I have a question as well. 2 My understanding is that the lighting and 3 the controls are fairly easy to accomplish and in 4 fact very possibly most schools now have pretty much exhausted their savings by doing those two things. 5 Are we going to be able to meet our return 6 7 formulas given that the future may portend a higher percentage of the other mechanisms? 8 Well, we are seeing a lot of 9 MS. SHIRAKH: 10 lighting projects still coming in, and later on my 11 slide presentation you will see that the savings to 12 investment ratio is trending up, which is meaning we are saving beyond \$1 for every dollar we're 13 14 spending. 15 I don't have a crystal ball but I feel confident that we will continue to get projects that 16 17 meet the savings to investment ratio. 18 I do say I've been tracking these trends from the very beginning, and it seems like we have 19 20 been about 50 percent lighting from the beginning of the program, so I'm seeing a consistent trend. 21 Ι 2.2 have not seen that go down. 23 VICE CHAIR RAY: Okay. 24 MS. SHIRAKH: Okay. So just wanted to 25 finally on this slide point out we've funded through

1	June 30, 2016 about 13,000 energy efficiency
2	measures and that covered about 3500 school sites.
3	This next section of the Prop 39 K-12
4	presentation is accomplishments, and this is my
5	favorite slide because it's pictures of real photos
6	from Prop 39 K-12 projects, and these are photos
7	that were provided to the Energy Commission in final
8	project completion reports by the schools, and this
9	is just a small representations of the thousands of
10	energy measures being installed throughout
11	California as a result of this program.
12	This slide shows the cumulative summary of
13	the final project completion reports in the two
14	reporting periods. Looking at the right-hand
15	column, that's this reporting period, 52 completed
16	EEPs represent about \$27 million in Prop 30 grant
17	funds. The reported annual savings for these
18	completed projects is 13,000 megawatts and over
19	54,000 therms. The reported energy savings is
20	equivalent to the annual energy consumption of 2,053
21	homes, with total annual energy cost savings of
22	\$2.4 million.
23	It's also important to note the savings to
24	investment ratio, or the SIR, that's the line at the
25	very bottom of this chart. This means for every

1 dollar of Prop 39 dollars invested, \$1.44 will be 2 saved over time. And this is important because the 3 statute requires that a project be cost-effective 4 with total benefits greater than project cost over 5 time.

6 Most of the 52 LEAs with completed energy 7 projects experienced a decrease in energy use 8 intensity, also known as EUI. The EUI is a metric 9 that measures the annual rate of energy use per 10 square foot of building space per year. It can be 11 compared to mileage per gallon used to measure 12 vehicle fuel economy.

Overall, the group of 52 LEAs saved 18.9 thousand btus per square foot, and this is calculated by comparing the 12 months of energy use data reported on an EEP application to the 12 months of post-installation energy use that's reported on the final project completion report.

19 Now I'd like to briefly touch on a few of20 the other accomplishment of the program.

As promised, the Energy Commission initially launched the program, we continued to identify program improvements, and since the guidelines were originally adopted in December 2013 there have been three guideline revisions.

1 In June 2014 the first revision changed 2 charter school eligibility, making it easier for 3 charter schools to participate in the program. 4 In December 2014, just six months later, new revisions modified the savings to investment 5 ratio for all LEAs. 6 And in July 2016, in response to the 7 Citizens Oversight Board report to the Legislature, 8 9 additional modifications to the sir were made 10 through guideline revisions. Next slide. 11 12 Another accomplishment I'd like to highlight is the publicly searchable database 13 14 launched June 30, 2016. This database is simple to 15 use, interactive, and provides quick searches for 16 K-12 projects and community college district program 17 projects. It was designed to provide information on a school site level through several ways for the 18 19 public to view detailed program information, and 20 this is available on our Prop 39 web page. Another publicly available database is the 21 2.2 State of California's Climate Investment Map. Six 23 statewide program topics are showcased, including 24 clean energy programs, and the Prop 39 K-12 Program 25 is represented in purple. With each Prop 39 funded

school site, a purple dot, and as you can see,
 purple dominates the map.

On this next slide I've zoomed in to highlight the Los Angeles basin area, and when you click on a purple dot the school site, Foothill High in this example, provides project information including estimated energy savings.

8 This database is also searchable by 9 assembly and senate district or by address or by 10 city. Program information is updated weekly and we 11 also include our ECAA loan projects in this 12 database.

As with any program, there are challenges. The biggest challenge is getting all LEAs to submit an energy expenditure plan to receive funding, and the following slides highlight this challenge.

The encumbered state of June 30, 2018 is the first challenge. To help illustrate how this date affects the program, I'll discuss a few dates on a program timeline, showing the encumbrance date limits the use of funding in the final 2017/18 fiscal year. To best manage the program and ensure LEAs

23 To best manage the program and ensure LEAS
24 have time to complete all the steps necessary to
25 encumber funds by June 30, 2018, the Energy

Commission established an EEP due date of August 1,
 2017. This is the final date a school can submit an
 EEP application to the Energy Commission. This
 deadline effectively shortens the program by 11
 months.

6 This deadline poses another challenge. The 7 California Department of Education announces the 8 yearly allocations each October with an August 1st 9 deadline. LEAs will now need to submit their 10 applications two months before that October 2017 11 allocation announcement.

12 So to summarize, the necessary final EEP due date of August 1, 2017, shortens the program by 13 14 11 months, and to complicate the issue further, LEAs 15 won't have their allocations until October, two months after the application due date. This most 16 17 likely will result in a high volume of EEP 18 amendments due to project change orders, creating 19 additional work for both LEAs and the Energy Commission. 20 21 BOARD MEMBER HARRIS: Quick question on 2.2 this one. 23 MS. SHTRAKH: Yes. BOARD MEMBER HARRIS: I believe in our 24 25 report last year we highlighted this issue, maybe

not with this degree of specificity but that the end
 of the program would create a challenge for
 deploying funds.

Kate, I wonder if maybe we should either
take time today or put on the agenda for our next
meeting before we issue our report that we may want
to underline this point in our report to the
Legislature and advocate more strongly for some sort
of continuation of the program.

And I guess the question I would have is that date's coming up in 2017. Can the Legislature, is it a simple enough fix to merely extend dates that the Legislature could do it in a timeframe that would not result in the deadline hitting LEAs that are applying for the program.

16 CHAIR GORDON: I think we do have one more 17 meeting before we have to submit our report to the 18 Legislature. We're hoping that the next meeting 19 will be the meeting where we really have an in-depth 20 discussion of recommendations, which is the most 21 important section to some extent from this Board in 2.2 the report where we actually provide our own 23 recommendations based on what we've been hearing. I'm hoping that today as we're listening we 24 25 will do what you're doing, Arno, and to highlight

1 areas that we should focus on next meeting, and then 2 come to the next meeting with sort of a set and use that as a time to narrow in on what we want to 3 4 recommend. But let's keep our ears open for this kind of thing because it's clearly an issue. 5 So 6 thank you for outlining it as clearly as you did. 7 Liz. BOARD MEMBER HARRIS: Indeed. 8 Thanks, 9 Kate. 10 CHAIR GORDON: And I'm sorry to your second 11 point. Jack, let's work on as these come up you and 12 I can talk about some of the background kind of information we need to know coming into that next 13 meeting about legislature timeframes, etcetera. 14 15 MR. BASTIDA: Okay. 16 Okay, next slide. MS. SHIRAKH: 17 Another challenge is the LEA participation, 18 especially charter school participation. The Energy 19 Commission has continually provided extensive 20 program communication, outreach and education 21 through webinars, workshops, conference 2.2 presentations, press releases, blog posts, listserve 23 announcements, direct phone calls, direct mail, and public meetings. Although these widespread efforts 24 25 we have facilitated increased LEA participation, yet

1 challenges do remain.

2 The program is more than halfway through the funding period, yet fewer than half of the 3 4 eligible 2,136 LEAs have requested project funding. If this trend continues there will be funding 5 remaining at the end of the program. 6 7 As you can see from this slide, charter schools are not participating at the same rate as 8 9 public school districts. As of June 30, 2016, 838 10 or 74 percent of charter schools were not 11 participating. In comparison, only 37 percent of 12 public school districts had not yet submitted an 13 energy expenditure plan. Next slide. 14 15 Charter schools have unique characteristics that prevent their full participation. Some of the 16 17 challenges are that many charters are housed in privately leased facilities. Some charters are 18 virtual charters with no buildings at all. 19 Some 20 charters have very few facilities with potential 21 energy savings projects. And another challenge is 2.2 that many charter schools do not have the staff 23 resources to pursue facility improvements. 2.4 Other challenges that apply to all LEAs are that certain areas of California have low electric 25

2 effective energy projects. 3 And finally, small public schools, just 4 like small charter schools, have such small facilities they are not able to identify eligible 5 energy measures that use their entire allocation. 6 7 BOARD MEMBER GOLD: I have a question before you jump ahead. 8 9 MS. SHIRAKH: Yes. 10 BOARD MEMBER GOLD: This is Mark Gold, and 11 sorry if you've addressed this in a previous 12 meeting, I apologize being the new kid on the block. 13 But has there been an analysis by the CEC 14 at this point of looking at what the spacial 15 distribution is of who has applied and received funds and whether or not there are some specific 16 17 areas or gaps geographically that might be, you know, in Title 1 school districts or the like that 18 19 just haven't gotten their act together for one 20 reason or another to really apply? Or also, in some 21 areas that might have really old schools which would 2.2 probably be more energy inefficient but just haven't 23 done the work to submit the applications? Have you looked at that sort of from the big picture for the 24 25 state as a whole?

rates which make it difficult to identify cost-

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1 MS. SHIRAKH: Yeah, we've actually done a 2 lot of slicing and dicing of the LEAs that are in 3 We've looked at them by the type of the program. 4 LEA, like what you saw, charter school, public school, office county of education. 5 We also look at them by size and we call 6 7 that tier, so if you have a school that has average daily attendance of 1 to 100, they get a certain 8 amount of money. And then there's four different 9 10 tiers in this program, the fourth tier meaning very, 11 very large school districts or large charter 12 schools. We've also looked at the participation and 13 14 the LEA distribution geographically, looking at 15 counties and as well as looking at LEAs, looking at a disadvantaged community or disadvantages LEA 16 metric, looking at the free and reduced priced meals 17

So there are just lots of different ways to slice and dice this and we continue to hone in on our outreach and education based on, you know, what we're seeing in these numbers.

versus the average daily attendance.

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Another thing we are doing is reaching out to, for charter schools for example, reaching out to the associations, the California Charter School Association and the California Charter School
 Development Association, getting their support in
 trying to reach their members.

4 BOARD MEMBER GOLD: Thank you, I greatly appreciate that. In looking at, though -- I can't 5 remember what the exact number is, but if you have, 6 7 you know, 60 percent of the eligible LEAs that have applied, then 40 percent haven't, and just 8 9 especially looking at those LEAs that have a history 10 of energy inefficiency that you can look up with the 11 data you have, or higher energy use or they're in 12 disadvantages communities or, you know, have those districts been identified and then you proactively 13 14 do whatever you can to really try to get them into 15 the system and apply before the money runs out? 16 MS. SHIRAKH: We definitely have, and one 17 of the things I'd like to mention. You have 18 mentioned looking at schools that might have older 19 facilities or haven't done energy efficiency, and 20 one of the challenges in California is that there 21 isn't a school building inventory, so we can't go to

22 California Department of Education and say can we 23 have the list of school buildings that were built 24 prior to, you know, 1920. There is no such list, 25 and so that is a challenge in California. BOARD MEMBER GOLD: You literally would have to go county by county and look at institutions is the only way to really get that done?

4 CHAIR GORDON: Mark, this is Kate, and it 5 is something we've talked about before but it's a 6 really good point to potentially bring up also in 7 our recommendations. There's no inventory of 8 buildings so we don't even know the number of 9 specific buildings that are in the school community 10 in California.

11 We know the number of districts, we know 12 the number of sites, we don't know the number of 13 buildings, we don't know the age, we don't know the 14 maintenance history, we don't know the energy 15 history unless they've applied for the program, so 16 that is an issue that's come up a couple of times in 17 meetings over the last year as a real challenge when 18 it comes to needs based outreach for the program. 19 VICE CHAIR RAY: Have you checked with DSA? CHAIR GORDON: 20 They didn't have it. 21 VICE CHAIR RAY: They don't? 2.2 CHAIR GORDON: Doesn't exist. I was just --23 BOARD MEMBER GOLD: CHAIR GORDON: Walkie asked if we checked 24 25 with the Department of State Architecture, and we've

-- this was an issue that came up repeatedly
 actually during the legislative discussions and the
 guideline implementation of Prop 39 and there is no
 inventory.

5 BOARD MEMBER GOLD: Okay. Well, for 6 whatever it's worth and maybe this is for a later 7 discussion, and we've been talking to CEC about this 8 for years.

So we have a faculty member here who has 9 10 been asking for data and receiving data from some of 11 the major IOUs and even DWP here in the L.A. Region, 12 so she's covered most of southern California. Tt's not the most current of data but from the standpoint 13 14 of looking at literally parcel by parcel data so you 15 can identify the schools and see what the energy use was over time. 16

17 And she's also gone to the planning 18 departments etcetera to get the information on the 19 buildings to get building age, so we have a lot of 20 that for southern California, or we have the 21 potential to extract a lot of that, so that just 2.2 might be something to consider moving forward, just 23 to give you an FYI. 24 CHAIR GORDON: Thank you, Mark.

25

BOARD MEMBER GOLD: Okay, thanks.

CHAIR GORDON: And we will talk about this 1 2 at the next meeting for sure, I'm sure it will be 3 one of the topics that comes up. 4 BOARD MEMBER GOLD: Okay. Thank you. 5 MS. SHIRAKH: Okay. So I'm just about 6 ready to move to our next program. 7 Next slide, please. And Liz, you get extra time CHAIR GORDON: 8 9 because you have so many programs. 10 MS. SHIRAKH: Thank you. 11 The second program the Energy Commission 12 administers if the Energy Conservation Assistance Act education subaccount, also known as ECAA-Ed. 13 14 This financing program is a revolving loan program 15 that provides zero percent loans to K-12 LEAs and 16 community college districts for energy efficiency 17 and clean energy generation projects. Next slide. 18 ECAA-Ed received \$28 million in both fiscal 19 20 years 2013/14 and 2014/15 for a total of \$58 21 million. No funding was allocated in fiscal year 2.2 2015/16. 23 Also included in this slide is funding from 24 our Bright Schools Program. Public Resource Code 25 authorizes the Energy Commission to set aside 10

percent of the job creation fund for school 1 2 technical assistance to identify Prop 39 energy projects. Therefore, Bright Schools Program 3 4 received just over \$5.5 million of the \$56 million. Next slide. 5 No, we're on the right slide. I can't see, 6 7 it's so far away. As of June 30, 2016, 29 ECAA-Ed loans were 8 9 approved by the California Energy Commission. This 10 represents \$46.4 million. 11 ECAA-Ed loan recipients request loans on a 12 reimbursement basis based on invoices submitted to 13 the Energy Commission. For this reporting period recipients requested and received \$23.9 million in 14 15 funds. Of the 29 approved loans, 10 have completed projects. One of the 10, and that's the first one 16 17 on the top of the table, has submitted a final project completion report. The remaining 19, the 18 19 last line, are loans that are still in the 20 construction phase. 21 Like Prop 39 grant program, the ECAA-Ed 2.2 loans fund energy efficiency and clean energy 23 generation projects. Each loan can represent multiple eligible measures, and of the 29 loans, 5 24 25 loans have funded energy efficiency measures only, 7

1 loans funded solar projects, and 17 loans funded a 2 combination of solar and energy efficiency projects. 3 CHAIR GORDON: Liz, I was going to ask 4 about default rates, but am I right that you don't know yet about repayment and potential default 5 because the projects aren't done yet? 6 7 MS. SHIRAKH: For this particular program, for the ECAA-Ed, that is correct. We have 10 8 9 completed projects but to my knowledge, we're good. No defaults. 10 11 CHAIR GORDON: No defaults. Okay, thank 12 you. Okay. Moving to the third 13 MS. SHIRAKH: 14 and final program administered by the California 15 Energy Commission is the Bright School Program. Again, this falls under the ECAA-Ed Prop 39 funding. 16 17 The Bright School Program assists LEAs in identifying energy savings projects in existing 18 19 school facilities. The program provides a range of technical assistance services, including energy 20 21 audits, third party proposal review, and 2.2 professional engineering support activities. 23 Energy Commission through a competitive contract solicitation selected prime contractor and 24 25 a team of professional energy engineers to provide

1 technical assistance and support. As of June 30, 2 2016, of the \$5.6 million allocated to the program, 3 \$5.5 million had been encumbered in technical 4 assistance contracts. The remaining \$91,524 were 5 reallocated to the ECAA-Ed loan program. Total 6 expenditures for this reporting period is \$2.3 7 million.

