Affordable Multifamily Energy Efficiency Financing Pilot

Tuesday, November 7, 2017

1:00 - 4:00 p.m. PST

>> Hello everyone. This is the beginning of the Affordable Multifamily Energy Efficiency Financing Pilot Webinar. We are going to begin in a few short minutes. We are just getting a few more folks settled in the room. Thank you.

>> Good afternoon again to everyone on the phone and thank you to those who are here in person. And before we get started Peter Thompson has a few words from PG&E.

>> Thank you PG&E for hosting. Quick safety note before we get started; there are all these fine rules for safety. You should call 9-1-1 in case of emergency and Matthew Brown is the person to call about that. I can perform CPR and if you need the paramedics then Deana can get them out. In case of an evacuation -- if we got evacuated from here, then go through here and then, go down stairs and you can get out of the front door. You can go down the stairs and get out through the back. The best way to evacuate would be to go out down Market towards Howard Street and meet on the corner of Howard and 4th Street and there is a (Indiscernible) there and that is the meeting spot if there's an evacuation. In case there is an earthquake, you duck, cover, and hold underneath the table. Stay away from the windows and do not leave the area until told to do so. Thanks a lot.

>> Thank you, Peter. And a big thank you to PG&E for hosting us today. I appreciate it. Let me take a quick minute to introduce myself. My name is -- and for those on the phone, my name is Deana Carrillo. I'm the Executive Director of the California Alternative Energy and Advanced Transportation Financing Authority. It’s a really long name. We have the worst acronym, but we call it CAEATFA. So, you will hear those references throughout the afternoon. And in case people ask, the PEC will be helping and administering the California Hub for Energy Efficiency Financing. Our workshop for today is to introduce the Affordable Multifamily Energy Efficiency Financing Pilot under the CHEEF. We want to propose the structure in its early phase prior to issuing

regulation, which is broadly reflected of CAEATFA thinking right now, and make sure that we get input. Did we do it right? Are we on the right track? Are we not? What else -- what should we be thinking about? These are real questions. And so, we very much want to get your feedback. Don't feel -- we pose a few questions throughout the slide deck and don't feel like you are limited to just answering those questions. If you see issues that we have not addressed, then please go ahead, and raise those. So, to introduce myself again, my name is Deana and I am the Executive Director of CAEATFA and Matthew Brown has been the technical consultant that has been helping us to develop these pilots and he'll also be helping with the slide presentation. Thank you. So, our workshop agenda for today is to give you some background on the CHEEF. For those in the portable multi-family sector we haven't been able to connect with you much before this date because we have been focused on launching some of the other pilots. And so, really making sure that got the background and go over some of the elements on things that we are thinking about the pilots. Here's our workshop agenda for the day. I know that we put aside three hours, but I don't think I'll take that long, but I do want to leave ample time for discussion. So, I am going to spend a few minutes on the background on CHEEF Pilot And then, I will be passing this off to Matthew Brown.

So, what is the CHEEF? So, the California Hub for Energy Efficiency Financing was established by the Public Utilities Commission, in 2012. It is a public-private partnership among state agencies, utilities, lenders, and contractors. The goal is to provide a streamline statewide platform. We have credit enhancement funding to work with private capital providers to broaden the access to financing. As well as, on-bill repayment infrastructure, which is currently being built for lenders. There will be credit enhancement on-bill repayment. It was initially set with $10 million dollars of marketing, education, and outreach funds. Much of that has been spent today because we are working on a truncated dot. A smaller budget for ME&O, but that is there. And then, we are also establishing uniform program requirements, so that we can establish a standard for the different lenders to get engaged. There are a lot of folks involved in the CHEEFs. So, this is just an example of some of the parties involved. So, CAEATFA establishes that infrastructure between our master servicer, various lenders, and the contractors; just an example of the collaborative effort that we're launching here for this public-private partnership.

So, why financing? Everyone in this room probably knows that California has a very aggressive greenhouse gas emission goals, especially as we look at creating more energy efficiency in existing buildings, as well as a target to our low moderate-income population. And there have been estimates set that the market in California alone is about $50 billion dollars for each retrofit. I actually think that could be an understatement. I mean, there is no way that we can do that with rebates and incentives. So, how do we work with private capital providers to help fill these gaps in the market? The PEC decision, in 2012 had two goals, well a lot of goals. Two predominant goals, one is developing scalable and leveraged financing projects to stimulate deeper EE projects then previously achieved through rebates and incentives. The other was to tackle their transitional rate support for credit enhancement, so it could lead to a self-supporting energy efficient plan. So, the way CAEATFA looks at this -- we look at more projects, deeper projects, and broader access to projects for those that might not have had some of the traditional underwriting criteria that lenders are looking for.

So how do we expand that access? This visual right here really shows the elements of on-bill repayment. The concept here is the California Hub for Energy Efficiency Financing will be the first open market on-bill repayment program in the nation. A few other states and counties do have on-bill repayment, but not from an open-market perspective. So, on-bill repayment is going to be an element that we're going to add to The Pilot. The multi-family pilot was initially restricted to only on-bill repayment and master metered. In the first year-and-a-half of working to develop The Pilot, CAEATFA asked the PEC staff to identify things -- elements that could make the program more flexible. So, one of the things that we recently did was we removed the restriction to on-bill payment only. So, now multi-families can be an off-bill or on-bill program. And we have also removed the restriction to master metered properties. So, that might still be a priority as we look for shared energy savings. But, we also know that master metered properties are decreasing, and with a number of master metered properties, we wanted to remove that restriction. This is an overview of the chief pilot and the whole suite. So, there is a single-family residential pilot that is both off-bill with no disconnection and that pilot we have up to $25 million in a credit enhancement for lenders. 70% of the project will be energy efficiency or demand response and that project for that pilot is limited to 1 to 4 units for single-family homes -- predominantly single-family homes. So, for the Affordable Multi-Family Pilot we are looking at supporting loans, leases, and energy service agreements of any size. It will be both on-bill and off-bill, but with no disconnection. And we have a loan options currently of $2.9 million in this pilot. We also have flexibility of funds shift. And so, if we see a big demand in this market, we can move funds. So, that will be a part of the conversation that we will be having today. Again, 70% of the loan proceeds need to be energy efficiency or demand response measures. Solar cannot be credit enhanced, so this is an energy efficiency program and we are not having any restrictions on borrowers. Yeah, so any questions?

>> This is Mary George (assumed spelling) with Resources for Community Development. Is demand response like a time of use rate and what other tools might it be?

>> So, demand response could be -- it is not a time of use rate, but it could be a port thermostat that automatically adjusts.

>> Okay.

>> So, it would be that type of technology for the building and I am open to what that means. So, we can work with that definition. We also have a small business pilot that will also support mostly ESA's. The Pilot is also under development, at this point. We will be offering that pilot on both on and off-bill. We currently have that pilot funded at $14 million in credit enhancements. And then, for large commercial or anything else in the MUSH market, we will be offering on-bill repayments with no credit enhancement. So, get the credit enhancement funds single-family and affordable multi-family and small business loans. Okay, so that is a little background on The Pilot. So, the way we were going to design this workshop was to go ahead and pause for discussion after each

section. And so, I'm going to ask that we go ahead and take questions there. If that ends up not working and people get more engaged, then we'll play it by ear. And with that I am going to pass it over to Matthew Brown.

>> Thank you, Deana. So, Deana has given kind of the overview of The Pilot. And now, we are going to spend the rest of our time digging deep into the affordable multi-family pilots. So, what I want to do is I am going to spend the first few minutes, no more than 10 minutes, just reviewing kind of -- some of the -- what we see is the context and what we see as the background for this Pilot. And then, we are going to spend the rest of the time really delving into the details of how we would propose to actually, operate this Pilot and some of the basic rules and eligibility requirements and so on. Again, we are going to have time for questions throughout.

So, what I want to do first, is I think maybe one of the most important things that I want to just recognize is that when we're -- we know that when we're talking about the affordable multi-family world, it is a really complex world. It is a really crowed world. It is not necessarily an easy world to introduce a new financing product into. So, we have tried to kind of keep that in mind as we have been developing The Pilot. Really, what we would like to do is to get your feedback on the -- on what we have -- what we are putting forth and hopefully, we are actually meeting the goal of actually being able to introduce a useful new financing offer or set of offers into this market.

Overall though, one of the things I think is important from a financing perspective, is to keep in mind to access to capital is hard. Senior mortgage holders are not necessarily excited about having somebody else come in with some type of new financing product. Tax equity investors are not necessarily excited about having somebody come in with a new financing product onto the same property. In cases of HUD ensured properties, HUD is not necessarily excited about having someone coming in with a new financing product, even if that financing product happens to do great things for energy efficiency and cashflows of the bill, so we recognize that. The energy efficiency and the rebate process isn't necessarily a top priority for most property owners and we recognize that, as well. And so, I think you know -- again, this is not a necessarily easy world to be operating in. What we have tried to do, keeping that in mind we will be working with our capital provider partners, who would be participating in this to be able to offer what we call certain non-debt products or energy service agreements. In addition, to traditional leases and loans, we will be providing a credit enhancement. Which is basically a way and you can think if it as credit in short to basically reduce the cost of capital and make it energy efficiency and the financing more affordable. And we will be -- also, offering a variety of technical assistance types of products and offerings as well which we would like to get your input on. So, all of these things we are hoping together are going to make the financing more effective and be able to address the barriers that we have laid out. I mentioned, this is a world -- and it is already a very crowded world and all other types of programs that are out there. We have developed the idea of not creating a new program that is operating in a silo, but we want to be creating a program -- a pilot rather that is operating in collaboration with and integrated with other programs as much as possible.

