

BEFORE THE  
CALIFORNIA ENERGY COMMISSION

In the matter of, )  
 )  
Joint IEPR/Efficiency )  
Committee Workshop ) Docket No. 10-IEP-1D

ENERGY EFFICIENCY LEADING ECONOMIC RECOVERY

CALIFORNIA ENERGY COMMISSION  
HEARING ROOM A  
1516 NINTH STREET  
SACRAMENTO, CALIFORNIA

TUESDAY, SEPTEMBER 28, 2010  
9:30 A.M.

Reported by:  
Kent Odell

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Anthony Eggert  
Dian Grueneich (Invited)

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## P R O C E E D I N G S

SEPTEMBER 28, 2010

9:38 A.M.

MS. KOROSSEC: All right. Good morning, everyone.

We are going to go ahead and get started. I am Suzanne Korosec. I manage the Energy Commission's Integrated Energy Policy Report Unit. Welcome to today's workshop on Energy Efficiency and the American Recovery and Reinvestment Act. This workshop is being held jointly by the Energy Commission's Integrated Energy Policy Report Committee and Energy Efficiency Committee.

Just a few housekeeping items before we get started. Restrooms are out in the atrium through the double doors and to your left, we do have a snack room on the second floor at the top of the stairs, under the white awning, and if there is an kind of emergency and we need to evacuate the building for any reason, please follow the staff out the building to the park that is kitty corner to the building, and wait there until we're told that it's safe to return.

Today's workshop is being broadcast through our WebEx Conferencing System and parties need to be aware that we are recording the workshop. An audio recording will be available on our Website within a couple of days and a written transcript should be available in about two weeks.

Our format today is a series of panels with short

1 presentations followed by a half hour or so of discussion  
2 for each panel topic. We do recognize that each of these  
3 topics could take an entire day's workshop on its own, so  
4 we'll try to keep things fairly focused. We will be  
5 breaking for lunch probably a little later than usual,  
6 around 12:30, depending on how quickly the two morning  
7 panels go. And we also have time set aside at the end of  
8 the day for additional, more general, public comments from  
9 those here in the room and for folks who are listening in on  
10 the WebEx. For those of you who are in the room, if you  
11 want to make comments, please come up to the center podium  
12 and use the microphone there so that we can make sure we  
13 capture your comments in the transcript, and it's also  
14 helpful if you can give our Court Reporter a business card  
15 to make sure that your name and affiliation are correct.

16           For those of you joining us through the WebEx, you  
17 can use the chat function at any time to let the WebEx  
18 Coordinator know that you have a question or a comment, and  
19 we will either relay the question or we'll open your lines.  
20 Written comments on today's topics are due on close of  
21 business October 5<sup>th</sup>. Because we do have such a full agenda  
22 today, I'm going to just very briefly talk about the IEPR  
23 process, itself, just noting that the Energy Commission is  
24 required to do an Integrated Energy Policy Report every two  
25 years with an update in the intervening years that talks

1 about energy market trends and makes recommendations for  
2 future energy policies based on those evaluations. 2010 is  
3 an Update year and the IEPR Committee chose to focus the  
4 report this year on the transformative effect that the  
5 Federal Stimulus funding will be having on California's  
6 energy sectors, particularly the Energy Efficiency sector,  
7 given that the majority of our ARRA funding for energy is  
8 really focusing on addressing barriers to widespread energy  
9 efficiency retrofits throughout the State. So, with that  
10 brief introduction, I will turn it over to the dais for  
11 opening comments.

12 CHAIRMAN DOUGLAS: Well, thank you, Ms. Korosec.  
13 And welcome, everybody, to the California Energy Commission  
14 and to this IEPR workshop. My name is Karen Douglas, I am  
15 the Chair of this Committee and of the Commission, and I'd  
16 like to thank you for being here, thank you for your - I  
17 know that there are many people here who are talking about  
18 some of the innovative programs on this agenda, so thank you  
19 for that leadership and your innovative work.

20 We will be talking today about Energy Upgrade  
21 California, about residential and commercial energy  
22 efficiency retrofit programs, and how they fit into Energy  
23 Upgrade California, workforce training, ratings and audits,  
24 all of this is fundamentally very important foundational  
25 work for AB 758, which is a statewide energy efficiency

1 retrofit program. So, we're pleased to be here. Thank you  
2 for your participation; it's a long agenda, so I'll keep my  
3 comments brief. I look forward to hearing from all of you.  
4 I would like to welcome my - or I guess I'll introduce  
5 everyone on the dais. To my left, Commissioner Byron, the  
6 Associate member on the IEPR Committee and also Associate  
7 Member of the Energy Efficiency Committee; to my right,  
8 Commissioner Eggert, he is the Presiding Member of the  
9 Energy Efficiency Committee, and to my far left is Laurie  
10 ten Hope, Commissioner Byron's Advisor. So, with that, I'll  
11 ask my fellow Commissioners if they have any welcoming  
12 remarks.

13           COMMISSIONER EGGERT: Thank you, Madam Chair. This  
14 is Anthony Eggert and, as you said, Presiding Member of the  
15 Energy Committee. Just a couple of quick comments. I am  
16 very excited about today's program. I was just taking a  
17 look through some of the presentations and looking forward  
18 to the conversation that we're going to have today. Just a  
19 few stats which I think sort of call out the importance of  
20 what we're going to be talking about. Approximately two-  
21 thirds of California's electricity consumption and about a  
22 quarter of all of California's greenhouse gas emissions come  
23 from the building sector, residential and commercial, both  
24 directly and indirectly, and of course, our strategy to  
25 address those sectors to achieve our energy and climate

1 goals includes standards for both new buildings, as well as  
2 trying to get at the existing stock. I noted that more than  
3 eight million homes were built prior to the first  
4 residential building efficiency standards in California, and  
5 about 5.2 billion square feet of commercial buildings were  
6 built before 1978, when the first commercial building energy  
7 efficiency standards took effect, and looking at the  
8 numbers, I think it's quite clear that there's really  
9 absolutely no way that we can meet either our energy or  
10 climate goals if we don't aggressively address this sector.

11           The other thing that is exciting about this is the  
12 great potential for energy savings to California consumers.  
13 I think, you know, in the context of low hanging fruit, this  
14 is some of the lowest hanging that I think, if we pick it  
15 properly, it will even grow back over time. I think, to  
16 successfully address this sector is going to require a  
17 number of different key elements, including things like  
18 accurate building evaluation and diagnostics to determine  
19 the most cost-effective measures, access to lending  
20 institutions and financing options, certified contractors,  
21 quality assurance, and quality control to ensure that  
22 retrofits actually provide the savings that are promised. I  
23 think all of these elements which we'll be hearing about  
24 today are really quite critical to establishing a viable  
25 retrofit industry in California, and as you said, will be

1 critical to establishing the foundation for successful  
2 implementation of 758, AB 758. So, I think I'll stop there  
3 and I look forward to the discussion.

4           COMMISSIONER BYRON: Thank you, Commissioner Eggert.  
5 You know, the American Recovery and Reinvestment Act funding  
6 has certainly preoccupied our thinking and the efforts of  
7 this Commission for, I think, coming up on two years now.  
8 And the CEC staff has done an excellent job during that time  
9 negotiating the labyrinth of state contracting rules and  
10 overlaid with a whole new set of Federal rules and  
11 provisions, and seeing the complexity of this as a  
12 Commissioner has been nothing less than astounding, I wish I  
13 could think of a better word. And it is fraught with many  
14 challenges. But if you take this potent elixir of combining  
15 almost half a billion dollars to the State, and what this  
16 Commission does really well, what I call our bread and  
17 butter, and that is energy efficiency, you have a really  
18 potent elixir. Now, the title of this workshop today is  
19 "Energy Efficiency Leading Economic Recovery," that sounds  
20 pretty presumptive on our part, so I'm going to withhold  
21 judgment until I hear from the experts here today. I want  
22 to hear and see what this elixir has produced and what it  
23 will produce. But, I'm also interested, as Commissioner  
24 Eggert and our Chairman indicated, in seeing how we're going  
25 to move forward in addressing the majority of our buildings;

1 that would be the existing building stock, as well, under  
2 legislation that was recently passed, AB 758. So there's a  
3 lot of expertise in the room, I'm very interested in hearing  
4 from you today. Thank you for being here.

5 MS. BROOK: Good morning. I'm Martha Brook. I'm an  
6 engineer with the High Performance Buildings and Standards  
7 Development Office at the Commission, and I'm going to  
8 provide some background, some context for what we'll be  
9 spending the majority of the day talking about. And we've  
10 heard about AB 758, so I'm going to give you an introduction  
11 to that law that was passed in 2009. I'm going to sort of  
12 paint the landscape in terms of energy efficiency and what's  
13 been happening in the State, and basically to try to answer  
14 the question; once you hear about 758, then the next  
15 question you ask is, "Well, aren't we already doing this?  
16 We do a lot of energy efficiency in existing buildings, so  
17 what's new?" So I'm going to try to address that, I'm going  
18 to give you a real high level timeline for the  
19 implementation that we've thought about for AB 758, and we  
20 have Simon Baker here from the Public Utilities Commission  
21 to summarize the relevant energy efficiency policy and  
22 programs now underway that are consistent and quite  
23 applicable to where we want to go for AB 758. And then,  
24 just sort of paint a picture of the statewide partnerships  
25 that we anticipate and what we'll be spending a lot of today

1 talking about, and to draw the connection, again, between  
2 758 and the Stimulus funding that we're going to be talking  
3 about today and how we're trying to pilot many of the things  
4 that we're intending to do in 758 with our State Energy  
5 Program, Federal Stimulus Programs, that you are all hear  
6 and know so much about.

7           So AB 758 was passed in 2009 and it was sponsored by  
8 Assembly Member Skinner. It calls for a comprehensive  
9 program to achieve energy savings in California's existing  
10 buildings stock, and the Energy Commissions is challenged  
11 with developing and implementing the program in  
12 collaboration with the Public Utilities Commission, the  
13 publicly-owned utilities, investor-owned utilities, and all  
14 relevant stakeholders that can contribute to this effort.  
15 And the scope is residential and commercial buildings,  
16 existing buildings as far as the eye can see. So AB 758,  
17 one way to look at it is it's a new law for old buildings;  
18 it calls for the complementary portfolio of techniques,  
19 applications and practices to improve the efficiency of  
20 buildings that fall significantly below current building  
21 standards.

22           The elements of 758 will include workforce  
23 development, public awareness, campaigning, financing  
24 options, performance rating systems, performance  
25 disclosures, efficiency recommendations, and efficiency

1 improvements, and hopefully you begin to acknowledge that  
2 there is a connection between what this slide says and the  
3 way that we've organized our discussion for the rest of the  
4 day. So, aren't we already doing this? We have investor-  
5 owned utility programs currently underway that are over \$2  
6 billion that are focusing on existing buildings; we have our  
7 own Title 24 Building Energy Efficiency Standards that apply  
8 to additions and alternations of existing buildings; we have  
9 the California Long Term Energy Efficiency Strategic Plan  
10 that many of us participated in developing with the Public  
11 Utilities Commission, that was published in 2008, that has a  
12 long list of action strategies that will address existing  
13 buildings; and then we have this Stimulus funding that our  
14 Commissioners mentioned, that is approximately \$740 million  
15 that are targeted at building efficiency upgrades, this is  
16 our own Commission controlled pot of money, along with the  
17 Block Grant money that is going straight to local  
18 governments across the State to do efficiency upgrades. So,  
19 a lot of activity. So, what's different about AB 758? So,  
20 all of the previous slide, lots and lots of great activity,  
21 but it all requires voluntary action on the part of the  
22 building owner or the homeowner. The Energy Commission was  
23 given the authority under AB 758 to develop, adopt, and  
24 implement regulations, so we have the potential to develop  
25 rating requirements to understanding the relative energy

1 performance of buildings and also to, in the long term,  
2 develop potential improvement requirement, so some way to  
3 bring up the bottom floor of older buildings to meet a  
4 higher level of efficiency. And it is a long term statewide  
5 program, so we're really excited about it because it forces  
6 us to do what we've been trying to do about sort of this  
7 underlying authority to kind of partner both the voluntary  
8 activities that we've been working on for years with the new  
9 mandatory element that we think will allow us to really go  
10 at this in a comprehensive way.

11           So, the things that we are piloting, that we're  
12 going to talk about the rest of the day with our ARRA State  
13 Energy Program retrofit programs, that are kind of key to  
14 758, are increasing public awareness, pursuing financing  
15 solutions, building the workforce, and then piloting rating  
16 programs. The timeline for AB 758, we sort of thought about  
17 this in three phases, the first phase is what we're calling  
18 kind of infrastructure development, so we are right here,  
19 right now, the next two years, piloting a lot of key  
20 concepts with Federal Stimulus funding. We have current  
21 voluntary energy efficiency programs that we're going to  
22 hear about from Simon Baker. We have to actually build some  
23 infrastructure and tools around commercial building asset  
24 rating systems. We have HERS II, the Home Energy Rating  
25 system, which is an asset rating system for residential

1 structures, you're going to hear about that today, it is  
2 really at the heart of our residential retrofit activity.  
3 We need the equivalent type of rating system for commercial  
4 buildings, so we're going to be looking at that in this sort  
5 of Phase I infrastructure development effort. And then we  
6 also potentially may need to revisit our Home Energy Rating  
7 System, again, based on the results of our pilot programs,  
8 so all of this, we're sort of calling "infrastructure  
9 development and foundational work" in the next couple of  
10 years to get us in the position in the Phase II and Phase  
11 III to actually begin our rulemaking activity.

12           So, ideally, in Phase II in 2012 and 2013, the  
13 Commission is ready to start rulemaking proceedings for  
14 rating disclosure regulations, so the idea is that you could  
15 generate a relative energy performance of your building and  
16 have some sort of requirement to disclose that, either to  
17 another party in a financial transaction, or potentially  
18 some sort of public disclosure, all of that is open for  
19 discussion and we'll be thinking about all those options.  
20 And in the same timeframe in Phase II, we actually want to  
21 think about developing recommendations for what we would  
22 pursue in Phase III, as far as mandatory improvements for  
23 energy efficiency in buildings. So that's sort of the last  
24 phase of what we're thinking about right now, is that we  
25 would actually have some sort of requirements for the State,

1 where you would actually have to improve the efficiency of  
2 your building based on, again, its relative performance  
3 rating, or other measures of where you are in needing to  
4 improve the efficiency of your building.

5           So, now we're going to hear from Simon Baker.  
6 Basically, we're just trying to convey the message that we  
7 don't think we're starting from scratch and, in fact, we  
8 couldn't have any kind of a mandatory efficiency program  
9 without lots and lots of voluntary activity that is out  
10 there and really successful, and gets us to a place where we  
11 could actually begin to establish some mandatory  
12 requirements. So, now we're going to hear from Simon.

13           MR. BAKER: Good morning, members of the Joint  
14 Committee. Thank you for this opportunity to speak today.  
15 My name is Simon Baker, I'm with the CPUC's Energy Division,  
16 where I supervise the Energy Efficiency Planning Section.

17           First of all, I'd like to applaud the Energy  
18 Commission's efforts in implementing this important piece of  
19 legislation, which is vital to achieving our climate goals  
20 through these comprehensive retrofits of existing buildings.  
21 The IOUs have a decades-long history of programs to improve  
22 energy efficiency in existing buildings, and these are  
23 voluntary programs, as Martha just said. They play an  
24 important role in a wide range of strategies to transform  
25 existing buildings, including supporting possible mandatory

1 requirements. As you know, per the legislation, close  
2 coordination between our two agencies is required, and so  
3 we're encouraged that this workshop is kicking off in a  
4 joint collaborative way, and we look forward to that  
5 continuing, going forward.

6 My purpose today is to provide some context for AB  
7 758 implementation by sharing a bit about the Energy  
8 Efficiency Strategic Plan, and give a sense of the scope and  
9 the scale of the IOU investments in residential and non-  
10 residential retrofits. I'd also like to highlight the few  
11 selected utility programs today and also some directives  
12 that the CPUC has issued that directly relate to AB 758.

13 In 2008, the Public Utilities Commission launched an  
14 initiative to make energy efficiency a way of life in  
15 California. It established a roadmap for energy efficiency  
16 through 2020 and beyond, and it was aligned with a need to  
17 identify a pathway to achieving AB 32 goals through the  
18 maximum use of energy efficiency, the first resource in the  
19 loading order. It establishes two specific goals related to  
20 existing buildings, first, in residential buildings, a goal  
21 of reducing energy consumption by 40 percent by 2020, and in  
22 commercial buildings, a goal of having 50 percent of  
23 buildings having zero net energy equivalent consumption by  
24 2030. The process of developing this Strategic Plan was  
25 truly an amazing collaboration of stakeholders that engaged

1 across a wide spectrum of industries, as well as agencies,  
2 and other interested parties. The process established  
3 numerous task forces, which are ongoing to implement the  
4 plan, and an important next step, which we are currently  
5 involved in, is developing action plans for each of the  
6 chapters in the strategic plan. For example, we recently  
7 released zero net energy action plan. This gets down to a  
8 further level of detail, the specific milestones and  
9 schedules more along the lines of a project management plan,  
10 and engages specific stakeholders to be champions to  
11 implement key actions in the Strategic Plan. As you know,  
12 the Energy Commission has endorsed the Strategic Plan and  
13 the CEC staff participated in workshops and stakeholder  
14 activities to produce it. As we move to the implementation  
15 phase, we look forward to this ongoing collaboration with  
16 the CEC.

17           So now a little bit about the utilities' current  
18 investments in energy efficiency. The PUC has approved \$3.8  
19 billion in energy efficiency funding for the 2010-2012  
20 period. That is broken down into about \$3 billion coming  
21 from general energy efficiency programs and an additional  
22 \$750 million for low income programs. Of that \$3.13 billion  
23 of general energy efficiency programs, over \$2 billion is  
24 directed at residential and non-residential retrofit  
25 programs. And as you will see in my presentation, these are

1 more than just traditional incentive programs, there's a lot  
2 of so-called "non-resource" programs here that support  
3 market transformation, and these are programs that the  
4 utilities are not counting savings for, but they contribute  
5 towards the objectives of the Strategic Plan. In total, the  
6 expected savings of this portfolio are 7,000 gigawatt hours  
7 and 150 megawatts and 150 million metric therms. The  
8 Strategic Plan also guided the composition of the utilities  
9 portfolio.

10           So, a little bit more on the breakdown of the  
11 utilities energy efficiency budgets. As you can see here,  
12 approximately 65 percent of their current budgets are  
13 devoted to the resident and non-retrofit sector when you  
14 include local government partnerships. So, \$195 million  
15 here for local government partnerships is administered  
16 through solicitations by the utilities, and local  
17 governments have an opportunity to bid in projects that are  
18 consistent with the Strategic Plan's menu of options for  
19 local government activities eligible for ratepayer funding.  
20 And I just highlight that because I know that the Energy  
21 Commission has been administering contracts with various  
22 local governments in the ARRA process.

23           About 50 percent of the retrofit funding is going  
24 towards the non-res sector and 35 percent going to the  
25 residential sector, and finally there is a set of cross-

1 cutting programs which I'll talk about later, which support  
2 both sectors. The breakdown for savings is roughly  
3 equivalent to the prior budget breakdown with some  
4 exceptions on the breakdown of res, non-res, and  
5 crosscutting.

6 So now I'll turn to highlighting a few specific  
7 utility programs. First, residential programs. The  
8 Commission ordered in the September 2009 Decision adopting  
9 the utilities Energy Efficiency Portfolios, the largest home  
10 full-house retrofit program in the country at the time, \$111  
11 million are being devoted to this incentive program, which  
12 is offered in two basic kinds of prescriptive basic package  
13 and an advanced performance package. The performance  
14 package requires use of the HERS II software, which we'll be  
15 hearing about later on today. From a timing perspective,  
16 this will be available beginning October 1<sup>st</sup> for single  
17 family and sometime in 2011 for Multi-Family. It is being  
18 marketed as Energy Upgrade California, which represents a  
19 very close cooperation between our two agencies to implement  
20 this program in a manner that is consistent and minimizes  
21 confusion in the marketplace. The Utilities Home Energy  
22 Efficiency Rebate Program is a \$142 million program that  
23 offers consumer rebates for efficiency appliances and  
24 equipment, and we also have a statewide demand side clean  
25 energy brand and Web portal, this is the successor to the

1 Flex Your Power brand, it is an \$80 million marketing  
2 education program that will raise public awareness about  
3 efficiency and other demand side options. This is strongly  
4 supportive of AB 758 goals to raise public awareness.

5 For non-residential programs, the Commission order  
6 in the September Decision that the utilities be required to  
7 benchmark all commercial buildings that touch their utility  
8 programs, and the rationale for the was that the Commission  
9 believed that this would give the utilities the data to do  
10 targeted marketing and to serve high usage customers best,  
11 to educate them about how to reduce their energy bills.  
12 This also intersects very strongly with AB 1103 requirements  
13 and we are in close coordination with the Energy Commission  
14 staff to implement this alongside AB 1103. There is a non-  
15 residential audit program, it is a \$34 million program that  
16 provides technical assistance and cost-effectiveness  
17 calculations, and has a variety of different audits, but  
18 I'll just highlight that there is a retro-commissioning  
19 audit which identifies opportunities to optimize building  
20 and system performance.

21 Going on with non-residential programs, there is a  
22 Calculated Incentive Program; it is a \$149 million program  
23 that provides incentives based on whole-house system  
24 modeling. And this provides technical and design assistance  
25 for retrofit and retro-commissioning projects, among other

1 things.

2           On-Bill Financing is another program that I'd like  
3 to highlight. This is a \$41 million program that provides  
4 zero percent financing to credit worthy non-residential  
5 customers that install measures that participate in utility  
6 programs. I'll be talking about this later in the Finance  
7 Panel.

8           The individual utilities are also administering  
9 various pilot programs to test innovative strategies to  
10 implement retrofit strategies. Southern California Edison  
11 has an \$8.6 million sustainable portfolios pilot which  
12 targets hard to reach leased office space, and PG&E has a  
13 Green Communities pilot which aids cities and schools that  
14 test creative approaches to achieving energy and greenhouse  
15 gas goals.

16           Moving on to a variety of programs which have  
17 crosscutting impacts in both the residential and non-  
18 residential sectors, the Commission order in the September  
19 Decision for Energy Division to conduct a assessment of  
20 financing needs across both residential and non-residential  
21 sectors, and recommend appropriate ratepayers back financing  
22 strategies. This dovetails strongly with CPUC's mandates  
23 under AB 758 to conduct such an investigation, and we expect  
24 that a final report on this initiative would be available by  
25 mid 2011.

1           The Commission also provided funding for Integrated  
2 Demand Side Management, this was a prominent chapter in the  
3 Energy Efficiency Strategic Plan that sought better  
4 integration between energy efficiency demand response and  
5 distributed generation, both in terms of the incentive  
6 programs, as well as the marketing of those programs. One  
7 exciting feature of this program is the utilities are  
8 developing a progressive energy audit tool; this will be an  
9 online integrated audit tool that will provide very  
10 sophisticated, yet user-friendly energy information and  
11 recommendations customized to customers' usage patterns and  
12 needs. That will be available at the end of 2011. The  
13 Commission provided funding for workforce education and  
14 training, \$102 million are going towards that initiative,  
15 with training and education targeted at energy related  
16 trades. Another \$10 million was provided to specific HVAC  
17 workforce and education and training. And the Commission  
18 also ordered a Needs Assessment of workforce education and  
19 training, which is expected in December of this year. The  
20 results of that Needs Assessment will inform further  
21 modifications to this program.

22           Wrapping up on some other crosscutting programs, the  
23 utilities funded the formation of an HVAC Performance  
24 Alliance, which is an unprecedented collaboration of HVAC  
25 industry stakeholders around energy efficiency topics. This

1 industry has traditionally been very balkanized and  
2 disorganized, and they really came together initially  
3 inspired by the outreach of the Energy Efficiency Strategic  
4 Plan, and this Performance Alliance is now active and  
5 ongoing. Committees are focusing on co-compliance and  
6 quality and maintenance, as well as other Strategic Plan  
7 objectives.

8           And finally, as part of the utilities Codes and  
9 Standards Program, there is a sub program focusing on  
10 Compliance Enhancement. This new \$3.8 million program  
11 provides training and support to building officials,  
12 develops process improvement tools, and aims to simplify and  
13 expedite permitting and compliance processes. I note that  
14 this supports the Governor's AB 758 Bill Signing Directive.

15           So, in closing, I would just like to emphasize that,  
16 given the scope of interrelated activities and the statutory  
17 requirements for coordination, as well as the significance  
18 of AB 758 in meeting State policy objectives, we believe  
19 that a joint work plan is needed to implement this  
20 legislation effectively, and the PUC is committed to working  
21 with our sister agency to plan and implement this important  
22 legislation. Also, the AB 758 program design, we believe,  
23 should take advantage of lessons learned from the PUC's EM&V  
24 activities. Currently in the current cycle there is \$125  
25 million that is being devoted to this activity, as well as

1 we have already completed the evaluation activities for the  
2 2006 to 2008 program cycle, and there is a wealth of  
3 information on where savings potential lies and what  
4 programs work and what programs do not work, so we encourage  
5 use of that information. And, with that, that is all that I  
6 have to present today. I also have some back-up slides for  
7 folks' information with a comprehensive list of programs and  
8 funding levels.

9 CHAIRMAN DOUGLAS: Well, thank you, Simon and  
10 Martha, we appreciate both of your presentations, and I  
11 really have one umbrella question I'd like to ask both of  
12 you to address. Our goal in setting out these programs has  
13 been to leverage and complement the tremendous work that is  
14 going on at the PUC in energy efficiency without  
15 duplication. And I'd like to ask you to address the  
16 question of how, at a high level, how these programs fit  
17 together and has that goal been achieved?

18 MR. BAKER: Well, I guess my response would be it is  
19 early days and the good news is that Martha and I are  
20 standing side by side presenting to you at the beginning of  
21 this process, and I think that the work that we've done  
22 today to describe what the terrain is, the existing terrain,  
23 will go a long ways to ensuring that the incremental efforts  
24 of the Energy Commission to adopt regulations pursuant to AB  
25 758 will avoid duplication with what's already going on.

1 MS. BROOK: Yeah, I don't think I have anything  
2 additional to say except just to reiterate that it's really  
3 a combination of our efforts, the vast amount of voluntary  
4 activity that Simon summarized, that is the only way that  
5 we'll succeed in developing any kind of mandatory  
6 requirements, that we can't do the mandatory piece without  
7 all that voluntary activity because it is really building  
8 the foundation in order to get acceptance by the people  
9 we'll be regulating. So I think we are getting there and  
10 it's a good start.

11 CHAIRMAN DOUGLAS: Okay, well, certainly as we've  
12 looked at the individual programs that have come forward,  
13 it's very clear that this is some amount of Recovery Act  
14 money leveraging a significant amount of, in some cases, IOU  
15 money, or of POU participation, and I'd like to invite  
16 people, speakers as they come up on the various panels,  
17 where there is a link with an IOU or POU program,  
18 specifically to go ahead and call that out so that we get a  
19 sense of how these programs are working together.

20 MS. BROOK: So I actually have two more slides just  
21 to introduce the discussions, and then we'll be ready to go.  
22 So, question?

23 COMMISSIONER EGGERT: Actually, if I might, just a  
24 couple of quick questions. I guess, first, you know, I want  
25 to thank Simon, the participation of you and the PUC, I

1 think, the level of research that the PUC brings to these  
2 activities is quite tremendous, both in terms of the  
3 knowledge, experience, and as well as the financial  
4 resources, I think, are quite helpful. I did have a  
5 technical question about the estimates of the savings from  
6 the programs that are called out in slides 4 and 6. Are  
7 those cumulative or annual savings? Those numbers are very  
8 impressive.

9 MR. BAKER: Oh, those are - I believe those are  
10 cumulative savings by the end of the program cycle, so those  
11 are basically 2012 cumulative savings.

12 COMMISSIONER EGGERT: From that three-year period.

13 MR. BAKER: From that three-year period.

14 COMMISSIONER EGGERT: Ten, '11, and '12, okay, so -  
15 and those investments will accrue ongoing savings because of  
16 all of the improvements that would be made under that  
17 program activity, right, beyond 2012?

18 MR. BAKER: No, my understanding is that,  
19 hypothetically, the next program cycle would add new annual  
20 savings which would add to those cumulative savings, while  
21 simultaneously the savings which were achieved in the 2010-  
22 2012 will degrade over time, so there's a - there's an  
23 erosion of savings from one program cycle, while there is an  
24 increase in savings from a subsequent cycle, so the net  
25 effect is an overall growth in cumulative savings.

1           COMMISSIONER EGGERT: Okay. And then I note that,  
2 at the very end of your presentation, you called out the  
3 need for a Joint Work Plan on 758, and I just wanted to see  
4 if maybe our staff had any comment on that, it seems like a  
5 reasonable request, and sort of how that would work, how  
6 would we accomplish a Joint Work Plan?

7           MR. PENNINGTON: This is Bill Pennington. To  
8 respond, I think working with the PUC on a Joint Work Plan  
9 is going to be a useful thing for us to do. And I think the  
10 timeframes that Martha showed in her slides are indicative  
11 of the pace that we probably can go through, and we have a  
12 lot of infrastructure development time that is going to be  
13 needed at the outset, and so, you know, I'm hoping that the  
14 PUC will have some patience with us as we get through that  
15 process, and I think we do very much want to collaborate  
16 with the PUC and want to coordinate also with all the other  
17 stakeholders, and ultimately I think the buck lands with the  
18 Energy Commission in terms of the direction from AB 758 to  
19 make decisions about things, and resolve differences, and  
20 you know, I think we need to take that final responsibility  
21 for implementing things, but I think the notion of working  
22 together to develop a Work Plan, and pursuing that Work Plan  
23 is a very good idea.

24           COMMISSIONER EGGERT: Thank you. Thanks a lot.

25           COMMISSIONER BYRON: If I may, Ms. Brook. Madam

1 Chair, I'd like to also acknowledge PUC's participation in  
2 this meeting, you know, most state public utilities  
3 commission's just regulate monopolies and allocate costs to  
4 consumers, but not our PUC. It has a strong track record of  
5 moving forward with policies that are trend setting and, I  
6 mean, these numbers are just astounding, Mr. Baker, and I  
7 would like to acknowledge the commitment of the Public  
8 Utilities Commission to energy efficiency, not just in this  
9 cycle, but in previous years. We are a bit always in awe  
10 about the amount of money that the PUC has allocated to this  
11 and we have to rely upon that puny little budget over there,  
12 across the street that the Legislatures dole out. And as I  
13 recall, the Public Utilities - and unfortunately  
14 Commissioner Grueneich, I understand, couldn't be here  
15 today, I really would like to acknowledge her and the  
16 leadership she has provided the PUC - but, as far as I know,  
17 you still only regulate in the investor-owned utilities, and  
18 so my question really is to our staff, where are the public  
19 utilities in this process? Where's the source of funds and  
20 the ability for us to enact these programs across the other  
21 20-25 percent of the State?

22 MS. BROOK: So, I actually had a note that I forgot  
23 to look at, to mention that we do have several very  
24 aggressive public-owned utilities that are doing great  
25 programs quite comparable to what the investor-owned

1 utilities are, with much smaller budgets, obviously, and we  
2 have - and they actually are directed under AB 758 to report  
3 their energy efficiency program results to the Commission as  
4 part of the AB 2021 requirements for public-owned utilities  
5 to report and work with the Energy Commission to report  
6 their efficiency program results. So we do expect their  
7 participation, and you're going to hear from some of them  
8 today that are involved in our Federal Stimulus Funding  
9 Programs that are related to the work we're trying to  
10 accomplish, so thank you for bringing that up. I just  
11 wanted to - are you done?