The Bright School Program provided 8 9 technical assistance to 119 LEAs and community college districts, identifying energy measure 10 11 opportunities at 260 school sites. These energy 12 measure recommendations represent an estimated annual electric savings of nearly 22,000 megawatts 13 and natural gas savings of over 260,000 therms, with 14 15 total estimated energy cost savings of more than \$3.6 million. The identified energy measures would 16 17 require an investment of more than \$53 million with potential utility incentives of nearly \$2 million. 18

In conclusion, the Energy Commission looks forward to the program's continued growth and partnership with LEAs and the Prop 39 interagency group and program stakeholders to deliver a strong program connecting job creation through energy efficiency and clean energy project installations. And this concludes my presentation. Thank

1 you so much for your time, and I'd be happy to 2 answer any additional questions. 3 CHAIR GORDON: Thank you so much, Liz, and 4 thanks to the CEC for all of the work you've done on 5 this large number of projects and reports, so thank 6 you. 7 Let's turn to questions. BOARD MEMBER HARRIS: Can I ask one 8 9 question? 10 CHAIR GORDON: Go ahead. 11 BOARD MEMBER HARRIS: The eager one on the 12 phone. 13 CHAIR GORDON: That's Arno, I assume. BOARD MEMBER HARRIS: Yes. 14 15 If we go back two slides, I just want to make sure I understand some of the numbers that were 16 17 presented there. There we go. 18 The \$3.6 million in utility cost savings, 19 that's the annual anticipated savings? 20 MS. SHIRAKH: Yes, these are anticipated 21 savings estimated savings if these recommendations 2.2 were installed. 23 BOARD MEMBER HARRIS: Got it. Okay. 24 MS. SHIRAKH: Because again, this program 25 identifies potential projects, and you see a report

cover on there. What schools do then is they can
 use these recommendations, put that into an energy
 expenditure plan and apply for funding through the
 Prop 39 K-12 Program.

5 BOARD MEMBER MARTINEZ: That's actually my 6 question as well. So we've identified \$53 million 7 worth of projects. Do we have any way of tracking 8 whether or not those projects have applied for or 9 have come to fruition, or will come to fruition?

MS. SHIRAKH: I don't have the numbers of how many of these schools have actually applied to our program. I know we are working on the ones that still have not.

Do you have a number? Sixty-one of them still have not applied to the program, and we are doing outreach, encouraging them to submit.

We've actually extended or added to the tasks of our technical assistance contract and now offer LEAs that have gone through and have a Bright School Program services to actually complete that energy expenditure plan so we can get this into the program. BOARD MEMBER MARTINEZ: Thank you.

24 MS. SHIRAKH: You're welcome.
25 CHAIR GORDON: Walkie.

VICE CHAIR RAY: I think I know the answer 1 2 to this question, but do religious schools whose 3 religious component is de minimus, is there a logic 4 whereby they would qualify? They're nonprofit. Right now we are really 5 MS. SHIRAKH: focusing on public schools that are eligible for 6 7 Prop 39. In the past we have funded nonprofit schools with the Bright School Program, but right 8 9 now it's targeting public school districts. VICE CHAIR RAY: So there's been a 10 11 conscious decision not to serve religious schools. 12 MS. SHIRAKH: Because this money is focused for public school districts and the intent of Prop 13 14 39, you know, we have a list from CDE of schools 15 that are eligible for the program, and if those schools are not on the list of eligible LEAs then at 16 17 this point in time we have not been funding them. 18 To be honest, I don't think we've -- I'm 19 remembering back in history prior to Prop 39, I 20 believe I remember one Catholic nonprofit school 21 coming through the Bright School Program. 2.2 CHAIR GORDON: The legislation allocates 23 the money to public schools so CEC doesn't have the ability to go outside those boundaries. 24 25 MS. SHIRAKH: Thank you.

1 CHAIR GORDON: Charter school question. On 2 your slide about charter schools, clearly we talked 3 about this last year too, the charter schools not 4 having the same participation rates as the public 5 schools.

Do you have any idea -- you brought up some 6 7 good points about some of the barriers to charter schools. Do you have any idea like what percent of 8 9 that number of charter schools rent their facilities and/or are virtual and/or -- you know, the things 10 11 that you brought up, I'm just wondering what the 12 actual number is of eligible charter schools versus the number of charter schools in California. 13

MS. SHIRAKH: It's my understanding through conversations with the California Charter School Association that 43 percent of charters are in leased facilities, so that's a very large number.

18 CHAIR GORDON: Of your number here on this 19 chart, whatever page that is -- yes. Of that number 20 of schools, which is -- now I can't see it. I know 21 it's up there but I can't read that.

22 VICE CHAIR RAY: 1222. 23 CHAIR GORDON: 1222. So of that number 24 you're saying 43 percent of those are in leased 25 facilities? 1

MS. SHIRAKH: Yes.

2 CHAIR GORDON: I'm wondering if we could 3 somehow make that clearer, because what I worry 4 about is that the impression presented by this slide is that there's somehow -- it's sort of a 5 misimpression because those who are leasing their 6 7 facilities are not likely to be coming in for a program to fix the facilities which they don't own, 8 9 it's the owner/renter problem. It might be useful 10 to be able to just sort of maybe do a dotted line or 11 a shading or something to show which of those are 12 actually eligible for the program versus all charter 13 schools.

MS. SHIRAKH: I have learned that through conversations. We're actually working with the California Charter School Association to get exact counts, which ones of these are in leased facilities and which ones not. But I think what I hear you saying is make a modification to the report; is that what you're suggesting?

21 CHAIR GORDON: I'm not suggesting something 22 to hold up the report approval because we'll see 23 other questions come up. I'm mostly saying I think 24 for our report to the Legislature I would like to be 25 able to say something intelligent about the number

1 of charter schools that are actually eligible for 2 this money and it would be good if you would 3 consider doing that investigation can you tell us 4 about that and can we discuss potentially doing some kind of a small amendment to that chart that 5 wouldn't require another vote? 6 7 MS. SHIRAKH: Absolutely. CHAIR GORDON: Questions, David. 8 One the 9 phone, Chelina, Mark? Walkie? 10 VICE CHAIR RAY: I know of a charter 11 school, a very, very successful charter school in 12 Santa Ana in a Title 1 area that operates in a leased facility, it's leased from the Santa Ana 13 Unified School District. 14 15 Now, it seems to me that that kind of a 16 lease or a lease on a facility for a long term, maybe 10 years or more, should somehow qualify the 17 charter school for these funds. 18 19 MS. SHIRAKH: Let me clarify that. 20 Charters in leased facilities are certainly eligible 21 for the program, they're not ineligible to 2.2 participate. 23 I think the challenge becomes if you are in 24 a leased facility and someone owns the building, 25 there's not a great incentive to apply to the

1 program.

2	But in the situation where we have charter
3	schools that are in publicly leased facilities,
4	often the public school district for example, Los
5	Angeles Unified School District is working with
6	their charters that are in public facilities helping
7	them identify their projects and kind of moving
8	these energy applications along. The challenge,
9	though, is it depends on the relationship with the
10	public school district and the charter.
11	Does that make sense?
12	VICE CHAIR RAY: I'm sorry, I don't
13	understand, I'm slow.
14	MS. SHIRAKH: So no, the way the structure
15	of this program works is that each charter has to
16	submit their own application, and so if they're in a
17	public school district, that school district can't
18	actually submit an application for them, so they
19	have to work in partnership, and I think sometimes
20	that might be a challenge.
21	VICE CHAIR RAY: You mean the charter
22	school would have to submit the application together
23	with the public school that owns the facility?
24	MS. SHIRAKH: The charter school submits
25	the application to the Energy Commission.
25	the application to the Energy Commission.

1 VICE CHAIR RAY: Right. 2 MS. SHIRAKH: But because they're leasing 3 the public school district facility, they need to be 4 working in coordination with that public school district. 5 VICE CHAIR RAY: 6 Why? Why? 7 MS. SHIRAKH: Because the public school district owns the building, it's their building. 8 9 VICE CHAIR RAY: I know, but if the charter 10 school is putting new efficient LED lighting in, the 11 school district is going to be delighted. 12 MS. SHIRAKH: And that's great. And when we have charters that come in on their own and do 13 14 that, that's awesome. That's fantastic. I'm just 15 saying that sometimes in leased facilities there may 16 be less incentive to take the time to apply to the 17 program. 18 VICE CHAIR RAY: I sensed that a leased 19 facility didn't qualify, so --20 MS. SHIRAKH: No, leased facilities 21 definitely qualify. 2.2 CHAIR GORDON: That was my mistake, I'm 23 sorry, I used the word 'eligible' and I shouldn't have used the word 'eligible.' What I actually 24 25 meant was it would be good to know the -- yeah,

1 there's disincentive in some of these cases with 2 short term leases in particular. So I'm sorry about 3 that, that was probably my fault. 4 VICE CHAIR RAY: Well, as a suggestion, you 5 might engage in outreach to charter schools in leased facilities as I know they too would like to 6 7 see energy efficiency. MS. SHIRAKH: Yes, yes. 8 9 CHAIR GORDON: Questions on the phone? 10 Arno, any burning follow-up questions? Mark, Chelina? 11 12 BOARD MEMBER ODBERT: None. BOARD MEMBER HARRIS: 13 None. 14 BOARD MEMBER GOLD: I'm good. 15 CHAIR GORDON: Are we ready for a motion to -- what we're moving, just to be clear, we are 16 voting today on whether to accept this report as our 17 18 input to the report that we're giving to the 19 Legislature. I would propose that we make that motion in a way that allows for small modifications 20 21 of things like charts or fonts or, you know, 2.2 subheads and not have to have another vote, so I 23 would love it if we could get a motion that allowed for that. 2.4 25 BOARD MEMBER MARTINEZ: So moved.

VICE CHAIR RAY: Second. 1 2 CHAIR GORDON: Perfect. Can we do a roll 3 call on these just because I can't see everybody? 4 MR. BASTIDA: Yes. Board Member Gordon? 5 CHAIR GORDON: Yes. 6 7 MR. BASTIDA: Board Member Ray? VICE CHAIR RAY: Yes. 8 9 MR. BASTIDA: Board Member Harris? 10 BOARD MEMBER HARRIS: Aye. 11 MR. BASTIDA: Board Member Odbert? 12 BOARD MEMBER ODBERT: Aye. 13 MR. BASTIDA: Board Member Martinez? BOARD MEMBER MARTINEZ: Yes. 14 15 MR. BASTIDA: Board Member Dias? 16 BOARD MEMBER DIAS: Yes. 17 MR. BASTIDA: Board Member Gold? BOARD MEMBER GOLD: Yes. 18 19 MR. BASTIDA: The motion is adopted. 20 CHAIR GORDON: Motion is adopted. Thank 21 And can I just say thank you -- we should have you. said this earlier -- but to Jack Bastida for being 2.2 23 very proactive about coming up with a standardized approach for these reports last year, but also to 24 25 all of you for getting reports in on time because it

1 just makes this whole process so much easier and 2 we're able to absorb the information and talk about 3 it and understand it, so makes it a lot smoother, so 4 thank you, Liz and everyone, Chair Weisenmiller and everyone at the CEC. 5 All right. Moving on to the California 6 7 Community College Chancellor's Office, the next report, and Carlos Montoya is here to present. 8 9 MR. NGUYEN: I'll be talking in Carlos's 10 stead. 11 CHAIR GORDON: And just tell us your name 12 and your role, if you would. 13 MR. NGUYEN: Okay. Good afternoon. I′m 14 Hoang Nguyen from the Chancellor's Office. With me 15 today I have Mario Rodriguez, the Vice Chancellor Finance and Facilities Planning, and of course, 16 17 Carlos Montoya, the Director of Facilities Planning. 18 Thank you for giving us the opportunity 19 today to tell you about our success with the Prop 39 20 Program and of course take into consideration the 21 approval of our report here. 2.2 The Chancellor's Office Prop 39 Program 23 carried out the initial success from year one into years two and three, which are reported here, 24 25 through the partnership with the IOUs and our

1 consultant, Newcomb Anderson and McCormick. We 2 assisted the districts through the planning process 3 all the way up until the completion of each project. 4 We are currently working with our partners to work on year five, the planning of it. 5 So the report that we have here today 6 7 consists of years two and three of the program for the facilities program side of the house. Workforce 8 9 and economic development is only reporting year two, 10 which I'll explain why later on. 11 For the funds used by the districts for the 12 facilities program for years two and three, of the \$64.2 million allocated we have \$2 million 13 14 unencumbered remaining. 15 We had 254 projects closed out that equated to \$54.9 million in total project costs, which was 16 17 able to save 30 million kilowatt hours, 316,000 therm savings, for a total of \$4 million in energy 18 19 cost savings. 20 The incentives paid back to the districts was a little under \$6 million. 21 2.2 The direct job years that were produced 23 from these projects was 300 and a little over 8 24 trainee job years. 25 So the energy saved from these 254 projects

1 from years two and three would be able to power over 2 5,000 homes.

3 The lighting projects are still the most 4 prominent projects out of the loading order. They 5 take over 60 percent on average between years two and three. HVAC projects come in second, averaging 6 7 slightly above 17 percent, followed closely by the control type projects, which also average on the 8 9 lower end of 17 percent, followed by the remaining 10 projects around 1 percent each.

For in-progress projects we have 481 projects that equated to \$110 million in total project costs. These projects are estimated to save 44.7 million kilowatt hours, 1.3 million in therm savings, for an estimated \$7 million in energy cost savings. The incentives paid back to the districts is estimated to be around \$9.6 million.