So, the types of programs that we are really focused on, just a few of them. We wanted to kind of -- again, be aware of -- for a bigger picture context there are the other energy operated California projects and programs. There is the utility rebates program for multi-families, the Low-Income Weatherization Program, and the Energy Savings Assistance Program, and so on. But when you look at every one of those programs you see programs that are generating volume. You see programs that are generating rebates or incentives, and in some cases technical support, but what we see is there is a gap. The gap is that after a rebate somebody -- the property owner has to come up with the additional money to actually complete the project and that is the gap. That is the financial gap that we are looking to fulfill, right?

So, what we will be doing is using this Pilot to deal with out-of-pocket cost for measures that are not covered through rebates or incentives and these various other programs. We will have a somewhat broader list of measures that could be financed and that are not always rebated or paid for true incentives. And one type or category that we will be able to cover that may not be as easy to cover as easily by the other programs is in-unit upgrades, right? So, not just common areas.   We can actually work in the individual units. One of the other things that we want to make sure that we are very well aware of is that we have some of the utilities have a 0% on-bill financing programs. On-bill financing is a very attractive (Indiscernible) at 0%, it is hard to beat that interest rate. But again, our program, the on-bill payment program although, there will be an interest rate associated with it, it is still going to cover certain areas that the on-bill financing programs doesn’t.

So, in this slide we get some sense of what some of those differences are between the On-Bill Repayment Program. Which is what we are talking about here and the On-Bill Financing Program, which is what utilities currently offer at 0% -- and what it currently is. So, I am not going to actually spend a lot of time on this, but I think the main point is for these last couple of slides there are many programs that we are well aware of that are operating in this state. Our real goal is to integrate as much as possible with those programs. We have tried very hard to identify gaps where those programs -- like areas where those programs may not serve the needs of property owners in their entirety. So, our goal has been to really to integrate as best as possible -- the best we can in with these other programs.   One of the kind of tools that we are playing with in order to do this is Deana mentioned the credit enhancement. We had talked about a credit enhancement. Does everybody know what it is?

>> Sorry.

>> I don't know if everybody does, but I’m going to -- think of it as a kind of loan insurance. So, if you are a lender you know that you are going to experience some level of loss you are going to have to write-off, charge-off some number of the loans that you make. Unfortunately, even though you may not want to, and you are going to select which property owner you might lend to and projects that you might lend to on the basis of some type of credit review, right? Our credit enhancement is going to enhance the credit and improve the credit of borrowers so that lenders are going to be able to use our credit enhancement -- using that loan insurance product in essence be able to lend to borrowers who they otherwise wouldn’t be able to lend to or/and/ be able to lend to them

at better rates and more attractive terms than otherwise possible. So, the credit enhancement is kind of the main tool that we have to offer, and it is a well-established tool in other markets, but it is a tool that we have to offer. That will be coordinated with a statewide marketing initiative that Deana mentioned already. We will also, be leveraging the existing investor utilities LIWP programs that are already in place and there is a technical assistance element that we will talk about later and that we would really like to get your input on.

So, to give you a little bit of a sense of what we think the pilot -- the financing pilot could do in terms of volume. You can play with these numbers in so many different ways and come up with so many different results, but given what -- if you kind of make some rough assumptions about -- if you assume that it costs about $3,000 per unit to upgrade the energy efficiency of a multi-family building and you have maybe 60 units in a building. Of course, it varies widely as does this number -- project size -- this may be a little on the high side. This gives you a sense. We have a budget of $2.9 million, which can be leveraged to bring in private capital, right, that we feel could be supporting on the average 107 projects and 6,000 and some units. Okay. Again, this is a very --if you look at the LIWP program you will remotely understand that the cost of an upgrade is anywhere to $100 to multiple thousands of dollars. And so, it is very hard to be able to guess that -- to be able to say, okay, here are these exact numbers. So -- but is Steph over there?

>> Yeah.

>> She has been very helpful; helping us to get some of those numbers. So -- but that kind of gives you a rough ballpark status. Why would stakeholders want to participate in this again? Property owners, we are hoping are going to be interested in taking advantage of the various programs that we have already discussed, but filling in that financing gap and upgrading their equipment. Project lenders are always interested in finding ways to deploy their capital, but not only to deploy their capital, but lenders that we think are going to be most interested in this are going to have a social motivation for doing so. Contractors, property tenants, and mortgagees are also, all stakeholders. Here again, I am

not going to spend a lot of time reviewing that. I want to make sure that we get to the meat of this, but I want to spend just a couple of seconds before we pause for some questions. When we think about target property owners what we think of are the properties that are essentially supported through the Low-Income Housing Tax Credit likely, are probably properties that are not HUD insured, are probably out of the period of which their tax equity investors are still engaged. They are probably more than eight to 10 years old overall, and kind of mid-cycle in their mortgage financing because frankly, if there is a property owner that is about to do a major refinance and a major rehabilitation project, that property owner shouldn't use our product. They should be using (Indiscernible) because it will be longer for them and cheaper, right?

So, there is a kind of a niche that we feel this supplemental financing project is going to fill. That's where we see it in terms of the types of projects and types of properties and where they stand, not just geographically not just in size, but even in time as related to their own financing. So, we also, would like to get as much as possible input from you on how to do this. We feel that it is going to be important to focus to the extent possible on higher usage facilities and master metered properties are not a requirement, but are good targets. And then, the properties that have had some type of energy assessment conducted. This is where coordination with the IOU programs, and with LIWP, and so on, we think are going to make a lot of sense. So, I'm going to stop here just for a second. Just pause and see if there are questions. We have laid out some questions for you, but I would love to get any questions whether they are clarification questions or reactions or thoughts thus far, and if we are on the mark or off of the mark or what have you. So, I am just going to pause for a second.

>> And if there is anybody online?

>> There are some questions.

>> Yeah.

>> From Michael Worsoftner (assumed spelling). What are the target rates for the average customer?

>> You mean by target for Michael -- I know that Michael works with a financing firm. So, the target rates are going to be established by the financial institution, Michael. So, we are not setting -- and we are going to talk about this in a little bit in more detail later on.

>> So, as low as you will go.

>> Yeah so, there you go.

[Laughter]

>> But we are not establishing specific rates, but we are hoping that you will find it in your interest, given the credit enhancement to provide rates that are attractive.

>> Well, to clarify, on an application, a lender will tell us how their rates will improve as a result of the credit enhancement. And so, that will be done on a lender-by-lender basis.

>> Yeah.

>> Okay. And from Lindsey Robins, which types of lenders are you expecting will participate?

>> That’s a good question, Lindsey. We are about to get into that. So, maybe with that one we will pause in the next section.

>> Okay. And also from Lindsey, for those properties that are not participating in an IOU program or LIWP program, how will owners access technical assistance to determine expected savings in the (Indiscernible)? Can those TA costs be wrapped into the loan?

>> That's another good question and we are about to get there. So, we will come back to that.

>> It looks like Charles Ward would like to go back to the slide on Participation.

>> And Charles, I think that we have a copy of the slide deck online.

>> Mm hmm. We do.

>> So, if you need to refer to that as we go on.

>> We can go back there.

>> Also from Charles, what is your view of HD’s acceptance of the energy service agreement?

>> I think that one, just to -- Charlie, I think our view is that HUD is not very -- on a staff level, the HUD is interested in finding ways to encourage energy efficiency, but HUD has not found its way clear to really supporting energy service agreements.

>> I'm sorry, I think the question is meaning HTD, not HUD.

>> HUD.

>> Oh.

>> Yeah.

>> Oh, sorry. Yeah.

>> I heard that.

>> Thank you.

>> Oh, sorry. It is the California Department of (Indiscernible) --

>> Yeah.

>> They are also a common funder with lots of strict rules.

>> Yes. Yes, they are one among a huge universe (Indiscernible)

>> So, our goal is to be able to have this financing product be able to work with these programs within the power that we have and knowing that we can have conversations with HUD and HTD about these certain elements, but won't be applied to those certain units. Okay.

>> Anything else there? Any thoughts? Yes?

>> Can we go back to the discussion about LIWP, please? Yeah.

>> Again, this is Mary George with Resources for Community Development. We are a reality-based nonprofit housing developer. We have almost 60 properties in our portfolio.   So, I think of our portfolio and other places I have worked with and I appreciate very much that you are trying to fill gaps that currently exists to enable more owners of properties to take advantage of these programs that have not had the means to do so in the past. Tax credit properties have their investors in them for 15 years. Let's just say they are 10 years, so you have to think of slightly older properties if they were newly built or much older if they were acquisition rehabs to begin with. That's the feedback that I would have for these questions right now.

>> Okay. I think the other thing that I could note is that I noticed is that throughout the slides we talk about the IOU programs and LIWP. I also mean the Regional Energy Network or REN and we need to be inclusive there. We just haven't got there in the slides.

>> Okay. So, let’s skip down to what we are proposing.

