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4
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P R O C E E D I N G S

1
2 **CHAIRMAN CARTER:** I'd like to call this
3 hearing to order. Good morning to everyone. As I said
4 to you yesterday, everyone eat your Wheaties, so I'm
5 going to presume that you did and we're going to rock
6 and roll.

7 When we started yesterday -- we left off
8 yesterday, Ms. Brownless, you were in cross-examination.
9 You are recognized. You may proceed.

10 **MS. BROWNLESS:** Thank you, sir.

CROSS EXAMINATION (CONTINUED)

11
12 **BY MS. BROWNLESS:**

13 **Q.** Good morning, Mr. Masiello.

14 **A.** Good morning.

15 **Q.** Do you have the responses to my
16 Interrogatories Number 9A there before you?

17 **MS. BROWNLESS:** And that's going to be
18 contained, I believe, Commissioners, in your Exhibit
19 152.

20 **THE WITNESS:** I can't hear you.

21 **CHAIRMAN CARTER:** I cannot hear you, Ms.
22 Brownless.

23 **MS. BROWNLESS:** I'm sorry. I'll start over.

24 **CHAIRMAN CARTER:** Would you start over,
25 please?

1 **MS. BROWNLESS:** Sure.

2 **BY MS. BROWNLESS:**

3 **Q.** Do you have the responses to Florida Solar
4 Coalition's Interrogatories Number 9?

5 **A.** Yes, I do.

6 **MS. BROWNLESS:** Okay. And, Commissioners, I
7 believe that's in Exhibit 152.

8 **BY MS. BROWNLESS:**

9 **Q.** When you were calculating the RIM, TRC,
10 Participant numbers that are shown on the response to
11 Exhibit 9A -- do you see those?

12 **A.** Yes, I do.

13 **Q.** Did you use Itron cost figures for the measure
14 cost evaluated?

15 **A.** These were existing programs, so you're seeing
16 the numbers that we used for our existing programs.

17 **Q.** Okay. So these are your own -- this is your
18 own data.

19 **A.** That's right.

20 **Q.** Okay. And the incentive levels reflected in
21 here are your own data as well.

22 **A.** That's right.

23 **Q.** And I think in response to Exhibit Number 11
24 in that same set --

25 **A.** I have it.

1 **Q.** Okay. You also did the RIM, TRC, and
2 Participant Test and your utility test for the solar
3 measures identified in the Itron technical potential
4 study; correct?

5 **A.** That is correct.

6 **Q.** Okay. And those are contained on the next
7 page; is that right?

8 **A.** That's right.

9 **Q.** Okay. And the measure figures that are in
10 here, the costs, measure costs and the incentive levels,
11 were those provided by you or provided by Itron?

12 **A.** These were numbers that were provided by
13 Itron.

14 **Q.** Okay. And they provided both the measure cost
15 and the incentive level?

16 **A.** That's what -- we provided the incentive.
17 They provided measure costs.

18 **Q.** And the incentive level that you used for
19 these, did it match that used for your existing
20 programs?

21 **A.** Apples and oranges.

22 **Q.** Okay. And can you explain why?

23 **A.** Sure. If you take -- our existing program
24 utilizes demand-side measures, a demand response
25 program. Essentially what we're doing is we take our

1 load control program, which has high benefit to us, and
2 we integrate that with solar water heating in one
3 example.

4 So essentially we're getting the benefit from
5 the demand response program, we're applying that to the
6 solar water heater, taking the implications or the
7 impact of the energy savings from the solar water
8 heating and applying that as a revenue loss. So it's
9 going through the full rigor of what would be the RIM
10 analysis, and as a result the measure comes out
11 cost-effective.

12 Q. Okay. And when you were developing the
13 incentives to plug into the Participant Test and the RIM
14 Test, how did you do that for these generic measures?

15 A. For the standalones that we've done here?

16 Q. Yes.

17 A. We came up with what's considered to be a
18 standard incentive, much like you had mentioned with the
19 \$2 a watt buy down. And in fact the incentive that was
20 applied on the, on the PV system was actually a little
21 bit less than a \$2 a watt item.

22 Q. Okay. And the PV systems would be both the
23 residential and the commercial?

24 A. PV systems would be both residential and
25 commercial.

1 **Q.** And we had previously discussed an 18 cents
2 per kilowatt hour commercial PV program. Did you use
3 that?

4 **A.** When we -- as I stated yesterday, when we went
5 down the path of our initiatives, we have not worked
6 through those RIM and TRC cost-effectiveness tests.

7 **Q.** No. I mean for these programs.

8 **A.** No.