The direct job years that will be produced from these projects is 605 and estimated at 16 trainee job years.

21 CHAIR GORDON: Quick question while we're 22 on this.

MR. NGUYEN: Yes.

23

24 CHAIR GORDON: We're just looking at the 25 chart on Page 11 of the report that shows lighting 1 and HVAC and the other.

2 MR. NGUYEN: Um-hmm. 3 CHAIR GORDON: There's only one solar 4 project and I'm just interested in your thoughts on why there aren't more self-generation projects. 5 In general what do you attribute that to? 6 Mainly attribute it to a whole 7 MR. NGUYEN: lot of lighting projects on district emphasis. 8 Thev 9 started off with parking lots and the outside of the 10 campus. Now they're working on the actual buildings 11 themselves on the interior, so lighting projects, 12 unless they're really good districts where they're practically energy efficient like the one here which 13 came from San Mateo, they didn't really have a 14 15 chance to start on them yet. 16 VICE CHAIR RAY: Do you think that by and 17 large the junior colleges have now upgraded their 18 lighting? 19 MR. NGUYEN: T do. 20 VICE CHAIR RAY: So the hit -- I got to be 21 careful of the way I use words from my profession --2.2 the bump from going to LED is not -- we're not going 23 to have that in the future. MR. NGUYEN: I don't believe so unless 2.4 25 there's some new technology out there that vastly

1 improves it over LED.

2 VICE CHAIR RAY: And what about controls, 3 HVAC and lighting controls, have you mostly done 4 that?

5 MR. NGUYEN: Not at all. Right now they're 6 trying to bundle lighting with HVAC to meet the SIR 7 rating.

8 VICE CHAIR RAY: Do you think it's going to 9 be increasingly difficult to meet the SIR rating 10 given lighting will not be available?

MR. NGUYEN: Well, right now we still have interior lighting for the buildings, so they're working on that.

14 VICE CHAIR RAY: You've got how many -15 you've got three years left before you exhaust that?
16 MR. NGUYEN: We're working on the last year

17 and a half of the program itself. The last time we 18 talked with the IOUs and our consultant and 19 districts, which is part of our partnership, they 20 said some districts still have lighting projects for 21 their buildings left over, so it's in progress.

22 MR. RODRIGUEZ: I'm Mario Rodriguez, I 23 could try to help maybe answer your question. 24 So I think Hoang, everything he said is 25 correct so far in the fact that our districts

1 initially have primarily focused on the lighting and 2 the controls as opposed to self-generation. That has to do not with just by chance, that has to do 3 4 with that's what our office has suggested as a loading order for the colleges, so before they start 5 focusing on self-generation, take care of the 6 7 efficiency side as much as possible, lower your bill before you start developing self-generation 8 9 projects. VICE CHAIR RAY: Well, self-generation has 10 11 a very low return on investment, generally speaking. 12 MR. RODRIGUEZ: That's partially why it's also in the loading order that it's in toward the 13 14 end as well. So Hoang is also correct when he's

15 stating that initially they're starting on the 16 outside of the building and they're moving toward 17 the inside of the building.

18 The longer this program goes on, the less 19 lighting projects that are still available. But I 20 think the question you were asking was possibly 21 trying to get at when is that year, and I think for 2.2 us it's very difficult for us to tell besides 23 stating the fact that I just stated, which is you're right, that the longer this project goes on the less 24 25 of those lighting projects that are available, and

1 so we're in year four, almost heading toward year 2 five of potentially a five-year program, so if this 3 extends out to ten years maybe we won't have as many 4 lighting projects anymore, but we think if it's a five-year program we feel pretty confident that 5 we'll be able to maintain the savings to investment 6 7 ratio and get the projects done in a timely manner. VICE CHAIR RAY: Thank you. 8 9 MR. NGUYEN: Continuing on from in-progress 10 projects. The energy estimated to be saved from 11 these 481 projects will be able to power over 8800 12 homes. 13 Moving on to workforce and economic 14 development. They are currently only reporting year 15 two for this report. This is due to their program 16 which uses a grant application process which 17 districts apply for, so this creates a longer cycle 18 starting at year one. So workforce and economic development are 19 20 looking into expediting their program possibly by 21 simultaneously going through all their remaining 2.2 funding years. 23 For year two workforce and economic 24 development received 12.8 percent of the total \$37.9 25 million, which resulted in \$4.8 million for them to

create and improve curriculum, provide professional 1 2 development for faculty and support for regional collaboration, developing partnerships and networks 3 4 for continued success for their students and faculty. With that money more than 5000 students 5 completed degrees and certificates in year two; 700 6 7 of those students completed with an AA or an AS degree; over 2000 completed a certificate and over 8 9 2500 with an industry or apprenticeship certificate. 10 CHAIR GORDON: Sorry, just on this, do you 11 have any sense of job placement numbers? 12 MR. NGUYEN: That I do not have. I'll have to ask WED for that. 13 CHAIR GORDON: That would be great to know 14 15 just for our overall understanding of how the 16 program is working. 17 Okay, I'll ask them. MR. NGUYEN: So in conclusion, our office is currently 18 19 working with districts for year five funding so they 20 can get started on their project list. With the initial (inaudible) preliminary budget we sent out 21 2.2 an estimated allocation to the districts so they 23 could get started working on it with the IOUs and 24 our partners, NAM. Once the final budget comes out 25 in June, we're expecting all the applications to

come in so that districts can get started in July 1 2 and August, so that way they can complete the projects within the specified timeframe. 3 4 So our goal here is to continue the 5 momentum that we had from year one and finish out this final year. 6 7 And that concludes my presentation. CHAIR GORDON: Thank you. We'll go to 8 9 discussion. 10 Yes, David. 11 BOARD MEMBER DIAS: Who are the incentive-12 owned utilities? 13 MR. NGUYEN: They're entities known as 14 PG&E. 15 BOARD MEMBER DIAS: Don't you mean 16 investor-owned, then? 17 MR. NGUYEN: Yes. 18 BOARD MEMBER DIAS: It says "Incentive." 19 CHAIR GORDON: Which page is that? 20 BOARD MEMBER DIAS: All through this thing. 21 CHAIR GORDON: Oh, typo, sounds like. 2.2 BOARD MEMBER DIAS: I was confused. 23 MR. RODRIGUEZ: Yeah, our apologies. Someone must have done a find-and-replace on the 24 25 document. We'll double check that when we get back

1 to the office.

2 BOARD MEMBER DIAS: I was wondering how an incentive owned a utility. Sorry. 3 4 MR. RODRIGUEZ: The investor-owned 5 utilities provide incentives, that's how it's supposed to work. So our apologies. 6 7 BOARD MEMBER DIAS: Okay, no problem. Thank you. 8 CHAIR GORDON: Good catch, David, thank 9 10 you. 11 Questions from here or on the phone on the 12 California Community Colleges report? 13 Arno, is that you? 14 BOARD MEMBER HARRIS: Yeah, I was just 15 going to say I had the same question on the IOUs but I have no other questions, thank you. 16 17 CHAIR GORDON: Other questions on the 18 phone. 19 BOARD MEMBER GOLD: No. No questions. You 20 asked the solar question which was my question as 21 well, so we're good. 2.2 CHAIR GORDON: Great. I have one more 23 question which actually goes to some of the earlier discussion. 2.4 25 So we know from the past couple of years

1 that the community colleges obviously run this 2 program from a very centralized way, right, from the Chancellor's Office. 3 4 MR. NGUYEN: Correct. 5 CHAIR GORDON: Do you have a sense of -did you map out the five years? Like do you have a 6 7 sense of where the money will go through the end of Because you're running it all 8 the program? 9 centrally and you have a good amount of communication with your districts. 10 Hi, this is Carlos Montoya. 11 MR. MONTOYA: 12 Not really. Our districts every year go in through a planning process so right now we've 13 actually done a call for projects for year five, and 14 15 so we will know, I think by April 1st is our deadline, of what we start to anticipate in terms of 16 17 projects for year five. 18 When we originally started the program we 19 thought, well, we ran it as five one-year programs 20 where we were trying to get projects and funding out each and every single year, and we built it on the 21 2.2 strength of an existing partnership with the 23 investor-owned utilities that we've had in place since 2006. 2.4 25 So for us, when this program came into

place it was actually providing us additional 1 2 funding on top of a program that we were already starting to work with our districts. Since we do 3 4 have 72 semi-autonomous local districts, so the startup and coordination is usually kind of a heavy 5 part of the process so we were just lucky to have 6 7 that ahead of time. CHAIR GORDON: Got it. Thank you, that's 8 9 helpful. 10 Other questions? Any other questions in 11 All right, we should move to a motion with here? 12 the same caveat -- especially since we found a typo already -- the same caveat as the last time 13 14 regarding grammar/other small changes. Is anyone 15 willing to make that motion? 16 BOARD MEMBER DIAS: So moved. 17 BOARD MEMBER ODBERT: So moved. CHAIR GORDON: Oh, we had two of them, so 18 Chelina, I'm going to go with you since you haven't 19 20 moved anything yet. BOARD MEMBER DIAS: 21 Second. 2.2 CHAIR GORDON: Great. Can we do a roll 23 call please, Jack? MR. BASTIDA: Of course. 24 Board Member Gordon? 25

1 CHAIR GORDON: Yes. 2 MR. BASTIDA: Board Member Ray? VICE CHAIR RAY: Yes. 3 4 MR. BASTIDA: Board Member Harris? 5 BOARD MEMBER HARRIS: Yea. MR. BASTIDA: Board Member Odbert? 6 7 BOARD MEMBER ODBERT: Yes. MR. BASTIDA: Board Member Martinez? 8 9 BOARD MEMBER MARTINEZ: Yes. MR. BASTIDA: Board Member Dias? 10 11 BOARD MEMBER DIAS: Yes. 12 MR. BASTIDA: Board Member Gold? 13 BOARD MEMBER GOLD: Yes. 14 CHAIR GORDON: Great, so moved. Thank you, 15 everybody. I like how we keep switching between aye and yes and we got a yea this time, that was good. 16 17 We keep coming up with new ways of saying that. 18 This is great, thank you. 19 Thank you so much, Community Colleges. MR. NGUYEN: Thank you. 20 You guys have done a great 21 CHAIR GORDON: 2.2 job of organizing these programs. 23 Moving to a presentation from the California Conservation Corps, Bill McNamara is 24 25 here.

Hi, Bill. 1 2 MR. MCNAMARA: First of all, I wanted to say thank you very much for inviting us to present 3 4 today, it's always a pleasure to see you all. There are two forms of this. 5 My name is Bill McNamara, I'm the Director of Energy Programs 6 7 of the California Conservation Corps. There are two forms of the presentation. 8 9 There's the slide set that I sent and also a more detailed text oriented version, although my slide 10 11 presentation has a lot of text as well, which is the 12 actual report itself. 13 So I wanted to start out by -- first slide. 14 We just wanted to start out, especially 15 since we have at least one new Board Member, to give a little context of who the CCC is and what we 16 actually do, that sort of thing, before we get into 17 18 what it is we've actually accomplished. 19 So the Conservation Corps is a state 20 agency, part of the Natural Resources Board, and its 21 function is in the sense of workforce development 2.2 and work/learn programs to assist young adults 23 between 18 and 25 throughout California and also returning veterans up to 29. 24 25 So in that regard the CCC has within its

organization a separate, well, an operational group
 called the Energy Corps that was founded in 2013.

So the design of what we're doing with the 3 4 energy efficiency funds that come from the Clean Energy Jobs Act are focused on actually producing 5 clean energy in the sense of -- I'm sorry --6 7 reducing energy use through energy efficiency, reducing energy costs, reducing greenhouse gas 8 9 emissions, and also creating job opportunities for 10 these young corps members in the energy industry and 11 elsewhere. Those are the main focus points for what 12 the CCC is actually doing.

13

Next.

So we have 26 operating locations 14 15 throughout the state, and since the last report a year ago we've actually made one significant change, 16 which is we've combined a number of our resources so 17 there are a total of 10 California Conservation 18 19 Energy Corps crews that work on Proposition 39 20 funded activity, and so we've created 4 energy 21 centers in the state of California. They are in 2.2 Sacramento, San Jose, Norwalk and Vista, which is in 23 northern San Diego County. So those facilities, whereas they used to 2.4

25 be co-joined where they would do natural resource

1 work and energy work on a more distributive basis 2 are now focused entirely on delivering energy 3 efficiency and renewable energy services. 4 We also have one additional location in Fresno in the Central Valley where there is one 5 Energy Corps crew that operates out of the Fresno 6 7 center but it's primarily a natural resource location for the CCC. 8 9 So from that standpoint we move our 10 resources out from those locations to anywhere in 11 the state and service according to wherever the 12 demand may be. 13 So from the standpoint of the actual goals 14 themselves, again, they're really quite 15 straightforward. We provide energy industry training for 16 these young corps members, young adults, that is 17 18 focused on primarily energy efficiency. We start with training them for doing ASHRAE compliant energy 19 20 audits, which we call energy opportunity surveys. 21 They then go out into the field and 2.2 actually practice this on hundreds of buildings, and 23 they do many, many audits, many buildings. 24 Then we take the same group of people and 25 we bring them back in and train them again to do

1 energy efficiency retrofit work. And our focus, 2 perhaps not surprisingly, on energy efficiency 3 retrofit work is on lighting and controls. And we 4 have a great deal of data regarding the individual 5 schools, which I'll get into in a minute, that might 6 actually address some of the points that were 7 brought up in the earlier presentations as well.

8 You know, as a combination of training and 9 extensive workforce on-the-job training, workforce 10 classroom training, and on-the-job training we have 11 a very substantial number of projects that are 12 actually engaged in by the corps members, both in 13 terms of the energy opportunity surveys and also in 14 the retrofit side.

15 The net of that is that we end up creating 16 many different pathways for employment for these 17 young adults, meaning in many cases the CCC Energy Corps is really all about partnership, working with 18 And so as we work with contractors and 19 others. 20 ESCOs and third party energy efficiency companies 21 and utilities throughout the state, these young 2.2 corps members get a chance to be exposed to many 23 things, many positive training events, and also, these are all potential employers, many of whom have 24 25 actually gone ahead and employed or actually

1 recruited directly from the CCC ranks, and we have 2 the numbers which I'll get to at the end. 3 CHAIR GORDON: No, I was going to ask the 4 placement rate number again. 5 MR. McNAMARA: Exactly. So the CCC itself -- next slide. 6 7 So this slide does a couple of things. First of all, it reports at the top of the slide 8 9 what the actual allocations have been to the CCC 10 since the 2013 timeframe, and you can see that in 2016/17 the allocation was \$5.66 million. 11 So the 12 scale of the allocation to the CCC is not, you know, 13 tremendously large by comparison to what we've seen 14 already, but the results from what we're doing 15 actually are pretty considerable, meaning pretty substantial. 16 17 So the way in which it works is we take our 18 allocation and we apply those funds to these different program activities, energy opportunity 19 20 surveys and retrofits, and we offer those services in the form of labor and work to the LEAs throughout 21 2.2 the state, so in that sense we are working in 23 partnership either directly providing the services to the LEAs or working with other energy service 24 25 providers that the LEA may actually have contracted

1 to do that work.

