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BEFORE THE
CALIFORNIA ENERGY COMMISSION

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)
 Joint IEPR/Efficiency)
 Committee Workshop) Docket No. 10-IEPR-1D

ENERGY EFFICIENCY LEADING ECONOMIC RECOVERY

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

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 9:30 A.M.

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 ORIGINAL

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Dian Grueneich (Invited)

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P R O C E E D I N G S

1
2 SEPTEMBER 28, 2010

9:38 A.M.

3 MS. KOROSSEC: All right. Good morning, everyone.
4 We are going to go ahead and get started. I am Suzanne
5 Korossec. I manage the Energy Commission's Integrated Energy
6 Policy Report Unit. Welcome to today's workshop on Energy
7 Efficiency and the American Recovery and Reinvestment Act.
8 This workshop is being held jointly by the Energy
9 Commission's Integrated Energy Policy Report Committee and
10 Energy Efficiency Committee.

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

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

24 Our format today is a series of panels with short
25 presentations followed by a half hour or so of discussion

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

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

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

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

19 We will be talking today about Energy Upgrade
20 California, about residential and commercial energy
21 efficiency retrofit programs, and how they fit into Energy
22 Upgrade California, workforce training, ratings and audits,
23 all of this is fundamentally very important foundational
24 work for AB 758, which is a statewide energy efficiency
25 retrofit program. So, we're pleased to be here. Thank you

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

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

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

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

1 implementation of 758, AB 758. So, I think I'll stop there
2 and I look forward to the discussion.

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

1 legislation that was recently passed, AB 758. So there's a
2 lot of expertise in the room, I'm very interested in hearing
3 from you today. Thank you for being here.

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

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

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

21 The elements of 758 will include workforce
22 development, public awareness, campaigning, financing
23 options, performance rating systems, performance
24 disclosures, efficiency recommendations, and efficiency
25 improvements, and hopefully you begin to acknowledge that

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

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

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

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

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

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

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

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

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

1 coordination between our two agencies is required, and so
2 we're encouraged that this workshop is kicking off in a
3 joint collaborative way, and we look forward to that
4 continuing, going forward.

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

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

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

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

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

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

22 About 50 percent of the retrofit funding is going
23 towards the non-res sector and 35 percent going to the
24 residential sector, and finally there is a set of cross-
25 cutting programs which I'll talk about later, which support

1 both sectors. The breakdown for savings is roughly
2 equivalent to the prior budget breakdown with some
3 exceptions on the breakdown of res, non-res, and
4 crosscutting.

5 So now I'll turn to highlighting a few specific
6 utility programs. First, residential programs. The
7 Commission ordered in the September 2009 Decision adopting
8 the utilities Energy Efficiency Portfolios, the largest home
9 full-house retrofit program in the country at the time, \$111
10 million are being devoted to this incentive program, which
11 is offered in two basic kinds of prescriptive basic package
12 and an advanced performance package. The performance
13 package requires use of the HERS II software, which we'll be
14 hearing about later on today. From a timing perspective,
15 this will be available beginning October 1st for single
16 family and sometime in 2011 for Multi-Family. It is being
17 marketed as Energy Upgrade California, which represents a
18 very close cooperation between our two agencies to implement
19 this program in a manner that is consistent and minimizes
20 confusion in the marketplace. The Utilities Home Energy
21 Efficiency Rebate Program is a \$142 million program that
22 offers consumer rebates for efficiency appliances and
23 equipment, and we also have a statewide demand side clean
24 energy brand and Web portal, this is the successor to the
25 Flex Your Power brand, it is an \$80 million marketing

1 education program that will raise public awareness about
2 efficiency and other demand side options. This is strongly
3 supportive of AB 758 goals to raise public awareness.