>> Okay, and as we go through, I know we are pausing, but if you need a quick clarification or have questions, then please stop me. I don't want to go too far down the road without you understanding what we are talking about. So, somebody on the phone had asked about what I am going to call a qualification pathway. So, what we have done is laid out three different pathways here. One, any property that is currently participating in one of the IOU programs and if they are participating, then they can participate in this program, right? The LIWP program -- anybody who is participating in the Low-Income Weatherization Program. And for those of you on the phone, the LIWP program is essentially an energy efficiency program that is run outside of the investor and utilities with sponsorship and funding from the greenhouse gas funding and from the state agency, what's the name?

>> I think the (Indiscernible).

>> Yes, thank you.

[Laughter]

>> And the third pathway, if a property has not gone through an IOU program and the property has not gone through the LIWP program, we wanted to find a way to still allow the property to qualify. And what we laid out is if that property has had an ASHRAE Level II Audit or has gone through a process that some of you may have heard of, the Investor Confidence Project process, which is a process for qualifying installers and auditors and whatnot to make sure those projects are high-quality projects, right? So, there are three pathways that we have talked about. Any project that has gone through one of those three pathways is eligible to participate. Secondly, is eligible projects and eligible measures. Okay.

>> Can we pause here?

>> Yeah.

>> One question that I had (Indiscernible).

>> If you have gaps in financing, we hope that the financing that we can provide are able to help. That is the goal.

>> Yup. Yup. The reason that we have these kinds of different pathways, we need to make sure that what we are doing is actually, producing energy savings and we recognize there are a lot of different ways to do that. We want to do that in a high-quality way, but also, in a way that is not additionally burdensome to property owners, so as far as the projects and the measures itself. So, any energy efficiency project as qualified through one of those pathways that we talked about before. We will a-- at least, 70% percent of the measures are financed in that loan need to be what I am going to call qualified energy efficiency measures, right? Qualified through one of the ways that we just talked about -- those pathways that we just talked about, right? Up to 30% of the loan amount or the lease or the service agreement amount and I may use the word loan kind of interchangeably, can be other measures that are in support of that energy efficiency, right?

So, a key thing here is that DG, Distributed Generation solar mechanics, right? Other types of electricity generation are not eligible to be financed under this loan -- under this financing. Okay. Another key point, and this is just something to keep in mind, we do not require that the loans be bill neutral. We recognize that in many cases financial institutions would want to see that, we simply don't require it for participation in the program.

>> And what that means for the financing is that you can have a longer term, right? That you are able to pay it back over a longer term and it doesn't have to be a 5-year term or an 8-year term, but ideally, you will have a longer term and you will be able to pay back those improvements. And I heard a question in the room of can we finance fuller? And the answer is no. These are energy efficiency funds provided by the PEC. They are for energy efficiency. There can be solar on the project, but it has to be a different instrument.

>> Hi, I had a question about the energy efficiency program (Indiscernible). I wanted to ask do you do a special on the and the type of measures that you think you might be able to fund that are not on the (Indiscernible) program?

>> So, I think...

>> Yeah.

>> Oh, were you asking Matt?

>> I didn't mean to --

>> No, sorry. Go ahead.

[Laughter]

>> Yeah.

>> So, I think that could be water conservation.

>> Okay.

>> It could be anything related to the work of the energy efficiency improvement it is included in the 70.

>> Yup.

>> What we realize is that when you are doing an improvement, you may want to do other things and so, we are trying to meet the borrower where they are and help provide more comprehensive projects. So, the 30% can be other measures, but it is not fuller.

>> How about like electrical improvements? For example, such as wiring?

>> Yes.

>> Yeah. Moving a wall even or putting in a concrete pad.

>> Okay.

>> That kind of thing. So, think of it -- I think the imprecise way to describe it is things that you need to do in order to get the project done. And I think we can be -- that is a relatively imprecise way to describe it, but it is a relatively imprecise metric to be honest with you.

>> And do you include heat in the energy efficiency category or DG distributed generation category?

>> The solar hot water.

>> Yes.

>> Is not included in this.

>> Right.

>> In this --

>> And so the same thing goes for (Indiscernible) as well?

>> That was a good question.

>> And I think I would personally advocate that would be in the 30. Although, I would have to -- that's a thought -- policy intense, but that is a good idea and I don't see any restrictions.

>> Okay.

>> It would be under discussion. And those types of things, it is like okay, we can't do this, so let's do that. That is part of why we want to have this conversation.

>> And so, your input on things like that is helpful.

>> Great.

>> Yup.

>> (Indiscernible) 70% percent of projects cost more qualified measures that is pretty much in overlap of OBF or am I reading that wrong?

>> OBF is -- I am going to look over at Andrew, who is going to tell me -- or slap me across the room if I am saying the wrong thing, but OBF is pretty much for qualified energy efficiency measures and they don't have that 70/30. It is 100%. It is 100% of the measures financed through OBF need to be essentially, rebate-able, or rebated measures.

>> And I am going to --

>> (Indiscernible) 70%, correct?

>> Correct. Yes. Yes, I'm sorry.

>> And we have a note on the phone --

>> Your question --

>> Folks are having a hard time hearing, so for those in the back if you are asking a question please project --

>> Sure.

>> Pretend that I am over there.

[Laughter]

>> Yeah.

>> Kaitlyn (assumed spelling) from Chinatown Community and I am currently having a lack of imagination if you tell me that EE and solar thermal are not included, do you have a list anywhere of what is?

>> Yes, but it's a very -- so, do we have a list of what is included, so everything that is on a -- on a fairly extensible list of eligible energy efficiency measures. The investor utilities will essentially, rebate or incentivize and such a list exists. I am not an expert on the LIWP program, but there is also, for similarly -- for folks over there and maybe Steph -- how that is listed out -- what the eligibility of measures through LIWP are.

>> There are information windows.

>> Yeah.

>> In addition to (Indiscernible).

>> Yeah, the biggest things with loans is that they do provide support for fuller and the other big distinction is they usually support (Indiscernible) pushing for gas and electric appliances. Other than that, the measure of LIWP eligible efficiency measures are very similar between LIWP and IOU programs for the most part.

>> Mm hmm.

>> But, you can tell especially with factors that are setting the utility bill for the property before the tenant. So, it is shelf measure, gas, water, heating, lighting, and appliances.

>> Yeah.

>> At a high level, but there are lists we would be happy to share with you after this workshop.

>> Yeah. Okay.

>> Could the 30% -- does that cover measures that support energy efficient -- does that cover health and safety issues?

>> Yes.

>> Yes, for those of you that may not be able to hear.

>> Okay.

>> Okay. We are going to move from eligible projects to eligible properties at this point. So, this is what we are proposing here. Long -- and some of these things we have flexibility on and some of them we don’t, and I will try to lay those out. So, every property effected here must -- and this is not something that we have flexibility on -- must receive gas or electric service from one of the investors of the utilities or one of the CCA’s. So, that is kind of a non-negotiable item from our perspective. The property and the project, I guess what’s in the property that has been improved can be either tenant space or common area. This one is more than 20 units. We are not required to do anything more than say five units or more. From a targeting perspective, we are saying more than 20. We have -- this one is maybe not surprising in the world that we live in here that covers deed restrictions are requiring us to keep the rent affordable and have income qualifying households that occupy at least, 50% of the units, and so on. This is kind of the -- last two are the affordability elements. The middle one with 20 units, that is more of a targeting of specific properties and specific types of space within those properties. And of course, the key thing is they have to be IOU; receive electrical or gas service to become IOU or CCA. Sophia --.

>> In terms of deed restrictions, have you thought about (Indiscernible) and rules around that?

>> There aren’t any rules in the PEC decision. So, we would be open and are welcoming input on what you think is an appropriate remaining amount of time. I don't that we are looking at 55 years because that's a different structure than what we have. With a goal of trying to get somebody with a mid-cycle who wants to find a sweet spot.

>> For the low-income, is there a requirement and that would be one option.

>> We are trying to keep things simple where we can.

>> Yup.

[Laughter]

>> Yes.

>> Does PEC have some input on, you know, might have some input on ensuring that the property remains affordable for a longer period? So, there may be stakeholder feedback on that.

>> That's exactly why we are having the workshop. So, yeah that's great now or later. Okay, eligible borrowers, and we went to a larger print here because there is less to say, I guess.

[Laughter]

>> So, the borrower still must be an owner. So, tenants cannot be borrowers and they must be an owner of the property where the energy efficiency measures are installed and also, they may not reside at the property. So, it is fairly straightforward. Any? Okay. Eligible contractors, so people who are actually installing the measures. One, contractors need to be licensed for the work they are performing on the property. They have to have appropriate licenses and permits in that local jurisdiction and we are going to be setting a general liability insurance baseline number. And also, they will allow that CAEATFA will be able to perform an audit of their business records. We are looking at establishing a contractor list and we would be very interested in your input on that whether it is a good idea or bad idea? We understand that contractors and multi-family property owners often have a long-standing relationship of trust. We don't want to get in the middle of that if it is not necessary. And looking at the other options in that same way besides establishing a list. I'm going to pause there because I saw a couple of heads wagging and I would love to get a couple of reactions on these items here, as long as people are engaged.

>> I was one of the people asking --

>> Yeah.

>> And we would like to be able to select contractors that we are comfortable with who have licenses and a proven track record on our kinds of buildings and know these kinds of buildings. So, establishing a contractor list would reduce participation.

>> Thank you. Okay.

>> I think as an in between option, maybe a list of pre-vetted contractors via the program and saying that you are not required to pick the contractors from that list.

>> Uh-huh.

>> Might be a middle ground and also, having performance-based contractors. I don't think there should be restrictions or having certain people off limits.