24

2 Next. 3 The three services that we actually provide 4 are, as I mentioned, energy opportunity surveys, which are the ASHRAE compliant energy audits, and 5 also these are low cost energy opportunity surveys. 6 7 We also provide low cost retrofit projects. And the term 'low cost' means in the case of the 8 9 retrofit projects is that we don't actually purchase the materials or the retrofit materials themselves, 10 11 that's incumbent on the LEA to purchase, whether 12 they are purchasing it with their own Prop 39 allocation or other funds. But by actually 13 14 providing the labor to do the installations we 15 actually provide a substantial furtherance of their 16 ability to purchase more of these lighting 17 retrofits, and therefore we can do a broader spectrum of work for them, which we do with some 18 19 frequency. The third element is a no cost or low cost 20 21 energy efficiency educational engagement, and I'll 2.2 show you what that actually looks like in its 23 furtherance, but essentially, we do presentations on

25 for students. This is all focused on K-12 schools.

energy efficiency within the classroom environments

We also do program innovation work with them, and the largest of those, which I'll show you shortly, is with the Los Angeles Unified School District.

5 CHAIR GORDON: Bill, you might get to this 6 later, but what percent of the projects that are in 7 process or have been completed so far through the 8 CEC do you have Conservation Corps members doing 9 audits and even more so doing the retrofits, do you 10 know?

MR. McNAMARA: We don't have across table information between what the LEAs have actually applied on the EEP side to the CEC and approved, unless they report that back to us.

15 What we have is our services are offered directly to the LEAs themselves, so they have a 16 17 tendency to -- in some cases they will actually 18 refer to or make use of the CCC's energy opportunity 19 surveys as the CCC's energy opportunity surveys in 20 their submission with the EEP package. So that information could be derived but we don't actually 21 2.2 have that as an independent -- I mean, as the CCC 23 itself.

24 25 Next slide.

So let's take a look at what that actually

1 looks like today.

	So when we designed this program the idea
3	was we would start in the beginning by doing
4	assessments of as many locations as we could
5	possibly do with the funding that we were provided
6	to do that. So in the first year of funding, 2013
7	from July 1st forward to the end of the year we were
8	spinning up or staffing up and training and putting
9	together the curriculums and working with UC Davis
10	Energy Efficiency Center and private sector entities
11	as well to put together, you know, industry standard
12	approaches to doing energy audits, knowing that we
13	would do those at least for the first full year
14	exclusively before we began to do retrofits. It's
15	kind of like measure before you cut. So we provided
16	those activities in 2013 and 2014.
17	The chart here shows the year-to-date,
18	meaning year-to-date at the end of the calendar year
19	2016, so this information starts in 2013, goes
19 20	2016, so this information starts in 2013, goes through 2016, and then the to-date column is the
20	through 2016, and then the to-date column is the
20 21	through 2016, and then the to-date column is the cumulative of all of that through the end of
20 21 22	through 2016, and then the to-date column is the cumulative of all of that through the end of December 2016.

1 exterior condition to ASHRAE level 2 compliance. So 2 it's a very extensive set of data on those. 3 From a building standpoint, those 1,258 4 school campuses actually have a total of 12,653 5 buildings, these are condition building spaces. So we have actually done approximately 20 percent of --6 7 or actually had a response rate of about 20 percent of the total LEAs in the state in terms of we've 8 9 actually done service work for. 10 So we actually are accumulating, we think, 11 one of the largest detailed databases of actual 12 room-by-room plug loads, fenestration of the envelope, full envelope insulation, all the energy 13 14 use subsystems and all the best practices -- well, 15 maybe not best but all the practices, O&M practices of all of those buildings that exist anywhere for a 16 17 single market segment identified as commercial buildings in the class specifically to schools, so 18 it's a very substantial set of data that we have and 19 20 we have intention of making, of course, that available and working with other entities who might 21 2.2 like to mine that data. 23 So we've done, again, from a survey 24 perspective we've done 408 LEAs, we've actually 25 performed survey work for 408, which is about 20

1 percent of the existing population of LEAs 2 statewide. 3 Next. 4 So what does that actually look like? 5 So as part of the process we started on paper doing the ASHRAE standard level audits, and we 6 7 quickly found that that was really not the best approach, so we ended up developing a very simple 8 ASHRAE, basically taking the ASHRAE level 2 forms 9 10 and converting them into a tablet based system so it 11 works on an Android system. You can use your phone, 12 you can use a tablet, you can use this to collect the data and also to create a very extensive 13 14 photographic inventory to go with, on a relational 15 model, to go with all of the rooms and all the 16 things that have been observed. 17 And again, from a survey content standpoint 18 it's a whole building approach. It's the envelope, 19 lighting, control systems, HVAC, internal plug 20 loads, integrated energy management systems, 21 fenestration, and O&M practices, so it's a very 2.2 extensive view into all of these facilities. 23 Next. Actually you've got the next, thank 24 you. 25 So I mentioned that the data itself is very

1 extensive, and we have had some inquiries to make 2 use of the data. In particular, our working 3 relationships to develop the energy opportunity 4 survey in conjunction or in partnership with UC Davis Energy Efficiency Center. There was an 5 intentionality there -- there is the intention there 6 7 of actually putting all of that information into a relational database and making that available and 8 9 cross indexing other data as well, but as I said, 10 it's a very substantial set of data. It represents 11 about 20 percent, we think, of the total population 12 of buildings in the state, so it's at least based on the averaging that we see now. We've done 13 14 everything from the largest school districts to the 15 smallest of the school districts throughout the state, which I'll show you what that looks like. 16 17 Next. 18 On the eventuality or the progression of 19 the program especially toward the end of 2015 and 20 through all of 2016 was to move the ten crews which 21 originally were focused on doing energy opportunity 2.2 surveys to create a balance that finally moved to 23 seven and three. So we do seven of the crews do actual retrofit work at LEAs, schools, and therefore 24 25 create direct energy savings and direct cost savings 1 and direct greenhouse gas reductions.

And three of the remaining crews actually do energy opportunity surveys and sometimes in addition, depending on the demand load, they will actually do retrofit work.

6 But all of the crews have been cross 7 trained into both of those activities so that they 8 really represent a pretty substantially attractive, 9 from an employment standpoint, entry level group of 10 individuals, which again I will show you in terms of 11 how that's playing out.

12 Corps members typically sign up for a year 13 at the CCC, and many of the Energy Corps corps 14 members are hired away well before that one-year 15 period, which is a good problem for us to have in 16 the sense of that's the intention.

On the retrofit side we've done a total of 17 79 projects since sort of late 2015. These projects 18 are fairly large scale, meaning they're entire 19 20 school campuses, multiple buildings. Sometimes for 21 a school district there will be many school campuses 2.2 done over an extended period of time, but they take 23 a lot longer to do, obviously, than the surveys do, so the resources are tied up for a longer period of 24 25 time -- or deployed for a longer period of time to

do that kind of work, but ultimately they are 1 2 generating very substantial amounts of savings. 3 From that standpoint, we've done a total of 4 115,222 lighting retrofit changes, which would be lighting fixtures and associated ballasts. 5 There are other work associated with that that we do. 6 And 7 we've done about 8,883 of lighting control installations as well throughout the state. 8 9 The lighting changes that we've done is 10 actually about 15 different types of lighting changes that we've done, both exterior and interior. 11 12 The most common is to convert from fluorescent to LED tube lights. And in some cases, depending on 13 who the vendor is that the LEA selects to purchase 14 15 from, they may be with or without ballasts. But ultimately all of these changes are 16 17 also effecting on the subjective side the quality of 18 the educational environment itself, so there's a really positive multifaceted aspect of what we do. 19 20 Sometimes we tend to be talking about the energy 21 side, you know, exclusively, but there is in fact a 2.2 real effect on people as a result of this, and 23 that's something that we, as the people who install this and work with the school districts, get to see 24 25 very personally. We'll observe the actual

1 conditions and see what it looks like and talk to 2 the teachers and students after the work is done. 3 From that standpoint, we have estimated 4 annual and sustainable KWH savings of about a little over 7 million KWH to date. And there are many 5 projects that are in progress that are not yet 6 7 completed that are obviously not yet reported, but this is through the end of 2016. 8 9 And from a greenhouse gas emissions 10 standpoint, using simple calculations from the EPA, 11 it's about 1.683 metric tons of greenhouse gas 12 emissions abated. 13 Next. 14 This page here is simply restating some of 15 that in terms of showing the progression of that growth of effect over years. So the blue chart over 16 17 here is talking about cumulative KWH saved through 18 the end of 2016. And then the green one is the cost 19 savings. And then sort of the orange color one is 20 greenhouse gas reductions. 21 Next. 2.2 This chart -- and you can see it more 23 clearly in the report than this actual very minute portrayal here -- is of all the 58 counties in the 24 state of California. 25

1 Of the 58 counties, we've done a total of 2 more than 400 LEAs, and the distribution of those LEAs is in 50 of the 58 counties. So 8 of the 3 4 counties we have not yet served. That doesn't mean 5 that there isn't a request in to do work, but we have not yet completed work in those areas, so 6 7 anybody who is interested in the distribution from that county perspective, it's here for you to look 8 9 at. 10 The next slide is showing from an 11 educational standpoint. So the first two were 12 energy opportunity surveys and then the retrofit services, and the third one is educational 13 14 engagement. 15 Now, some of that is very straightforward, 16 as I said, doing presentations in the classroom 17 environment for students and for other interested 18 parties about energy efficiency, answering 19 questions, promoting the understanding and the 20 engagement of that especially with K-12 students. 21 But in addition to that, we also help to 2.2 architect programs that are interactive engagements. 23 So for example, with the L.A. Unified, which is the second largest school district in the country, 24 25 largest in California, they have a pretty extensive

1 linked learning program wherein they are able to 2 make arrangements with different private sector 3 companies to work with their students and actually 4 hire the students on a cooperative education program 5 and give credits for this and take the students as 6 employees and they're actually employees of the 7 school district during that period of time.

8 So one of the things we did is that the 9 services that we offer have quite a heavy bias, 10 which are on these charts, in the sense that we are 11 trying to provide as many of these to ADA 5000 or 12 less in terms of size of schools.

We service all schools who make a request, that's without a doubt, but we give some slight scheduling preferences to schools that are ADA 5000 and less, and also that have 50 percent or more of the free and reduced priced lunch. So those combinations work together.

19 L.A. Unified is unique in the sense that 20 they applied for 13,300 building audits, of which we 21 provided 30 campuses. And the campuses we provided 22 were all charter schools, by the way. And that was 23 not us who said, gee, let's do all the charter 24 schools, because there are 56 of them in the L.A. 25 Unified. These are leased entities that lease from 1 L.A. Unified, or so they report to me.

2 And so what we did was we said, okay, well, you pick the schools that you want. Obviously we 3 4 can't do the full 13,300 buildings, but we suggest you take who you think are the least efficient or at 5 least oldest buildings or some combinations of those 6 7 and come back to us with who you want to do, and they came back with a list that was all charter 8 9 schools.

10 And they very actively promote -- this is 11 firsthand observation over two and a half years with 12 them on this topic -- they very actively promote the charter schools that are leasing from them their 13 14 school facilities to apply for these types of, you 15 know, for their EEPs and to make use of the Proposition 39 funding. So we ended up doing a 16 17 total of actually 31 of their schools, the CCC providing the services. 18

But then the next step was, they have so many other facilities so we worked with one of the local corps. There are 14 local corps in the state of California. Now, they don't get funding from Prop 39 in the sense of an allocation like the CCC. However, they can be funded to do the same sort of work by the LEA themselves using their Prop 39 funds 1 or non-Prop 39 funds. So we worked with them to 2 train the local Conservation Corps to be able to do, using our curriculum and our materials and our 3 4 software systems to do the tablet surveys, etcetera, and they ended up getting a multi-year contract with 5 L.A. Unified and the CCC provides initial training 6 7 for the students and then they have -- well, actually, initial training for the L.A. CCC to do 8 9 the surveys for them.

10 But then we took it one step further and 11 said, okay, so how about if we train some of the 12 students, some of the high school students that might be in your linked learning program, and so 13 14 they created a new program which has been announced 15 and the kickoff for that will be toward the end of February or early March, and that new program is 16 17 called the SEAT Program, Student Energy Auditor 18 Training.

And that program actually we have trained the first group of 20 of these students in the first week of January. They now are deployed to work onsite in the school district buildings throughout the school districts in combination with the Los Angeles Conservation Corps who has been contracted to do energy opportunity surveys. So they've gone through the same classroom environment that the L.A.
 Conservation Corps folks go through to be trainers
 like we do for our corps members, and then they go
 out on the job and work as part of that crew.

5 So it's an extensive program. Half of the 6 group goes through an additional eight weeks of 7 classroom training and then they switch that group. 8 They go back out into the field, the other field 9 group comes back into the classroom.

10 That's an example of some of the work that 11 we've been doing to help further the Clean Energy 12 Jobs Act intention of creating job opportunities. It's creating many pathways for these high school 13 14 students as well as our corps members for employment 15 and also to community colleges, which we're 16 promoting them as a pathway that they should 17 consider.

Next slide. Good.

18

19 CHAIR GORDON: Bill, sorry, on that last 20 point, are you working directly with the Community 21 College Chancellor's Office on that connection? I 22 mean, is that like a formal relationship with the 23 community colleges?

24 MR. McNAMARA: So the answer to that is 25 yes, we do have -- we don't work -- let me rephrase

1 that.

2 So we do work with community colleges, and 3 as a point which you'll see coming up very shortly, 4 we work with Sierra College, for example, we 5 contract them and we work with them very closely to 6 develop the training for energy opportunity surveys 7 as well as retrofit lighting retrofit classes, 8 etcetera.

9 And we have worked in the sense of talked 10 to and addressed different ways of working together 11 with the Community College Chancellor's Office as 12 well, but there isn't an active program. There has been some funding at the present, but that's an 13 14 ongoing activity. So we work with individual 15 community colleges. L.A. Trade Tech is another 16 example.

So on the training side, we've trained a total of 553, on the survey side, 553 students which are corps members, and we've done 301 retrofit training of individuals.

Now, the thing is those are additive like you put those two together. In most cases, almost all cases, the 301 are part of the 553, but what I'm doing is providing the detail of all the different training and the level of training and activity that 1 these good folks, corps members, are actually 2 engaged in, and I provide that data in this table 3 from the beginning, July of 2013, all the way 4 through the end of 2016 so that you have a sense of 5 how that's building up and what its effect is.

6 On the staff side, I provide the same 7 information from the beginning 2013 through the end 8 of 2016. We've trained a total of 37 of our staff 9 and deployed them throughout the state. That 10 doesn't mean that they're all still there, there is 11 attrition over time, but most of them are there. 12 Next.

So this simple graph is an illustration of 13 we draw -- on the lower left side with the big blue 14 15 arrow, we draw people from all over California, young corps members, to join the CCC. They then go 16 17 through this process which is up the pyramid, if you 18 will. Everything from recruitment through comet training, which comet is kind of like a boot camp 19 20 equivalent training, you know, physical training as 21 well as social training, etcetera, in preparation 2.2 for more technical training and moving out into the 23 field.