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

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

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

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

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

25 The Commission also provided funding for Integrated

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

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

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

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

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

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

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

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

25 MS. BROOK: Yeah, I don't think I have anything

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

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

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

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

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

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

11 COMMISSIONER EGGERT: From that three-year period.

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

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

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

25 COMMISSIONER EGGERT: Okay. And then I note that,

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

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

23 COMMISSIONER EGGERT: Thank you. Thanks a lot.

24 COMMISSIONER BYRON: If I may, Ms. Brook. Madam
25 Chair, I'd like to also acknowledge PUC's participation in

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

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

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

11 COMMISSIONER BYRON: I can be done.

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

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

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

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

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

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

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

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

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

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

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

23 So, I will now talk about the program and its vision
24 for roll-out, and at this point, it is truly a visionary, as
25 well as a vision, in that we are, as suggested by Mr. Baker

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

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

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

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

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

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

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

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

1 through that pilot program.

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

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

1 road towards energy efficiency retrofits.

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

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

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

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

22 The consumer outreach under Energy Upgrade
23 California is going to be bringing together the marketing
24 efforts of the Investor-owned utilities, State government,
25 our two Commissions, and local governments, across the

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

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

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

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

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

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

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

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

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

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

25 MS. CRAIG: Thank you, Susanne. So, I'm going to

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

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

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

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

25 The cost is a challenge, especially, again, the

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

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

22 So, after all this research, we wanted to find out
23 who are we actually talking to, and again, this is a pilot,
24 and so we have specific goals for the energy upgrade
25 program, and I think what Panama presented was a much

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

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

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

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

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

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

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

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

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

1 venues, in-store kiosks, this is a huge range of materials
2 and marketing modes that we'll be building on.

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

25 Then we see kind of the next phase, that once we get

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

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

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

23 And I wanted to mention a couple other ones before
24 we go on, that we're doing work on the Better Buildings
25 Program, and there are several pilots that are very

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

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

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

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

1 program, but it's actually about building better
2 communities, it does help meet climate change goals, it has
3 a direct impact.

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

24 The website is a critical piece to this, especially
25 as a statewide program, reaching so many different

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

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

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

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

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

10 MS. GARFIELD: Thank you, Mindy. As you can see, we
11 have a very aggressive and expansive marketing intent and
12 we're moving forward with that. And I'd like to change from
13 more of the overview statewide program to a specific
14 program, and that's in the Energy Upgrade team, and that is
15 the Downtown Oakland Saturation Project, and I'd like to
16 introduce Derrick Rebello. He is the President of QuEST,
17 which is an energy efficiency engineering and program
18 management firm, they are also based in Berkeley. Dr.
19 Rebello has 15 years of experience in implementing and
20 evaluating energy efficiency programs, and oversees a broad
21 portfolio of energy efficiency programs focusing on areas
22 such as data centers and the high tech sector, wastewater
23 treatment, hospitals, and on-bill financing, in addition to
24 working with local government partnerships. The Downtown
25 Oakland Saturation Project received \$4.8 million under the

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

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

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

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

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

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

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

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

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

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

23 So, moving on, when we think about this campaign, I
24 mean, we really think about it as a political campaign, and
25 our candidate is energy efficiency, and so what can we do to

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

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

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

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

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

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

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

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

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

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

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

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

1 point of view is extremely valuable, so I don't have any
2 questions for you, Panama.

3 MR. BARTHOLOMY: Thank you.

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

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

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

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

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

23 COMMISSIONER BYRON: Well, that's just excellent
24 information and I agree completely, just these thoughts came
25 to mind about missing certain segments, but your

1 explanations make perfectly good sense. Mr. Rebello - Dr.
2 Rebello - when did you become President here? That's
3 relatively new, isn't it?

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

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

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

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

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

24 COMMISSIONER BYRON: Excellent program,
25 congratulations.

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

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

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

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

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

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

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

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

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

22 DR. REBELLO: And then, for Oakland, everybody who
23 is an occupant of these buildings, who works or runs a
24 business, they also live in a house, or home of some sort,
25 so we want them to take that message home with them, so it's

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

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

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

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

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

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

22 MS. GARFIELD: Thank you, Commissioners.

23 MS. GOULD: Good morning, Chairman Douglas,
24 Commissioners, Advisors. My name is Angie Gould, I work
25 here at the Energy Commission on the Energy Upgrade

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

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

1 Upgrade California financing program.

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

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

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

1 what we think of as the "clearinghouse" and the new
2 financing program that, 1) not only allows for PACE to come
3 back, but is infrastructure that now serves a variety of
4 financing products.