>> In the comments, we would be interested to hear what you guys think that the performance requirements should be. Let’s really flush that out because we are hearing comments from across the spectrum. So, to get some specific recommendations would be great.

>> Yup. Okay. Next, eligible lenders. Lenders, first of all, we are trying to be fairly broad here. We would like to see, and this is something again, I'm trying to identify areas where we do and do not have flexibility. So, lease providers and financial institutions and finance lenders that can demonstrate at least $20 million of committed capital. That $20 million is not something that is required to have. We do want to see lenders who are creditable, and we would like to have input on whether that is a good number and a good way to --essentially, one way to qualify those lenders. The third item that Deana already mentioned briefly, the lenders do need to, as part of the qualification program, identify as a result of getting the credit enhancement. And they are going to in one way or another improve rates, improve terms, offer better underwriting, or some other benefit. The idea is that in exchange for that credit enhancement that CAEATFA is providing that the lender needs to be able to demonstrate they are providing a benefit to the public and CHEEF is going to review that and have the discussions with those lenders. Finally, the lenders need to be in good standing with all of the appropriate regulatory agencies and laws. And also, be able to provide and commit to monthly reporting to CAEATFA with their portfolio.

>> So, I hope with the slide demonstrates that we are very open about the types of lenders we are participating with such as CDFI or Community Bank. Recently, I was approached to see if we would let a local economic development association with local public dollars enroll and we really want to hear from you guys which lenders you feel comfortable working with in the field. Maybe it is not who we should let in, but who we should keep out.

>> Yeah.

[Laughter]

>> Yeah, and I think Deana's point is a good one. The idea of some amount of committed capital. Our idea there is to essentially filter out, and we don't want to have the what we call "the bad actors," but a way to filter out the lenders who are not meeting the overall goals and not able to represent CAEATFA appropriately.

So, eligible financing terms and eligible financing instruments; we are talking about here loans, leases, and service agreements. Equipment finance agreements are a type of loan, so it is included in there. What are we saying in terms of minimum and maximum financed amounts. By the way, I'm going to pause here. And what I'm talking about here is the eligible financing and this is not necessarily related to what would be credit. And there are going to be different rules that might apply to credit enhancement, but we will get to that in a second. And lenders are welcome to finance whatever amount that they want. And again, we are going to talk about whether there are limits that we would propose for how much CHEEF would ensure or credit enhance. We are not setting a maximum. We are also, not setting a minimum term or maximum financing term. I will -- note here -- importantly the credit enhancement that we will go over later would only be available for 10 years. No minimum or maximum rate. The rates are going to be market-based and we want to be able to accommodate a wide range of borrowers and not predetermine based on artificial determination of rates who is going to qualify. Fixed or variable rates are allowed.

>> I have a quick question, I'm sorry, are we talking about interest rates right now?

>> Yes, interest rates. Yes. Thank you. Security -- a mortgage is actually not something that we are contemplating with credit enhancing through this program. The financing is always going to be either unsecured or we assume equipment secured. We are not setting particular underwriting requirements for this Pilot. There is a Bill Impact Disclosure is essentially, a requirement that says this customer is going to have X energy use; we would assume reduction. And therefore, energy cost reduction as a result of the energy efficiency measures that are installed, right? We would require that the customer receive

would receive what we call a Bill Impact Disclosure as part of the loan documents that are provided. Okay. That disclosure is different from a requirement for build neutrality. There is no requirement for build neutrality. Lenders would be free to offer their own or require their own build neutrality eligibility requirement. Sophia?

>> So, regarding the bill disclosure, are we referring here to meter bill or in other words, the bill the owner is paying for or the impact inside the residences?

>> We -- Go ahead.

>> So, the PEC decision requires that we provide a bill impact estimate and I think that could be a number of different things that would probably be provided as a utility, right? That identifies the -- well, first of all, we have determined that it is not really the bill, but it is the energy savings that will be defined cost out of energy savings and it will most likely -- what is will be provided by the utility or your audit --

>> What the energy savings will be --

>> So, this is just a requirement from the PEC decision and you will see more in the slides, but potentially will not be a problem.

>> Yeah.

>> The reason that I'm bringing this up is with a lot of these properties you are looking at probably three-dozen meters along with different phases and pulling that data together tends to be a very large (Indiscernible).

>> Mm hmm.

>> So, there is trying to narrow down what bills really matter and where you want the investing to happen. If it is a utility that is investing or the property owner, or the city, or another agency. Pulling that information together is very powerful, but still a big challenge at this stage.

>> Great input.

>> Yeah.

>> Okay.

>> Looking at the energy savings and not the cost and if the building is a benchmarking process, if that should be used with the disclosure?

>> That's a good idea and we should look into that. I think it could be. We haven't figured out to incorporate
that into this particular provision. The question is if the building went through a benchmarking process, if that should be used with the disclosure? And the answer is it sounds like it. We are going to have to look into that a little bit more, but yeah.

>> Yeah. That's terrific input for us on what that bill impact disclosure is going to look like.

>> (Indiscernible) PG&E and adding the particular element, which is energy efficiency improvements may actually, decrease their use of energy because of housing costs and that sort of thing. So, this is going to be a challenging concept, I think, to figure out.

>> Yeah. My guess is that we may need to fall back on the piece of data that it is valued at what it is valued at. I said there would be a be lot of caveats in the final assessment.

>> Yeah. One of the things, if you look at the evolution of this bill impact disclosure requirement, is that it is tied to the build neutrality agreement or the lack there of. And so, the idea if you go back far enough is that well, PEC is not going to require a bill neutrality requirement, but we do want to have some type of disclosure. What that looks like is going to be an interesting discussion and we had the same discussion in the residential sector. So, everybody's input is terrific here.

>> Stay tuned.

>> Indeed. Okay. We have been doing questions and comments. We have moved along. I think we are doing okay on time though. I am just going to continue. I can pause a little more and see if there are other comments, but also, if you have thoughts. Again, this is not your last bite at the apple, but if you have thoughts as you look at these questions, we would certainly welcome any responses here.

>> And I will be providing contacts for the first few questions. We have gotten a lot of feedback. Well, you know, doing the retrofits on the affordable multi-family projects were so expensive and given the needs of the market, we typically, don’t even do projects prior to the IOU rebates and incentive programs. Any project is going to go through that pathway. So, one of the questions that we have is, is having multiple pathways feasible -

to be able to go through LIWP or IOU rebate or to have another pathway. Maybe developers don't want to put in the time to go through the IOU rebate and incentive process? I have great respect for my brethren who have IOU's, but that process is complex and time consuming. So, perhaps, doing it with your own pathway through ASHRAE II Audit or the ICT may be more effective. We are happy to build this if there is a market need, but if you told me today there is no market need, then we would just simplify the program. And there is a market need. There are contacts for that one. I think the other interesting thing is whether we just have a list of eligible measures? So, is there a need to be able to finance some reactive measure? Is this something that burns out and it is not working anymore, and you don't know what to do about it. You don't want to go through the rebate program and you just want something like a reactive measure. Is that useful in this market? Is that a gap that we can help fill?

>> So, if you were asking about -- what are we financing, right? So, we are kind of asking you back now --

[Laughter]

>> In a sense and just how -- what would you like to see financed when you do projects or think about projects like this? Do you only think about them in the context of geez, I have a rebate, or I have an incentive, or I've done or participated in the LIWP program, or do you actually, operate outside the contexts of those programs? And would it be useful for us to do so, as well?

>> And this program will allow to be quite honest (Indiscernible).

>> Yeah.

>> We do have a question.

>> Yup.

>> Sorry. I think you were going to --

>> Well, I was, but I didn't quite understand what you said. I'm sorry.

>> So, for the PB program they do you allow projects on and off. We have a way to (Indiscernible).

>> So, I think I'm getting -- I'm kind of getting hung up on the fact that we can't do PB.

[Laughter]

>> I’m sorry, I am not laughing at you. I'm laughing with you because I understand.

[Laughter]

>> Okay. So, we have done -- we kind of think of these things as our small interventions and large interventions. The smallest one seems to be the one we have done with the weatherization program through and we say REN for things like lighting and boilers, but the big-ticket item always are the solar thermal projects and we have done -- we are in the midst of three of the solar thermal projects. And the payback time on those is about seven years. So, in my mind, they were really great candidates for this sort of financing. Also, we would like to be able to look at the building restrictively and not have to default into this program. And I thought that the great thing about the program is that we would be able to decide how to approach energy efficiency in our building, and if we would showed that it reduced use then it was going to be eligible. I'm a little surprised, but that is just because I don't get acronyms that I didn't get before. It feels like there is an opportunity here to uncomplicate and it is not happening for us.

>> I love that you have brought this up. It is a constant challenge in the California marketplace that we have these artificial silos and so I'm sympathetic and I am also, powerless on this one.

>> (Indiscernible)

>> But we have folks in the room who need to hear this feedback, so that maybe we can breakdown some of those artificial barriers.

>> Okay.

>> I am going to point to Andrew about the (Indiscernible) program solar thermal is included in that program. Is that correct, Peter?

>> No.

>> Oh, it can’t okay.

>> (indiscernible).

>> So, that is my ignorance. So, we need to fill a gap that is not.

