

BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

In the Matter of:

DOCKET NO.: UNDOCKETED

INVESTOR-OWNED UTILITY SOLAR
PILOT PROGRAMS.

_____ /



PROCEEDINGS: STAFF WORKSHOP

TAKEN AT THE
INSTANCE OF: The Staff of the Florida
Public Service Commission

DATE: Thursday, March 3, 2011

TIME: Commenced at 9:30 a.m.
Concluded at 2:46 p.m.

PLACE: Betty Easley Conference Center
Hearing Room 148
4075 Esplanade Way
Tallahassee, Florida

REPORTED BY: LINDA BOLES, RPR, CRR
JANE FAUROT, RPR
Official FPSC Reporters
(850) 413-6734/(850) 413-6732

DOCUMENT NUMBER-DATE

01538 MAR-9 =

FLORIDA PUBLIC SERVICE COMMISSION

FPSC-COMMISSION CLERK

PARTICIPATION

1
2 TAMPA ELECTRIC COMPANY:

3 JIM BEASLEY
4 HOWARD BRYANT

5 GULF POWER COMPANY:

6 LONNIE NOACK
7 STEVEN GRIFFIN

8 PROGRESS ENERGY:

9 ARLENE TIBBETTS
10 CHRISTOPHER GILLMAN
11 LEE GUTHRIE
12 LINDA KUSHNER

13 FLORIDA SOLAR ENERGY INDUSTRIES ASSOCIATION:

14 BILL GALLAGHER
15 CHRIS MAINGOT
16 BRUCE KERSHNER
17 SUZANNE BROWNLESS

18 FLORIDA POWER & LIGHT:

19 CHARLIE GUYTON
20 OSCAR GANS
21 WAYNE BESLEY

22 FLORIDA PUBLIC SERVICE COMMISSION:

23 JUDY HARLOW
24 MARK FUTRELL
25 LARRY HARRIS
WALTER CLEMENCE
LEE GILBERT
BOB TRAPP

FLORIDA PUBLIC SERVICE COMMISSION

P R O C E E D I N G S

1
2 **MR. FUTRELL:** Okay. Good morning. We're
3 going to get started with our workshop, and I'd ask our
4 attorney, Larry Harris, to read the notice, please.

5 **MR. HARRIS:** Pursuant to notice published
6 February 11, 2011, this time and place has been set for
7 an undocketed Staff workshop regarding the
8 investor-owned utilities' solar programs.

9 **MR. FUTRELL:** Thank you, Larry. Before I turn
10 things over to Ms. Harlow to kind of run the content to
11 the meeting, I wanted to make a few housekeeping
12 announcements. I'm Mark Futrell with the Staff.
13 Welcome to the Commission and our workshop today.

14 A few things, we are, we have some handouts
15 on the sides here, the agenda and kind of the questions
16 that we put out to try to frame where we want to go
17 with the workshop. We also have a sign-up sheet in the
18 back, so if you'd please sign that so we can have a
19 record of your attendance. We have set up a page on
20 the Commission's website to post the documents that'll
21 be, that have already been sent out and also further
22 documents that we'll be receiving. We're anticipating,
23 we'll have an announcement later about postworkshop
24 comments to provide you an opportunity to provide that
25 to us and we'll be posting those.

1 Our intent at this time is to put together a
2 document summarizing the discussions here today,
3 include with it the postworkshop comments that, if any
4 of you file, put that package together, submit it to
5 our Commissioners as a, as a record of the workshop and
6 the discussions today. We'll also post that document
7 onto the website.

8 We are recording this, this meeting. It's
9 also being transcribed. We're also going out over the
10 Web. So please, if you have comments or questions,
11 come to a mike, identify yourself and the party you're
12 representing. We may have -- one or more Commissioners
13 may be tuning in over the Web possibly or maybe even in
14 the building dialing in, so please keep that in mind.

15 And I will turn it over to Ms. Harlow to kind
16 of get us started. We do want to open with brief, very
17 brief comments from the utilities just to give us a
18 status of where you are in rolling out the programs. I
19 know because of a variety of issues we've kind of had a
20 staggered approval process here and so we're under some
21 different time frames, but we would like to get a sense
22 of, since we're together, where things are as far as
23 getting the programs up and offered to the public.

24 So, Ms. Harlow, if you'd continue the
25 workshop. Thank you.

1 **MS. HARLOW:** Thank you, Mark. We'd like to
2 get started today with a brief staff presentation, a
3 little background on the FEECA statute, the revisions to
4 the statute with regard to demand-side renewables. And
5 also we'll go through the questions that we expect to
6 get information on today. And I'd like to introduce our
7 Staff member, Walter Clemence.

8 **MR. CLEMENCE:** Good morning, and welcome to
9 the solar pilot program workshop. As Ms. Harlow said,
10 I'm Walter Clemence from the Division of Regulatory
11 Analysis, and I will give a brief overview of the FEECA
12 amendments of 2008 and the agenda of the workshop. A
13 copy of this presentation will be available, and I
14 believe it may even be available now on our website.

15 The Florida Energy and Conservation Act, also
16 known as FEECA, was enacted by the Florida Legislature
17 in 1980 with emphasis on a few areas. One, growth rate
18 of seasonal peak demand; reducing and controlling the
19 growth rates of electricity consumption; increasing
20 conservation of expensive resources; and in 2008 it was
21 further amended to encourage the development of
22 demand-side renewables. Due to the 2008 amendments,
23 the Commission was tasked with adopting goals for
24 increasing development of demand-side renewables.

25 Okay. The amendments in 2008 directed the

1 PSC to set goals for demand-side renewables, and as
 2 part of the DSM proceeding the Commission tasked the
 3 utilities with analyzing demand-side renewables. No
 4 measures were found to be cost-effective.

5 In 2009, while establishing the aggressive
 6 peak demand and energy conservation goals, the
 7 Commission directed the utilities to develop solar
 8 pilot programs with an emphasis on solar water heating
 9 and solar PV, and the programs would have an annual
 10 expenditure cap of 10 percent of their previous five
 11 years ECCR expenditures. Here are the amounts approved
 12 for each of the utilities for the solar pilot programs.

13 We are here today because while approving the
 14 DSM goals and the solar pilot programs the Commission
 15 noted several differences amongst the IOUs in the
 16 allocation of funds between PV and thermal and
 17 differences amongst the utilities in allocations for
 18 public and private distribution. The programs were
 19 approved, and in the approval the Commission had
 20 directed Staff to have a workshop to discuss some of
 21 these differences and to see how to address these into
 22 the future.

23 We are here today, we have gathered some
 24 questions and have some areas of discussion we'd like
 25 to have. There are, as mentioned earlier, copies at

1 the front of the room. And the bottom is just some
2 general areas that we've seen, the previous programs
3 that have come in here that have already been approved
4 by the Commission.

5 The standards have been filed and accepted by
6 Staff for Gulf, Progress, TECO and FPUC, and we are
7 currently awaiting the filing of the solar pilot
8 program standards from FPL.

9 Here is the agenda for today. I thank you
10 very much for your attention and we look forward to the
11 discussion.

12 **MS. HARLOW:** Thank you for that update,
13 Mr. Clemence. We appreciate it.

14 I'd like to add my two cents to Mark's today
15 and, and say how much I appreciate your attendance, and
16 I'm really looking forward to a good discussion today.

17 I understand that we're going to start with
18 the utilities and kind of have a status update and some
19 general remarks. But first I think it would help our
20 court reporter if we went down the line at the
21 microphone and each of you please identify yourself and
22 who you're with.

23 **MR. BEASLEY:** I'm Jim Beasley for Tampa
24 Electric Company.

25 **MR. BRYANT:** Howard Bryant, excuse me, Howard

1 Bryant with Tampa Electric Company.

2 **MS. NOACK:** Lonnie Noack with Gulf Power
3 Company.

4 **MR. GRIFFIN:** Steven Griffin, counsel for Gulf
5 Power.

6 **MS. TIBBETTS:** Arlene Tibbetts for Progress.
7 And I have three colleagues with me today: Christopher
8 Gillman, Lee Guthrie and Linda Kushner.

9 **MR. GILLMAN:** Christopher Gillman with
10 Progress.

11 **MR. GALLAGHER:** Bill Gallagher with the
12 Florida Solar Energy Industries Association.

13 **MR. MAINGOT:** Chris Maingot with the Florida
14 Solar Energy Industries Association.

15 **MR. KERSHNER:** Bruce Kershner, Executive
16 Director of the Florida Solar Energy Industries
17 Association.

18 **MS. BROWNLESS:** And Suzanne Brownless
19 appearing today on behalf of the Florida Solar Energy
20 Industries Association.

21 **MR. GUYTON:** Charlie Guyton appearing on
22 behalf of Florida Power & Light Company. There are also
23 two representatives of the company that are here, Oscar
24 Gans and Wayne --

25 **MR. BESLEY:** Besley.

1 **MR. GUYTON:** Besley. Thank you.

2 **MS. HARLOW:** And as you can see, we have a
3 slight shortage of microphones for everyone that I'm
4 sure wants to speak today, so let's all be courteous to
5 each other and, and be mindful that, that everyone needs
6 a chance to speak and a mike so that our court reporter
7 can, can catch every word.

8 And now I'd like to move to our utilities,
9 please, as a starting point. We'd like to see where
10 you are in implementation, what's your timing, perhaps
11 what you've done to notify your customers, and have you
12 been hearing very much from your customers on these
13 programs, kind of a brief update. And it's my
14 understanding that Howard Bryant from Tampa Electric
15 has some opening remarks.

16 **MR. BRYANT:** Yes. Thank you very much.

17 Sometimes when you show up and they have a
18 bunch of straws available and you draw the short one,
19 you end up having to be the one that talks. And so
20 good or bad, I drew the short straw.

21 But let me say on behalf of the utilities,
22 we're happy to be here and we're happy to discuss the
23 opportunities before us from the standpoint of the
24 renewable programs that are going to operate on a pilot
25 basis. We look forward to sharing with you what our

1 activities have been and what we plan to do on a
2 going-forward basis.

3 All of us, I think you'll find, are at the
4 early stages, if not really right on the precipice of
5 initiating programs, particularly from the standpoint
6 of Progress Energy. I think also from the standpoint
7 of the questions that y'all provided to us early on a
8 lot of our answers are going to be quite similar, and
9 so to the, to the, to the extent that I can
10 characterize our responses for all of us, I'll do so.
11 But I would also ask for anybody that I misrepresent,
12 if they would certainly speak and say, wait a minute,
13 he's got it wrong for me, then they would certainly
14 speak up. But, again, we look forward to providing you
15 with the information at hand.

16 As I look at the questions, I noticed that
17 several of them from Tampa Electric's perspective were
18 discussed during the conference calls that we had as
19 our standards were being approved. But then I think
20 too, as I said earlier, many of these questions from
21 the allocation perspective, from the monitoring
22 perspective, things like that, I think we've got some
23 similarities among us that I'll share with you as time
24 goes along. So thank you.

25 **MS. HARLOW:** Howard, Mr. Bryant -- I can't

1 decide whether to be formal or informal today with
2 everyone -- could you please just give us a very brief
3 update on where TECO is.

4 **MR. BRYANT:** Sure. Yes. From Tampa
5 Electric's perspective, again, our standards are
6 approved. We are implementing the electronic needs
7 within our systems in order to facilitate the incentive
8 payments. We're looking toward very early in April, we
9 thought April 1st but it may be the 4th or 5th, kind of
10 in that range, in terms of when we will actually be
11 ready to go. Some testing needs to be done on the
12 systems and what not.

13 We have communicated and have been
14 communicating with our contracting community, and in
15 turn they have been calling us as well asking, you
16 know, they're aware and so they're asking us. We've
17 also had customers calling us and wanting to know when,
18 things like that, and so we've indicated to them that
19 probably by mid-March we should be able to have date
20 certain and the community will know. And so we'll make
21 that knowledge available to our customers for sure by
22 delineating what the incentives are going to be and
23 qualifications, things like that. We have information
24 that will be placed on our website, and so that's the
25 level of communication that we're making with our

1 customers and the contracting community.

2 **MS. HARLOW:** So at this point you haven't
3 advertised the programs.

4 **MR. BRYANT:** No. And the reason we've not
5 done that is we think the customer needs to have date
6 certain as to when it can go and not go. And so if you
7 advertise and yet the customer calls and says, well,
8 when are you going to do this, and if we don't have a
9 good solid answer, we're not convinced that's the best
10 thing to do. And so they are contacting us. There's
11 not an overrun, if you will, but we are telling them
12 that it appears to be early April, and we will have date
13 certain information to them and be made known across our
14 service area when we do know that.

15 **MS. HARLOW:** And one final question. Have
16 you, have you seen -- I know you're very early in the
17 process, but have you seen any implementation concerns,
18 and not to be negative, any implementation successes as
19 you're, you're moving forward in the early stages?

20 **MR. BRYANT:** Not really. We're looking for
21 the partnership to exist with the contracting community.
22 That has to happen. We're looking for integrity to be a
23 part of the process. And so to the extent we can
24 communicate that with the contractors, and which we
25 intend to do so and have a meeting with them, those

1 expectations will be given to them. But to date there's
2 not a setback, there's not an advancement, if you will.
3 It's going as you would expect it, and we're just
4 looking forward to early April to launch.

5 **MS. HARLOW:** I know I said it was the final
6 question, but just one more. Have you been working
7 with, I realize it's in the early stage, but have you
8 been working yet with the community service
9 organizations toward the low income programs?

10 **MR. BRYANT:** Yes. As a matter of fact, we had
11 contact with them yesterday and inquiry from them. And
12 so the two that are in our area, we are poised to begin
13 working with them to the extent that our activities will
14 benefit those particular customers they're serving.
15 Yes.

16 **MS. HARLOW:** And now I believe Mr. Guyton
17 would like to speak.

18 **MR. GUYTON:** What makes you think that?

19 (Laughter.)

20 I'm going to defer to Mr. Gans for an
21 overview of where we are. We're a little bit behind
22 the curve in terms of approval for the other utilities,
23 and I think Walter has already noted that.

24 **MR. GANS:** At this point we are working on
25 finalizing the standards in order to file them now this

1 month, in March, and we're beginning our preparations
2 for all of the system work that we're going to be
3 needing in order to get the reservation system up. We
4 think that's a critical piece of our implementation.
5 And that's basically where we are right now. We're
6 shooting for a, sometime in the summer, hopefully June
7 time frame in order to be able to implement.

8 **MS. HARLOW:** Have you been meeting with any of
9 the solar contractors?

10 **MR. GANS:** We have not.

11 **MS. HARLOW:** Okay.

12 **MR. FUTRELL:** Oscar, I've got a question for
13 you. Have you had a chance to speak to anybody at the
14 Governor's Energy Office about their experiences with
15 their rebate programs, lessons learned that might help
16 you as you start to develop and decide on the best
17 practices for, for your program?

18 **MR. GANS:** Not directly as far as the way they
19 administered it. We've gotten some reports from them in
20 order to see what the level of activity was in our
21 territory and we based it on that.

22 We did observe from the -- they've done two
23 types of programs where they've had reservations. They
24 did the -- well, where they had the incentives. The
25 first one was the solar program, and then we also

1 looked at their experience with the, the appliance
2 rebates. And so there was some lessons learned that we
3 could see as far as the way they handled the
4 reservation systems.

5 **MS. HARLOW:** Progress?

6 **MR. GILLMAN:** Good morning. Christopher
7 Gillman for Progress.

8 For our status update we are, have approved
9 eligibility standards, participation standards. We're
10 prepared to launch on March 15th. We've made an
11 announcement, a press release on that, that launch
12 date. We have information available on our website at
13 progress-energy.com/sunsense. We've conducted a
14 handful of workshops with our solar vendors, had
15 attendance of approximately 125 vendors, providing
16 information on the application process and the
17 materials needed to, to file an application. I think
18 that's a good success story early on in the
19 implementation. We're in the final stages of
20 implementation.

21 You asked a little bit about maybe a
22 challenge. Some of the challenges on getting it out on
23 March 15th is not all of our IT processes will be ready
24 to go, so we're doing some manual processing of
25 applications. But I think we're prepared to do that.

1 So all of our programs will be available on March 15th.

2 MS. HARLOW: And are you doing that, the
3 implementation in-house with the, the application
4 process?

5 MR. GILLMAN: Yes. The applications will be
6 received in-house, evaluated in-house and processed.

7 MS. HARLOW: Thank you. I do think that
8 sounds like a success story with the meetings with the
9 contractor. Very, very nice participation by the
10 industry, and that bodes well for the program.

11 Would Gulf like to go next?

12 MS. NOACK: Yes. Lonnie Noack representing
13 Gulf Power Company.

14 We are in a very similar situation to TECO.
15 We are current -- our program standards have been
16 approved and we are currently in the process of
17 developing our online application reservation process.
18 We have already gotten a mock-up of that, and so in the
19 next month we'll probably be doing some testing of
20 that. We're still on track for launching our programs
21 during the second quarter. We actually anticipate a
22 May launch date; early in May, first or second week of
23 May we anticipate our incentives being available.
24 We've had several customers and contractors that we've
25 been communicating with making sure that they

1 understand what the program standards are.

2 We have placed the general program standard
3 requirements on our website so that it is out there.
4 We do have a notice that they will need to check back
5 for the official launch date. We don't want to put a
6 date out there until we're sure that we can meet that.
7 But we have had quite a few inquiries and we're on
8 track for a second quarter launch of the programs.

9 **MR. FUTRELL:** Lonnie, have you -- do you
10 have -- can you give us a little more specificity as far
11 as when you think you'll be able to target a launch
12 date? Are we looking at June 30th, are we looking at
13 May or --

14 **MS. NOACK:** We're looking at the first or
15 second week of May to launch the programs.

16 **MR. FUTRELL:** That's helpful. Thank you.

17 **MS. HARLOW:** Have you had any initial
18 discussions with community, excuse me, service
19 organizations?

20 **MS. NOACK:** Yes, we have. And we've actually
21 started looking and evaluating sites. We've, we've
22 talked to Habitat and a couple of other different groups
23 about potential sites and have actually gone out and
24 looked at some potential suggestions for sites to
25 implement the low income programs. So we have started

1 that process.

2 MS. HARLOW: Thank you. Can you give us any
3 initial success stories or challenges you're seeing in
4 implementation?

5 MS. NOACK: I guess the challenge right now is
6 just making sure that the customers are aware of what
7 the program standards are. I think we've had success by
8 being able to get that information out on the website so
9 customers can see that so they understand that it is a
10 first-come, first-serve process, that the systems cannot
11 be installed prior to the incentives being, being made
12 available. So we've had some success in communicating
13 that. And I think we've had some success communicating
14 with contractors, making sure that they're aware of what
15 those program standards are and what to expect with the
16 program.

17 MS. HARLOW: I think we all share the concern
18 that customers understand this is a first-come,
19 first-serve program with limited funds.

20 MS. NOACK: Yes.

21 MS. HARLOW: I think that it's time to move on
22 to FPUC.

23 (No response.)

24 I don't think we have a representative of FPUC
25 here today, but we will have an opportunity for written

1 comments.

2 And that's a good time to remind everyone
3 here that we will have a postworkshop comment period.
4 So as we move through the day, if there's anything you
5 feel that you want to provide in writing to us, just
6 make a note to yourself.

7 So now I think it would be a good time to
8 move toward the questions that Staff has developed. We
9 found if we, if we provide a list early of questions
10 for discussion for the workshop, it helps us to keep us
11 all on the same page. And that helps Staff later as
12 we're kind of analyzing the information that we got at
13 the website so we can provide that to our
14 Commissioners.

15 So I'd like to start with the topic of
16 allocation of funds. This is the primary topic that
17 our Commissioners requested information on, and so it
18 would be good if we focused on this up-front. And we
19 have several questions in this we'd like to get started
20 with, but first we'd like to discuss the allocation of
21 funds for private facilities versus public facilities.
22 And we've noted that there are a number of programs for
23 private customers and the bulk of the money goes toward
24 private customers. But we're also seeing some funding
25 of public facilities, and that is through, solely

1 through Solar for Schools. So if anyone would like to,
2 to get started. I believe Mr. Bryant has hit his
3 microphone.

4 **MR. BRYANT:** Yes, he has.

5 From the standpoint of allocation, I think I
6 would like to make a general comment that encompasses
7 the process in which each of us chose to, to do the
8 allocation, and that statement is this: Our allocation
9 is not cut in stone. In other words, we may say that
10 10 percent will go to this particular endeavor and
11 30 percent may go to that particular endeavor. It's
12 simply a projection. It's, in some cases it comes from
13 a little bit of experience that we may have in the area
14 such as with solar water heating in the case of Gulf
15 Power, they have some experience there, and I think
16 Progress is in the same category.

17 But it's not -- they're not cut in stone to
18 the extent that we're going to stick on 30 percent as
19 an example for a particular allocation and that's going
20 to be it. Now if you don't have enough people that
21 line up for that particular program, that does not mean
22 that that allocation is going to stay at 30 percent and
23 there would be unused funds. What it means is on a
24 periodic basis the utilities are going to look at how
25 the activity has been progressing. And so to the

1 extent that you have a long line in one particular
2 program and no line in this particular program as an
3 example, the funding is going to be shifted to where
4 there's demand. The idea being proliferate the
5 technology, be it solar thermal or PV, until the funds
6 have basically been exhausted. That's the general
7 statement on allocation.

8 Now to the extent that you notice differences
9 on the, on the front end as to where those allocations
10 may have been or are being projected, simply because
11 there's money being allocated to the school system
12 through that particular endeavor does not mean that the
13 public sector cannot participate in the monies
14 available through commercial PV as an example. They
15 certainly can. We simply were looking for a broad
16 casting of the net in terms of how to deploy the
17 technologies, but also deploy the education surrounding
18 the technology, and that's why we chose the school
19 system in, in what I'll call partnership. We're
20 certainly in an endeavor associated with the Solar
21 Energy Center such that we could go to the emergency
22 shelters through the program that they are, are
23 providing, and then we could supplement that or
24 increase it beyond the school systems that they're
25 going to have their installations go for. Our money

1 would add additional installations and our monies would
2 also provide the education to the students as well.

3 So you're, you're doing two things: You're
4 increasing the, the availability of PV on emergency
5 shelters, number one; and, number two, you're providing
6 the educational opportunity of that technology to a
7 broader base of students than what would otherwise have
8 been done. That's why we chose it and that's why it
9 looks like public is, is being allocated in one
10 particular case. But, again, it does not mean that
11 they're not available to participate over in the
12 commercial sector.

13 So if you had a building within a particular
14 city, the City of Tampa as an example, if they wanted
15 to put PV on a particular facility, I would consider
16 that a private -- or a public institution. And then to
17 the extent funds were available, we would work with
18 them toward doing that toward the maximum incentive
19 that's, that is allowed.

20 **MR. FUTRELL:** Howard, I've got a question for
21 you, just something to contemplate and maybe provide
22 some response about whether it would be more effective
23 as a thought of where the allocation of funds -- since
24 the general body of ratepayers will be paying for these
25 programs, rebates, their associated costs, would there

1 be a more effective use of those funds to direct it
2 towards public facilities to help reduce their energy
3 costs and therefore provide a benefit to the general
4 citizenry that is paying for these projects? Can you
5 speak to that? And, and in that, did you look at other
6 means of providing funds to public facilities as opposed
7 to just dovetailing with the Solar for Schools program?

8 **MR. BRYANT:** I think I'll address it from
9 Tampa Electric's perspective, and perhaps others can,
10 can, can augment or agree or disagree with what I say.

11 But from Tampa Electric's perspective, we saw
12 the initiative that was given to us from a spending
13 perspective to be one of, of casting it as broadly as
14 we could and casting it into as much of the private
15 sector as you could, getting more systems out there.
16 If you think about what a public institution would do,
17 they would logically have a larger PV system, and so it
18 would challenge the funding early on to where there
19 wouldn't be very much left. And so we wanted to
20 proliferate it as broadly as possible and give it to
21 the public sector. If you can give it to the -- I'm
22 sorry -- the private sector.

23 If you can give it to the private sector and
24 have more people take on the technology, then the
25 possibility of the marketplace accepting it is perhaps,

1 I think, greater as opposed to just simply putting it
2 again on a, on a public building. It's probably true
3 what you're saying to the extent you do put it on a, on
4 a public facility and it would help their energy costs.
5 It would bring down the cost of that public institution
6 in the case of a county building, for instance. But
7 that was not in our thinking.

8 We were looking at a broad casting of the net
9 and broad proliferation and going into the private
10 sector to gain as much distribution as we could of the
11 technology.

12 **MR. FUTRELL:** Anybody else have a -- would
13 like to follow up with that answer?

14 **MS. NOACK:** Yes. Yeah. I'd like to reiterate
15 several points.

16 First of all, with the allocation of funds,
17 the way we did that, this is the utility's best
18 projection of how to spend these funds. And I know for
19 Gulf Power Company it's based on our experience with
20 programs that we already have implemented or that we
21 did our pilot program for 2009 for our solar thermal
22 water heating. Our program standards and our incentive
23 level is very similar to what we're offering now, so we
24 based our participation on that. Our solar PV
25 incentive levels, they're based on our experience with

1 net metering in conjunction with the state incentive
2 program. And we used that as kind of the basis, as the
3 launching pad for how to spend the expenditure cap or
4 how to budget the expenditure cap that, that we were
5 given by the Commission.

6 Another thing I wanted to point out is that
7 for the public and private facilities, as Howard said,
8 none of the public facilities are prohibited from
9 applying for the incentives if they qualify and meet
10 the program standards. They're not prohibited, so
11 we're not limiting them. We have just added some
12 additional programs to focus on things that we think
13 are important, especially in markets that may be a
14 little bit more resistant because of the initial high
15 capital cost of the technology. So we're targeting the
16 schools for the educational purposes, and then the low
17 income because typically you wouldn't see these
18 applications in a low income application because of the
19 high original capital cost.