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

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

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

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

1 clearinghouse.

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

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

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

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

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

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

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

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

22 Next up, we have Mark Lowder, he's going to present
23 the Moderate Income Retrofit and Conservation Loan. Mark is
24 the Director of Housing Finance for the Regional Council of
25 Rural Counties, or RCRC, and its Joint Powers Authority, the

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

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

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

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

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

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

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

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

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

24 What does the loan look like? I don't know if I
25 went down too far there. We'll talk about the loan in a

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

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

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

12 There are grants in conjunction with the MIRACL
13 loans and, by the way, the acronym crazy we went on MIRACL
14 was Moderate Income Retrofit and Conservation Loan, so we
15 got a little redundant when we added "Loan" at the end
16 there, but essentially the grants that are going to be in
17 conjunction with that will be for retrofit projects on
18 existing homes. It has got to be for a homeowner that has
19 got a loan, and it's 10 percent rounded up to \$1,250. The
20 grant that is going to be provided with the home purchase or
21 the refinancing will have to be a grant that goes with an
22 energy efficiency mortgage. It will be for home
23 refinancing, it will be 10 percent rounded up to \$1,500, and
24 with a home purchase, it will be a 10 percent rounded up to
25 \$2,500.

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

22 We would review and approve the proposal if it
23 looked like it was going to be cash flow positive on a month
24 by month basis, the contractor would then complete the
25 retrofit for the homeowner, and an important part of that

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

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

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

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

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

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

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

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

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

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

1 Fredrick P. Rose Architectural Fellowship and serves on the
2 Steering Committee for the Green Affordable Housing
3 Coalition. Dan.

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

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

1 our City General Fund by reducing energy and utility cost
2 burdens, so it is a great collaboration, and it is a grand
3 alignment of goals.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

24 So, how does OBF work? A utility provides customers
25 with unsecured loans that cover up to 100 percent of the

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

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

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

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

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

24 MS. GOULD: Thank you, Simon. And I wanted to let
25 the audience know that, once the Commissioners have had an

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

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

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

12 COMMISSIONER BYRON: Okay.

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

17 COMMISSIONER BYRON: Thank you.

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

25 MS. FRUSHA: Yeah, absolutely. And one of the

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

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

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

1 want to lower their risk, but also provide them with quality
2 consumers, as well.

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

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

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

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

1 that?

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

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

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

24 MR. BAKER: Yeah, I mean, I think we're a little bit
25 beyond a pilot phase. San Diego Gas & Electric, as I

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

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

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

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

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

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

25 MR. SPASARO: So we have something in the

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

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

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

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

25 MR. SPASARO: Sure.

1 COMMISSIONER EGGERT: I have no further questions.

2 MR. BAKER: Thank you, Frank.

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

14 MS. GOULD: Thank you.

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

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

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

22 MS. GRAILLAT: Good afternoon, everyone. My name is
23 Chris Graillat and I am the staff lead at the Energy
24 Commission for Workforce Development. The panel that we are
25 about to present right now focuses on workforce. Workforce

1 is basically essential to meeting our goals for energy
2 efficiency and implementing the programs that you heard
3 about in this morning's presentations.