24 Of the corps members that want to go into 25 the energy field, which is a large percentage. The

1 CCC itself has about 1240 corps members right now. 2 It's authorized from a FTE perspective to have about 3 1500. So of those, then begin a pretraining 4 engagement, and that goes through Schneider Electric's Energy University courses, which are 5 online courses. So they do a number of those 6 7 courses in preparation, and then they go to be trained first for the energy opportunity surveys and 8 9 they go out in the field and deploy and work in that 10 Then they come back in again to do energy area. 11 efficiency retrofit training.

And then there's also another aspect whereas most of the corps members are deployed in crews, meaning CCC managed, CCC administered using our facilities, trucks, etcetera, to move them around.

17 There also are a number of engagements 18 where we use an internship model where a third party 19 energy efficiency company or ESCO might want or be 20 willing or want to have corps members join in with 21 their crews to work with their crews, so they are 2.2 supervised by the sponsoring partner under a set of 23 rules and responsibilities that we have for internship. That is a small number by comparison to 24 25 the crew model but it does exist and there is great

1 interest.

From the internship model, a very high percentage, more than 80 percent of the interns are hired away by the people who bring them in. It's kind of like a try before you buy model, so it's been very successful in that regard.

7

Next.

So the demand on the survey side, so in 8 9 August of 2013 we put out the announcement to all 10 the LEAs of availability of energy opportunity 11 surveys, and from that between that time period and 12 the end of June we received about 350 LEAs who applied for our services. Those 350 LEAs were 13 14 actually representative of about 80 percent of the 15 total student population within those LEAs. The vast majority numerically were small but all of the 16 17 large one applied as well, so that gives you some 18 sense of the dynamics there.

19 That totaled more than 33,000 schools and 20 212 million square feet of building space that was 21 requested for us to audit. From that number we've 22 actually audited about 1,258 of those schools for 23 108 LEAs, and that total is 12,653 buildings. 24 So there's still another 20,000 buildings 25 left from those original applications, which I'm not

1	saying are still valid, you know, in the sense that
2	they may have very well gone on and had somebody
3	else do the work or decided not to do the work, but
4	a large portion of them we still continue to get
5	requests for energy opportunity surveys coming in
6	literally every month, so the demand for the service
7	is still very substantial but we've turned most of
8	our resources toward the retrofit side which has a
9	very large demand cycle.
10	Next.
11	On the side of the energy efficiency
12	lighting retrofit installation, as I mentioned, we
13	do the labor for that, so an LEA can say to us,
14	okay, we have this. We use our Proposition 39 funds
15	to pay for the crews. The crews go to the LEA
16	location. The LEA is responsible for paying for
17	everything else, you know, like buying the retrofit
18	materials and getting whatever other supervision
19	requirements that they may have locally as well. We
20	then do the installation for those, and of course
21	that's a significant portion of the cost of doing
22	the retrofit, so therefore typically the LEAs, of
23	which we've done now about 79 of these projects,
24	these LEAs typically are using, that we've observed,
25	using the additional savings to buy more lighting

retrofits, because in many cases when you go to a 1 2 school campus the choice for their particular 3 budgeted funding opportunity would not cover the 4 entire campus, but so now in conjunction with the CCC they can do many more and therefore get greater 5 savings and much more cost effective implementation. 6 7 And also, of course, it effects the quality of the work environment. 8

9

10 So this is sort of the end of the 11 presentation.

Next.

12 One of the things we've found out is that from a hiring standpoint, and this is not -- we do 13 14 have more detailed statistics on this, but these are 15 things that are self-reported, meaning the actual corps members. We don't have a mechanism to 16 17 actually track the corps members after they leave 18 the CCC. I'm not suggesting that there isn't a way 19 to do that, but we don't currently track them. What 20 we do is we ask them and many of them, a large 21 percentage, will self-report that condition, like if 2.2 they graduate from our program or if they leave our 23 program early. 24

Now, as you'll see here, to date 49. Andthese corps members all sign up for a one-year

1 period, so it's not like all of them would have 2 graduated right away. So 49 of the Energy Corps 3 members have actually gone to work directly and 4 self-reported as well as their employers have directly reported this to us as well, joined energy 5 industry companies. Typically these are contractors 6 7 and ESCOs but in some cases they are utilities and other entities, third party energy efficiency 8 9 companies.

We've had requests, another 52 Energy Corps members have also left early, meaning been hired away by companies that are in the supply chain for the energy efficiency companies, and in some cases not directly associated with them.

15 So it's a total of more than 100 of our 16 corps members that we've trained with Proposition 39 17 funds have been directly employed and measurably 18 employed. In many cases the compensation that 19 they're getting is very substantial by comparison to 20 the track that they might have been on at the time 21 that they joined the CCC.

We also have had very substantial requests from individual companies to hire more corps members. Like in some cases like in the northern San Diego County we have two crews that work out of

the Vista Center, and we've had at least three 1 occasions now where those crews were -- I mean, we 2 were solicited to hire the entire two crews away at 3 4 This is a very good thing, meaning it's one time. not what we want to do ultimately but we do want 5 them to find this kind of employment. And these are 6 7 from energy efficiency companies, so it's a perhaps unscientific measure at the moment except for the 8 9 ones that are actually hired, but the trending toward that in terms of like how long do CCC Energy 10 11 Corps members stay in the program before they are 12 hired out versus how many wait until the one year is 13 up and they graduate from the program. We have 14 quite a bit of data on that.

15 And the other thing is we've also been 16 recognized, the CCC's program has been recognized in 17 a number of ways, and one of the ways is that a 18 number of the contractors and ESCOs we worked with 19 have actually decided that they would pick somebody 20 from the CCC crew that works with them, or at least 21 onsite with them, and give them a scholarship to 2.2 community college or to a four-year school, or hire 23 them away directly, and that's what these photos at 24 the bottom are actually of the presentation of 25 awards. So we've gotten a number of award

1 recognitions for this. And the quality of the work 2 that we do has been, I think, vetted by many 3 entities that actually do this sort of work and held 4 to a pretty high standard. 5 And that's it for my presentation. Happy to answer any questions. 6 7 CHAIR GORDON: Thank you. Questions from 8 the group. Walkie? 9 VICE CHAIR RAY: Yeah. Great, great 10 presentation. 11 How many young people pass through your 12 programs annually? 13 MR. McNAMARA: The collective CCC program, all of it? 14 15 VICE CHAIR RAY: Yeah. 16 MR. McNAMARA: Okay. So we have on any 17 given day, at least for the last 18 months, we have about 1,240 corps members, and the attrition rate of 18 that -- so the CCC is one of these organizations 19 20 that when the economy is not wonderful we have lots 21 of people who want to join. When the economy is 2.2 doing very well they tend to stay less time. So we 23 have probably about a 40 percent attrition rate per year, measured against the full year wherein people 24 25 come to the CCC, they gain many skills and they put

1 those to good use, and during that time they have an 2 opportunity to find a full-time employment that's 3 not with the CCC and they go to that.

VICE CHAIR RAY: So maybe 7-800 young
people a year graduate or are in it long enough that
they are adept at analyzing energy management
issues.

This is the entire CCC. MR. MCNAMARA: 8 9 Now, the Energy Corps has a higher rate of 10 retention, so we have a less separation rate, 11 meaning people leaving for not wonderful reasons, 12 but we have a higher rate of employed away, so the Corps members will get somewhere between six and ten 13 14 months. The Energy Corps members become exposed to 15 many opportunities and they get solicited to be 16 hired away.

17 VICE CHAIR RAY: Where I'm going with this, there is some number, 800, 600, 1000 people who are 18 19 suddenly trained and capable of becoming project 20 managers, property managers, plant engineers. 21 They're on a pathway into the middle class. 2.2 MR. MCNAMARA: Yes. But T will have to 23 look at that again to give you a more realistic number, but I would say that out of the -- at any 24 25 given time we have like 120 CCC Energy Corps corps

members, so from that number we would probably see 1 2 about 200 corps members would come in and cycle 3 through that population of intended population of 4 120 in a given year. 5 VICE CHAIR RAY: Okay. MR. McNAMARA: So the target is 120 corps 6 7 members that are Energy Corps, and during the year we would probably see up to 200 corps members join 8 9 and leave for some good reason or go to one of our 10 other crews. 11 VICE CHAIR RAY: You have corpsmen and 12 women other than energy. MR. McNAMARA: Yes. 13 Yeah, very 14 substantial. 15 VICE CHAIR RAY: I apologize. MR. McNAMARA: We have 1,240 corps members 16 collectively, all of the CCC, 26 locations. Out of 17 18 that, the Energy Corps right now consists of 11 crews and staff, and 10 of those are Proposition 39 19 20 funded. So from that population we have about 120 21 corps members as the target annual population, and 2.2 then it cycles through probably 200 people cycle 23 through that annually. VICE CHAIR RAY: I think it's wonderful 24 25 you're sending these messengers out and doing good

1 and training people to enter the middle class. 2 MR. McNAMARA: Exactly. And just one last 3 quick comment. 4 So a lot of these corps members were not on 5 a track to any particular thing, whether it was college or career, and so the change for them is 6 7 rather profound. CHAIR GORDON: On this point, and then 8 9 David, just on Slide 14, which is the slide where 10 you talk about the number of trainees, it might 11 actually be helpful -- you made the point verbally 12 that many of the people trained for retrofit training had also already been trained for the 13 surveys, but on the slide it looks like they're 14 15 individuals because it totals the number of trainees as if you have 1,505 but actually --16 17 MR. McNAMARA: Yeah, I think the labeling 18 could be changed. Those are instances of training. 19 CHAIR GORDON: And we won't hold up 20 approval unless there's some other reason, but if 21 you could just address that and make that clearer, I 2.2 think that would be helpful. 23 MR. McNAMARA: I would be happy to do that. 24 CHAIR GORDON: David, did you have a... 25 BOARD MEMBER DIAS: Yeah, actually I was

1 going to ask about that.

2 How do you recruit? And that's another 3 question I had, and then I have one other one. 4 MR. McNAMARA: So the CCC has a cadre of 5 recruiters that are stationed throughout the state, and so we recruit either online -- I mean, people 6 7 hear about us or they discover us online or somebody recommends us. Word of mouth is the biggest single 8 9 point, recommendation by other young adults. 10 We also recruit directly into the Energy 11 Corps itself, so there's a general recruitment into 12 the CCC and then once you're in the CCC you might actually want to be interested in energy. When you 13 14 found out that we did energy, you could say that you 15 wanted to do that and you could move into the Energy 16 Corps side. 17 But we also do direct recruiting now into the Energy Corps, which is something we didn't do a 18 19 year ago, and so we go to trade fairs or we go to 20 community colleges or other places where they have 21 energy seminars or that sort of thing and we show up 2.2 and we talk about what we do and show all of this 23 information and invite people to come and see us, 24 etcetera, so we recruit in all those ways. 25 BOARD MEMBER DIAS: Great. And then the

1 other question. I was looking at the numbers of 2 trainees, which is actually it looks like it's that 3 many, you know, the total is either 1505 or 1805. 4 MR. McNAMARA: Yeah, a total of instances 5 of training. BOARD MEMBER DIAS: Yeah, but it's under 6 7 the heading of training, so --MR. MCNAMARA: So I will adjust that. 8 9 BOARD MEMBER DIAS: Yeah, but then also the 10 hours, and I'm assuming that like if you go to 11 retrofit training, for example, you have 301 12 trainees that went through and then it had 24,000 hours, which is about 80 hours a person, I'm 13 14 assuming? 15 MR. McNAMARA: Right. 16 BOARD MEMBER DIAS: Okay. 17 MR. McNAMARA: Yeah, so the courses are different lengths, and also it depends on, for 18 19 example, if somebody comes in with a certain 20 background, educational background, the CCC also has 21 a direct relationship with the John Muir Charter 2.2 School, so sometimes it takes a little longer, a 23 little less time, but it's a pretty standard length 24 of time for the surveys and the retrofit training. 25 BOARD MEMBER DIAS: Okay. Thank you.

Welcome. 1 MR. MCNAMARA: 2 CHAIR GORDON: I know Randall had a 3 question then we'll go to the phone. 4 BOARD MEMBER MARTINEZ: Thank you for the 5 presentation. I know that we're going to have a presentation next by the California Workforce 6 7 Development Board, and I notice that they made a grant to L.A. Trade Tech for a pre-apprentice 8 9 training program, and you mentioned L.A. Trade Tech 10 was one of your partners. I'm curious if there's cross utilization. 11 12 Graduates from the pre-apprentice program, do they end up in the CCC or vice versa? 13 14 MR. McNAMARA: So at the present time --15 this brings a broader topic of organized labor too, 16 for example, to traditional apprenticeship programs. 17 And so we don't actually have a direct working 18 relationship with L.A. Trade Tech in that particular 19 regard. We do work with them. We've been talking 20 with them about certification of the training 21 programs we do and we've also talked to the 2.2 Community College Chancellor's Office and gone to 23 their meetings and presented to the people from all the different campuses what services we have and how 24 25 they might make use of those services.

In those cases they would not be Prop 39 funded because our Prop 39 fund is targeted to K-12, but on a reimbursement basis they might be interested in having these kinds of services performed or in which case they might use their Prop 39 allocation funds for that.

7 So we work with apprenticeship programs but not in a formal basis. Historically the CCC has 8 9 done that but at the present time in the Energy 10 Corps we have not. We've talked to people, we have 11 presented those opportunities or worked with 12 organized labor and others to explore the possibilities of having our program become like a 13 14 pre-apprenticeship program so that we could help 15 create a pathway for Energy Corps members to organized labor. 16

17 Same thing is true for going to community 18 colleges. We're working with community colleges now to develop a micro badging system which is kind of 19 20 an accreditation thing for the work that we're doing 21 and the work experience that the corps members have. 2.2 So there's still much to be done and a lot 23 of other opportunities as well. BOARD MEMBER MARTINEZ: It seems to me that 24 25 if it is possible that a logical extension would be

1 for the Energy Corps to be recognized as a certified 2 pre-apprentice program with organized labor. 3 MR. McNAMARA: I certainly would agree with 4 that. BOARD MEMBER MARTINEZ: 5 Thank you. CHAIR GORDON: Thanks, Randall. 6 7 On the phone, Arno, Chelina, Mark, questions? 8 9 BOARD MEMBER GOLD: No questions, just 10 obviously very, very impressive, so thank you. 11 MR. McNAMARA: Thank you very much. 12 BOARD MEMBER HARRIS: Thank you. It sounds like no CHAIR GORDON: Great. 13 14 other questions from the members. So again, with 15 the same caveats as before, looking for a motion to 16 approve the report for our use in our bigger report 17 with obviously small modifications, not needing 18 additional votes. Is anyone willing to make that motion? 19 20 BOARD MEMBER MARTINEZ: Kate, I'd like to 21 make the motion perhaps with the understanding that 2.2 when we convene next and we talk about possible 23 recommendations that this group would make to the 24 Legislature, that we discuss the concept of what we 25 just discussed, the Energy Corps becoming a

1 certified pre-apprentice program.

2 CHAIR GORDON: Let's take that up at the 3 next meeting, but thank you, I will make a note of 4 that. Actually, you reminded me that I did have a 5 question, Bill, before we go to the motion, which is 6 you said earlier a couple times that 10 of your 11 7 groups are Prop 39 funded. What happens to you if 8 this program is not continued?