20 And then also when we're looking at whether
21 or not we would put these things in, focus most of the
22 dollars in public, the intent of having these pilot
23 programs initially is because of the addition to
24 366.82 and the fact that they wanted to increase the
25 deployment of these technologies. And since the

1 private sector tends to really drive that deployment,
2 that's where we spent a majority of our focus on, on
3 these incentive programs.

4 MS. HARLOW: Ms. Brownless.

5 MS. BROWNLESS: Is it the solar industry's
6 turn as opposed to the IOUs? Are the IOUs --

7 MS. HARLOW: Sure. Sure. I'm hoping today we
8 can just go back and forth, and, and just, just get my
9 attention when you're ready.

10 MS. BROWNLESS: Thank you.

11 Our perspective on the allocation of funds
12 between public and private is a bit different. First
13 of all, we think that the purpose of these incentive
14 funds is to maximize the number of solar installations,
15 thereby supporting the development of the solar
16 industry in Florida.

17 So there's two pieces to this puzzle. One
18 piece is to encourage the development of the industry,
19 and that means to encourage as many installations as
20 possible. If you are putting large installations on
21 high schools in Broward County or in Dade County where
22 I grew up where there were, you know, like 10,000
23 people in our high school, that to us is sort of
24 counter, counterintuitive. If you are doing that
25 because you believe it is an education and marketing

1 tool, what we would respond to that is that we don't
2 think the public needs convincing that solar PV is a
3 technology that they want to embrace.

4 We would point to the fact that the funds
5 that were available under the Governor's Energy Rebate
6 Program for the two years that the funds were available
7 were immediately oversubscribed, and that
8 oversubscription and dealing with oversubscription is
9 an issue that you have correctly identified and are
10 trying to address in the IOUs' implementation.

11 So saying that we're going to focus or
12 allocate significant funds, and in the case of Progress
13 it's 31.7 percent of their allocated money, about
14 \$2 million for schools, seems to us to be
15 counterintuitive to what we're trying to do, which is
16 to get the most distributed generation and the most
17 solar facilities out there.

18 The other thing we want to say is that this
19 is a redundant program. You already have funds
20 available that are being administered, federal stimulus
21 funds, through the Florida Energy Center, and why
22 recreate a program that's already there and already
23 meeting a need?

24 Also, with regard to these facilities,
25 ratepayers pay the full cost. In other words, as I've

1 looked at the program standards for, that everybody has
2 put out there for the public school program, the
3 utilities buy the equipment, install the equipment, put
4 in all the metering, allocate funds for education
5 associated with the equipment, and at the end of, I
6 think it's five years, allow the school to own the
7 equipment. So it's a totally funded program as opposed
8 to a matching program.

9 The other incentive programs for PV
10 residential, PV commercial, solar thermal are matching
11 programs. In other words, an individual person is
12 given, given a certain amount of money and in that way
13 you're stretching your dollars over a larger portion of
14 people and again maximizing the number of installations
15 that you're doing for maximum ratepayer benefit in our
16 opinion.

17 Listening to what Howard and -- and I'm
18 sorry, I didn't get the lady's name from Gulf Power --

19 **MS. NOACK:** Lonnie.

20 **MS. BROWNLESS:** -- have said about the ability
21 to reallocate, we're a little concerned about that.
22 These programs were, a set dollar amount was allocated
23 in the order approving these pilot programs. How would
24 that type of reallocation be done and when would it be
25 done and how, what would trigger a reallocation?

1 I'm sure that the Florida Energy Center has
2 identified several hundred schools that serve as
3 emergency shelters; I believe there's a boatload of
4 those. So how would you tell, well, we're going to
5 switch from schools to another public facility, to the
6 civic center in Sarasota or, or whatever? And how
7 would that be accomplished, who would make that call,
8 and would they have to come back here to the PSC and to
9 the Commissioners to get permission to do that? As I
10 --

11 MS. HARLOW: Suzanne, could I ask a quick
12 question?

13 MS. BROWNLESS: Yeah.

14 MS. HARLOW: Is your primary concern with
15 reallocation, aside from the administrative aspect of it
16 of how would it happen, that more dollars would go
17 toward public? Is that your primary concern? Or are
18 you also concerned that there'd be reallocation from
19 thermal to PV or vice versa if there was not enough
20 demand for one of those rebates?

21 MS. BROWNLESS: I think we have a concern
22 about reallocation, whether it's between PV or thermal
23 or whether it's between programs. Because, frankly,
24 what we believe, based upon previous experience, is that
25 as soon as TECO says today is the day, we're starting

1 today, we believe the subscription for PV will be
2 immediately satisfied. In part because of the good job
3 that's being done reaching out to the contracting
4 community and to the building community and telling
5 them, you know, this program is going to be available;
6 in part because it's a first-come, first-serve; in part
7 because we think it's pent-up demand. So we think
8 reallocation is going to be an issue that's almost
9 immediately an issue; it's going to be instantly,
10 instantly there.

11 But our, our true, our bigger concern about
12 the school program is that we don't think it's the most
13 cost-effective use of the money if what, what your goal
14 is, and we believe the Legis -- one of the
15 Legislature's intents was the development of the
16 industry so as to create more jobs. Because you're
17 going to create the most jobs by having the most
18 installations. If you have the most installations, you
19 involve the most contractors, you involve the most
20 electricians, you involve the most -- you put out
21 enough facilities so that the infrastructure that
22 supports that, the contracting community, the
23 electrical contracting community, the maintenance
24 community, is maximized. If you have large PV
25 facilities on top of any kind of public utility or

1 public facility, you're not maximizing the number of
2 distributed generation. So we, and we also think that
3 having a maximum number of distributed generation is
4 better overall for all the reasons that, that we heard
5 about with regard to implementation of a smart grid.

6 So that's kind of our concern. If it were --
7 if we had our way, we would like to see the Solar for
8 School programs either eliminated or drastically
9 reduced.

10 **MS. HARLOW:** So I may have under --
11 misunderstood you. So if I'm mischaracterizing, please
12 let me know.

13 **MS. BROWNLESS:** Yes, ma'am.

14 **MS. HARLOW:** But my understanding was that you
15 expressed there's not a particular need for the
16 additional education efforts that would go along with
17 those schools because there's already enough demand out
18 there, enough knowledge of these systems, and it's the
19 funding that's needed for people. Is that correct?

20 **MS. BROWNLESS:** That, I think we think that.
21 Now I think there is a place for education with regard
22 to how a PV system works, how a solar thermal system
23 works. There is certainly an aspect to the education
24 associated with these systems that I think the IOUs are
25 going to collect data from these systems. But my

1 understanding is they're going to collect data from the
2 installation of the other programs as well, perhaps
3 equivalent data.

4 So I think our idea is that based upon what's
5 happened in the past, there is a lot of education about
6 these systems. You don't have to convince people in
7 Florida that using PV is a good thing. They're
8 convinced.

9 As to the actual operation and maintenance of
10 a PV system, installing them, let's say, at a junior
11 college where you're going to have that in tandem with
12 a work program that talks about how to train people to
13 install PV, maintain PV, that's something we think that
14 can be done a lot cheaper than is being advocated here.
15 And it doesn't necessarily have to be done in
16 connection with a very expensive PV solar installation.

17 **MR. FUTRELL:** Suzanne, could you speak to this
18 idea that in these days of tight government budgets that
19 providing means of government entities to reduce energy
20 costs and therefore be able to reallocate their budgets
21 to, to more pressing needs provides a benefit and that
22 benefit should be recognized as far as providing, maybe
23 divert, reallocating more funds to public institutions
24 is to provide that benefit?

25 **MS. BROWNLESS:** Well, certainly who is going

1 to be against minimizing costs that the public pays?
2 And, you know, you're taking -- you have two different
3 public pots of money, if you will. I kind of consider
4 rate, ratepayer money to be public money. It's coming
5 from the same group of people who would otherwise fund
6 electric bills, right, who would otherwise pay the taxes
7 that support the institutions that buy the electricity
8 from the IOU. So they're kind of, they're kind of the
9 same people.

10 I think one thing that's not said is that if
11 you pay to install, if you pay incentives to regular
12 ratepayers to install these facilities, you are also
13 benefiting the broader public because you are delaying
14 the installation of capacity, you are deferring the
15 purchase of more expensive fossil fuel. I mean,
16 there's benefits that the general body of ratepayer
17 gets as well.

18 So I don't think it's a question of
19 ratepayers, taxpayers get no benefit if, if an
20 incentive program is used versus they get much more
21 benefit if a public facility is used. I think it's
22 basically, when you get right down to it, it's where do
23 you get the most bang for your incentive buck?

24 **MR. FUTRELL:** I'd like to hear from the
25 utilities to speak to this allocation issue, this

1 reallocation. I think Howard touched on it in the
2 beginning in some of his comments. I'd like to hear
3 more about some of those concerns about how your, what
4 your intention is so we can have some, some more clarity
5 on that and transparency. But I would like to ask if,
6 if, for whichever member or members of the IOUs that are
7 here would answer, did you, when you were coming up with
8 the programs, specifically the Solar for Schools, did
9 you consider some other types of program design to reach
10 out to the public sector, and did you consider this idea
11 of forming matching programs where you used the program
12 funds to allocate towards a portion of the cost of the
13 system and then try to get the school or the county or
14 whatever facility to have some skin in the game as well?

15 **MR. GILLMAN:** This is Christopher Gillman from
16 Progress.

17 I might just start with some of our, our
18 beliefs in the design of, of the program. Our, our
19 objective was to try and reach as many of our customers
20 as possible, perhaps as young as possible, and we
21 really believed in the education component that this
22 program has a potential to achieve. Not only on
23 renewable energy, on solar, but also on energy
24 efficiency and other benefits that go beyond these
25 programs through education.

1 That, you know, our program started with that
2 belief of having an educational component. We also
3 recognized, to your point on the potential of doing
4 matching funds versus paying for the facilities, that
5 the type of facilities we're going after, the type of
6 customers we're going after didn't have a budget to
7 participate. We wanted to certainly have, have
8 participants that would adopt this type of a program.
9 So we did recognize that there would be a need for, for
10 higher funding per installation, for example. That's
11 kind of the beginning predication to our design of, of
12 the program.

13 To the question on, on allocation of funds,
14 when you develop programs, you have to start with some
15 kind of design criteria. We started with that design
16 criteria and what fell out was the allocation of
17 funding that we have for our portfolio. That's not to
18 say that it's, it's right or wrong. It's what we
19 established.

20 With these types of programs, we recognize
21 them as pilot programs and want to learn as we deploy
22 them of the benefits that we get from the programs, of
23 the customer adoption, of the customer acceptance, and
24 we would look to apply that newfound learning to
25 potentially enhance the programs, reallocate funds or

1 what have you. That's kind of the starting point that
2 we, we came from for the, for the development of this
3 school program.

4 We also recognize that, that our program is,
5 is higher funded from an allocation percentage than the
6 other utilities. That's just by, by the initial
7 design, and our criteria sets that were maybe different
8 than the other utilities. Again, that's not to say
9 it's right or wrong. We certainly look for the
10 Commission to provide guidelines and direction that
11 helps us establish if there is a, a direction that we
12 want to go, and we'll support, of course, that, that
13 direction.

14 But, again, we believe in an educational
15 component that's not just about marketing, not just
16 about selling solar arrays, but about educating on the
17 benefits of energy efficiency and renewable energy and
18 doing it at all levels of age. You know, not only the
19 participants that will purchase today, but those
20 children that will perhaps develop newfound
21 technologies in the next decade.

22 **MS. HARLOW:** You mentioned that Progress does
23 have a higher allocation toward this function and
24 actually you've got almost double what any of the other
25 utilities have.

1 As we're in such initial stages of these
2 programs, they're not even off the ground yet. But
3 what would you anticipate would have to happen for you
4 to reduce that percentage or increase that percentage
5 to that program?

6 **MR. GILLMAN:** Certainly one thing I'll mention
7 is, is one of our design objectives was to have an
8 installation, a participant in all the counties that we
9 serve. We serve 32 counties. So that's one of the
10 starting places for, for maybe how many schools we need.
11 That, that was an initial design criteria.

12 As far as reducing funding allocation, there
13 is flexibility that's designed within the program
14 design. For example, the design is based on a
15 projection of a number of schools annually; the size of
16 the system array; the equipment, for example, a battery
17 backup is an optional component. All those things can
18 be adjusted and can support reduction of allocation.

19 **MR. CLEMENCE:** If you decided reallocation was
20 necessary, how would that information be conveyed to
21 both us here at the Commission and to the industry as a
22 whole?

23 **MR. GILLMAN:** Well, I think first we would
24 probably look for the guidance and direction from the,
25 from the Commission, and then we would respond to that,

1 to that direction. You know, I think -- I don't think
2 there's any intention of -- you know, our programs right
3 now are, are ready for implementation. You know, we're
4 launching on, on March 15th.

5 We, we're expecting to deliver the programs
6 that we developed, so there's not really a plan to
7 necessarily reallocate. But should we be given that
8 direction, like I said, we can certainly adjust.

9 As far as the schools program, we will launch
10 the application on March 15th. The results for that,
11 that application should come back on April 22nd. Our
12 plan is to have a first cut of potential participants
13 that we would announce on May 13th, requesting
14 additional information from those first cut
15 participants. And then a final decision, I believe, I
16 believe that comes back on May 27th, with a final
17 deliverable of the selection of schools on June 24th.
18 So there's some time between now and that final
19 selection that we could make adjustments, if need be.

20 **MR. FUTRELL:** So, Christopher, if I'm hearing
21 you correctly, you're saying right now you, if you, for
22 example, get oversubscribed on PV, and as you get
23 towards the end of the fiscal year, if you still have
24 some excess money, you don't have a plan for addressing
25 unsubscribed, unfulfilled applications for PV, is that

1 correct, or do you?

2 **MR. GILLMAN:** Well, our program is set up
3 now -- you know, we have, of course, our, our Solar for
4 Schools program, our low income that would be, you know,
5 managed by us that we already have costs established.
6 We have, of course, our two incentive programs for solar
7 PV. We also have a solar thermal, residential solar
8 thermal program that's based on historical performance
9 on, on incentives. We're expecting that those
10 projections would come true and that we would implement
11 them accordingly. So our, our, our plan is to make the
12 expenditures that we've, we've expressed.

13 **MR. FUTRELL:** Suzanne.

14 **MS. BROWNLESS:** Thank you. With regard to
15 Progress, I assume you've worked closely with the Solar
16 Energy Center to identify schools in your area that
17 qualify for the PV for Schools program; is that correct?

18 **MR. GILLMAN:** That's correct.

19 **MS. BROWNLESS:** Okay. How many schools had --
20 did the Solar Energy Center have identified as
21 qualifying for their program and their funding?

22 **MR. GILLMAN:** Well, there's approximately
23 100 emergency shelter schools in our service territory.

24 **MS. BROWNLESS:** Okay. And how many are going
25 to receive funds from the Solar Energy Center?

1 **MR. GILLMAN:** I believe there's a handful. I
2 don't have that number right with me, but it's a, a few
3 schools that, that are already planned for that.

4 **MS. BROWNLESS:** Okay. So do you -- have you
5 already gone out to the school districts and identified
6 schools that your program would serve in addition to
7 those served by the Solar Energy Center?

8 **MR. GILLMAN:** We haven't gone out to the
9 schools or done any kind of selection process, if that's
10 your question. What we have done is, is identified what
11 the market is, which is roughly 100 schools with, within
12 the energy that serve as, as shelters. I should note
13 that our, our program has a, a preferred allocation
14 toward shelters, not a prescriptive requirement. So
15 it's actually all public schools within our service
16 territory that would be available to participate.

17 **MS. BROWNLESS:** Okay. How do your standards
18 for participation in your solar school program compare
19 to that of the Solar Energy Center? Are they
20 comparable, are the incentives similar?

21 **MR. GILLMAN:** They're comparable that it was
22 designed off of the, the E-Shelters program.

23 **MS. BROWNLESS:** Are they similar in
24 specifications, installation, the size of installation,
25 commitment of funds? In other words, is the Solar

1 Energy Center program going to pay for the complete
2 installation of the facilities or are there going to be
3 matching funds under the SEC program?

4 **MR. GILLMAN:** I'm not sure I'm, I'm
5 interpreting your question correctly. If your, if your
6 question is are our programs similar to the E-Shelters
7 program, it is similar. Our, our program is not as
8 prescriptive, it has a little more flexibility in the,
9 in how, in the size of the array, the equipment that
10 would be there. We also have our own application
11 process and criteria.

12 **MS. BROWNLESS:** Okay. So it is more flexible
13 in the sense that it gives, allows the installation of
14 more capacity than the, the SEC program?

15 **MR. GILLMAN:** I don't believe so. I believe
16 our program is designed with an up to 10kW installation,
17 and I believe that is FSEC's implementation of the
18 E-Shelters program is to be exactly 10kW with battery
19 backup.

20 **MS. BROWNLESS:** Okay. Do you know how many
21 schools have signed up for the SunSmart Program with
22 FSEC?

23 **MR. GILLMAN:** I don't know how many schools
24 signed up for it. I do know that FSEC has, has selected
25 90 schools to participate.

1 **MS. BROWNLESS:** Okay. 90 of the 100 in your
2 service territory or 90, 90 all over the state?

3 **MR. GILLMAN:** 90 across the state.

4 **MS. BROWNLESS:** One thing that was mentioned
5 by the investor-owned utilities that we think is very
6 important is a standardization of the programs,
7 particularly for the solar pilot program. Obviously you
8 have the Solar Energy Center that has one set of
9 standards that's being applied across the state. So
10 what we would like to see is if the Solar for School
11 program is going to be allowed as a pilot program, which
12 obviously the Commission has approved, that there be the
13 same criteria all across the state.

14 One thing I'm concerned about from listening
15 to the testimony is that you'll have, if the IOUs have
16 a more advantageous program, a better funded program,
17 allow more funds to be allocated, then you basically
18 will have the IOU program filled up first, and then the
19 SEC program -- you'll have competition, and that's not,
20 that's not the best use of the money. You know, we
21 want to make sure you get the best use of the money,
22 and having a head-to-head competition between two
23 incentive programs doesn't strike me as being, as a
24 policy matter, a really, a really good thing.

25 **MR. FUTRELL:** Let me step in and say that one

1 of the purposes that we're not here to try to do today
2 is to relitigate the programs that have been approved by
3 the Commission.

4 MS. BROWNLESS: Sure.

5 MR. FUTRELL: We're here just to gather some
6 additional information based on some things they noticed
7 in the programs they did approve. And so we're trying
8 to gather that information and then provide that to them
9 for their information as they, as we move forward in
10 this process, and then the Commissioners can take that
11 and use it as they, as they see fit.

12 So I certainly understand where you're coming
13 from, Suzanne, but I think -- I'd just like to make
14 sure everybody is clear about that.

15 MS. BROWNLESS: Sure. Yes, sir, I understand
16 it.

17 MR. FUTRELL: We're not trying to reopen the
18 programs. They are what they are. They've been
19 approved.

20 MS. BROWNLESS: Sure.

21 MR. FUTRELL: And so we're just trying to
22 better understand is there some things we need to be
23 aware of going forward about these, about public versus
24 private programs?

25 MS. BROWNLESS: And I guess then we would just

1 want to make sure that we think there needs to be a
2 standardization of these programs across the state.

3 **MR. FUTRELL:** Thank you. If anybody else
4 has -- I know Christopher responded, but if anyone else
5 has a, would like to speak to this idea of were there
6 some other program designs that were looked at, if you'd
7 like to speak on that, that would be helpful. If, if,
8 in addition to that, if you'd like to speak about again
9 your intentions with reallocation between the programs
10 as you move forward in the fiscal year once the programs
11 are up and running, what your intentions on handling
12 that if one program is oversubscribed, and as you move
13 towards the end of the fiscal year, if there's excess
14 funds available, what's your intention on moving that
15 into areas that, where there's unfulfilled needs? If
16 anyone would like to take up those two questions, that
17 would be helpful.

18 **MS. NOACK:** Yeah. It's our intention to look
19 and evaluate these programs. Again, as we've
20 established, these are pilot programs and this is our
21 best projection of how to best allocate these dollars.
22 So we are, we plan to look at how we've budgeted these
23 dollars on an annual basis based on possible changes in
24 market conditions, possible changes in the cost of the
25 systems, looking at the incentive levels. It is our

1 intent that if we make any adjustments to that, that we
2 would come before the Commission and we'd put that in
3 our program standards, that if we made any changes based
4 on the experience that we received in the first year of
5 our pilot program, that we would come to the Commission
6 and it would be up to the Commission on how to approve
7 those changes.

8 The other thing that I wanted to mention is
9 that when you're allocating these, to have a standard
10 percentage allocation across the state I think would
11 wind up coming, you'd wind up with very unreasonable
12 type programs. If you look at the dollars allocated to
13 each individual company, we've got very different
14 budget amounts. Saying allocating 10 percent to Solar
15 for Schools for each individual IOU, that's going to
16 really impact the number of schools that you could
17 actually touch.

18 If you look at Gulf Power's percentage, it
19 says 16 percent. Well, that's only for one school per
20 year. For us to be able to do one school per year,
21 that's just the nature of, of the percentage in
22 conjunction with the amount of budget dollars that we
23 have to work with. So if you look at historically for
24 all the other DSM programs, there hasn't been this
25 requirement of this standardization from IOU or utility

1 to utility because each utility's marketplace is
2 different, their customer base is different. They have
3 different needs in their particular areas. And so each
4 IOU as a collaborative, we have gotten together, there
5 are a lot of consistencies among the programs and the
6 types of offerings, the initial incentive levels, and
7 so we've evaluated not only what's best for our
8 marketplace, but we've also evaluated the allocation of
9 these programs based on the amount of budget dollars
10 that we have to work with.

11 MS. HARLOW: I think as we've been working
12 with the utilities on the standards, I think the Staff
13 has expressed that one of our concerns with the
14 reallocation is the purpose of the statute and the
15 Commission's order is to encourage these facilities to
16 be installed. And one concern would be that dollars
17 were left on the table at the end of the year. And I
18 understand that we really -- the solar industry has
19 expressed they don't expect that. But let's say it
20 happens and you have a line and your, for your solar
21 thermal funds but you've used up long ago your PV funds.
22 I think that there needs to be a process established and
23 the utilities need to let us know if that's the case,
24 and the money needs to be reallocated toward where you
25 have the demand. And these are pilot programs. This is

1 a first pass at allocation of these monies. So I think
2 as we move forward we'll learn more about where the
3 customer demand really is.

4 **MS. BROWNLESS:** May I ask a question? Is it
5 the Staff's position that if a reallocation took place,
6 for example, if you had the solar school program that
7 didn't get subscribed for whatever reason and there were
8 funds there while the solar thermal and solar PV quickly
9 got exhausted, is it your position that the IOU would
10 come back to the Commission and ask for funds to be
11 reallocated, or would you do that through the clause, or
12 how do you think that would work?

13 **MR. FUTRELL:** Yeah. I don't think we have a
14 real -- taken a position. We'd certainly like to get
15 the opinions if folks could address that issue. I know
16 that's not one of our explicit questions here, but I
17 think that's becoming obviously a pretty critical one is
18 to add that to the, to the list to respond to in
19 postworkshop comments and give us your thoughts on how
20 that should be handled. We've heard a couple of ideas
21 here verbalized this morning and we'd like to see that.
22 And that would be helpful to have it in writing so we
23 can consider that and maybe have a dialogue about that.

24 Howard.

25 **MR. BRYANT:** Well, I was, I was going to

1 respond from Tampa Electric's perspective, and it may or
2 may not be true of the other utilities, but our process
3 is one where on a quarterly basis we're going to look at
4 what has happened. Now let me, let me assure Suzanne up
5 front, the allocation that's gone toward the schools
6 will not increase. If anything, it will decrease and
7 here's the reason why.

8 Two-fold, you may not find a school that
9 wants to participate in our service area. We have five
10 counties. We know how many were identified as
11 emergency shelter schools. And if they choose not to
12 participate, that's going to be the case. We may find
13 a substitute.

14 But if we find a substitute, the installation
15 is going to be cheaper for this reason. The emergency
16 shelter school program is one that requires battery
17 backup. That's an additional cost. If we install a
18 system on a nonemergency shelter school, it is not
19 going to have battery backup. That's money that then
20 is shifted from what we thought would go into the
21 school program over to one of the private programs, be
22 it PV or be it solar thermal. So that's our
23 perspective.

24 Now on the reallocation, I think we will bog
25 the process down and we will hinder funding being

1 available if we have to come up here on a regular basis
2 and ask for that reallocation to take place. I think
3 it's incumbent upon the utilities to look at their
4 systems and, and to look at the, the number of people
5 in line in a given case and recognize we've been
6 charged with spending X number of dollars. And so to
7 the extent we're going to accomplish that, you have to
8 look at who's in line and who's not in line and you
9 have to reallocate. And so from our perspective we're
10 going to look on a quarterly basis and make that move.

11 Now if we are to inform you of that, we would
12 certainly do that. But at the end of the year from a
13 true-up perspective we're going to give an analysis of
14 what has happened. And I think the others will in
15 general give an analysis of what's happened in, in each
16 given endeavor on an annual basis.

17 But the idea is to -- at least our
18 perspective -- the idea is to use the funds, and to
19 proliferate as many systems as possible, recognizing the
20 private sector is one where you can get -- I'll use the
21 expression biggest bang for the buck, because it's the
22 smaller number of systems which will use less money,
23 therefore more is available for participation. That's our
24 perspective. I'm trusting that that will be adequate as
25 we look at this pilot and gather information and then

1 begin to formulate a more consistent pattern as to what
2 should happen on a going-forward basis.