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

25 We will learn about these models and how they are

1 drawing from training programs to implement the retrofit
2 programs and provide jobs in California. Our first
3 presenters are going to be -

4 MS. KOROSEC: I'm sorry, I didn't hear your
5 question.

6 MS. GRAILLAT: Is Bernie on the line?

7 MS. KOROSEC: Bernie, are you on the line?

8 MR. KOTLIER: Yes, I am.

9 MS. KOROSEC: Great, go ahead.

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

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

23 MS. KOROSEC: Yes.

24 MS. GRAILLAT: Yes.

25 MR. KOTLIER: Yes, okay. Wonderful. I'd like to

1 thank the Commissioners and everyone who is participating,
2 first of all, for allowing me to take your time today, but
3 also for allowing me to do this remotely and accommodate my
4 schedule.

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

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

25 One of the key points of the creation of this

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

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

22 And we do always want to remember the outdoor
23 opportunity, a lot of people think about indoor lighting,
24 but outdoor is a significant opportunity, as we can see
25 here. This is the state facility, I won't mention the

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

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

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

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

1 for CALCTP certified contractors and electricians, and that
2 URL is CALCTP.org. Next, please.

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

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

1 Energy Solutions.

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

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

24 The ETAP goals are to save 17.6 million kilowatt
25 hours a year, 6,170 therms per year, and 1.7 megawatts of

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

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

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

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

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

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

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

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

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

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

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

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

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

18 MS. BIALLY: So the EnergySmart Jobs Program has
19 three overarching goals, we are working clearly to create
20 jobs and create energy savings, but we are also working on
21 market transformation. So, part of the RFP that was put out
22 about a year ago, it is our goal to create new green jobs,
23 and we are specifically targeting green jobs for the under-
24 employed and disadvantaged workers, thus Erin and her
25 company, not her. And we are also making great leverage of

1 matching funds and providing direct economic stimulus to the
2 businesses and individuals we're working with.

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

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

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

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

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

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

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

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

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

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

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

14 MS. BIALLY: So, at the end of all this, what do we
15 expect to have achieved? It is our goal to survey at least
16 25,000 commercial refrigeration sites. Those will mostly be
17 made up of grocery stores, convenience stores, and other
18 commercial sites with stand-alone or refrigerated cases that
19 open and close. We anticipate, of the 25,000, that we will
20 actually incent 5,000 of those to do projects for either LED
21 case lighting, LED case lighting with motion sensors, or a
22 variety of refrigeration control strategies. This is going
23 to result in 88 million KWH and, using a Federal formula,
24 214 jobs. We can calculate our own jobs, we will be able to
25 point to 117 jobs that we've created through the CCC and the

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

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

24 MS. HALAWANJI: Thank you, Chris. It is a pleasure
25 for us to be here today. My name is Rola Halawanji and I am

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

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

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

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

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

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

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

24 MS. HALAWANJI: Right. You know, we'll get to the
25 issues in a little bit. The partner that I want to spend

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

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

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

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

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

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

1 we've only had two drop-outs.

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

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

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

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

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

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

23 DEAN SCHWANDNER: Okay, in this job market, this has
24 been a major challenge for us. We have placed 50 people so
25 far, some of them have started their own small businesses,

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

1 certain credibility being a community college that, at least
2 we get in the door and people are willing to talk to us, and
3 they're hiring people in one's and maybe two's, but we'd
4 like to have the opportunity to get people hired in a more
5 substantial way.

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

24 MS. HAUENSTEIN: And for the ETAP program, we can't
25 guarantee that the contractors that we train are going to be

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

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

10 MS. BIALLY: Bially.

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

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

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

23 MS. BIALLY: I think we need the market activity to
24 sustain the training, even without these programs, there's
25 not enough energy efficient professionals out there, so my

1 hope is what we are doing is instilling an idea and a value,
2 and the different various entities that are able to fund
3 these trainings are able to do it, whether that's public
4 funding, or whether that's private, whether contractors
5 realize that they can get great staff if they just invest in
6 the training, that would be a great outcome and it's
7 something that the industry really needs.

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

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

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

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

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

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

24 CHAIRMAN DOUGLAS: I don't have questions. We have
25 a few minutes left for this panel for any additional

1 discussion. I'll turn to our moderator.