>> Yeah, it is not. So, the solar thermal pilot has had an interesting road and I think, at this point, solar thermal can be financed. It cannot be credit enhanced. So, that's a new one for us to work with on our lenders. We are trying to be as flexible as possible and CAEATFA just got some new flexibility from the Public Utilities Commission, and we might be able to work that into our new authority.
>> And just to clarify to your answer I am being ruled off my confidence at all. Provide it and tell me I am way out of line, but part of the reason we are structuring this the way we are is that they want to ensure the property is matching all the efficiency options before you start looking at other sources of energy. Not that they will have every single opportunity available, but there is an order that we are looking at to see if energy efficiency (Indiscernible). So, there might be a case for the longer-term perspective, in terms of advocacy and demonstrate that it is done at (Indiscernible) percent. That is where you might be able to make the case that it is done at (Indiscernible) percent, but we want to prevent just going for the easy option here and I see that you guys don't do, but that is a policy context here.
>> Part of the issue, and we have heard it so much and that we just follow with that's the way it goes. Someone puts money out for a rebate program and it is not necessarily the best timing for us, yeah.
>> Understood. This is not easy or simple and that's where we want it.
>> And CAEATFA might not fit into any program and there is a development of our organization that wants to do these projects whether or not they produce savings. In the sense that if we can reduce our carbon footprint, that's enough of an incentive. So --
>> Then they actually fit in. Keep in mind, there is not a requirement in what CAEATFA is putting together that you have a build neutral project, right? So, it doesn't have to provide savings.
>> Well, it doesn't have to be bill neutral.
>> Correct.
>> We have every intent that it does.
>> Thank you. Yes.

>> We are doing this for energy.

>> Yes.

>> We did have one question here: any issues, discomfort with, or limitation on ownership of equipment under a service agreement?

>> My answer is no.

>> I think I lost it.

>> From Charles Ward, do we have any issues, problems, or limitation on ownership with service agreements?

>> Can I provide an example?

>> Yeah. So, commonly laundry is used by a third party   It cannot be wrapped into the financing.

>> (Indiscernible).

[Laughter]

>> You know --

>> So, you might have to pay to operate the machine to work efficient --

>> Yeah.

>> And update the lease agreement.

>> I think that we need to take that as something that we need to look at.

>> Yeah.

>> It sounds like an opportunity that we don't want to lose, but...

>> It also sounds complicated.

>> It sounds like a good working group.

>> Yes. And if I could let me just respond to Charlie's question, I think -- if I am responding appropriately, CAEATFA does not have a problem with a third party owning the equipment that are -- that -- energy efficiency equipment that is installed and housed and hosted in an affordable housing property. That is not a problem.

>> We think that model will work well for the affordable multi-family structure.

>> Yup. So, Charlie, I don’t know if that answered your question.

>> I would kind of like to wait until we get through the whole presentation, but our portfolio and my analysis of it in preparing to come here, might have a lot of illumination of different issues in terms of the size and building density, and the way things are structured, and what kind of market would be left out given the current design of the program.

>> Mm hmm.

>> For instance, our portfolio is almost entirely in Alameda and Contra Costa County and more so, west of the hills than east of the hills more or less. And along with 57 properties, we have five that are in LIWP and on track. Some are new, so they don't need to be rehabbed and the ones that aren't, don't fit for a number of different reasons, so that's not a pathway that we would be able to use.

>> Mm hmm.

>> We do have one HUD property and it is going through an upgrade of $30,000, which is nice and starting this week. And then whether the utilities are billed to the tenants or the owner make a huge difference, so it might be master metered for water and gas but not for electricity. It is good that this program is open to all of that, but the kind of savings that we might realize and what our overall operating expenses are for gas and electricity versus water and sewer is very illuminating. But, I don’t want to get into that now, but it is something I keep thinking of in the different discussion questions listed with all the measures. Yeah, we want to do lighting etc., etc. So, we have often done a lot of the easier things; the lower hanging fruit, but we can never get any money to do windows. Windows take a long time on the payback, but they make a huge difference to the residents. And so, if there would be a way to do windows and not have to cough up money for it, boy, that would be wonderful.

>> So, again the intent is to include windows and like with anything there would be financing on it, but no cash in hand.

>> Some of the pathway points that came up at times with the solar and thermal, as well. So, we didn’t raise this before because we didn’t know the AB-693 decision. The current

draft of the decision -- the intent is to provide -- for the program to provide technical assistance for energy efficiency providing the potentially additional --

>> Steph -- I'm worried that people -- I'm hope that people can hear, but if you wouldn't mind coming forward two steps --

[Laughter]

>> That would be great.

>> So, the proposed decision for the AB-693 Solar Program indicates that there could be an additional pathway to this program. If the program administrator does -- if the decision goes through with the program administrator providing technical assistance on energy efficiency, it could be a way to get at an additional pathway. Especially, for those who are not in disadvantaged communities.

>> Yeah.

>> And therefore, cannot access the weatherization program where there may not be funds left for an Energy Free for California Pilot Program where -- and other locations, right? So, there, that has been that gap and the other piece that came up around where do we get the solar funding? And so, to the extent that the dream of a lot of policymakers have always been that solar is going to bring people into energy efficiency. And to the extent that you can be part of that conversation of what would that streamline pathway look like? And how would you make -- how would that -- how would those two programs fit together? I think that would be really ideal from a participation perspective.

>> And Stephanie, I'm not familiar with that particular effort, mostly because we have had our head down trying to get some work done. What do you think the time line is for that effort if you could guess or estimate? 12 months from now? 24 months from now?

>>So, we are owed a final decision by the end of the year. I think the vote -- the last of the year I think it's -- by the PEC is December 14th if my memory is correct. Others may hear me and correct me as well. In terms of the actual launch -- the launch date of the program and when the funds are going to be available and the technical assistance will be available --, it is not currently in the proposed decision. It is something that a lot of us

are interested in nailing down what exactly is the timeframe for launch. So, you know, we can guess from there.

>> Yep.

>> I already have my answer, which is a little unknown.

>> That was very helpful. Is there anybody else with questions, comments, or thoughts? This is terrific.

>> In the next section, we are talking about the credit enhancement overview and this is targeted more to our lenders on the line of what that credit enhancement looks like. Of course, it is open, but I recognize there are more than lenders on the phone then others.

>> And so, the structure here and what we are proposing here is a loss reserve structure that relies on providing a credit enhancement essentially, loan insurance that is available to the lender after the point of charge-off after the lender has written off the loan. That's the basic structure. We have talked about the potential for using a different structure or more of a Debt Service Reserve structure, which would keep the loan current. And we have a question later on that we can maybe address about the value of the Debt Service Reserve versus the loss reserve. We have a loss reserve and the loss reserve is available for up to 10 years. If the lender has a 15-year loan that's fine, but the loss reserve will be available for 10 years. Okay. We recognize that in many cases that may keep the loans to a 10-year tenure, but that's how we have it structured, and we are open to input. Yes?

>> Would it have to be the first 10 years? Could it be the last 10 years?

>> It could be the last 10 years.

>> That's a good idea.

>> Well, there is nothing in anything that we have that says whether it is the first or the last. So, that’s okay.

>> I think that what it does do is add the long-term administrative costs to The Pilot. And so, under context, that these are pilots that the PEC is going to be evaluating and CAEATFA is going to be supporting the loans over the life of the loan. So, one of the ideas is that if we limited it to 10 years, there could be savings of the cost. I think my

question would be if we did the last 10 years, which I definitely see there being a need for this particular market, What would the maximum long-term loan look like?

>> Right.

>> Fast forward it is probably 15, maybe?

>> I think that one of the things --, there is a variety of things that go into this decision, and one of which Deana mentioned is the administrative, and what is necessary to administer the program? If we have a 20-year loan, essentially, that means 10 years from now, after we are all doing whatever we are doing. At that point, yeah.

[Laughter]

>> At that point, then CAEATFA will essentially be kind of more actively monitoring. So, we won't go into detail, but that's a point that we are going to take a look at. Loss reserve amount., I'm going to go into this in just a minute on how this works. The 15% in a contribution to a lender reserve account with a maximum coverage of a million dollars for this enrolled loan amount, right? Again, I'm going to go into this in a second, so rather than spend time --

>> So, for clarification, the loan amount is a million dollars, not the credit enhancement.

>> Yup. Yup. The loss coverage is 90% of the outstanding principal balance. We are not covering the interest. Prefunding. We will talk about how this works, but essentially, the first two projects that any single lender enrolled would essentially be double credit enhanced. We are going to talk about that in a second. Credit enhancement basis again the enrolled loan could be up to a million dollars, but there is no distributive generation allowed in that loan amount. So, I have thrown a lot at you. Let me just give it to you in the form of an example. Oops. That was supposed to all right -- okay.

[Laughter]

>> That was supposed to go up just a bit, bit-by-bit. Let me check one thing. No. Okay. So, ignore, if you will --

[Laughter]

>> Everything under 2 and 3, and just assume - what we've got here is we are assuming that in year 2018, we have a single project that a lender has originated -- enrolled, and

that project is a $100,000 project. In that first year, what is going to happen is there will be a 15% contribution to the loss reserve times two because we have this buy-one-get-one and the doubling of that loss reserve. And for the first two loans, we put $30,000 into that lender's reserve account. It sits there and that's where it sits with the loss reserve balance with that $30,000 contribution at the end of year one or during year one is $30,000. Now, we move to year two. In year two, the lender does two loans, both again for $100,000. For one of those -- for the first of those two loans, we are putting in an additional $30,000 which is 15% times two, and we are putting in $15,000 because now, this lender is on its third loan and we are no longer at double credit enhancing. So, at the end of the second year, the lender’s balance sitting in its loss reserve account again, not going to that the lender is $75,000, right? Year three, we assume there has been a charge-off of $60,000. One of those loans has gone bad, right? We will pay 90% of $60,000, right? So, $54,000 and that reduces the lender's balance in the reserve account of $75,000. So, $75,000 minus $54,000 is $21,000, right? So, that's kind of how that loss reserve works. For every project that is enrolled, CAEATFA puts in, except for the first two, puts in 15% of the value of that project. As there are charge-offs, CAEATFA will pay 90% of that outstanding principal balance. Okay. Always based on the amount that is sitting in that lender's reserve account. The reason for the doubling is that we want to make sure it is more likely at the beginning -- in the early stages, there is actually a sufficient balance in that lender's reserve account to actually be able to compensate the lender for charge-offs. Any questions on kind of how that works? Let me know if there is --

>> Nope.