3 **MS. HARLOW:** Does anyone else want to speak to
4 that from the utilities, please?

5 **MR. GILLMAN:** This is Christopher from
6 Progress. I think I can agree with the majority of
7 those comments that Howard made. It is our intent to
8 use this funding towards solar programs and solar
9 installations. Our program design is based on our
10 estimates, our projections of how that spending is going
11 to occur. So we expect that to occur. Should it not in
12 any one program or another, we're going to evaluate the
13 availability of funds and look to potentially reallocate
14 it towards a more customer-accepted program, for
15 example.

16 In addition, Howard mentioned the cost of the
17 schools programs. Those were all the same comments I
18 was trying to make, as well, is that our program has
19 flexibility. That flexibility is the potential to
20 reduce the cost, not to increase it.

21 **MS. HARLOW:** Thank you.

22 Suzanne, did you have any comments?

23 **MS. BROWNLESS:** No, ma'am. Thank you.

24 **MR. FUTRELL:** If we could just move on to the
25 rest of the questions in this section, but just go ahead

1 and let everybody know, we would like to hear what your
2 intentions are with reallocation. And then if you have
3 some advice or some thoughts on what things we should be
4 aware of, that would be helpful. But if we could go
5 back and finish up these questions, if you have any. If
6 you have some prepared remarks, you'd like to address
7 these further questions about -- I think we talked about
8 standard percentage, but if you have some thoughts on
9 other types of public facilities that would be good. If
10 not, we will move on to the next section.

11 Nothing? Okay.

12 **MS. HARLOW:** Why don't we move forward and --
13 a lot of this I think we have touched on already, but
14 just to make sure everyone gets their thoughts in on how
15 to allocate the funds on thermal versus photovoltaic.
16 And -- let's see. We are noticing that most of the
17 utilities have allocated more toward photovoltaic, and
18 to come up with these figures we have included the Solar
19 for Schools programs, and less toward thermal, and Power
20 and Light is about equal on those two. And could we
21 have someone from the utilities to kick us off to kind
22 of address how you came up with your allocation of
23 photovoltaic versus thermal, and also your process where
24 you will determine if you need to reallocate during the
25 middle of the year.

1 **MR. BRYANT:** You're looking at me, so I guess
2 I have to, again, be the first one to speak, and that's
3 okay.

4 There was no magic. And the fact that the PV
5 is included -- I'm sorry, the solar PV is included in
6 the number, I think that's a function of what Lonnie
7 said earlier, the fact that you have a certain amount
8 of dollars, and if you are going to do, in our case,
9 and, in fact, in their case, if you are going to do one
10 school per year, that's going to, kind of, set in stone
11 what you are attempting to spend there, and it's going
12 to make the allocation, you know, move toward whatever
13 it happens to be in terms of the PV.

14 But, again, I want to go back to the earlier
15 comment that no allocation is cut in stone. It will
16 move, depending on the demand in a particular area.
17 And so if you see that you have a greater demand in the
18 solar thermal and smaller demand in the PV, then we
19 would move the funds accordingly. So there is no
20 magic.

21 We did not have any experience to go by in
22 terms of what to do for PV versus what to do for solar
23 thermal. Gulf and Progress are not in that same
24 category. And I can't necessarily speak for FPL, I
25 can't recall the background there, but it's just an

1 estimate. And our intent through the whole thing is to
2 have flexibility to move the dollars so that you can
3 expend what has been required, in our case
4 \$1.5 million.

5 **MS. HARLOW:** Earlier you said that one of your
6 intents was to get to the most number of customers, get
7 the most systems installed, and your incentives toward
8 thermal are much lower than toward PV. Did that come
9 into your consideration?

10 **MR. BRYANT:** Yes. And the reason for that is
11 you typically find your thermal installation being less
12 expensive than your PV, and so the funding went
13 accordingly. From a net metering perspective, we do
14 know how many customers we have, and so do the rest of
15 us. And we know generally the cost on each of those
16 systems as we have dealt with those customers. And so
17 you can see what the cost is, and you know what the cost
18 is for solar thermal. And so if you are going to help
19 the program along, then you are going to have to put a
20 little bit more money, in our opinion, toward the PV in
21 order to disperse it as opposed to the solar thermal.

22 **MS. HARLOW:** Anyone else?

23 **MS. NOACK:** This is Lonnie. Oh, I'm sorry.
24 Just one additional comment about the funding. You
25 can't just look at the dollars allocated, because if you

1 look at the total number of customers that we're
2 impacting for solar thermal versus PV, the total cost of
3 an installed system is much lower for solar thermal than
4 it is for PV.

5 We have allocated more dollars to PV for a
6 couple of different reasons. First, based on our
7 program experience, which I had talked about earlier
8 and how we decided to allocate those funds, and
9 especially based on the incentive level that we are
10 offering, and then, also, because of the cost of the
11 systems to install. We have enough funding in there
12 for our residential program to incent 100 solar thermal
13 customers, whereas for PV, using the same consistent
14 base level and incentive level that the other IOUs are
15 using for residential, we have enough funding in there
16 to incent 45 customers. But that is also not only
17 based on the incentive level, but it's based on our
18 experience with our net metering program and the
19 state's incentive program. So we have to look at more
20 than just percentage allocation and the total dollars.
21 You also have to look at the number of customers that
22 are being affected in each particular area, as well.

23 **MS. HARLOW:** Mr. Gans.

24 **MR. GANS:** Thank you.

25 From FPL's perspective, what we tried to --

1 what we attempted to do was we knew there were two
2 technologies that were of interest, both thermal and
3 PV. And looking at the state rebate information, we
4 saw that PV has -- because of the size of the systems,
5 could very quickly draw a lot of money. And what we
6 wanted to do is make sure that at least at the
7 beginning, that both technologies have sufficient funds
8 to support the interest from our customers.

9 Now, we're going to reevaluate that over
10 time, and if we see that one area, as has been said
11 several times, as we see that we gain experience and we
12 learn, and if there is one area that starts performing
13 at a higher level, a higher demand, we may shift from
14 one technology to the other. But at the beginning, we
15 wanted to make sure that both technologies had adequate
16 funds to support the interest of our customers.

17 **MS. HARLOW:** Thank you.

18 Does the solar industry want to speak to
19 thermal versus PV?

20 **MS. BROWNLESS:** Yes, ma'am. We have a couple
21 of comments. First of all, we think that it's important
22 that commercial and industrial customers have a solar
23 thermal program, and we would note that Florida Power
24 and Light does not have a -- they do? I'm sorry,
25 Progress does not have a commercial solar thermal

1 program. So we think it needs to be made available to
2 commercial as well as residential.

3 Another point we'd like to make, and I'm
4 going to make this quickly, is that Progress, for
5 example, has a combined solar thermal program with load
6 management, which was previously always in its energy
7 efficiency portfolio, and it has been moved now to the
8 pilot program portfolio. That is the one program that
9 I think did pass the cost-effectiveness test because of
10 its combination with load management. So we would like
11 to see that program moved back to the energy efficiency
12 side of the equation, because from our point of view
13 that does a couple of things: It is cost-effective; it
14 does pass the test. The reason that these solar
15 programs were pilot programs was because they were not
16 cost-effective by any of the traditional tests. And
17 that would free up more money to -- free up more of the
18 allocated money to go toward encouraging programs that
19 need to be incentivized.

20 And the other thing is that we basically
21 agree with the utilities that, obviously, since thermal
22 is cheaper than PV, if you have got the same pot of
23 money, you're going to get more thermal units than PV
24 units, so it really is a balancing process. We would
25 just like to say that that is why the reallocation of

1 funds becomes such a serious issue, how one is going to
2 do that, and we'd like to get a standard mechanism for
3 reallocation across to all the IOUs.

4 **MR. FUTRELL:** Christopher, could you respond
5 to one of the points that Suzanne made about
6 commercial/industrial solar water heating program? Did
7 you folks consider that? If you did, why didn't you
8 include it? What do you see as the pros and cons of
9 that program?

10 **MR. GILLMAN:** Certainly. We did consider it.
11 We looked at the market for commercial solar water
12 heating. What we saw in that market space were several
13 renters that might be potential participants as well as
14 a mix of alternative fuels. That really limited the
15 potential participation.

16 We also looked at our existing solar water
17 heating with energy-wise residential program, and
18 looked to see if there was a potential to mirror that
19 for commercial. There wasn't currently. So we didn't
20 look at design of commercial for those factors. The
21 design constraints seemed to limit the potential for
22 that type a program.

23 I should note that, you know, solar water
24 heating with energy-wise, we have identified
25 energy-wise as actually a barrier to adoption.

1 Customer acceptance is sometimes precluded because you
2 have the combination of a requirement for demand
3 response and solar, and maybe a customer wants to
4 participate in one or the other. That's one of the
5 reasons why we looked to see it as a pilot, you know,
6 to look at the potential for ways of addressing
7 additional acceptance, additional adoption, additional
8 mechanisms of program design, and perhaps in the future
9 addressing some of the existing program's barriers, and
10 making it available to developing commercial programs.
11 So all of those things are possible in the future as a
12 pilot program.

13 **MS. HARLOW:** Anybody else? And, once again,
14 if you're out there and you want to speak, we have extra
15 microphones or we can accommodate you.

16 **MR. FUTRELL:** I guess, Judy, I've got a few
17 questions. I'm sorry, Bill, go ahead.

18 **MR. GALLAGHER:** Yes; thank you. Bill with
19 FlaSEIA. Just a general comment about the importance of
20 allocation. If we use the solar rebate program as kind
21 of a model, when it was first laid out we did not know
22 that the federal would relieve the cap on PV.
23 Consequently, we were paying \$100,000 out of general
24 revenue for commercial systems that really didn't need
25 that incentive. We are kind of looking at the same

1 thing right now. We're sitting down trying to figure
2 out how can we help the public sustain the industry, not
3 only speaking from FlaSEIA, where I'm the current
4 president right now, but I'm also a small business
5 owner, a solar contractor for 36 years. The constant up
6 and down has been traumatic. Most of the industry is
7 seeing a minimum of 35 percent reduction. Some of the
8 people are leaving the state.

9 We're trying to determine how can we put a
10 package together to have some stability and help as
11 many people. And I think that is why you are seeing
12 the comments about the school program thing. In order
13 to get as much money available for the consumer, you
14 know, that's our interest. So that is just a general
15 comment that this is a very good point of discussion.
16 I appreciate it.

17 **MS. HARLOW:** Bill, you said you were a small
18 business owner, and I assume many solar installers are.
19 Do most solar installers do both PV and solar water
20 heater, or do they focus on one technology?

21 **MR. GALLAGHER:** Well, about four years ago it
22 was principally solar thermal. Now more and more people
23 are coming into the solar electric marketplace. It has
24 not been sustainable for them, so they are leaving at a
25 pretty rapid pace right out. Without a good policy,

1 they won't be there. Right now it's mostly thermal, but
2 we can bring them back with a good policy.

3 **MS. HARLOW:** So if the installers focus on one
4 technology, the reallocation issue would be even more
5 important.

6 **MR. GALLAGHER:** Well, I think the industry
7 needs a balance of both technologies to really -- to
8 sustain it. Because obviously the PV with grid parity
9 is going to be extremely effective, you know, maybe four
10 or five years down the road. We are trying to find a
11 bridge, you know, between now and then to sustain
12 businesses.

13 And, you know, one thing we haven't talked
14 about is job growth. You know, a system on a school
15 uses a few people for a short period of time. And if
16 you allocate that money to, you know, private
17 facilities, rooftops, you're going to extend that a lot
18 further and put a lot more people to work, and that's
19 our interest.

20 **MR. FUTRELL:** I have a few questions kind of
21 based on this idea of thermal versus PV, and the
22 allocation of those two, and should the emphasis be on
23 one over the other, or what that allocation should be.

24 In the Florida Energy Efficiency and
25 Conservation ACT, FEECA, the legislature stated that it

1 is critical to utilize the most efficient and
2 cost-effective demand-side renewable systems to protect
3 the health, prosperity, and welfare of the citizens in
4 the state.

5 Kind of from that general statement about
6 efficiency, cost-effectiveness of systems, putting an
7 emphasis on that, in the analysis that was done in the
8 goal-setting process to look at PV and thermal systems,
9 as Walter said earlier, the analysis was that none of
10 those systems were cost-effective using the traditional
11 tools. But was one technology more or less
12 cost-effective than the other? Can anybody speak to
13 that? What was some of the results? In other words,
14 was one shown to be much less cost-effective than the
15 other?

16 **MR. BRYANT:** Yes. Solar thermal has the
17 greater potential of the two to be cost-effective. And
18 I think one of the reasons for that, it has the slightly
19 greater potential of providing capacity benefits at time
20 of system peak. Now, granted the sun is not necessarily
21 shining at 7:00 in the morning, and it's kind of off in
22 the sunset, so to speak, at 5:00 or 6:00 in the
23 afternoon. But to the extent you have an 80-gallon
24 water heater that has been heated and has sustained its
25 temperature, the propensity for that water heater to not

1 run at 7:00 in the morning is greater because of the
2 volume, and the propensity to not run at 5:00 or 6:00 in
3 the afternoon is greater because of the volume.

4 So you get slightly better demand at times of
5 system peak from solar water heating, and therefore it
6 has a slightly greater propensity to be cost-effective.
7 And that would be -- that would be from the perspective
8 of the RIM test or the TRC test.

9 **MR. FUTRELL:** Do you have a feel for --
10 obviously folks use hot water differently
11 house-to-house, person-to-person. But, in general, is
12 there a point at which the number of members of a
13 household makes solar water heating become more
14 cost-effective, more of a reasonable pay-back period?

15 **MR. BRYANT:** From Tampa Electric's
16 perspective, we have generally used the criterion that
17 if there are three or four people in the family and you
18 can sustain that family in that home for more than just
19 one or two years, you've got the greater opportunity for
20 that to pay itself back to that customer. Solar water
21 heating in and of itself is not a bad idea, and in the
22 right application it does work.

23 I have told this story many times. I grew up
24 in the '50s, and we had solar water heating on our
25 house. And we had hot water, and it worked. So it has

1 been around for awhile. The question is can the
2 utility afford, from the standpoint of ratepayers using
3 their money through the ECCR, can the utility afford to
4 give an incentive to promote it, because it can give
5 capacity and energy savings that occur such that it's
6 better than building the avoided unit in
7 cost-effectiveness. And to date that has not been
8 proven.

9 The principal driver for that is the cost of
10 the equipment. As long as the cost of solar equipment
11 remains at its current level, cost-effectiveness is not
12 going to be achieved. Because the performance side,
13 even though it can improve slightly, and it will, it's
14 not going to improve enough such that the capacity
15 benefit is going to outstrip the cost need of coming
16 down. So the cost has to come down a significant
17 amount, which I think is one of the primary purposes of
18 the pilots is to see if infusion of utility dollars
19 into the marketplace will, in fact, proliferate the
20 technology, but at the same time bring the cost down.
21 If the cost does not come down, the TRC test will never
22 be cost-effective. And if the cost does not come down,
23 the incentive that can be provided by the RIM test will
24 not make the Participant test whole for the given
25 customer.

1 So the greatest probability, then, for
2 cost-effectiveness to occur is on the RIM side of the
3 equation, not on the TRC. The RIM values that we had
4 in the goals process were greater than the TRC values.
5 That's where the success of these programs are going to
6 be measured. Will the costs come down, the number one
7 item, and then which cost-effectiveness test should we
8 use on a going-forward basis to hopefully continue the
9 proliferation of the equipment? And it has to be on
10 the RIM side of the equation.

11 **MR. FUTRELL:** Well, given that at least at
12 this point, you know, obviously we'll be collecting
13 information going forward with these systems and the
14 cost and the benefits that may accrue, but given this
15 general statement in FEECA, should the Commission
16 consider, given that solar water heating appears to have
17 more benefits, or I should say it's more cost-effective
18 compared to PV, should the Commission consider that that
19 technology may help fulfill its requirement to meet
20 FEECA more effectively than allocating the PV?

21 **MR. BRYANT:** I think it's going to be driven
22 by what happens to the cost side of the equation. The
23 greatest probability for cost to come down, I think, is
24 on the PV side. And I think when we talk about grid
25 parity in five years, which I'm skeptical that that will

1 happen in five years, but, nevertheless, as it comes
2 down, that's the greatest opportunity there. So it's
3 too early to tell as to whether you should set a
4 directive, a policy, or an approach. I think, again, we
5 work through the process over five years, and we
6 determine what has happened in the marketplace to the
7 prices, and how does that impact cost-effectiveness.
8 And to the extent we are going to monitor and get demand
9 and energy savings from the work that we're going to do,
10 if, in fact, technology increases and becomes more
11 efficient, it will be measured.

12 **MR. FUTRELL:** Anybody else like to comment on
13 that? Bill.

14 **MR. GALLAGHER:** Thank you.

15 Yes. Howard, thank you for your comments. I
16 agree with most of them. I think the solar thermal
17 part of it is cost-effective now.

18
19 You know, we have installed somewhere
20 between 13 and 15,000 systems in the state, and we are
21 seeing conservatively rate savings of 20 percent. The
22 system cost somewhere around \$5,000, and after the federal
23 credit it's down to 3,500, payoff at about five years, so
24 there is no question, no doubt that these are -- they are
25 very cost-effective systems. And that was a guess on the

1 grid parity, sorry.

2 **MR. FUTRELL:** I don't want to bog things down,
3 but I do have a curiosity you raised. Is there any
4 standard reporting system for solar water heating
5 systems? I think with our net metering rule, we are
6 getting a pretty good stream of data, transparent
7 accurate data on PV systems and other renewable systems
8 pursuant to that rule, but is there any kind of standard
9 reporting on thermal systems that we could have access
10 to?

11 **MR. GALLAGHER:** The OUC has those records.
12 They have been doing it for sometime now. You know,
13 they have a production meter that actually tells how
14 much energy is being produced.

15 **MR. MAINGOT:** OUC is monitoring their thermal
16 systems. They offer a thermal incentive. Not an
17 upfront incentive, but they pay their customer for the
18 renewable attribute. On a solar hot water system they
19 pay them 3 cents a kilowatt hour, so they have installed
20 in their solar thermal systems a Btu meter that converts
21 to -- there is a converter in it that converts the
22 kilowatt hours. And an average 80-gallon system for a
23 family of anywhere from two to six people, you're
24 looking at about 8 kilowatts a day, 7 or 8 kilowatt a
25 day savings, something like that, kilowatt hours a day

1 savings.

2 **MR. FUTRELL:** But does FlaSEIA or FSEC, they
3 don't collect -- do they collect data?

4 **MR. MAINGOT:** Yes, FSEC does collect data.
5 Yes, they do.

6 **MR. FUTRELL:** Okay. Thanks.

7 **MS. HARLOW:** Anyone else want to comment on
8 thermal versus PV? Okay. I'm not seeing any takers.
9 Let's move on and talk about low income. Of course, we
10 all know that in use of utility funds from general body
11 of ratepayers we have equity issues and the utilities
12 have all come forward with low-income programs. And so
13 can we start by discussing how you decided how much to
14 allocate to those, how you're working with community
15 service organizations, kind of just update on that.

16 Mr. Bryant.

17 **MR. BRYANT:** Okay. And this is probably going
18 to be more specific to Tampa Electric than the others.
19 Although we're all using agency providers in our service
20 areas to help us, and you have heard mention Habitat For
21 Humanity. From our perspective, we know who the
22 providers are and we know how many, the number of -- the
23 average number of homes that they build in the service
24 area in a year, and so our intent then is to -- for
25 instance, in Habitat's perspective, they build either

1 four or five, I forget the number, but on average they
2 build about four or five per year in the area. And so
3 to the extent that those homes are being built for a
4 family of four or greater, typically they are, then we
5 are going to put a solar water heating system on that
6 particular home for new construction.

7 **MR. FUTRELL:** And all the costs of that system
8 will be covered, correct?

9 **MR. BRYANT:** Yes, ma'am.

10 **MS. HARLOW:** Did you consider working with
11 existing homes?

12 **MR. BRYANT:** We have not. We have not.

13 **MS. HARLOW:** Lonnie.

14 **MS. NOACK:** We started off budgeting for the
15 solar PV and the solar thermal first, because that is
16 where our experience had lied. So once we developed a
17 budget for the solar PV, the solar thermal, we know we
18 wanted to do a solar for schools program. We are
19 targeting one school per year. And then to kind of look
20 at what the administrative costs would be to be able to
21 administer these programs, we kind of took what we had
22 as far as the remaining dollars available and applied
23 that to a low-income application. That's how we
24 determined how much to apply to low income, but we
25 focused initially on those initial programs because we

1 felt that is where you would get the biggest deployment.

2 However, we wanted to incorporate low income,
3 because we felt like that was one potential market that
4 could he benefit from energy efficiency and renewable
5 type programs. But there is a significant barrier in
6 those particular markets or that particular market
7 because of the high cost of these systems. So we
8 wanted to make sure we included that, but that is how
9 we determined much to allocate or budget to that
10 particular program.

11 And we are not limiting it just to new
12 construction. We are evaluating existing low-income
13 facilities, so we are not limiting it to new
14 construction for Gulf Power's program.

15 **MS. HARLOW:** Progress.

16 **MR. GILLMAN:** Christopher Gillman with
17 Progress. First of all, Howard, of course, mentioned
18 that he was just speaking for TECO, but I think in
19 general his comments were in line with ours. We have
20 worked with the community groups in the past and have
21 identified the market. We also looked at our percentage
22 of low income throughout our DSM portfolio, and we
23 looked to mirror that in our solar programs.

24 Regarding the existing homes, we looked at
25 the potential for additional administration,

1 installation, and perhaps even liability issues, and
2 wanted to limit it at least at this time to new
3 construction.

4 **MS. HARLOW:** Does Power and Light have any
5 comments on low income?

6 **MR. GUYTON:** A few. This is Charlie Guyton.
7 I think you need to put it in context a little bit, and
8 I would harken back some to Mark's original
9 observations. Most of these programs were not
10 cost-effective under either RIM or TRC, so the only real
11 prospect of them being cost-effective was for the
12 participant. Not all of these measures are even
13 cost-effective to the participant, so FPL has -- as it
14 has looked at low income has looked at the measures that
15 stand a chance of being cost-effective to the
16 participant. That is on the solar water heating side.
17 And the low income customers are eligible to participate
18 there because it makes -- it can make economic sense for
19 them to do it.

20 We know that they are not going to benefit as
21 nonparticipants from the results of the RIM test, and
22 we also know that they are not going to benefit as a
23 general body of ratepayers from the TRC results. So
24 that's where the focus on FPL has been in terms of the
25 low-income customers is that FPL chose to fund the

1 measures where the participants, the low-income
2 participants may actually be able to derive some
3 benefit to themselves. I think that's the general
4 approach.

5 Oscar, correct me if I have misspoken here,
6 but that is the thought that has gone into the low
7 income.

8 **MS. HARLOW:** Anyone from the solar industry?

9 **MR. GILBERT:** Excuse me. Lee Gilbert. None
10 of the programs in the public sector. All the monies
11 went to schools, but there is low-income housing and
12 projects that are out there that could also probably
13 benefit from some of these programs, especially thermal.
14 In some of the larger house housing projects that would
15 probably be considered public funds rather than private
16 funds, but nobody crossed that issue in any of the
17 programs thus far.

18 **MS. HARLOW:** I think Power and Light wants to
19 speak to that.

20 **MR. GUYTON:** I'd point out that those public
21 institutions are eligible under FPL's programs. There
22 is not a specific program targeted to them as there is
23 schools, but there is an eligibility, and they would
24 address it just like any other customer as to whether it
25 makes economic sense for them to participate. They are

1 certainly not precluded, and they will be eligible.

2 **MS. HARLOW:** Suzanne, I wanted to give you an
3 opportunity, if you wanted to speak to low income.

4 **MS. BROWNLESS:** Only to the extent that for
5 low-income families, probably solar hot water is where
6 the emphasis needs to be placed. That probably has more
7 bang for the buck for them.

8 **MS. HARLOW:** You expressed a concern earlier
9 about the school program that the utility dollars would
10 be used to fund the entire system, and that's also the
11 case with low income. Do you have that concern here?

12 **MS. BROWNLESS:** Well, thermal is a lot
13 cheaper.

14 **MS. HARLOW:** Thank you.

15 Any other comments on low income? Once
16 again, anyone back there in the crowd, if you want to
17 jump forward just do so, let us know. Let's move on.
18 And I think we've covered this a good bit, but just in
19 case we have any additional thoughts on residential
20 versus commercial/industrial. Anyone have any thoughts
21 on the allocation there?

22 **MR. GUYTON:** FPL would just reiterate that
23 allocation wasn't the starting point, it was the end
24 result. I mean, the program design was the starting
25 point in terms of what's the best design for programs

1 and then the dollars fell out. It wasn't an allocation,
2 it was the reflection of what we thought the appropriate
3 design parameters were.

4 And to reiterate what Howard said earlier,
5 they are all projections, and I think FPL certainly
6 intends to respond to the market as what's accepted and
7 what's not accepted. And its almost a misnomer to talk
8 about this as an allocation. I mean, there will be a
9 refocusing of program and expenditures. If it requires
10 program modification, the Commission will be consulted.
11 If it requires participation standard changes, the
12 Commission will be consulted. If it doesn't, we would
13 like to preserve the flexibility to be able to respond
14 to the market in a meaningful and timely fashion.

15 **MS. HARLOW:** Thank you.

16 And I think Mark said earlier that we would
17 really appreciate everybody's comments, post-workshop
18 comments on how you think that reallocation should
19 occur if -- using the term allocation loosely. Any
20 thoughts from the solar industry on residential versus
21 commercial/industrial?