9 MR. McNAMARA: So in 2013 when I was called 10 on as a consultant to architect the Energy Corps, 11 there was no Prop 39, so it was meant to be a self-12 funded reimbursement based program.

13 So what we do is, what we haven't talked 14 about today, which is appropriate, is all of the 15 other work that we are engaged in now with the 16 Department of General services and private entities 17 as well that is all about reimbursement based 18 contract work.

So we will, if Proposition 39 is extended in some way, we will continue to put those funds to good use. But if it isn't, we will create reimbursement opportunities, which I'm already doing.
CHAIR GORDON: Got it.

MR. McNAMARA: To take all of those 10

25

1 crews and more, which is what we're doing right now. 2 CHAIR GORDON: Great, thank you. Great. So Randall, I have the note down for the next 3 4 meeting on recommendations, and thank you for the answer to that question. Looking again for a motion 5 on this. 6 7 BOARD MEMBER MARTINEZ: So moved. CHAIR GORDON: Thank you, Randall. 8 9 BOARD MEMBER DIAS: Second. CHAIR GORDON: Second from David. 10 11 Roll call, please. 12 MR. BASTIDA: Board Member Gordon? CHAIR GORDON: Yes. 13 14 MR. BASTIDA: Board Member Ray? 15 VICE CHAIR RAY: Yes. MR. BASTIDA: Board Member Harris? 16 17 BOARD MEMBER HARRIS: Yes. MR. BASTIDA: Board Member Odbert? 18 19 BOARD MEMBER ODBERT: (No audible 20 response.) 21 MR. BASTIDA: Board Member Martinez? 2.2 BOARD MEMBER MARTINEZ: Yes. 23 MR. BASTIDA: Board Member Dias? BOARD MEMBER DIAS: Yes. 24 25 MR. BASTIDA: Board Member Gold?

BOARD MEMBER GOLD: 1 Yes. 2 CHAIR GORDON: Chelina is an abstention, 3 right, because she's not here anymore? 4 MR. BASTIDA: Yes. 5 CHAIR GORDON: Thank you. Thank you, Bill, for your presentation and for the program. 6 7 MR. MCNAMARA: Pleasure. CHAIR GORDON: And we will talk directly, 8 9 as I will with everybody, just about any small 10 modifications. Thank you. 11 MR. McNAMARA: Thank you for the 12 opportunity today. Have a good day. 13 CHAIR GORDON: You, too. 14 All right. Both Items 7 and 8 put Sarah 15 White on the hot seat here. The first will be the presentation and the potential vote on the annual 16 17 report from the workforce development board and the 18 second will be on the jobs report specifically. 19 And hi, Sarah. 20 MS. WHITE: Hi. 21 CHAIR GORDON: Welcome. 2.2 MS. WHITE: We have some flashy handouts if 23 we could be so bold. They're a little bit better than that. Could I just hand these out? 24 25 CHAIR GORDON: Great, thank you. I feel

like I should say you may approach the bench because
 I feel like a judge up here.

3 MS. WHITE: Sort of, yeah. I was going to 4 vault over but trying to maintain some decorum.

So good afternoon, thanks for having the 5 state workforce board come in again to report on the 6 7 work that we're doing with and for all of you. We have put our energy into producing two different 8 9 reports on two very different kinds of pieces of 10 this project, which we will walk you through. Ι 11 have a few slides but mostly wanted to give you the 12 highlights and let the written reports speak for 13 themselves. Answer any questions.

14 Oh, first of all, I'm Sarah White. I'm 15 Deputy Director at the California Workforce 16 development Board. I just wanted to flag for the 17 next conversation we would be happy to partner with 18 you in thinking through the role of pre-19 apprenticeship, specifically in and outside of Prop 20 39 and there's a whole body of work that people fit into in all kinds of different ways and different 21 2.2 organizations and we've done a lot of hard thinking 23 about that around the state, so we'd be happy to -that was a great guestion and I think we have some 24 25 thoughts on that from lessons learned from this and 1 other work on that, so that's an ongoing 2 conversation which we'd be very interested in 3 participating in, but I'm not going to take us over 4 there today.

5 So I was struck as the earlier presenters were talking how much a lot of this work is about 6 7 more broadly sharing the economic and the jobs benefits of energy efficiency investments in 8 communities and in school districts around the 9 10 state, and the fact that we have for our training 11 programs we have just a tiny sliver of the Prop 39 12 money, about \$3 million a year, but with that we are investing not in training programs but in 13 14 infrastructure, by which I mean we're not just 15 improving the capital of the built environment but we're improving the skills infrastructure. We're 16 improving the human capital, and that's a huge piece 17 18 of this work. It's in the legislation in a variety 19 of ways and so I think when we talk about the 20 training that we're doing that's how we think of it, 21 as building a system of which pre-apprenticeship is 2.2 an enormous and important part. 23 Well, let's go on to the next slide, let's talk a little bit about the goals. 24

25

So the pre-apprenticeship programs for Prop

1 39, as for most pre-apprenticeship programs, were 2 designed to reach underserved communities, at-risk 3 youths, veterans, women, low income, depending on 4 the trade and the area, a variety of barriers to 5 employment, and they really were designed specifically to provide what you all have mentioned 6 7 earlier, which is specifically a career pathway to family supporting jobs, middle class jobs in the 8 construction trades. We've talked about this 9 10 before, and we think that the best way to get there 11 is through training folks to enter into and be part 12 of formal apprenticeship programs. It is the way 13 that we guarantee wages, benefits, and guality of 14 work across the state and the way that this prepares 15 people not just for careers in energy efficiency but 16 for careers across the spectrum of energy 17 development. So the other piece that I think is critical 18 19 to know about our Prop 39 pre-apprenticeship program 20 is that it's based on the multi-craft core 21 curriculum. Not going to go into great detail now, 2.2 we have talked about this a little bit before, but

- 23 what makes this different from other pre-
- 24 apprenticeship programs is that the multi-craft core
- 25 curriculum was developed nationally by the building

1 trades councils. Building and construction trades 2 came together and all the different trades -- brick 3 layers, ironworkers, plumbers, carpenters, laborers, 4 electricians, dozens and dozens of trades came 5 together and said --

Normally when you go into an apprenticeship 6 7 you have to pick a trade and go through. So what the multi-craft core curriculum does is it says here 8 9 are the common skills that we need to go into any of those trades. Let's take a bunch of folks, train 10 11 them with all of those common set of skills, and 12 then you're able to leap into any one of the trades instead of going straight through a single silent 13 14 pathway. So it's a very unique thing that was 15 developed at a national level and has been piloted in California over the past five years, but then 16 17 specifically is a piece of this training program.

18 So it's very unusual. It gives people the 19 opportunity to -- and one of the things we've seen 20 with pre-apprenticeship is so essential, and I will 21 come back to this at the end, is having actual 2.2 negotiated relationships with the building 23 construction trades, because you can train a lot of folks up but if they don't have a place to go and 24 25 someone to hire them, then they're just trained,

1 right, and so we see this over and over again. 2 So the great thing about a strong pre-3 apprenticeship is that it actually has a 4 relationship with the building trades. It doesn't quarantee placement but it open a lot more doors. 5 And again, I will come back to that. 6 7 So we're excited about the multi-craft core curriculum, which is an essential piece of this. 8 9 And the other thing to know about this work 10 is that we build partnerships. You mentioned L.A. Trade Tech. And all of our different training 11 12 partnerships -- we have 13 of them now -- are based on regional amalgamations of building trades 13 14 councils, community based organizations, workforce 15 development boards, community colleges, Conservation Corps in some cases, and they all work together and 16 17 they often provide different things. 18 There's no one person that does everything 19 well, so you'll find one person does the training. 20 One group might be the best at the recruiting. 21 Another group's going to provide the sort of 2.2 supportive services so that folks can actually 23 succeed and make it through. So there isn't any one organization we find does all of those things, but 24 25 partners come together in different regions to do

1 that together. It's a holistic approach.

2 So we have just released the (inaudible) 3 report that we also sent around to you, I think this 4 morning, talking about what's happened just in the 5 last year with these programs. So if you want to go 6 ahead a slide, I don't want to go into great detail 7 here but I should just mention we have two cohorts 8 of grantees.

9 The 1.0, as we call them, are six programs 10 that we first launched in 2014. We have given them 11 extended funding. We would like to see them get not 12 just up to speed but continue refining the lessons that we learned in those pilots, and they are 13 14 continuing to serve people, so we have six of the 15 1.0 grantees who we gave additional money to this 16 year to continue.

And then if we go to the next slide, these are the new, the 2.0 grantees. We're missing one there, I just have four. The fifth one there is the San Diego Urban Corps, so there are five new of these training implementation grants.

In addition, we have two development grants, which is a smaller allotment which gets partnerships together to figure out what they want to do. It gives them six months to come together 1 and say, you know, you can't just build something 2 from whole cloth. What's it going to look like? 3 Who's going to do what? So these are the 4 development grants. And in the first term we had 5 development grants that are now funded as full 6 training grants.

7 And then we have, as we had in the 8 beginning, a technical assistance and capacity 9 building from the California Labor Federation, their 10 workforce and economic development initiative 11 provides technical assistance on the ground.

These are very hard things to do. preapprenticeship is not for the faint of heart, and so the folks at WED work with each partnership on the ground to make sure that the partnerships are going, that everyone's talking to each other and that people are being served, and they can troubleshoot in the moment whatever the problems are.

We also have a community practice where we bring together all the grantees four times a year to learn from one another. They are pilots. They're all the same goals although they serve different groups of people.

And then we also have this year an investment in capacity building with the East Bay

Alliance for Sustainable Economy e-base who is looking into how community organizations and building trades work together to develop community workforce agreements, which are the way we get the demand side of this equation going.

In other words, what that means is that if you're going to do a big public infrastructure project or a small one, it could be a school, it could be a stadium, that there's a way to write into the program of that a way that benefits communities, like a community benefits agreement that guarantees that some of the investments will be reaped locally.

And it also quarantees a certain amount of 13 14 local hire, so one of the ways you make sure that 15 there are placement opportunities is that you write into the contract that people have to hire a certain 16 17 number of people locally, a certain number of zip 18 It's a standard practice but hard to do. codes. 19 With all the partners in the room it's threading a 20 needle, so we have some experts in doing that going 21 around the state to work with regional partnerships 2.2 to suggest how they might get involved upstream on 23 this.

24 So those are our investments right now, so 25 that's about \$5 million just for this year.

1 And if you want to go to the next slide. 2 Well, this is just repeating the alphabet 3 soup which I just told you again, the kinds of 4 partners, the workforce development board, the building trade council, the joint apprenticeship 5 training committees, community based organizations, 6 7 the community colleges, the Conservation Corps, and So getting these folks together into a 8 others. 9 single unit to figure out how to best serve groups 10 of people and feed them into the construction trades 11 is the challenge of this work. 12 And I should say that we -- and we explained this before but it's worth saying again, 13 14 that the vision of the Board's Prop 39 training 15 investments is that the best way to get 16 disadvantages communities into pathways to the 17 middle class, working on school projects or others is to get them into apprenticeships, which is a 18 19 three- to five-year training program in the building 20 trades. 21 So there's not a guarantee that these folks 2.2 are going to go in and tomorrow be working on the 23 school. In fact, they wouldn't have had time for 24 that training. 25 The pre-apprenticeship is just to get folks

up to the level where they pass the reading and the 1 2 math and the tools and the other kinds of skills 3 necessary to get into an apprenticeship. Then the 4 apprenticeship itself is three to five years. During the course of this we're learning energy 5 efficiency skills to be used on these and many other 6 7 projects, but the point is to build the pathway and the pipeline, right, rather than giving people a 8 9 narrow set of skills to do a single job at a single 10 site but to give them a lifetime career doing this kind of work. 11 12 CHAIR GORDON: Sarah, I'm sorry. MS. WHITE: 13 Yes. CHAIR GORDON: And I know Bill's not here 14 15 anymore, unfortunately. So you just made an 16 important point about the three years, the long term 17 of the apprenticeship, and obviously they're paid while they're in the program, right? 18 19 MS. WHITE: Yes. CHAIR GORDON: So do you have any sense at 20 all of the kind of different outcomes of coming out 21 2.2 of that type of an apprenticeship program and going 23 into the trades in terms of pay, benefits, whatever, you know, the quality of the job, versus people who 24 25 kind of go through the pathway you just talked

about, which is more of a single set of skills or
 take a community college court, which is not a bad
 thing but let's just say versus another pathway.

MS. WHITE: Right. I mean, right, there's many ways up and in and through. I think that we will get to that in actually we talk about the jobs report, that's where we address some of the job guality issues.

9 I mean, this is the place where you find 10 the data that we have are good. If you take the 11 time to go into an apprenticeship, apprenticeship is 12 the gold standard of earn and learn training programs. We find that they have the highest wages, 13 that they have the best job retention. 14 It's 15 actually a negotiated agreement between employers, labor, and workers, so that people understand 16 17 there's a training progression.

You start out making a little money. As you gain skills, you gain income, and you get an industry certified credential.

21 The same is true for the pre22 apprenticeship, this is a gateway into those
23 training paths.
24 The labor market data that we have shows

25 that the highest quality jobs and the only guarantee

of the quality of job is in the apprenticeship
 programs where possible.

3 CHAIR GORDON: David, of course go ahead.
4 BOARD MEMBER DIAS: I see you have the
5 grantees, what is it, seven or eight or whatever it
6 is. Did you open it up to more throughout
7 California or is that just what you picked, or how
8 did it just come to them?

9 MS. WHITE: We had an open request for 10 applications that was a procured competitive 11 process. The first round of grantees there were six 12 of them, six training and implementation as well as 13 two development and some technical assistance.

We did a second round last year that reopened it, and that's where we got the seven new projects. The five grantees, the two development and the two others. So they were both open and competitive processes.

BOARD MEMBER DIAS: Good.

19

MS. WHITE: What we'd like to see, because as you can imagine, building these kinds of partnerships takes a fair amount of investment, time, money, resources, and they've been able to run cohorts through pretty quickly, which is amazing, but we want them to really build and thrive, so at the end of the first round they were just up and
 staring to run, and so we invested in them for a
 second year based on performance criteria.

4 BOARD MEMBER DIAS: Are you going to open 5 it up for more later?

MS. WHITE: To talk about the future a 6 7 little bit, because we only have funding through 2018 we didn't feel that there was room for another 8 9 round of that. What we were hoping to do is we have 10 set aside funds, we do have an investment plan so 11 that if performance is satisfactory with the new 12 rounds we would have enough money to raise the development grants this year into full training and 13 14 implementation grants, let them run through the end 15 of 2018, as well as investing in the five that have just started last summer and let them run through 16 17 the end of 2018 so that we have various grantees in 18 various stages of development, but that's what we think. 19

We did not think there was enough time in one year to get these things up and going and done, so that's with the amount of money that we have, which is also a limited amount of money, that's where we have budgeted it.