12 COMMISSIONER BYRON: I can be done.

13 MS. BROOK: So I just wanted to have one corny slide  
14 here that is just sort of another way to look at kind of  
15 where we are at now with AB 758 and put it in context of  
16 what we're going to talk about today. So, Energy Upgrade  
17 California has been mentioned a couple of times, we are  
18 really kind of thinking about that as a hub for retrofit  
19 activity in the State, and it has many spokes, so I just  
20 wanted to mention that part of the public, those efficiency  
21 programs and other parts of the public, its programs are the  
22 public-owned utilities, and what we're going to be talking  
23 about the rest of the day are these other components of a  
24 successful comprehensive program. In our opinion, public  
25 awareness is a key part, financing solutions, green jobs,

1 and performance rating pilots, so all these things are to  
2 sort of key up what we are going to talk about for the rest  
3 of the day, and they are, of course, achieving existing  
4 building retrofits. So, what we want to do and the way that  
5 we structured the rest of the day is that we've built the  
6 discussion panel topics around these key 758 program  
7 elements, each of the panel members are each participating  
8 in one or more Federal Stimulus Fund programs that we've  
9 started, and our challenge for the day, I think, is to  
10 identify the barriers to success, and discuss other relevant  
11 issues. So, again, we don't just want to say what a great  
12 job we're doing spending Federal Stimulus dollars, we want  
13 to talk about issues with actually reviving the economics of  
14 the State, as well as how do we carry these programs forward  
15 in a persistent, sustainable way so that we can help achieve  
16 the goals of our more comprehensive retrofit program goals.  
17 So, that's it.

18           So I think our first discussion panel today is in  
19 Public Awareness and Marketing.

20           COMMISSIONER BYRON: Just in time, Mr. Rebello.  
21 Glad to have you.

22           MS. GARFIELD: Good morning, Commissioners. Susanne  
23 Garfield and I am the Assistant Executive Director at the  
24 Energy Commission, Director of Communications. It is my  
25 pleasure to be a moderator of the first panel and what we're

1 going to do is help set the framework on discussion of what  
2 is this Energy Upgrade California, a little of the marketing  
3 approaches to different customers groups are taking. And I  
4 had a professor in college one time who talked about  
5 marketing public relations and advertising, and he put it  
6 this way, he said that if a young man tells his date how  
7 handsome, smart, and successful he is, that's advertising;  
8 if someone else tells the young woman how handsome, smart  
9 and successful her date is, that's public relations;  
10 however, if a young man tells his date she's intelligent,  
11 looks lovely, and is a great conversationalist, he's saying  
12 the right things to the right person, and that's marketing.  
13 So, simply put, marketing is everything we can do to place  
14 our product, Energy Upgrade California, and its services  
15 into the hands of its potential residential and commercial  
16 customers.

17 As mentioned before, Energy Upgrade California is a  
18 very complex, comprehensive, and somewhat outside of the box  
19 program and will require very innovative, creative, and new  
20 ways to market. It has a lot of stakeholders, a lot of  
21 players, and we're just at the very beginnings of putting  
22 this whole program together. And as you'll find out  
23 throughout the day, there are many interests and many  
24 partners. First, I'd like to thank our three panel members,  
25 Panama Bartholomy, Mindy Craig, and Derrick Rebello. And

1 first what I'd like to do is set the stage for the framework  
2 of Energy Upgrade, what is Energy Upgrade California. And  
3 who are our players, and who are some of our customers. And  
4 our first panelist is Panama Bartholomy, and he is on  
5 special assignment right now to the Executive Office as the  
6 lead for the Energy Upgrade California project. Currently,  
7 he serves on the City of Sacramento's Planning Commission  
8 and the County of Sacramento's Environmental Commission. He  
9 is Vice President of the Northern California Chapter of the  
10 U.S. Green Building Council and is a Board member of the  
11 Humboldt-based Center for Sustainable Living. Something new  
12 and dear to my heart, he worked previously at the California  
13 Conservation Corps in the Vocational Environmental Education  
14 and a Division of the State Architect, where he ran the  
15 Sustainable Schools Program. So, we are very fortunate to  
16 have him as the lead for this program. Panama.

17 MR. BARTHOLOMY: Great, thank you, Susanne. Good  
18 morning, Madam Chair, Commissioners, and Special Advisors.  
19 Fellow panel members, audience members, real and virtual,  
20 thank you for joining us today. As mentioned, my name is  
21 Panama Bartholomy and, as suggested by Susanne, I do work  
22 here. I will be talking today about a brand new program  
23 rolling out across California called Energy Upgrade  
24 California. As already has been suggested to you this  
25 morning, there is a significant amount of money going

1 towards building retrofits from Federal Government, local  
2 government, from utilities, both investor-owned and  
3 publicly-owned, this year and over the next few years,  
4 across the State. And about six months ago, a group of our  
5 two Commissions, local governments, and utilities, realized  
6 that this was an amazing opportunity to not only bring about  
7 significant energy savings and environmental benefits, but  
8 also significant opportunity for mass market confusion, as  
9 well. The wanting to achieve the first and not the second,  
10 these groups got together and decided to band and try to  
11 find a way to coordinate and harmonize all aspects of these  
12 programs as much as possible, and what we came up with was  
13 Energy Upgrade California.

14 I will be briefly, very briefly, covering perhaps  
15 just the froth of the potent elixir that Commissioner Byron  
16 talked about. I'll be giving just a very brief description  
17 of the program, its components, and then some focus on the  
18 marketing and outreach efforts, and then talking about how  
19 it furthers state policy moving forward, and then I'll let  
20 the rest of the panel members throughout the rest of the day  
21 fill in the details because every program and project and  
22 speaker that you hear from today is under the umbrella of,  
23 and coordinated with, Energy Upgrade California efforts.

24 So, I will now talk about the program and its vision  
25 for roll-out, and at this point, it is truly a visionary, as

1 well as a vision, in that we are, as suggested by Mr. Baker  
2 and Ms. Brook, still at the very early stages of rolling  
3 this program out. So what it is at the highest level is a  
4 statewide energy, water efficiency, and renewable energy  
5 generation retrofit program for all building types in  
6 California, residential, commercial, single-family, Multi-  
7 Family. It is a large scale collaboration between all the  
8 entities I mentioned earlier, the two Commissions  
9 represented here, as well as utilities, local governments,  
10 and the private sector. And it attempts to act as the one  
11 all encompassing resource for any building owner in  
12 California, or any contractor that wants to retrofit  
13 buildings in California, and to be able to go to it and find  
14 all information on building retrofit activities across the  
15 State and all the various programs and what those programs  
16 have to offer, and it attempts to coordinate all of the  
17 various retrofit programs rolling out in California this  
18 year and over the next few years across the Golden State.  
19 And, as mentioned previously by some of the Commissioners,  
20 as well as some of the speakers, it acts to begin to create  
21 some of the infrastructure and the foundation for the  
22 implementation of 8758, and hopefully Home Star, as well.

23           It intends to encompass a wide variety of funding  
24 sources, I will not read you the details of this, but just  
25 highlight that it discusses public good charge funds here,

1 it discusses Recovery Act Funds, Workforce Investment Act  
2 funds, Energy funds, and then a significant amount of local  
3 government investments, whether it is through their own  
4 Federal Stimulus money, or through their general fund, or  
5 other Treasury funds.

6           The program has a variety of levels of coverage at  
7 the statewide level, as a statewide, Worldwide Web presence,  
8 providing information to every resident, every building  
9 owner in California, about the benefits and the  
10 opportunities presented to them for building energy  
11 retrofits, as well as opportunities for low cost financing  
12 for residential and commercial buildings. What we offer  
13 through the programming, and I will mention briefly in  
14 upcoming slides, the program, when you look at the  
15 combination of Recovery Act money and investor-owned utility  
16 retrofit programs, brings about the development of  
17 comprehensive residential retrofit programs in 51 of  
18 California's 58 counties, covering the details you see up on  
19 the screen, but everything from the marketing and outreach  
20 to the workforce development for all these different  
21 counties.

22           Additionally, the program attempts to overcome some  
23 of the barriers put in place by Federal agencies around  
24 property assessed clean energy funds. The program - it is  
25 the belief of the Commission that PACE, also known as PACE,

1 this program has significant benefits and opportunities for  
2 California and the rest of the nation, and we need to be  
3 finding ways, either under the current regulatory regime, or  
4 future regimes, the way to be able to enable local  
5 governments and building owners in California to use this  
6 innovative financing tool, and the Energy Upgrade California  
7 program offers pilot programs, residential and commercial  
8 PACE programs, to try to find a way to still make PACE work,  
9 even in light of the barriers put up by Federal agencies.  
10 And then it provides new tools for affordable housing  
11 retrofits and I'll provide some details later on in the  
12 presentation.

13           So some of the -- deeper into the topic for this  
14 program. The financing program will be offered through the  
15 California Statewide Community Development Authority, they  
16 will be engaging in a competitive solicitation for financial  
17 institutions to be able to offer financing products across  
18 the state for commercial and residential buildings. Offered  
19 to them will be incentives such as interest rate buy-downs  
20 and other securities, as well as a statewide marketing  
21 program with strong quality assurance and underwriting  
22 criteria, and there is a belief that, through these  
23 incentives and through the strong program infrastructure, we  
24 are going to be able to achieve low cost financing, to be  
25 able to bring that to Californians, to be able to engage in

1 their energy, water, and renewable energy retrofit projects.

2           The program brings together and attempts to  
3 coordinate and harmonize the various residential programs  
4 being rolled out across California, and the Chairwoman asked  
5 that any speaker highlight when any of the programs have an  
6 interplay with publicly-owned utilities or investor-owned,  
7 utilities, so I will say, here is your interplay, Madam  
8 Chair. It consolidates information, everything from the  
9 rebates to the contract requirements, the quality assurance,  
10 of all the residential programs being rolled out across the  
11 State under one brand and one location, and it attempts to  
12 bring harmony to the various programs so that it'll make it  
13 easier for the consumer to interact with the various  
14 programs in a single fashion, in a single application, and a  
15 single contractor, rather than multiple phone calls,  
16 multiple interactions, with multiple different programs. It  
17 offers a subsidy to an increased HERS II roll-out across the  
18 State, and it attempts to expand HERS to the Multi-Family  
19 market. As mentioned, it provides support to Sonoma County,  
20 the real leader in rolling out property assessed clean  
21 energy in California, it provides support to them to develop  
22 new strategies for having to deal with some of the barriers  
23 that have been put in place by the Federal Housing Finance  
24 Authority, and then offer technical assistance to other  
25 local governments wishing to put in place a similar PACE

1 program with the strategies and materials that are developed  
2 through that pilot program.

3           The program will be funding the development of a  
4 asset manager tool, basically a process decision tool, for  
5 the Multi-Family market. There is a significant amount of  
6 funds available for low income and Multi-Family market, and  
7 one of the real challenges is finding the right source of  
8 funds for the right project, and quite often you have owners  
9 of these sorts of facilities having a real challenge to  
10 identify what their project actually is and then how to  
11 choose the right fund source to fund their program. This  
12 decision tool will help guide them through developing the  
13 right project for their building, and then be able to  
14 identify and lead them to the process of choosing the right  
15 fund source and helping them to then track what kind of  
16 progress they've made on their project, and then the results  
17 of their project, as well.

18           Similar to the residential part of the program,  
19 Energy Upgrade California attempts to bring together and  
20 consolidate information on the various commercial retrofit  
21 programs being offered across the State, and it attempts to,  
22 again, coordinate and harmonize as much as possible the  
23 various programs, so there is the marketing, the contractor  
24 qualifications, or the quality assurance across the various  
25 retrofit programs to, again, meet the goal of reducing

1 consumer confusion and really easing people's path down the  
2 road towards energy efficiency retrofits.

3           Similar to the residential program, it is going to  
4 offer an opportunity for a piloting of commercial PACE  
5 Program in three communities across California, the City of  
6 Los Angeles, Placer County, and San Francisco County,  
7 working closely with their utilities, LA Department of Water  
8 and Power, and Pacific Gas & Electric's Retro Commissioning  
9 Programs and their On-Bill Financing Programs. This will,  
10 similar to the residential pilot program, offer an  
11 opportunity for the City of LA and the two counties to  
12 develop strategies and methods for dealing with some of the  
13 challenges put in place by the Office of Currency  
14 Controllers guidance around PACE districts, and then,  
15 working with the Clinton Climate Initiative, to provide  
16 outreach to other communities across California that want to  
17 roll-out similar commercial PACE programs, using the tools  
18 and the methods developed in the City and two Counties.

19           The program is going to be spending a significant  
20 amount of time on contractor qualification and bringing our  
21 contractor class in California up to speed, to work on  
22 retrofit programs. There is going to be a variety of  
23 training programs offered at the State utility and local  
24 level, and there will be new online tools to be able to  
25 track the progress of a particular contractor on every

1 project that they're working on, and be able to have close  
2 quality assurance coverage of all projects carried out under  
3 the Energy Upgrade California banner. There is a  
4 significant amount of funding under the program going  
5 towards workforce development under the Clean Energy  
6 Workforce training program and the Investor owned utilities  
7 workforce education and training programs, and then there's  
8 going to be the opportunity again to try to roll out in  
9 great stead the HERS II infrastructure by providing  
10 scholarships for contractors interested in becoming a HERS  
11 II rater in California.

12 I will just finish up briefly talking about the  
13 marketing and outreach efforts planned under Energy Upgrade  
14 California, and then at the statewide level, and then give  
15 it over to some of the particular details of the next few  
16 panel members. This is the logo that has been agreed to  
17 between the various party members of the partnership. Any  
18 of you who have been involved in logo wars in the past know  
19 that no logo comes easy to any program, but this through a  
20 significant partnership collaboration and arm twisting, we  
21 came to this wonderful logo, which all the programs will  
22 roll out under.

23 The consumer outreach under Energy Upgrade  
24 California is going to be bringing together the marketing  
25 efforts of the Investor-owned utilities, State government,

1 our two Commissions, and local governments, across the  
2 Golden State, and it will be coordinating all those efforts  
3 together through a variety of different media sources, it is  
4 going to be mass media by billboards, brochures, but a real  
5 focus on county-level integration, and in particular, under  
6 the contract that the Energy Commission approved on  
7 Wednesday, we will be doing significant on-the-ground  
8 coordination of local government and community group  
9 outreach, working with one of our subcontractors, Ecology  
10 Action, represented by Margaret Bruce in the back of the  
11 room there today, who will be working on putting together  
12 local government advisory committees that will work with  
13 every contractor group, community group, nonprofit  
14 association, involved in this area, in each of our  
15 leadership counties across the State, to make sure that by  
16 this time next year, every building owner in California will  
17 have had more than enough conversation about Energy Upgrade  
18 California.

19 Here is some of the collateral that has already been  
20 developed, what the programs are beginning to look like, and  
21 this is an excellent opportunity to show some of the co-  
22 branding and the partnership that has already taken place.  
23 You see here the Energy Upgrade California logo, and then  
24 the County of L.A. and Southern California Edison, so,  
25 again, it's an excellent opportunity to show some of the

1 partnerships that are already taking place and some of the  
2 early materials developing out of that partnership. We will  
3 be offering Energy Upgrade California information in many of  
4 the major language groups across California on both the  
5 material, as well as our online - our online website is  
6 going to be a significant resource to building owners in  
7 California, as well as contractors in California, and  
8 program administrators. As mentioned, it's going to provide  
9 a one-stop resource for all information about retrofits and  
10 programs in California. It is going to allow property  
11 owners to have a one-stop shop for applications, to be able  
12 to submit as few applications as possible in order to apply  
13 for the various programs, and allow property owners to track  
14 to their project online through a personal account, to be  
15 able to check the status of all aspects of their project as  
16 they finance their retrofit project, as it moves forward.

17           Here is how the Website is going to work from a  
18 homeowner or the commercial building owner's perspective,  
19 they will enter the Website, be educated about the  
20 opportunities before them, they will then type in  
21 information about where they are located, and the kind of  
22 project they want to engage in. The Web resource will then  
23 highlight to them the rebates and incentives that are  
24 available to them, and then offer them the opportunity if  
25 they don't want to pay cash for the difference, the

1 financing that is going to be made available through this  
2 program. It'll then direct them, based upon the programs  
3 they've chosen to use for their financing and their rebates  
4 to qualified contractors under each of those programs, and  
5 allow them to track the progress of their project moving  
6 forward.

7           We are particularly excited about Energy Upgrade  
8 California because of the opportunity to reduce consumer  
9 confusion and bring about energy efficiency and  
10 environmental benefits, but also we have embedded throughout  
11 the program other state policy that we think it furthers, in  
12 particular, the loading order; implicit in the program will  
13 be that, if Energy Upgrade California financing is used to  
14 finance solar photovoltaic, then the building owner must  
15 invest in energy efficiency first, and this is our efforts  
16 to continue to bring together the renewable energy and  
17 energy efficiency fields. It will be expanding HERS II  
18 significantly, as well as the Multi-Family buildings, and  
19 then providing some of the infrastructure and the groundwork  
20 for AB 758 implementation, and Home Star, in particular,  
21 providing a home for PACE when it comes back, so that we'll  
22 have all of the infrastructure, the workforce development,  
23 the quality assurance, the marketing and outreach, all in  
24 place and ready to go, so that when PACE is given back to  
25 us, we'll be able to incorporate it and use it most

1 successfully. The timeline for this program is coming up in  
2 October and November. The investor-owned utilities will be  
3 doing a launch of their programs to the Energy Upgrade  
4 California, the integrated website will be launched right  
5 around the second week of October, and the development of  
6 the Long Range Implementation Plan for Energy Upgrade  
7 California will be developed and completed. And then, in  
8 December, the full integration, all of the opportunities to  
9 integrate a website will be rolled out.

10 So, to sum up, the program you've heard about and  
11 that we'll be talking about the rest of the day is, again, a  
12 statewide energy and water efficiency program with renewable  
13 energy retrofits for all building types in California. It  
14 is going to act as one place for all building owners and  
15 contractors to come for information about how to retrofit a  
16 building, or take part in programs, and it acts to  
17 coordinate and harmonize programs to reduce consumer  
18 confusion, and then really ease the way to as many building  
19 retrofits as possible. And with that, I will be happy to  
20 entertain any questions, and I will give it over to my other  
21 panel members. Thank you very much for your time and  
22 attention.

23 CHAIRMAN DOUGLAS: Thank you, Panama.  
24 Commissioners, should we hear from all the panel members  
25 before we take questions? Very well, let's hear from the

1 next panel member.

2 MS. GARFIELD: Okay, thank you, Commissioner. Our  
3 next panel member is Mindy Craig, and Mindy is going to  
4 focus on some of the background for the residential programs  
5 that she's been working on. They've done a lot of extensive  
6 market research and we'll look at what the residential  
7 consumers' focus is on. Mindy is a principal and the  
8 Director of Marketing at MIG, they are based in Berkeley.  
9 She is also a Senior Planner and she has more than 18 years  
10 experience in the strategic planning Parks and Recreation  
11 planning area, marketing and communications, and financial  
12 feasibility services for numerous public agencies in  
13 California and the United States. Mindy has been very  
14 instrumental in establishing the partnerships for the Energy  
15 Upgrade California program, and has been working extensively  
16 with partners such as the L.A. Retrofit Ramp-Up, the L.A.  
17 County Planning Implementation, Alameda County Planning  
18 Implementation, ABAG, Association of Bay Area Governments,  
19 those are nine counties, and also in the planning area of  
20 that, many state entities, and she's been facilitating the  
21 Better Buildings Program, which is a statewide ARRA funded  
22 program. So, I'm very pleased that Mindy could join us  
23 today and she's been - her expertise has been incredibly  
24 valuable as we've been moving forward in this process,  
25 especially in the website development. Mindy.

1 MS. CRAIG: Thank you, Susanne. So, I'm going to  
2 try and give a little bit of overview and go a little bit  
3 deeper than what Panama did about the marketing and where  
4 we've come from and where we're going. There has been a lot  
5 to start with, with research. We wanted to make sure that  
6 we grounded what we were doing here in solid research, and  
7 so we started off, actually, with a number of surveys within  
8 Los Angeles County, in Alameda County, and the nine Bay Area  
9 counties, as well as also using some statewide surveys. In  
10 addition, the investor-owned utilities have been doing  
11 surveys and we found, actually, that all of this research  
12 has aligned, which is very pleasing, so I am just going to  
13 give you a snippet here of what we found and, obviously, if  
14 we want to go into questions, I can give you a lot more  
15 detail.

16 So, one of the things that we wanted to find out is,  
17 are people even interested in energy efficiency, and have  
18 they done anything. And the vast majority said yes, they've  
19 actually been doing a lot to change their behavior around  
20 energy efficiency. And have they done any improvements?  
21 And, again, a lot of people said yes. This is actually a  
22 little bit of a challenge because some of this means they've  
23 changed the light bulbs and they think they've done a lot of  
24 energy improvements already, and we actually have to kind of  
25 get over their idea of what it means to do energy

1 improvement, but at least people are aware of this concept,  
2 and that was important for us. And what kind of things do  
3 they feel is an important thing for them to do?  
4 Installation, new doors, solar panels were very exciting, so  
5 people, again, had a sense of "we know what we need to do,  
6 we just need some more help to do this." And then we also  
7 wanted to find out, have they been reading anything about  
8 these new energy retrofits, about greening your house, and  
9 again, the vast majority had heard something about this, so  
10 we know there is awareness, at least, out there about the  
11 need and the opportunities for this. And then the question  
12 is, okay, would you be interested in this kind of a program  
13 in participating and doing energy efficient upgrades to your  
14 house. And then, again, a majority of people were  
15 interested, given all the elements and the details of duct  
16 sealing, and installation, they liked the idea and they want  
17 to do it.

18           But there were some barriers. A lot of people  
19 aren't because of the economy, they didn't want to do a  
20 whole house concept, they wanted to do just one little thing  
21 at a time. And so we need to educate people about what it  
22 means to do a systematic approach to energy efficiency  
23 because that's really where we're trying to lead consumers,  
24 is to think about their houses, an entire system that needs  
25 to operate as a whole.

1           The cost is a challenge, especially, again, the  
2 economy and some of the things that the new program, and the  
3 financing and the rebates are really going to help address  
4 this, but that's definitely one of the barriers consumers  
5 said. Complexity, a lot of complexity, and we spent a lot  
6 of time internally and working with utilities, the local  
7 governments, to say, okay, how can we make this simpler?  
8 How can we make our language simpler? How can we give the  
9 consumer something they can handle very easily? And our  
10 website is really going to try and address this specific  
11 problem, how can we make this very complex program  
12 attainable?

13           And then contractors, that quality of contractors  
14 that people like often the contractors they're working with,  
15 but there's kind of an ambiguity about that other contractor  
16 over there, who hasn't done a great job, so how do we make  
17 sure that contractors are trusted, the quality assurance,  
18 quality control program part of the Energy Upgrade is going  
19 to be really critical here, and how we present that, and how  
20 we make sure that contractors go through these programs,  
21 because that's going to be a way of making trust on this  
22 program.

23           So, after all this research, we wanted to find out  
24 who are we actually talking to, and again, this is a pilot,  
25 and so we have specific goals for the energy upgrade

1 program, and I think what Panama presented was a much  
2 broader view, and so this is really oriented to the pilot  
3 program and to the residential markets, so that is what this  
4 key market is. Homeowners, basically in this 35-54 age  
5 group, college educated women are very interested in doing  
6 this kind of an upgrade, in middle incomes, not people who  
7 are really wealthy because they don't necessarily see the  
8 benefits of lower utility bills, that isn't a big motivator;  
9 maybe some of the green measures might be, but that idea of  
10 energy savings is not, so it's more of a middle income.  
11 Multicultural - we had a lot of very positive response from  
12 very diverse communities in L.A., in the Bay Area,  
13 particularly. School age children, and just having large  
14 families, as a whole, because obviously there are more kids  
15 using the shower, running things, keeping the lights on,  
16 they have higher bills and so there is a benefit, then, to do  
17 this program. And then, again, that idea of the Spanish-  
18 speaking community is very interested in this, so we see a  
19 very positive aspect of being a very inclusive project and  
20 program.

21 Houses that were built before 1940, and even before  
22 1975, also, where we're targeting it, and people have  
23 already done something to their house are much more likely  
24 to participate and do more, but they've already kind of  
25 drunk the Kool Aid, as it were. And those who are

1 transitioning, are buying a new house, or they're having a  
2 baby, something new is changing their life and they want to  
3 do something. I just want to say on this, one of the ways  
4 we're using this information is really important is what  
5 we're calling "hotspot marketing," and Los Angeles County  
6 and the Bay Area, we've actually done GIS mapping of these  
7 different areas, and we said, okay, well, there are  
8 neighborhoods that we can actually go and specifically  
9 target with information about this, that we know are going  
10 to be very interested in this kind of a program, and so  
11 we're really trying to make sure that we are very targeted  
12 on that, and I'll talk a little bit more.

13           What are some of the messages? This has been a lot  
14 of controversy and a little bit about what is the message  
15 that people want to hear in order to be participating in  
16 this program. Overwhelming in all the survey and all the  
17 focus groups that we've done is money, is the primary  
18 motivator. So, saving on the utility bill and also saving  
19 on the upfront cost on your upgrade itself, those are just  
20 critical things, and we've said that, no matter what we do,  
21 we have to have those kind of messages permeate our  
22 marketing messages. But there are also some very critical  
23 secondary messages that we also want to get across, which is  
24 we have certified contractors, and that word "certified" is  
25 actually - we're working on what the right word is, the

1 participating contractor that's been trained, but that idea  
2 that we have contractors who have gone through some sort of  
3 training and filtering. Helping the environment and climate  
4 change, that's a good important secondary message. It's not  
5 going to be the number 1 one, but people want to do the  
6 right thing and this is a good way of doing that.

7 Similarly, the idea of reducing foreign oil, reliance on  
8 that, is important, and fossil fuels, increasing property  
9 values, comfort, particularly once a contractor is in a home  
10 and they're talking to a potential consumer, they can start  
11 discussing the idea of, "Well, we can really improve your  
12 comfort," or indoor air quality, "Did you know that all the  
13 air is coming through your basement and bringing molds and  
14 other things into your house? Well, if we do the right job  
15 here, energy upgrade, we actually can improve your indoor  
16 air quality." So, there are different messages that are  
17 going to be used at different times on different messages.

18 So, who are messengers? This is also an important  
19 discussion, who are the people that are going to listen to  
20 one another? Well, we know overwhelmingly it is neighbors  
21 and other homeowners are going to be the most trusted  
22 advisors, and that's what people want to hear, so a lot of  
23 our marketing effort, and what Panama identified with  
24 Ecology Action, which is we want to do on-the-ground  
25 marketing, it's not necessarily lots of blitz and glamour

1 with so many billboards, but it's really building a trusted  
2 network of people who are really talking about this.  
3 Building contractors, obviously you're in the house, you  
4 need to be able to discuss the benefits, how we get this  
5 done, why you should do it, your energy savings, so we  
6 really want this contractor to be really well educated and  
7 understanding the marketing messages, as well as the  
8 technical details. Architectural design professionals are  
9 also very well respected in this. The gas and electric  
10 utilities, again, very respected in terms of their ability  
11 to give good information. There is a little bit of question  
12 about, "Well, are they going to raise my rates? Or is this  
13 going to be this way or not?" And the utilities, we've had  
14 a lot of conversations with them on this conversation and  
15 they agree with us, that they know if they provide  
16 information, the consumers agree with it, they like having  
17 that information, but there is a little bit of a tension  
18 there. Environmental organizations, and then also home  
19 improvement staff can also be good messengers on this.

20           And how are we going to do it? And Panama mentioned  
21 a couple of those, but utility and billing service,  
22 newspaper articles, a lot of social media, we're going to  
23 use YouTube, having maybe people do little videos about  
24 their home upgrades and do more environmental marketing,  
25 again, building on that concept of hearing about your

1 neighbor and what they're doing. The posters at different  
2 venues, in-store kiosks, this is a huge range of materials  
3 and marketing modes that we'll be building on.

4           So strategy - how do we actually do this and what  
5 are we going after? Again, this is sort of the pilot, and  
6 so we believe that there's a building of this market, there  
7 are people we know who are already there, they're just  
8 waiting patiently for the rebates to be ready, for the  
9 financing to be ready, and get going, they already believe  
10 that this is the right environment, they want to reduce  
11 their footprint, they're ready to go. Then, there are the  
12 people we're calling retrofit ready. They want to save  
13 money on the utility bills, they're kind of on the fence,  
14 they just need a little bit of pushing, we need to give them  
15 the incentives and the right information, and they're going  
16 to go out there and get it done. And then the persuadables,  
17 so this is sort of more mainstream group of people who,  
18 again, are kind of interested in this, and they've heard  
19 about it, they've maybe done some of these energy efficiency  
20 things, but they don't understand the whole house concept  
21 and, again, they need more help, more information, and more  
22 details, but we think they're going to be available and  
23 captured. So we are going to talk to them about things like  
24 comfort in their house, their health and, guess what, there  
25 are rebates available, and there's financing.

1           Then we see kind of the next phase, that once we get  
2 through this opening phase, we create a buzz, we create  
3 enough of a concept, the demand, making this the norm that  
4 people have more interest in joining in as we move along.  
5 And we, of course, know that there are those people that are  
6 just never going to do it, and so we're not even going to  
7 try.

8           As I said, we're really trying to make this a  
9 targeting marketing approach and, as Susanne mentioned,  
10 we're working closely in Los Angeles County and Alameda  
11 County on implementation here, and although there is a lot  
12 of money going around in marketing, we're not just spending  
13 it everywhere, we're very targeted about it, and that's what  
14 all this market research is pointing us to. So, we're  
15 really trying to keep close looking at our contractors,  
16 online ads, social media, those hotspots I mentioned before,  
17 community newsletters. We will go out to a little bit  
18 bigger, some local media, some billboards, we're doing some  
19 transit advertising on buses and the transit stations, and  
20 some city TV, we're actually looking at how we can work with  
21 the weather men on several stations in advertising Energy  
22 Upgrade California as an ongoing road and marketing campaign.  
23 And then, county events, a lot of the county fairs, where  
24 people are going to big events, radio, street fairs, and  
25 some other mass media things. One of the areas we know is a

1 lot in our marketing is what we call "trigger" that  
2 marketing, so we want to get people, if their air-  
3 conditioning blows out, they need to go to the right person,  
4 their contractor, having a marketing kit, the retailers know  
5 that, okay, your air-conditioner went out, but don't just  
6 get a new air-conditioner, think about this whole house  
7 approach, think about the idea that you need to seal and get  
8 your basics done, and then you may actually get a smaller  
9 HVAC system because you have a better, more efficient house.  
10 So we need to make sure that message gets out there, that  
11 idea of lifestyle changes, make sure that we have things  
12 around families, doctors offices, that we get that message  
13 to that group. If someone is buying a house, that the  
14 realtors know about this. I was at a street fair yesterday,  
15 I guess on Sunday, and there were about four or five green  
16 realtors out there talking about energy efficient mortgages,  
17 they were really excited about this program and how they  
18 want to talk to their consumers about this and as AB 758  
19 comes around, this is even more important as a marketing  
20 line. If someone is complaining on a utility, that the  
21 people who are on that call center can help direct them into  
22 this idea of doing the whole house concept, and again the  
23 remodel.

24           And I wanted to mention a couple other ones before  
25 we go on, that we're doing work on the Better Buildings

1 Program, and there are several pilots that are very  
2 exciting, one is the community-based social marketing, which  
3 is really, again, looking at different social networks, be  
4 it a neighborhood network, a Girls and Boys Club, or the  
5 Girl Scouts of America, as a way to reach their constituents  
6 and build a need and a desire for energy upgrades. Retail  
7 marketing, we are working with different retailers  
8 throughout the state to see if we can work with them, and if  
9 they can help build a market. Green labeling, so another  
10 layer, actually, to the energy upgrade, which Panama alluded  
11 to, is how do we integrate more sustainable recycled  
12 measures into the program as a whole, and then the idea of  
13 looking at whole neighborhoods, particularly around tract  
14 home neighborhoods, can we create programs that reduce the  
15 cost of actually doing these upgrades by saying, okay,  
16 there's similar housing types in one neighborhood, and we  
17 can have a package that you can do very easily on that.

18 So, Panama talked about the logo wars, it was a very  
19 interesting program to get to our brand, and you asked again  
20 about that collaboration. This was a huge collaboration  
21 with the IOUs, the CPUC, and CEC. It was probably a four-  
22 month process, all told, talking with each other,  
23 understanding each other's needs and issues, how we were  
24 going to market this, where it would come from, and I think  
25 we came out very successfully at the end, and feel like we

1 now have a lot of momentum to move that.

2           So, what the vision of the program is, it's an  
3 inspirational and an aspirational brand, we want to make  
4 sure that it lasts long time, that it isn't just this pilot,  
5 but it goes on for a long time, that it's motivating and  
6 gets users to do the energy upgrades, and have a better  
7 quality of life because of it. It's dynamic, it's positive,  
8 we don't want to talk about negatives, we want to go about,  
9 again, that positive aspect, and that we get people on a  
10 kind of intuitive idea that this makes sense, and that they  
11 can make out that the dollars and cents also makes sense at  
12 the end of the day, that's the vision that we want to  
13 achieve. And I'll just kind of go over the core things  
14 really quickly.