22 **MR. FUTRELL:** If I could just follow up. And
23 pardon me, Suzanne --

24 **MS. BROWNLESS:** Sure.

25 **MR. FUTRELL:** -- and follow up with Charlie.

1 You mentioned, you know, that the allocation wasn't
2 something that drove the program design, but there were
3 factors in the program design that led to the
4 allocation. Can you kind of give us an idea of what
5 some of those critical -- maybe you or Oscar can give us
6 what were some of those critical program design elements
7 that led you to design the program as you did that
8 resulted in these kind of allocation breakdowns that we
9 have seen.

10 **MR. GANS:** Yes. What we did is we looked at
11 -- starting with the basic economics to the consumer --
12 looking at the paybacks of the different technologies,
13 and so we modeled what the expected participation rate
14 would be or what the adoption rate would be for
15 different types of technologies; so residential solar
16 thermal, residential PV, et cetera. And so we basically
17 let that growth curve determine where the dollars were.

18 So we had already been looking at it, making
19 sure we had a thermal and a PV allocation as far as,
20 you know, wanting to make sure we had those two
21 covered. But then we looked at the incentive levels
22 that we were planning on having and then looking at the
23 effect of those incentive levels on the typical
24 projected adoption.

25 **MR. FUTRELL:** So did the -- what drove that,

1 was it the number of installations that was kind of
2 critical to you to see how many installations were
3 driven or the kilowatt hour savings that would result
4 from the dollars that would be spent?

5 **MR. GANS:** Actually we were focused on the
6 installation, the projected number of installations
7 based on the economics.

8 **MR. FUTRELL:** Okay. Thank you.

9 **MS. BROWNLESS:** I just have a question about
10 how the cost-recovery clause works for FEECA. Are there
11 quarterly reports, progress reports that are required to
12 be filed in the cost-recovery docket that would track
13 Howard's quarterly evaluation of the programs?

14 **MR. FUTRELL:** Well, I know right now there are
15 annual filings that are made as part of the true-up
16 process, and each program that the Commission has
17 approved for which the utility receives cost recovery,
18 they file schedules that document the costs.

19 **MS. BROWNLESS:** I know they do that.

20 **MR. FUTRELL:** And in the back of those
21 schedules there's a program summary page for each
22 program where they state -- give you a quick briefing on
23 where they are with the program, the dollars that have
24 been spent, things like that. And so that's done
25 annually currently.

1 Now, if you think we should do something a
2 little more frequent --

3 **MS. BROWNLESS:** I was just wondering if it was
4 currently being done quarterly.

5 **MR. FUTRELL:** Yes, that is how it is currently
6 being done. It's annually.

7 **MS. BROWNLESS:** Okay. Thank you.

8 **MS. HARLOW:** Suzanne, did you have any
9 thoughts on residential versus
10 commerical/industrial? No? Thank you.

11 The next topic we would like to discuss is
12 program monitoring and verification. These are new
13 programs. We're moving into new areas here for utility
14 funding, and we'd like to discuss what kind of data we
15 need to track the programs; how often should we get the
16 data; how do we tell if the programs are a success; how
17 do we tell if the programs are meeting the requirements
18 of the revisions to the FEECA statute? And I'd like to
19 just start by saying how should the results of the
20 programs be monitored, tracked, and verified, and can
21 we get an update from the utilities on what types of
22 data they plan to collect and how?

23 **MR. BRYANT:** Again, thanks for looking at me,
24 Judy. (Laughter.)

25 I think you will generally find the utilities

1 tracking a half a dozen key items that are components
2 to cost-effectiveness: Summer demand/winter demand
3 reduction; annual energy reduction, cost of equipment,
4 the key driver. We currently know what those items are
5 today for our respective service areas, particularly
6 the cost, and so the biggest monitoring effort is going
7 to be what's happening to the cost. Is it actually
8 coming down like the vision is for the pilot program.

9 Now, to go beyond that and get specific in
10 terms of how often should that be tracked or monitored
11 and the number of sample points and things of that
12 nature, this is probably going to be specific to Tampa
13 Electric. We don't believe that it's necessary to do
14 end use monitoring on solar water heating. The Solar
15 Energy Center has done that for years, and we can
16 simply piggyback on their data. The one key determiner
17 happens to be the number of people in the home. That
18 will dictate the consumption of hot water, therefore,
19 it will dictate the consumption, or the lack thereof,
20 of kilowatt hours through the meter, because it is
21 being provided by the sun. And so we will monitor
22 that, and that will tell us what is going on from the
23 number of folks in the household. That's solar water
24 heating.

25 We will certainly know how many are paid. We

1 will certainly know if we have reallocated funds during
2 the course of the year, and all of that will be a part
3 of what we supply in the true-up filing that Mark was
4 alluding to earlier.

5 From the PV perspective, our vision is to
6 monitor on a sample basis. And the reason we believe
7 you can monitor on a sample basis and, therefore,
8 expand the population of participants is because the
9 output of solar technology is somewhat linear from the
10 standpoint of a 10 kW system and a 5 kW system. So you
11 can kind of recognize it's going to be twice as much or
12 half as much, depending on which way you want to go
13 there.

14 And so we will do end use monitoring no
15 different than we do on our other DSM programs. The
16 reason we want to do sampling is because it minimizes
17 the cost. You have the efficiency of the linear
18 application of demand and energy savings, and so we
19 think that will help us, again, do the collection of
20 the demand and energy information for
21 cost-effectiveness.

22 Cost, again, will be collected; the size of
23 the systems, things of that nature, and, again,
24 reported on an annual basis in the FEECA report, or in
25 the -- well, certainly the FEECA report, but also in

1 the true-up filing where the expenditures will be
2 identified. If there has been a reallocation, the
3 reason for that will be stated, you know, that type of
4 stuff. So our perspective is that you will find in the
5 true-up filing the data that's necessary to do the
6 evaluation of the program on an ongoing basis.

7 Now, that brings to mind the question of,
8 well, when are you going to do cost-effectiveness? I'm
9 not convinced we should do it at the end of the first
10 year, and I'm not convinced we should do it at the end
11 of the second year. I think you do it at the end of
12 the process to determine if there has been a change
13 from where we were when the goals were set and the
14 expenditure levels were set. That gives time for two
15 things to happen; costs to go down, and, number two,
16 demand and energy savings to increase because of the
17 technology increase. And you can actually perhaps see
18 a trend as you collect that data over time, which would
19 suggest maybe we should know -- and I said maybe -- we
20 should identify what types of solar PV or PV systems
21 are being installed.

22 There are different kinds of technologies
23 that convert the sun into energy. Solar thermal is
24 kind of solar thermal, but it's just another piece of
25 what we want to track in terms of identification. When

1 you get to the end of the race in five years or four
2 years, depending on when the goals setting process is
3 going to happen again, then we can say here is what we
4 have done. We have spent X number of dollars. It has
5 gone across these technologies. It has gone across
6 these end use segments. Here is our demand and energy
7 savings. Here is our avoided unit at that particular
8 point in time, and here is the cost-effectiveness that
9 we now see. And did, in fact, the experiment of market
10 infusion of dollars reduce the price so that we can
11 help its cost-effectiveness.

12 I kind of see that as what we want to do on
13 an overall basis on a marketing -- I'm sorry, on a
14 monitoring perspective of these particular programs.

15 **MS. HARLOW:** I have a couple of questions.
16 First of all, so your intent for providing data to us is
17 through your annual true-up filings as well as through
18 any FEECA data requests, and then it sounds to me as if
19 you're intending to provide us with a follow-up report
20 at the end of the pilot programs.

21 **MR. BRYANT:** It could be a follow-up report or
22 it could be the culmination at the last true-up filing
23 that now summarizes all that we have learned. It would
24 depend on what the need is. But you would have
25 probably two avenues. One we see in place to be used,

1 but then to the extent more data may be found necessary,
2 then we could work toward a broader perspective or a
3 broader evaluation.

4 **MS. HARLOW:** And on the sampling for the PV
5 systems, could you walk us through the equipment for
6 that, who is paying for the equipment, would those
7 dollars be applied toward the dollars that have been
8 allocated toward the programs?

9 **MR. BRYANT:** The equipment is simply another
10 meter that tells us the output. A pulse meter, if you
11 will, that gives us demand and energy coming from the PV
12 array. And if you're going to sample no different than
13 you do in our other DSM programs, around 10 to
14 15 percent, then the cost is going to be minimal, and we
15 have built that cost into the overall administrative
16 estimate that we have provided here.

17 **MS. HARLOW:** I think this question is
18 important enough that we should go through each utility
19 and then open it up to other parties. Power and Light.

20 **MR. GANS:** In our case we are thinking of a
21 similar sampling plan that we do with our other DSM
22 programs for M&V. We want to look at, you know, looking
23 at the energy and demand impacts obviously. We're going
24 to look at the billing impacts to customers, how the
25 bills actually -- how much of it results in their bill

1 going down. We are also going to do some actual end use
2 monitoring on sampling to see what the actual output of
3 these systems are. And then probably -- just as
4 importantly as everything, is we are going to monitor
5 the cost of the systems by capturing system cost
6 information throughout the period of time to see if
7 there is any movement in the cost.

8 One area that we are very interested in is on
9 our solar thermal for business program. While there is
10 probably more information on the solar water heating
11 for residential applications, for example, we believe
12 that on the solar thermal that we have not been able to
13 find any major studies done on this. So for those
14 we're going to take particular attention and make sure
15 that if those customers start putting those systems in,
16 we want to get a good sampling of different types of
17 buildings and different types of applications. So that
18 one will be probably a little bit higher monitoring
19 than others because it's new.

20 **MS. HARLOW:** Gulf.

21 **MS. NOACK:** Gulf plans to track various
22 customer and system information throughout the entire
23 process that we'll capture in a tracking database, and
24 we will do some engineering estimates and calculations
25 of what that equates to as far as energy and demand

1 savings. Because we feel as far as additional
2 monitoring goes that there is quite a bit of information
3 already available on the performance of solar thermal as
4 well as solar PV. We have even done some projects
5 internally. We feel like we have enough data that we
6 know what types of data to collect to get good
7 calculations and estimates on how those systems are
8 performing. So we will be tracking those, and, of
9 course, we plan to provide that information to the
10 Commission during our annual reporting process under the
11 FEECA docket and any subsequent requests in association
12 with that particular docket.

13 In addition, we're not adding additional
14 monitoring because it would take away from the
15 available -- it would increase administrative costs for
16 the program, and it would take away from the available
17 incentives that we could apply to the other programs.

18 **MS. HARLOW:** Progress.

19 **MS. GUTHRIE:** Lee Guthrie for Progress. I
20 would agree with Howard and our colleagues from Gulf and
21 FPL as well, for the most part. But, we will be -- on
22 the PV for Schools, we'll be metering the installations
23 there. Otherwise, we will be relying on -- as we said,
24 we have a lot of good industry knowledge. We will be
25 relying on that information to keep administrative costs

1 low, as well as our metering analysis, billing,
2 information that we have on demographics as Howard
3 mentioned. Occupancy is very important in solar water
4 heating; and, again, we would look to include that
5 information for greater efficiency in the annual
6 reporting that we do.

7 **MS. HARLOW:** Let's look to the industry. Do
8 you have any concerns about the use of existing data
9 that the utilities are suggesting?

10 **MR. GALLAGHER:** I think FSEC is probably the
11 best resource for the existing data. They have been
12 tracking it for 25 years. Just a comment on the solar
13 water heating portion of it; it's really hard to
14 determine it by the number of people in the family,
15 because it is all based on water usage. You could have
16 a family of two where the lady takes baths every day and
17 they could be using the amount of hot water of a family
18 of five. So it's probably not the best gauge, but FSEC
19 would probably be the best source.

20 **MS. HARLOW:** I heard some consistency that the
21 intent of the utilities at this time is to present
22 annual data. I wanted to know if there were concerns
23 with that.

24 **MS. BROWNLESS:** And I apologize for my lack of
25 knowledge of how the FEECA clause calculations are done.

1 That's an annual docket; that's a continuing docket
2 every year. So during the course of the year, the
3 filings are made in March or April -- is that when the
4 initial filings are made, or how does that work?

5 **MR. FUTRELL:** I believe the first true-up
6 filings are made generally in May, I believe, and then
7 the projected filings for the upcoming year are made
8 usually in September. You can correct me if I have
9 stated it --

10 **MS. BROWNLESS:** And then the docket is in
11 October?

12 **MR. FUTRELL:** And then the hearing is in
13 November.

14 **MS. BROWNLESS:** November. Okay. If, as
15 appears to be the case, the utilities are going to be
16 constantly monitoring these programs so that they can
17 figure out if any reallocation needs to be done,
18 obviously they're going to know instantly through their
19 sign-up systems if they have got oversubscriptions,
20 where they have got oversubscriptions, how fast they get
21 oversubscriptions, what's the amount that has been
22 subscribed in the period of time, and I know that there
23 is data requests that are -- once the filing is made in
24 May, I'm sure there's instantly a review of the data by
25 the staff and data requests are made; is that correct?

1 So the true-up goes into effect January 1 each year,
2 right? That's when the factors get put into place.

3 **MR. FUTRELL:** (Indicating yes.)

4 **MS. BROWNLESS:** I think because these are new
5 programs, maybe what we'd like to see is -- because I
6 think the utilities will be preparing their own
7 quarterly reports anyway. For purposes of their own
8 monitoring and reallocation, perhaps a brief quarterly
9 report that just enumerates the data that they are
10 already going to be collecting, energy demand savings,
11 the number of installations, the costs that they have
12 been able to collect, I think that would help,
13 particularly in the first year, because it is such a new
14 program. Maybe not so much for Progress' solar thermal
15 and demand-side, because they have been doing that a
16 long time, but for everybody else.

17 So I think that's what we would be looking
18 for, which I assume also could be achieved through
19 staff data requests in the FEECA docket. So it kind of
20 comes out to, you know, six of one and half a dozen of
21 another, but I think we'd like to see a standard
22 reporting for everybody, that's our issue, so that all
23 the IOUs, if they had to file a quarterly -- and we are
24 not talking a whole lot of data, just kind of a
25 snapshot. And that would give the Commission an

1 opportunity to find out if they thought reallocations
2 needed to be made, or kind of track the funding.

3 **MR. FUTRELL:** Let me pose a question to the
4 utilities. In addition to the information provided in
5 the conservation cost-recovery docket, there's also --
6 the Commission rules require what is called a FEECA
7 report, which is essentially an annual report that comes
8 in usually in March, I believe, that provides
9 information on conservation program participation,
10 comparison to what the anticipated participation was,
11 the goal achievements compared to what the goals were
12 for that year, and it's an annual filing. Were the
13 utilities intending to include information in that
14 report on the solar pilot programs, or have you thought
15 that through at this point? And I'm not going to look
16 to Howard directly.

17 **MR. BRYANT:** Everybody else is, so I'll still
18 talk. Our intent was to utilize the true-up mechanism
19 as the comprehensive mechanism to provide what's
20 happening. To the extent that you look at the March 1
21 FEECA report, that more is geared toward activity. And
22 when you look at what we have been required to do, it's
23 an expenditure cap. It's not a participation level
24 target, it's an expenditure cap. And so I would view
25 the March 1 report as perhaps, though I have not thought

1 through it, but I would view it as perhaps an
2 opportunity to identify participation, but identify also
3 did we spend the cap or not. So it's more of an
4 activity driven thing. The true-up is activity and
5 dollars spent, and I think is probably the better
6 mechanism to look toward us having sort of the
7 comprehensive review.

8 You talk about making a report on a quarterly
9 basis. That's cumbersome, bottom line. Number two,
10 it's use for the first year is not that significant,
11 because when you launch the program there may well be
12 60 to 90 days before you find certain participants even
13 being able to install the equipment. And each of us
14 has a mechanism in place such that after 90 days, or it
15 could be different for a different utility, I think we
16 are in the 90-day range, but if a subscription has not
17 been secured by way of an installation, then that money
18 goes back into the pot for someone else.

19 So I think we wait until a year goes by and
20 then we make the analysis on what we have learned. I'm
21 not sure there is a lot to learn three months down the
22 road or six-months down the road. I'm just not sure.

23 **MS. BROWNLESS:** So, Howard, may I just ask,
24 for the first year, for this FEECA docket coming in
25 September, would you be looking to provide data in

1 September for this year?

2 **MR. BRYANT:** You have, you have two
3 opportunities to provide information. The first is when
4 the projection is filed, and that's typically filed
5 around early September. That's when you're projecting
6 the following year. But in that particular filing you
7 also historically talk about what's happened previously.
8 So you have information that has actually inception to
9 date and, as well, annual information there from a
10 participation perspective and dollars. And so that'll
11 look forward but it'll also look back.

12 When you get to the true-up filing, which for
13 the 2011 period will be filed sometime in late April or
14 early May, that'll have 12 months worth of action
15 activity and dollars spent for 2011. So those would be
16 the two opportunities to be viewing things. And so
17 from that perspective you're going to get, frankly, two
18 opportunities roughly six months apart to see what's
19 been going on with this particular, with these, with
20 these, with these pilot programs.

21 **MS. BROWNLESS:** So for this year the original,
22 the initial filing would be in September of this year
23 for, in September of 2010, and that would have been for
24 the short period of time that the programs would have
25 been in place. And then you'll have a projection for

1 next year; correct?

2 MR. BRYANT: It would be September 2011. And
3 that will be to the extent we can provide information
4 what has been happening in the current year.

5 MS. BROWNLESS: Right.

6 MR. BRYANT: And then it would have the
7 projection for the full 2011.

8 MS. BROWNLESS: For the coming year, for 2012;
9 right?

10 MR. BRYANT: Yes. Uh-huh.

11 MS. BROWNLESS: Thank you.

12 MR. FUTRELL: Mr. Trapp.

13 MR. TRAPP: Hi. I'm Bob Trapp, Staff.

14 I just wanted to make everyone aware that
15 reporting is not just to the Commission, but we also
16 have responsibilities to report to the Legislature.
17 And we received an announcement today that next year's
18 session for 2012 is going to start early, in January,
19 and I would suggest that Staff is going to want the
20 data to be able to report to the Legislature in January
21 of 2012. So whatever is decided, please take that into
22 consideration.

23 MR. GALLAGHER: Thank you. Yeah. I, I would
24 like to know if the utilities plan on posting the status
25 of the program online. I think most of our concerns are

1 if, if these programs were to run out of money in four
2 to six months, what occurs at that point? How do we
3 know going on -- let's suppose somebody puts in for the
4 program and they're not accepted. Do they go first in
5 line to next year? Do they have to reapply? You know,
6 our main concern is, is this starting and stopping of
7 the industry. Because if a person knows that I'm going
8 to have a certain incentive, I'll have to wait until
9 January to get it -- I think you can see our concerns.
10 I'd just like to know how they plan to keep industry
11 informed.

12 **MR. BRYANT:** The -- I think the thing that
13 will help you the best is to perhaps understand the
14 reservation process and then the communication process.
15 I think all of us, and if I'm wrong, somebody correct
16 me, but I think all of us are putting our information
17 online.

18 And, number two, prior to the installation of
19 any technology occurring, we want to have a
20 representative in the field that knows it's going to go
21 in, it's going to be installed.

22 One of the reasons is the fact that if you
23 install either of these technologies and there's
24 extreme shading, you're not going to get your savings.
25 And so we want to be on the front end of this.

1 So the customer will know before they even
2 apply whether or not -- and I say apply, before they,
3 before they start the installation, the customer is
4 going to know that we need to be in the field and say
5 it's a go or it's a no-go so that they have an
6 understanding of whether they're going to get their
7 money or not.

8 At the same time that they put their name
9 into the reservation process, on the Web, on the
10 website it's going to tell whether there's funding
11 available in the first place. And if there's no longer
12 any funding available for solar water heating as an
13 example, they will be put into, I'll call it a waiting
14 list, I forget what our fancy name is, but it's, it's a
15 waiting list, but they're going to be put in a waiting
16 list, interested parties, so that if funding does
17 become available in that particular endeavor they're,
18 they're wanting to install, then we will notify them.
19 And we'll notify everyone in that, in that pool of
20 interested parties for, for instance, solar water
21 heating. So when more money comes available, everybody
22 at one time, at one instant is going to learn this
23 money is available by date certain, get in line, in so
24 many words, so that you can have your shot at the
25 money. But, again, we're going to be on the front end

1 of knowing whether or not that person qualifies or not.

2 **MS. HARLOW:** Will the information on the
3 website that's available to the industry and your
4 customers just say, yes, no, there is funding, or will
5 it have a counter that counts down the funding, how much
6 is left?

7 **MR. BRYANT:** I wasn't getting hungry by
8 chewing my fingers. I was searching for an answer.

9 There is no countdown. It's either a it is
10 available or it's not available.

11 **MS. NOACK:** May I go ahead -- may I address
12 this question?

13 Our program is, is very similar but slightly
14 different in the fact that we will have the amount of
15 available funds for each of the programs. We will have
16 that available on our website. And we are not going to
17 have a waiting list. It's just going to be on a
18 first-come, first-serve. Customers will not even be
19 able to apply if there aren't any incentives available
20 for a particular program. So there is no expectation
21 on the part of the customer, you know, similar to what
22 happened with the state program where customers just
23 continued to apply and apply and apply, and then they,
24 they were thinking that they were going to get the
25 incentive but the funds had actually run out. So we

1 are going to make sure that we have notification on the
2 website that funds are available.

3 And then final payment of those funds will be
4 determined, once a customer gets a reservation, then
5 final payment of those funds will be determined based
6 on them meeting the rest of the program eligibility
7 requirements. So we'll know in advance, the customer
8 will know and contractors will know in advance how much
9 funds are available for each individual program.

10 **MR. GILLMAN:** It's Christopher with Progress.

11 Again, our programs work similarly but some
12 slight differences. First and foremost, our program is
13 going to launch on March 15th with some annual
14 tracking. So initially we'll have a, our funds
15 available. Whether or not we have a countdown later
16 would be determined. But initially we won't have a
17 means of doing a counter, so we'll just do yes or no.

18 As far as a, a waiting list, we'll accept
19 applications and we will actually process those
20 applications, we'll provide a reservation number
21 similar to the other utilities, but the actual
22 installation will be on the payment of the incentive.

23 So there is the potential that funds would
24 become available even after the, quote, expiration of,
25 of allocations of funds and the initial process. If

1 that were to happen, our list of, of applicants,
2 approved applicants would, would go down the list on a
3 first-come, first-serve basis.

4 Regarding the next year's application, that
5 process would start over. So on an annual basis we
6 would have a potential waiting list, but not year over
7 year.

8 **MR. FUTRELL:** Christopher, I'm sorry, but I
9 didn't quite hear that correctly. It sounded like
10 you're going to be able -- customers will be able to get
11 on a waiting list whether there's -- if funds run out.

12 And will people just be, you know, continuing
13 to stack up and stack up and stack up? Because
14 that's -- just clarify that with me, if you could,
15 because we're very concerned about trying to avoid the
16 problems that the Energy Office faced and the customers
17 faced and the industry faced. And if you could clarify
18 that for me.

19 **MR. GILLMAN:** Absolutely. I apologize for not
20 being clear initially. You know, our initial process is
21 going to be manual. So it's going to be hard to cut off
22 applications until we know that the funds are, are, are
23 fully subscribed. We expect that it will potentially be
24 oversubscribed and that will generate somewhat of a
25 waiting list of, of potential applicants that are, that

1 don't have availability of funding.

2 So those, those individuals on that waiting
3 list, if we did not -- if an approved application was
4 not installed, then funds would be made available to
5 the person down the waiting list. However, it's not
6 our intention to maintain a waiting list for,
7 throughout the program. That would just be in a case
8 of, of the design of the, the specific year and mostly
9 because of our manual tracking process.

10 The beginning part of 2012 installations,
11 we'll begin accepting applications in October for the
12 following year, and that would be a first-come,
13 first-serve basis at that time.

14 **MR. FUTRELL:** But are you going to notify
15 customers whenever that, the cap has been reached and
16 tell them that no further applications will be accepted
17 similar to Gulf, or are you going to continue to allow
18 the applications to flow through?

19 **MR. GILLMAN:** No. What we would do is we
20 would, we'll, we'll respond to each one of our
21 applicants and to let them know if they have a
22 reservation number or whether or not the funds have been
23 expired, and so they'll know instantly on that during
24 the year.

25 Should funds become available, then we would

1 contact the customer that's in order to let them know
2 that funds have become available. So if they would
3 like to proceed with their, their application, they can
4 do so.

5 **MR. FUTRELL:** But are you going to publicize
6 to customers in general when that cap has been reached,
7 that, to --

8 **MR. GILLMAN:** Yes. That would be made online,
9 and also individual applications would no longer be
10 accepted.

11 **MS. BROWNLESS:** Well, I'm a little confused.
12 You're going to -- you will know when your funds have
13 been fully allocated, you'll know when you've accepted
14 enough applications to clearly exhaust the funds in each
15 program; is that correct? And at that time are you then
16 going to accept more applications and put them on a
17 waiting list and give priority to the people on that
18 waiting list in the, in the order that they were placed
19 on that waiting list should funds become available in
20 that year? Is that what you're saying?

21 **MR. GILLMAN:** No. I'll try to be a little bit
22 more clear in that our application process is going to
23 be manual and it's going to require us to take a few
24 days to go through that processing.

25 Now during that time period there's certainly

1 the potential to receive more applications. And so as
2 we receive those applications, we'll want to process
3 them. Once we can identify that our funds are, are
4 exhausted, we will notify that there's no more funds
5 available and stop accepting applications.

6 **MS. BROWNLESS:** Okay. So you're going to have
7 a waiting list only to accommodate the short period of
8 time to manually process the applications?

9 **MR. GILLMAN:** That's correct.