>> Okay. Let me see. In terms of the process for enrollment, what is going to happen is that the -- excuse me -- the lender -- first of all, there is a preapproval process. So, the lender may seek preapproval of the -- of its loss reserve amount. And there are different pathways to do that. For example, that lender, excuse me, if that project is going through the LIWP program and there is a reservation letter for a rebate through the LIWP program, that reservation letter is sufficient to create a reservation of that loss reserve.

Okay, and that loss reservation approval is provided, and the lender has 180 days to submit a completed project enrollment to CAEATFA. And then, we go through the actual process of enrolling that loan after that preapproval. That's profits. Documentation, this gives a sense for how that documentation is going to look we will look at various points for different types of documentation alone enrollment form, with essentially, various types of key characteristics of the project. A certificate of completion so we are not going to fund that loss reserve in a final basis, until we have that certificate of completion and an itemized invoice showing the actual measures that have been installed and the various documentation forms regarding privacy, and a current within 60 days investor utility bill. So, that's kind of a more process-based slide that would be all laid out in regulations at a later date. So, pausing here for any questions, and maybe anybody in the room, but the lenders who might have questions. Okay, Deana. I'm going to turn this over to you again for the technical assistance focus and what we are going to do here is we have a couple of very quick slides talking about the technical assistance and we would like to get your input. And then, we are going to talk briefly about on-bill repayment. And then, we will continue the discussion and wrap up after that.

>> Great. So, technical assistance. So, as many of you know or may know, investor and utilities are all working on identifying subject matter experts or single points of contact Sorry, wrong acronym or SPOC. Yeah, it is a new frontier. So, all IOU's will have single points of contact for their program -- for the multi-family programs. When the decision first came out, in 2012, so this goes with the point of how long does it take to get the program launched or to get to the center of a tootsie pop. When the decision first came out, it contemplated the IOU's providing technical assistance to various developers. I think, at the time, the technical assistance would have been considered to be potentially audits and each of the IOU's had brought some of that funding internally to provide that service. As the pilots have been rolled out, the multi-family pilot has been delayed. And so, we know the PEC tends to not have technical assistance, but technical assistance is important for this market and what we don't know is what should it look like? So, now, we are four years later, and the industry has changed a little bit and the programs have

changed a little bit. What are the gaps? For this industry, what type of technical assistance do you think is needed? We don't have a clear budget on this right now. So, what we really want to do is hear what the need is. And once we hear what the need is, then we can figure out if we have the capacity to accommodate in our draft. That's kind of the background of the technical assistance and we think that it can come in a bunch of different forms, but again, we wanted to hear from the developers directly of today okay. What is the need? This is the part that I have been waiting for.

[Laughter]

>> So, I was in TA and previously a helper with this so, I'm going to put on my developer hat for a minute. One of the useful things, as far as TA would be dealing with the entire portfolio of the building and having someone who can prioritize where to focus on and then the next step would be to doing the audit on those building to see what the feedback would be and if they have good feedback that is actually accessible. So, whether that would actually be provided by this program or whether you would be able to follow the cost of that up in the financing is another question, but I think the gap has to be addressed because the builders are not going to have someone who is going to be able to devote enough time to doing that stuff.

>> So, what that would mean, and I want to make sure that I am hearing you, it would be getting your list of properties, knowing that their addresses are and their energy use, and the number of residents to see if that is a high energy use or not.

>> The system, yeah.

>> Getting a list of their systems.

>> Generally, a --

>> Yeah.

>> New portfolio. And then, the prioritization of that.

>> And is the provision of the audit, is that a tough one amongst all the other programs right now? I mean is anyone giving -- are audits being provided in other programs right now or is that a need?

>> There are audits being done in the early stage say for like the LIWP project or the savings project. I mean, for the TA program, we would go to the building and do an audit and write a report for what should be done. I am sure... but if we are looking at building this in a way that someone could leverage it and they are not going through LIWP --

>> Mm hmm.

>> Then, being able to provide a detailed audit of that building. It can be kind of an extensive gap if you have not gone through a program already.

>> Yup. And also, if you don't have that, then you rely on vendors which can be (Indiscernible).

>> Can you say the last part again?

>> It is how we get our solar thermal; all those estimates were from our vendors.

>> Mm hmm. Who actually installed the project.

>> Yeah.

>> Yeah.

>> I have a couple of questions and comments here. Regarding pathways, would projects that have an IOU and who are LIWP programs that are receiving Low-Income Housing Tax Credit for example, would CTOP be eligible, since they are required to have an energy efficiency target?

>> So, the short answer is yes. We want to provide an avenue for developers, for property owners to participate outside of the IOU rebate incentive pathway. The proposal is to do that through ASHRAE II audits either in the private market or --

>> The ICP.

>> The Investor Confidence Project for those who are aware of that. The different option that PG&E uses in its territory. We thought we could just leverage some of those consistencies. Is there any other questions regarding technical assistance?

>> No, but I have some comments here. From the perspective of an ESA investor, we have seen the audit as a roadblock especially, if you need ASHRAE II as standard eligibility. So, technical assistance on this would be very helpful. It is also very helpful for being able to evaluate the project as an investor.

>> So, if I understood that, the ASHRAE II Audit is a roadblock, but it's helpful. Is that what I heard? Is that what you guys heard?

Maybe technical assistance would help to alleviate the roadblock.

>> Yeah.

>> Of the subsite, yeah.

>> Okay.

>> Okay.

>> any other thoughts in the room on technical assistance and gap?

>> I am speaking on behalf of a design manager and he brought this up and what is going to work with us because even working with our investors and having something for the customer to look at because even for them it is hard for them to comprehend.

>> That would be your equity investors under (Indiscernible)?

>> And lenders.

>> And lenders.

>> And lenders.

>> So, essentially, helping to prepare a package almost to help those lenders understand what is happening in the building. Yes, there are energy savings and cost savings and so on. So, yeah. I see literally, a thumbs up.

[Laughter]

>> (Indiscernible).

>> A need to support the overall capital, and staff, and design. By that I mean, you know, a lot of these projects will have -- I am assuming there is going to be competition between OBF and CAEATFA financing, and there may be a blend of them, and there are also, probably will be rebates involved on top of that. The tax incentives come into play. And then, you have got the whole world of financing distribution.   Which I agree will probably always be a question on these projects. Is there a need for someone who knows sort of that broad landscape? It is not necessarily an energy issue or an accounting --

>> It's a rotation --

>> It is an engineering issue.

>> You had me at facilitation and then, you went to accounting and engineering.

>> Sorry.

>> So no, no....

[Laughter]

>> I think that could be a possibility. I am trying to figure out how to provide technical assistance statewide. Also, what is the gap and how do we implement it? It is definitely worth exploring. I do want to just piggy back on the competition with on-bill financing. So, on-bill financing is a 0% loan with a utilities capital and I'm very glad they are out in the market doing that. I would say what we are trying to do is fill a gap where that doesn't work for folks. And if you are from the affordable multi-family project, my guess is a 0% loan sounds pretty good if you can actually take on the debt. I think that OBF also provides -- supports energy service agreements?

>> Um.

>> Maybe.

>> Really?

>> Not really. Okay. So, there is a gap that we can fill. So, I don't know if I see it necessarily as competition, as much as each borrower is going to have its own constraints, which goes back to your comment of how unique the capitol stack is for each multi-family project and why we would need someone to help navigate that.

>> A multi-family rider for neutrality and any project (Indiscernible).

>> Yeah.

>> I'm under the impression that this loan is more generous in terms of covering shelf measures like windows and according to those (Indiscernible) that qualify margin (Indiscernible).

>> Again, we are going to look at advocating and something that you may not be able to pull your financing through a gap and you can have 0% financing through a gap (Indiscernible).

>> And he spoke about all utilities, right? You are required to receive the rebate.

>> The rebate for Southern California Utility, you have to receive a rebate to qualify for the OBF program whereas --.

>> It is just like for windows, we couldn't qualify for the zone because we don't qualify for the rebates.

>> You can't even register for them through OBF. Can you? Am I mistaken on that?

>> It doesn't cover the tax shelf measures.

>> It is for homes that require neutrality. So, in many cases, you have a project for windows there will only be a (Indiscernible) for (Indiscernible) it is a way to use (Indiscernible) and get the best deal as far as the development.

>> You can always share rebates with the OBF (Indiscernible).

>> It is just extremely harder to qualify for OBF or Multi-Family Affordable Housing. There is where an affordable finance project could come in and fill that gap.

>> Is that (Indiscernible) perspective or is that the general OBF market?

>> I think that it is a general assumption, not assumption, but...