15           We want to make sure that it's quality driven, that  
16 contractor quality, that we have a promise, and we actually  
17 deliver on it, it's clear, we want that idea, one stop shop,  
18 you don't have to go a lot of places, you don't have to do a  
19 lot of the things, it's going to be clear. And it's also  
20 creative, that we want to make sure that people think it's  
21 fun, that it's not too institutional, that it has some play,  
22 that it actually represents California as this innovative  
23 community, and it shows that, it's consistent. Again, if we  
24 want this to last on and on, we want to make sure all those  
25 principles go on and on here. And then it's about our

1 communities, that it's not just about a big statewide  
2 program, but it's actually about building better  
3 communities, it does help meet climate change goals, it has  
4 a direct impact.

5           So, ultimately, it's for property owners who want to  
6 reduce their energy use, increase comfort, while saving  
7 money and helping the environment. Energy Upgrade  
8 California is the source for practical information and  
9 innovation and we make it simple. That's really where we  
10 want us to be at the end of the day. I'm going to pass  
11 this, I don't know that this really goes into too much here.  
12 Here is the logo that we went through, and it was an  
13 important element here, is that when we were working with  
14 the CPUC and the utilities, their brand Engage 360, where  
15 they're building at the same time, came out and so we had a  
16 great conversation about how would these work together, and  
17 we developed an understanding of how they do work, and so  
18 the Engage 360 brand actually helped inform the look and  
19 feel, to a certain extent, of this. We picked the same  
20 color palettes, so we have about seven colors that we will  
21 work together, they have their primary colors and we have  
22 our primary colors, but we share a whole palette. We share  
23 the font styles so that we can be seamless as we move  
24 forward.

25           The website is a critical piece to this, especially

1 as a statewide program, reaching so many different  
2 consumers, it's just critical, and we are working very  
3 diligently to have one that is unprecedented in its  
4 integration, with the utilities, with the muni's, as well,  
5 we're trying to bring them into this, all the local  
6 governments, that there's a local control factor, but a  
7 state consistency. And that's a really interesting balance  
8 and we can talk more about that if we want to, but it's  
9 going to be that hub of activity to keep this brand and the  
10 marketing program alive.

11 We are going to do things like interactive tours of  
12 the house to help educate people, this is sort of just a  
13 little example of what it might look, how people might think  
14 about sealing those ducts, we want to make it, again, very  
15 accessible to individuals. Right now, we have some local  
16 websites up for Alameda County, Los Angeles County, and  
17 we're building a couple of other ones in the interim so that  
18 information is getting out to the community. Again, we're  
19 branding it across the board, the same brand. As Panama  
20 said, we're already doing templates, and we're working with  
21 the utilities to make sure our language is the same. We  
22 actually had a great meeting a week ago about how do we talk  
23 about all these different things, what is an energy audit?  
24 Is that what we want to call this? Maybe we should come up  
25 with the ideas of an "energy assessment," it seems a little

1 less taxing. And so we have come up with a whole glossary  
2 of terms the utilities and the local governments are going  
3 to hopefully agree on very shortly to guide this. We've  
4 already come up with a whole book of design guidelines, so  
5 that anybody who is participating can download the brand and  
6 the guidelines, so that they can create materials in the  
7 same look and feel wherever they are.

8           These are some of the other things we're going to be  
9 creating online for some of the contractors, so that if they  
10 want to do an online ad, for instance, they can go online  
11 and get the materials to do that. Here is an example of a  
12 Web banner ad that might be there, that a contractor might  
13 want to do. Again, co-branding with us. Here is an example  
14 of that - brochures. We really think the contractor is a  
15 critical messenger here, we think perhaps maybe 50 percent  
16 of the actual retrofits will happen from direct contact with  
17 contractors, so we're spending a lot of energy and thought  
18 about how do we ensure they have the right tools, the right  
19 information. They have all this research available to them  
20 in a package format, so they can go out and talk to  
21 consumers in a similar manner. And to that end, we're doing  
22 big contractor marketing kits, right after you go through an  
23 orientation and you have your BPI assessment, you actually  
24 get a whole kit. You can go online and access all of the  
25 materials, download them, print them out, we'll have pre-

1 printed materials, as well, for contractors so they can go  
2 to a homeowner and talk about this. And then we're going to  
3 do also things like promotional signage, hats, iPod covers,  
4 iPhone covers, and the same. Signage for lawns, again, that  
5 idea that if you can't really see your ducts being changed,  
6 obviously it's not going to be windows or a paint job, so  
7 the idea that we could have some signage for contractors to  
8 use on a lawn, or something like that, is very important  
9 too. And I think that's it. So I will welcome to take more  
10 questions when we get to that.

11 MS. GARFIELD: Thank you, Mindy. As you can see, we  
12 have a very aggressive and expansive marketing intent and  
13 we're moving forward with that. And I'd like to change from  
14 more of the overview statewide program to a specific  
15 program, and that's in the Energy Upgrade team, and that is  
16 the Downtown Oakland Saturation Project, and I'd like to  
17 introduce Derrick Rebello. He is the President of QuEST,  
18 which is an energy efficiency engineering and program  
19 management firm, they are also based in Berkeley. Dr.  
20 Rebello has 15 years of experience in implementing and  
21 evaluating energy efficiency programs, and oversees a broad  
22 portfolio of energy efficiency programs focusing on areas  
23 such as data centers and the high tech sector, wastewater  
24 treatment, hospitals, and on-bill financing, in addition to  
25 working with local government partnerships. The Downtown

1 Oakland Saturation Project received \$4.8 million under the  
2 Municipal and Commercial Targeted State Energy Program  
3 Solicitation, and as has been mentioned, they are also a  
4 partner of the Energy Upgrade California. So, Dr. Rebello  
5 is going to speak specifically on that program and focus  
6 more on the commercialization and marketing aspect. Dr.  
7 Rebello.

8 DR. REBELLO: Thank you. This program came out of a  
9 lot of conversations with the City of Oakland and actually  
10 related conversations with other cities who are looking at  
11 their Climate Action Plans that have been approved by their  
12 City Councils, 25 percent reduction, 30 percent reduction in  
13 some cases, and if you've ever sat down and actually taken a  
14 look at it, it is an incredibly daunting project, it will  
15 not be cheap, it will be very complex, it will be  
16 burdensome. I think it is achievable, but to date, I  
17 haven't seen a plan that kind of lays out a roadmap, you  
18 know, "Here are the five ways that you can actually get from  
19 Point A to Point B." Some of that is included in the  
20 Climate Action Plan, but no one has actually taken, I think,  
21 some of those first steps. So the genesis for this project  
22 was to try one approach, which is to cordon off an area and  
23 say, "If we applied a lot of resources and really went door  
24 to door, I mean, hand to hand combat, to try to achieve 20  
25 percent energy reduction, is that possible?" You know,

1 typically we on the energy efficiency implementation side,  
2 we look at sort of a three to a 12-month engagement, so you  
3 go in, you do a study, you hand the study over, hopefully  
4 the client does the work, you hand over the rebate, and then  
5 people do this. My experience has been that, you know, a  
6 lot of times it's driven by the economics of projects, and  
7 so people want fairly quick paybacks, they don't want to  
8 think long term. We want to take that and turn it on its  
9 head, and instead of looking at sort of the three to 12-  
10 month engagement, we wanted to look at a five-year  
11 engagement, so we could work through a whole series of  
12 measures. I mean, obviously people are going to go after  
13 low hanging fruit, but what could we do to continue to stay  
14 engaged after that customer and not just sort of leave that  
15 engagement after 12 months. I mean, if you look at most  
16 marketing, most products, they want to hold on to you for a  
17 very long time, so we're looking to achieve the same thing  
18 here with Oakland, and to continue that dialogue.

19           So very quickly, program highlights. It is targeted  
20 at Downtown Oakland. We wanted to pick an area that we - I  
21 hesitate to say - comfortably thought that we could serve,  
22 but at least to try and narrow the bounds of the problem.  
23 We are focused primarily on large and small commercial  
24 customers. By picking that area, we kind of leave out the  
25 residential side. There is some Multi-Family in this region

1 and I'll talk a little more specifically about the region.  
2 The Step 3 solicitation was really focused on emerging  
3 technologies, so what we've done is take the emerging  
4 technologies that were specified under the RFP and then  
5 combined them with more common measures that are available  
6 through the local government partnership and through  
7 standard programs. We are working hand-in-hand with PG&E on  
8 this one because they are the local utility in Oakland,  
9 obviously. We have an internal goal of getting 80 percent  
10 participation -- I didn't hear anybody laugh -- and to get  
11 20 percent reduction in those participants. So, if we get  
12 half way there, I think we will have accomplished something  
13 monumental, but we're going to hold that goal, and I think  
14 we've got resources, we've got buy-in from the community,  
15 and hopefully some luck.

16           One of the key components is a very intensive  
17 community focus campaign, and I'll speak a little bit more  
18 about that, but effectively, what we're doing is cutting the  
19 community up in that specific part of the community of  
20 Oakland, just downtown, into five specific areas, and I'll  
21 address that a bit later. What are the sources of the  
22 savings? So, we sort of have this piece that is the  
23 emerging technologies which were required by the RFP, we are  
24 going to overlay PG&E's standard retrofits and retro-  
25 commissioning for the large buildings, and then standard

1 retrofit for these smaller buildings. What are the more  
2 interesting or exciting pieces to this is we hope to have a  
3 fairly large behavioral component as part of - for the large  
4 commercial customers, and I'll speak to that.

5           So, drilling down a little bit more, we're taking  
6 the large commercial sector and really narrowing it down to  
7 about 20 commercial buildings - 15 to 20. It says here  
8 we're going to provide innovative audits, we're looking at  
9 retro-commissioning demand response. This is the way that  
10 we hope to capture the savings that come from the building  
11 systems, themselves. A second piece is the downtown  
12 building challenge, we're looking to capture the behavioral  
13 pieces and to set up, effectively, a building competition  
14 amongst 15 to 20 independent buildings to see who can be the  
15 biggest saver, the biggest loser, whatever sort of - we  
16 haven't sort of figured the tagline yet. And maybe the most  
17 important piece, I think, is to set up a system where you  
18 can, on an ongoing basis, monitor the savings. We see  
19 plenty of cases where, particularly on the retro-  
20 commissioning side, sometimes on the retrofit side, where  
21 you don't see the savings that you were expecting; part of  
22 that is, I would argue, that there is not a sufficient  
23 feedback mechanism to help inform the building owners when  
24 things are starting to slip. So, what we hope to leave  
25 behind is this ongoing monitoring system that will ensure

1 persistence.

2           On the small commercial side, this really is, I  
3 mean, I mentioned hand-to-hand, this is door-to-door energy  
4 efficiency. When we think about how do we market into this  
5 community, into each of the communities, we're looking for  
6 who are the leaders in this community? Who can we work  
7 directly with them and use them as a foundation for linking  
8 to the next individual in the community, and the next  
9 individual in the community? We really want to leverage  
10 those leaders for outreach, collateral events. As I said  
11 before, a very high touch direct and install approach and,  
12 again, a focus on the emerging tech, as well as standard  
13 measures.

14           So here's a quick picture of the areas that we're  
15 looking at. For those of you who know Oakland, even this  
16 120-block area, although I haven't counted it up exactly, is  
17 still quite diverse. What's going to work in Jack London  
18 Square, where you have a lot of loss right now, you've got  
19 entertainment in many areas, you've got a small little chunk  
20 of it that is still an ongoing functioning produce market,  
21 that's a very different set of individuals than in, say,  
22 Chinatown, or for that matter, the uptown district, the Gold  
23 Coast, or the Broadway corridor.

24           So, moving on, when we think about this campaign, I  
25 mean, we really think about it as a political campaign, and

1 our candidate is energy efficiency, and so what can we do to  
2 increase uptake or, you know, how can we get our candidate  
3 elected? So we look at sort of a citywide campaign, and  
4 what we want to do here is to try and build enough buzz in  
5 the community, and enough interest in this downtown Oakland  
6 project, so that they will start to apply pressure on the  
7 businesses where they work, on the businesses that they  
8 support. The next way we look at it is sort of the second  
9 layer, looking at the neighborhood campaigns, so taking each  
10 of those five neighborhoods and launching a separate  
11 campaign. Now, I think the difference between what happens  
12 in downtown, uptown, and Gold Coast, probably not that  
13 different, but clearly different than what happens in  
14 Chinatown and, I would argue, very different than what  
15 happens in Jack London. So, tailoring campaigns and events,  
16 identifying the champions in each of those areas and, again,  
17 building that connection, building that coalition, so we can  
18 get this candidate elected. On a separate path, we will  
19 have this buildings campaign, so, again, looking at the 15-  
20 20 largest buildings, and what we can do to work with the  
21 property owners. BOMA will be a participant, and this may  
22 actually be a very cool piece that comes out of this, is  
23 there is a direct alignment with BOMA's building challenge  
24 and what we are trying to achieve, so there's a chance that  
25 this thing may see a second life as a BOMA-branded product,

1 which would not be a bad thing. So, again, the strategies  
2 that we are going to use in Chinatown would be very  
3 different than what we are going after in these 15-20  
4 largest buildings. You know, we need everybody involved, so  
5 we've already gotten buy-in, obviously, from the City of  
6 Oakland, PG&E will be a big partner, BOMA, as I said, the  
7 Chamber of Commerce, the building owners. In each of these  
8 districts, there are multiple district associations that  
9 will also be part of this initiative, the Building  
10 Management entities, as well as any sort of community  
11 associations. And one of the overriding themes, at least  
12 when we're approaching businesses, is that we want you to do  
13 this because it's green, and not because of a leaf or  
14 something like that, but because of the dollars that it's  
15 going to bring, that you can pile back into your business.  
16 So, this is really about making Downtown Oakland property  
17 more competitive than it already is.

18           So as I said before, it's critical to identify the  
19 champions in each of these districts. We are looking to do  
20 a demonstration project in each of these districts, so  
21 Chinatown, the focal or building in Chinatown is probably  
22 the Senior Center, so doing an energy efficiency project to  
23 kick it off in Chinatown, bring the community together,  
24 bring the leaders there, as well, and use that as the  
25 vehicle at which we start our political campaign into the

1 community. Obviously, events are going to be a big part of  
2 this. We are working with the Crucible, which some of you  
3 may know, on Industrial Arts Group, a nonprofit, to help us  
4 build energy bikes, and so these energy bikes will be a key  
5 feature at many of our events. What we want to do is set up  
6 a bank of CFLs and a bank of incandescents, and this has  
7 been done before, but to drag these out to many events and  
8 watch people have to really struggle to get, I think, three  
9 incandescents going, let alone a hairdryer, but to make the  
10 connection, a very direct connection between the more  
11 efficient solution and the less efficient solution. The  
12 neighborhood campaign, as I mentioned before, the building  
13 challenge, and I will talk a little bit more about that.  
14 There are a lot of bloggers in Oakland, there are a lot of  
15 people who feel very passionately about what happens in  
16 Oakland, and so trying to tap into them and make the  
17 connection so that they can also be yet another vector for  
18 our political campaign. More traditional media, Oakland  
19 just installed something called the Bee, which is a free bus  
20 to move people up and down Broadway, taking - linking with  
21 that, so the transportation angle, also the transportation  
22 angle on the bikes, we are hoping to work with one of the  
23 East Bay Bike Coalitions on that topic. And then,  
24 obviously, a lot of demonstration projects, demonstration  
25 projects that are very tangible for the community, that

1 occur in places where the community gathers.

2 I am going to talk a little bit more about the  
3 Downtown Building Challenge. So, I think this is the first  
4 time somebody has tried to do this, but what we are looking  
5 at doing here, as I said before, to achieve savings to the  
6 building systems, as well as looking at the behavioral  
7 savings, and I would argue that the behavioral savings could  
8 be as much as 10 percent, if not more. And the way that we  
9 hope to achieve this is by setting up baselines in the 15 to  
10 20 largest buildings, and then to create a competition. We  
11 will have a kiosk, a touch screen kiosk in the foyer of  
12 every single building that is part of this building  
13 challenge. There will also be a website that the  
14 participants can go into, that they can get into. What I  
15 mean by that is really occupants at the building. And the  
16 goal here is to create this competition where Building A  
17 looks at how they did yesterday and saw that, wow, we didn't  
18 do so well in our building challenge, we really got our butt  
19 kicked the other day, so what can we do to do things better?  
20 Are we not turning off enough monitors at night? Is the  
21 cleaning crew coming through and leaving all the lights on?  
22 But trying to really identify these energy champions within  
23 each building. And I would argue, we need five to 10 of  
24 these people per building, who are the ones who are going to  
25 run around and really drive the behavior changes that I

1 think need to be done. These types of challenges have been  
2 done on college campuses before, but they have not been done  
3 in a downtown area where you've got independent buildings  
4 competing against each other. They have not also been done  
5 for 360 days. I would argue that gaining momentum for 30  
6 days, fairly easy to do; 360 days? It's a whole different  
7 animal. We have already identified some issues that we're  
8 going to have; since it is baseball season, how do you deal  
9 with the 20 games out first place? Right? So, what are we  
10 going to do in that case? So, I'm last, or I'm second to  
11 the last, third to last, clearly I'm never going to make it  
12 to the top, so I'm going to give up, a rational thing to do.  
13 So, what we're looking to do here is to have one-day, or  
14 one-week events, that, you know, while you're not going to  
15 make it to first place, you might actually pick up a couple  
16 of points, you might win a few events here, and so over the  
17 course of a week, with the winner of that building, we'll  
18 come and we'll do an event, maybe we'll drag the bikes over  
19 and do some other things to try and, again, continue to gain  
20 momentum.

21           One thing that I really think is going to be a  
22 struggle, obviously, you have got some large buildings that  
23 are single tenants. Kaiser has its own building, Clorox  
24 occupies a fairly large portion of a building in downtown  
25 Oakland, State and Federal buildings are also there. You've

1 also got some multi-tenant buildings, so how do we get  
2 people who really have no relationship to each other, no  
3 affinity? So, in that case, what we really need to do is to  
4 attach that affinity to the overall building challenge. And  
5 maybe we might need to work a little more carefully with  
6 those individuals. Structured events, as I said before,  
7 prizes, and industry co-sponsors, so BOMA being one of them,  
8 Clorox, and Kaiser, so we really need the committee behind  
9 this.

10           And then, sort of the last slide here is just a  
11 quick look at the energy kiosk that we're looking to put  
12 out. So, we are working with a group called Lucent Designs  
13 out of Oakland to implement this strategy, Dashboard, you  
14 can see yesterday how we did, we can make plans, the other  
15 thing we might do is maybe put our finger on the scale  
16 sometimes if somebody is in that sort of 20 games out of  
17 first place problem, where we might come in and try to do  
18 some more training with the building staff, whether it is  
19 the facility staff or with the occupants, to try and sort of  
20 pick up their game a little bit.

21           MS. GARFIELD: Thank you, Derrick. Well, I thank  
22 you for your indulgence; we went a little long on this. We  
23 started early and we took more than enough time, but I  
24 thought it was important that you actually hear some  
25 exceptionally creative aspects of what these projects are

1 doing in the marketing. And so there are a lot of different  
2 marketing tools that can be used to get our "candidate," I  
3 like that, or, in my case, a "date," you know, adopting and  
4 embracing energy efficiency by all Californians. And you  
5 heard from the high view of the statewide general awareness  
6 approach, to local targeted specific community actions and  
7 programs. And I think the key here that you found, that ran  
8 through all of it, is that, to make a successful marketing  
9 program and to have our clients or consumers embrace energy  
10 efficiency, you have to humanize it. And I think it went  
11 from the residential to understanding what the needs are in  
12 a home, to even humanizing it for commercial, which tends to  
13 get the cold shoulder a lot of times. And what Oakland is  
14 doing is fabulous because it's actually making it a very  
15 community focused message. So, if you have any questions or  
16 comments, I'm sure the panelists would be happy to answer.  
17 I want to again thank them all for taking the time today. I  
18 thought they brought some very innovative and important  
19 messages.

20 COMMISSIONER BYRON: Thank you. I do just have a  
21 couple quick questions. First of all, I mean, Panama has  
22 presented before this Commission on this Upgrade California,  
23 so he knows how I feel about the program. I think this is  
24 one of the best things that has come out of this Commission  
25 in a long time and I'm very proud of the staff and everybody

1 that's worked on this, looking at this from the consumer's  
2 point of view is extremely valuable, so I don't have any  
3 questions for you, Panama.

4 MR. BARTHOLOMY: Thank you.

5 COMMISSIONER BYRON: But, Ms. Craig, you know, the  
6 data that you presented is really interesting and the  
7 breakdown early on in your slides that shows the composition  
8 of responses, I can't help but think about probably some of  
9 the same things you have in terms of ethnicity and income,  
10 you know, the political affiliations, whether some of these  
11 people are pasta eaters or meat eaters, but there's 47  
12 percent that aren't interested, and you just said, "We're  
13 going to ignore them."

14 MS. CRAIG: Well, at this phase because we think,  
15 again, thinking this is a pilot, we have to build the buzz.  
16 This is not the norm right now. People think about their  
17 light bulbs, they don't think about their house. And so, if  
18 we can have 52 percent of the population that we can target,  
19 and get them to get there, that's then going to build this  
20 normative behavior that we can then go, as we move into the  
21 AB 758 world, to build that population because they're going  
22 to see a lot more people in their neighborhood who are doing  
23 this, so it is a long term view of how we have to change  
24 behavior, as we said here, you know, we can't just change it  
25 all tomorrow, we're going to have to build this concept,

1 this awareness, and to get people to actually change more  
2 than their behavior, but invest very hard earned dollars in  
3 their homes to make this happen. So, we're not ignoring it,  
4 we're just recognizing the reality of it, and building a  
5 strong plan to address that over the long term.

6 COMMISSIONER BYRON: Very good. And a related  
7 growing target market might be the unemployed and the under-  
8 employed. Are they in your consideration also?

9 MS. CRAIG: Well, I think maybe the workforce will  
10 probably go into this, but we're seeing that, again, the  
11 contractor and their connection to the homeowner is going to  
12 be so critical and, as I said, architects, design  
13 professionals, and realtors, all who have been hit really  
14 hard by the economy, and so creating the tools, the  
15 training, not just in how do you actually do the work, but  
16 how do you sell it and talk to the consumer is what we're  
17 really thinking about as a critical thing, and making sure  
18 that we have an ongoing campaign to provide them the tools,  
19 the tips, the materials, over the long time. So, we're not  
20 directly related to bringing in the unemployed right now,  
21 except for building up the tools and framework for them to  
22 actually succeed once they're able to access the workforce  
23 program.

24 COMMISSIONER BYRON: Well, that's just excellent  
25 information and I agree completely, just these thoughts came

1 to mind about missing certain segments, but your  
2 explanations make perfectly good sense. Mr. Rebello - Dr.  
3 Rebello - when did you become President here? That's  
4 relatively new, isn't it?

5 DR. REBELLO: Four years ago. After we stopped  
6 hanging out together.

7 COMMISSIONER BYRON: Congratulations and it makes a  
8 lot of sense that that's where you are. This is just  
9 astounding, this effort in Oakland, and I think it's going  
10 to be a model for maybe how a lot of other areas proceed to  
11 bring a tremendous amount of expertise to this, and I wrote  
12 down in my notes here as you were talking, this seems like a  
13 political campaign, and of course, then you said that later  
14 on, it really is. How far are you in this program? When  
15 does the 360 days start?

16 DR. REBELLO: So, the 360 days will start January  
17 1<sup>st</sup>. So we're in sort of the early stages now of wrapping up  
18 the offering, putting the package together for the  
19 buildings, so, yeah, if you're referring to the building  
20 challenge piece, it will ramp up on January 1<sup>st</sup>. As far as  
21 the rest of the campaign goes, that will launch in November.

22 COMMISSIONER BYRON: Well, we know when you're going  
23 to be taking vacation next year then, don't we?

24 DR. REBELLO: Yeah, two years from now.

25 COMMISSIONER BYRON: Excellent program,

1 congratulations.

2           COMMISSIONER EGGERT: So, this is Anthony Eggert and  
3 I also just want to commend you for all the hard work,  
4 everybody on the panel. I was encouraged, Ms. Craig, to see  
5 one of the focus areas is on trigger event marketing, given  
6 the fact that a lot of people think about making those  
7 investments when their air-conditioner goes out, or some  
8 other event of that sort. Could you maybe expand just a  
9 little bit more on how your efforts will take advantage of  
10 that trigger event? What's the motivation for, say, an HVAC  
11 contractor to inform the homeowner of all these other great  
12 opportunities.

13           MS. CRAIG: Right, well, that again is a good tie to  
14 the workforce. It was interesting, when we first started  
15 this program, we were very much separated, there was the  
16 contractor workforce and there was marketing, and as we've  
17 gone down the road, we realize that they can't be separated.  
18 So, to that fact is to help contractors with this messaging,  
19 understand the benefits from participating in the program,  
20 that there is going to be a motivation for consumers to do  
21 these other measures because of the rebates, because of the  
22 financing, to tell them how they can help their clients  
23 actually save money, that they are sort of the Ambassadors  
24 to this, so really providing them with the benefits and the  
25 understanding, and that goes to that orientation and

1 training, and then giving them the tools that they can talk  
2 to their clients very clearly about it. So, it is really  
3 encouraging them through those modes. As I said earlier,  
4 the real estate agents and the design professionals are just  
5 waiting for us, those ones who already are kind of like-  
6 minded, they are "retrofit ready," as you will. They want  
7 to be able to provide that information already to their  
8 consumers or their customers who are, you know, changing  
9 houses, or remodeling. So, again, giving them the tools so  
10 they can go out and do it, that's what we've heard a lot  
11 from both contractors and these other professionals, is  
12 "help us to do it and we're ready to go."

13           COMMISSIONER EGGERT: Excellent. I was also  
14 encouraged to hear that you're involved in the Better  
15 Buildings activities. And how do you see that program  
16 interacting with this program?

17           MS. CRAIG: Completely integrated and that's  
18 actually why, one of the reasons, especially in Alameda,  
19 well, we're involved in Los Angeles County and in Alameda  
20 County, and in Los Angeles, there's really no  
21 differentiation, it's just different layers of our marketing  
22 approach. I talked about the hotspot marketing, well,  
23 that's directly related to the BBP Program and what they  
24 want to do around whole neighborhoods. We're doing an  
25 Energy Champions concept that is going to be linked with all

1 our other marketing efforts in these hotspots, so we say,  
2 okay, we're going to identify communities, organizations  
3 within our hotspots, that we'll then go out and encourage  
4 their constituents to get their retrofits, and actually they  
5 will then get an incentive going back to the organization,  
6 so that people have yet another incentive to participate, so  
7 it is completely integrated. They are going to have the  
8 same branding, messages will be slightly different, we're  
9 going to try and incorporate them into the website. The  
10 green labeling is a really interested element and I think  
11 the way that Panama has talked about the entire program as  
12 being rather inclusive, offering both basic and advanced  
13 retrofit packages with a green package, perhaps, and  
14 considering what a green label might do; we're kind of  
15 struggling how we make it not too complex, but making sure  
16 that they are integrated in the end so that a homeowner can  
17 say, "I want to go the whole spectrum from ducts to solar,  
18 and also do the green." We want to make sure that that's  
19 available and integrated, so that is a big part of the BBP  
20 program, as well.

21 COMMISSIONER EGGERT: Okay, thank you. And then, I  
22 guess this is a question for Mr. Bartholomy and Mr. Rebello.  
23 It seems like some of the messages, marketing and strategies  
24 for reaching out to residential vs. commercial building  
25 operators might be different, and I guess one question is,

1 how do we see the Energy Upgrade California program  
2 interfacing with commercial building owners, and how do we  
3 take advantage of just some of the lessons that we'll be  
4 learning from some of these targeted programs like the one  
5 in Oakland?

6 MR. BARTHOLOMY: Great question, Commissioner. I  
7 would also say it's probably different in City of LA  
8 commercial building owner and a Placer County commercial  
9 building owner, as well, so there's going to have to be  
10 implicit within Energy Upgrade California is a regional  
11 approach, and so we are going to be developing strategies  
12 and marketing techniques that fit for the community that it  
13 goes into. We're not going to be coming from the State and  
14 telling a community and telling champions in the community  
15 how to reach out and be able to engage commercial building  
16 property owners. We're going to be working with them to  
17 work on the messaging that resonates within their  
18 communities for their efforts, and so it's going to be some  
19 level of statewide application, but also a significant  
20 amount of work with Ecology Action and the rest of our  
21 subcontractor partners to be able to develop those messages  
22 that best resonate within those communities.

23 DR. REBELLO: And then, for Oakland, everybody who  
24 is an occupant of these buildings, who works or runs a  
25 business, they also live in a house, or home of some sort,

1 so we want them to take that message home with them, so it's  
2 not just about the energy efficiency here and turning the  
3 lights off, and making sure the monitor is turned off and  
4 things like that, but take the message home. And so there  
5 will be other events integrated in - I mean, it is not the  
6 core what we're doing, but it is obviously a great  
7 opportunity to leverage what they're learning in the job  
8 place and to take it home and apply it. So...

9 MS. CRAIG: And if I can add one thing which, again,  
10 this idea of the hotspot marketing, one of the things we see  
11 is the small commercial areas within a neighborhood is using  
12 that as a community center, that we would talk about the  
13 residential home efficiencies, but I could definitely see,  
14 as we evolve the commercial program, this also can be a way  
15 of bridging that combination of commercial and home  
16 residence marketing.

17 CHAIRMAN DOUGLAS: One question, I think. First, I  
18 really appreciated this panel, this has been very helpful to  
19 hear not only the broad program overview, but then the sort  
20 of broad residential outreach and targeted outreach in  
21 Oakland. I think we're going to learn a tremendous amount  
22 from consumer response to these different programs. I  
23 really only had one question. I was pleased to hear that  
24 China Town was one of the target areas within Oakland's  
25 program and I've been encouraging staff throughout this

1 program to make sure that we have materials and outreach in  
2 Spanish and hopefully other languages, as well, in order to  
3 have a functioning statewide program and get these potential  
4 savings for the State. I wanted to ask you a little more  
5 about the China Town outreach. I think the community center  
6 for the - the senior centers - makes sense, that is a great  
7 place to start. Are you doing any Chinese language outreach  
8 or development of materials, as well?

9 DR. REBELLO: Yeah, the program that we delivered to  
10 China Town, one of my staff continues to drill into my head,  
11 you know, in language and culture. So that's obviously got  
12 to be a critical part of any sort of effective campaign in  
13 China Town. If you've ever driven through most China Towns  
14 and you look around, they're actually pretty efficient  
15 already, I mean, the CFLs are plugged in everywhere. A lot  
16 of them have done the lighting. So take a look next time  
17 you're in a China Town.

18 CHAIRMAN DOUGLAS: I will do that. So, thank you.  
19 And, of course, a lot of the reason for these pilot programs  
20 is to pilot materials and efforts that can be brought  
21 statewide, so hopefully we can take advantage of some of  
22 this research into the broader program. Thank you.

23 MS. GARFIELD: Thank you, Commissioners.

24 MS. GOULD: Good morning, Chairman Douglas,  
25 Commissioners, Advisors. My name is Angie Gould, I work

1 here at the Energy Commission on the Energy Upgrade  
2 California Program, and I'm joined today by Mimi Frusha from  
3 Renewable Funding, Mark Lowder, from the Regional Council of  
4 Rural Counties, Daniel Adams from the San Francisco Mayor's  
5 Office of Housing, and Simon Baker of the California Public  
6 Utilities Commission. These four panelists are going to be  
7 discussing various approaches to financing energy retrofits.

8            Financing has been very big in the news lately due  
9 to PACE and the FHFA statements on PACE, and the subsequent  
10 fallout, but it also has the potential to overcome many  
11 existing market barriers, such as the high upfront cost.  
12 And I know that we have a larger number of panelists than  
13 most of the panels today, so I will go ahead and get  
14 started. We will begin the discussion with Mimi Frusha, she  
15 is the Chief Operating Officer of Renewable Funding, and has  
16 spent over 10 years in the Community Economic Development  
17 and Social Services sector, including work with asset  
18 building, workforce development, and business development  
19 programs. Prior to Renewable Funding, Mimi worked with  
20 Inner City Advisors, a nonprofit dedicated to helping  
21 socially responsible companies grow and create an impact on  
22 the local community. Mimi has also worked with several  
23 other community-based organizations, GM Adventures and the  
24 East Bay Asian Local Development Corporation, building and  
25 expanding their financial education and asset development

1 programs. Today, Mimi will be talking about the Energy  
2 Upgrade California financing program.