10 **MS. BROWNLESS:** Okay. And if you get through
11 the application process and for whatever reason the
12 person doesn't actually install the facility that
13 they've applied for, what are you going to do then, and
14 funds do subsequently become available, what are you
15 going to do?

16 **MR. GILLMAN:** We expect to have -- again, some
17 of those applications that we've processed that were not
18 made available for a reservation number because the
19 funds were exhausted, and we would go down that list to
20 let, inform the customers that now funds are available.

21 **MS. BROWNLESS:** Okay. Then this is what I'm
22 confused about. I can understand cutting off accepting
23 any applications when you believe all the funds have
24 been expended. That makes sense to me. I can
25 understand Howard's system, which is where you keep a

1 list and then you figure out that you have extra money
2 and then you notify everybody and let them do
3 first-come, first-serve.

4 But I guess I don't understand how you're
5 going to have a waiting list that gets -- I don't
6 understand how your waiting list is going to get turned
7 on and turned off. Either you accept a waiting list
8 and then as funds become available you let people have
9 access to the funds in the order that they're on the
10 list, or you do as Howard is saying, you have a waiting
11 list and then you have a point in time at which you
12 notify everybody that funds are going to be available.

13 I mean, it seems like if you're going to have
14 a waiting list and you're going to give them priority,
15 you have to continue to keep the waiting list, you have
16 to continue to keep it. Or how are you going to tell
17 when you're going to cut it off when you have your, all
18 the funds expended because people have gone through the
19 complete process and had the application actually
20 installed? Do you understand why I'm confused?

21 **MR. GILLMAN:** Again, I think the, the process
22 required -- there's going to be some overlap. There's
23 going to be a need for us to process the applications as
24 we receive.

25 In addition, there's information on the

1 application that's valuable information on the type of
2 system perhaps being installed, the cost of those
3 systems. That's valuable information as well. We hope
4 to gather that information associated with these pilot
5 programs.

6 The, the term of a waiting list I think is
7 perhaps being, being overused. It's not the intent to
8 have a waiting list. The intent is to process
9 applications in the order that they're received.

10 During the time that we accept applications,
11 we want to process all those applications. If there's
12 an application that's received and processed before we
13 recognize that funds are exhausted, we want to maintain
14 that availability.

15 **MR. FUTRELL:** Bill.

16 **MR. GALLAGHER:** Again, just as, as a, as a
17 small business owner just trying to put, put this in
18 perspective, we have a sales staff that are, they're
19 unaware at this point that the funds are exhausted.
20 They go out and a consumer purchases a solar system. We
21 do the site survey, the whole thing, submit it, only to
22 find out the money has been expended. Now the customer
23 goes, "Now what? This is June. Now what do I do?"
24 "Well, sorry, we'll have to get back together in
25 January." And you can kind of see the dilemma that it

1 puts us in.

2 There, there has to be a tracking mechanism
3 so that we know before we go out. Because my
4 understanding is there's not going to be any marketing
5 of solar, it's going to be left up to the solar
6 contractor. So how can we effectively market a program
7 if we really don't even know if there's funds there?

8 **MR. FUTRELL:** Well, I think, given how
9 Christopher described how the program is going to get up
10 and running, it's going to be kind of a manual basis
11 initially. It's going to be really incumbent to stay on
12 top of those applications as they come in. And as soon
13 as you've reached that cap, it's very important,
14 personally speaking, to make sure it's posted on the
15 website, publicized to make sure everything is
16 transparent.

17 And I understand when you get a more
18 mechanized system up and running, that might make it
19 easier. But I just think it's even more critical
20 initially to get the information out there to the, to
21 the customers and to the industry.

22 **MR. GILLMAN:** Excellent point. And that's why
23 we will use the website to, to convey that information
24 that the funds are exhausted for, for the individual
25 programs.

1 **MS. HARLOW:** So your intent is the same as
2 TECO's and Gulf's are my understanding of it, that your
3 website will just say funds are available or funds are
4 exhausted.

5 **MR. GILLMAN:** Initially, yes.

6 **MS. HARLOW:** There's no counter to say, you
7 know, we still have \$2 million or --

8 **MR. GILLMAN:** I believe Gulf responded that
9 theirs would be a counter. TECO explained that it would
10 be just a yes or no of availability. I think initially
11 ours will be yes or no without the counter as well.

12 **MS. HARLOW:** Sorry for mischaracterizing.
13 Could we have Power & Light speak to this issue?

14 **MR. GANS:** Yeah. Our, our plan right now is
15 to have a -- I guess the term that you're using is a
16 counter. So we want to show the available dollars that
17 are available by program so that way we can inform the
18 industry, they can plan accordingly. And when, and then
19 when the dollars are exhausted, we will then put some
20 notification to say check whenever this date is to see
21 if there's more dollars available. And then when the
22 dollars are exhausted, our plan is to at that point stop
23 receiving any further applications.

24 **MS. HARLOW:** Anyone else?

25 **MR. MAINGOT:** Yeah. We heard Progress say

1 that they would be accepting applications for the next
2 year in October. What do the other utilities, when are
3 their application deadlines? If there's money available
4 through the year, when are they, when are they going to
5 be accepting for the -- and Progress said that they
6 would, you would have to reapply. If you applied this
7 year and you were not one of the people that got
8 accepted, you'd have to reapply the following year. Is
9 that going to be the same for the other utilities, and
10 when do they plan to accept the applications for the
11 next year?

12 **MR. FUTRELL:** I think from looking at the
13 standards we've seen to this point, it seems to be a
14 fairly consistent October to September period, but I'll
15 let them confirm that and follow up with that other
16 question you had.

17 **MR. BRYANT:** No, that's true, Mark. Giving
18 the customer 90 days to install whatever system they're
19 selecting, we felt like the end of the, the year should
20 occur in September. And then in October you would begin
21 to take reservations for the following year.

22 **MR. GANS:** We're going to use the same, we're
23 going to use the same model, October through September.

24 **MS. NOACK:** And that's consistent with Gulf's
25 approach as well. However, I will say that the actual

1 incentives will not be paid until the funding actually
2 becomes available starting January. But we'll go ahead
3 and start taking the reservations for those funds
4 October 1st.

5 **MS. HARLOW:** And we're starting the programs
6 in midstream. How do you expect to handle that this
7 year? Just on the day that the program starts, say it's
8 March 15th, that would be the day you start taking
9 reservations, and then October 1st would start for the
10 next year's funding?

11 **MR. BRYANT:** This is one item I, I agree with
12 Suzanne on. I think there's going to be a run on money.
13 And so even though we're starting midstream, I don't
14 think there's going to be a problem exhausting the funds
15 for this given year, I don't think.

16 So I would see us for 2011 again stopping the
17 situation in September, and in October we would begin
18 collecting reservations for 2012.

19 **MR. FUTRELL:** Help me understand. If the, the
20 year, the fiscal year begins October 1st, a customer
21 makes an application, gets the system up and running,
22 let's say fairly quickly within 20 to 30 days, why
23 couldn't the customer go ahead and start, get the rebate
24 check cut at that point? I mean, all these funds are
25 subject to, you know, cost recovery, whether it be a

1 conservation rebate.

2 MR. BRYANT: Right.

3 MR. FUTRELL: I don't see the -- explain to me
4 the difference.

5 MR. BRYANT: Sure. Sure. If you have an
6 expenditure cap, in our case the \$1.5 million, and
7 you've reached it in September, you're not going to
8 spend any more money until January 1st or January 2nd.
9 And so to the extent that customer makes the reservation
10 in October and is able to get it installed in 20, 30
11 days, as long as the, the steps for qualification have
12 been met, then you would, you would spend your first
13 dollar come January 2nd of 2012 because that's when they
14 fit into the expenditure opportunity.

15 MS. BROWNLESS: If I'm following what you're
16 saying, so all the money is going to track the FEECA
17 funding process, and so it starts from January to
18 January.

19 MR. BRYANT: Right. Yes.

20 MS. BROWNLESS: And so whoever you sign up,
21 you start signing up October 1st and then get that in
22 the mail, but the first money can't be released until
23 January. So should you have anyone who signs up in
24 January, then obviously their money would be released
25 quickly; right?

1 **MR. BRYANT:** Right.

2 **MS. BROWNLESS:** Got it. Thank you.

3 **MR. GILBERT:** I hear this as being a cap, but
4 in reality it's an allocation. And what if you did have
5 a big run? Couldn't you come before the Commission and
6 ask for a larger allocation?

7 **MR. BRYANT:** You could certainly come and ask
8 for a larger allocation, but I would make two statements
9 to that question.

10 Number one, the order was a cap, and, number
11 two, it's still not cost-effective. And so to the
12 extent we spend beyond the cap, we're spending more and
13 more noncost-effective dollars, which I hate to use the
14 ugly word, but it's a subsidy.

15 **MS. HARLOW:** Yes.

16 **MR. GALLAGHER:** This is just a personal
17 question, everyone else probably knows this but me, but
18 since we're going to lose about a year and a half of
19 this program, what happens? Does this continue for five
20 years starting from the date of institution, or did we
21 lose the, the waiting period?

22 **MR. FUTRELL:** Well, yeah. I think because of
23 the delay in rolling out the programs based upon the
24 time it took to get the goals established and all that,
25 we have lost some time. We're going to look at this.

1 I'm sure the Commission, whenever it begins its next
2 goal setting proceeding, this will be looked at at that
3 point.

4 The Commission has to set goals by December
5 of 2014, so there's going to be some, at that point
6 we'll have to, the Commission will have to address
7 whether or not to continue these programs, whether
8 there's another way to meet the standard in the statute
9 or not. So it appears we have programs in place
10 through 2014. But, again, the Commission can decide.
11 It has authority to establish goals at any point within
12 a five-year window. So they could decide to initiate a
13 goal setting in the interim. I have no indication they
14 would want to do that, but that possibility exists.

15 **MR. GALLAGHER:** Mark, does -- and I'm sorry.
16 I'm confused a little bit. But does that mean that,
17 that the year and a half that we weren't able to take
18 advantage of the program just doesn't exist and now
19 we're down to three and a half years?

20 **MR. FUTRELL:** Right. Yeah. The programs
21 essentially were effective when the Commission approved
22 them. And then once we get the standards approved and
23 then the program is up and running, that's kind of the
24 schedule we're on.

25 **MR. GALLAGHER:** Can that money that was

1 allocated be reallocated into the three-and-a-half-year
2 period?

3 **MR. FUTRELL:** I don't believe that's come up.
4 That certainly -- if you folks would like to raise that
5 as an issue in conservation cost recovery, that
6 possibility exists. But I don't believe that's come up
7 at this point.

8 **MR. GALLAGHER:** Okay. Thank you, Mark.

9 **MR. FUTRELL:** Okay. If we could -- I know
10 we're getting close to the noon hour. If we could
11 finish up this little section of questions about program
12 success, we've got this one question about what criteria
13 should the Commission use to determine success. And you
14 may have some prepared remarks, that would be fine. But
15 if you could also address the notion of the job creation
16 benefits that could, could stem from these programs.
17 And do you intend to try to measure job creation
18 benefits? If so, how would you -- how do you intend to
19 do that? There's some other things we could look at for
20 measuring job creation.

21 **MR. BRYANT:** In terms of program success, I
22 think that was the first question you had, we, we may
23 have covered some comments that address that particular
24 issue. And when you look at the question there, it says
25 the criteria that should be, that the Commission should

1 use in determining whether the pilot programs have met
2 the intent of the statute, I think I'm going to go back
3 to two items that were part of the goal setting process.

4 One is the idea that we have an expenditure
5 that needs to be made. That was the goal that was
6 established because of the non-cost-effectiveness. And
7 so did we spend the money, number one? But, number
8 two, did the cost of the equipment come down? And if
9 it did come down, then we can do cost-effectiveness and
10 prove its sustainability for a longer term period in,
11 in our DSM portfolio.

12 I -- to me that's how you measure the
13 success: What happened to the cost of the equipment,
14 and then did it come down enough to make it
15 cost-effective? We can debate which test we want to
16 use later, but again I make no bones about it, the RIM
17 test is the one that gives it the greatest opportunity
18 for cost-effectiveness if the price comes down.

19 In terms of job creation, we have not thought
20 about that a great deal. That's one I'd have to think
21 on.

22 **MR. FUTRELL:** I believe in a recent senate
23 committee meeting they asked the Governor's Energy
24 Office, Energy and Climate Commission staff about job
25 creation. I believe Alexander Mack, who's their, one of

1 their program administrators, he mentioned that there
2 was some data that they report to the Department of
3 Energy as part of their grant reporting process about
4 job creation. That might be something that, you know,
5 I'm going to look into just to find out more to educate
6 myself.

7 But if, if anybody else has any thoughts
8 about how, even from the industry how to measure job
9 creation benefits from this, from this program, we'd
10 like to hear it.

11 **MS. BROWNLESS:** I think in addition to what
12 Howard has said about was the money spent and did the
13 cost come down, we'd like to see the job creation
14 numbers, and we'd also like to see the number of
15 installations of the various technology.

16 **MS. HARLOW:** Yes.

17 **MR. GALLAGHER:** Yeah. I would just like to
18 say that job creation never leaves our mind in the
19 industry. It is key. The layoffs are emblematic of
20 that.

21 I personally do not look at this as a
22 subsidy. I look at it as a method of job creation.
23 You know, there's a lot of other subsidies for other
24 industries and other energy related. This is a, this
25 is a drop in the bucket that we can put thousands of

1 people to work with a mechanism such as this. It is
2 substantially -- and this is no fault of anyone -- this
3 is substantially underfunded because of the demand.
4 People want the technologies. It is cost-effective
5 specifically for domestic hot water. There's no
6 question about that. PV prices are coming down.
7 Domestic hot water prices, it's unlikely they will
8 because we're driven by, we're driven by materials.
9 We've got glass, we've got aluminum, we've got stuff
10 that just is not coming down, copper. Copper is
11 skyrocketing. So the domestic hot water price isn't
12 going to come down but it's still cost-effective. And
13 PV is dropping very quickly. But job creation is what,
14 is what we do. Thank you.

15 **MS. HARLOW:** So earlier Howard said that he
16 saw more opportunity for a cost decrease in PV rather
17 than thermal. You're seeing the same thing.

18 **MR. GALLAGHER:** I'm sorry. Did you say a cost
19 increase?

20 **MS. HARLOW:** Cost decrease.

21 **MR. GALLAGHER:** Oh, I'm sorry. Yeah, a
22 decrease. Well, you know, yeah, solar electric PV is
23 coming down substantially, and I think part of what's
24 driving it is to a large degree the rebate program.
25 Look at the success of that. Look at the amount of PV

1 that was implemented. The more that's implemented, the
2 lower the price.

3 But the, the raw materials and the labor will
4 probably not allow the price of solar thermal to come
5 down. It's just economics. Everything is going the
6 other direction. But there's still -- I mean, you're
7 only talking about a four to \$5,000 investment for, you
8 know, a 20 percent return.

9 **MS. HARLOW:** Anyone else want to speak to how
10 we judge the success of the programs?

11 **MR. GUYTON:** Judy, one other observation about
12 job creation, I think the utilities are uniquely
13 positioned to provide energy savings and to monitor the
14 market and the customer response, and should be aware of
15 whether or not the costs of these systems are declining.
16 Those are all things that they're positioned to be able
17 to measure.

18 I'm not sure that the utilities are
19 particularly well positioned to measure job creation
20 when they're not doing the hiring of the jobs. I, I
21 don't mean to suggest that that wouldn't be valuable
22 information for the Commission and policymakers to
23 have. I'm just not sure that the utilities are in a
24 position to accurately measure that for the
25 policymakers.

1 And it's as much a personal observation as
2 anything else. I just, I'm not sure that data is going
3 to be readily available for them if they have to model
4 it. It's a cost, but they're not the employers of
5 record.

6 **MS. HARLOW:** If the utilities provide us with
7 data on number of systems and type of technology, is
8 there data readily available from the industry, from the
9 Solar Center that would tell us time of installation,
10 number of workers, those kind of things?

11 **MS. BROWNLESS:** Yes, that data is available.

12 **MS. HARLOW:** Any other utilities with thoughts
13 on how we judge the success of the programs and whether
14 they meet the requirements of the statute? Gulf.

15 **MS. NOACK:** I would just concur with what
16 Howard had to say about, about what we're looking at as
17 far as the success of this program.

18 The other thing too I would add to that is
19 the fact that, you know, the original driver for even
20 implementing these programs initially, you have to go
21 back to the FEECA statute. It's for the deployment of
22 these systems. So another component of success is
23 going to look at what are the number of systems that
24 have been installed since we, we put these programs in
25 place? And then I think to look, measure or monitor

1 the success of these programs goes actually beyond the
2 pilot period.

3 Once these pilot programs end, we'll evaluate
4 at that time what to do going forward. But, but
5 where's the marketplace? Once these subsidies are
6 gone, did it allow the market to create a foundation
7 where it can actually sustain itself? And I think that
8 is something else that needs to be considered as well.

9 **MS. HARLOW:** Does Progress have any thoughts?

10 **MS. GUTHRIE:** I agree with the colleagues.

11 And I think what we're trying to measure is did we
12 increase and encourage the implementation of these
13 systems? And I think we will collect that data: What
14 types of systems did we install, how many participants
15 in each of those?

16 So I think, to Charlie's point, I think we're
17 well positioned to provide that data as to job
18 creations. I think, as we mentioned, there are other
19 systems in place that can track that. But our job will
20 be what types of systems, how many, did we expend the
21 dollars that we budgeted?

22 **MS. HARLOW:** At the same time we're looking at
23 our, the pilot programs here we could have changes in
24 tax incentives. So that'll be something that needs to
25 be considered as we look at the end of the programs.

1 Did the solar industry have any response to
2 the utilities' thoughts?

3 **MS. BROWNLESS:** Well, with regard to the job
4 creation, I think they make a valid point there and the
5 industry can provide that information.

6 With regard to the number of installations,
7 of course they're the people who would know how many
8 installations were made, what were the types, what were
9 the sizes, what was the participation level of all
10 programs?

11 I think the comment about the sustainability
12 of the market after the incentive, that is the point.
13 That's why the, you know, that was the directive of the
14 Legislature. It is the industry's belief that having a
15 consistent funding mechanism and a consistent amount of
16 incentive available every year will stabilize and
17 incent the market. So I think that can be either
18 proven or disproven based upon the number of
19 installations you have. What happened before you had
20 the incentive versus what happens now, and does the
21 price of the equipment come down?

22 As has been mentioned, and I think has
23 historically proven true, solar thermal technology has
24 been out there a long time. That is not groundbreaking
25 technology. It's the PV that is, the cost of which is

1 radically decreasing and the efficiencies of which are
2 increasing based upon engineering advancement. So I, I
3 agree with all those criteria.

4 **MR. FUTRELL:** Okay. If there's no other
5 comments, I think this is a good natural break point.
6 We -- thanks for hanging in there with us without a
7 break. I think we've been able to get through quite a
8 bit of the agenda and we've got a little bit left.
9 Hopefully we can get through at a reasonable hour. So
10 let's go ahead and break for lunch, come back about
11 1:15. And then we've got a few more items to go and I
12 think we should be able to get done in a reasonable --
13 thank you very much for hanging in there with us.

14 (Lunch recess.)

15 **MS. HARLOW:** If we could get everyone to be
16 seated, please. Let's get started.

17 We are going to keep moving through our
18 topics here, and the next topic that we wanted to
19 discuss is program design. I know we could be able to
20 move through this relatively quickly, because we have
21 covered some of these issues earlier. But let's go
22 ahead and get some greater detail on this and see if we
23 have any comments on that from everyone.

24 This came up a good bit this morning, but to
25 what extent do you believe that the program should be

1 consistent across the utilities. And, if so, how would
2 we accomplish that? And, again, we see Howard stepping
3 up to the plate.

4 **MR. BRYANT:** It was that strong glance that
5 was, you know, indicating that I needed to hit the
6 button here.

7 I think I would couch my comments by first
8 saying there seems to be a fairly good consistency
9 among the programs. You might find the incentive level
10 being slightly different, and that's even going to be
11 on rare cases, but I think there is a lot of
12 consistency there. Now, to the extent it should be the
13 same, I would probably suggest it shouldn't necessarily
14 be the same. Each utility may have its own information
15 in terms of what -- as an example, what solar water
16 heating may cost in their particular area. And so for
17 us, as an example, if a thousand dollars is what we
18 think is appropriate, for another utility it may need
19 to be 800, or another one may be 1,200. So I think
20 there's conditions locally within each utility's
21 service territory that would dictate nuances of
22 differences, but I think by and large they are somewhat
23 the same. That's just my first thought in terms of the
24 consistency.

25 But perhaps, also, we can liken it to what we

1 are doing in the DSM arena. As an example, I think you
2 will find each of the utilities has an insulation
3 program or an HVAC program, but the extent of
4 similarity may stop when you get to the incentive
5 level. And obviously that's driven by
6 cost-effectiveness, or the avoided unit. So having an
7 insulation program, incenting it to be installed,
8 absolutely wise. Having solar programs because we have
9 been asked to have expenditures and therefore put
10 effort toward thermal and PV, nothing wrong there, but
11 we may not want to have them all be cookie cutter
12 across every area because of perhaps market differences
13 that could exist, and frankly do exist in the different
14 service areas. My initial thought.

15 **MS. HARLOW:** Have you been working together on
16 program design, or perhaps the same members of the solar
17 industry working with each utility?

18 **MR. BRYANT:** To the extent that we have been
19 working together among ourselves, we have. Not so much
20 to be absolutely identical, but to just understand
21 something that someone else may know that we don't know.
22 So it's the sum of the parts are greater than the
23 individual, and so the knowledge has increased because
24 of that, but still we have retained nuances of
25 differences among the various utilities.

1 **MS. HARLOW:** Uh-huh. And do you intend, as
2 you learn more in these pilot programs, to share that
3 information if you have concerns?

4 **MR. BRYANT:** I think so. I mean, the
5 communication, I don't see it as being something that
6 would stop.

7 **MS. HARLOW:** Do we have any other thoughts on
8 program consistency or perhaps from the solar industry
9 an industry perspective?

10 **MS. BROWNLESS:** Our perspective is we'd like
11 to see as much uniformity as possible. Make sure that
12 everybody is offering, as Howard suggests, a solar
13 thermal program, a solar PV program, that type of thing.
14 And we would also like to see rebate levels as uniform
15 as possible.

16 I recognize that each individual utility has
17 a different service territory and slightly different
18 characteristics, but with regard to the incentive
19 levels, I really don't think there is a justification
20 for having a wild difference in incentive levels. And,
21 frankly, when you look at the programs standards that
22 have been proposed, there doesn't appear to be a wild
23 variety of difference in the incentive levels being
24 offered.

25 **MS. HARLOW:** Anyone else?

1 **MS. NOACK:** I would just like to add one more
2 comment to that, and that has to do with the built-in
3 flexibility that we have built into these programs. And
4 we have built in flexibility to reevaluate those
5 incentive levels also based on market conditions, but I
6 don't think that it should necessarily be set at a
7 particular level. We started off very consistently as a
8 starting point, because that is our best projection of
9 what will incent customers to install these systems.
10 But if you look even at the contractor base in central
11 and south Florida versus the number of contractors that
12 we have in the panhandle, there is more competition down
13 in central and south Florida. Prices, the average
14 prices of the systems are a little bit lower in south
15 Florida than it is in the panhandle of Pensacola and
16 northwest Florida. So I'd like to say that not only
17 should there be flexibility in the programs and how we
18 are offering them, but there should also be flexibility
19 in the incentive levels to match what's occurring and
20 happening in the respective marketplaces of each
21 individual utility.

22 **MS. HARLOW:** And are you intending to track
23 those price or cost differences in the systems across
24 regions or territory?

25 **MS. NOACK:** Yes. We are going to be tracking

1 the costs of the systems. I'm sure that is consistent
2 amongst the other utilities, as well. And we have very
3 good open communication amongst the individual IOUs, and
4 I think that collaborative effort that we have had thus
5 far has led us to some very good basic program designs
6 that you see a lot of consistency from the types of
7 programs being offered and incentive levels, and we'll
8 continue to share that information and adjust the
9 programs as necessary to make the most robust programs
10 that we can.

11 **MR. GUYTON:** Judy, one other observation, or a
12 couple of other observations. There is quite a bit of
13 uniformity at the present stage, not identity, and that
14 may be good. I mean, somebody -- you're talking about
15 the best way to move a market and incent a market. And
16 if you have a variety of alternatives that you are
17 testing, then you have a variety of responses that you
18 can measure one relative to the other. So uniformity
19 may be undesirable, in that sense, because you may have
20 some other different approaches that you ought to test.

21 I think the other thing, to comment on what
22 Lonnie was talking about, incentive levels have started
23 out much the same, but there is some flexibility there.
24 We have talked about some anticipation of
25 oversubscription and exhaustion of those funds, and I

1 think it's helpful to have a maximum incentive and be
2 in a position to reduce that incentive if the market
3 demand is so great that it becomes apparent that you
4 don't need that maximum incentive. Those dollars go
5 farther then. So I think that flexibility being built
6 into it is desirable, too.

7 **MS. HARLOW:** So you are seeing, perhaps, an
8 opportunity to lower the incentive as the cost of the
9 systems goes about down, and perhaps spread the dollars
10 among more participants?

11 **MR. GUYTON:** That is one possible consequence
12 that could arise if you have, you know, an immediate
13 response to -- an immediate demand that is kind of
14 unprecedented. Obviously once the dollars are gone,
15 they're gone. But if you realize early on that your
16 maximum incentive is not necessary to move the market,
17 you do have the flexibility to offer a reduced
18 incentive.

19 **MR. FUTRELL:** A follow up, Charlie, if I
20 could.