9 **Q.** No? Okay. So you just used the \$2 a watt for
10 everybody, residential and commercial?

11 **A.** It wasn't quite \$2 a watt. It was a figure
12 that we had for each of the various measures here that
13 we ran through. I said much like the \$2 a watt you were
14 proposing. It's actually a little bit less than.

15 **Q.** So it was a figure per watt?

16 **A.** Yes.

17 **Q.** Okay. And that was for the commercial and the
18 residential?

19 **A.** That's correct.

20 **Q.** Did everybody in the Collaborative to your
21 knowledge, or if you don't know, please say, use the
22 same incentive levels in these generic programs?

23 **A.** I believe, I believe they had, although I
24 can't say that with certainty.

25 **Q.** Okay. Are you aware of whether everybody used

1 the same measure costs?

2 **A.** I believe we have.

3 **Q.** So if everybody used the same incentives and
4 the same measure costs, then the difference in their
5 calculations would be associated with the avoided units
6 for each investor-owned utility?

7 **A.** Absolutely. Right.

8 **Q.** And they ought to look pretty similar when I
9 look across the scale; correct?

10 **A.** I can't answer that.

11 **Q.** Well, to the extent that the avoided costs are
12 combined cycles.

13 **A.** Right, or CTs.

14 **Q.** Or CTs.

15 **A.** Uh-huh.

16 **Q.** To the extent that you are expressing opinions
17 about PSC rules, Section 366.82, or revisions to the
18 FEECA statute made in the 2008 legislative session,
19 those are based on your utility expertise and they're
20 not a legal opinion; correct?

21 **A.** Uh-huh. That's correct.

22 **Q.** Because you are not an attorney, are you?

23 **A.** Not an attorney.

24 **Q.** I handed you Florida Progress Energy's 2008
25 4th Quarter FERC Form 1.

1 **A.** I have it.

2 **Q.** Okay. If you look at Line 9, total sales to
3 ultimate customers for the quarter ending 2008, were the
4 sales \$4.002 billion?

5 **A.** I'm sorry. You said Line 9?

6 **Q.** Oh, I'm sorry. Line 10, total sales to
7 ultimate customers.

8 **A.** Line 10?

9 **Q.** Yeah.

10 **A.** And the number was?

11 **Q.** 4.002 billion.

12 **A.** That's correct.

13 **Q.** At your deposition we had quite a long
14 discussion about the fact that Progress sends out
15 surveys to folks who have participated in its energy
16 audit programs; is that right?

17 **A.** Yes.

18 **Q.** Okay. And you have actually been able to
19 estimate the energy savings associated with the measures
20 discussed in an audit program; is that right?

21 **A.** We do that in a variety of ways, but that's
22 right.

23 **Q.** Okay. But you have a number for that, is that
24 right, some idea about what you're realizing?

25 **A.** What a savings -- what a measure was saved,

1 yes, we do.

2 Q. Okay. But you also have some idea based on
3 those surveys as to what is being saved as a result of
4 the audit; is that right?

5 A. Yes. Yeah. It's a matter of taking a look at
6 just a total consumption over an annual basis of those
7 that have had audits and those that have not had audits,
8 those that have implemented measures.

9 Q. Okay. Are you taking the position in this
10 docket that there should be separate goals associated
11 just with energy audits?

12 A. No.

13 Q. Okay. Have you used the savings which you've
14 documented from the energy audits to -- as part of
15 developing your megawatt goals?

16 A. To the extent that we have within our goals
17 the audits that we project to conduct and the benefit
18 that we would get from those audits, that would be
19 embedded in our goals.

20 Q. Okay. As a separate megawatt number that's
21 added in there?

22 A. Sure. It would all be in there.

23 Q. Okay. Now am I correct that your position is
24 that none of the energy efficiency or demand-side
25 measures that you've discussed and that you took into

1 account in your studies can avoid the Levy nuclear unit
2 in whole or in part?

3 **MR. BURNETT:** Objection. Asked and answered.

4 **MS. BROWNLESS:** No. Actually he didn't answer
5 that question.

6 **CHAIRMAN CARTER:** Ms. Helton?

7 **MS. HELTON:** Maybe Ms. Brownless could repeat
8 the question because I'm not sure that I heard the
9 question.

10 **BY MS. BROWNLESS:**

11 **Q.** Okay. Is it your position that none of the
12 energy efficiency measures or demand-side management
13 measures that are being discussed in your goal portfolio
14 can avoid the Levy nuclear unit in whole or in part?

15 **MS. HELTON:** I think she may have asked it a
16 little bit differently.