3 MS. FRUSHA: Good morning, Madam Chair,  
4 Commissioners, and friends and staff. It feels like a  
5 family, I am getting to see a lot of you lately. So, I'll  
6 be talking about the financing program today. Panama had  
7 introduced a few pieces of it, but I will spend a little bit  
8 more time getting into the details. I think an important  
9 piece of this to really recognize is rebates and incentives  
10 help move the needle for a consumer to do a retrofit to  
11 their home, but there still is a gap in the cost and the  
12 upfront cost, and that remains a barrier to the consumer.  
13 And so PACE was really initially the mechanism we were all  
14 using to address that barrier, but in the absence of PACE,  
15 or at least with PACE on hold, we need to seek an interim  
16 solution. So, the financing program that I'll be talking  
17 about today are the clearinghouse, as it is also being  
18 named, as really a way to fill the gap of PACE in the  
19 interim.

20 So Panama introduced this slide, I'll just add a few  
21 more pieces of color to this. I really think of this  
22 financing program as a "clearinghouse," and that really  
23 CSCDA, or the California Statewide Community Development  
24 Authority, is a procurement agency. So they are the ones  
25 that will facilitate the competitive solicitation process to

1 select financial institutions that will then be represented  
2 in the clearinghouse, and the clearinghouse, then, is  
3 matching the products that these financing institutions  
4 bring to the table with the consumer at the end because all  
5 the financing products don't necessarily match every  
6 consumer. For example, if you have a financial institution  
7 that is local, most likely they're going to want to lend  
8 locally rather than lend outside of their region. So, the  
9 way I think of this is, before we had a financing program  
10 that was PACE; and today, existing in the market is a whole  
11 set of financing products - secured, unsecured, leases,  
12 PPA's, even in some instances PACE is still there. But what  
13 we're doing with this clearinghouse and financing program is  
14 taking these financing products and adding a common  
15 structure, which is enhanced, and if we could draw a big box  
16 around the existing and enhanced components, this is the new  
17 financing program. And this new financing program allows  
18 you to take financing products offered by lenders, and not  
19 only have lender qualification and criteria and underwriting  
20 standards you're asking them to meet, you're also applying  
21 credit enhancements, whether it is a loan/loss reserve, or  
22 an interest rate buy-down, and then you're including  
23 approved contractors and quality assurance measures, as well  
24 as a universal application process. So, essentially, a  
25 consumer is being able to find their financing product, but

1 also leverage all these common elements. And this is really  
2 what we think of as the "clearinghouse" and the new  
3 financing program that, 1) not only allows for PACE to come  
4 back, but is infrastructure that now serves a variety of  
5 financing products.

6           So, some of the components that are important to  
7 think about is sort of what the value proposition here.  
8 Well, for a consumer, it is oftentimes when they are going  
9 to do a retrofit, there are lots of different products out  
10 there, and so this really allows them to become aware of the  
11 different products that are available, and allows them to  
12 get pre-qualified and actually apply for those products in  
13 one central location, and then it is a side-by-side  
14 comparison of these loan offers, so they can really choose  
15 what is best for them. This is often one of the challenges  
16 when you're shopping for products, is you're having to go  
17 from one lender to another; this brings them actually all  
18 under one umbrella. And then the rates, the subsidized  
19 rates, the interest rate, buy-downs and loan/loss reserve  
20 all come under the same umbrella, so the consumer is able to  
21 see all products with their subsidies in one place.

22           The lenders, this becomes a new distribution  
23 channel, but also an input structure with qualified  
24 contractors, as well as quality assurance protocols that  
25 they would have otherwise not been able to leverage. This

1 also allows them, as lenders, to access a loan/loss reserve,  
2 which can be very attractive in current credit conditions in  
3 markets. The governments, obviously, and for all of us  
4 actually in this room, it fills the gap that's left by PACE,  
5 and I think this is really important for all of us, but it  
6 allows that reinsertion of PACE once it comes back. It  
7 allows us to address our constituents and our Climate Action  
8 goals, and then it's also going to promote some competition  
9 amongst the lenders, they're going to be incentivized to  
10 start competing on rates, and actually provide something  
11 that is more attractive to the consumer, so they pick their  
12 product over a different product. It also allows for  
13 efficient deployment of the funds to consumers.

14           So, some of the product types that you might see,  
15 when I talk about Secured would be your energy efficiency  
16 mortgages, your home equity loans, and your home equity  
17 lines, your HUD Title 1, and home improvement loan, might be  
18 some examples of secured projects, so these products will  
19 actually have a lien on the property, and in some respects  
20 have some commonalities with PACE. You have Unsecured  
21 products like an EGIA, Geo Smart loan, a Fannie Mae Energy  
22 Loan, or a Personal Loan. You also may see some of the  
23 Municipal or investor-owned utilities loans in this  
24 Unsecured area, as well. And then other PACE, as well as  
25 solar leases or PPAs also could be in this spectrum of

1 product types that you could offer the consumer and the  
2 clearinghouse.

3           The type of lenders that you might see in this  
4 clearinghouse would include not only your national banks,  
5 U.S. Bank, Bank of America, or GE Money, but also regional  
6 banks, community and local banks, credit unions, are all  
7 types of lenders that we're seeing throughout the country,  
8 that are demonstrating interest in some sort of aggregated  
9 clearinghouse model, where there are common standards and  
10 criteria applied.

11           So, one of the big components of the clearinghouse  
12 are credit enhancements, so just what is available today in  
13 the current market that we're looking at. There are  
14 interest rate buy-downs and loan/loss reserve funds. They  
15 are available from several different sources and they really  
16 can increase not only the attractiveness to the lender, but  
17 also to the consumers. There's currently \$4 million  
18 allocated in the award from the CEC to CSCDA, and that \$4  
19 million will be available to the leadership counties, and it  
20 would be primarily used for a combination of interest rate  
21 buy-down or loan/loss reserve, depending on what ultimately  
22 will drive the lenders to the lower rate. There is \$50  
23 million from SB 77 that was originally programmed for PACE,  
24 that, if reprogrammed for a clearinghouse, could essentially  
25 also be applied for a loan/loss reserve, and could really

1 help leverage a private capital in the private markets.

2           And then, finally, local governments can apply their  
3 own additional financial subsidies, so essentially this  
4 clearinghouse, you as a local government can say, "I'm the  
5 City of San Diego, and I have an additional million dollars  
6 that I was going to use for a revolving loan program, but  
7 actually this is a much better deal for my constituents  
8 because I can leverage a lot more opportunities, so I'm  
9 going to apply my additional subsidies to the clearinghouse  
10 and it will only be for the benefit of those in San Diego.  
11 So, ultimately, because the clearinghouse was relying on a  
12 combination of technology to really present the choices and  
13 information to consumers, we ultimately can then pinpoint  
14 where they live and show them the products, as well as the  
15 subsidies in the community where they live, so this is a  
16 great opportunity to really customize if local government  
17 wants to bring a special product to the market, this is a  
18 way to do it.

19           This is just a very rough schematic and it's your  
20 little stick figure here to show you want the consumer may  
21 be going through, sort of similar to what Panama presented  
22 already, but adding just a few more steps and understanding.  
23 The property owner has come to this Web portal, and they may  
24 have looked at their projects, their contractors, and their  
25 financing info, and so once they've sort of identified what

1 the scope of work they're doing, they then can really start  
2 looking at, okay, how do I fill the gap and really cover the  
3 upfront cost here? And so there's a combination of looking  
4 at your rebates, as well as the different loan products that  
5 are in the clearinghouse, and you as a consumer are going to  
6 select what's most appropriate for you, and what you're  
7 eligible for, and then you're able to combined those into  
8 one package for your project, you're able to get approved,  
9 and then, once you have completed your project, you will  
10 come back, you'll submit your paperwork, and the key  
11 documents for verification, and then get your loan disbursed  
12 to you, as well as your rebate that you can pay your  
13 contractor with, and then you would continue repaying your  
14 loan. And dependent on the servicing of the loan type, it  
15 could be just a separate bill, in some cases it may be On-  
16 Bill, in other cases it may be attached to your property,  
17 but that's exactly sort of the concept of how it would work  
18 for the property owner. So, that is the concept of the  
19 clearinghouse and what we are proposing that would be  
20 rolling out. The proposed timeline right now, there would  
21 be a fair amount of design and stakeholder engagement, as  
22 you can imagine. There are many lenders across the State,  
23 there are also many lenders nationally that are really  
24 interested in how they bring alternative financing products  
25 to the consumer market. Looking into January, we will be

1 launching early testing and piloting of the clearinghouse  
2 and then a full launch and implementation later through  
3 March and May, and so this is a long process, this is a new  
4 concept, there are elements that have been done before in  
5 other industries, but this is really trying to take it to  
6 another level, so it's really exciting to be offering and  
7 presenting on this today. So, thank you very much.

8           CHAIRMAN DOUGLAS: Thank you, and before we hear  
9 from the next panelist, we did get a question about public  
10 comment and somebody wanted to comment on the first panel.  
11 We have public comment on the agenda for estimated 3:40  
12 [phon] after the third panel, but if somebody would like to  
13 make public comment and does not plan to stay through the  
14 panel, and would like to make a brief comment, we'd be  
15 willing to hear that after the second panel and before  
16 lunch, so that's just to let everybody know what their  
17 options are for public comment.

18           MS. GOULD: Thank you. And thank you, Mimi. And  
19 this is no reflection on the amount of time you took, you  
20 stayed within your limits, but I just wanted to remind the  
21 other panelists that we have a large panel today, so we need  
22 to make sure we stick to eight to 10 minutes.

23           Next up, we have Mark Lowder, he's going to present  
24 the Moderate Income Retrofit and Conservation Loan. Mark is  
25 the Director of Housing Finance for the Regional Council of

1 Rural Counties, or RCRC, and its Joint Powers Authority, the  
2 CRHMFA Home Buyers Fund. Mark has almost 34 years of  
3 government related work experience, including over 20 years  
4 of experience with the State of California. He has worked  
5 with RCRC for over six years and has participated in over  
6 \$270 million in housing finance bond deals. Currently, he  
7 lives with his family in Folsom, California. Mark.

8 MR. LOWDER: Thank you, members of the Commission  
9 and members of the audience, thanks for having me here  
10 today. I will try to stay within our time limits because  
11 we're getting close to lunch, and that's pretty important  
12 for everybody, I know. They wanted us to come here and talk  
13 about what we call our Residential Retrofit Program, the  
14 MIST program. We went a little acronym crazy when we put  
15 forward our response to the RFP last year and the MIST  
16 Program stands for the Moderate Income Sustainable  
17 Technology Program. The idea is that we will create new  
18 jobs and promote energy efficiency in our jurisdictions in  
19 California.

20 We responded to the RFP for residential retrofit  
21 funds that were available through the SEP Program RFP that  
22 went out last year. In February, we got a \$16.5 million  
23 grant from the Commission to do residential retrofits in our  
24 jurisdictions. As I indicated, the purpose was to create  
25 jobs through energy efficiency in single-family residences

1 throughout all of our jurisdictions. The contract is to  
2 begin in 2010 and terminates at the end of March 2012, as do  
3 most of the contracts. I do want to qualify it, we are in  
4 the finishing touches of entering into our contract now, and  
5 so I add that qualification as I make this presentation. I  
6 also want to add that these slides were put together a  
7 little earlier and, as we put together and finesse the  
8 business model, we've made a few changes that we think are  
9 important, and I'll point those out as we go along.

10 But, to make sure that the Energy Commission  
11 understood that we were putting our money where our mouth  
12 was, CHF, Credit for Homebuyers Fund, the Joint Powers  
13 Authority that is actually administering this program, has  
14 added \$2 million of its own funds to be used for the energy  
15 efficiency retrofits.

16 Whenever I put on one of these presentations for  
17 anybody, I really have to introduce everybody to the  
18 Regional Council of Rural Counties, and explain their  
19 relationship to CHF. The Regional Council of Rural Counties  
20 has been around an awfully long time in its present form as  
21 RCRC, since about 1974. Prior to that, they were actually a  
22 group of rural counties called the Mountain Counties Water  
23 Association, and they were dedicated then, as they are now,  
24 to advocating on behalf of rural counties whose needs aren't  
25 necessarily met by the statewide county organization called

1 CSAC. They advocate RCRC, advocate on behalf of all kinds  
2 of issues, water, forest issues, conservation issues, those  
3 issues that hit home at the rural counties. In 1993, RCRC  
4 formed a joint powers authority called the Credit for Home  
5 Buyers Fund, I don't know who thought that name up, but it  
6 was a mouthful then, and it is now. The purpose of that  
7 joint powers authority was to allow us to embark upon a  
8 housing program that would finance loans with tax-exempt  
9 funds through tax-exempt allocation through the State  
10 Treasurer's Office. You have to be a local government to  
11 access those funds. As a JPA, they are entitled to do so.  
12 Currently, our membership is 30 counties, they were 31, we  
13 just had San Luis Obispo drop out for various budget  
14 concerns; as you know, it's a very difficult time for  
15 counties now. We have 30 regular voting members of the JPA;  
16 we also have 18 associate members of the counties. You can  
17 see a map here. The counties in yellow are all the regular  
18 members of our county, with the recent exception of San Luis  
19 Obispo. Those in light green are associate members, are  
20 housing programs, are effective in those areas, and loans  
21 are available to homeowners who are interested. We actually  
22 have some cities that are associate members, and they are in  
23 the counties in the light blue. And the real purpose of  
24 this slide, though, is to show you that, if you look at a  
25 regular member, it would cover most of the rural areas of

1 California, if you include all of our associate members, we  
2 include all but maybe 10 California counties right along the  
3 coast. So we've got quite a reach, and we've been doing  
4 housing programs and advocating on behalf of these counties  
5 for an awfully long time.

6           The idea behind the MIST program, though, is that we  
7 would do these energy retrofit loans and grants to moderate  
8 income individuals and families. Initially, we were  
9 discussing about doing those in the member counties, those  
10 would be the counties that you saw in yellow there, they  
11 would be above the poverty level, greater than 10 percent of  
12 the poverty level, and less than 140 percent of the county's  
13 area median income. That is really tailored to some housing  
14 formulas that we used when we were doing housing loans that  
15 are financed by tax-exempt funds. The energy efficiency  
16 measures that we contemplated, and we looked at the Tier I  
17 and Tier II improvements, but I really want to focus on the  
18 whole house, the comprehensive retrofits using the whole  
19 house upgrades. The projects, moreover, would not only be  
20 whole house upgrades, but they must have a positive cash  
21 flow, and when I say that, what I'm really saying is that  
22 the monthly energy savings have to be greater than the  
23 monthly payments that you would make on the loan that we  
24 would lend to anybody who was interested in that.

25           What does the loan look like? I don't know if I

1 went down too far there. We'll talk about the loan in a  
2 minute, but basically the structure of the loan is going to  
3 - the structured loan, we'll talk about in a minute -  
4 basically, the loans are going to have over \$11 million  
5 available for loans and over \$4 million available for  
6 grants. The loans and grants in the first phase, there will  
7 be one to 10, max, will be loans and grants on existing  
8 properties; Phase II would be grants in conjunction with a  
9 home purchase, using an energy efficiency mortgage; and  
10 Phase III would be grants in conjunction with a refinance,  
11 using home efficiency mortgages.

12           The loans that we make in the first phase of the  
13 program, and actually throughout the program, will be at a  
14 three percent fixed interest rate. There would be 15-year  
15 fully amortizing using relatively generous underwriting  
16 restrictions that the underwriting will be performed by our  
17 own staff. Our idea is to get the loans out there. So, if  
18 you're a homeowner, you're current on your mortgage, you're  
19 on the title, and you've got a project that we think works,  
20 those are going to be the basic elements of the  
21 underwriting. We want to get those loans out there to do  
22 the energy efficiency upgrades because we also want to  
23 create jobs in our jurisdictions. They will be secured with  
24 fixed year lien against the property that includes language  
25 indicating that energy efficiency has been performed on the

1 home.

2           Now, we're going to have another speaker, Michael  
3 Day from the Beutler Corporation will talk about the real  
4 servitude language, so I don't want to steal his thunder in  
5 that regard, but I do want to say that we're interested in  
6 seeing the energy efficiencies recorded with the properties  
7 so that, in the future, it will be recognized, what's been  
8 done there. And the loan will be serviced by CHF. Most of  
9 our housing programs, we have large corporations of servicer  
10 loans, but we do have experience servicing loans and we're  
11 going to embark on servicing loans in this particular  
12 program to save money.

13           There are grants in conjunction with the MIRACL  
14 loans and, by the way, the acronym crazy we went on MIRACL  
15 was Moderate Income Retrofit and Conservation Loan, so we  
16 got a little redundant when we added "Loan" at the end  
17 there, but essentially the grants that are going to be in  
18 conjunction with that will be for retrofit projects on  
19 existing homes. It has got to be for a homeowner that has  
20 got a loan, and it's 10 percent rounded up to \$1,250. The  
21 grant that is going to be provided with the home purchase or  
22 the refinancing will have to be a grant that goes with an  
23 energy efficiency mortgage. It will be for home  
24 refinancing, it will be 10 percent rounded up to \$1,500, and  
25 with a home purchase, it will be a 10 percent rounded up to

1 \$2,500.

2 I am going to try to run through this fairly  
3 quickly. We've altered this project flow a little bit,  
4 we've done an awful lot of upfront work because we knew  
5 that, once this contract got approved, we were going to have  
6 to hit the ground running, but essentially it's going to  
7 work like this, and where I use the word "contractor," I  
8 want to emphasize that it's not only the contractor, but the  
9 homeowner. The homeowner is a typical player in this whole  
10 process for various reasons I can explain, but the  
11 contractor and the homeowner will identify the energy  
12 efficiency needs by looking at past energy records, and then  
13 identifying using some of the software, the kind of savings  
14 that can be effected if certain improvements are made. The  
15 contractor will then help the homeowner identify financial  
16 assistant sources, those can include anything from the  
17 manufacturer and utility incentives and rebates to our loan  
18 availability and our CHF grant availability. And after  
19 discussing the project proposal with the homeowner, the  
20 contractor would submit the proposal to us with an analysis  
21 and supporting documentation, as well as the grant  
22 application that we have already come up with.

23 We would review and approve the proposal if it  
24 looked like it was going to be cash flow positive on a month  
25 by month basis, the contractor would then complete the

1 retrofit for the homeowner, and an important part of that  
2 retrofit, there would be a third-party verification that the  
3 energy savings actually approximate what they thought they  
4 would be at the beginning, and it has to be cash flow  
5 positive for us to go ahead and then review the completed  
6 project, and sign off the loan documents and reward the loan  
7 to the homeowner from CHF. The contractor and the other  
8 parties that are involved, as it is currently envisioned,  
9 would be paid out of an escrow that's going to be  
10 coordinated in the name of the homeowner, and it will be  
11 paid out simultaneously, as long as all the conditions of  
12 the loan are met.

13           As I indicated, the installation, after it is  
14 complete, the energy verification has to be verified by an  
15 independent third party, the verification will be done using  
16 some kind of - the software that has been approved by the  
17 Commission, and no loans will be disbursed until that  
18 verification occurs. We're also working on making sure that  
19 future energy use records will be available for review in  
20 the future.

21           The contractor participation - there's going to have  
22 to be the standard license and insurance requirements, there  
23 will have to be the standard qualifying training and  
24 certifications that are necessary to do this kind of work.  
25 The approved software is going to have to be used, HERS II

1 or other approved software. We envision that we'll be  
2 working with the California Workforce Investment Board, some  
3 of the local workforce investment boards, to make those  
4 people aware of the kinds of jobs that are becoming  
5 available through these retrofit efforts. The contractor is  
6 going to be an important part of that, including the  
7 Beutler, one of our main partners. And the CHF program  
8 training, we will be conducting program training throughout  
9 our jurisdictions, to show not only contractors but  
10 homeowners, realtors, and other interested parties, how you  
11 apply for our program, and what it takes to be successful in  
12 obtaining either a grant and/or a loan from our program.

13 We've got a lot of program partners here. The  
14 primary partner is the Beutler Corporation, we worked on the  
15 RFP response with Beutler very closely and put that  
16 together. But, for obvious reasons, we have a lot of  
17 jurisdictions to which we must answer. Our board members  
18 are all elected County Supervisors from their County, so we  
19 want to make sure that other contractors are trained to use  
20 all the approved software and can operate in our counties.  
21 This program needs to create jobs throughout the  
22 jurisdictions in which we operate, so we're looking forward  
23 to that. Utilities and other energy providers or entities,  
24 we will have to partner with. We will also have to work  
25 with the County Housing offices with whom we've already done

1 some work in the past on our loan programs, making our loan  
2 products available to the moderate income members of their  
3 counties. We intend to work with the realtors, the mortgage  
4 professionals, and all of our member counties, as well as  
5 the local workforce and investment board, so we've got a lot  
6 of work ahead of us in contacting and working with these  
7 partners, to make sure that the program is successful.

8           You know, in coordination with the CEC, we've got a  
9 huge marketing effort that we're going to have to undertake.  
10 We've got to market this program to all the potential  
11 participants. We've got to promote this program to the  
12 County Housing Offices; they are an enormously influential  
13 party over the homebuyers in their areas. The Regional  
14 training with contractors and the regional meetings with  
15 realtors, the mortgage brokers, will be important, as well  
16 as meeting with the local Workforce Investment Boards, and  
17 we want to promote and coordinate ourselves with the  
18 utilities serving the member county jurisdictions.

19           Primarily, our program is aimed at sustainability,  
20 that was part of the whole concept behind the program, and  
21 hence we know that we have a goal of continuing the program  
22 beyond the contract period. This is a revolving fund using  
23 Federal grant funds, so if anybody is familiar with the Code  
24 of Federal Regulations and doing their due diligence, you'll  
25 know that the Code of Federal Regulations dealing with

1 revolving funds means you've got to apply all of the repaid  
2 principal and all of the repaid interest back into the  
3 program. So, we intend, and after this contract, we know  
4 that the Federal character of the funds will continue, so  
5 that's part of our contract discussions with the CEC, but it  
6 was our goal to plow those back in and basically turn those  
7 loans over so that we can sustain this program as long as  
8 possible. The loans we will prepay, we will use the prepaid  
9 funds, as I indicated, for new loans, but we'll do it as  
10 long as possible and we're not really sure how long that's  
11 going to be, but we're hoping it's for a very long time. So  
12 that really marks the end of my presentation here. I'll  
13 look forward to any questions at the end, and I certainly  
14 hope I stayed with the time limits that were allotted to me.  
15 Thank you.

16 MS. GOULD: Thank you, Mark. Next, we'll be hearing  
17 from Daniel Adams, who will be talking about the Affordable  
18 Multi-Family Retrofit Initiative. Dan is a Senior Project  
19 Manager at the San Francisco Mayor's Office of Housing, a  
20 Licensed Architect, he has over 15 years working in  
21 Affordable Housing Development, serving as a community  
22 organizer, designer, planner, developer, and construction  
23 manager. Dan currently oversees construction of all the  
24 Mayor's Office funded affordable Multi-Family developments,  
25 and serves as the Agency Lead for Green Building and

1 Sustainable Policy Development. He is a recipient of the  
2 Fredrick P. Rose Architectural Fellowship and serves on the  
3 Steering Committee for the Green Affordable Housing  
4 Coalition. Dan.

5 MR. ADAMS: Thank you. It's really great to be  
6 here. I am going to talk about our financing program, it  
7 actually has a lot of similar components as the one  
8 previously presented by Mark Lowder. But I also want to  
9 highlight our program model, it is a program model that  
10 emphasizes our ability to leverage diverse funds, and so the  
11 topic is financing, but for us it's really a funding  
12 picture, how do we bring diverse funds to bring diverse  
13 needs in our housing portfolio.

14 I usually like to start off with a few disclaimers,  
15 the first of which is I approach this work with an  
16 Affordable Housing focus, I work for the Mayor's Office of  
17 Housing, and our mission is to create and preserve  
18 affordable housing for low income residents in San  
19 Francisco. So, although as a citizen of this planet, I'm  
20 very interested in greenhouse gas reductions and climate  
21 change goals, primarily, I want to help preserve a network  
22 of affordable housing for disadvantaged populations in my  
23 city and other places. The beauty of working on these  
24 issues is that energy efficiency means utility cost  
25 reduction, and so we have this fantastic alignment of goals.

1 We help lower cost to tenants, to building owners, and to  
2 our City General Fund by reducing energy and utility cost  
3 burdens, so it is a great collaboration, and it is a grand  
4 alignment of goals.

5           The other important aspect for me to highlight is we  
6 have Multi-Family housing in San Francisco, so my focus is  
7 really on a subset of the building types that we see around  
8 the State, around the Country. Multi-Family housing,  
9 permanent affordable housing, this is housing that has  
10 existing deed restrictions that ensure long term  
11 affordability for San Franciscans, in our case. So,  
12 programs that are established to meet energy efficiency  
13 needs for single family homes, they don't work for us, the  
14 contracting model doesn't work for us, the proscriptive list  
15 of measures don't work for us, it's very exciting to be  
16 working with a number of partner on developing programs that  
17 are focused on Multi-Family affordable housing.

18           So when we talk about affordable rental housing,  
19 what are we talking about? These statistics come to me and  
20 to us through a California Housing Partnership Corporation,  
21 they do a lot of advocacy work around green building and  
22 affordable housing. In California, we have 13 million  
23 homes, nearly 6 million are rentals, and the majority of  
24 rentals are Multi-Family. A large percentage of our low  
25 income households live in Multi-Family. Much of this

1 housing stock suffers from deferred maintenance and a high  
2 per square foot utility cost, certainly in our city that is  
3 true. And one fact that highlights a lack of access of this  
4 kind of housing, this tenant population to energy efficiency  
5 programs, is that 90,000 HUD assisted units in California,  
6 less than one percent have benefitted from energy efficiency  
7 programs to date, so there is a real opportunity there.

8           What does Multi-Family housing look like? It can  
9 look like this, this is a pretty picture, I like to show  
10 pretty pictures, a recently completed new project in San  
11 Francisco, we do this well, it meets high green building  
12 standards, all our buildings meet either LEED green point  
13 rated, or Green Communities Initiative. When we have \$30  
14 million, we like to do a building like this, and we do it  
15 well. But we have a lot of other kinds of buildings,  
16 buildings like the following, older buildings, older  
17 structures that are close to 100 years old, they suffer from  
18 poor insulation, old central systems, leaking windows, and  
19 they have associated needs. They might need a new roof,  
20 they might need accessibility upgrades, it's an aging  
21 housing stock, but it's an important part of our safety net  
22 of affordable housing in San Francisco.

23           So what is the opportunity? The low income  
24 investment fund, one of our partners in this program, did a  
25 demand and sensitivity analysis and found that we think

1 across our affordable housing portfolio, we could save about  
2 \$2 million in annual operating cost, just by improving  
3 energy efficiency. That has a net present value of about  
4 \$14-\$18 million for us. Nationwide, and this statistic  
5 comes from a recent presentation from Wayne Waite at HUD, in  
6 HUD-assisted properties around the country, \$2 billion of  
7 potential energy efficiency savings with a net present value  
8 of over \$8 billion. So, in saving energy, we can save a lot  
9 of money, and this is extremely powerful for us. In the  
10 face of that opportunity, we established our Green Retrofit  
11 Initiative. We want direct energy efficiency programs and  
12 funding towards low income rental housing, to lower utility  
13 costs, preserve affordability, reduce greenhouse gas  
14 emissions -- again, preserving affordability is paramount  
15 for us -- attract private capital, and we'll talk more about  
16 that, that is the program that we are being funded through  
17 the State Energy Program, as well as develop audit protocols  
18 and program models that facilitate a whole building approach  
19 and the leveraging of diverse resources. Some critical  
20 issues, again, being able to work with partners like  
21 Stopwaste.org, the Enterprise Community Partners in  
22 developing audit protocols that really are appropriate for  
23 Multi-Family housing is a fantastic opportunity for us, and  
24 we're really looking forward to moving that agenda; it helps  
25 us address buildings in a holistic way, something that has

1 been a real impediment for us to date. Also, the leveraging  
2 of diverse resources, we have a diverse set of buildings  
3 with a diverse set of needs. I like to use the analogy, it  
4 is a medical analogy, I think a lot of energy efficiency  
5 programs are structured like vaccination campaigns, they see  
6 a specific problem, broadly across a population, and they  
7 find a specific solution to that problem. And a lot of the  
8 proscriptive list programs that I see are similar. If you  
9 need new lights, there is a program that can provide you  
10 with new lighting, or a limited proscriptive list of  
11 measures, which is great. Our buildings, we need a primary  
12 care network. So, if you go to your doctor and you have a  
13 shoulder injury and a bad knee and a peptic ulcer, and he  
14 says, "Well, I can treat you for Polio," you know, that's  
15 not really - that doesn't help. So, we need a structure  
16 that allows us to give primary care to our buildings, where  
17 we can do site specific analysis based on a Multi-Family,  
18 whole building energy audit, and then bring diverse  
19 resources through a contracting program model to address  
20 those needs. It is essential to our buildings. And so, we  
21 have some funding to do that. We are the Stimulus period  
22 provider of weatherization assistant program, and a lot of  
23 the work that I've been involved in is helping to move that  
24 structure toward a Multi-Family model that works to us, we  
25 are blessed to be the recipient of a State Energy Program

1 grant to establish a revolving loan program, and we have a  
2 host of leveraging sources that are potentially available,  
3 depending on the specific characteristics of a building  
4 Energy Efficient and Conservation Block Grant, utility  
5 rebates, Letter [phon.] mediation money, CDBG, our housing  
6 dollars, and property reserves. Our State Energy Program is  
7 the Bay Area Multi-Family fund, this provides free energy  
8 audits and technical assistance to providers of low income  
9 housing. We have a revolving loan program, it is a low  
10 interest rate loan, 10 years at 5 percent interest paid  
11 through the energy savings. The grant funds that we  
12 received from the State Energy Program fund at top loss, a  
13 loss reserve component of those loan funds, which is serving  
14 to attract private capital. We already have secured \$2  
15 million in commitment of private capital for a total fund of  
16 \$4 million.

17 I did want to - I like diagrams, as well as  
18 pictures, but I wanted to spend just a minute talking about  
19 our program diagram. Again, this is how our funds flow, the  
20 founders of CACC, we are the prime contractor, the City of  
21 San Francisco, and we are working with the Low Income  
22 Investment Fund and Enterprise Community Partners - this may  
23 be a little tough to see, and then there are two tranches  
24 that split off from that, one is the loan fund, itself, and  
25 the other is a technical assistant. And then I just want to

1 draw your attention to kind of the central piece, it is the  
2 beneficiary, it is the affordable housing provider. We work  
3 with an extensive infrastructure of very professional,  
4 capable, affordable housing providers, who do retrofits and  
5 upgrades to their buildings all the time. So, part of what  
6 we want to do is enable those entities and provide them with  
7 funding so they can enter an agreement with contractors to  
8 do the construction, the retrofit, and then those funds flow  
9 back into our Multi-Family loan fund. Again, it is this  
10 contracting model that is so essential. If there are only  
11 certain specialist contractors that they can use, who can  
12 only do certain specialist activities, it's a real  
13 impediment for us to enact these retrofits. So the  
14 contracting model is an essential component. One example of  
15 a kind of sources and uses in this kind of leveraging model  
16 we have is, if we look at energy and water efficiency  
17 measures, complimentary measures, again, remember the  
18 analogy, a whole building retrofit, if we go into a  
19 building, we might need a new roof at the same time we're  
20 putting on a solar hot water pre-heat system. And then,  
21 other upgrades that the owner might want to do at the same  
22 time. We have weatherization assistance funds, and those  
23 are granted on the basis of their payback, a savings to  
24 investment ratio. We want to pair that with a loan program  
25 that is sized according to the projected energy savings.

1 We'll match that with housing dollars to pay for some of the  
2 non-energy focused upgrades, and then bring in other grants,  
3 potential grants. I see my colleague, Cal Broomhead, in the  
4 room, he manages our EECBG fund and we had lunch the other  
5 day and he mentioned the possibility of \$3.00 a therm to  
6 replace hot water distributions, so I put that in there, I  
7 hope that's okay.