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

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

23 DEAN SCHWANDNER: Well, this is what I wanted - you
24 know, I pushed Rola when she was at the mic, is that, you
25 know, we have had a particular challenge and -

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

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

25 MS. HEALY: I just wanted to talk a little bit about

1 CCC And PEI, we didn't have an existing partnership or
2 relationship when we began, we quickly understood or
3 realized that we had too many things in common, that it
4 clearly was a great relationship and would be long lasting,
5 way beyond this little thing that we're doing.

6 MS. BIALLY: Right.

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

21 MS. BIALLY: Yeah, I would agree. I think the PEI
22 CCC partnership was something we all very happily stumbled
23 into, we meshed, we worked together well. Some of the other
24 partner challenges have been, every single partner we have
25 is incredibly excited about this program and wants to

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

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

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

22 COMMISSIONER EGGERT: Thank you very much.

23 MR. PENNINGTON: Ready? Okay. Good afternoon, my
24 name is Bill Pennington, I'm the Manager of the High
25 Performance Buildings and Standards Development Office at

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

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

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

24 I'd like to start with Julieann Summerford. Julieann
25 is the Director of Implementation for the Heschong Mahone

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

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

22 In California, about one-third of Californians live
23 in apartments, and most of those - that's where most low
24 income families live, are apartments. They're not single-
25 family homeowners, you know, and low income - they pay up to

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

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

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

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

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

23 So, we're hoping to have one of the first Multi-
24 Family HERS II trainings by the end of this year, we have a
25 couple of programs that are starting that we need HERS II

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

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

1 their portfolios of buildings and sort of develop a plan of
2 attack over time.

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

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

1 California area, also in Sacramento.

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

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

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

1 Michael.

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

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

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

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

21 The qualifications that come in, again, we went
22 through that. Pretty easy underwriting standards. There
23 are two financing arms, one is the MIRACL loan which is a
24 direct loan program to finance the upgrades; the other
25 operates off of the 203K, which is a type of energy

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

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

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

24 Lastly, as a reporting mechanism, we did something a
25 little bit different here, it's been difficult and there has

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

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

23 In the MIST program, we aim for Transformational
24 outcomes. It's jobs now, it is jobs for Raters, it's jobs
25 for the contractors that are out there doing the work. It's

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

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

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

24 Just a couple of milestones. HERS Phase II became
25 effective September 1st, 2009, I believe, and we were

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

1 II, or Whole-House Rater, they are required to enter lots of
2 information, give homeowners an education, talk about
3 occupant behavior, talk about the most cost-effective way to
4 install certain features, and so forth.

5 There are three ways to get to be a HERS II Rater
6 through CalcCERTS, the first one is CalcCERT's retail
7 training, that's what we've been doing all along, up until
8 the point where the ARRA money helped to provide some
9 subsidies for Workforce Investment Boards and things.
10 CalcCERT's retail training is somebody calls us up, wants to
11 take one or more of our classes, pays the bill themselves,
12 goes to the training, does the exams, and so forth.
13 Community college classes, most of those are being
14 subsidized by Workforce Investment Board money in one way or
15 the other, and I'd like to throw a great big thanks to Long
16 Beach Community - or City College for, you know that scene
17 in Butch Cassidy and the Sundance Kid where they grab hands
18 and they run off the cliff, well, we did and had our
19 parachute open, gratefully, and Rola and Gail and other
20 people there have just done a great job in identifying
21 leakages and stoppages to the progress and the success of
22 the program, and curing those, and moving on. And something
23 that Rola did say was that there are two HERS certified
24 trainees that have come out of that training, but there are
25 about 30 who are on their way and have passed at least a

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

16 So what's the current status for HERS II? There's a
17 total of 158 people who have signed up or have taken the
18 class statewide, we do train in both Northern and Southern
19 California. Forty-nine have been trained prior to November
20 2009, and in November of 2009, due to some other
21 considerations regarding approval of HERS Providers and so
22 forth, staff wanted to make sure that trainings that are
23 being delivered by providers were approved trainings only,
24 so we were required to stop training at that time, but we
25 had already pre-trained 49 people in a program that was not