21 I think even in some of the orders approving
22 the programs, it speaks to this notion of a flexible
23 incentive level, and I think in some cases it speaks to
24 up to a certain level. For example, two dollars per kW
25 for PV, up to two dollars per kW. Have you thought

1 about, or has any of the other utilities thought about
2 what's the process for if it -- the time comes when you
3 see a need to possibly lower that incentive? Have you
4 thought about notifying the Commission, and then also
5 notifying the industry and customers for the program
6 about how that would work? And have you thought about
7 how often do you foresee the need to kind of evaluate
8 that? Is it kind of an annual thing? Is it more
9 frequent than that?

10 **MR. GUYTON:** I am going to tread where I
11 probably shouldn't; I'm going to say something, and my
12 client can correct me if I'm wrong. Typically, the way
13 this is done in DSM is that you get a program approval
14 for a maximum incentive. And then in your program
15 standards you set the targeted incentives, which may or
16 may not be equal to the maximum incentives. Such that
17 if you were going to change that from whatever is set
18 forth in the program standard, you would have to make a
19 program standards change.

20 Now, that's kind of a typical approach that
21 we have seen in DSM for a lot of years now. I assume
22 that that is fairly typical of what is envisioned here.

23 **MS. NOACK:** May I comment on that? It's
24 Lonnie.

25 **MS. HARLOW:** Sure.

1 **MS. NOACK:** We actually modified our program
2 standards to include if, in fact, in our annual
3 evaluation of our programs, if we feel that there is a
4 need to reduce the incentive that we would -- before we
5 actually made that adjustment, we would notify
6 Commission staff. So we actually put that in our actual
7 program standards that if we felt a necessary change to
8 the incentive was warranted, that we would notify
9 Commission staff in that annual review.

10 **MS. HARLOW:** Anyone else on standardization?

11 Yes, Bill.

12 **MR. GALLAGHER:** We are fairly familiar with
13 Progress' standards, and thanks so much for the meetings
14 that you guys have had. Not so much with FPL as far as
15 what the caps are. In other words, if it's \$5 million
16 for PV, is there a certain cap? Does that mean
17 commercial up to 25 kW? I haven't seen those standards,
18 so it's hard to pinpoint exactly how many systems that
19 will support.

20 **MR. GUYTON:** We haven't filed them yet, that's
21 why you haven't seen them yet. We are a little bit
22 behind the curve of the rest of the utilities in terms
23 of where our program approval is, and we haven't
24 submitted the standards. We just had the programs
25 approved, but that will be evident when we file the

1 standards.

2 **MR. GALLAGHER:** Okay. Thank you, sir. That
3 is really a critical component of how long the money
4 will last. If you incentivize commercial systems to a
5 large degree, which, you know, personally we don't feel
6 they need because of the accelerated depreciation and
7 the 30 percent tax credit, it will eat up a substantial
8 amount of money and we are really anxious to see those
9 numbers. That will help us a lot.

10 **MS. HARLOW:** Also, I would just like to
11 briefly say that as the staff has been looking at the
12 standards, we have had a number of conference calls on
13 these, and we have done that as an open process, and the
14 meetings were noticed and we have had participation from
15 the solar industry, and we appreciate that very much.

16 **MS. BROWNLESS:** Judy, you might tell folks who
17 might be listening how to access the information on the
18 website.

19 **MS. HARLOW:** Thank you; that's an excellent
20 suggestion. For today's workshop we have a tab on the
21 website that will have the notice of the workshop. It
22 will have any post-workshop comments we get and any
23 documents that the Commission staff develops as a result
24 of the information. And perhaps Larry would like to
25 speak to how people could get on a list if they want to

1 be notified of any future calls.

2 **MR. HARRIS:** She looked at me, and unlike
3 Howard, I do not have an answer for that question. I
4 hadn't thought about it. That's something I've heard
5 him say. I am modeling off to you.

6 You referred to a tab. Basically, if you go
7 to our webpage, across the top bar there is one that, I
8 think, says agendas and hearings. If you click that
9 and scroll down, sort of a drop down list towards the
10 bottom it will say -- I think it says workshops, or
11 staff workshops. And if you click that, it goes into
12 essentially a very large list of what I will call
13 undocketed matters, and they go back a couple of years.
14 And we have things that really we want to get -- you
15 know, and this is general information, but it applies
16 specifically to this -- things that we want to make
17 available publicly, but there is really no way to put
18 them out there because they are nondocketed.

19 The very top one at this point will be -- for
20 this workshop, and it will have the information, you
21 know, it will say the solar pilot projects workshop,
22 and under that are links to PDF documents. You have
23 heard us refer to post-workshop comments. What our
24 intent will be is somebody will receive them, either
25 me, or Mark, or Judy, and we will take those and get

1 those to our computer people who will then put them on
2 the website so they are all there in one place.

3 And looking at that drop-down list, it
4 appears that we have stuff going back a couple years,
5 so it appears that we have the ability to retain these
6 materials on the website in that location for a period
7 of time. Specifically, a mailing list, I would
8 anticipate that we don't, I don't believe, have an
9 automated way of doing that because it is undocketed.
10 So what I would think is one of us, either me, or Judy,
11 or someone would essentially have a list in our office.
12 You know, people would e-mail us and say, hey, can you
13 put me on the list for receiving notice of when these
14 things come in. And that would be a manual process
15 where whoever got them would turn around then and send
16 out to everybody else who was on that list kind of
17 thing.

18 The easiest thing to do for all of you who
19 have done this before, and I know that most of the
20 practitioners are familiar with this, reply to all,
21 because the lists, you know, get longer and longer, and
22 people will forward it to each other and it starts
23 adding onto these things. And so I would encourage all
24 of you as you send in e-mails to us or to each other to
25 click reply to all. Generally you will pick up if not

1 everybody, at least a large portion of the people who
2 have sort of indicated interest by being on that e-mail
3 list. It makes it easier for someone like me to look
4 at it and say, oh, I see, you know, Charlie Guyton
5 isn't on there, so I know I will forward this to him
6 kind of a thing.

7 So I would anticipate -- we do have sign-up
8 lists in the back, and I would encourage everyone -- I
9 think this was mentioned earlier by Mark -- I would
10 encourage everyone to sign up on the sign-up list, if
11 you were here today, and give us your e-mail address.
12 We will give you -- you know, our e-mail addresses are
13 fairly easy, you know, my name would be LHarris. And I
14 think it is up to eight characters, so you have to sort
15 of truncate it for people who have longer names, but
16 its first initial and then, you know,
17 JHarlow@psc.state.fl.us. And so you can e-mail us, and
18 we can add you to whatever list we have, kind of a
19 thing. And that's the best answer I have to something
20 I haven't really thought about.

21 **MR. TRAPP:** Hey, Larry.

22 **MR. HARRIS:** Yes.

23 **MR. TRAPP:** This is Bob Trapp over here. The
24 proper response is call Larry.

25 **MR. HARRIS:** The proper response is call

1 Larry. I have been instructed by Mr. Trapp that I will
2 be the contact person. So call me, and I can give you
3 my e-mail address, which is LHarris@psc.state.fl.us.
4 And my office phone line is 413-6856. I think we might
5 have an easy way of doing that. I think on the website
6 there is, like, a contact someone at PSC, and you could
7 say direct this to Larry Harris. You can call our
8 General Counsel's Office line, which is 6199, and say I
9 want to talk to Larry Harris. Or just call anybody you
10 know here and say, hey, connect me to Larry Harris or
11 send him this message, and they will do that, to those
12 of you who know Judy's line or Mark's line.

13 **MS. HARLOW:** We will be happy to do that.

14 **MR. HARRIS:** And unfortunately, you know, we
15 do have a new phone system here that has the ability
16 within the phone message to send a message to a new
17 user, and people know how to do that. And so sometimes
18 you will get this little white flashing on your phone,
19 and you will pick it up and it will be voicemail that
20 went to somebody else's voicemail that they have sent to
21 you. So we will get it. Unfortunately, I can't hide.

22 **MR. FUTRELL:** Let me just follow that with a
23 comment about the standards that will be coming from FPL
24 and how to access that. The other utilities have been
25 filing that information in their conservation plan

1 approval dockets, and I would ask when Charlie gets
2 ready to do he would continue to file that, the
3 standards in that docket, as well. FPL's docket is
4 100155-EG, and that will be a point where parties
5 outside the building can access that information and
6 access the notices to any conference calls that may take
7 place to discuss their standards will be noticed and put
8 into that docket file.

9 And there is a process, if you go to our
10 Commission website, that if you would like to get
11 information on a particular docket, you can contact our
12 Clerk's Office. And for folks not familiar with our
13 process, that's an easy way to keep up with
14 particularly FPL's program standards and details and
15 what they intend to offer to the customers.

16 **MR. HARRIS:** Following up on that, for
17 docketed matters, those of you know it is very easy.
18 The clerks do domain a list of interested persons or
19 people who want to receive notice of things in dockets,
20 so for the 155 docket, FPL, it's easy to contact the
21 Clerk's Office and say I want to receive notice of
22 filings or meetings. I was commenting specifically on
23 undocketed matters. We don't have a way to do that,
24 because everything in the world that is not docketed
25 would have this same list.

1 Yes, Mark is right, for the FPL standards,
2 you would be able to contact the clerk and say please
3 add me to the interested persons list for Docket
4 100155, and you would go on the list. And that has
5 worked well. Most of you all, I think, in the room
6 have done this before, at least with some of the other
7 companies.

8 **MS. HARLOW:** Thanks. Let's see.

9 Let's move on with the questions. And I
10 think we have covered rebate levels and whether those
11 should be uniform. And let's turn to eligibility. We
12 have all discussed wanting to get these funds out to
13 the maximum number of systems that we can, given the
14 limited dollars. But there is also the issue of the
15 energy produced or avoided by these systems, and should
16 the utilities or perhaps the solar installers be
17 determining some kind of eligibility criteria for how
18 to use these limited funds. I'm trying not to look at
19 you.

20 **MR. BRYANT:** And the answer is yes. And I
21 think one item to focus on here in terms of your first
22 question there about a screening criteria would be that
23 of shading as it relates to PV or solar thermal. The
24 more shading you have, the less efficient the system.
25 And I think, if I'm not mistaken, and the industry

1 experts can help me here, but I think the shading has
2 more of a detrimental effect on PV than it does on solar
3 thermal. So if our focus is to reduce cost, improve
4 system performance as best as possible such that we want
5 to achieve cost-effectiveness at the end of this pilot
6 period, then we need to be screening at this stage so
7 that we can maximize system performance to give the best
8 opportunity for cost-effectiveness to occur down the
9 road when we do our final analysis. So there needs to
10 be screening.

11 Now, to the extent of what that screening
12 level should be, I think the industry probably has some
13 standards out there, and I'm going to talk about Tampa
14 Electric now and not the other utilities. But from our
15 perspective on what the screening should be, we have
16 taken a bold step, and we said we don't think any
17 shading could be -- if there's shading, then it should
18 not qualify.

19 Now, we are going to utilize the Solar Energy
20 Center to help us to determine what that shading means.
21 What piece of equipment should we use? Where should we
22 use it, you know, how do we walk up to a home as an
23 auditor, and how do we determine whether there is
24 shading or not. And so that's going to be facilitated
25 for us in a couple of weeks, and so then we should be

1 able to walk away from there with knowledge of the
2 industry expert in terms of how to determine what the
3 shading is or is not, or can or cannot be. But, you
4 know, what is the characteristic of the home to help us
5 on the shading issue. So it is important, and that is
6 where we are headed from the shading perspective.

7 **MR. HARRIS:** Howard, for my information, you
8 are down there, you intend to do this, I think that is a
9 great idea. You get a customers who is dead set that
10 wants solar because he saw it on TV and he thinks it is
11 the greatest thing ever and he really wants it, and he
12 has got a beautiful lot with live oaks and stuff. And
13 you all come up and say, you know, dude, you've got one
14 percent light on your house, which is a great thing for
15 your energy conservation because you are shaded and
16 whatnot, it is not so good for solar. And he says I
17 want my -- whatever the rebate limit is -- because I
18 really want to get this. And you say, well, it's really
19 not going to work really well for you. No, I saw this
20 on TV, and I care about the environment, and I want you
21 to give it to me.

22 Is your company prepared to deal, and if so,
23 how would you anticipate this would work for the
24 customer being unhappy with the answer we are not going
25 to give you the rebate, and then he is calling you or

1 whoever saying I'm being discriminated against, I want
2 to do this. How would your company work through that
3 process, do you think?

4 **MR. BRYANT:** Because you were gracious enough
5 to give us your phone number awhile ago -- (Laughter.)

6 **MR. HARRIS:** There you go. That's what I was
7 afraid of. Great.

8 **MR. BRYANT:** No, I'm just kidding obviously.
9 The one thing that we are going to count on is a
10 contracting community that is in agreement with us as we
11 work through those case-by-case basis where shading
12 could be an issue. And we are of the opinion that the
13 contracting community as well is not going to want to be
14 on the hook, if you will, for a nonperforming system.
15 And so we are going to utilize the contractor at the job
16 site with the customer who we originally have gone out
17 and said there is too much shading. And to the extent
18 they can identify their contractor, if we can meet then
19 and parlay that into good information being given to
20 them, that's what we want to do.

21 Now, to the extent we get that good
22 information, we can then begin to quantify what the
23 savings potential will be. And when you look at their
24 savings potential versus what they are paying,
25 hopefully as my mom used to say, they will come to

1 their senses. But that's our desire. Now, that's
2 perfect. And as I shared with you on our conference
3 call a month or so ago, you know, we're going to be
4 documenting that information, because the next step
5 along the food chain is to call you folks. You know,
6 these turkeys won't give us the money. Come on, help
7 us out.

8 And so to the extent we can quantify that
9 stuff and provide you with factual information we would
10 anticipate your support of what our decision is based
11 on the facts that we have presented at that time, if it
12 rises to that level of occasion.

13 **MR. HARRIS:** So the key I heard you just say
14 was that you would be not only including the installer,
15 but documenting these discussions along so that you
16 would have something that could be -- that would be
17 objective. You know, here is the efforts we made, and
18 here is what we have done, and be able to provide that
19 fairly easily.

20 **MR. BRYANT:** Right. And to the extent that
21 we -- from the standpoint of the training that we are
22 looking for here from the Solar Energy Center, to the
23 extent that we have that kind of background as to why a
24 decision has been made, you are now interjecting into
25 the situation another expert, if you will, in the

1 evaluation process. And so you are using what they have
2 taught you in order to make your decision.

3 MR. HARRIS: Right.

4 MS. HARLOW: And you're using your regular
5 audit staff as the initial contact with the customer?

6 MR. BRYANT: Yes.

7 MS. HARLOW: And would all of your auditors be
8 trained in this, or would you have a specialized group?

9 MR. BRYANT: Yes.

10 MS. HARLOW: All?

11 MR. BRYANT: All; yes, ma'am.

12 MR. FUTRELL: Howard, can you help us at this
13 point, is there going to be a certain percentage of the
14 day that is going to be where there is going to be some
15 obstruction, if you will, of the sun that you will
16 tolerate? Is it a zero tolerance policy; is it the
17 extreme of what Larry described with oak trees, but what
18 if it is a single pine tree where there may be some
19 shading for a few -- 20 or 30 minutes a day? Have you
20 thought that through?

21 MR. BRYANT: Yes. And as we have thought it
22 through, we recognize there's going to be arguments no
23 matter how you get there. And so our standard is no
24 shading. And that is where we are going to, you know,
25 leave the launching pad. Although this may not be the

1 best reason, I believe this is going to be the case,
2 though. I think we are going to be able to say no
3 shading and not jeopardize participation, because,
4 again, in deference to Ms. Brownless, there's going to
5 be a significant number of people wanting these
6 technologies. And so I don't see that our shading
7 requirement, as we have stated today, is going to hinder
8 participation. It will do -- it is not going to hinder
9 it, number one. Number two, it's going to provide the
10 greatest performance opportunity for that system, absent
11 any shade whatsoever.

12 **MR. GALLAGHER:** If I could address that. The
13 industry uses an item called a solar pathfinder. And
14 Howard is correct that it is much more critical with
15 solar electric than it is with solar thermal. It's a
16 bit unreasonable to deny a consumer a rebate because of
17 a single palm tree for domestic hot water, because the
18 decreased performance will barely be measurable. Okay.

19 What the solar pathfinder allows us to do
20 with solar electric systems is we are actually able to
21 get on the roof, determine where the shade is at any
22 time of the year, put it in a software program to
23 produce a percentage of performance. And, you know, my
24 recommendation would to be use something like this as a
25 guide for the utility folks so that it's done in a fair

1 way.

2 Additionally, from a solar electric
3 standpoint, there now exists a mechanism called a
4 microinverter. And a microinverter, if shade from that
5 palm tree were to hit the solar panel, it's only going
6 to shut down the one module. So this is much different
7 technology than even three or four years ago. So I
8 would hope that the industry and utilities will work
9 together to find a fair way for the consumer. You
10 know, we certainly don't want someone to sell a product
11 out in the shade, okay? We want to eliminate those
12 people from the industry. We have as big a concern as
13 you do, but we don't want to punish consumers that
14 really want to benefit from the program.

15 **MS. HARLOW:** And how do you communicate with a
16 customer when you go to their home or their business and
17 feel like it's not an optimal site for that expense? Do
18 you show them what you think the production would be,
19 the reduced production?

20 **MR. GALLAGHER:** We certainly do. We actually
21 get up on the roof and we take these calculations based
22 on different areas of the roof, and we go back and we
23 put it in a software program. We present the homeowner
24 with an outline of what they can expect. You know,
25 during the month of December and January, because the

1 sun is lower in the sky you are going to have diminished
2 performance. So your total benefit is going to be
3 somewhere around 75 percent instead 100 percent, and at
4 that point the consumer can make a determination. It
5 will also tell them what their savings will be based on
6 current utility costs. So the technology and through
7 the software, we are give this homeowner a very concise
8 estimate of their savings.

9 **MR. HARRIS:** Is this device and software that
10 all installers would have or --

11 **MR. GALLAGHER:** Well, all installers should
12 have, if they are in the solar electric business. It's
13 really not so important in solar thermal, it's just a
14 different technology. We are talking about heating a
15 body of water. You can have shade throughout the day
16 with a domestic hot water system, okay? With PV it is
17 much more critical, but I would recommend everyone to
18 have one, yes.

19 **MR. HARRIS:** All right. So what happens to
20 the installers who don't have that?

21 **MR. GALLAGHER:** They need to go to the store.
22 They go to the hey dude website and buy one of these
23 things. They're not that expensive. In fact, it
24 wouldn't be bad to have a requirement for people to have
25 one, in my opinion, because it is really necessary.

1 **MR. HARRIS:** Sir.

2 **MR. MAINGOT:** I have another issue, as well.
3 Not every -- and the solar industry, itself, is the
4 perfect orientation for a solar system. Not everybody's
5 roof faces south, so if you have a east or west facing
6 roof, there they are still applicable for a solar system
7 to be installed. You are not going to get a full day's
8 sun on an east or west roof, but they will do 80 percent
9 of what a south roof does.

10 So the people like that should not be
11 penalized because their house doesn't face the ideal
12 way and they don't get the full day's sun. They may
13 lose like two hours in the morning or a couple of hours
14 in the afternoon because of the orientation. So we put
15 a lot of systems -- Bill will tell you we put a lot of
16 systems in east and west and sometimes even a north
17 roof with pool heating. So, you know, and we can have
18 as little as four or five hours of sun on a thermal
19 system and it will still operate properly, it just
20 needs to be sized slightly bigger than if it was on a
21 south roof.

22 So shade is an important consideration, but
23 to insist that you have full sun, I think, is -- you
24 are going to penalize a ton of people by insisting they
25 have a full day's sun. So that's just one thing to

1 consider.

2 **MR. HARRIS:** Let me ask you a follow-up
3 question to that. You just said you are penalizing
4 people. But if it is true that we are anticipating
5 blowing through these -- you know, half the morning was
6 talking about how are we going to deal with
7 oversubscription that's going to happen in, you know, a
8 month or two, if that is the case and we really think
9 these things are going to be oversubscribed, and the
10 money is going to go very, very quickly, doesn't it make
11 some level of sense to try to pick the people who are
12 100 percent unshaded so that the scarce resources can go
13 to the places where they would be the best for the grid
14 and the best for the system? And then as the technology
15 matures, as the market develops, you know, and you get
16 this 100 percent full sun places, in the first couple of
17 years, you can start backing down the economics. Does
18 that makes sense from a policy standpoint?

19 **MR. MAINGOT:** It does, but in reality to find
20 a true south-facing roof, you know, it's not -- you
21 know, one out of four people may have a true
22 south-facing roof. It just depends on what side of the
23 street you are on or, you know, if you can put it there.
24 So a lot of people -- there is very negligible, like I
25 say, in a lot of cases 10 or 15 percent difference in

1 production throughout the year in what the system would
2 do if it was put on a west roof as opposed to a south
3 roof. So, you know, you're going to tell those people,
4 no, you can't have solar because we decided that, you
5 know, you don't face the optimal direction. We would
6 lose probably 50 percent of our customers or more,
7 because, you know, how many people do you have on a
8 south roof? I mean, it's optimal, but it's not a
9 consideration that, you know, that we look at with
10 100 percent and say, oh, it has to be there. I mean, we
11 do a lot of stuff on other roofs, a lot. The majority
12 are put on other roofs.

13 **MR. FUTRELL:** I would just follow up -- excuse
14 me, Larry -- that noticing what Tampa Electric's program
15 standards mention not only south facing, but east and
16 west facing roofs would be eligible, as I understand it.
17 So they specifically point that out in their standards.
18 And if we could hear from the other utilities on this
19 issue, just to hear where they stand on it as far as
20 this idea of establishing criteria that could preclude a
21 customer from participating.

22 Oscar.

23 **MR. GANS:** Our approach is we're hoping to
24 help the customer make an informed decision. And so
25 what we are looking at is for the PV systems we are

1 going to require a copy of the PV watts calculation from
2 NREL, the National Renewable Energy Lab. That has a
3 very good way of modeling what the performance of a
4 system would be in specific geographic areas. And you
5 put in the amount of shading that would be occurring,
6 the orientation and other factors regarding the system
7 itself. It will give the customer a very good estimate
8 of what the performance of that system should be in a
9 year.

10 So then that customer can then plug in that
11 type of information into the -- similar to what the
12 gentleman explained from his software. It would give
13 the customer an idea of, you know, you are not going to
14 save a hundred -- you know, this is not something where
15 you are going to make money on this deal, or they are
16 going to make money on this deal, but they will have
17 the facts.

18 And so our approach is let's make sure the
19 customer understands, because unfortunately there is
20 some misunderstanding by some customers that we have
21 had experience with where they thought they are putting
22 in these systems, and they are going to be selling a
23 ton of electricity back to the utility. This helps the
24 customer make a realistic estimate of what this thing
25 will do, and then they can make that personal choice.

1 And so that is the approach we're taking; give them the
2 facts, they will make the decision, and if they want to
3 participate we'll play with them.

4 **MR. FUTRELL:** So, just to confirm, if the
5 customer still insists on putting in the system, you'll
6 approve the application?

7 **MR. GANS:** At this point we want to utilize
8 the fact that this is a pilot program. And so we want
9 to get all those different factors and then get enough
10 data so that we can say what is the right threshold
11 where customers really are not making that, you know,
12 making good economic decisions, or where we can guide
13 the customer.

14 **MR. GILLMAN:** This is Christopher with
15 Progress. I think I can summarize my answer by almost
16 saying ditto. Oscar explained our standards, as well.
17 However, I would just add when we look at screening, we
18 are looking at a minimum performance eligibility
19 criteria that's established by FSEC certification. And
20 for PV, for example, that's a thousand kilowatt hours
21 per year. That is going through using the equipment
22 that was mentioned by Bill, and using the software that
23 Oscar mentioned, the PV watt. So it designs to the
24 common customer, but it provides that real information
25 so the customer can make an informed decision.

1 **MR. MAINGOT:** As I say, that is a good
2 standard because an average one kilowatt of PV can
3 produce 14 or 15 kilowatt hours a year if there is no
4 shade. So to put a minimum of, you know, it has to do
5 at least a thousand kilowatts a year is a good average
6 to be put in there.

7 And if I could make one more comment. I
8 think the industry is more concerned -- shading is an
9 issue, but we are also concerned with system design,
10 because we see a lot of inefficient systems being sold
11 by competitors. You know, it's not the norm, but there
12 are some inefficient systems out there. So like with
13 hot water, Progress is -- you know, there is an energy
14 factor number for hot water, that the system has to
15 meet a certain energy factor or standard, and these are
16 all standards put out by FSEC.

17 So, I mean, FSEC is a good place to go look
18 for system standardization and system design, because,
19 you know, one thing we don't want to see is ineffective
20 systems be -- or ineffective designs be put out there,
21 because we are going to end up with a bad name. You
22 know, the industry, even though it may not be your
23 company doing it, the industry ends up with a bad name.
24 So we definitely don't want to see that, either.

25 **MS. HARLOW:** I think we're missing Gulf.

1 **MS. NOACK:** You know, I'll just wrap up kind
2 of the comments for the utilities. And there's bits and
3 pieces of everything that applies to Gulf, but I think
4 that our standards that we have put out there, they
5 provide actually some sort of basic criteria for
6 performance as well as safety for our customers by
7 requiring a UL&I EEE certifications for the equipment,
8 FSEC certification for the equipment, inspections,
9 passing inspections by the local building code
10 authorities.