8           Potential measures include boilers, domestic hot  
9 water, re-circulating pumps, in-unit radiators, hydronics  
10 [ph.] heat circulating pumps, exterior lighting, interior  
11 lighting, toilet and sink fixtures, windows are always a big  
12 issue. Again, these are upgrades to central systems in  
13 Multi-Family buildings; it is a very distinct housing and  
14 building type -- and complimentary measures like roofing.  
15 This is our timeline, the most important thing about this is  
16 our production goal, this is just for the City of San  
17 Francisco, around 800 units over the next two years, we hope  
18 to attend to, and regionally, probably around 1,300 units,  
19 given that our loan fund is a regional fund. Thanks very  
20 much.

21           MS. GOULD: Okay, thank you, Dan. Our last  
22 presenter will be Simon Baker from the CPUC, he'll be  
23 talking about the Utility On-Bill Financing Program for  
24 Commercial businesses. He supervises the Energy Efficiency  
25 Planning Section within the Energy Division at the CPUC.

1 His group oversees the investor-owned utilities current  
2 portfolio of energy efficiency programs, as well as the IOUs  
3 planning activities for future program cycles, and the  
4 advancement of the California Long Term Energy Efficiency  
5 Strategic Plan. Prior to his current role, Simon was the  
6 Lead Analyst for the CPUC's Long Term Procurement Plan  
7 Proceeding, where he oversaw the IOUs resource planning and  
8 needs assessments for new generation resources, while  
9 ensuring compliance with the Energy Action Plan Loading  
10 Order. In that role, he was actively engaged in  
11 coordination with the Energy Commission's IEPR Proceeding  
12 and Demand Forecasting processes. Simon.

13 MR. BAKER: Thank you very much. I'm pinch hitting  
14 today for one of my team members, so I'll try my best to  
15 respond to questions or follow-up as needed. Being the last  
16 presentation before lunch, I'll also try to make it as  
17 exciting as possible. I really do think that this program  
18 is an extraordinary deal for customers that are eligible to  
19 participate.

20 San Diego Gas & Electric first began offering this  
21 program in 2005, and Southern California Gas, and Southern  
22 California Edison followed suit in 2008, PG&E is just now  
23 offering Off-Bill financing with On-Bill financing expected  
24 available in 2011.

25 So, how does OBF work? A utility provides customers

1 with unsecured loans that cover up to 100 percent of the  
2 cost net of rebates and incentives at zero percent interest  
3 rate, or up to the loan cap, whichever one comes first. The  
4 loan installments appear as a line item on the utility bill  
5 and, just to clarify, there is a typo here, it is not  
6 actually a "surcharge," that word is inappropriate in this  
7 context, so it is just a loan installment. So, with this  
8 program, you end up paying the utility once with one check  
9 on your bill per month for both energy use and your loan  
10 repayment.

11           So who is eligible to participate? This is limited  
12 to business customers of the four large investor-owned  
13 utilities - I did mention that PG&E has Off-Bill financing,  
14 with On-Bill financing expected soon. Multi-Family  
15 properties, where owners do not reside on the premises may  
16 be eligible to participate, in that case OBF can be used to  
17 install measures in common areas. And the customers are  
18 screened for utility bill payment in good standing and the  
19 utilities may also use other credit criteria to screen for  
20 eligible participants.

21           So, in order to be eligible to participate, a  
22 project must be installed as part of another utility  
23 program, and it also must be installed at the Borrower's  
24 premises. The loan repayment term is matched to the payback  
25 period of the project, and in order to apply, you can

1 contact the account representative or other means of  
2 contacting the program. So, here is the punch line, the  
3 terms of the loan are zero percent interest, you can't get a  
4 better deal than that, for commercial loans, the loan limits  
5 are between \$5,000 and up to \$100,000 for a five-year term.  
6 Institutional loans have longer terms and higher ceilings  
7 because they're considered to be more secure. Institutional  
8 loans were authorized per the PUC decision up to a million  
9 dollars, but the utilities are currently offering up to  
10 \$250,000 while they evaluate risk management strategies to  
11 enable offering higher loan amounts. The loans are non-  
12 transferable, so unlike PACE loans, which accompanied the  
13 property upon resale, the OBF loans must be repaid to the  
14 utility at time of sale. And finally, and importantly,  
15 partial or non-repayment of a loan may result in utility  
16 shut-off, and so this is a significant disincentive for  
17 default on the loan.

18 Funding levels, as I mentioned previously, \$41.5  
19 million have been authorized for this program for the  
20 current portfolio cycle, and you see the breakdowns by  
21 utility service area. In actual fact, the utilities may be  
22 able to loan out more than this amount because it is set up  
23 as a revolving fund. And that's that. So, I'd be happy to  
24 take questions.

25 MS. GOULD: Thank you, Simon. And I wanted to let

1 the audience know that, once the Commissioners have had an  
2 opportunity to comment and make any questions, that we are  
3 going to open it up for public comment, but before we go to  
4 lunch. So, Commissioners, do you have any questions?

5 COMMISSIONER BYRON: I'll ask one, and Mr. Baker,  
6 well, maybe it's two, but they're related. Any explanations  
7 as to why PG&E is late to the program? And I guess the  
8 second is, who is buying down these rates to zero interest?  
9 Is that part of the program funding?

10 MR. BAKER: Well, I'll answer the second question  
11 first, which is that, yeah, essentially it's ratepayer  
12 dollars that are buying down these rates.

13 COMMISSIONER BYRON: Okay.

14 MR. BAKER: And as far as your first question is  
15 concerned, I don't have the details in terms of why PG&E has  
16 been late to the game on this, but the important thing is  
17 that they're in the game now.

18 COMMISSIONER BYRON: Thank you.

19 COMMISSIONER EGGERT: Thank you. I have a couple of  
20 questions. I guess the first one is for Ms. Frusha. One of  
21 the things that came up during some of the discussions  
22 around PACE and FHFA were the default rates of existing  
23 programs, which I think, my understanding, were looking  
24 pretty good. Is that part of this program is to track some  
25 of that information?

1 MS. FRUSHA: Yeah, absolutely. And one of the  
2 things that we have at least been looking at are some of the  
3 historical programs out there like the Keystone and the  
4 Fannie Mae loan program, and often times the default rates  
5 are correlated with credit scores. But often times, if you  
6 have a higher savings, you're also seeing lower default  
7 rates, this is the savings to investment ratio being a big  
8 part of this, as well.

9 COMMISSIONER EGGERT: And I think - I don't remember  
10 if it was part of your presentation or one of the others,  
11 but there was a discussion about aggregating debt for  
12 purposes of getting lower interest rates. How do you see  
13 that occurring in the context of Lendees with different  
14 credit ratings and such?

15 MS. FRUSHA: So, when you're referring to  
16 aggregating debt, I guess there are a couple different ways  
17 to approach it. One of the things, first off, in  
18 aggregating or asking Lenders to participate in the  
19 clearinghouse is to really operate by standard underwriting  
20 criteria, and then how do you start to tier out different  
21 FICO scores and different credit ratings, and how Lenders  
22 will participate in that is to be determined in this, in the  
23 development phase and the design phase, but how then a  
24 Lender may choose to lower their interest rate based on a  
25 credit score, I mean, obviously they have to assess their

1 risk and our job is to help provide them with incentives to  
2 want to lower their risk, but also provide them with quality  
3 consumers, as well.

4 COMMISSIONER EGGERT: Okay, thank you. And then, I  
5 guess this is a question maybe for both Mr. Lowder and Mr.  
6 Adams. Mr. Lowder, I was encouraged to see, on the  
7 verification of energy savings, this is another thing that  
8 came up in the discussions around PACE, which was some  
9 demonstration that the savings that are promised are  
10 actually achieved, and I guess - is this something that you  
11 would expect to be tracking in the aggregate across the full  
12 program?

13 MR. LOWDER: Yes, we will be gathering information  
14 for each residential homeowner and tracking that in the  
15 aggregate.

16 MR. ADAMS: And we'll be doing the same. All the  
17 participating projects will receive a full energy audit,  
18 they'll do the upgrades, and then they'll be uploaded onto a  
19 portfolio manager and we'll be monitoring and comparing the  
20 before and after, to be able to - one of the essential  
21 components of our program is data collection, in order to  
22 verify the viability of this market.

23 COMMISSIONER EGGERT: Okay, and then I guess this is  
24 also a question for both of you. In terms of coordination  
25 with the statewide outreach activities under Energy Upgrade

1 California, how do you see your programs interfacing with  
2 that?

3 MR. LOWDER: Well, we basically march to the tune of  
4 the Energy Upgrade California, we're going to market under  
5 that - using that logo, and in accordance with all and in  
6 compliance with all of the requirements for Energy Upgrade  
7 California, and then we'll concentrate on our jurisdictions.

8 MR. ADAMS: We'll do the same, though I think the  
9 marketing piece is pretty distinct for our constituency and  
10 population. We're a very focused market, it is not a broad  
11 market, and there are a number of networks where we have  
12 very direct relationships with affordable housing providers,  
13 so we will use the logo, we will make reference to this as a  
14 broader effort, though we are advantaged in that our  
15 marketing and outreach can be very direct based on  
16 relationships and existing networks, so it is less reliant  
17 on a kind of public campaign.

18 COMMISSIONER EGGERT: And then one last question for  
19 Mr. Baker. In terms of the On-Bill Financing activities,  
20 the levels of this particular round of investment seem  
21 relatively modest, I guess. Is this considered to be sort of  
22 a pilot to test out, to see what sort of uptick you get from  
23 the commercial building owners? And how do you see that  
24 playing into future plans for On-Bill?

25 MR. BAKER: Yeah, I mean, I think we're a little bit

1 beyond a pilot phase. San Diego Gas & Electric, as I  
2 mentioned, and the Southern California utilities have been  
3 doing this since '05-'06. We are essentially testing the  
4 waters for the demand for this, and there are options to be  
5 able to expand the loan amounts, if necessary, by a PUC  
6 decision or other mechanisms.

7 COMMISSIONER EGGERT: Have the previous programs  
8 been fully subscribed or over-subscribed, or what's the  
9 extent of the participation?

10 MR. BAKER: That, I don't know. There is somebody  
11 in the audience, Frank Spasaro from San Diego Gas and  
12 Electric that could perhaps speak to his experience with the  
13 program.

14 COMMISSIONER EGGERT: I guess if he's interested.

15 MR. SPASARO: Good afternoon, Commissioners. Yeah,  
16 the Edison program was just released on the street, and I  
17 believe they are subscribed with SDG&E, and SoCal Gas  
18 actually don't have a cap for the loan pool. The number up  
19 there, I think you've got \$5 million and \$3 million. We're  
20 actually somewhere close to \$12 million already, so we're  
21 just going. If it meets my energy efficiency goals,  
22 qualifies for a program, gets me savings, I get a loan if it  
23 qualifies. So, we're moving forward.

24 COMMISSIONER EGGERT: And have you had to exercise  
25 any of the penalties in terms of non-payment?

1 MR. SPASARO: So we have something in the  
2 neighborhood of 450 loans that we've done, we have pretty  
3 much done everything, so we've had customers pay off loans  
4 completely, we'd have customers that moved, that we had to  
5 exercise the non-transferability, so the loan was due and  
6 full at that time, they paid it off, we've had customers,  
7 three defaults, where in one case we shut them off, the  
8 other two times they basically just came to us and said  
9 "we're shutting down business, can't pay your deal, we're in  
10 Chapter 11," so we had to write off the loan.

11 COMMISSIONER EGGERT: And in terms of - I'm not sure  
12 how to ask this question, but in terms of that level of  
13 default, is there any sort of comparison against other types  
14 of loans in that sector? And how does that compare?

15 MR. SPASARO: Yes, there is comparisons. We're  
16 under one percent at this point; typically, you plan for two  
17 to three percent, so we are so far performing pretty well,  
18 considering the economy. I mean, we've been watching this  
19 very closely. That is one reason we haven't done the over  
20 \$250,000 amount yet, because we're a little concerned about  
21 what the implications are there. But, that said, it seems  
22 to be - the program parameters seem to be pretty well  
23 designed, such that we're minimizing defaults.

24 COMMISSIONER EGGERT: Thank you very much for your  
25 comments.

1 MR. SPASARO: Sure.

2 COMMISSIONER EGGERT: I have no further questions.

3 MR. BAKER: Thank you, Frank.

4 CHAIRMAN DOUGLAS: And I don't know if it's the  
5 nearness of lunch or the thoroughness of presentations, but  
6 I don't have any questions at the moment. We'll invite  
7 public comment just for members of the public who are not  
8 planning on staying through the end of the agenda when we  
9 also have time set aside for public comment. I don't see  
10 anybody jumping up in the room. Is there anyone on the  
11 phone in that category? So it sounds everybody is joining  
12 us for the day, unless a question comes through the phone or  
13 WebEx in the next - all right, well, we'll see everybody  
14 after lunch at 1:30. Thank you.

15 MS. GOULD: Thank you.

16 (Off the record at 12:31 p.m.)

17 (Back on the record at 1:45 p.m.)

18 MS. KOROSEC: Bernie, are you on the line? We're  
19 not hearing you here in the room. Chris, rather than wait,  
20 why don't we just go ahead with you and, if Bernie is not on  
21 the line before, then we'll just go to the next presenter on  
22 the agenda.

23 MS. GRAILLAT: Good afternoon, everyone. My name is  
24 Chris Graillat and I am the staff lead at the Energy  
25 Commission for Workforce Development. The panel that we are

1 about to present right now focuses on workforce. Workforce  
2 is basically essential to meeting our goals for energy  
3 efficiency and implementing the programs that you heard  
4 about in this morning's presentations.

5           Commissioners, as you are aware, the Energy  
6 Commission joined with Departments under the Labor and  
7 Workforce Development Agency and that's the Employment  
8 Development Department Workforce Investment Board and the  
9 Employment Training Panel, to create the Clean Energy  
10 Workforce Training Program, which is the largest green clean  
11 energy training program in the U.S. The partnerships  
12 developed under QTIP, as we fondly call it, or "Cutie Pie"  
13 CEWTP, depending, some people call it either one, provide  
14 opportunities for California's workers to learn vital skills  
15 to enter and build the clean energy economy, including green  
16 building, energy auditing, and renewable energy occupations.  
17 The program meets the Recovery Act goal as it was funded  
18 with a large portion of Recovery Act money, it meets the  
19 goal of readying people to get back to work. Key to the  
20 training program success is partnerships on the State and  
21 local level. The presenters you will hear from today are  
22 not only developing innovative and model energy efficiency  
23 programs, they're partnering with training providers and  
24 will employ trainees of the Clean Energy Workforce Training  
25 Program.

1           We will learn about these models and how they are  
2 drawing from training programs to implement the retrofit  
3 programs and provide jobs in California. Our first  
4 presenters are going to be -

5           MS. KOROSSEC: I'm sorry, I didn't hear your  
6 question.

7           MS. GRAILLAT: Is Bernie on the line?

8           MS. KOROSSEC: Bernie, are you on the line?

9           MR. KOTLIER: Yes, I am.

10          MS. KOROSSEC: Great, go ahead.

11          MS. GRAILLAT: Let me introduce you. Okay, our  
12 first presenters will be Bernie Kotlier, who is the Director  
13 of Green Energy Solutions, of IBEW/NECA, California, and  
14 that is the Electrical Workers and Contractors Labor  
15 organization, and Bernie will be first up, and then  
16 following him will be Heidi Hauenstein, who is the Project  
17 Manager of Energy Solutions. They will talk about the  
18 Emerging Technologies Assistance Program, or ETAP, which  
19 focuses on commercial lighting and controls applications,  
20 and Mr. Kotlier will start off with his presentation,  
21 provided remotely. Bernie.

22          MR. KOTLIER: Okay, well, thank you very much. Can  
23 everybody hear me all right?

24          MS. KOROSSEC: Yes.

25          MS. GRAILLAT: Yes.

1 MR. KOTLIER: Yes, okay. Wonderful. I'd like to  
2 thank the Commissioners and everyone who is participating,  
3 first of all, for allowing me to take your time today, but  
4 also for allowing me to do this remotely and accommodate my  
5 schedule.

6 Today, we're going to talk briefly, because I know  
7 we have limited time, about the California Advanced Lighting  
8 Controls Training Program, which we referred to the in  
9 presentation as CALCTP. This is a training program that  
10 trains electricians and contractors on advanced lighting and  
11 controls. Next slide, please. The founding members of this  
12 training program were the Lighting Technology Center at U.C.  
13 Davis, Southern California Edison, IBEW, and NECA. And it  
14 is a collaborative effort that grew from the founding  
15 members to include the three major investor-owned utilities,  
16 the Sacramento Municipal Utility District, the California  
17 Community Colleges, and Lighting and Control Manufacturers,  
18 so it is a very broad based, industry-wide training effort.

19 The program was created for the admission of  
20 training electricians and contractors to make our lighting  
21 systems in commercial industrial and institutional  
22 facilities more energy efficient and cost-effective, to make  
23 sure that they're installed and they function correctly, and  
24 at the same time, to improve the quality of lighting for  
25 commercial facilities. Next slide.

1           One of the key points of the creation of this  
2 training program and the objectives of this training program  
3 are to save energy, and the opportunity to save energy is  
4 enormous. According to the Department of Energy, we have  
5 approximately 8 billion square feet of existing indoor and  
6 outdoor non-residential facility space, so this is various  
7 types of non-residential space, it could be industrial,  
8 commercial, or institutional space. There is approximately  
9 8 billion square feet of it. Lamp efficiency is improving  
10 and we've squeezed quite a bit of efficiency into or out of  
11 lamps, so now controls are the single biggest opportunity to  
12 save energy in the lighting category, and the vast majority  
13 of that 8 billion square feet of space does not have  
14 controls, or has very few controls, maybe just an occupant  
15 center in a restroom, but most of it does not have controls,  
16 or significant controls. So, retrofitting that 8 billion  
17 square feet is the key to an enormous opportunity to save  
18 energy.

19           Roughly about 40 percent of existing facility  
20 electrical energy is in the lighting category, about six  
21 percent outdoor and about roughly 35 percent indoor, and it  
22 is our single biggest opportunity to save energy.

23           And we do always want to remember the outdoor  
24 opportunity, a lot of people think about indoor lighting,  
25 but outdoor is a significant opportunity, as we can see

1 here. This is the state facility, I won't mention the  
2 location, but there are a lot of parking lots and a lot of  
3 parking structures where we are wasting a lot of energy when  
4 they're not being used in the evening and at night, so  
5 outdoors is one of our great opportunities, as well as  
6 indoor.

7 This training program has been recognized by the  
8 Department of Labor, as well as the Energy Commission, and  
9 the Employment Training Panel grant money and ETP fund have  
10 been awarded to this training program. The DOL grant was  
11 about \$5 million, over two years, and you can see the list  
12 of funders, I won't go into the detail. But it is  
13 significant collaborative and cooperative agreements,  
14 statewide.

15 The statewide partnership is reflected in the CALCTP  
16 training coverage. It is held at fixed community college  
17 campuses, which are part of the advanced transportation  
18 technology group, also at 21 electrical training centers,  
19 IBEW/NECA training centers around California, is supported  
20 by nine California Web partners, and it is an open program  
21 to Union and non-Union State Certified General Electricians.

22 Those are the objectives of the program that is  
23 funded by DOL, CEC and ETP, is to train roughly 2,300  
24 unemployed or underemployed electricians, about 50  
25 instructors to provide equipment for 66 lab boards, and

1 create a website which is actually already up and running  
2 for CALCTP certified contractors and electricians, and that  
3 URL is CALCTP.org. Next, please.

4           The training implementation has already begun, we  
5 have already trained and certified about 200 electricians  
6 this fall, about 800 more are enrolled this spring, and we  
7 estimate about 500 through June, an additional 800 estimated  
8 through the end of 2011, to get that 2,300 total. Next,  
9 please.

10           We also have a somewhat unique feature of this  
11 training. We have Business Development seminars, so in  
12 addition to the technical training, we also train  
13 contractors and employers, and the reasoning there is that  
14 the contractors have to be educated in the business skills  
15 to sell advanced lighting control systems because if they  
16 don't sell the projects, the electricians won't have the  
17 work, so business training is a critical part of the  
18 development of these jobs. The business training is paid  
19 for by the contractors and, with new construction down,  
20 retrofitting is a big counter-cyclical opportunity for the  
21 contractors, they are well aware of that, and we pointed it  
22 out to emphasize it. These are full day classes that  
23 instruct them in marketing sales, PR project development,  
24 and finance, and we expect, and the utilities are expecting,  
25 to have new programs that will provide incentives for

1 customers who use CALCTP certified contractors and  
2 electricians, and we'll be hearing more about those from our  
3 utility partners in the near future.

4           So, the strong participation drivers for program  
5 success in CALCTP are first and foremost that we have 20-30  
6 percent unemployment for California Electricians, and many  
7 more are under-employed. Electricians want and need this  
8 advanced training and certification to gain employment and,  
9 of course, they can attend this training easily because it  
10 is already paid for by a combination of CEC and ETP funds,  
11 along with DOL grant funds. The new lighting control jobs  
12 are driven by existing market demands, we have environmental  
13 concerns and regulations, we have a need to manage peak  
14 demand and reduce lighting costs, and the ability to deploy  
15 advanced lighting controls is limited mostly by a shortage  
16 of trained personnel in CALCTP training to fill that gap,  
17 and with the expected additional incentives from the  
18 investor-owned utilities and SMUD to drive that market  
19 further, we expect a lot of retrofitting, and that is  
20 retrofitting that will be well done and filled by the  
21 contractors and electricians who are trained and certified  
22 in the program. And I believe that is the last slide,  
23 right? So that's the end of my short time here, but I'll  
24 turn it over to Heidi for the second part of the  
25 presentation. Thank you.

1 MS. GRAILLAT: I now have Heidi Hauenstein from  
2 Energy Solutions.

3 MS. HAUENSTEIN: All right, thank you for the  
4 opportunity, for joining the conversation today. I'll be  
5 talking about the workforce development aspects of Energy  
6 Solutions Emerging Technologies Assistance Program - oops, I  
7 said that wrong - Energy Technologies Assistance Program.

8 So ETAP is an ARRA funded State Energy funded  
9 Program and it targets municipal energy efficiency  
10 retrofits, and we are working with about 21 municipal local  
11 governments right now, but we're looking to expand our  
12 reach. We are targeting three emerging technologies, so  
13 this is a little bit different than the traditional approach  
14 where you go to a local government and say, "Hey, your  
15 entire building stock is a little bit inefficient, let's  
16 audit a bunch of buildings and figure out which retrofits  
17 that fit best for each building." So, in this approach,  
18 we've identified three measures that we think will work well  
19 with the municipal stock, in general, and then we'll be  
20 identifying specific buildings where we can install that one  
21 technology. The three technologies that we'll be working  
22 with are bi-level lighting, lighting for parking garages and  
23 parking lots, wireless lighting controls mostly for offices,  
24 and then wireless HVAC controls.

25 The ETAP goals are to save 17.6 million kilowatt

1 hours a year, 6,170 therms per year, and 1.7 megawatts of  
2 demand reduction. So those are short-term goals for the  
3 program duration, which is going to end in March of 2012.  
4 And then, our longer term goals are to help prepare the  
5 retrofit market so that projects can continue to be  
6 installed after ETAP is completed, and we will do this by  
7 proving the efficacy of targeted technologies, increasing  
8 demand for future retrofits, and training workforce to  
9 deliver retrofits in the future. And when we were  
10 envisioning the ETAP program about a year ago, we looked at  
11 the ARRA funding and it really resonated with the goal of  
12 creating jobs. And we thought, you know, this is a really  
13 great opportunity to leverage short term funding to grow our  
14 little energy efficiency field so that we can add more team  
15 members, because ultimately our goal is to save energy, and  
16 if we can train more people to know how to save energy, then  
17 that is a long term win for us, with short term funding.

18 So, the ETAP program areas, we are providing  
19 technical services to local governments. The technical  
20 services are auditing, design recommendations, design  
21 review, we'll do Monitoring and Verification of projects  
22 after they're installed, we'll also help local governments  
23 find financing for projects if they don't have EECSBG or  
24 other funding sources to fund their cost share of the  
25 project. We'll be offering financial incentives, and these

1 incentives are all on top of the utility incentives. We'll  
2 be developing case studies, I think there are six case  
3 studies throughout the course of the program, and these case  
4 studies will be cobranded with the Energy Upgrade California  
5 brand, and will be available through our website. We'll  
6 also be offering local government technology seminars,  
7 wireless controls trainings, and then there is also going to  
8 be an ETAP internship.

9           So these first four items really are focusing at  
10 increasing the demand for retrofits, so proving that the  
11 technologies that we have selected are actually going to  
12 save energy, and that they're going to be cost effective.  
13 Then, the bottom three bullets are focused more at  
14 increasing the pool of qualified workers. So, I'm going to  
15 focus the rest of the topic on those last three bullets.

16           So, the local government technology seminars, there  
17 are going to be six of them over the course of the program,  
18 and they'll be open to local government staffs, and  
19 participants of Green Jobs Training Programs at the  
20 Community College Districts, and the goals of the program  
21 are to inform participants that are thinking about  
22 installing retrofits through ETAP about the retrofit  
23 measures and then the technical services that ETAP is  
24 providing. And we'll also provide an opportunity for  
25 networking so that local government staff who are thinking

1 about installing a retrofit can speak to staff that have  
2 already installed the retrofit and kind of get a more  
3 personal, I guess, conversation going about how the retrofit  
4 process worked, and then, at these technology seminars,  
5 we'll also be reviewing best practices for operation and  
6 maintenance of the different technologies, so that will be  
7 targeted at building operators.

8           The partners for these are the local government  
9 associations, like ABAG, SCAG, and LGC, and then we'll also  
10 be partnering with our equipment manufacturers. The  
11 wireless controls trainings, we have two of them, one is for  
12 the HVAC controls, and one is for the wireless lighting  
13 controls. For the HVAC controls, we're going to be having  
14 two seminars, they're going to be week-long classes,  
15 actually, and the participants are qualified electricians  
16 and electrical contractors, and our goal is to train 20  
17 electricians on how to install Federspiel controls DART  
18 System, which is one of the two technologies that we've  
19 identified for the wireless HVAC controls.

20           Then, the other objective is to provide a pool of  
21 qualified contractors to actually install ETAP projects, so  
22 one of the barriers that we've identified is that all these  
23 kind of advanced controls are always installed correctly, so  
24 we want to make sure that, in this first round of  
25 installations with municipal partners, that they're

1 installed correctly so that we provide a good model going  
2 forward. The wireless lighting controls trainings, there  
3 are going to be four of them and we're partnering with  
4 CALCTP and we just heard from Bernie about this program.  
5 And the training will be open to Weisman Seton [ph.]  
6 Electrical Contractors and state certified - they are  
7 General Electricians. What we will be doing is we'll be  
8 updating existing CALCTP curriculum to make sure that all of  
9 the wireless lighting controls technologies are integrated  
10 into the existing curriculum. And we'll be training 40  
11 electricians, not all of those electricians will pass the  
12 final exam because I think there is a 75 percent pass rate  
13 and, again, another goal is to provide a qualified pool of  
14 installers for ETAP projects. And our partners for this are  
15 CALCTP and the California Advanced Lighting Technology  
16 Center, and then also Adore Controls which is the lighting  
17 manufacturer.

18 A final workforce development aspect is the ETAP  
19 internship. The duration of the program is going to be  
20 about a year, it is going to be open to current students at  
21 Delaney College, Los Rios, and Workforce Institute. The  
22 goal is to provide interns with professional experience in  
23 delivering audits, design recommendations, and design  
24 review. And our partners for this are Laney College, Los  
25 Rios, and the Workforce Institute. I think that is all I

1 have. I'm sure I went overtime.

2 MS. GRAILLAT: Okay, thanks very much, Heidi and  
3 Bernie. Next, we're going to have Allison Bially, who is  
4 the Associate Director of PEGI, the Portland Energy  
5 Conservation Incorporated. And joining her is Erin Healy,  
6 who is the Administrative Services Division Chief of the  
7 California Conservation Corp. They will tell us about the  
8 Energy Smart Jobs Program that focuses on commercial energy  
9 efficiency retrofits, and will train California Conservation  
10 Corps members to do EE surveys.

11 MS. BIALLY: Hello, good afternoon, thank you,  
12 Commissioners. I hope that no one is too sleepy after  
13 lunch. I'll try to keep it perky and moving. So I wanted  
14 to really briefly tell you who we are. PEGI has been  
15 involved in Energy Efficiency since 1980.

16 MS. HEALY: And the CCC is a state agency, we've  
17 been around a little bit more than 30 years. We hire 18-25-  
18 year-old men and women in California.

19 MS. BIALLY: So the EnergySmart Jobs Program has  
20 three overarching goals, we are working clearly to create  
21 jobs and create energy savings, but we are also working on  
22 market transformation. So, part of the RFP that was put out  
23 about a year ago, it is our goal to create new green jobs,  
24 and we are specifically targeting green jobs for the under-  
25 employed and disadvantaged workers, thus Erin and her

1 company, not her. And we are also making great leverage of  
2 matching funds and providing direct economic stimulus to the  
3 businesses and individuals we're working with.

4 We have a large host of partnerships, both public  
5 and private. Earlier, the Commissioners asked about  
6 utilities working with us, we currently have - this slide  
7 shows two, but I think we actually have three utilities, two  
8 of them are public utilities, the third is an IOU, and we  
9 are working with many other public utilities and the other  
10 large IOUs to get them on board, as well, and to partner  
11 with us. Our key partnership implementation, however, is  
12 the California Conservation Corps.

13 The way the program works is we, through the  
14 Conservation Corps, have job openings for 60 folks, many of  
15 whom will take the role of surveyor, they will go through  
16 training. In fact, Erin and I came back from yesterday  
17 which was our first day of starting our training of the  
18 Auburn facility of the Conservation Corps, and it was really  
19 exciting, we trained about 30 folks, and it is ongoing, so  
20 we train these folks the energy efficiency industry on how  
21 to do surveys in refrigerator-related businesses, how to  
22 talk to the customers, and how to look for the specific  
23 technologies that we're incenting. And we will also train  
24 contractors on how to work with the technologies that we're  
25 incenting, how to work with our program, and how to work

1 with the utility programs that are partnering with us.

2           Once trained up, the surveyor will blanket the state  
3 and survey various refrigerated businesses, and enter the  
4 information through a database, through an iPhone into a  
5 database that will be available to the contractors who have  
6 successfully completed the training. Those contractors will  
7 have access to the leads that the surveyors have created.  
8 They'll also earn financial incentives that we're offering,  
9 where applicable, they will also have utility incentives  
10 that they can pick up, and they will go and they will sell  
11 the energy retrofits to the customer and put those in for  
12 incentives through both us and the utility, where  
13 appropriate. We also give the utility partners access to  
14 this database so they can see what is going on in their  
15 utility territory.

16           We have designed this program to make these jobs  
17 sustainable. We start by hiring for the CCC for the  
18 surveyor positions; once those surveyors learn their jobs,  
19 we immediately employ them. We give them a chance to get  
20 experience in the field doing what we train them to do.  
21 They now have work experience to put on their resume. At  
22 the same time, we're training the contractors, who leverage  
23 that training and the incentives to go out and increase  
24 their sales. This increasing of sales means they have more  
25 workload, and that means they need to hire. We are

1 requiring that each contract organization hire at least one  
2 person, and we are strongly recommending that person come  
3 from the Conservation Corps; therefore, we will hire, our  
4 surveyors will leave, and as our surveyors leave, we'll have  
5 to backfill them with new surveyors, so we will keep the  
6 cycle going and we will put the surveyors into private  
7 industry, into full time jobs that are not state funded.

8 MS. HEALY: So, a little bit about the CCC. And  
9 I've been in the CCC since, well, since I was a Corps  
10 member. In 1980, I joined the CCC and I was a young person,  
11 18-25 year old folks we pick up, hire them for work  
12 throughout the State in conservation-related jobs. We also  
13 respond to emergencies and that's probably the claim to fame  
14 they'll see a lot of times with the CCC, is people out on  
15 fires and floods and stuff.

16 Here is a little description about who the Corps  
17 members are. Again, they're 18-25 year old and they're not  
18 on probation or parole, they are California residents and,  
19 really, they're willing to work hard. We provide them a  
20 physical, drug testing, and we do fingerprinting background  
21 checks on all of our Corps members. You can see kind of a  
22 demographic breakdown of the young people that we hire,  
23 almost, well, a little over a quarter are women, and three-  
24 quarters are men, and you can see that 60 percent of the 18-  
25 20 year olds are a significant proportion of our folks,

1 which is also significant in terms of unemployment because,  
2 at this point, the 16-19 year old folks are at 35 percent  
3 unemployment, so this is quite a big opportunity for our  
4 young people, and you can also see that about 41 percent of  
5 our people have not finished high school, so we enroll them  
6 immediately in our charter high school.