>> An observation.

>> Observation. And it is difficult, we can only fund common area measures. We can't fund anything in unit measures like your clothes washer in your apartment or...

>> The developer is ESA, right?

>> Right.

>> That's common area measures. I thought they increased the limit on OBF match and made it (Indiscernible) for applicants per meter?

>> So...

>> So, this a low-income decision. I think from March, increased the loan term for Multi-Family Affordable Housing to $250,000 with a loan term up to 10 years. So, that increases, but it still requires you to apply for the IOU rebate. At least, for the southern utilities and it also requires you to (Indiscernible). So --

>> That ASHRAE II Audit is looking really good about now, right?

[Laughter]

>> I don't know where 3 million came from. Yeah, it is up to $250,000.

>> It is $250,000 (Indiscernible).

So, that is the piece that you need and that piece you need tends to be higher in the common area I thought.

>> You need a common area measure. The non-requirement of the common area measure.

>> Okay, thank you.

>> Can we go back to Mary’s example where the gap is paid by the property? And I want to see if the gap is paid by the property and assuming those are gas heaters in the units, could the windows be because they are showing up as bill neutral on the property? To me that given the flexibility of the OBF program, then could we qualify for the windows. Or am I off base?

>> Yeah, the idea is that we can tie it together and fully fund the project.

>> Right, okay.

>> The idea is that is not bill neutral and you can add the two together and fully fund the project.

>> Yeah.

>> It is okay if you add them together.

>> Right, and gentlemen, thanks because that helped me understand the difference. I think a lot of it comes down to, is it master metered, or what is paid for by the property itself. I think that is the biggest barrier between OBF and what CAEATFA is offering.

>> Yeah. We do have a few comments online that I want to try and summarize. One is that the ASHRAE II Audit is robust and essential and helpful. I am assuming that means someone to pay for the ASHRAE II Audit or to wrap it up or provide it. There is another comment by Josh Ferguson. As an Asset Manager, there are so many different areas where you are supposed to know and keep with the details of the projects and what is needed from us. Assuming that we can have a contact person who can not only help us prioritize the work, but also, be easy to access and determine what we don’t know is key. So, that goes back to the single point of contact potentially. Audits are not our problem, so as long as what is desired is laid out before they start, and they work with you at

utilizing the same documents and requirements as someone like (Indiscernible). Yeah, that makes a lot of sense. Any other comments on technical assistance?

>> I think PG&E has a good program with large integrated audits for their commercial accounts (Indiscernible) programs and basically direct engineers and they call for field assessment. They call it the ASHRAE Level II, but really, it is somewhere in between.

[Laughter]

>> 1.5.

>> Yeah, they only do the energy portion, but from there, I think that it would be cool for the initiative where basically, someone can go to the site and because it is someone that PG&E contracts with, they are already familiar with the various programs and are able to direct them or at the point the account manager takes over, and can also do that, and take initiative, but I think that is how -- when -- several years ago, when the Commercial Code was being pushed heavily, that's how PG&E got a number of properties with their program.

>> So, Peter, I'm going to ask you a question on that one, is there a silo between the large integrated commercial and affordable multi-family? It sounds like --

>> No, we have to go through this box.

>> Yeah.

>> This box is bringing together all of the programs which everyone uses. We do have all of the opportunities, as well as plans, and we will be offering various programs. There will also be more available.

>> Okay.

>> You know, I was curious, and Seth, I'm not an expert on LIWP, but I will try it. When you or maybe the – whether we are interested in finding ways to kind of integrate the technical assistance and LIWP. I think what I heard from you was that there was -- LIWP was helpful, but there was a gap. I am not understanding where that gap was. Maybe is it kind of geographic gap that is at work here?

>> Yeah.

>> We talked about that --

>> I was thinking you could talk about the geographic gap. Another way to look at it, is if I am using it where LIWP programs are available and there is funding, LIWP would be worthwhile to do this financing on top of it. (Indiscernible) dollars, right? Is it identifying LIWP and will there be enough ASHRAE funds. And they are affordable and now, you know people who are in line for energy efficiency with solar and specifically, for energy efficiency and solar, right, so that's -- and then, you don't see everyone who is that (Indiscernible).

>> That's helpful. So, important.

>> Okay, I feel like we addressed a lot of these questions. And I have identified a few more. Any other comments or discussion on technical assistance? Okay, think about it some more. We would love to get your comments. I'm going to talk a little bit about on-bill repayment. So, why on-bill repayment? So, one of the structures that the PEC authorized is on-bill repayment for borrowers. It is very convenient for borrowers especially, if there is bill neutrality. Then you can see your payments and the savings right there. From what we have seen from other programs from across the nation, there is a low default rate for finance equity. And I am actually going to put a disclaimer. I think there is a low charge-off. The delinquency rate could be a little higher, but the ultimate charge-off and default rate is lower. So, that's kind of an interesting characteristic. There is no disconnection for nonpayment for the affordable multi-family market. So, that is another characteristic of on-bill repayment for affordable multi-family. And as we noted before, utility OBF has successive -- we really want to -- desire -- we want to test the feasibility for the private cap.

So, CAEATFA has been working on developing the on-bill repayment infrastructure concurrently as it has been developing the other three pilots. So, the IT development work has been happening between the IOU’s and our master servicer, which is Concord Servicing. And we are in the process right now of mapping the other side of the bridge between the master servicers and the lenders. We anticipate that will probably be Q2. Next quarter, but CAEATFA has some staff and resources -- resource constraints right now, so we are bringing on some additional staff to help in that capacity. So, we anticipate the Public OB Lender Workshop to be -- I am guessing in Q3, at this time. We are waiting for some additional development. So, we will be launching this program before we develop the on-bill repayment infrastructure. We don't want to hold off and wait for that infrastructure. We are going to go ahead and move forward with direct bill. So, that is my update for on-bill repayment. What I would like to hear from you today is, I know, we have some lenders on the phone and some live developers here, what does OBR do for you? As a housing developer, is it something that interests you? Is it something that you would rather have off-bill? And there was a great pilot that PHC did and it was about gap and territory with on-bill repayment. I know some developers have felt that if you are paying for the utility bill, then it is more like a service and less like debt. That might help with the complexity of this capital stack. This is really kind of an opportunity to refresh a little bit. Is OBR attractive?

>> Yes, I would say for me, it is a huge attraction for OBR because it does not walk, talk, and smell like debt. And it is inextricably linked in my mind and not having to get legal approval to go ahead and do it. That was the way it was back in the brain damage stage.

[Laughter]

>> When all of this stuff started.

>> Right.

>> I mean, you had to go through ridiculous things, such as individual household income recertification for pro-scripted (Indiscernible) measures. No, thank you. We did it, but we don't want to do it anymore. We have come a long way since then and OBR is a huge step forward in that regard.

>> So, what I am hearing is that OBR will help you do more projects?

>> Yes.

>> Okay.

>> And just to clarify is OBR at unit level and it is not restricted to (Indiscernible).

>> So, OBR will --

>> (Indiscernible).

>> Yeah. So, we asked the PEC to give us some flexibility and be able to launch The Pilot without being just restricted to OBR. So, to be able to provide an off-bill were could do tenants areas non-master meters. I think on-bill repayment is going to have some more restrictions then what we have provided here. I think it may be limited to master metered and we are going to have to deal with some technical issues on the bills and the meters. As you mentioned, a lot of the units have I don't know, a dozen bills, so it will take -- it will be a different shape and a different form. It may just be limited to common areas.

>> How are you defining common areas?

>> I haven't yet.

>> Okay.

>> So, actually, I am going to go over there. You -- how are you defining common areas?

>> We will require that the common areas that are open areas that do not impact the individual units.

>> I would love for CAEATFA to have that flexibility. So, I will walk like I have that flexibility, until someone tells me that I don't.

[Laughter]

>> And part of the initial constraints about the on-bill repayment and the IOU concern and being a direct borrower to a business versus a resident. Now that CAEATFA has more authority under the decision, then we may be able to push that flexibility. My guess is it will look a little different, potentially. How about any lenders on the phone? Anyone want to chime in on the on-bill repayment? Not yet?

>> Not yet.

>> Okay.

>> So, if I recall we had a couple of lender questions that we deferred earlier.

>> Yeah.

>> But, I don't know.

>> I think we touched upon them. So, next steps. We are having this workshop today on program structure and we would love to get your comments by December 1st. And then, we are going to schedule some one-on-one meetings and do some follow-up a to make sure that we understand everyone's perspective. If you have provided verbal comments to us today, then I would really appreciate you writing that down and submitting that to us in writing because we took some notes, but no one says it like you do. So, just to make sure that we got it right. And then, after we finish some of our program development research because we kind of work one-on-one with both, then we will talk about the different portfolios and the gaps. There were a number of issues that were raised today that we want to continue to dive into. We will be developing regulations and that will be in Q2 of 2018. So, this will be a little bit of a process and we are expecting that we will be able to enroll lenders in Q3 or Q4. Now, my goal will be to accelerate the pie table. My experience tells me that I might need to add a quarter on the other end, but full transparency in the next steps in the process.