11 So we are putting requirements out there that
12 are standard requirements that all customers should
13 meet, and then other information about the performance
14 of the system such as direction, angle, shading. We
15 are not making that necessarily a requirement to
16 participate in the program, but we are making sure that
17 the customer has that information, and we are going to
18 be requiring from the contractors things that they
19 should be doing. Copy of a shading analysis, a copy of
20 an energy calculations, the same as FPL is doing from
21 PV Watts. So the customer has that full information to
22 make the decision as to whether or not they are doing
23 it for economics, whether or not they are doing it
24 because they feel they have an environmental
25 responsibility. There may be a number of different

1 reasons. And so what we are trying to do is make sure
2 we establish the foundational requirements for having
3 good installations, and then allowing the customer to
4 make that decision whether or not it is an economic
5 choice for them to install those systems.

6 But I will say, though, however, with the
7 solar thermal for low income and the solar PV for
8 schools, since we are fully incenting the full cost, we
9 will ensure that optimum installations are done for
10 those particular locations, since we are making the
11 full cost available to those customers.

12 **MS. HARLOW:** Any other thoughts?

13 Suzanne.

14 **MS. BROWNLESS:** One thing that we thought of
15 was that the standards could provide that licensed
16 contractors be used and that those contractors have
17 adequate insurance because, you know, that's a way to
18 ensure that all of the information that Bill and Chris
19 have been talking about actually gets to the person
20 that's buying the solar equipment, and that the people
21 who are talking to them do, in fact, have the software
22 necessary to evaluate the programs.

23 **MS. HARLOW:** Yes, Bill.

24 **MR. GALLAGHER:** Yes. Along those lines, we
25 would love to see an approved contractor list where

1 contractors are fully vetted to qualify for these
2 programs. We have had a lot of people recently come
3 into the industry with the hope of making a quick buck,
4 and sometimes they are not following the rules. We
5 would highly endorse that. And Chris' model with the
6 solar pathfinder, having to submit that to qualify is a
7 huge benefit for the consumer, because, like I say, it
8 may be at 75 or 85 percent, but they could sign off on
9 this and give it to the utility company, and the utility
10 company goes, okay, we are good to go, this is their
11 house; they know just what is going on. So I appreciate
12 that, and I applaud them for doing that.

13 **MS. HARLOW:** I think these are all good
14 points, and I think we have gone beyond eligibility. So
15 in your post-workshop comments, we would be happy to see
16 thoughts on eligibility, but also we discussed how to
17 ensure that the systems are designed properly, and we
18 also discussed how to make sure we have an informed
19 consumer so that they don't have unmet expectations.
20 And I think that's a key issue in this. So any further
21 thoughts you have on that, we'd appreciate looking at
22 those.

23 Let's move on to administrative and marketing
24 costs. We have got some variance across the utilities
25 and how much they expect to spend on administrative and

1 marketing costs. And, of course, this will be
2 something we will have more information on as we see
3 the programs implemented. But I wondered if we had any
4 thoughts on the appropriate level of expenses that
5 should go toward administration? And I see Suzanne has
6 a thought, I believe.

7 **MS. BROWNLESS:** And we are just going to
8 repeat what we have been saying consistently, which is
9 that the administrative and marketing costs range from a
10 high of 19.3 percent for FPL to Progress' 9.8 percent.
11 We think that the necessity for marketing of solar
12 rebate programs is pretty limited. The contractors are
13 going to get the word out. And in the past, there
14 hasn't been a problem with people finding out about the
15 programs, or knowing about the incentive programs, or
16 signing up for them. So that we would like to limit the
17 administrative and marketing costs to 10 percent.
18 That's consistent with what Progress and TECO have
19 proposed, and we think that's fair.

20 You mentioned in your comments, here should
21 the administrative costs be included within the
22 incentive cap or recovered through the entire DSM
23 portfolio. And our position would be it should be
24 recovered through the entire DSM portfolio.
25 Particularly as we mentioned before with regard to

1 Progress, their solar load control program was
2 previously administered through the DSM portfolio. And
3 it just strikes us that the incremental cost of these
4 solar pilot programs are basically an IT program so
5 that you can administer the subscription list and
6 personnel necessary to run that program and perhaps
7 some costs associated with holding workshops to let the
8 contractor community know, and possibly personnel
9 costs, FTEs. I don't know what the equivalent is for
10 utilities, for people to run the IT website and notify
11 people. So it just strikes us that the administrative
12 portion of these programs is not substantially
13 different than what they have already been doing since
14 1980 for the DSM programs.

15 We do have one other issue, and I don't know
16 whether this is a program design issue, but I'll just
17 throw it out here, which is that each of the utilities
18 has an allocation between the different programs. What
19 we are concerned about is that one person, one business
20 will come in and they will say we're going to put PV on
21 our Wal-Mart, and you have got \$1.8 million, FPL, for
22 that program in the first year, and thank you very
23 much, we'll take all that. So that we'd like to see
24 some further refining so that one business cannot take
25 the whole chunk, or, conversely, one solar contractor,

1 as a hypothetical, might be out there right now and he
2 is saying, you know, this program is coming up, give me
3 your stuff, give me your stuff, give me your stuff,
4 bundling all of his things up into one request, and
5 then the first day he is there, puts it on there, and
6 there is nobody else.

7 Because the whole idea that we are trying to
8 get to here is effect as many homes as possible, as
9 many people as possible, as many installers as possible
10 as an incentive to the entire industry. So I don't
11 know where that fits, but that's a design concern that
12 we have.

13 **MR. FUTRELL:** I guess I'd like to hear some
14 responses, but as I understand, much of the programs are
15 set to where there is not only -- in the case of PV,
16 there is a per kW rebate, there is also, in most cases,
17 a total dollar limit per customer. And that appears to
18 take care of part of your problem. I'd like to hear
19 some feedback on that.

20 As far as this notion of bundling, that's a
21 very interesting concept, and maybe they have some
22 thoughts on that. I'm not sure, maybe they may have
23 some better answers than I. That seems to be a free
24 market issue. I can understand your concern about
25 that, but I'd like to hear, if that has crossed their

1 minds.

2 **MR. BRYANT:** Let me address both of those
3 questions. From the standpoint of not having a run on
4 the bank from one particular individual or one
5 particular sector, I can speak for Tampa Electric; I'm
6 not familiar with the other utilities. But we have
7 limited the commercial amount of money available to be
8 smaller, less than the residential piece for sure. In
9 addition to the other maximum pieces that you mentioned,
10 Mark, for instance, \$20,000 on a PV system, so there is
11 limitations that have been built in there.

12 There has also been limitations built in, for
13 instance, on new construction versus existing
14 construction, because you don't want the new
15 construction folks to hog the money, if you will. So
16 we have provided a 20 percent barrier or -- well,
17 barrier, I mean, that's all it can be. A cap, if you
18 will, in that particular case. So we have made the
19 provisions that we think are necessary, at least out of
20 the chute, to, again, maximize money to as many folks
21 as possible, with an eye being toward the residential
22 marketplace.

23 From the standpoint of the administrative
24 costs and should they be a part of the program or not,
25 I think we will all agree that they should be. It is

1 no different than how we manage the administrative
2 costs of other programs. When you regular DSM
3 contained within that particular program is an element
4 of administrative cost. Now, within that cost could be
5 inspection; it could be check processing; it could be
6 customer interaction; it could be back office. There
7 is just back-office detail. It's not as simple as we
8 simply have a website, and then you walk away and at
9 the end of the year you come back and gather some data
10 and it's done. That's not going to happen.

11 So there's going to be field visits; there's
12 going to be, in our case, audits being done in order to
13 qualify; there's going to be the monitoring and
14 evaluating, an evaluation that takes place after the
15 fact, so you've got 10 to 15 percent of the inspection
16 that is going to be inspected from that perspective.
17 So there are administrative costs exactly identical to
18 other DSM programs that, in fact, should be a part of
19 the overall expenditure.

20 Now, our experience, wherever it's at, there
21 it is, 10 percent. Our experience, across all of our
22 programs, is it is kind of in that neighborhood. And
23 so we would anticipate from experience that that is
24 what would serve us well here. I guess if it's not up
25 there it's on this sheet. There it is. At any rate.

1 So we think that is a fair number. And, in
2 fact, we do believe it should be a part of the overall
3 cost of the program, and we anticipate managing it
4 downward to the extent that we can collect the data,
5 administer the program, things of that nature. That is
6 our perspective. Because at the end of the day, again,
7 you come back to cost-effectiveness, and should we do
8 this on a long-term basis. Have the costs come down;
9 have the efficiencies improved; and what's happening,
10 and the best -- and are you doing it in the same
11 consistent manner that you do all other programs, which
12 has, as their components, administration and marketing
13 expense.

14 But I do agree marketing is not going to be a
15 big piece of the puzzle here. The contracting
16 community will do that. No different than our
17 heating/cooling program. We really didn't have to do a
18 lot of marketing. Once the contracting community got
19 it, they got it, and away they went. So those are our
20 thoughts.

21 **MR. FUTRELL:** And, Howard, I guess one of the
22 things that prompted that question about moving around
23 the administrative and marketing cost is there is in
24 conservation a category that is used by most utilities
25 called common expenses.

1 **MR. BRYANT:** Yes.

2 **MR. FUTRELL:** And that's what kind of
3 intrigued me about, you know, are there some expenses
4 that are general in nature applying to all programs.

5 **MR. BRYANT:** Yes.

6 **MR. FUTRELL:** And would these programs also
7 fall into that such that some of their expenses could
8 fall under that common expense category, thereby
9 lessening those costs. The drain, if you will, on the
10 overall cap the Commission established.

11 **MR. BRYANT:** Right. Let me help there just a
12 little bit. Again, from our perspective, common
13 expenses and that category that we use is to capture
14 those costs that absolutely cannot be targeted to a
15 given program. So, for instance, my salary or the
16 component thereof. I don't work on insulation. I don't
17 work on -- I don't do that, and so my money and expenses
18 and whatnot go into the common category.

19 On the other hand, when you work at the
20 department level that's responsible for the deployment
21 of the program or the facilitation of the program, you
22 know exactly what they are doing and you are tracking
23 it, because we have got computer systems in order to
24 account for time spent, those types of things. So we
25 know exactly what they are doing, and you can allocate

1 to insulation, to heat pumps, to standby generator, to
2 whatever the case might be. So that's how we use the
3 common.

4 Now, when you think about administrative
5 expenses for this program or these programs, again,
6 it's going to be very targeted. It's not going to be
7 such that you can't determine where those monies were
8 spent or the resources were allocated in order to
9 facilitate the program. You are going to know that it
10 was done to do an inspection. You are going to know
11 that it was done to process checks. You are going to
12 know what your back-office operation is specific to
13 these programs. And that is why we would, again, put
14 it in the bucket of these programs, and not in that
15 common bucket which is too nebulous to make a
16 determination as to where they should go.

17 **MR. GUYTON:** Mark, I would follow up on that a
18 little bit, too. I think it's important to understand
19 that using -- picking on Howard, some of his salary
20 associated with these programs is already being picked
21 up in common expense, so that element is already being
22 shared. It's the administrative cost of the individual
23 programs that need to be recovered. And I'd
24 respectfully submit that as you recognize that those
25 costs have to be recognized in the cost-effectiveness

1 test, if you don't include them, you don't have the
2 right data necessary at the end of your pilot to judge
3 cost-effectiveness. It has to be part of that cost.

4 **MR. FUTRELL:** In analyzing the
5 cost-effectiveness role of the other conservation
6 programs, is there an allocation from the common expense
7 category to all those other programs, do you know?

8 **MR. GUYTON:** I do not know the current
9 practice.

10 **MR. BRYANT:** I can address that, Mark.
11 From our perspective the answer is no,
12 because, again, the reason you don't allocate -- if you
13 could allocate, you would have them there in the first
14 place. So if you can allocate, then you put them in
15 common and, therefore, they don't roll into it. There
16 is just that overhead kind of A&G expense, if you will,
17 that does not -- you just can't tell what it is, and so
18 you leave it in common, and it just becomes the cost of
19 doing the clause, if you will.

20 **MS. HARLOW:** What about audit costs? Most of
21 the standards we have looked at are requiring an audit
22 as the first step in the customer receiving a rebate,
23 and you already are required to have an audit program,
24 and I'm hopeful that you are doing a full audit when you
25 take the time and the gas and the expense to go out to

1 the customer's house. How will you allocate those
2 expenses?

3 **MR. BRYANT:** There is a full audit being
4 required, and those dollars will be allocated to the
5 audit because that is the function of what's going on.
6 But the audit, every audit that's done is required to
7 have an evaluation of solar energy. Now, to the extent
8 that you are able to capture 15 minutes to use a solar
9 pathfinder, that would likely be an allocation that goes
10 to the program, but it's contained within the 10 percent
11 number that we have got put forth. So we have minimized
12 it as much as we can. Still looking at what's the
13 primary function going on, doing an audit; where should
14 it be allocated to the audit; but to the extent now we
15 are going to qualify for incentive dollars, do we have a
16 special requirement there, yes, would do; then we will
17 allocate accordingly on a very small basis.

18 **MS. HARLOW:** Do we have some consistency on
19 that across the utilities?

20 **MS. NOACK:** Well, let me kind of start by
21 prefacing this with -- the question was what level of
22 administrative, or what level of utility spending on
23 administrative and marketing costs is appropriate in
24 these programs? And the answer to that question is
25 whatever is needed to effectively and efficiently manage

1 these programs. When we are talking about marketing
2 costs, well we are not planning on doing marketing for
3 these particular programs. We are planning to make sure
4 that we have the information out there for customers and
5 for contractors, but we are not going to be doing
6 marketing. So the administrative costs that we are
7 talking about are those costs that we need to capture
8 and recover to actually manage and administer these
9 programs.

10 And you can't look at a standard percentage
11 like we had talked about earlier across the board,
12 because you are talking about very different caps to
13 begin with. And whether you have got 5,000 customers
14 or a thousand customers, there are some basic costs,
15 say, with the IT or your online application that you
16 are going to have a minimum expenditure for, and it's
17 reasonable to say that you are going to have a
18 higher -- that is going to look like a higher
19 percentage of the total budget, say, for us than it
20 would be FPL or TECO. So if don't think establishing a
21 standard percentage is the right way to look at it,
22 either.

23 The other thing is when you look at the
24 intent of having the cap initially, you know, the
25 Commission's intent of having the cap was to make sure

1 that they could meet the intent of the Florida Statute
2 by increasing the deployment of these systems without
3 adding undue rate increase pressure on the ratepayers.
4 And so it does not make sense to take that and pull
5 that out of this cap and add it to other DSM
6 components. We need to capture what is the full impact
7 of managing and offering these programs, and what will
8 that do to the cost-effectiveness of these particular
9 programs.

10 The other thing too is with the IT we do
11 anticipate from Gulf's perspective that our initial IT
12 costs are going to be more, but those, those costs are
13 going to come down over a period of time, which will,
14 in our annual evaluation we'll be able to determine
15 where to reallocate or rebudget those programs or
16 rebudget those particular dollars to some of the other,
17 other programs. So I just don't think you can look at
18 it as a standard percentage. I think we have to look
19 at the intent and what we're actually doing with those
20 administrative dollars.

21 **MS. HARLOW:** Progress.

22 **MR. GILLMAN:** I think there have been several
23 good points made. I'll piggyback on a couple of them.

24 We mentioned the audit. It's also a
25 requirement of our program. The auditor that would be

1 going to the, the potential solar participant's home or
2 business would be doing an audit and their, those costs
3 would be associated with the audit, not the seller. So
4 in some cases, as Howard mentioned, the common expenses
5 or the other programs that are maybe supporting the
6 solar program are being captured outside of this
7 program. But solar expenditures, administration of
8 those solar programs should be captured under the
9 program itself.

10 Regarding administration, you know, our goal
11 is of course to keep the administration costs as low as
12 possible, and so we need to be cognizant of what drives
13 administration up such as, as measurement and
14 verification, customer adoption. Is customer adoption
15 going as, as perhaps described this morning where
16 there's pent-up demand? If it is, great. Obviously
17 there would be no additional cost towards that. If
18 there's not, then there needs to be dollars from an
19 administration standpoint to drive adoption. So the
20 projection is, we feel is appropriate. But, again, it
21 is a projection based on, on our program design.

22 **MS. HARLOW:** Are you saying the opportunity
23 for some administrative costs to go down over time such
24 as the IT costs?

25 **MR. GILLMAN:** Absolutely. There's the

1 potential. You know, our, our projection is based on
2 historical understanding of DSM programs and what we
3 expect to be the requirement to administer the solar
4 programs, but certainly there's the potential as we
5 evaluate the pilots going forward to see where
6 administration costs are coming in and they could be
7 lower. Sure.

8 **MS. HARLOW:** Let's go back real quickly to the
9 marketing of the programs. I know we've got a pretty
10 consistent feeling here that, that we'll be
11 oversubscribed like the Energy Office was. Was the
12 advertising for that program handled primarily through
13 industry contacts? Yes? And --

14 **MS. BROWNLESS:** My understanding, Judy, is
15 they didn't do any advertising per se, that it was all
16 handled by the industry.

17 **MS. HARLOW:** Thank you.

18 **MR. GANS:** Judy.

19 **MS. HARLOW:** Oscar.

20 **MR. GANS:** In FPL's case, very similar to what
21 has been already expressed, our intent is to manage the
22 administrative costs as low as possible. The costs that
23 are included in that 21 percent, depending on how the
24 math is being done, ultimately reflects IT systems
25 measurement and valid -- measurement and verification,

1 but there's also a research and demonstration program
2 included in that nonincentive cost.

3 So what we did was we focused on the need for
4 education at the school level and also educating so
5 that we can get some of these contractors that may be,
6 that have licenses that may be applied to solar,
7 specifically the plumbers and electricians that may not
8 have been involved with the solar industries per se
9 because they may have been involved more in new
10 construction, et cetera, that maybe have some seminars
11 around the state where we can help educate them so that
12 they can get more involved in this industry. So
13 education we thought was a big component of what we
14 were trying to do as opposed to just pure marketing.
15 Marketing, as has been said, is going to be primarily
16 driven by the people that are going to be selling. But
17 our costs, we're really looking at M&V, as we talked
18 about earlier, really focused on the business, solar
19 water heating so that we could really get a good
20 understanding of what that looks like, educational
21 expenses.

22 However, at the end we're, like the goal of
23 every one of the utilities is manage that down, react
24 to the market conditions and, if needed, we inject
25 dollars to stimulate the market. But where there is,

1 where we see that market is already established, we
2 back off and spend the dollars in other areas.

3 **MS. HARLOW:** All right. Okay. Anything else?

4 **MR. GALLAGHER:** I have a question for you.
5 Are you hiring new personnel to implement this program,
6 these portions?

7 **MR. GANS:** In FPL's case, yes, we are. And
8 we're looking at the incremental headcount as far as
9 what that, what our resources are going to be needed
10 throughout the organization because right now we see
11 this incremental work that's going to be done. So we do
12 anticipate there's going to be some impact. And we're
13 looking at our staffing levels, looking at our
14 resources, seeing how we best can implement these
15 programs, but ultimately it comes down to efficiency,
16 making sure we're not adding just for the sake of
17 adding. So we're looking at specific functions and
18 seeing where the -- if we have the appropriate personnel
19 and we can shift people, we'll use that if it's
20 appropriate. If not, we'll add additional people to
21 the, to our organization.

22 **MS. HARLOW:** Yes.

23 **MR. GALLAGHER:** I just wanted to address the
24 the, on the marketing administrative costs. There may
25 be a duplication of effort here in the educational

1 process. The Banner Center, many universities now are
2 taking on the responsibility of training solar
3 practitioners, and of course the biggest barrier right
4 now are there are no jobs. So they have the curriculum
5 set up, they have everything in place to hire and
6 educate everyone, but there aren't any jobs. So I would
7 suggest maybe take a look at the, at the \$3 million
8 figure and say, okay, we're not going to do any
9 marketing and maybe we could cut back a little on the
10 education because it's being duplicated. Put a little
11 bit more money, you know, in the, toward the consumer
12 might make a little sense.

13 **MS. HARLOW:** That's a good point.

14 Power & Light, do you intend to, before you
15 begin your R&D efforts, perhaps as part of that, look
16 at what is out there now and how can we increment
17 (phonetic) that?

18 **MR. GANS:** And the answer is yes. We are, we
19 are aware of the different centers. Really what we're
20 looking at is possibly working with those centers so
21 that they can increase the amount of people that they
22 can touch, maybe draw more people in. So we're -- we
23 don't have a firm plan as how that's going to work, but
24 we are aware of their work and that's primarily who we
25 want to work through. Make sure that there's enough

1 regional places so that contractors throughout our
2 territory can access the, the training that they want.

3 **MS. HARLOW:** Well, let's move on then to the
4 topic of renewable energy credits. As, as part of our
5 discussions with the utilities and, and the solar
6 industry on the utility program standards, the issue was
7 raised about who should own the renewable energy credits
8 from these systems when they received a rebate from
9 ratepayer funding. And as you know, the Commission has
10 an existing rule now on interconnection and net metering
11 for PV systems, and it requires the ownership of those
12 credits to go to the customer. So we wanted to provide
13 an opportunity for anyone to address this issue, if, if
14 they have thoughts on this, and we think this is the
15 appropriate forum for that. So anyone want to go first?
16 And it's Howard.

17 **MR. BRYANT:** We're consistent with the
18 interconnection rule. We're not, Tampa Electric is not
19 pursuing the ownership of the RECs. It's in the, it's
20 in the hands of the owner.

21 **MS. HARLOW:** Gulf.

22 **MS. NOACK:** Yeah. Given the fact that Gulf
23 Power's general body of customers is subs, they're
24 subsidizing these particular systems and are actually
25 enabling the market to move forward, it's Gulf's opinion

1 or belief that the RECs actually should belong to Gulf
2 on behalf of those general body of customers.

3 However, due to the fact that Gulf wanted to
4 expedite the implementation of these programs and given
5 the fact that there is no state or federal mandate for
6 these credits at this particular time, we're not
7 pursuing that through, through these initial pilots.
8 However, we do want to make the statement that that
9 does not indicate that we're relinquishing our rights
10 in the future to possibly pursue those or that we waive
11 any opportunity to pursue those in the, in the future
12 if in fact there is a state or federal mandate
13 regarding renewables.

14 Now for the system, systems where, you know,
15 we have full ownership, I think it might be a little
16 bit more clear on the ownership of, of those renewable
17 energy credits for the systems that the utility will
18 own. But, again, as I stated before, we're not
19 pursuing the ownership of those RECs at this particular
20 time.

21 **MS. HARLOW:** Progress.

22 **MR. GILLMAN:** Yeah. I think if I just stay in
23 this order, maybe I can keep saying ditto with, with
24 Gulf. We're very much in line with those comments. We
25 do feel that the REC ownership should be a benefit

1 towards the ratepayer who is subsidizing the ownership
2 of the, of the solar.

3 We also see that that's a protection of the
4 REC for not only the ratepayer, but for the State of
5 Florida. There are voluntary markets out there for
6 RECs, and there's the potential that a, a, an owner,
7 whoever is titled to the REC, could, if it was not in
8 the case of the ratepayers, general body of ratepayers,
9 that it could be sold in those markets and then
10 therefore Florida would not be able to continue to lay
11 claim to that environmental benefit.

12 MS. HARLOW: Do we have thoughts from Power &
13 Light?

14 MR. GANS: At this time our position is that
15 we are not looking for ownership of the RECs associated
16 with the programs, but, like the others, we retain the
17 right to reevaluate that in the future.

18 MS. HARLOW: Solar people.

19 MS. BROWNLESS: We believe obviously that the
20 RECs ought to stay with the owner. And as to the
21 question of benefit to the ratepayer, if the -- in most
22 of these incentive instances the owner would have put up
23 the substantial bulk of the money for the facility
24 that's being installed, and so it seems that the
25 attribute ought to stay with him.

1 **MR. FUTRELL:** I don't want to delay things
2 much longer but I do have -- I am curious, I'd like to
3 see if there's any, anybody wants to take a stab at
4 Lonnie's question -- I think, Lonnie, you raised it
5 first about the idea that if, if there were a system,
6 you would be open to raising this issue of if ratepayers
7 are subsidizing these systems, that the REC should go
8 back to the, to the utility, and thus the ratepayers can
9 benefit. Yet the ratepayers are only subsidizing a
10 portion of the cost of the system, yet you seem to be
11 taking the position they should take the whole REC. Has
12 there been some thought about because the customer in
13 these instances are putting up a substantial portion of
14 the cost of the system that there should be some kind of
15 sharing? Have you heard any discussion about that or do
16 you have any thoughts about that?

17 **MS. NOACK:** Yeah. We've talked about that,
18 but depending on what drives the utility for pursuing
19 those, we would evaluate at that particular time how we
20 would pursue those RECs. Since we're not pursuing it
21 with the current programs, you know, we haven't taken
22 that to the next, to the next step. So we'll evaluate
23 that as, as the need comes up and depending on what the
24 market and regulatory environment dictates.

25 **MR. CLEMENCE:** What are those drivers?

1 **MS. NOACK:** Well, say, for example, we have a
2 mandate in the State of Florida for renewable energy
3 credits, that would require the utility to go out and
4 begin pursuing renewable investments. And so at that
5 particular time we would want to, to look at if we're
6 going to incent customers to install these things and
7 our customers are actually subsidizing that, to be able
8 to capture those on the benefit of the ratepayers.
9 Otherwise, we have to go out and find alternative means
10 for, for acquiring those particular renewable energy
11 credits. And you have to look at the fact that with
12 those customers even having installed the system, if we
13 didn't have this type of subsidy available to those
14 customers either.

15 And then also looking at the value of the
16 RECs. How much is that REC worth versus how much of
17 the incentive are we paying? Not just the fact that
18 the customer is paying for a large portion of the
19 system -- if the value of a REC is \$100 and the system
20 is producing X number of kilowatt hours, what is the
21 value of those RECs in that regulatory or even in a
22 voluntary market? The amount that our customers are
23 subsidizing could very well be above and beyond what
24 even the value of those RECs are. So I think you have
25 to look at a number of factors, not just who is paying

1 what percentage of those particular systems.