7           We have traditionally done some CCC energy work, and  
8 you can see some of the things that our young people have  
9 done, retrofitting lighting systems, and installing some  
10 solar panels. Obviously, this gives them some kind of  
11 opportunity to go into a different kind of energy field,  
12 which is exciting to the Corps members, especially when they  
13 get that iPhone! Here is the traditional CCC work that we  
14 do, and kind of our claim to fame, outdoors doing a lot of  
15 trail work and fire stuff, and finding trees, and responding  
16 to floods. And that's kind of what the CCC is known for,  
17 again, we're looking at kind of dual purpose now, which is a  
18 lot of energy work, and we've always been in the green jobs  
19 field, but a little bit more into the energy work and this  
20 is opening up an interesting and great opportunity for the  
21 CCC.

22           So, how we work, CCC works in groups, and that is  
23 kind of how we always have worked, and this is how this is  
24 structured, we've got crews of Corps members, and we'll  
25 probably break them into teams from the crews, they'll work

1 surveying stores that have commercial refrigeration units in  
2 them, they'll go in with their iPhones, it'll kind of prompt  
3 them to go through some things that they just are learning  
4 right now, this week, and we're going to focus on urban  
5 areas, initially, so we've got people in Sacramento, San  
6 Jose, and San Diego in this training right now, and they'll  
7 kind of do concentric circles, getting wider and wider as  
8 the program goes on, so that we get more and more of that  
9 urban area, and "spike" [ph.] is a weird little term that we  
10 use which is, if folks have to go someplace that is about an  
11 hour away or longer, we can actually have them at State  
12 Parks, those kinds of things, and they can work from there  
13 for a week or two, so that we don't incur a lot of driving  
14 costs.

15 MS. BIALLY: So, at the end of all this, what do we  
16 expect to have achieved? It is our goal to survey at least  
17 25,000 commercial refrigeration sites. Those will mostly be  
18 made up of grocery stores, convenience stores, and other  
19 commercial sites with stand-alone or refrigerated cases that  
20 open and close. We anticipate, of the 25,000, that we will  
21 actually incent 5,000 of those to do projects for either LED  
22 case lighting, LED case lighting with motion sensors, or a  
23 variety of refrigeration control strategies. This is going  
24 to result in 88 million KWH and, using a Federal formula,  
25 214 jobs. We can calculate our own jobs, we will be able to

1 point to 117 jobs that we've created through the CCC and the  
2 requirement for the contractors to hire. During the program  
3 period, we anticipate saving ratepayers \$13.9 million and  
4 over five years, that will translate into \$41 million. We  
5 were asked to give recommendations to the Commission, so if  
6 you will allow, I think this is an amazing opportunity to  
7 take young people who are eager to get into a booming field,  
8 and get into entry level jobs, to train these people up, and  
9 get them to survey other sites outside of this sector, or  
10 even this business line, they'll help everyone reach those  
11 customers that have not yet done energy efficiency, or  
12 haven't heard about it, and it should help in uptake Codes  
13 and Standards as we can get these entry level folks in large  
14 numbers out into the State. That is all we have, so thank  
15 you for your attention.

16 MS. GRAILLAT: Thank you, and thank you for your  
17 excellent time management skills. Next, we have Rola  
18 Halawanji, who is the Environmental Technology Manager at  
19 Long Beach City College and Gail Schwandner, who is the Dean  
20 of Workforce Development at Long Beach City College. Long  
21 Beach is an excellent example of a community college meeting  
22 demands of industry. They are collaborating with Los  
23 Angeles and local industry in a variety of clean energy job  
24 trainings, which we will hear about.

25 MS. HALAWANJI: Thank you, Chris. It is a pleasure

1 for us to be here today. My name is Rola Halawanji and I am  
2 the Program Manager for the Clean Energy Workforce Training  
3 Program, and Gail Schwandner is my boss, Dean of Workforce  
4 Development. And I have to say that, two years ago, we  
5 thought that energy was sexy, but with these programs, and  
6 keeping it on the, you know, dating team, we are now the  
7 hottest dates in town.

8 I'd like to start off with giving you an overview of  
9 the role of community colleges and our core competency is to  
10 address workforce gaps, whether they're long term or short  
11 term, we identify those gaps and, while we create the  
12 training programs to ensure that there is a trained  
13 workforce and qualified workers for industry needs, we want  
14 to emphasize on continuing education. We create our  
15 training so that they can be transferred to our core credit  
16 sites, so that they can be transfer-ready to four-year level  
17 universities. And so we do that by partnering with industry  
18 and trade associations and industry associations, and we  
19 wouldn't be able to identify the trends or qualifications  
20 needed if we didn't know what the industry actually needed,  
21 and so we also align our objectives with government  
22 initiatives and other programs in the region, who are now  
23 setting the stage for market transformation by, you know,  
24 providing those programs and incentivizing a lot of the  
25 workforce. So, this is a glimpse of our partners. If we

1 were to put all of our partners, we would probably need 10  
2 slides, but these are partnerships that we have established  
3 over the years, working on so many projects, tackling  
4 changing industries to ensure that we best serve our  
5 students, as well as leverage resources, and we've also  
6 developed wonderful wonderful partnerships over the last  
7 year with this opportunity.

8           We group our partnerships into four categories, one  
9 being the small business development - did you want to -

10           DEAN SCHWANDNER: Yes. At the SBDC, we see as a  
11 major growth area small business development centers and it  
12 has been, you know, you talk about a push-pull, and in the  
13 last 10 months, we've been pulling the SBDC's along with us,  
14 talking about how important the green industry is and is  
15 going to be to SBDCs and how that could provide  
16 opportunities for jobs, and also, though, growth in a small  
17 business through this training would enable them to be able  
18 to hire more people. But I just got word that they had a  
19 major SBDC meeting in Florida, and what they're going to do  
20 is actually provide funding for green for SBDC. So,  
21 suddenly, they want to pull us, and they're saying, "Ah,  
22 this is a wonderful new thing and we really want to develop  
23 green programs," and we're going, "Have we not been talking  
24 about this for a year?" But, however we get there, we now  
25 have a really really strong incentive for the SBDCs to

1 partner with us.

2 MS. HALAWANJI: Pacific -- we work with Investment  
3 Boards, so Gail is going to interject and, you know, this is  
4 how we roll, I guess. These are our partner in crime, you  
5 know, we partner pretty much on all of our projects, and  
6 this is mostly attributed to the fact that the Executive  
7 Director, Bryant Rogers, is one of the most creative  
8 individuals in workforce development, and whenever we face  
9 challenges, you know, we sit down, hash it down and find  
10 solutions. Industry, as I mentioned earlier, we want to  
11 make sure that we're part of Industry Associations. For  
12 instance, I sit on the USGBC Long Beach Branch as the Chair  
13 of the Education Committee, and so we take a lot of  
14 information back and forth to make sure that we align our  
15 resources with theirs. And the last category, or  
16 categories, are cities or governmental agencies, utility  
17 programs, and one of the new partners we developed is  
18 through the Long Beach Community Action Partnership, who  
19 recently received a grant from the Department of Energy, a  
20 \$17 million weatherization program that specifically targets  
21 loans from communities. Did you want to --

22 DEAN SCHWANDNER: No, I was going to say that was  
23 where you were going to talk about one of our issues, was  
24 training in this area.

25 MS. HALAWANJI: Right. You know, we'll get to the

1 issues in a little bit. The partner that I want to spend  
2 some time on is - we can't see - is the LA County Office of  
3 Sustainability, they have a wonderful staff and, you know,  
4 we're able to align our objectives, and find ways to  
5 mitigate a lot of the challenges. We've heard of Energy  
6 Upgrade California and, you know, in the LA Region, their  
7 goal is to retrofit 30,000 homes by June 2013, and you know,  
8 we've identified the skill gaps, and so, in order for  
9 contractors to be part of the program, they need to be BPI-  
10 certified. But the cost of the training is not conducive to  
11 having the contractors going and getting the training, and  
12 so there is a need for subsidized training, as well as, you  
13 know, we see a lack of field mentoring or field technical  
14 training, and we need to align our resources with other  
15 organizations to make that happen. We also noticed, as many  
16 mentioned, the marketing and business skills are lacking,  
17 and since the contractors are the ones in the front line,  
18 they need to be able to translate the benefits of these  
19 programs not only in terms of kilowatt savings, but also  
20 health benefits, environmental benefits, and cost.

21           And so I just wanted to show you here a picture of  
22 what the LA workforce looks like. The orange table is the  
23 workforce needs and, in order to roll out this program in  
24 LA, we need 176 BPI Analysts. In the blue table, there are  
25 currently 10 active companies that can do home performance

1 work, and so that really shows the workforce gap here. As  
2 for another gap we see, are HERS Raters, there are zero, but  
3 actually, in August, we had the first CalCERTS HERS II Rater  
4 Training in Long Beach, and two of our participants took  
5 that training and are now certified, so we can account for  
6 two, specifically account for two. This is also a picture  
7 of the training providers in LA and the reason why I'm  
8 showing this slide is to actually, you know, 1) show the  
9 fact that, through the Clean Energy Workforce Training  
10 Program, we were able to set up an infrastructure in the LA  
11 Region to be able to tackle the demand for the energy  
12 upgrade professionals, but also we feel that it is actually  
13 sufficient to handle the capacity for training and the key  
14 is to strategically fund those programs who show good track  
15 records and have been successful.

16           So, speaking of successful programs, I'd like to  
17 share a little bit with you the trainings that we have. We  
18 were funded in Category One, that is training the targets of  
19 unemployed, under-employed, dislocated workers, and trades  
20 and construction, who are looking into upgrading their  
21 skills, obtaining industry certification, and to be part of  
22 the green emerging industry. What's made our program  
23 successful is actually the filtering and the screening of  
24 our participants, and even though it wasn't required of us,  
25 we actually do background checks. Every participant getting

1 into the training has to take a test for adult basic  
2 education. If they have a level higher than 12<sup>th</sup> grade, they  
3 get into the training directly, if they're between 9<sup>th</sup> and  
4 12<sup>th</sup>, they have to take extended basic skills orientation -  
5 what is it - Basic Skills Remediation, here I go. They  
6 also, before they choose any specialty module, they have to  
7 take those introductory modules that really shows them and  
8 prepare them for the green building industry, shows the  
9 different elements of green building. An example I want to  
10 use is actually two of our participants, Bret and Albert,  
11 who are architects, and they came in wanting to take Elite  
12 training, or Building Information Modeling Training. After  
13 taking the intro modules, they decided to take HERS and  
14 certify Green Building Professional. Bret has bought the  
15 HERS equipment, they partnered up, created a company, Green  
16 Energy Management Services, and now they are heavily  
17 involved with the Huntington Beach Chamber of Commerce, and  
18 actually the person leaning there is Albert and that is the  
19 article he wrote about what is green building. We are very  
20 proud of them, and we have a lot of stories like that.

21 Category 2 is a pre-apprenticeship program that  
22 targets also unemployed, underemployed, and new entrants to  
23 the workforce. And the training itself is as stringent as  
24 the first category, you know, we are talking about six weeks  
25 of going to class Monday through Thursday, 9:00 to 4:00,

1 with a very strict attendance policy. And even with that,  
2 we've only had two drop-outs.

3           So, I'm going to summarize here, you know, as  
4 Community Colleges, it has become our expertise to identify  
5 those gaps and create the training or find ways to address  
6 those industry demands, but we also want to do that so that  
7 we don't want to train just for the sake of training, we  
8 want to train, knowing that we're not watering down the  
9 market, and work with other industry organizations whose  
10 core competency can be leveraged into ours. We face many  
11 challenges, and are still facing challenges, you know, the  
12 training cost is very expensive, and so there is a need for  
13 subsidized training, and we also want to partner with more  
14 trade associations and Unions, and synergize our workforce  
15 efforts. Speaking of leveraging, one of the organizations  
16 we really want to partner with is the NSB, Neighborhoods  
17 Stabilization Program, who takes foreclosed homes, retrofit  
18 them, and then resell them, this would be such an amazing  
19 opportunity to pipeline our graduates to do field mentoring,  
20 and also technical field training.

21           And the last point we want to make is that, you  
22 know, at the State level, we're all going in the same  
23 direction, but at the local level, you know, we feel that  
24 some of the decision-makers are not aware of where we're  
25 going, and so you know, the analogy is like being in a

1 fishbowl with multiple type of fish, red, blue, big, small,  
2 and sometimes you see two fish going together, or fish  
3 working against each other and, you know, we need to have  
4 some type of current created for us and we're seeing that  
5 with Energy Upgrade California, and the key is to keep  
6 pushing in that direction. Thank you. Gail, did you want  
7 to say anything?

8 DEAN SCHWANDNER: No, I think in the interest of  
9 time...

10 MS. GRAILLAT: Thank you very much, it's been very  
11 interesting to hear about all of your programs, and your  
12 insights about the programs, as well. Commissioners and  
13 Advisor, do you have any questions for our speakers today?

14 COMMISSIONER EGGERT: Yes, I do. Thank you very  
15 much and thank you for the wonderful presentations. This  
16 is, I guess, a general question to the panel. In some of  
17 these programs, like the EnergySmart Jobs Program, there's a  
18 direct hand-off from the training to the work, as I  
19 understand the structure of your program. How are you and  
20 these other programs for training handling the handoffs so  
21 that, when these people complete these programs, that  
22 there's a high likelihood that there will be a job waiting  
23 for them at the other end?

24 DEAN SCHWANDNER: Okay, in this job market, this has  
25 been a major challenge for us. We have placed 50 people so

1 far, some of them have started their own small businesses,  
2 some of them were out of work in an industry, say, they were  
3 an architect, and with these new skills, they've been able  
4 to go back and create a niche in an architectural firm and  
5 work for themselves. We are working with every organization  
6 that we can who is doing any sort of placement and hiring.  
7 But one of the things we found in working with our Workforce  
8 Board, because they are our partner that has the core skills  
9 in placement vs. what the community college has, and we  
10 learned at a meeting last week that, inadvertently, the  
11 partnership of EDD and CEC and the WIB, made the decision  
12 that it would be a really good idea to create a separate  
13 database. And so, in creating a separate JTA database where  
14 our people go into this and the regular WIA people go into  
15 this, when they go out and sell jobs, they're not selling  
16 our people because they're not showing up for them, because  
17 it's a separate database. And so this is something we're  
18 going to talk with EDD about and say, "Understand the reason  
19 you did it, but you're creating barriers to employment."  
20 And we are now creating separate profiles for our people  
21 that will allow them to have something to take out on the  
22 calls that they make, but there are very few ways that we  
23 can, other than wherever we see things happening like what  
24 was going to happen with PACE, what is happening with the LA  
25 Office of Sustainability, we don't have a lot of avenues for

1 placement that are not open to everyone else, but we bring a  
2 certain credibility being a community college that, at least  
3 we get in the door and people are willing to talk to us, and  
4 they're hiring people in one's and maybe two's, but we'd  
5 like to have the opportunity to get people hired in a more  
6 substantial way.

7 MS. BIALLY: So, built into the program design for  
8 EnergySmart Jobs, we put a large number of the surveyors out  
9 of the CCC, we put them into the contractors, so they're now  
10 in private jobs. And the question you asked was an  
11 excellent one, is how do we make sure, once the program  
12 shuts down, that they're still in those jobs. When we get  
13 to market transformation, which I didn't speak too much  
14 about, but we're working with the manufacturers, and it is  
15 our goal to do enough projects of two types, the lighting  
16 and the controls, that we shift the market, we lower the  
17 pricing permanently, maybe not as low as they get to the  
18 incentives, but low enough that we don't need that level of  
19 incentives, so many other stores are doing it that it's  
20 almost a peer pressure that everyone is doing it now, this  
21 is the common. The contractors' workload has increased,  
22 even once the program has shut down, because they continue  
23 to do these technologies, they keep their staff, and they  
24 hire new staff, as well.

25 MS. HAUENSTEIN: And for the ETAP program, we can't

1 guarantee that the contractors that we train are going to be  
2 employed because local governments have to go through a  
3 vetting process, but we are strongly encouraging all of our  
4 local government participants to include in their RFPs for  
5 contractors that they hire a CALCTP certified contractor to  
6 do the wireless lighting controls, installations, and then  
7 similarly, that they hire a contractor to install the HVAC  
8 controls that has gone through one of our programs.

9 COMMISSIONER EGGERT: And actually, I think that's  
10 very helpful, and - is it Ms. Bially?

11 MS. BIALLY: Bially.

12 COMMISSIONER EGGERT: You sort of anticipated my  
13 next question, which is whether or not the market activity  
14 that we're hoping to create through all these programs will  
15 lead to sort of a sustainable industry, which would include  
16 a training component. I mean, do we see that as being  
17 sustained through market demand if we get a lot of these  
18 people demanding retrofits and paying good prices for them?

19 MS. BIALLY: So are you asking will there be  
20 training continuing on afterwards, as well?

21 COMMISSIONER EGGERT: Yeah, do we expect that the  
22 market activity could sustain a training program without the  
23 current -

24 MS. BIALLY: I think we need the market activity to  
25 sustain the training, even without these programs, there's

1 not enough energy efficient professionals out there, so my  
2 hope is what we are doing is instilling an idea and a value,  
3 and the different various entities that are able to fund  
4 these trainings are able to do it, whether that's public  
5 funding, or whether that's private, whether contractors  
6 realize that they can get great staff if they just invest in  
7 the training, that would be a great outcome and it's  
8 something that the industry really needs.

9 COMMISSIONER EGGERT: And, as I understand, the  
10 Energy Upgrade California is also going to be working to  
11 provide connections to these trained individuals as they  
12 come out, is that right?

13 MS. HALAWANJI: Mostly scholarships. I actually  
14 went to the HERS orientation in LA last week and, you know,  
15 the attendance was great. One of the major questions that  
16 contractors had was how are we going to pay for these  
17 trainings when, you know, given the current economic  
18 conditions, we cannot afford them. And so, they're kind of  
19 in a situation where they know that work will be coming down  
20 the pipeline through these programs, but they cannot afford  
21 to pay for the training.

22 COMMISSIONER EGGERT: And then, this is, I guess, a  
23 question that came into my mind as you were talking about,  
24 for example, the strategy on refrigeration, and this is  
25 maybe just a hypothetical, but I note that there are some of

1 these programs that really focus on whole house, whole  
2 building type assessments and retrofits, and retro-  
3 commissioning, and some of these that are very targeted  
4 towards specific technologies, and I guess it seems - I can  
5 imagine there is room for both of these types of programs,  
6 but is there any thoughts about how these things might  
7 interact, whole house and whole building programs, vs. these  
8 technology targeted programs?

9 MS. BIALLY: I definitely see the technology  
10 targeted programs as pilots. And I can speak for my  
11 program, and it sounds like for the others, as well, that  
12 you could pick these up and apply it in another scenario:  
13 we're testing it out with a small group, we're impacting the  
14 market in a small group that works great, let's start  
15 looking at whole building, let's start looking at all these  
16 other things - same fundamental model applies.

17 COMMISSIONER EGGERT: I don't have any other  
18 questions. I would note, personally, I was a member of the  
19 YCC in Wisconsin, the Youth Conservation Corps, which is a  
20 youth component of the CCC, and found it to be a wonderful  
21 program to train the value of hard work and we did a lot of  
22 trail maintenance, response to fire, and things of that  
23 sort. So I'm happy to see that there are these partnerships  
24 occurring, so I have no further questions.

25 CHAIRMAN DOUGLAS: I don't have questions. We have

1 a few minutes left for this panel for any additional  
2 discussion. I'll turn to our moderator.

3 DEAN SCHWANDNER: Chris, I had just one quick thing  
4 to add, is that we are going to start doing incentivized  
5 internships, subsidized, because one of the things that,  
6 while employees are very reluctant to hire a new employee,  
7 if they get someone on who really works well for them, then  
8 we are finding that there's more reason to keep that person,  
9 and so we're going to try this as part of what we're doing  
10 with the people that we're training, is we have such a good  
11 relationship with the contractors in our area, and with  
12 these different organizations and associations, we're going  
13 to try to place people through subsidized internship and see  
14 if we can get some full time placements out of that.

15 MS. GRAILLAT: Thank you. And as I mentioned in my  
16 introduction, partnerships are a really important component  
17 and all of you are representing partnerships. Would any of  
18 you like to speak a little more about the successes of the  
19 partnerships, the challenges you face in creating the  
20 partnerships and sustaining them? And also, did you have an  
21 existing partnership? Or was it a new partnership? Or did  
22 you have models to draw from? So, would anyone like to take  
23 a stab at that question?

24 DEAN SCHWANDNER: Well, this is what I wanted - you  
25 know, I pushed Rola when she was at the mic, is that, you

1 know, we have had a particular challenge and -

2 MS. HALAWANJI: You know, the main challenge we have  
3 is to align our trainings or pipeline our participants into  
4 core programs at the City level, the Municipal level. I  
5 mentioned Neighborhood Stabilization Program, you know, that  
6 would be such a fantastic opportunity to leverage both of  
7 our programs and create this mutually beneficial  
8 relationship. We are having difficulties with - the fact  
9 that, you know, when we said local leaders need to come on  
10 board, is that City officials, for instance, don't know  
11 where the industry is moving, and sometimes they don't see  
12 us as the ones to tell them, "This is how we're moving  
13 forward." And so, this is one of the challenges we've been  
14 facing. Other than that, the new partnerships we've created  
15 with other training organizations have been fantastic.  
16 CalCERTS, for instance, we have an orientation for our  
17 participants, they actually fly someone down to - CalCERTS,  
18 yes - to give a presentation to prospective students,  
19 letting them know what they're getting into. So, there have  
20 been some great great leveraging of resources between  
21 partners, but we also need, I guess, some muscle to get into  
22 those programs that we know are key to making these  
23 successful.

24 MS. GRAILLAT: We're about out of time, but does  
25 anyone want to take another quick stab at answering that?

1 MS. HEALY: I just wanted to talk a little bit about  
2 CCC And PEGI, we didn't have an existing partnership or  
3 relationship when we began, we quickly understood or  
4 realized that we had too many things in common, that it  
5 clearly was a great relationship and would be long lasting,  
6 way beyond this little thing that we're doing.

7 MS. BIALLY: Right.

8 MS. HEALY: It is a really nice kind of entryway  
9 into working with a nonprofit. It is kind of funny, you  
10 know, Federal money coming to the State, and then State  
11 money going to a nonprofit, and then the nonprofit money  
12 going to the State again, kind of an interesting way, but  
13 it's also great to work for a nonprofit, CCC does a lot of  
14 work for Fed, State, nonprofit, all kinds of stuff. They  
15 get stuck in some of the State tangles of working with us  
16 and working kind of sandwiched between the State, it's kind  
17 of interesting to watch a nonprofit go, "Oh, my gosh," but  
18 we've been able to be creative and work around things so  
19 that we could make our partnership work. And I think that's  
20 the most important thing that we've been able to do, is just  
21 figure out how to do it and make it work.

22 MS. BIALLY: Yeah, I would agree. I think the PEGI  
23 CCC partnership was something we all very happily stumbled  
24 into, we meshed, we worked together well. Some of the other  
25 partner challenges have been, every single partner we have

1 is incredibly excited about this program and wants to  
2 engage, and now that we're at implementation, everyone is  
3 starting to go, "Oh! That's what you meant?!" So, we're  
4 working through all of those, but it's very interesting  
5 going from idea to actuality, and sometimes partners,  
6 especially those who are mostly providing, or only providing  
7 leveraged funding, especially as budgets are pinched right  
8 now in the State Government. So it's a nice challenge for  
9 us.

10 MS. HAUENSTEIN: Sure, I'd just like to reiterate  
11 that this is a new good opportunity to develop partnerships  
12 with people that we wouldn't have worked with otherwise.  
13 Energy Solutions is not - our core competency is not  
14 workforce development, so it's been really great to be able  
15 to reach out to our existing partners that work with us more  
16 on technical aspects of projects and figure out ways that we  
17 can work for workforce development. And we would have  
18 probably never reached out to CALCTP had it not been for  
19 this grant opportunity, so it's been great to develop those  
20 relationships.

21 MS. GRAILLAT: Okay, we are out of our hour  
22 allotment, so thank you all.

23 COMMISSIONER EGGERT: Thank you very much.

24 MR. PENNINGTON: Ready? Okay. Good afternoon, my  
25 name is Bill Pennington, I'm the Manager of the High

1 Performance Buildings and Standards Development Office at  
2 the Energy Commission. And I'm also the Program Lead for  
3 the ARRA Comprehensive Residential Retrofit Program. And  
4 this afternoon's final panel here is talking about Ratings  
5 and Audits. And I would bring you back to Martha's opening  
6 remarks this morning about the components about AB 758 and  
7 what that Bill was trying to accomplish, and one of the very  
8 important things that the Bill was looking at was doing  
9 energy assessments and getting buildings rated and labeled.  
10 And the author of that Bill and the supporters in the  
11 legislature of that Bill were very anxious to see that  
12 program result in a statewide program of doing building,  
13 rating and labeling, and disclosing those ratings and labels  
14 into the marketplace. And that whole subject matter relates  
15 not only to residential buildings, but also to commercial  
16 buildings, as Martha was saying this morning. On the  
17 commercial side, we have quite a bit of work to do to  
18 develop the approach for doing those ratings and how to go  
19 about it. In terms of building techniques for doing those  
20 ratings, the residential sector is a little bit ahead of the  
21 commercial sector in that the Commission has gone through  
22 the HERS II proceeding and has developed a lot of the  
23 approaches, procedures, rules, for how that would be done.  
24 And, in fact, that HERS II work benefits from about a 10-  
25 year experience in California in doing what we term HERS I

1 field verification work in support of our Title 24 Building  
2 Standards, and also in support of other new construction  
3 programs, incentive programs beyond standards programs, the  
4 New Solar Homes Partnership Program. And so, we're building  
5 on that. HERS II was intended to get into doing what has  
6 been commonly perceived as the real business of doing HERS  
7 ratings, and that is establishing ratings for existing  
8 buildings, existing residential buildings, and a technique  
9 for doing energy audits that would evaluate the energy  
10 efficiency opportunities in buildings and residences, and  
11 how to get that recommended into the hands of the  
12 homeowners.

13           So, today's panel, we're focusing on kind of where  
14 we are related to HERS II. One of the things that we're  
15 doing under the ARRA Program is, virtually all of the  
16 comprehensive residential retrofit program contracts that  
17 the Commission is administering under ARRA has a HERS II  
18 aspect to it, and so we have on the panel today two speakers  
19 that will be talking about what some specifics are about how  
20 contracts are progressing with issues related to HERS II and  
21 how they would implement those into their contract. And  
22 then we also have a panelist that will be speaking to what  
23 is kind of the status of the ramp-up to getting to HERS II.  
24 So that's what we have before us here.

25           I'd like to start with Julieann Summerford. Juieann

1 is the Director of Implementation for the Heschong Mahone  
2 Group. Are you going to present there? Is that - can you  
3 help her with her slide? Either way, that is fine. So,  
4 Julieann has extensive experience on getting energy  
5 efficiency done in Multi-Family buildings. The Heschong  
6 Mahone Group is one of the national experts in this whole  
7 arena of trying to promote energy efficiency in Multi-Family  
8 buildings, and Julieann is really head of that activity.  
9 She is working on two of our ARRA contracts in doing the  
10 Multi-Family component of those contracts, both the SMUD  
11 contract that we have started, and also the County of San  
12 Diego's EECSBG-funded contract, she'll be the lead on a big  
13 effort there on Multi-Family. So, Julieann.

14 MS. SUMMERFORD: Well, first I'm going to talk a  
15 little bit about the characteristics of the Multi-Family  
16 market and why it's so important to equitably serve this  
17 market as part of the residential pie, so to speak. And I  
18 know that you heard a few of these comments before from Dan  
19 Adams, and he was specifically speaking about the affordable  
20 housing market, and I'd like to include also market rate  
21 apartment owners. We just want to make sure that they're  
22 not left out of the market.

23 In California, about one-third of Californians live  
24 in apartments, and most of those - that's where most low  
25 income families live, are apartments. They're not single-

1 family homeowners, you know, and low income - they pay up to  
2 25 percent of their income in utility bills, as opposed to  
3 an average income person who pays about 5 percent, so that  
4 is an important factor in terms of lowering the utility  
5 costs for Multi-Family tenants. And also, they have been  
6 traditionally underserved in California and across the state  
7 in terms of whole building programs. They have been sort of  
8 falling between the IOU program cracks, you know, they have  
9 an extensive proscriptive program that often times, I know,  
10 runs out of funding, so there's a great demand throughout  
11 the State. And the buildings are complex, the ownership  
12 structures are complex, they range from everything from  
13 condos to LLC affordable housing, to renters, and basically  
14 it takes a complex kind of a program to accommodate this  
15 market.

16           And in the past, with the CPUC direction on  
17 residential whole-building programs, until recently that has  
18 primarily been interpreted to apply to single-family  
19 residences. Also, the vintage of the building stock, there  
20 is about 3.5 million residential dwelling units in the  
21 State, and over half of those were built before the Energy  
22 Code, and even before the 2005 Code, there were a few  
23 loopholes in that Code that buildings could get to 15  
24 percent by accident, so there's a lot of opportunity. And  
25 the transaction costs, sure, the energy savings aren't as

1 big and deep as a single-family home, but when you're  
2 looking at an apartment, you're getting 40 units, or 100  
3 units at the same time, so the transaction costs per  
4 dwelling unit is less. There actually has been a whole  
5 building program in the State of California, and I'll  
6 describe it a little bit. It's been around for about 10  
7 years and the reason why, and I'll tell you a little history  
8 so that you'll know how grateful we are to have HERS II as a  
9 tool, that we can apply to Multi-Family and how we intend to  
10 use it. This whole-building program has been funded by all  
11 of the utilities in various capacities for the last 10  
12 years, and it was a whole-building existing program that we  
13 shoehorned into a new construction infrastructure. We used  
14 Title 24 software, oftentimes EnergyPro where they'd run a  
15 baseline and they'd run a propose, and they'd take the  
16 difference, and if they improved by 20 percent over  
17 baseline, they could qualify for incentives. Well, HERS II  
18 takes the clunkiness out of that system and is really - that  
19 tool evolved to apply to existing buildings. And before we  
20 were only looking at heating, cooling, and water heating,  
21 and now the HERS II tool allows us to look at appliances and  
22 lighting. It allows the HERS Rater to do parametric runs  
23 where they can look at a couple different options compared  
24 to baseline, so that they can present options to the  
25 building owner, you know, to help them, depending on what

1 level of investment they want to make. And also, in the  
2 past we used the HERS I Raters. They would go out and do an  
3 audit, the energy consultant would do the building  
4 simulation, once the measures were installed, the HERS Rater  
5 would go back out and inspect. And as clunky as that  
6 program was, every funding cycle, we had wait lists that we  
7 couldn't fund. So, there is a demand, there is a need for  
8 this tool, and with the existing building focus for whole-  
9 building, like I said, often times Multi-Family is not  
10 addressed, or it's addressed in Phase II. Well, some of the  
11 Stimulus money being funneled into Multi-Family gave the  
12 Multi-Family program implementation community the impetus to  
13 join forces through this Home Energy Rating Coordinating  
14 Committee, this HERC Committee, for Multi-Family, and try to  
15 get to the bottom of what's it going to take to get HERS  
16 applicable to Multi-Family.

17 So basically, in a nutshell, the HERC Committee, a  
18 group of volunteers, identified some of the gaps that HERS  
19 II was not addressing and kind of filled in the holes and  
20 figured out some audit protocols, and some training  
21 curriculum, and developed some solutions. One thing that's  
22 in the works now is developing a HERS II proxy for Multi-  
23 Family high-rise, so that's still underway.

24 So, we're hoping to have one of the first Multi-  
25 Family HERS II trainings by the end of this year, we have a

1 couple of programs that are starting that we need HERS II  
2 Raters for Multi-Family desperately. But basically, it will  
3 be based on the existing HERS II modules, with a couple of  
4 modules added that deal with central systems and whole  
5 building sampling, and data collection, and renewable  
6 energy. And in the future, we'll address high-rise Multi-  
7 Family and hopefully whole property where we're addressing  
8 the common areas as part of one program, as well.