25

We do have other funding coming in from

1 other sources where we are considering doing a 2 different kind of open RFA but I can talk about 3 that. 4 BOARD MEMBER DIAS: Thank you. MS. WHITE: Sure. 5 CHAIR GORDON: Did someone on the phone 6 7 have a question? We just heard a little bit of feedback, wondering if someone was trying to break 8 9 in. 10 BOARD MEMBER HARRIS: Not me. 11 CHAIR GORDON: Okay. 12 MS. WHITE: Can we go ahead? CHAIR GORDON: It wasn't Arno, great. 13 14 Good, go ahead, Sarah. 15 Just keep running the slides MS. WHITE: because I'm not even sure where we are now. 16 17 Oh, we'll just jump in here, performance. 18 I just wanted to note that -- you talked 19 about -- you've asked a number of times about placement. So tracking placement is very difficult 20 21 to do but something that we are committed to do as 2.2 part of this program. 23 What was negotiated at the beginning is 24 that the performance schools track a variety of 25 kinds of placement, what counts, and this is

consistent with the standard for workforce programs
 around the country, so a number of things.

3 Getting an industry valued credential, very 4 important. We measure that by somebody who goes through. This means that when you go through a 5 training program you come out with a piece of paper 6 7 that tells employers and schools this is what I This is legit. I have a certificate. I have 8 know. a credential. It means something. It's not just I 9 10 went to, you know, I went to the corner and got some 11 skills, right, or I learned it in my basement. Ιt 12 means that this is a valued credential.

The MC3 certificate which folks get for going through this program is exactly that, so that any employer or any school looking to admit or hire folks knows exactly what they did to earn that degree. So we count earning an industry valued credential as an important benchmark.

Also, there's a number of other placement outcomes.

21 Placement into state certified22 apprenticeship, again, the gold standard.

Placement in continuing education, because we think that going back into full secondary education for a longer career, obviously a great

1 outcome.

2	Placement in construction or energy
3	efficiency employment. Apprenticeships, you only
4	have an apprenticeship if there is a job. I sort of
5	want to make this point that apprenticeship is not a
6	system where you simply run through a pre-
7	apprenticeship training program, then you get placed
8	in an apprenticeship. There's only enough
9	apprenticeships for how many jobs there are, so when
10	there are jobs open they will hire on apprentices.
11	Usually we've found for this work it's a ratio of 20
12	percent, so about one apprentice to every five or
13	four workers, journey level workers for the training
14	purposes because they are earning as they're
15	learning, right, so they're learning on the job as
16	well as in classroom instruction.
17	So this program, the Prop 39 program is
18	just to get people up to the level to get into these
19	apprenticeship programs.
20	So in the meantime, until an apprenticeship
21	slot opens or somebody decides that's not the career
22	for them, getting a job in energy efficiency
23	employment, even if it's not a formal
24	apprenticeship, counts as a win, right, like that's
25	a good thing. We want people to get employed.

1	We find that our placement numbers, in
2	fact, that's why we call it a snapshot, they are
3	constantly moving because folks graduate from one of
4	these pre-apprenticeship programs. They might work
5	as a helper for three months, or they might work on
6	a site for two months before they get accepted into
7	an apprenticeship program, so it's not just a
8	straight pathway through. So the placement numbers
9	vary as people move through their careers.
10	And once we have a solid dataset and are
11	able to track these folks into the labor market, we
12	will be able to measure their retention in
13	apprenticeship as well as their income increase, and
14	this is critical.
15	Again, apprenticeship is a long process and
16	one of the things we find particularly with policies
17	with barriers to employment is that the retention
18	rates are not great in apprenticeship. It's very
19	difficult. Very high levels of reading and math.
20	Very hard physical labor. You know, these are
21	really tough jobs, and so folks wash out of them a
22	lot, so one of the things we do with pre-
23	apprenticeship is try to make sure that people are
24	prepared and ready and know what they're going into.
25	And then one of the things is to show that

1 this actually going through pre-apprenticeship 2 actually helps them stay and persist through 3 apprenticeship because apprenticeship persistent 4 rates are really pretty low all over the country, 5 and especially for women and people of color.

6 So these are some of the performance goals,7 I'll give you a quick performance snapshot.

8 I think the thing to take away here, these 9 are percentages which are an update of what we gave 10 you last year. This is based only on the first six 11 projects because they have completed more than a 12 year. The second round that we talked about those 13 grantees, we'll have data for them this summer when 14 they're done with their first year.

So this cumulative data for the first two years of these six projects ending December of last year. The percentages are actually really remarkable. To have a 78 percent placement rate is pretty much unheard of in the world of workforce development, we're tremendously excited about that.

The actual numbers, if you want the raw numbers, are people we've trained, I think we've enrolled a little over 1000 folks and somewhere close to 600 have already been placed into jobs. Again, a really, really high number. There are lots of ways in here between enrolling and then surviving through the program and thriving in it and graduating and then moving on into a job, to have placed 600 people in the course of two years with a new program is pretty remarkable and we're pretty excited about that.

So we want to move on to the last slide.
Yeah, so this is just, again, coming back
to these lessons which I actually started out with
because of some of the questions.

We found that active involvement with the 11 12 building trades is really critical, so our partnerships are all different. Some of them, as I 13 14 said, are led by workforce development boards, some 15 of them are led by community based organizations. We have one, San Francisco, that is led by 16 Conservation Corps actually, and we have some that 17 are led and run by the building trades, and they all 18 19 have different strengths but we find that the best 20 indicator for placement and for success in the 21 program is whether or not the partnerships, whoever 2.2 is leading it has worked closely with the building 23 trades.

And part of the program is not simply learning math and learning how to use tools, right?

It's also learning about what all the different trades offer. What is that career like? What is that job like? Are you interested? Would you be good at it? Going out and actually living it. So if you have an opportunity to go out doing practice interviews for getting into an apprenticeship.

So when we say having a relationship with the building trades it's like having a relationship with your employer, right? This is the connection that you're going to need coming out of this training program.

12 Otherwise people are just, you know, this is how we've always done education in America, 13 14 right? You get a degree and you're released into 15 the wild. It doesn't really work like that anymore in our labor markets, right? So these folks we need 16 17 to make sure there's connections to the 18 apprenticeship slots that are opening in the 19 building trades. That's why these relationships are 20 so important.

Again, making the emphasis that placement into registered apprenticeship is not guaranteed. No pre-apprenticeship program guarantees placement into apprenticeship, and you have to be very clear about that up front, because think again it's like, 1 well, okay, I got that certificate, now I should be 2 able to go and get my apprenticeship, but it doesn't 3 work like that.

4 You're setting people up for success. The 5 problem is that disadvantages populations have a very hard time getting into apprenticeships at all 6 7 for a variety of reasons. Pre-apprenticeship is to help broker that relationship so the doors are open 8 to the building trades and also so that the 9 10 requisite skills are learned ahead of time, and the 11 supportive services are provided.

And the other piece we haven't gone into detail about but the successful program provides more than just a curriculum, so all kinds of things that in our report there are little snapshots of each of the original six. All kinds of supportive services are required.

18 First of all, once people get into an apprenticeship, help with child care, 19 20 transportation, continuing education. But even for 21 the pre-apprenticeship there is a large case 2.2 management position. We've found some of our most 23 successful programs have run students through as a There is an all women's cohort, for 24 cohort. 25 example, through Rising Sun that these women sort of 1 provide a formal peer support member to one another 2 so that all of them made it through to graduation. 3 The kind of peer support that applicants provide one 4 another while going through the pre-apprenticeship 5 is incredibly important to persistence throughout 6 and to graduation.

7 Also things like you have to have a driver's license. Many people do not have a valid 8 9 driver's license for a variety of reasons, and it could be because of prior offenses, it could be 10 11 because you need to get your license back, but one 12 of the things that supportive services do, ticket amnesty. They help people clear their driver's 13 14 license because you can't get a job. You could 15 graduate from pre-apprenticeship but if you don't have a driver's license you will never get a job, so 16 helping people get their driver's license is one of 17 18 the best things a training program could do, right.

And the same thing with record expungement for ex-offenders. We are serving increasingly a reentry population through these channels, and those are folks also who need help getting their paperwork cleared to be able to work in construction.

24 So those are the kinds of things that we've 25 learned, so I think it's just always guiding people

1 back to this idea that you think it's just a 2 training program, but it's really a whole suite of 3 services to help people get to the equal level of 4 opportunity that other folks have had all along. So I think I'll stop with that. We still 5 have to talk about jobs, so open to questions. 6 7 CHAIR GORDON: We'll do questions and a motion on this one, we'll split these in two. 8 9 Yes, David. 10 BOARD MEMBER DIAS: I'd like to thank you 11 for this. This is a great thing. I'm a sheet metal 12 worker, I went through the apprenticeship and did all the stuff, and I'm a former instructor and sit 13 on the JVC. 14 15 So you know. MS. WHITE: BOARD MEMBER DIAS: So I know all this 16 stuff, but most trades do have through the building 17 trades have direct entry programs and we do bring 18 19 people in directly through the pre-apprenticeship 20 program, so I don't know if everybody opens up to 21 that or not but that's a way to get them directly 2.2 It's only a percentage through the state of in. 23 California maximum is 25 percent and that's 24 including veterans, so you have to go through all 25 those regulations.

1 And yes, you do have to, a person has to 2 have a driver's license and pass the math test and all that. Otherwise, they will not get in. 3 4 MS. WHITE: Yeah. BOARD MEMBER DIAS: I know that. 5 MS. WHITE: Yeah. And I think there's a 6 7 variety of ways that the individual partnerships have negotiated those entries, it's not always 8 9 direct entry. In other words, that you 10 automatically get to be an apprentice. 11 What it is is they'll have a guaranteed 12 interview, right? So let's say you graduate with an MC3 certificate, the trades at that local area have 13 14 agreed that you will get an interview to be an 15 apprentice or that you will get certain points, you can move higher on the list. There's all kinds of 16 17 ways that this can be turned into an advantage in 18 those competitions for the apprenticeship slot. 19 BOARD MEMBER DIAS: But thank you. 20 MS. WHITE: No, thank you. 21 CHAIR GORDON: Other questions, comments? 2.2 On the phone? Room? So let's do a motion on --23 First of all, thank you. It's a great presentation and a really impressive numbers, I'm 24 25 amazed at the 600 number, actually, that's shocking

1 and really impressive.

2 MS. WHITE: Right. 3 CHAIR GORDON: Can we get a motion on this 4 We're going to do Sarah's second report on report? 5 the larger job numbers for the whole program, but can we get a motion on this part? 6 7 VICE CHAIR RAY: So moved. CHAIR GORDON: Thank you. 8 9 BOARD MEMBER DIAS: Second. 10 CHAIR GORDON: Second. Roll call please. MR. BASTIDA: Board Member Gordon? 11 12 CHAIR GORDON: Yes. 13 MR. BASTIDA: Board Member Ray? VICE CHAIR RAY: Yes. 14 15 MR. BASTIDA: Board Member Harris? 16 BOARD MEMBER HARRIS: Yes. 17 MR. BASTIDA: Board Member Odbert, I believe you are back? 18 19 BOARD MEMBER ODBERT: Yes. 20 MR. BASTIDA: Board Member Martinez? BOARD MEMBER MARTINEZ: 21 Yes. 2.2 MR. BASTIDA: Board Member Dias? 23 BOARD MEMBER DIAS: Yes. MR. BASTIDA: Board Member Gold? 24 25 BOARD MEMBER GOLD: Yes.

1 CHAIR GORDON: Did we lose Mark? 2 MR. BASTIDA: Board Member Gold, are you 3 there? 4 CHAIR GORDON: All right, we have lost 5 another one off the phone, so that'll be an abstention, thank you. Oh, are you back? 6 7 MR. BASTIDA: There he is. Board Member Gold? 8 9 BOARD MEMBER GOLD: That's weird, I was 10 talking the whole time but it didn't come through, 11 sorry about that, weird. 12 CHAIR GORDON: What's your vote, Mark? BOARD MEMBER GOLD: 13 It was a yes. 14 CHAIR GORDON: Thank you. Great, thank 15 So we have moved on that report. you. 16 We now get to go to the harder report from the Workforce Development Board. You got to do all 17 18 your good success stories and now you have to do the 19 hard data report. 20 MS. WHITE: Right. 21 CHAIR GORDON: Which is the jobs report on 2.2 the full program. Go ahead, Sarah. 23 MS. WHITE: That's fine. Let me say also just thank you for 24 25 listening to a slightly rambling report about the

1 projects. There was so much to share that it's hard 2 to know which are the highest level points to bring 3 up for you. I encourage you to read through the 4 case studies in the reports. And also, we'd be happy to put you in touch with -- there's lots of --5 it feels like there's a graduation happening every 6 7 month, right, and it's a really incredible thing to go out to these sites and visit people who have made 8 9 it through and who are now interviewing to have 10 these careers, these high wage careers in 11 occupations that they never dreamed they'd be able 12 to, and it's incredibly moving thing. The peoples' stories are fabulous as well as I talk about 13 14 building skill systems because where systems change, 15 that's what we do at the state board, but there's a lot of really human stories here too which are 16 17 really great. 18 But we also want to talk to you about the jobs data behind this, so I have a lot of paper 19 20 here. I'm going to keep it relatively short and 21 sweet. 2.2 Again, I came and talked to you last year 23 about the methodology that we would use. The kinds of jobs and how it was hard to count them and how we 24

25 planned to count them, and there was a lot of room

for sort of fun swirling presentations in that. Now
 we just have the numbers from the labor (inaudible)
 and just give you the straight numbers.

4 But I should say that -- make the caveat again that I am not a labor economist. We have 5 worked closely with our colleagues at the University 6 7 of California at Berkeley who also hired onto this project a nationally known construction economist 8 9 because this is very thorny difficult data issues to 10 get through, so we have some of the best folks in 11 the country looking at this data.

I am here to report their results. I cannot draw them for you if you have questions about the methodology. We included a pretty lengthy methodology note in the report about how we arrived at these numbers, but what we're trying to do is give the big picture and a little explanation of what that contains.

And also I should say that we're hoping to do is to give it to the CEC or we can post on our website something that's more like a chart book, right, that just shows here's the six big things that you need to know about this and then a little bit of text. Kind of the reverse of the report. We have tiny little charts and lots of text. We just 1 want to move it into kind of an online thing that 2 people can just click through and understand and we 3 think that's sort of the best way to transmit this 4 information, so we're on our way there.

But I think, again, to say that Prop 39, as 5 you know, is an investment in the clean energy 6 7 workforce intended to also increase the number of jobs in California supporting energy retrofit 8 9 improvements while providing training in sustainable careers for all Californians. And I think that the 10 11 data that we have addresses both of these questions. 12 Both how many jobs were created and what the quality 13 is.

14 So the big takeaway, let me say, is that 15 the job creation is on a really decent par with what 16 we predicted, there are no surprising things to 17 We have no rabbits to pull out of a hat. know. We are on track with the mid range forecasts that were 18 19 run by UC Berkeley last year and the year before. 20 And the quality indicators which we have are really 21 pretty great, right, so they speak directly to this 2.2 goal of creating quality jobs that provide middle 23 class careers, which was one of the goals of this. So if we want to move to the first slide. 2.4 25 I should remind folks that we are taking

1 the job measures only for the K-12 investments, 2 which are the vast majority of the Prop 39 investments, but the job creation numbers by the 3 4 investments to the community colleges and the Conservation Corps are tracked separately by those 5 folks, so this is the K-12 job creation numbers and 6 7 these numbers are for your purposes they go through the third quarter of last year and it's based on the 8 9 amount of approved money out the door for these 10 projects, right, so that's \$752 million when 11 adjusted to 2016 dollars.