2 **MS. HARLOW:** I think we can at this point move
3 on to our last topic of the day, and I'm seeing some
4 cheering from the audience. We wanted to just briefly
5 kind of change tack here and talk a little bit about
6 utility ownership on the demand side and whether there
7 are existing regulatory models or perhaps new models
8 that, that we've not approached in Florida that might
9 encourage capital investment by the utility on the
10 demand side and just see if there were any thoughts on
11 that. I'm getting blank stares, but Progress is willing
12 to go first.

13 **MR. GILLMAN:** Well, I figured I was going to
14 give time for Howard to jump in there, but since he
15 didn't do so, I'll step up to the plate this time.

16 You know, there are models out there, other
17 models out there. One of the ones that we've looked at
18 is a rooftop leasing type model that's a model that's
19 done by some California utilities, also by Duke Energy
20 where the, the asset is owned by the utility and the
21 rooftop is leased, like a land lease. There, of
22 course, are barriers to any type of, of capital
23 investment, and in this particular case ownership on
24 the, on the customer's side of the meter.

25 You know, the first barrier to capital

1 investment is just the competition for capital. If you
2 get past that hurdle, then another critical hurdle is
3 the liability and legal risk of owning assets on, on
4 customer property.

5 So there are several hurdles there, but there
6 are models out there that, that we've looked at in the
7 past and we'll continue to look for.

8 **MR. FUTRELL:** Have you looked at the Lakeland
9 project where they own the solar hot water heating
10 program, system and charge customers a flat monthly fee
11 for, I believe it's 20 years, and essentially the
12 customer is paying for solar hot water at an equivalent
13 rate to the, to the electric rate they would have paid
14 if they had traditional strip heating?

15 **MR. GILLMAN:** We have. In fact, if you go
16 back to our development of our solar water heating with
17 the EnergyWise program that we established in 2007, we
18 evaluated that type of model back then.

19 One of the issues there is there's M&V and
20 additional costs associated with, with basically
21 metering the Btus and equivalent kilowatt hours. So
22 there, there are models like that. Again, we, we
23 continue to look at them, but to date we haven't looked
24 at many that we find favorable.

25 **MR. FUTRELL:** Is there anything unique about a

1 municipal that may be better situated to make a move
2 towards that kind of a program versus an investor-owned
3 utility? Is there any just structural differences that
4 make it easier for a muni or --

5 **MR. GILLMAN:** There probably are. That's
6 probably a better question for them than for I, but I
7 imagine there are some, some policy advantages.

8 **MS. HARLOW:** Anyone else want to take a stab
9 at this? TECO.

10 **MR. BRYANT:** Sure. There's a difference for
11 the investor-owned utilities versus the municipals. If
12 the investor-owned -- well, for the investor-owned
13 utility to own the generating resource that is on the
14 customer's property, now whether that power is delivered
15 in front of the meter or behind the meter, to me it's
16 going to require legislation to do that for this reason.

17 The technologies that we're talking about
18 here are far beyond our avoided cost. And so
19 least-cost planning would suggest that it would be
20 another generating asset in our fleet, but it's not the
21 most cost-effective generating asset in our fleet. So
22 it's going to take legislation in order to do that.

23 The thing that's going to encourage the
24 utility to want to do that is the opportunity, once
25 that hurdle of legislation is passed, is going to be

1 the opportunity to have a return or we're not going to
2 want to invest in it. So there again it becomes an
3 asset in our fleet and can we have a return? And, if
4 so, then we would begin to move down that, that avenue.

5 Unfortunately for solar as an example, it is
6 only going to be an as-available resource. It's not
7 going to give capacity benefits. And so there again
8 that's a hindrance that it has for us to want to fully
9 embrace it as a generating asset in, in, in our
10 portfolio of, of, of generation.

11 So it's going to take, as I said, legislation
12 for the utility, they're going to have to have a
13 return. Those are, those are the things that I see
14 immediately.

15 And if you do let the energy come on to the
16 system behind the meter, then you're going to have to
17 have additional metering requirements there because now
18 you are providing a situation where that particular
19 customer is getting the energy and so you're going to
20 have to do some netting of what's going on in fairness
21 to other ratepayers. So there's hurdles there.

22 The Southern Cal Edison example is on the
23 rooftops of giant warehouses and, and it works. And I
24 think their goal is to have some 250 megawatts of that
25 over, I think it's a five-year period. But if I'm not

1 mistaken, that power is coming back on to the grid in
2 front of the meter. So they're only, they're only
3 utilizing the space on the customer's roof. But,
4 again, even if you do that, again it goes back to it's
5 above avoided cost and we're not allowed to do that at,
6 in today's regulatory environment.

7 **MR. FUTRELL:** Howard, if you could earn -- if
8 Tampa Electric could earn 50 basis points above the top,
9 above the top end of your range, would that be a pretty
10 good incentive?

11 **MR. BRYANT:** I'd have to ask our accounting
12 people to take a look at that, Mark.

13 **MR. FUTRELL:** Okay. Thank you.

14 **MS. HARLOW:** Anyone else?

15 **MS. NOACK:** I would just like to add just one
16 additional comment, and that's to the second question:
17 Are there any existing models? We do kind of have a
18 model like that already in the proposed programs from
19 the standpoint that the utilities are providing the
20 option of owning the school-based systems for a period
21 of time. So I think what that allows us to do is it
22 allows us to gain some experience from owning systems on
23 the customer side. It reduces some of the risk because
24 we're not looking at owning something on several hundred
25 customers; we're working with large single, individual

1 customers. And from the standpoint that we're able to
2 earn a return through the clause and capitalize those
3 costs over a period of years, so we're minimizing the
4 immediate impact of providing that subsidy to that
5 customer through, through, through the clause as well by
6 being able to, to capitalize that over the period of
7 five years and, and earn a return. So there is kind
8 of -- we do have a model in our current proposed
9 programs for the utility-owned customer side of
10 generation.

11 **MR. FUTRELL:** I have a follow-up question. I
12 should have asked this in the program design section, so
13 I apologize. But something I noticed in looking at a
14 program JEA has where they have an offer to customers
15 where they will restore existing solar water heating
16 systems to working order. Now they define what that
17 means, but they provide a rebate to help get an older
18 system -- as we've heard for many years, solar water
19 heating has been around in the state for decades. Is
20 that something that anybody considered or does that
21 sound like something to, the Commission could consider,
22 you know, the next time it takes these kind of programs
23 under advisement? Has that come up in any discussions?

24 **MR. BRYANT:** I, I don't recall us having
25 discussed that. Not that it's a bad idea. I would

1 assume if you had to start -- I would assume if you
2 wanted to start down that path, you'd have to put some
3 requirements on the age of the system you're restoring
4 because you, you know, you can't put new wine in old
5 wine skin, that type of thing.

6 So I, I would think there, there would need
7 to be some significant parameters put around that
8 endeavor if we were to walk down that street.

9 **MS. HARLOW:** Suzanne.

10 **MS. BROWNLESS:** Howard, I'd just like to ask a
11 follow-up question with regard to the implementation of
12 utility-owned PV or solar thermal on customers'
13 property.

14 Are you suggesting that you'd have to have an
15 incentive above the midpoint of the ROE to do it or
16 simply be allowed to recover the cost of the
17 installation plus your midpoint rate of return?

18 **MR. BRYANT:** Assuming that it was allowed for
19 us to do that, you would simply want it to be part of
20 your assets that would earn the normal return that all
21 of your generating assets would be earning.

22 **MS. BROWNLESS:** Thank you, Howard.

23 **MR. BRYANT:** Yeah.

24 **MS. HARLOW:** Yes, Bill.

25 **MR. GALLAGHER:** Yeah. I'd just like to make a

1 comment from the, from the industry's standpoint about
2 the lease systems that we're seeing.

3 I just, it's hard for me to, as a consumer to
4 justify doing a lease like that because in many cases a
5 lease payment is more than the savings. They give up
6 the possibility of the tax credit, they don't have
7 ownership, it'll never pay for itself. It's a
8 long-term commitment and they just don't have
9 ownership. So I don't understand the model. I know
10 that there's, you know, some companies that are, that
11 are, that are doing that. I don't, I don't
12 particularly think that it's, that it's good for the
13 industry, nor does it drive employment opportunities if
14 one company capitalizes on thousands of consumer-owned,
15 I mean, you know, utility -- it doesn't necessarily
16 have to be a utility, but one customer-owned system.

17 **MS. HARLOW:** Would there also be property tax
18 increases associated with that?

19 **MS. BROWNLESS:** (Nods affirmatively.)

20 **MS. HARLOW:** And do you know who's picking
21 those up in a lease situation?

22 **MS. BROWNLESS:** I don't know who's picking
23 them up in a lease situation, but I do know now that one
24 of the issues on the table that our industry is seeking
25 to remedy is an increased property tax assessment based

1 upon the installation of PV or solar thermal. So that's
2 a problem that we're experiencing right now and seeking
3 to mitigate.

4 **MS. HARLOW:** Before we close, I just wanted to
5 ask if anyone has any closing remarks, anything that you
6 think you'd like to speak to? And, and if you don't
7 want to do that now, we'll have the opportunity for
8 written comments.

9 (No response.)

10 That means we covered everything. So just
11 briefly to talk about where we are, we covered the
12 topics that the Staff was interested in discussing
13 today, but we would also like to have the opportunity
14 for postwritten comments in case there's anything you
15 think you'd like to provide more detail on after
16 further thought.

17 We will have a written transcript. We will
18 post it to the Commission's website under the tab that
19 is associated with this workshop. If you have trouble
20 finding that, please give one of us a call. We'll be
21 happy to walk you through that. And the transcript
22 date is expected on March 10th. And at this point we
23 would like to see written comments by March 18th.

24 **MR. HARRIS:** If you care to file them.
25 They're not required.

1 **MS. HARLOW:** Right. It's not required
2 homework. And since Larry so graciously gave you all
3 his contact information earlier, I'd appreciate it if
4 you would send the comments to Larry.

5 **MR. HARRIS:** Yeah. And, you know, as we
6 talked about, you can send them to me,
7 lharris@PSC.state.fl.us. I suppose if you want to mail
8 them, you're welcome to mail them too. You know, our
9 address is on the website.

10 If you let me know, you know, if you e-mail
11 them and you know each other's e-mail addresses, it
12 helps to just, you know, carbon copy other people, say
13 here are our comments. If you don't want to do that
14 and you let me know to turn around and send it out to
15 people, I'll do that. And as I get comments from
16 people, what I'll be doing is I have a little file
17 folder in my e-mail thing for this workshop, and as I
18 get the e-mails from people, you know, they're all in
19 there and I'll go through and try to make sure that as
20 I send them out I'm copying everybody who I know to.
21 Some of your companies may not get -- you know, if
22 you've got six people from TECO, I might only send it
23 to Howard and Jim or something as opposed to listing
24 all six on there or what not. But I'll try to make
25 sure as much as I can that everybody is covered.

1 What I would ask is if one of you all gets an
2 e-mail and you happen to be looking at it and you see
3 that I haven't included somebody you think should get
4 it, go ahead and forward it, you know, on my behalf
5 kind of a thing just, you know, among each other or
6 what not. And I know Suzanne was very helpful earlier
7 in this process with sending stuff that she got from me
8 on to people. And so I would ask all of you, if you
9 see somebody's name that you know of that's not on
10 there, go ahead and send it on, so.

11 **MR. GUYTON:** Judy, one -- Charlie. One
12 observation is that a couple of times during the
13 discussion today you asked for comments on additional
14 issues that transcended and went beyond your list of
15 issues. It would be helpful in terms of actually
16 getting comments if those could be separately listed so
17 that we make sure we don't overlook something in going
18 through the transcript.

19 **MS. HARLOW:** Sure. I can only think of two
20 things off the top of my head, but I'll look back
21 through the transcript.

22 **MS. BROWNLESS:** And maybe you could put those
23 on the website so we can make sure we --

24 **MS. HARLOW:** We'll do that. I think one of
25 them was to, anything that comes to mind about ensuring

1 that the customer gets what they expect. And I think we
2 discussed a good bit with the solar industry and
3 utilities as well about at the time the system goes in,
4 letting the customer know what type of output is
5 expected based on the system conditions.

6 And one further thing, I know Mark mentioned
7 this earlier, but not to dwell on it, but just to say
8 it one more time, we are at a point where we have
9 Commission orders on these programs. The programs have
10 been approved. We've -- the Staff has looked at the
11 standards for four out of five. One more is coming in.
12 So keep in mind as you're doing your, your comments, if
13 you choose to, that we, the programs have been
14 approved. But we are in a pilot situation and this is
15 a learning experience, and so keep the Commission's
16 orders in mind as you're making any comments.

17 And we'd like to thank everybody for coming,
18 and we appreciate all your input and sorry it was kind
19 of a long day, and I hope to see you again soon.

20 (Workshop concluded at 2:46 p.m.)
21
22
23
24
25

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

STATE OF FLORIDA)
 :
COUNTY OF LEON)


CERTIFICATE OF REPORTERS

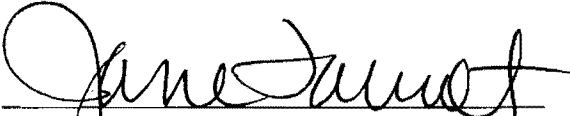
WE, LINDA BOLES, RPR, CRR, and JANE FAUROT, RPR, Official Commission Reporters, do hereby certify that the foregoing proceeding was heard at the time and place herein stated.

IT IS FURTHER CERTIFIED that we stenographically reported the said proceedings; that the same has been transcribed under our direct supervision; and that this transcript constitutes a true transcription of our notes of said proceedings.

WE FURTHER CERTIFY that we are not a relative, employee, attorney or counsel of any of the parties, nor are we a relative or employee of any of the parties' attorneys or counsel connected with the action, nor are we financially interested in the action.

DATED THIS 9th day of March, 2011.


LINDA BOLES, RPR, CRR
FPSC Official Commission
Reporter
(850) 413-6734


JANE FAUROT, RPR
FPSC Official Commission
Reporter
(850) 413-6732

AGENDA FOR STAFF WORKSHOP

INVESTOR-OWNED UTILITY SOLAR PILOT PROGRAMS

March 3, 2011 - 9:30 a.m. – 4:00 p.m.
Betty Easley Conference Center, Room 148
4075 Esplanade Way, Tallahassee, Florida

PURPOSE - During its most recent demand-side management goal setting proceedings, the Florida Public Service Commission (FPSC) required Florida's investor-owned electric utilities (IOUs) to develop pilot programs designed to encourage solar implementation by customers. Subsequently, the FPSC approved solar pilot programs for the five IOUs and directed its staff to conduct a workshop to address the allocation of funds approved for these programs. The purpose of this workshop is for the FPSC's staff to gather information on this issue and other issues relevant to the solar pilot programs.

NOTICE – Larry Harris, Staff Counsel

OPENING REMARKS – FPSC Staff

STAFF OVERVIEW PRESENTATION – FPSC Staff

STATUS OF SOLAR PILOT PROGRAMS – Investor-Owned Electric Utilities

TOPICS FOR DISCUSSION

Allocation of Program Funds

Program Verification

Program Design

Renewable Energy Credits

Utility-Owned Demand-Side Renewables

NEXT STEPS

Discussion of Procedures for any Future Modifications to Solar Pilot Programs

Schedule for Filing Comments

ADJOURN

One or more Commissioners may attend and participate in this workshop.

Parties/Staff Handout
event date 3/3/11
Docket No. Undocketed

01538-11

Questions for Discussion

March 3, 2011 Staff Workshop on Solar Pilot Programs

1. Allocation of funds

Public versus private

What is the appropriate allocation of funding between public and private buildings under the solar pilot programs? How should this be determined?

Should there be a standard percentage allocation?

What other types of public facilities should be eligible for incentives? How should these facilities be selected?

Thermal versus photovoltaic

What is the appropriate allocation of funding between thermal and photovoltaic programs under the solar pilot programs? How should this be determined?

Should commercial/industrial customers be eligible for solar thermal programs?

Low income

What is the appropriate level of funding for low income programs under the solar pilot programs? How should this be determined?

Should low income funds be used to add thermal hot water heating to existing homes?

Residential versus commercial/industrial

What is the appropriate allocation of funding between residential and commercial/industrial customers under the solar pilot programs? How should this be determined?

2. Program Monitoring

Methodologies to monitor and evaluate programs

How should the results of each pilot program be monitored, tracked, and evaluated?

Parties/Staff Handout
event date 3/3/11
Docket No. Undocketed

01538-11

Workshop Outline

- Allocation of Funds**
- Program Monitoring**
- Program Design**
- Renewable Energy Credits (RECs)**
- Utility-Owned Demand-Side Renewables**

Parties/Staff #5
event date 3/3/11 Handout
Docket No. Undocketed
01538-11



Allocation of funds

Public versus Private

- What is the appropriate allocation of funding between public and private buildings under the solar pilot programs? How should this be determined?
- Should there be a standard percentage allocation?
- What other types of public facilities should be eligible for incentives? How should these facilities be selected?

Allocation by Ownership Type

Company	Public Schools	%	Private Sector	%	Solar Research & Demo	%	Admin, Ed, and Mktg	%
FPL * \$13,978,079	\$1,347,755	10%	\$9,628,917	69%	See note below	n/a	\$3,001,407	21%
PEF \$6,338,206	\$2,050,000	32%	\$3,329,000	53%	\$323,380	5%	\$635,826	10%
TECO \$1,531,018	\$153,102	10%	\$1,224,814	80%	\$0	0%	\$153,102	10%
GULF \$ 900,338	\$140,000	16%	\$610,000	68%	\$0	0%	\$150,338	17%
FPUC \$ 47,123	\$0	0%	\$42,400	90%	\$0	0%	\$4,723	10%

Note: FPL intends to spend \$2.5 million over a 5 year period.



Allocation of funds

Thermal versus Photovoltaic

- What is the appropriate allocation of funding between thermal and photovoltaic programs under the solar pilot programs? How should this be determined?
- Should commercial/industrial customers be eligible for solar thermal programs?

Funds Allocated by Thermal vs PV

Company	PV	%	Thermal	%	Solar Research & Demo	%	Admin, Ed, and Mktg	%
FPL * \$13,978,079	\$5,724,862	41%	\$5,251,810	38%	See note below	n/a	\$3,001,407	21%
PEF \$6,338,206	\$4,027,500	64%	\$1,351,500	21%	\$323,380	5%	\$635,826	10%
TECO \$1,531,018	\$1,209,504	79%	\$168,412	11%	\$0	0%	\$153,102	10%
GULF \$ 900,338	\$575,000	64%	\$175,000	19%	\$0	0%	\$150,338	17%
FPUC \$ 47,123	\$40,000	85%	\$2,400	5%	\$0	0%	\$4,723	10%

Note: FPL intends to spend \$2.5 million over a 5 year period.



Allocation of funds

Low Income

- What is the appropriate level of funding for low income programs under the solar pilot programs? How should this be determined?
- Should low income funds be used to add thermal hot water heating to existing homes?

Funds Allocated to Low Income

Company	Low Income	%	Private Sector	%	Solar Research & Demo	%	Admin, Ed, and Mktg	%
FPL * \$12,630,324	\$848,437	7%	\$8,780,480	70%	See note below	n/a	\$3,001,407	24%
PEF \$4,288,206	\$114,000	3%	\$3,215,000	75%	\$323,380	8%	\$635,826	15%
TECO \$1,377,916	\$25,000	2%	\$1,199,814	87%	\$0	0%	\$153,102	11%
GULF \$ 760,338	\$75,000	10%	\$535,000	70%	\$0	0%	\$150,338	20%
FPUC \$ 47,123	\$0	0%	\$42,400	90%	\$0	0%	\$4,723	10%

Note: Data does not include Solar for Schools; FPL intends to spend \$2.5 million over a 5 year period.



Allocation of funds

Residential versus Commercial/Industrial

- What is the appropriate allocation of funding between residential and commercial/industrial customers under the solar pilot programs?
- How should this be determined?

Funds Allocated Residential vs Commercial

Company	Residential Sector	%	Commercial Industrial	%	Solar Research & Demo	%	Admin, Ed, and Mktg	%
FPL * \$12,630,324	\$7,670,467	61%	\$1,958,450	16%	See note below	n/a	\$3,001,407	24%
PEF \$4,288,206	\$2,351,500	55%	\$977,500	23%	\$323,380	8%	\$635,826	15%
TECO \$1,377,916	\$1,013,534	74%	\$211,280	15%	\$0	0%	\$153,102	11%
GULF \$ 760,338	\$610,000	80%	\$0	0%	\$0	0%	\$150,338	20%
FPUC \$ 47,123	\$42,400	90%	\$0	0%	\$0	0%	\$4,723	10%

Note: Data does not include Solar for Schools; FPL intends to spend \$2.5 million over a 5 year period.



Program Monitoring

Methodologies to monitor and evaluate programs

- How should the results of each pilot program be monitored, tracked, and evaluated?

Program Monitoring

Program Results

- What data should be provided to the Florida Public Service Commission (FPSC) in order to evaluate the results of the pilot programs?
- How often should data be provided to the FPSC and in what venue?



Program Monitoring

Program Success

- What criteria should the FPSC use in determining whether the pilot programs meet the intent of Section 366.82(2), F.S., of the Florida Energy Efficiency and Conservation Act (FEECA)?

Program Design

To what extent should programs be consistent among utilities?

■ *Rebate levels*

- Should rebate levels be uniform among utilities?

■ *Eligibility*

- Should there be screening criteria for a customer to receive a rebate based on optimum system performance of the solar photovoltaic or solar thermal system?
- If so, what screening criteria should be used to select sites?

Program Design

Administrative/marketing costs

- What level of utility spending on administrative and marketing costs is appropriate in these programs?
- Should administrative costs be included within the incentive cap or recovered within the administrative costs of the entire DSM portfolio?

Renewable Energy Credits

Ownership

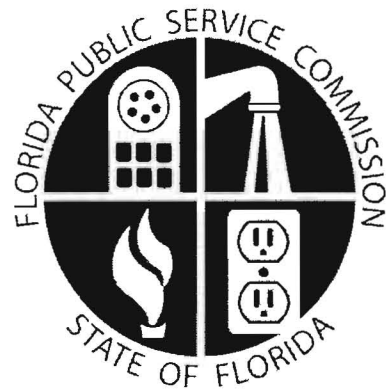
- Who should own the renewable energy credits from systems that receive solar rebates or other utility funding?

Utility-Owned Demand-Side Renewables

- What business model attracts utility capital to implement renewables on the customer side of the meter?
- Are there existing models for implementation of utility-owned generation on a customer's property?

Solar Pilot Program Workshop

March 3, 2011



Walter Clemence
Division of Regulatory Analysis
Florida Public Service Commission

Parties/Staff # 3
event date 3/3/11 Handout
Docket No. Undocketed

01538-11

Energy Conservation Policy

Sections 366.80-.85, and 403.519, F.S.

- Florida Energy Efficiency and Conservation Act (FEECA)
- First enacted in 1980
- Emphasis on:
 - Reducing the growth rates of seasonal peak demand
 - Reducing and controlling the growth rates of electricity consumption
 - Increasing conservation of expensive resources, such as petroleum fuels
 - Encourage development of demand-side renewable energy systems (2008 amendment)



FEECA – 2008 Amendments

- FPSC to adopt appropriate goals for increasing the development of demand-side renewable energy systems.
- Demand-Side Renewable Energy- a system located on a customer's premises generating thermal or electric energy using Florida renewable energy resources and primarily intended to offset all or part of the customer's electricity requirements provided such system does not exceed 2 megawatts.

2009 Conservation Goal Setting

Demand-side Renewables

- Amendments to FEECA in 2008 direct the FPSC to establish appropriate goals for increasing the development of demand-side renewables
- The FPSC requested that utilities analyze demand-side renewables.
- No such measures were found to be cost-effective.



2009 Conservation Goal Setting

Summary of Decisions

- December 1, 2009 - FPSC established cost-effective and aggressive peak demand and energy conservation goals.
- Directed the IOUs to develop solar pilot programs.
 - Focus on encouraging solar water heating and solar PV.
 - Annual expenditure cap to limit rate impact.



2009 Conservation Goal Setting

Summary of Decisions

- IOUs authorized to provide up to \$24.5 million total in annual incentives for customer-owned solar water heating and photovoltaic systems.

Utility	Commission Approved Annual Expense
FPL	\$15,536,870
Gulf	\$900,338
PEF	\$6,467,592
TECO	\$1,531,018
FPUC	\$47,233
Total	\$24,483,051



Purpose of the Workshop

- The Commission noted differences in the allocation of funds for the pilot programs proposed by the IOUs
 - Greater allocation to PV applications than thermal
 - Public versus private facilities
- The IOU Solar Pilot Programs were approved by the FPSC.
- In approving the programs, the Commission requested a workshop to address:
 - How the distribution of funds should be allocated.
 - The appropriate allocation between technological and customer categories.



Purpose of the Workshop

- Staff has compiled some topics/questions to gather more information about the implementation and next steps, if any, for the solar pilot programs.
- General Description of Programs
 - PV (Residential and Commercial)
 - Thermal (Residential and Low Income)
 - Solar for Schools



Status of Solar Pilot Programs Standards

- FPL
 - Not yet filed with the FPSC
- Standards have been filed and accepted by staff for the following companies:
 - GULF
 - PROGRESS
 - TECO
 - FPUC

Agenda

- Status of Current Pilot Programs
- Topics for Discussion
 - Allocation of Program Funds
 - Program Monitoring
 - Program Design
 - Renewable Energy Credits
 - Utility-Owned Demand-Side Renewables
- Post-Workshop Comments