9           But HERS II is a long overdue and much needed tool  
10 to use as the basis for these Multi-Family programs, and one  
11 intent of the HERT Committee is to ensure consistency among  
12 the States, so that we have consistency in who we qualify,  
13 who we train, what tools they use, what are the standard  
14 protocols for audit and verification, so we're consistently  
15 trying to implement this across the State of various  
16 programs. Also, the HERS II tool will provide a mechanism  
17 for building owners to help assess their properties.  
18 Oftentimes we work with property owners that have properties  
19 throughout the State, and they need some tool to figure out,  
20 to identify and assess their buildings, and prioritize their  
21 investments. So, this rating tool will help them to do  
22 that. Also, as a component of ongoing energy management,  
23 you know, post-investment, they make a major investment in  
24 rehabilitating and improving efficiency, ongoing energy  
25 management is certainly a key, and I think this tool and

1 this rating will help them to systematically look through  
2 their portfolios of buildings and sort of develop a plan of  
3 attack over time.

4           Also, the quality assurance and consistency, you  
5 know, among building assessment, to make sure they're  
6 comparing apples to apples, and also tenants can make a  
7 choice if the building has a rating and particularly for  
8 limited or moderate income. You know, they can use it as a  
9 marketing tool for sales and rentals and also for financing,  
10 as well. I mean, there is a potential to use something like  
11 this tool to satisfy financing, or lenders' requirements.

12           The intent for including HERS II in Multi-Family in  
13 the programs that we're implementing is basically to develop  
14 programs that are based on this tool, and continue the  
15 whole-building performance-based, and the consultant model,  
16 as Dan suggested earlier, is what's appropriate for the  
17 Multi-Family market because they want to pick their own  
18 contractors that they have long relationships with, and  
19 pricing, I'm sure, where the HERS Rater, you know, does the  
20 audit, the analysis, and the verification. And we intend to  
21 coordinate with the HERT Committee to ensure consistency  
22 where appropriate in our programs across the State, and to  
23 adhere to the standard that was developed of rigorous audits  
24 and verification, and also to build capacity through the  
25 training. We have quite a bit of funding in San Diego to

1 try to develop capacity, you know, throughout the Southern  
2 California area, also in Sacramento.

3           There are a couple of issues that I just wanted to  
4 leave on the table; one is the applicability of HERS II to  
5 Multi-Family, if we run into any issues, you know, we're  
6 going hopefully try to work them out along the way, but  
7 because of the short timeframe of the funding and the goals  
8 that need to be implemented in a fairly short period of  
9 time, and because an average whole-building rehab for a  
10 Multi-Family takes about six to eight months, you know, if  
11 we run into problems, we'll just default to that Plan B,  
12 which is the HERS I, shoehorn HERS I, and then, also,  
13 another issue is billing data from individually metered  
14 buildings, so that we can calibrate the HERS II model. And  
15 I know Dan referred to it earlier that all of the projects  
16 that he was working with were going to enter their billing  
17 data into Portfolio Manager, which is EPA's benchmarking  
18 tool. And that is great if the projects are Master Metered,  
19 most of Multi-Family buildings in the State of California  
20 are not Master Metered, they are individually metered, so  
21 the only way to collect billing data from all of those  
22 tenants, you know, from a building owner's standpoint, even  
23 if we give them some billing data, you know, some sampling  
24 protocols where they collect billing data with turnover and  
25 things like that, it could very quickly become problematic.

1 And we've worked with a couple of utilities to try to  
2 aggregate billing data on a whole property level, and we're  
3 not getting very far, as you can see, as you can imagine  
4 because of confidentiality issues. So, we're having some  
5 trouble on that front in terms of trying to calibrate the  
6 model with actual billing data for individually metered  
7 buildings.

8 MR. PENNINGTON: Okay, thank you very much,  
9 Julieann. So, our second speaker is Michael Day. And  
10 Michael is the President of Bestco, which is a division of  
11 the Beutler Corporation. And Beutler is one of the largest  
12 HVAC contractors in California, I think the largest in  
13 Northern California, I'm not quite sure where, actually,  
14 statewide, but a very large HVAC company that has  
15 specialized, in addition to sort of ongoing work in  
16 development, and introducing into the market air-  
17 conditioning related technologies, particularly for  
18 residential buildings. The Beutler Corporation is an active  
19 partner in the Regional Council of Rural Counties ARRA  
20 contract and was active in helping them design that winning  
21 proposal. So, Michael, as a long time advocate around here,  
22 I kid Michael sometimes that he really doesn't need a  
23 microphone, but we do have people on the line out there that  
24 need to hear him, so we're not going to shut his microphone  
25 off today. Anyway, his presentation is Transformation on

1 Transfer - How the MIST program will promote HERS ratings.  
2 Michael.

3 MR. DAY: Thank you, Bill and Chairperson Douglas  
4 and everybody else here, colleagues, usual suspects.

5 I just want to go through real quickly the MIST  
6 basics again, go into working with the real estate  
7 community, and then the recording mechanism, which is sort  
8 of unique in what we designed with RCRC for the MIST  
9 Program.

10 Mist Program Basics and Programs: We talked about  
11 it through the RCRC and through CHF, \$16.5 million from  
12 ARRA, \$2 million from CHF, it is a jobs program at its  
13 heart. One thing that is interesting about this, and it's  
14 going a little bit off topic, we were talking about  
15 workforce development, and in the MIST program we do not  
16 mandate that contractors such as Beutler, or any other  
17 contractor who comes into it, we do not mandate that we in  
18 the contracting community hire through the Workforce  
19 Development Office. What we do, however, do is that, in  
20 order to become a MIST certified contractor, you have to go  
21 through training, and the California Workforce and Training  
22 Agency will be presenting at these workforce training  
23 seminars and talking about the advantages of hiring through  
24 your local Workforce Training Office. Also, to remain a  
25 contractor in good standing, quarterly, there are going to

1 be surveys of the contractors, and we're going to say -- the  
2 Program Administrator will ask us, as the contractor, "Did  
3 you do any hiring because of this? If so, did you hire  
4 through your local Workforce Investment Act Office?" And,  
5 if the answer is "yes," that's wonderful; if the answer is  
6 "no," in some ways, that's more valuable because, when we  
7 say, "No, we didn't hire through the local Workforce  
8 Offices," the next question is, "Why not?" "Were the people  
9 not of the caliber?" "What training were they missing?"  
10 That information is going to be aggregated for every  
11 participating contractor and, again, is a condition of  
12 continued good standing, that we'd say on a quarterly basis  
13 if we're hiring and, if not, why not. That information is  
14 to be aggregated and applied not just to our program, but to  
15 programs across the State, and it is a good example of how  
16 information could be gathered in a collegial and cooperative  
17 manner, as opposed to it being mandated. And the people  
18 over at the California Workforce Development Office are  
19 pretty excited about getting that feedback on a regular  
20 basis, if only because they'll be able to watch it on an  
21 iterative basis, and to see the improvement occur over time.

22           The qualifications that come in, again, we went  
23 through that. Pretty easy underwriting standards. There  
24 are two financing arms, one is the MIRACL loan which is a  
25 direct loan program to finance the upgrades; the other

1 operates off of the 203K, which is a type of energy  
2 efficiency mortgage that has been available for a number of  
3 years, but it's been extremely under-utilized. In both  
4 cases, there are also grants which buy down the first cost  
5 of the project, and we also have grants that cover the audit  
6 and the audit-out, the audit out obviously happening by an  
7 independent third-party HERS Rater. And, again, it needs to  
8 be cash flow neutral or better for people who are signing up  
9 for this program, and that's a key distinction in these  
10 programs that is particularly important for people who are  
11 in moderate income, but we feel that it's easier to pull a  
12 string than to push one, and if you can come forward with a  
13 program that makes them more comfortable, that takes away  
14 major expenses such as air-conditioner or furnace  
15 replacement, or a water heater replacement, that these  
16 homeowners are looking at, and that there's no upfront  
17 costs, and their monthly savings will be equal to or greater  
18 than what their monthly costs will be, that is a winning  
19 formula.

20           So the next question is, how do we work with the  
21 Real Estate community? So, one of the question is, what is  
22 really the status of the real estate community in California  
23 right now. And I think this graphic sort of tell us. It's  
24 similar to the great dining of the cretaceous extinction  
25 event. There are a lot fewer real estate agents and

1 mortgage brokers right now than there were just a few years  
2 ago. Some offices have grown a little bit; a lot of offices  
3 have closed. So there is still work going on in real  
4 estate, people are still buying houses, but a lot of these  
5 houses now are real estate that's owned by the banks. So  
6 the question is, in this game of musical chairs, in the  
7 great dying of real estate agents, what do they need? What  
8 they need is they need a competitive advantage, and we think  
9 that knowing about financing programs, knowing about  
10 programs where they can buy a house at State X and get it  
11 upgraded to be more comfortable and energy efficient and  
12 have a lower net cost of ownership is something that can  
13 help real estate agents and help brokers, and that's what  
14 we're focusing on. We are developing -- or we intend to  
15 develop once our contract is designed and because we'd never  
16 take any expenditures before that happened -- we're  
17 developing Department of Real Estate recognized training.  
18 This training will go on in every RCRC member county. If it  
19 fills real estate professionals' requirements for continuing  
20 education, it's aimed at both real estate agents and  
21 brokers, as well as mortgage brokers and people who work for  
22 mortgage companies, and again, the idea is to give it a  
23 competitive advantage in an extremely difficult business  
24 environment for that, let them differentiate themselves.

25 Lastly, as a reporting mechanism, we did something a

1 little bit different here, it's been difficult and there has  
2 not been a recognized method of passing on to all future  
3 owners and potential owners of the property a bona fide  
4 rating or a bona fide way of saying what was done to this  
5 house at a certain point in time. Now, some elements of  
6 that, we've had. We've had the CF6R for quite some time,  
7 we've had that for as long as we've had HERS ratings, but  
8 there was no way to make that run with the land, so to  
9 speak, so that the next buyer could come along and say, "Oh,  
10 I got tight ducts," "Oh, it was tested by this HERS Rater on  
11 this date," "Oh, it's registered with this HERS provider and  
12 I can go back and I can trace it back to the source  
13 documents and see that this was really done." There was no  
14 way for them to do that. So, what we did was we took  
15 something that already existed and it's called a "real  
16 servitude," and a real servitude, it is a way of appending  
17 something to the title, so that it runs with the land, as  
18 opposed to being just tied to some particular owner. For  
19 example, say that Mr. Pennington wanted the right of way  
20 across my land and he gave me \$500.00 and I let him have the  
21 right of way to get to his favorite fishing spot, we could  
22 record that as a real servitude, so that it was there, it  
23 was appended to the title, and it ran with the land no  
24 matter what happened to any ownership subsequent to that.  
25 This is what we're doing in this program. In exchange for

1 receiving the incentives and the cash buy-downs, the  
2 property owners will agree to let the documentation that,  
3 again, already exists in HERS I and in HERS II be appended  
4 to the title, it is a permanent record of the rating, it  
5 runs with the land, and when they go to sell that property,  
6 there will be something right there saying, "Here's our HERS  
7 II score" if we have HERS II Raters in some of these distant  
8 locations. It will say, "Here's what was done on this  
9 date." When they go to sell that land, that's a way of  
10 having a bona fide proof that this house actually is more  
11 energy efficient, and we think that's the way that will make  
12 their house more valuable than somebody else on that street.  
13 Maybe it helps sell their house for a little bit more money,  
14 maybe it helps their house sell a little bit faster. And  
15 once we start being able to prove that a little bit down the  
16 road, then this starts getting to questions in a whole  
17 number of financing programs about what does this do to the  
18 future value of the house. If you have lower operating  
19 costs, what does this do to the value of the house? Well,  
20 the first step in that is being able to show future  
21 homebuyers what has already happened in a conclusive way.  
22 We take the reports that are already generated and we append  
23 them to the title, it runs with the land.

24 In the MIST program, we aim for Transformational  
25 outcomes. It's jobs now, it is jobs for Raters, it's jobs

1 for the contractors that are out there doing the work. It's  
2 cost-effective energy efficiency, it has to be - especially  
3 for the moderate income subgroup of our population. But  
4 most importantly, it's going to build the infrastructure to  
5 allow HERS to roll out faster than it would otherwise -  
6 Raters, contractors, real estate agents, mortgage brokers,  
7 and lastly, it will establish something that was needed for  
8 a long time, which is a methodology of permanent recording  
9 of upgrades that runs with the land. Thank you very much.

10 MR. PENNINGTON: Thanks, Michael. The last speaker  
11 in this panel is Mike Bachand. Mike is the President of  
12 CalCERTS, who is the only HERS II Commission approved  
13 provider at this point. CalCERTS has been a HERS I  
14 provider, going back to 2002, or 2003 - October 10th --  
15 12:00 A.M.? So, a lot of experience there in terms of doing  
16 field verification and first on the block for being a  
17 provider for doing HERS II. So, Michael is going to tell us  
18 about the ramp-up process that he's gone through and is  
19 going through to make HERS II a reality.

20 MR. BACHAND: Madam Chair, Commissioner Eggert,  
21 Advisors, staff, everybody else, thank you for this  
22 opportunity to come and report on our progress today and to  
23 make you aware of some things that we have done and things  
24 that we yet need to do.

25 Just a couple of milestones. HERS Phase II became

1 effective September 1<sup>st</sup>, 2009, I believe, and we were  
2 approved as a HERS II provider on July 28<sup>th</sup> of this year. A  
3 Whole-House Rater Update Webinar was scheduled two days  
4 later, and I'll talk about that in a little bit in the  
5 training section here, and then the first certification  
6 classes that were full classes were held August 9<sup>th</sup> of 2010.  
7 A Whole-House Rater is - let me back up a second - we spent  
8 the last nine months telling people what Whole-House Raters  
9 are, a HERS II, a HERS I, which there isn't one of, and a  
10 CBPCA and a BPI this and, whew, it's been a big education  
11 process for us to try to get this information out to people.  
12 But here is what a Whole-House Rater is. They have to be a  
13 field verification and diagnostic, i.e., a HERS I Rater  
14 first, and this provides the basics in energy flow in  
15 houses, for the HERS Program, in general, conflicts of  
16 interest, what is being achieved by Title 24, what is energy  
17 efficiency in the first place, and so on and so forth. They  
18 have to take the providers approved training program, and  
19 that is a rigorous process, I assure you, let by Bill and  
20 his capable staff, demonstrate competency in a field house.  
21 This was a new thing for the HERS II process in the 2008  
22 Regulations, the HERS providers must demonstrate that a HERS  
23 Rater has had some practical knowledge and experience  
24 actually in a field house, and in fact, that occurs at least  
25 twice in the training and is a very good thing, we feel.

1 They also have to know how to use approved software for HERS  
2 II, or Whole-House Rater, they are required to enter lots of  
3 information, give homeowners an education, talk about  
4 occupant behavior, talk about the most cost-effective way to  
5 install certain features, and so forth.

6           There are three ways to get to be a HERS II Rater  
7 through CalcERTS, the first one is CalcERT's retail  
8 training, that's what we've been doing all along, up until  
9 the point where the ARRA money helped to provide some  
10 subsidies for Workforce Investment Boards and things.  
11 CalcERT's retail training is somebody calls us up, wants to  
12 take one or more of our classes, pays the bill themselves,  
13 goes to the training, does the exams, and so forth.  
14 Community college classes, most of those are being  
15 subsidized by Workforce Investment Board money in one way or  
16 the other, and I'd like to throw a great big thanks to Long  
17 Beach Community - or City College for, you know that scene  
18 in Butch Cassidy and the Sundance Kid where they grab hands  
19 and they run off the cliff, well, we did and had our  
20 parachute open, gratefully, and Rola and Gail and other  
21 people there have just done a great job in identifying  
22 leakages and stoppages to the progress and the success of  
23 the program, and curing those, and moving on. And something  
24 that Rola did say was that there are two HERS certified  
25 trainees that have come out of that training, but there are

1 about 30 who are on their way and have passed at least a  
2 portion of the pre-required Title 24 requirements, so it has  
3 been a very successful program, it has been a learning  
4 curve, too. And we've taken those lessons and Rola has  
5 helped other people in the business, San Bernardino College,  
6 and some other people, to understand the screening process  
7 that helps provide proper candidates to the programs. Then,  
8 there's a Rater challenge from other providers, and I've got  
9 a sidebar here, dual certifications, that means you can be  
10 from a different provider if you've made those certain  
11 requirements with a different provider, you can take a  
12 challenge test with us, you don't have to give up your other  
13 membership, you can come and work and do different tasks,  
14 and there is already a ton of that, that goes on in the HERS  
15 I world, anyway. I don't have an exact number, but a ton is  
16 the number.

17           So what's the current status for HERS II? There's a  
18 total of 158 people who have signed up or have taken the  
19 class statewide, we do train in both Northern and Southern  
20 California. Forty-nine have been trained prior to November  
21 2009, and in November of 2009, due to some other  
22 considerations regarding approval of HERS Providers and so  
23 forth, staff wanted to make sure that trainings that are  
24 being delivered by providers were approved trainings only,  
25 so we were required to stop training at that time, but we

1 had already pre-trained 49 people in a program that was not  
2 approved, but was a large component of what finally did get  
3 approved. So, of those 49, 18 have done the field house and  
4 gone all the way in and become HERS II, or are on their way  
5 to HERS II, and we're still counting. I mean, the pipeline  
6 is full of people right now, and 109 more have taken the  
7 class since August 1<sup>st</sup>, that does include some people at San  
8 Bernardino College and Long Beach City College. But you can  
9 see from these numbers that participation is trailing off a  
10 little bit, 60 in August, everybody was happy, and money was  
11 falling from the sky, so the excitement has gone down maybe  
12 a little bit, you could say. There are 89 expected to be  
13 certified by October 15<sup>th</sup>. Part of the process that defines  
14 this is the classroom, okay? That is three days of intense  
15 knowledge pounding, then you go out and do a field house,  
16 you bring your documents back - when I say "you," I mean a  
17 candidate - brings his documents back to his house, plugs  
18 them into the software that he's been trained on, does an  
19 actual rating on the house, then submits those documents to  
20 us so that we can review them, because the very first word  
21 of Title 20 about a Provider is, "I have to certify to these  
22 people that the people that are out there as HERS II Raters  
23 know what they're doing," at least have a good chance of  
24 knowing what they're doing. They're not all perfect, but  
25 they've all been through a program that's rigorous. And so

1 we want to make sure that we can defensibly say, "Yes, this  
2 person knows what they're doing." So the 158 by October  
3 31<sup>st</sup>, people weren't turning in their paperwork. They'd take  
4 the class, take the house, then they'd sit at their computer  
5 and the dog would bark, and the phone would ring, and  
6 whatever, and they were kind of stalling, so we said, "Okay,  
7 get your house done in October for free, we'll let you do it  
8 for free," "Oh?" A whole bunch of people. So, cost is an  
9 issue. And we only charged a hundred bucks for a field  
10 house, so, I mean, that's not a lot of money for some  
11 people, it's more for other people, however, so cost  
12 definitely had an impact on what was happening.

13 Right now, 66 cities have at least a whole-house  
14 Rater somewhere in that count, and several of the cities,  
15 most of them in Northern California, have more than one  
16 whole-house Rater certified, or whose paperwork is going  
17 through the system. I say that as kind of a slowing down,  
18 it is a bottleneck, it's difficult, but we have capacity to  
19 handle all the paperwork that is coming in, so it's not a  
20 bottleneck from that standpoint, and we can apply more  
21 people to it, if necessary. The total of 158, that could be  
22 done by October 15<sup>th</sup> to October 31<sup>st</sup>, and would represent 90  
23 percent of the State, and the part that is not represented  
24 is no less valuable than any other part that is represented,  
25 but it's the farther outlying areas, as you could imagine.

1 It's probably a little bit tougher to find a Rater in Weed  
2 than it is in Sacramento. So there are some areas that are  
3 underserved at the moment, that will be growing. North of  
4 Chico, of course, is the worst, hardest area to get people  
5 into. However, people in a rural community understand how  
6 business works in a rural community, and so somebody from  
7 Mt. Shasta City knows, "Hey, I'm going to have to call  
8 Redding to get a guy up here that's got the proper skill  
9 set," or a plumber, or electrician, whatever. But we're  
10 working on trying to smooth that out.

11 We had projected 120 by September 30<sup>th</sup>, and actually  
12 129 have passed their classroom training, but they haven't  
13 completed the rest of the process. Ten more are scheduled  
14 to take classes, and so on and so that again is how I'm  
15 adding up to this 89 number. Our efforts vs. our results,  
16 some successes, some not so successes, however, training and  
17 qualified trainers is not a problem; they are part of the  
18 cost, however, and a qualified trainer, we have not allowed  
19 a train the trainer session where 30 people can come in and  
20 sit for four hours and suddenly learn how to instruct a HERS  
21 II class, it's just not that kind of a training, so we  
22 demand high quality in that area. CalCERTS, we send out  
23 lots of our e-mail blasts with information to our HERS II  
24 Raters, some of them responded, some of them didn't. We ran  
25 coupon specials, everybody who got hit by that date jumped

1 in, as I said before. And we also work with many many  
2 Workforce Investment Boards and community colleges - I say  
3 many Workforce Investment Boards, and their money scatters  
4 over different areas, I know there are scholarship programs,  
5 wherever somebody can get subsidized training, we do the  
6 very best we can to work with those people to accommodate  
7 their needs.

8 One of the things for community colleges is, for  
9 instance, at Long Beach, we train at night, 6:00 to 10:00  
10 p.m., three or four days in a row. At San Bernardino, it's  
11 9:00 to 5:00 for a five week program. So, the colleges have  
12 put very difficult demands on the process, too, and we've  
13 done our best to accommodate them.

14 We also attend a jillion roll-out programs and  
15 contractor summits and things, the QTIP, the Clean Energy  
16 Workforce Training. Panama drags me all over the State, and  
17 I want to thank him for that, by the way. He has been a  
18 great support to us and a great resource, and has kept me  
19 and others in my office appropriately apprised of  
20 situations that the Commission wants us to be involved with,  
21 and also that he is concerned that we should be involved  
22 with, so thanks to him. And we also allow challengers,  
23 again, like I said, Raters with other providers.

24 Some of the barriers that we're running into, jobs  
25 are not putting enough demand on the Raters. You know, if

1 you're a Rater in Redding and you don't want to drive to  
2 Sacramento and blow another \$1,100 or \$1,200 on a new  
3 certification, and go back to Redding and then sit there and  
4 have cobwebs go on your duct blaster, that's not a good  
5 thing. So not enough pressure from contractors to use a  
6 Rater, but we're hearing today that we are on the cusp of  
7 that, and so I think that a lot of progress has been made on  
8 that. The cost of training is another thing I've  
9 demonstrated in one area of that; another area is that Long  
10 Beach and other facilities have been gracious enough to put  
11 parts of their grant money, and I'm talking tens of  
12 thousands of dollars, into training facilities. You can't  
13 teach a guy how to do a Fan watt draw by drawing him a  
14 little picture on a blackboard and saying, "Well, you take a  
15 meter which we don't have a picture of, but you take this  
16 meter, and you do this and you do that," that's not  
17 training. Training requires hands-on facilities that  
18 present reasonably good conditions that mimic what you're  
19 going to be doing. So those are expensive. Instructors are  
20 expensive. And, you know, gas, and fuel, and everything  
21 else. So, the cost of equipment and the software that is  
22 being used by the Rater after he gets trained, that's  
23 another big outlay -- \$2,500 to \$10,000, depending on what  
24 kind of set-up the person ends up needing.

25 Some of the other barriers are bad information and

1 perceptions by program managers and designers that HERS II  
2 is not ready. Now, if you're in one of those cities where  
3 there's not a HERS II Rater right now, you can say HERS II  
4 is not ready, but you could also call the city next door and  
5 see if there is one there, or you could at least realize  
6 that HERS II is approved, there are HERS II Raters coming  
7 through the world, and so I sort of get my feathers ruffled  
8 up a little bit when people say HERS II isn't ready. That  
9 might be a relative term, now days. There are contracts  
10 that are not signed, not my problem - it was my problem, but  
11 I can't fix it. Anyway, you know, maybe this will be the  
12 last time I get invited back! I won't have to do this at  
13 3:00 in the afternoon! This information and lack of  
14 information is something we spend a lot of time just  
15 educating people, ditto the HERS II not ready, existing home  
16 Raters or Whole-House Raters, there are some old trainings  
17 and things that are out there that are misleading. Some  
18 people have been misled as to whether or not - what a Whole-  
19 House Rater actually is, and what they need to do, and then  
20 how to get involved with programs that are rolling out,  
21 that's very critical to a HERS Rater. Okay, I just spent  
22 all my money on this, I've got this great training, but I  
23 don't know where to go to access the money and the jobs.  
24 So, what we're looking for, then, is how to overcome those  
25 barriers and getting more building performance contractors

1 trained. We just yesterday submitted our draft curriculum  
2 to staff here, to train building performance contractors to  
3 the HERS II Title 20 regulation standards, and that  
4 curriculum is designed to bring a person to BPI Analyst and  
5 BPI Shell Envelope Specialist, Qualifications also, so when  
6 a person finishes our three-day training program, they will  
7 be a Building Performance if they pass the rest of the  
8 exams, they will be a Building Performance Contractor under  
9 Title 20 and they will be able to immediately be accredited  
10 through BPI. They will be able to take both those  
11 classifications, pass those tests, and move on. We think  
12 that's a great combination package that fills a lot of  
13 needs.

14           Scholarships and/or subsidies for training costs - I  
15 heard about in the Energy Upgrade, Panama had given me a  
16 heads up that that was coming, those things that are in  
17 those Energy Upgrade programs, we saw it today with regards  
18 to scholarships and subsidizing Ratings and those things,  
19 that's going to be very very helpful. We hope that that is  
20 the major key that helps turn a windfall into  
21 sustainability, and everywhere I talk, I talk about building  
22 the industry up, that the HERS Raters have an opportunity  
23 now to float their boat on a ton of Federal money so that it  
24 can float by itself later on - build that sustainability and  
25 build a good quality professional industry. CalCERTS can

1 hold webinars to inform the ARRA Programs. We are just now  
2 contacting all of the award winners, we were given that  
3 information a little while back, we are putting together an  
4 informational piece that they can send, and we would hope  
5 that they would be able to attend a Webinar, but we will  
6 inform them of the HERS II status and help them figure out  
7 how to go about accessing that in their communities.

8           The California Website for Rebate and Retrofit,  
9 again, I guess that's the Energy Upgrade Website, the sooner  
10 that gets up, the better, that'll be another major resource  
11 for us to give to our Raters. We need to improve our  
12 information and search section on our website, we are  
13 working on getting a much more user-friendly front end to  
14 our website, and getting proper information out  
15 transparently to all Raters statewide, to give them an  
16 opportunity for everybody to participate, would be a good  
17 thing. That's it. Thank you.

18           MR. PENNINGTON: Thank you very much. So, thank you  
19 very much, panelists, very good presentations.  
20 Commissioners, do you have questions?

21           COMMISSIONER EGGERT: Yes, I do. Thank you very  
22 much for the presentations. Let's see, I think I'll start  
23 with Ms. Summerford. What's the timing on the HERS II for  
24 Multi-Family? Sort of, when do you see that? How do you  
25 see that evolving and when do you see sort of the level of

1 maturity that we're now starting to see for single-family?

2 MS. SUMMERFIELD: I have two answers to that, one is  
3 for the SMUD jurisdiction, we are hoping to have our first  
4 HERS II Multi-Family training by - that date keeps moving -  
5 but now it's at the end of November, and we just had a  
6 contract signed like two weeks ago, so we hope by the first  
7 of the year to have the program on the streets and HERS II  
8 Raters doing some of the work. In San Diego, we don't have  
9 a contract, it's through the County of San Diego, and we  
10 don't know when that will happen, hopefully by the end of  
11 the year that the contract will get signed, so the San Diego  
12 effort is a little bit further off.

13 MR. PENNINGTON: Just a comment about the status of  
14 the San Diego contract, that's expected to be approved by  
15 the Board of Supervisors at the County in the middle of  
16 October, October 13<sup>th</sup>, I think it is, is that right? I even  
17 have the date correct, that's amazing. And so, right in  
18 there. And so that will be the point they will have their  
19 signature, and we'll be able to go to DGS for an expedited  
20 review, so by the end of October, we would expect the San  
21 Diego contract to be in place and we can get going.

22 MS. SUMMERFORD: And then they'll turn around  
23 contracts with us, so it'll probably be around December or  
24 so.

25 COMMISSIONER EGGERT: And then, in terms of the

1 protocols and software and everything for Multi-Family, is  
2 that all going to be developed as a component of your  
3 program?

4 MS. SUMMERFORD: The protocols are developed and the  
5 software, as well, the HERS II software, as well. There  
6 have been a couple of issues that we have a couple of people  
7 that are doing some building simulation, that have questions  
8 on, but by the time January comes around, we'll have all  
9 those issues worked out, hopefully.

10 COMMISSIONER EGGERT: And then, I think you were  
11 mentioning some of the challenges associated with different  
12 types of billing structures and the ability to I guess maybe  
13 even potentially evaluate the savings. Do building owners  
14 have access to their renters' bills? Or is there a way they  
15 have some sort of agreement there?

16 MS. SUMMERFORD: Yes, there's a way to get an  
17 agreement, but they typically don't have access. You know,  
18 if they're individually metered, each person has their own  
19 utility account, and in some jurisdictions, they have two  
20 utility accounts. But building owners can, as part of their  
21 lease, you know, when they start anew, ask for authorization  
22 to access their billing information, you know, it's a bit of  
23 work, and with the turnover, they have to make sure they're  
24 keeping up on it. And what we'd ultimately like to see, and  
25 this is sort of a pipedream, is to have the building owners

1 being able to get aggregated building data, billing data at  
2 the property level, and have it automatically uploaded  
3 through the utility's ABS Systems. I know that's a bit far  
4 off, but that would - so that the building owners don't have  
5 to go through such a laborious effort to get the billing  
6 data.

7 COMMISSIONER EGGERT: And is that - I guess, is that  
8 something, you know, we've been talking a lot about our  
9 partnership with PUC, is that something they might be able  
10 to help with?

11 MS. SUMMERFORD: Potentially, yes.

12 COMMISSIONER EGGERT: Okay -

13 MS. SUMMERFORD: But I think it stems from - I think  
14 there is some legislation that stems from confidentiality,  
15 and I can't speak to the legal aspects of that, but you  
16 know, disclosing customer information.

17 COMMISSIONER EGGERT: Gotcha. So, and then, Mr.  
18 Day, I enjoyed your presentation, particularly the  
19 discussion about trying to get this activity driven through  
20 market demand, meaning driving the ratings process through  
21 demand, and is part of your program also linking it to the  
22 MLS Listings?

23 MR. DAY: MLS Listings are problematic, and they  
24 have been politically for a while. The fact is, is there's  
25 a great fear by many in the real estate community that that

1 is the camel's nose under the tent flap for a mandatory  
2 transformation on transfer. And, to be honest, that seems  
3 to have been the hold-up of going through MLS over the last  
4 few years, and this is personal opinion as opposed to  
5 anything that I can say from a documentation standpoint.  
6 But a number of real estate agents have spoken with me about  
7 the fear that getting it into the MLS means that, once it's  
8 there, then it can be made from a regulatory or legislative  
9 standpoint mandatory that you bring it up to some level of  
10 Title 24 compliance every time the home is transferred.  
11 That was a major problem, and that was why we went with the  
12 route of going with the real servitude, so that it attached  
13 to the title of the land, and it basically got around MLS.

14 COMMISSIONER EGGERT: In terms of, if I'm looking  
15 for a property, is that information that would be available  
16 through the servitude attachment, easily accessible?

17 MR. DAY: It will certainly be accessible to both  
18 the Seller's agent and to the Buyer's agent because a title  
19 search is a mandatory part of any transfer. Our assumption  
20 is that, if you have a house that has been spiffed up, and  
21 you can prove it, and you think it's worth more, that you as  
22 the Seller are going to start championing that. In some  
23 ways, this is an end-around on MLS in that, if their fears  
24 are well placed, or not, we're going to start documenting  
25 what's actually happening at these houses, and let market

1 forces, for those who choose to participate, carry it  
2 forward and hopefully spur transformation.

3 COMMISSIONER EGGERT: That would be interesting. I  
4 guess it would be surprising if we couldn't find some  
5 progressive agents that might be willing to - is the MLS  
6 something that is - let's see how to ask the question - is  
7 that something you could find a progressive real estate  
8 company to start attaching to their own MLS listings? Or is  
9 that something that they have to all agree on?