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

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

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

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

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

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

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

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

23 Some of the barriers that we're running into, jobs
24 are not putting enough demand on the Raters. You know, if
25 you're a Rater in Redding and you don't want to drive to

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

24 Some of the other barriers are bad information and
25 perceptions by program managers and designers that HERS II

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

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

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

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

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

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

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

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

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

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

24 COMMISSIONER EGGERT: And then, in terms of the
25 protocols and software and everything for Multi-Family, is

1 that all going to be developed as a component of your
2 program?

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

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

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

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

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

10 MS. SUMMERFORD: Potentially, yes.

11 COMMISSIONER EGGERT: Okay -

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

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

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

1 transformation on transfer. And, to be honest, that seems
2 to have been the hold-up of going through MLS over the last
3 few years, and this is personal opinion as opposed to
4 anything that I can say from a documentation standpoint.

5 But a number of real estate agents have spoken with me about
6 the fear that getting it into the MLS means that, once it's
7 there, then it can be made from a regulatory or legislative
8 standpoint mandatory that you bring it up to some level of
9 Title 24 compliance every time the home is transferred.

10 That was a major problem, and that was why we went with the
11 route of going with the real servitude, so that it attached
12 to the title of the land, and it basically got around MLS.

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

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

1 forward and hopefully spur transformation.

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

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

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

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

23 COMMISSIONER EGGERT: I know, that's not an easy
24 accomplishment, and the fact that you're already up and
25 running and training individuals is, I think, really

1 fantastic.

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

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

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

1 out there, they'll do it. To get the jobs that are
2 contemplated by these contracts, several hundred probably
3 could do it, and keep up with the rest of their work, too.

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

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

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

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

24 MR. PENNINGTON: No, I think we covered the ground
25 that we intended to cover, so I'm satisfied.

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

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

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

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

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

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

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

25 CHAIRMAN DOUGLAS: And are you saying that this is a

1 metric for the utility whole-house programs?

2 MR. PENNINGTON: Yes.

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

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

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

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

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

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

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

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

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

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

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

23 COMMISSIONER EGGERT: Yeah, I guess I'll just agree
24 with that and I also want to thank you, Mr. Stone, for your
25 leadership on this topic, and I think you bring up some very

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

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

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

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

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

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

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

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

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

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

1 you're on your own ticket, he's on my ticket.

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

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

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

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

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

7 MR. WOODBURY: That would be politically correct.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

25 CHAIRMAN DOUGLAS: Well, thank you, Ms. Goodhill,

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

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

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

24 COMMISSIONER EGGERT: Okay, and then actually the
25 other group I would be interested in are the mortgage

1 lenders, to the extent that they might be participatory in
2 the efforts.

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

4 COMMISSIONER EGGERT: Thank you very much.

5 MS. GOODHILL: Thank you.

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

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

1 fill that gap? How is that information going to be
2 controlled? So, my comment is around how that is going to
3 be addressed.

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

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

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

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

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

21 MS. LICHTENFELS: Thank you.

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

24 MS. KOROSSEC: Can you open their lines? Yeah, we
25 have two comments on WebEx, so could you go ahead and open

1 up - Matt Golden, can you go ahead and speak? Okay, Jim
2 Metropolis?

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

4 MS. KOROSSEC: Yeah, go ahead and speak.

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

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

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

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

23 COMMISSIONER EGGERT: Thank you very much.

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

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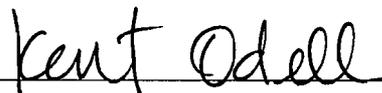
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I do hereby certify that the testimony in the foregoing hearing was taken at the time and place therein stated; that the testimony of said witnesses were reported by me, a certified electronic court reporter and a disinterested person, and was under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

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

IN WITNESS WHEREOF,

I have hereunto set my hand this 5th day of October, 2010.



Kent Odell
CER**00548