12 So the job estimates are based on this 13 disbursement rather than the final program 14 expenditures because, as you've heard this morning 15 I'm sure, the LEAs do not have to report until a 16 full year after their projects.

And there's been a lot of discussion in our data about what means a completed project, so we're basing the job numbers on the amount of money that has gone out and been approved for these.

So with that, because I mean, if you actually -- I think when we looked in the fall at the CEC data there were only 60 projects that had actually been considered completed and measurable, so we are basing this on the money that went out the

1 door before the third quarter, and from that we find 2 that California has created over 10,000 brand new 3 jobs.

These are broken into about 4400 direct jobs, which are actually the direct construction industry jobs.

7 The indirect and induced jobs which you see 8 here are the kinds of work that are created in an 9 economy when construction happens, right. Sort of 10 the indirect jobs are those in the supply chain and 11 the induced jobs are because people now have money 12 in their pockets to spend in their communities.

The reason this is important and especially in Prop 39 is because the legislation was used to close a tax loophole. This is entirely new money, it's not just moving things around in the economy so these jobs would have been somewhere else and now they're coming here. They're considered brand new by the economists because it's new money coming in.

20 So 10,000 jobs. That's, again, sort of 21 about the middle of the range estimates that we had 22 before.

I would also just like to add to this. I didn't put in a slide here but there is a notation in the report we also had Berkeley run us some of the economic impact numbers overall, which said that in addition to the employment that is generated on this spending that was generated, so we have \$587 million in induced spending and \$361 million in indirect spending for the total economic impact of \$1.7 billion from this work alone.

7 And this increase in economic activity they 8 calculated generates an additional \$88 million in 9 state and local property taxes. So we feel the 10 economic outcomes of the investments to date to 11 retrofit schools have been a tremendous boon to the 12 California economy, so that is good news.

13

Let me move ahead.

This is a detail which actually has gotten 14 15 moved up here, it's in the appendix. This is just to answer this question of where are most of the 16 17 construction jobs. There was concern in the beginning that it went to a lot of consultants or 18 managers, and actually only 2 percent went to the 19 20 energy managers or the jobs in training, but 21 actually the majority of the jobs, 98 percent of the 2.2 jobs were in direct construction activities. 23 So if you want to move ahead. This takes us to a couple slides where we 24 25 talk about the story of job quality. These next two

1 just talk about the main job classifications. 2 Again, what are people doing when they do energy retrofits, right? So this is where we have direct 3 4 data from the Department of Industrial Relations, from the certified payroll records, and it tells us 5 some things about quality. 6 7 We know that in the sample that we have there's an importance of highly skills specialty 8 trades, so the electricians, the plumbers and 9 10 pipefitters, the sheet metal workers working on two 11 of the energy using systems in building, lighting 12 and HVAC. So the prominence of trades also that work 13 14 on the building envelope is (inaudible). 15 Why don't we go to the next slide. This is another way of breaking this down 16 because this is just showing the amount of highly 17 skilled labor on these projects and where the work 18 19 is being done with the investments that were made.

If you want to leap ahead.

20

This slide is probably the most important, I think, in terms of job quality because it shows what I mentioned earlier, which is that 18 percent apprenticeship utilization rate. So that means that 80 percent of the jobs are high quality journey level or other trained construction jobs, which is
 great news.

Only 1 percent are occupations that didn't require any formal training. Those are things like, in these cases, not in all cases, in some cases the lighting contractors who came in, if there were people that were being taught how to change lights, and also landscapers that came in to redo grounds after the work was done.

But the vast majority are in journey level occupations, and with 20 percent room for apprentices. Again, that shows us a ratio of about 1 trainee to 5 workers, which is incredibly good, that's healthy, that's what we see across the country in solid construction projects.

16 It also means that there's room for a lot 17 of apprentices to come into this work, and if we hop 18 ahead.

19 Let me just back up for a second. 20 Kate, you had said, I should say this 21 earlier, I just want to remind folks that 22 apprentices are earning a salary while they're 23 getting three to five years of training that teaches 24 a broad occupational skill set so they can be 25 employed across the board in the construction 1 industry. And the state certified apprenticeships 2 are really the gold standard in workforce training, 3 and these are the pipelines for a middle class 4 career and we're very excited to see that there's 5 room for 20 percent. So far we have seen the data 6 that 20 percent of the workers are apprentices.

7 If you move ahead, another way that we document the importance of apprentices is by showing 8 9 the average hourly wage rate for apprenticeships in the selected trades on these projects. And I think 10 11 you will see that these are not terrible wages, 12 right? We're talking about people making a living that they could support a family on. This is not 13 14 about the low wage dead-end kinds of careers, these 15 are kinds of jobs we want to be trained for. This 16 is why we emphasize the importance of moving into 17 apprenticeship because if you're an apprentice 18 you're going to be making these kinds of wages. These jobs are also, by and large they pay 19 20 dental and health and retirement benefits, and the 21 waqes, aqain, hiqh. 2.2 I think the only other thing -- is there 23 another slide? That's all we have. 24 MR. BASTIDA:

MS. WHITE: Oh, look at that.

25

1 I think the other thing I just want to draw 2 your attention to is the sampling that we did. So we had talked about building a data 3 4 system where we could measure the jobs from the direct payroll records. There has still been an 5 ongoing challenge in matching the CEC records and 6 7 the payroll records, so while we're able to use the DIR data and it is good to get at the job quality 8 9 issues, to look at average wages and to look at benefits and apprenticeship utilization, the actual 10 11 job numbers are modeled based on an in-plan modeling 12 which is specific to the California construction industry based on the inputs that have been spent by 13 14 CEC so far, so that's where we get our job data 15 number up front. 16 This is a nationally accepted form of 17 modeling which is then ground truth, if you will, by 18 the information we have from DIR about the nature of 19 the jobs themselves. And then again, the modeling 20 is applied specifically to the case of California 21 and California's economy and the construction trades 2.2 involved in doing this work. 23 So that's the sort of great --CHAIR GORDON: 24 Great. 25 MS. WHITE: -- good, slightly anticlimactic

1 end of the day, but happy to say that we're seeing 2 not just tremendous growth in skills infrastructure, 3 but I think really solid job creation numbers as 4 well.

5 CHAIR GORDON: Thank you, Sarah, you did 6 such a good job last year of setting us up for not 7 having good numbers that now that we get really good 8 numbers it's especially great, so really appreciate 9 it.

MS. WHITE: Yes, they're good. They're solid numbers. I would say we are still going to get the short of, you know, some folks hope to see 40,000 and some folks -- but 10,000 jobs is a good number.

15 CHAIR GORDON: It's great, and thank you.16 It's as always a very clear presentation.

17 MS. WHITE: And again, the quality again, 18 as I said, is very important because there's a lot 19 of ways to create crappy jobs. We don't want those. 20 CHAIR GORDON: Questions for Sarah on the 21 jobs data, or comments? Arno, Chelina --2.2 BOARD MEMBER HARRIS: None. None for me. 23 That was great, thank you. BOARD MEMBER ODBERT: 2.4 No. Just also happy 25 to see the numbers.

CHAIR GORDON: Mark, you weren't here last 1 2 year but Sarah was very discouraging about what she thought she would be able to provide to us in terms 3 4 of numbers, so I think you're experiencing us being 5 happy not only about the numbers but about the ability to get some of the numbers. 6 7 MS. WHITE: Right. CHAIR GORDON: It's really great. 8 9 BOARD MEMBER GOLD: Also sounds like it was 10 very strategic. 11 CHAIR GORDON: Yes. Well, thank you. 12 Let's have a motion on this report, which I think is our last motion of the day, and then we'll 13 14 do public comment afterwards, which we have not yet 15 So motion on this report? done. 16 BOARD MEMBER DIAS: Move to accept the 17 report. 18 CHAIR GORDON: Great. 19 BOARD MEMBER MARTINEZ: Second. 20 CHAIR GORDON: That was David and then 21 Randall seconding. 2.2 Roll call, please. 23 MR. BASTIDA: All right. Board Member Gordon? 24 25 CHAIR GORDON: Yes.

1 MR. BASTIDA: Board Member Ray? 2 VICE CHAIR RAY: Yes. MR. BASTIDA: Board Member Harris? 3 4 BOARD MEMBER HARRIS: Yes. MR. BASTIDA: Board Member Odbert? 5 BOARD MEMBER ODBERT: 6 Yes. 7 MR. BASTIDA: Board Member Martinez? BOARD MEMBER MARTINEZ: 8 Yes. 9 MR. BASTIDA: Board Member Dias? 10 BOARD MEMBER DIAS: Yes. MR. BASTIDA: Board Member Gold? 11 12 BOARD MEMBER GOLD: Yes. CHAIR GORDON: Great. 13 Thank you. 14 MR. BASTIDA: The motion is passed. 15 CHAIR GORDON: That was that. So we will 16 take that report and the others that we voted on 17 today and use them as the basis for our report to 18 the Legislature. 19 Again, as with all of those motions, I 20 probably and Jack will be reaching out individually 21 to the different departments if we have specific 2.2 questions on presentation or tweaking, making sure 23 that we are not talking about the incentive-owned utilities, etcetera. But thank you to everybody who 24 25 presented who's still here.

1 Do we have any public comment, since we 2 didn't call for it during the items, on any item on 3 the agenda? Seeing none --4 MR. BASTIDA: There might be online. 5 CHAIR GORDON: Oh, there might be on the 6 7 Is there any public comment or question on phone. anything on the agenda or on our board in general on 8 9 the phone, since this is an open line? 10 MR. BROWN: Yes. 11 CHAIR GORDON: Great. 12 MR. BROWN: Yeah, hi, this is Rick Brown from Terra Verde. As many of you know, we're 13 involved in (inaudible) with a lot of districts, 14 15 over 50 now, and as we discussed last year where 16 there was some concerns about the progress, last summary, you know, kicked it in terms of a lot of 17 construction, and we all know why there were those 18 19 delays. And this summer is going to be, you know, 20 similar if not more. So that's the good news. 21 I did want to comment quickly on the 2.2 charter issue, because I think in listening to the 23 discussion there's still a little unclarity. The problem with independent charters that 2.4 25 are in leased buildings, and particularly in leased

facilities that, you know, are privately owned, is 1 2 that it's very, very difficult for those charters to 3 qualify their energy expenditure plans because the 4 requirements of the owner of the building to basically, you know, reimburse if the charter leaves 5 the building makes it really hard to get that to 6 7 happen. We've done a lot of charters in our 8 9 programs but they've all been charters that are in 10 buildings that are owned by the local school

11 District. No problem there. But in privately owned 12 buildings, just doesn't happen because you can't get 13 over that hump.

So just wanted to make sure there was clarity there. It's not that we don't want to try to do it, but the landlords just don't want to go along with that provision.

The other issue that I really do want to highlight is the issue of school districts that are in particularly municipal or irrigation utility districts. Getting the formulas to work in terms of the savings is extremely difficult because of how those rates are structured.

And just like I know last year we gave some exceptions to districts that are in the north part

1 of the state where they are getting, you know, the 2 power prices are very cheap because of being in 3 large hydro areas, we really need that exception for 4 folks that are in places like Modesto, Merced, Turlock Irrigation District, and some of the other 5 municipal utilities, because the only way they can 6 7 get out of the conundrum is by putting a lot of cash into the project to lower that denominator to bring 8 9 up that SIR, and a lot of these districts in those 10 rural communities are very poor and they don't have the cash. 11

And because those are irrigation districts where the rate structures are such that they're in really high peak pricing, solar doesn't really bail them out in terms of that SIR.

16 So I strongly encourage you to make a 17 recommendation that in the next iteration of quidelines review that those districts be able to 18 19 get that exception. We have several that are in those irrigation districts that are really 20 21 struggling to figure out how they're going to make 2.2 their plans work because they just don't have the 23 cash to bring it up the other way. 2.4 So those are my comments, thank you.

25

CHAIR GORDON: Thank you, Rick. Always

1 very helpful, and individual board members may be 2 following up with you on some questions specifically 3 around the charter question, but thank you very 4 much. BOARD MEMBER DIAS: 5 Kate? CHAIR GORDON: Yes, David? 6 7 BOARD MEMBER DIAS: I don't even know. Ι deal with the CPC a lot and all that stuff, but do 8 9 the municipal utility districts give incentives like the incentive-owned utilities do? And that was a 10 11 joke about the incentive-owned utilities. 12 CHAIR GORDON: That was good. 13 Bob, do you want to -- Chair Weisenmiller, 14 sorry, do you want to address that? 15 CHAIR WEISENMILLER: No, this is about looking generally at the publicly owned utilities, 16 17 there's like 44 of them. So some of them like SMUD 18 are very generous with incentives. On the other 19 hand, and I'm not going to be able to go through the 20 litany of all of them and certainly some of them are 21 less so, let's put it that way. 2.2 But certainly if it'll help, particularly 23 on this issue of the exemption issue or adjustment issue, we can certainly have the staff try to pull 24 25 together some of it. You know, once we have an idea

of here's the, say, half dozen you're most concerned 1 2 about we could try to see what's there. 3 And certainly some of the peer use, like 4 SMUD for example, was really trying to figure out how to help their customers participate. And again, 5 the question is how many of the others are also 6 7 being vigorous on that account? Don't know. BOARD MEMBER DIAS: 8 Thank you. 9 CHAIR GORDON: Good question. And thank 10 you. 11 Are there any other public comment from the 12 phone? Nothing else? Great. So we will, just as a reminder for the next 13 meeting, we will -- which is on... 14 15 MR. BASTIDA: The 21st. 16 CHAIR GORDON: March 21st? 17 MR. BASTIDA: Yes. CHAIR GORDON: We will be talking in much 18 19 more depth about potential -- about recommendations, 20 so between now and then Jack and I, and we will 21 reserve the right to reach out to you all. We're 2.2 not going to do a committee this time but we will 23 reach out individually to people to engage on this question of how to start putting together a draft of 24 25 a recommendation section. What we'd ideally do is

1 have that draft for discussion at the next meeting, 2 and then we'll obviously be adding to it and 3 amending it at that meeting. But to the extent that 4 this conversation has brought up thoughts on that section, please bring those -- well, communicate 5 those to Jack directly. Remember, we can't do big 6 7 emails, so directly to Jack or directly to me, and we will be bringing a draft to the next meeting. 8 9 And at the next meeting we hope to approve 10 our entire report to the Legislature with any amendments that we include in the next meeting. 11 12 MR. BASTIDA: Yeah, we padded a few extra days this time so we can have time to do this. 13 14 CHAIR GORDON: It's going to be a little 15 bit less crazy than last year. 16 Great. Well, thank you to everybody, and I 17 don't think I have to move to adjourn, so I think I 18 can just adjourn. 19 MR. BASTIDA: All right. 20 CHAIR GORDON: Thank you again to everyone. 21 BOARD MEMBER ODBERT: Thank you. 2.2 BOARD MEMBER GOLD: Bye, everybody. 23 BOARD MEMBER HARRIS: Thank you, guys. 24 CHAIR GORDON: Folks on the phone, thank 25 you.

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.

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IN WITNESS WHEREOF, I have hereunto set my hand this 20th day of February, 2017.

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