10 MR. PENNINGTON: A couple of other of our ARRA  
11 contracts have an expectation that they'll be working with  
12 the local MLS to get ratings into the MLS System, and so  
13 that is being pursued in a couple of our other 403  
14 contracts. And we expect some success on that.

15 COMMISSIONER EGGERT: Okay, good. Yeah, because, I  
16 mean, my own sense is that, if that is one of the ways, or  
17 the most potentially promising ways, of driving some of this  
18 activity, is getting people to really value that as much as  
19 the number of bathrooms and, you know, granite countertops,  
20 and things of that sort. And let's see, I guess, Mr.  
21 Bachand, first of all, congratulations on getting certified  
22 for HERS II.

23 MR. BACHAND: Thanks. We did it again.

24 COMMISSIONER EGGERT: I know, that's not an easy  
25 accomplishment, and the fact that you're already up and

1 running and training individuals is, I think, really  
2 fantastic.

3 MR. BACHAND: A lot of people put in a lot of work.

4 COMMISSIONER EGGERT: Yeah, it's a great  
5 accomplishment. I guess one question is, do you have a  
6 sense of how many HERS II Raters we need in this State to be  
7 able to serve some of these programs that we're currently  
8 talking about?

9 MR. BACHAND: Well, to meet the job flow now, we've  
10 probably got enough. No, I don't really have a way of  
11 calculating that with any real confidence because, who is to  
12 know what the success of the MIST program and the other ARRA  
13 programs will be? I can tell you that a person can do  
14 comfortably a couple a day, and do maybe eight a week, I  
15 suppose, I mean, giving a person time to go to the grocery  
16 store and to sleep, also. But there's a tremendous amount  
17 of capacity per person, I think, and obviously that would be  
18 based on if you worked full time and you had nothing but  
19 jobs lined up. So, I would say, you know, there were  
20 numbers floating around - 3,000 were going to be needed to  
21 do 30,000 homes and all that. The things that is saving  
22 part of this process is that it's over a two to three year  
23 period that these numbers are being hit by the contracts.  
24 Now, that does not speak to the market transformation, but  
25 if the market transfers, transformation happens, then people

1 will - you build it, they will come. So, when they see jobs  
2 out there, they'll do it. To get the jobs that are  
3 contemplated by these contracts, several hundred probably  
4 could do it, and keep up with the rest of their work, too.

5 COMMISSIONER EGGERT: And what's the current  
6 estimate of a cost for a typical home for a rating?

7 MR. BACHAND: That's bouncing around a little bit,  
8 but we're seeing that the minimum for a small house is  
9 probably about three hundred bucks, and larger houses can  
10 go, you know, \$700 and \$800 if it's really complicated. But  
11 the majority of the ones that are contemplated in existing  
12 homes, those are smaller homes, basically simpler homes.

13 COMMISSIONER EGGERT: Okay, well, again, I just want  
14 to say I think this shows tremendous progress since the last  
15 time we convened on this issue. And I guess my last comment  
16 is to Mr. Day, and happy to hear that you're going to be  
17 providing that access route to Bill Pennington's fishing  
18 hole, because I think after all this is over, he's going to  
19 need some rest and relaxation. So, I have no further  
20 questions.

21 CHAIRMAN DOUGLAS: I have no questions at this time.  
22 We are reaching about an hour on this panel. Bill, did you  
23 have one question you wanted to throw the panel before we  
24 move to public comment?

25 MR. PENNINGTON: No, I think we covered the ground

1 that we intended to cover, so I'm satisfied.

2 CHAIRMAN DOUGLAS: Great, well, I'd like to thank  
3 this panel and all of the previous panels, and I see that  
4 many of you are still here and listening, and I really  
5 appreciate your participation and your contributions in this  
6 overall effort. And at this point, I will ask if anyone in  
7 the room would like to make public comment? All right, we  
8 don't have cards, so I'm afraid you'll just have to move  
9 towards the podium and create some kind of a line. Please  
10 begin.

11 MR. DAY: Hello, my name is Michael Day. I'm with  
12 Beutler Corporation. My comments this afternoon have to do  
13 with the interim process, the Energy Upgrade California,  
14 that the IOUs at SMUD, the way that this is being done,  
15 particularly we're looking at calculations for these homes  
16 being done in terms of source energy, as opposed to time  
17 dependent valuation. We've been working on time dependent  
18 valuation in California for 10 years, it's the heart of  
19 Title 24, it's the heart of HERS II, and it's true that  
20 energy intensity and the value to society is much greater on  
21 an August afternoon than it is on a May morning. The heat  
22 rate of your marginally dispatched power plant is different  
23 on a May morning than an August afternoon, so the impacts to  
24 our environment are true. By staying with a source energy  
25 methodology and metric now, it means that we are going to

1 have to shift later. It will slow the adoption of HERS II.  
2 For the MIST program, seven counties do not have even a HERS  
3 I Rater, we want to try and pull in HERS II raters through  
4 the MIST program, and by staying with the source methodology  
5 as opposed to TDV, that does not help us spur the need for  
6 this infrastructure. And ultimately, I think that this  
7 harms not just the moderate income people who agree to  
8 proposals, it also in the long term will hurt the Commission  
9 because we're trying to ask people to agree to a long term  
10 payment stream based on straight KWH, when we know for a  
11 fact the time of use is coming. Time depending valuation  
12 does a fair job of modeling the ups and downs that are going  
13 to be there on their electric bills, going forward, because  
14 of time of use pricing that is coming to California. And  
15 that, by staying with source energy, we're doing a great  
16 disservice to the people who sign up for this. And if you  
17 get people to sign up for programs now, and knowing that  
18 their energy cost world will change in the future, it's like  
19 Lucy pulling the football away from Charlie Brown and he  
20 goes to kick it, "Oh, I'm a sucker." Well, there's an  
21 impact to that. If you try and encourage people, "Hey,  
22 we're the Energy Commission, we're the PUC, go do this, it's  
23 good," and you know that there's something different, and  
24 you know for a fact that your calculation methodology is, to  
25 use a phrase, wrong, then, guess what? That affects your

1 ability to persuade people to undertake the large amounts of  
2 change that we need to do in the future, and we have to  
3 recognize that we're getting people to make long term  
4 commitments in a variable world. And when we know for a  
5 fact that time and use pricing is coming in the future, and  
6 we're staying with the source methodology right now, that  
7 ain't helpful. Thank you for your time.

8 CHAIRMAN DOUGLAS: Thank you for your comments, and  
9 let me ask Bill or someone else on staff to provide some  
10 insight into the issues that you've raised.

11 MR. PENNINGTON: So the expectations for the  
12 Commission for the interim performance approach is to use  
13 TDV energy as the metric, and you know, the Interim  
14 Performance approach was intended to be the way that you  
15 would show that you've done the energy efficiency 10 percent  
16 improvement before going to solar and using financing for  
17 solar. So, that's the Commission's expectation. I think  
18 what Michael is talking about is that discussions for the  
19 IOU programs has tended to focus on a different metric, and  
20 so, at the moment there is a lack of clarity about what  
21 metric would actually be used in each of these programs. So  
22 I think this is potentially a discussion with the PUC.

23 COMMISSIONER EGGERT: Yeah, I was just going to  
24 mention that, that this is probably an item that we would  
25 want to take up with our good friends at PUC.

1           CHAIRMAN DOUGLAS:  And are you saying that this is a  
2 metric for the utility whole-house programs?

3           MR. PENNINGTON:  Yes.

4           CHAIRMAN DOUGLAS:  I see, all right.  All right, Mr.  
5 Day, thank you for your comments and we will look at this  
6 and talk to our colleagues at the PUC about it, as well.  
7 Who would like to talk?  Please.

8           MR. STONE:  Nehemiah Stone with the Benningfield  
9 Group.  I had two comments, one is objectively short, and  
10 the other one is short for me.  But, the short - you know,  
11 the objectively short one is, I have more of an answer for  
12 you, Commissioner Eggert, on the HERC stuff, a little bit  
13 more in depth on some of the things.  The Draft Protocols  
14 for HERC are out in a document that is being reviewed by the  
15 HERC members right now, and the review deadline is the end  
16 of the day on Thursday, and there's supposed to be a  
17 document that is passed Draft on October 8<sup>th</sup>, so those would  
18 be available for everybody to take a look at.

19           The software - I think it's important to understand  
20 that the software for HERS II right now is designed for  
21 single-family, it works sort of for Multi-Family up to three  
22 stories, it has no capability to deal with anything higher  
23 than three stories.  So that is off in the future, that is  
24 not something that you can expect to see anything on in the  
25 short term.  And the other thing is that the Draft protocols

1 are actually being used right now, you know, since they're  
2 under development, it's kind of, well, this is the iteration  
3 of the Draft Protocols that are being used. But the  
4 Enterprise Foundation's program that they're doing, they're  
5 running in cooperation with San Francisco and Berkeley and  
6 Alameda County and Oakland, is using a version of the Draft  
7 Protocols, so, essentially trying them out and finding out  
8 what needs to be tweaked one way or the other.

9           And the other comment that is short, at least for  
10 me. I'm pleased - bear with me, I'm going to read it mostly  
11 because I made it as dense as I could and to keep it as  
12 short as possible, and I don't want to miss one of what I  
13 consider to be an important point in the density. I want to  
14 start by reminding you of something that I've said before,  
15 and that is that your - all your previous IEPRs didn't  
16 really address affordable housing. The last IEPR mentioned  
17 affordable housing twice, and only in the context of land  
18 use, and that was it, you know, there was no other mention.  
19 The State agency that is responsible for housing policy, it  
20 puts out a similar report, a housing policy report, and  
21 their last one mentioned energy twice, and efficiency not at  
22 all. That is an indication to me of a very important  
23 disconnect. And the rest of the comment I have here is  
24 about why I think that's an important disconnect, why we  
25 need to address it, and what I think the Commission - the

1 role I think the Commission ought to take in addressing  
2 that. So, again, please bear with me in reading this. If  
3 the people that were in this room before lunch represented  
4 all of the households in California, eight of us would be  
5 households making less than \$20,000 a year of income, four  
6 of us would have less than \$825.00 a month to cover all  
7 expenses, of which nearly \$300 would have to be allocated to  
8 utilities. Eight hundred thousand households in California  
9 are at less than one-half of the Federal poverty level which  
10 puts them even lower on the California poverty level, and  
11 pay on average 38 percent of their monthly income for  
12 energy. And, you know, all households in California pay an  
13 average of between three and a half and five percent, and it  
14 varies by year. Right now, it's about four percent. These  
15 households pay 38 percent. Yesterday in Los Angeles, 911  
16 calls for ambulance service were up 47 percent over normal  
17 due to the heat, and over 40,000 households were without  
18 power because the record peak demand blew out over a dozen  
19 transformers. The heat wave in Chicago in 1995 caused more  
20 than 800 "excess" deaths, virtually all of whom were low  
21 income and either elderly or disabled. This makes energy  
22 efficiency a health and life safety issue for low income  
23 households, over one-quarter of our population. In a study  
24 for California's sustainable building task force, E-Capital  
25 estimated that the cost premium for green building,

1 including 15 percent better buildings than Title 24 requires  
2 in energy, ranges from \$3.00 to \$5.00 per square foot, with  
3 20-year economic benefits of \$53.00 to \$71.00 per square  
4 foot, roughly 15 times the cost. The bulk of the benefit,  
5 70 percent, were due to economic value of increased health  
6 and productivity, which are particularly relevant in a low  
7 income community. Low income workers are less likely to  
8 have adequate sick day wages, or adequate health insurance,  
9 so there is a disproportionate impact on local economy when  
10 they miss work. Low income houses are in greater need of  
11 energy efficiency work than perhaps any other sector in  
12 California. Three-quarters of low income households are  
13 renters, and are unable to adopt most measures that affect  
14 heating, cooling, and water heating energy use. Even if  
15 they owned their own appliances, the appliances are  
16 disproportionately older and inefficient because they're  
17 seldom able to buy new appliances, and even less able to  
18 afford the usual efficiency cost increment when they can.  
19 While average household energy costs have stayed relatively  
20 flat, relative to the Consumer Price Index, home energy  
21 costs have risen 15 percent faster than CPI over the past 10  
22 years for low income households. Renter households are  
23 almost exactly 60 percent of the national average household  
24 income, and yet they cannot take advantage of the largest  
25 housing subsidy in American, the Mortgage Interest tax

1 breaks. For homeowners, the tax break is roughly equal to  
2 the household annual energy cost. On average, low income  
3 households even pay a higher utility rate because the vast  
4 majority are in urban areas and utility rates on average are  
5 higher there. You know, 87 mills per KWH vs. 98 mills per  
6 KWH and \$9.84 per thousand CF vs. \$10.86 per thousand CSF of  
7 natural gas. According to parallel surveys by AARP with  
8 seniors and the National Energy Assistance Director's  
9 Association, with low income families, about one-half of all  
10 households are finding it noticeably harder to cover their  
11 household energy costs. And about 10 percent are cutting  
12 back on their medications just in order to pay the utility  
13 company, yet, even by cutting back elsewhere, 30 percent of  
14 low income households skipped making a payment, or made less  
15 than the full amount due, and 10 percent of them had their  
16 utilities shut off for non-payment. Unfortunately, almost  
17 all of these factors are trending the wrong direction, even  
18 though it is so unnecessary. Enterprise Foundation  
19 estimated the national investment of \$5 billion a year for  
20 10 years would reduce energy costs for the 25 million lowest  
21 income households by 25 to 40 percent. The potential  
22 benefits far outweigh the cost. Every dollar that  
23 California low income household does not have to pay for  
24 utilities is worth more than \$3.00 to the local economy,  
25 even without counting the economic value of their increased

1 health. Several efforts are now being started to help  
2 address the efficiency needs of this housing stock.  
3 Nonetheless, I heard too little today about programmatic  
4 efforts to serve this third of our state's population. None  
5 of the marketing we heard about this morning seemed designed  
6 to address decision-makers for this sector. Dan Adams spoke  
7 about San Francisco program and there are other programs  
8 that are looking to learn from and incorporate San  
9 Francisco's efforts. But even these great efforts barely  
10 scratch the surface of a huge need. Most of the workforce  
11 training is emphasizing energy efficiency opportunities in  
12 single-family homes and the vast majority of those have  
13 nothing to do with low income households. Neither are the  
14 existing programs sufficiently counting for the  
15 characteristics and the needs of the low income sector.  
16 LIEE does not allow the contractor to replace or make major  
17 upgrades to heating systems. LIHEAP does not know how to  
18 deal with mid and high-rise multi-family buildings, multi-  
19 family buildings with a mixture of central and individual  
20 systems, or multi-family buildings where even 21 percent -  
21 actually, even 20.1 percent of the tenants are not willing  
22 to provide all of the information that the State requires.  
23 The current leap forward in residential energy efficiency  
24 that this Commission is overseeing is a golden opportunity  
25 to fix most of these problems, to ensure that low income

1 households get an equitable share of the energy efficiency  
2 community's attention, and to ensure that the mostly  
3 artificial barriers against broad energy efficiency adoption  
4 among the low income housing stock are intelligently  
5 removed, or reduced. HERC can help. Green can help. But,  
6 from my point of view, the best outcomes can only be  
7 accomplished if the Commission takes a focused look at the  
8 needs of this market sector. I am requesting that you  
9 develop a section of the IEPR specifically focused on  
10 identifying and dealing with all of the barriers to greater  
11 energy efficiency in the low income sector. And my voice  
12 was not quavering at the end there because I'm dry, I'm a  
13 little passionate about it, so, thank you. Any questions?

14 CHAIRMAN DOUGLAS: Now, you've spoken to us before  
15 on this topic and you are passionate about it, it's a topic  
16 we strongly support and we're certainly pleased with the San  
17 Francisco program and the efforts, some of which we've heard  
18 today, to look at multi-family. Your suggestion to us that  
19 we take up the specific issue in the IEPR is a good one; the  
20 2011 IEPR committee is not yet decided. Commissioner  
21 Eggert, on the Efficiency Committee, may have other ideas  
22 for how the issue could be approached, but there is no  
23 question that it is a very big issue.

24 COMMISSIONER EGGERT: Yeah, I guess I'll just agree  
25 with that and I also want to thank you, Mr. Stone, for your

1 leadership on this topic, and I think you bring up some very  
2 very good points that we'll probably want to continue to  
3 have that discussion and dialogue. I did also just want to  
4 thank you, I know you were participating in some activities  
5 to reform the California Tax Credit Allocation formulations  
6 for multi-family, and that also has some potential benefits  
7 for this particular target audience. I got a report out  
8 from Mr. Pennington that that seems to be going in a good  
9 direction, so I just want to again recognize your input and  
10 we'll definitely take it - continue the discussion.

11 MR. STONE: Thank you. Madam Chair, I do want to  
12 make one point about Dan Adams' program, as great as it is,  
13 it's focused just on master metered buildings, which means  
14 it's going to get most of the buildings they need to deal  
15 with in San Francisco, it is going to ignore most of the  
16 buildings that need to be dealt with in the rest of the  
17 state.

18 CHAIRMAN DOUGLAS: Who would like to go next in  
19 public comment?

20 MR. WOODBURY: I have some numbers - could I let you  
21 look at them while I'm talking or - I wrote them down during  
22 my lunch, just to give you an idea of what the costs are to  
23 become an independent HERS Rater. I'm Glen Woodbury from  
24 Sonora, way up in the mountains, not Sonoma, and I was  
25 unemployed about six months ago, and I started looking into

1 ways that I might be able to get back into the employment,  
2 business, okay? And I want you to know that, to start off,  
3 I want to give you some good news, I am California's newest  
4 HERS II Whole-House Rater as of today. [Applause] I  
5 haven't even met Mr. Bachand yet, but I did go through  
6 CalcERTS to get that training, and it is rigorous, but it's  
7 a very good training program, they did an excellent job of  
8 getting me to this point. Those numbers that I gave you are  
9 to show you my next step. Now, I need to, in order to be an  
10 independent Rater, I have some start-up costs, and that's  
11 basically what I wrote down for you, and I hope you make  
12 copies of that because it is kind of a hindrance to a new  
13 HERS Rater. How do I get started now? I am rated, but I'm  
14 still unemployed. And so, either I go out and get an SBA  
15 loan -- and one of the reasons I came here is hopefully  
16 somebody will be able to give me some direction on this --  
17 or go to work for a company that does ratings. I know you  
18 want to keep HERS Raters independent, that's the whole idea,  
19 and I'm at a crossroads right now trying to figure out which  
20 of those two directions I need to go. I don't even know who  
21 hires HERS Raters. But I'm excited about my new career and  
22 what you're doing, and I know a lot of people put, after  
23 listening to this workshop today, put a lot of work and  
24 effort into this program, I think it is an excellent  
25 program, and I think that this Commission is a very

1 important Commission, and deserves all the support it can  
2 get from the general public and, you know, with all the  
3 cutbacks that are going, I think that this would be the last  
4 one that gets cut, anyway, so I appreciate all the hard work  
5 you're doing. So, I graduated and if anybody wants to take  
6 me out for a beer, I can't afford one right now, but after  
7 this workshop, much appreciated. I'm sure that it's going  
8 to open doors for me, and I'll get back to work again, and  
9 I'm really excited about it, so I'm here, so if anybody  
10 wants to give me any advice, I'm willing to listen.

11 CHAIRMAN DOUGLAS: Well, so thank you for being  
12 here, and I think I know exactly who you should talk to. Do  
13 you want to talk on the record?

14 MR. BACHAND: I wonder if I could just be on the  
15 record?

16 CHAIRMAN DOUGLAS: Please speak on the record.  
17 Please come forward.

18 MR. BACHAND: Mike Bachand with CalCERTS. Thank you  
19 for your faith in us and for going through our training.  
20 Maybe some of the things he's pointed out there, I wanted to  
21 reiterate that the Energy Upgrade California website will  
22 help with is putting these people together; it may also be  
23 somewhat of a deficiency in our training program, so we'll  
24 take a look at that. Meanwhile, Mr. Woodbury and I will go  
25 have a beer tonight and I'll talk to him about some places,

1 we'll run over to the Fox and Goose, and everybody else,  
2 you're on your own ticket, he's on my ticket.

3 CHAIRMAN DOUGLAS: Thank you for that. And,  
4 Commissioner Eggert is going to read the costs we've been  
5 looking at behind the Dais, so that it's on the record.

6 COMMISSIONER EGGERT: Yeah, so I won't read  
7 everything, but this is actually quite interesting. And,  
8 I'm sorry, what was your full name again?

9 MR. WOODBURY: Glen Woodbury. In fact, I forgot to  
10 bring up how important education really is, I had to educate  
11 my career counselor all about the CalCERTS program before  
12 they even knew anything about it. I mean, I feel I'm here  
13 for a reason.

14 COMMISSIONER EGGERT: So, we appreciate definitely  
15 the fact that you're very much on the potentially leading  
16 edge of this new industry, and actually what's - again, I do  
17 appreciate this and definitely want the staff to take a look  
18 at these estimates, because the vast majority of your  
19 estimated costs are not the training, it's sort of  
20 everything else that surrounds the training, including the  
21 equipment that would be necessary to conduct the ratings,  
22 blower doors, infrared cameras, etc., estimated at about  
23 \$14,000 plus other miscellaneous at about \$3,000, and then a  
24 significant amount for business start-up costs, license,  
25 insurance, vehicle, marketing. Hopefully marketing, again,

1 could be maybe one of those components that could be  
2 facilitated by the Energy Upgrade California that would link  
3 potential consumers directly to you as a certified rater.  
4 But it's definitely a fairly large number when you add it  
5 all up, to the extent that this bears out for Raters. I  
6 noticed the biggest contribution is the vehicle, so I would  
7 encourage you to buy a hybrid, for one.

8 MR. WOODBURY: That would be politically correct.

9 COMMISSIONER EGGERT: Yeah. But again, I really  
10 appreciate the contribution, good to have somebody who is  
11 actually -

12 MR. WOODBURY: All that you've done up to this  
13 point, I know it's been years and you've been working hard.  
14 If anything makes sense on how to use our money, this is it  
15 in this economy we're in today.

16 COMMISSIONER EGGERT: Thank you very much,  
17 appreciate the comments.

18 CHAIRMAN DOUGLAS: Thank you very much. Let me ask  
19 for the next speaker. Please come forward.

20 MR. O'KEEFE: Good afternoon, Madam Chair,  
21 Commissioner Eggert, Advisors, and staff, my name is Matt  
22 O'Keefe. I'm from the California Energy Efficiency Industry  
23 Council. I want to thank you for the opportunity to meet  
24 with us today. Although we have had the opportunity to meet  
25 with several of you in the past, for those of you who are

1 unfamiliar with us, we are a relatively new business  
2 association with members that span energy efficiency  
3 businesses from services and products throughout California.  
4 Today, you've heard from representatives of several member  
5 companies, and selected member companies, including the  
6 Benningfield Group and AEC, led by PECI, are going to aid  
7 the Commission in the development and implementation of AB  
8 758. Other members of our organization, including non-  
9 utility companies, run the gamut from implementers and  
10 evaluators to architects and engineering firms to  
11 manufacturers. Our growing membership of nearly 50  
12 companies employs thousands of people throughout the State  
13 of California. We applaud the State Energy Commission,  
14 Public Utilities Commission, and Legislature, for continuing  
15 their leadership in energy efficiency and we are  
16 particularly excited and impressed by Energy Upgrade  
17 California and its potential. The Energy Council supports  
18 AB 32 and the opportunity that it creates for energy  
19 efficiency improvements throughout the state, that will help  
20 Californians save money, reduce pollution, while creating  
21 green jobs in the State's growing clean energy economy. As  
22 we begin this process, the Energy Council offers our  
23 members' collective experience and expertise to counsel and  
24 support Commission in their AB 75 efforts, in upcoming  
25 workshops and going forward. Our members are eager to be of

1 service, and we hope that you think of us as a resource. We  
2 look forward to providing assistance at any stage, to design  
3 a program that benefits all, and helps capture as much of  
4 the efficiency potential in the state as possible, while  
5 rebuilding California's economy. Thank you for your time.

6 CHAIRMAN DOUGLAS: Well, thank you for being here.  
7 Certainly, your organization, which is very new - when was  
8 it formed?

9 MR. O'KEEFE: About a year ago, but we really  
10 staffed up in the last about six months.

11 CHAIRMAN DOUGLAS: Well, good, it's a very important  
12 niche and this is a voice that will be valuable to  
13 articulate, to be heard. So welcome and thank you for your  
14 comments.

15 MR. O'KEEFE: Thank you very much.

16 CHAIRMAN DOUGLAS: Is there anybody else in the  
17 room? Please come forward.

18 MS. GOODHILL: Good afternoon, Madam Chair and  
19 members of the Commission, my name is Gina Goodhill and I'm  
20 the Policy and Legislative Associate with Global Green USA.  
21 We are a nonprofit environmental organization that focuses  
22 on clean energy, energy efficiency, and green buildings, in  
23 general. And we were actually the sponsors of AB 758. And  
24 since the bill actually passed, we've been very involved in  
25 the implementation process, and it really does remain a top

1 priority for the organization. Since the passage, we've  
2 actually worked to greatly increase the coalition of groups  
3 that support the bill and its implementation, so, you know,  
4 adding a combination of environmental groups, and trade  
5 associations, and nonprofit groups, in general. And all  
6 these groups are very excited to actually see these  
7 workshops take place and to be a part of it. We've also,  
8 since January, been following the budget process very  
9 closely to ensure that the 9.5 positions that were laid out  
10 in the bill stay in the budget, and through that we're very  
11 hopeful and, I think, confident that in the next couple of  
12 days when the budget does come out, we'll see those  
13 positions in there. And so, I think what makes Global Green  
14 a little bit unique from a lot of groups is that we're also  
15 uniquely positioned to provide technical expertise,  
16 especially in Southern California. We have a really close  
17 relationship with cities and with counties, and especially  
18 with the low income community, to make sure that, when we  
19 actually start seeing implementation, we can act as a  
20 facilitator to these groups and really sort of help ease the  
21 transition. So, just once again, this, I thought, was  
22 incredibly helpful and a really great workshop, and we are  
23 very excited to see these specific AB 758 workshops move  
24 forward and to act as a resource to the Commission. So,  
25 thank you so much for having this.

1           CHAIRMAN DOUGLAS: Well, thank you, Ms. Goodhill,  
2 for your work on AB 758. That is one of our highest  
3 priorities, we are very committed to carrying that out and  
4 we think that these programs that are rolling out will be  
5 foundational and will be essential, but they are a first  
6 step, and there's a lot more to do.

7           COMMISSIONER EGGERT: Yeah, I just want to second  
8 that. I thank you very much, and also appreciate your  
9 efforts to sustain those 9.5 positions. If we don't have  
10 the resources within the agency, you know, we can't develop  
11 good regulations, so we appreciate that assistance.  
12 Actually, a question, you said in "expanding coalition,"  
13 have you tried to reach out to the real estate industry? We  
14 were having a conversation earlier about potentially the  
15 need, or the benefit of bringing them in.

16           MS. GOODHILL: You know, that's a really good  
17 question. I think we actually have. I just actually took  
18 someone's place who was working on this more full-time, so  
19 I'll check back and see what our current coalition - and  
20 actually, I can send you the updated coalition list so you  
21 can see who exactly has signed on at this point, but I know  
22 we definitely reached out to them, whether or not they are  
23 supportive at this point is a different story, but we have  
24 at least made that effort.

25           COMMISSIONER EGGERT: Okay, and then actually the

1 other group I would be interested in are the mortgage  
2 lenders, to the extent that they might be participatory in  
3 the efforts.

4 MS. GOODHILL: That's a good point.

5 COMMISSIONER EGGERT: Thank you very much.

6 MS. GOODHILL: Thank you.

7 CHAIRMAN DOUGLAS: Anymore public comment from  
8 people in the room, please come forward.

9 MS. LICHTENFELS: Hi. I'm Michelle Lichtenfels with  
10 PECI. I'm the third-party implementer for the San Diego  
11 Retro-Commissioning Program, and I'm working with Martha  
12 right now to sign our new contract to assist the Commission  
13 in implementing AB 758. My question is, or my comment is  
14 around the workforce training. There is a commendable  
15 wealth of workforce training being designed and deployed in  
16 the State, multiple programs and trainings, certifications,  
17 certified raters, so my comment is about what's going to be  
18 done to reduce contractor or customer confusion around all  
19 these different kinds of programs and trainings, and the  
20 different names and labels for the certified individuals.  
21 And I think, Commissioner Eggert, you I think started to  
22 allude to this earlier, you know, so I guess my comment is  
23 around, you know, when these certifications come out in the  
24 marketplace, how do we ensure that they are credible and  
25 legitimate and recognized as such? So, you know, is this a

1 role that Energy Upgrade California is going to step in,  
2 fill that gap? How is that information going to be  
3 controlled? So, my comment is around how that is going to  
4 be addressed.

5 CHAIRMAN DOUGLAS: Well, I think the brief answer is  
6 the Energy Upgrade California will be the main interface  
7 with consumers. I don't know if staff wants to add  
8 anything.

9 COMMISSIONER EGGERT: Yeah, we certainly hope that  
10 it's a way of cutting through all the acronyms and, you  
11 know, providing very straightforward guidance to  
12 specifically the end consumer, so that they do have an easy  
13 way of understanding what types of programs they should be  
14 looking for, incentives, financing mechanisms, and raters,  
15 as a component of a comprehensive retrofit. Martha -

16 MS. BROOK: I think it's a great point, Michelle. I  
17 think we have to be careful, to be completely candid, that  
18 we don't see the Energy Upgrade California, that it's going  
19 to solve all of our problems, because we - it has limited  
20 funding, right? So we have to be careful that we focus -  
21 that we identify issues like this that potentially are in  
22 the scope of that work, at least in the next foreseeable  
23 future, and that way we can address it more completely. And  
24 if we just assume that Energy Upgrade California is going to  
25 solve all our problems, that it most definitely won't

1 because we won't have explicitly identified ways to do that.  
2 One of the things that we could do is, because we do have  
3 the technical support contract, and one of the very first  
4 things that Michelle's group is going to do, is a needs  
5 assessment work, if this is one of the things that is  
6 identified as something that isn't addressed fully in what  
7 we've planned for the next couple years, then we can  
8 identify and know we can assess and assign resources to  
9 fixing it.

10 COMMISSIONER EGGERT: I was going to say I think  
11 that's an excellent point, Ms. Brook, and I think we have a  
12 great opportunity in the fact that we're going to be  
13 developing the 758 rules and regulations in parallel with  
14 implementation and evaluation of all of these other  
15 activities, so hopefully there is a very strong connection  
16 and positive feedback loop that occurs, that allows for the  
17 learnings to be coming out of their feeding into the 758  
18 development, and vice versa, as we're doing these needs  
19 assessments, that I know that your team will be involved in,  
20 making sure that any early findings get incorporated into  
21 the strategy for the ARRA programs, as well.

22 MS. LICHTENFELS: Thank you.

23 CHAIRMAN DOUGLAS: Anyone else with public comment  
24 here today? If not, we'll turn to WebEx.

25 MS. KOROSEC: Can you open their lines? Yeah, we

1 have two comments on WebEx, so could you go ahead and open  
2 up - Matt Golden, can you go ahead and speak? Okay, Jim  
3 Metropolis?

4 MR. METROPOLIS: Yeah, this is Jim Metropolis.

5 MS. KOROSEC: Yeah, go ahead and speak.

6 MR. METROPOLIS: Hi, Chair Douglas and Commissioner  
7 Eggert, my name is Jim Metropolis with the Sierra Club. And  
8 I would just like to echo the comments that Ms. Goodhill  
9 just made earlier on behalf of Global Green, that we would  
10 like to see the starting up of workshops and the development  
11 of the program and implementation of AB 758, and we look  
12 forward to working with the CEC when this process gets  
13 started.

14 CHAIRMAN DOUGLAS: Thank you, Jim. This is Karen.  
15 We certainly look forward to working with you and look  
16 forward to that process, as well. Thanks for your comment.

17 MS. KOROSEC: All right, I think that is all we have  
18 on the WebEx, unless, Mr. Golden, are you on the line?  
19 Apparently not.

20 CHAIRMAN DOUGLAS: All right, well, we've gotten  
21 through all of the panels, public comment here, and on the  
22 WebEx, so, again, thank you very much. The workshop is  
23 adjourned. We look forward to working with all of you.

24 COMMISSIONER EGGERT: Thank you very much.

25 [Adjourned at 4:15 P.M.]