So, CAEATFA is a state agency and we do have a regulatory making process. This is kind of an informal process before we get to those regulations, so that we can get it right the first time and not have to do it in regulation because I know how much you guy love reading regulations. Okay. So, again, I'm Deana Carrillo and this is Matthew Brown and we have been the leads to-date on the multi-family pilot and we are bringing up some more resources and so, we hope to have those in place soon. In the meantime, if you could send your comments to thecheef@treasurer.ca.gov we will be taking those, and December 1st is our goal date for getting those initial comments. This PowerPoint slide is also provided on our website if you need reference to it. And, what am I missing? Am I missing anything? Yeah, I think I am and that is thank you, but before I say thank you, we will open it up for any other questions or comments. Yes?

>> I was asked to come today by a wonderful person at PG&E. I wanted to share what I prepared for the folks here regarding the Resources for Community Development Portfolio and how much recent activity that we might have for this program and our properties. We have been around since the early 1980s. We have a combination of

properties from very small to about 130 units and very small, meaning six. And some of our very small properties are serving people with special needs, people with HIV diagnosis, and folks with other kinds of disabilities stay there. We have SRO, single-room occupancy. We have apartments for small households and large households. We have acquisition rehab that goes back to 133 years ago in West Oak Glen. 100 years ago, in Downtown Oakland and stuff from the ‘70s or the ‘60s in Contra Costa County. So, in one sense, sort of all over the map. At the time that I put together my information about utility costs in our portfolio, it was June of last year. So, I looked at our portfolio at that time, and 6 years -- 6 months of utility costs. We had 54 properties at that time, 17 of them are smaller than 20 units, so that only leaves 37 properties potentially eligible for this program. Of our 54 properties, 17 are in Contra Costa County, 36 are in Alameda County, and one in Solano County. Our Alameda County properties are basically, west of the hills, so they don't need A/C. More than half of the Contra Costa counties are in hotter areas, so we need air-conditioning. We have dense urban single-family properties. We have low dense group of fourplexes in Antioch. So, what each property has and what each property needs varies quite a lot. The campus-style properties are multi-building properties and often load the utility costs onto the residents, which means what we are left to pay for can be relatively small. Of our 11 campus-style multi-building properties, all of them have below average energy costs. For our entire portfolio, the electricity and gas proportion of total operating expenses averages 5.2%. So, all of our campus-style properties are below that, and they range from .1% to 4.4% of operating expenses and nine of them are below 3%. None of these have solar thermal. For the properties that have above average energy, there is 19 of them. Seven of them are too small; under 20 units. Three of them are due for a rehab anyway in the next couple of quarters. And one, which I mentioned is having a comprehensive water and energy retrofit this month in Berkeley. That leaves six others. Six large ones that might be potential candidates for this program. One of them has two pools in Concord. Two of them were completed in the last two years and aren’t likely to need a thing. So, three are left as potential candidates for consideration of the pilot program and they are in Emeryville, downtown

Oakland, and downtown Berkeley. So, that's a very small geography. They are not in likely disadvantaged area communities and it is really frustrating because we thought for quite a long time that one of our East Oakland properties -- it was (Indiscernible) and it had 24 units and a huge financial need. It is across the street from a DAK. It is at 6000 International, if it were 6001 International Boulevard it would qualify. We are literally, on the wrong side of the street. Another property in downtown Oakland is around the corner from being LIWP eligible and these things are intensely frustrating for asset managers like myself. So, the candidates are not our neediest properties. And they are only master metered for water and gas and at least, one of them has solar thermal on the roof. On the other hand, water and sewer are virtually entirely paid by the owner. The average water and sewer cost is proportionately operating at 8.9%.

So, if you are asking me, where do I want to put my time, energy, and resources? It would be conserving water and reduce our sewer costs. Quite a big part of our RCD’s portfolio is in the East Bay (Indiscernible) district geography and in eight (Indiscernible) communities, thank goodness, our sewer costs are tied to our water consumption. That is the way it ought to be. That's the way it is for my two-bedroom house in Berkeley. If I use less water, then I pay less on the sewer. For a huge proportion of many portfolios, we have a separate sanitary district bill to pay. They charge based on units. They don’t charge based on consumption, bedrooms, or per capita. So, we can be as efficient and as miserly as possible on the water intake and we won’t save a cent when it comes to sticker charges. This is a policy arena that folks that know me understand that I am interested in pursuing more. Because the same sanitary sewer district does charge their commercial and investor users based on consumption. They don't charge the multi-families based on consumption. I understand there could be a lot of structural and technical issues on getting these sanitary districts to switch and be able to charge up based on consumption as well, but boy, that would incentivize us to save on the water. Then, there is the whole water and energy mecca. Although, the IOU's in the room, because of other energy companies are not billing us to pump water to our water companies, it is still energy saved. If we can save water, then we are going to save energy. 20% of water -- of energy in California is used to pump transported tree water. So, I would suggest that what you are doing here is great and it is wonderful. It is many, many steps forward from where we started about 12 years ago. For our portfolio, I think that the applicability is small. It could be different for other portfolios. I encourage people to be advocates in their own communities and when it comes to design, zoning, and density. It is so frustrating when we have eight fourplexes. There is one water heater for every four units. There is individual heat in each unit. There are eight roofs and there are lots of envelope and there are windows. And the thing that would make the most difference to residents, in their lives and comforts, would be windows and those are next to impossible to finance. And this property also needs a rehab. And so, cutting the energy bill, which is already there because it is only 3.7% of operating costs. So, you are going to have to pay me to do this. Not just make it free, but you are going to have to pay me to do this because that is not where the best use of our resources is.

So, if we can affect law regulations, and local ordinances, and planning and zoning codes to get additional density onto these existing properties and in the future, to build higher and denser, that will help us. It will help us to be greener from the get go and hopefully, help us retrofit some of these existing properties. We are hoping to acquire a site in Southern Alameda County where there is an opportunity to add new units onto the existing parcels and maybe even go up a story of the existing build. That's ideal. That is where we can reduce our per capita energy consumption a lot, but in our current portfolio, it is challenging to find those properties that will meet the purposes of what you are offering us today or asking us to help you to fine-tune and offer to people throughout the state. So, that's what I wanted to share with folks. It is sobering, but that’s the way it is.

>> Well, this is what I heard.

[Laughter]

I heard that allowing water in the 30% is really important.

>> Yes.

>> Right, if we are just talking about baby steps.

>> Water and irrigation.

>> Yeah.

>> And that the water is heated, so it counts for energy.

>> Yup and that we probably shouldn't put a limit on the size of the units.

>> The number of units of the property and number of units per building. If you cut out the fourplexes, boy, you are cutting out a lot of people in non-urban California.

>> All right. So, those are two areas of influence that this discussion helped frame. I think the other thing that has been reinforced for me is that relying on the IOU, REN rebate, and incentive pathway. Yes, we should leverage to help fill in gaps, but that shouldn't be the only pathway and LIWP isn't the way.

>> One thing I want to add to that is if this was recently done, a REN or other projects should count because if you have already completed it -- because we are trying to reach the low hanging fruit. So, even if we started our pathway, you know, six to 24 months ago. Hopefully, we can still be eligible for this program, as well and initiating goals at the same time.

>> And so to be clear about what we are talking about, we are talking about the ability to access private capital to finance that, right? So, I think if you are on the pathway, but you probably don't need to finance it today.

>> It depends on the site.

>> Right. So, maybe you do. Yeah, and I was going to say that maybe we need a third pathway to be able to do windows.

>> Yeah, so I'm not trying to interrupt. I am not sure if Shavonne (assumed spelling) heard it as well because I was out of the room, but we can do the windows. We should be able to do them. So, let's talk.

[Laughter]

>> Funding is limited, but it is available. And so, the AB-693 program should be coming out any day now. So, let's talk about what your needs are with that property and (Indiscernible) PG&E for disadvantaged communities.

>> Also, note that not -- we are accomplishing things like leveraging multiple money sources. So, LIWP won't be the only upgrade (Indiscernible) program or the (Indiscernible) programs that you need help with OBF. So, yeah, so before we give up --

[Laughter]

>> On the state property that you identified is getting some attention, let's talk about how we can probably work together to make windows and other things happen and feel free to let us know.

>> I just want to go back to one of the things and the discussion that I really wanted to focus on, and that is the number of units per building because in addition to what you mentioned about mapping and the tax, let's say that I have a DAK and I'm eligible for Level 3, which I only have six units in my building (Indiscernible). So, it is very difficult for the smaller buildings to have a large footprint and say not have a large common area like a boiler. 10 units in my building and (Indiscernible) with the boiler (Indiscernible). So, I think that it is even more important for the smaller buildings to be able to access something like this than the larger buildings, which might be counterintuitive.

[Laughter]

>> Also, in terms of funding, all of these funding sources have one way together and the way that we can all think together and the further that the funds can go, as well. I wanted to make sure that if you guys decide to open up pathways, you also are not having the project come through and that the project doesn't pull more than they needed to if they were able to leverage money for a pilot program.

>> That's where technical assistance would really come in handy.

>> I'm offering my help for anyone who needs it. I know that Jodi and Shavonne (assumed spelling) introduced himself and as Peter mentioned, that's part of our job.

[Laughter]

>> So, please use us for that.

>> Great. Thank you very much. Any other final thoughts online?

>> Yes. This person has since left, but he said, as an investor in these projects we are interested in participating in an OBR pilot. The convenience and the lower default rates are of interest and we are interested in seeing how it works and whether it does indeed, provide convenience.

>> All right. Great. I want to thank everyone for your time today. I think this is the first -- well, not the first, an early discussion of many and I appreciate you contributing and being part of the solution, so that we can build something that really works. So, thank you very much. Yeah.

>> Thank you.