17 **CHAIRMAN CARTER:** Let's move on, Ms.
18 Brownless. Let's move on.

19 **MS. BROWNLESS:** Well, if I may, Commissioner.
20 The reason that's an important question is it goes to
21 what is the selection of the avoided unit for purposes
22 of calculating every cost-effectiveness test.

23 **CHAIRMAN CARTER:** But you only get one bite at
24 the apple. Okay?

25 **MS. BROWNLESS:** Well, but we'd like to get an

1 answer, would we not, sir?

2 **CHAIRMAN CARTER:** Well, just because you're
3 not satisfied with his answer does not mean --

4 **MS. BROWNLESS:** No. I didn't get an answer.
5 That's my problem.

6 May I have an answer? It is a relevant
7 question, sir.

8 **CHAIRMAN CARTER:** I'm going to sustain the
9 objection. You may proceed.

10 **MS. BROWNLESS:** Thank you, Mr. Masiello.
11 That's all we have.

12 **THE WITNESS:** Thank you.

13 **CHAIRMAN CARTER:** Staff?

14 **MS. FLEMING:** Thank you.

15 **CROSS EXAMINATION**

16 **BY MS. FLEMING:**

17 **Q.** Good morning, Mr. Masiello.

18 **A.** Good morning.

19 **Q.** I would like to have you turn to your Exhibit
20 JAM-17 that's attached to your direct testimony, please.

21 **A.** I'm on it.

22 **Q.** And this exhibit shows the list of measures
23 that were eliminated based on a two-year payback
24 criteria; is that correct?

25 **A.** That is correct.

1 **Q.** And there are about 11 pages worth of measures
2 that were eliminated due to the two-year payback
3 criteria; correct?

4 **A.** That's correct.

5 **Q.** And all of these measures were removed from
6 the economic and achievable potential analyses; is that
7 correct?

8 **A.** That is correct.

9 **Q.** What is Progress doing to educate its
10 customers about DSM measures with a payback period of
11 less than two years?

12 **A.** And also let me add that these are iterative
13 measures, meaning you will see them show up many times
14 on this list. So it makes the list look a lot longer,
15 and that's because the way you have to apply a measure
16 to the various segments. So you have three residential
17 segments, you have 11 commercial segments, and you have
18 many more industrial segments as well. So you'll see a
19 measure show up many times.

20 To answer your question: What do we do? We
21 have a three-pronged approach at Progress Energy to
22 educate our customers. It starts with mass media. And
23 at this point I would hope many people in this room have
24 seen our Save the Watts man. If you've seen the fellow
25 in the funny lightbulb, fluorescent lightbulb suit, he

1 has done a very effective job at promoting compact
2 fluorescent lights. He's been in many schools, he's
3 been in many events, he's been to trade shows, he's been
4 on TV, he's been on radio, he's in the newspaper and
5 he's on the Internet as well. So first it's mass media.

6 The second area that we promote education is
7 on our website. You can then go, and much like GEICO is
8 to gecko or the gecko is the GEICO, he cuts through that
9 millions of messages we get a day and he hits home. And
10 so in addition to that you can go on the web and see our
11 Save the Watts icon and find over a hundred ways to save
12 energy. And there's a variety of things that you can do
13 online that makes it interactive.

14 Our third approach is sort of the one-on-one.
15 It's the community events that we do, it's meeting with
16 our customers, it's a variety of things, to now even
17 including perhaps the social media, the Tweeter, the
18 Facebook -- Twitter, I guess I should say, and Facebook
19 and others that we're doing.

20 And I can go on and on with education that we
21 do at the schools, education that we do in low income
22 communities, which is a big part of what we have just
23 initiated. In fact, we are now going to take our show
24 on the road. We have measures that we would normally
25 want to be able to show a customer in their home, and

1 recognize sometimes we can't get in their homes. I
2 mean, we'd almost have to break into their homes to do
3 some of the things we'd like to do.

4 So what we're doing now is we're bringing it
5 out to them. We're bringing out the heat. You know
6 that air handler unit that you see in your garage?
7 We're bringing that air handler unit out to a community
8 center. We're bringing our load management box out.
9 We're bringing out duct leakage to show duct leakage.
10 We're showing how to weather-strip a door. We're going
11 to show how to weather-strip a window. We're showing
12 attic insulation, what it looks like. We're bringing it
13 to the people at this point, and that's another example.

14 During the course of our energy audit our
15 auditor is bringing an energy efficiency kit with them.
16 And in that kit they provide two compact fluorescent
17 lights, they provide a low-flow aerator, they provide
18 snug plugs. If you're not familiar with that term, it's
19 something that you take your receptacle plate off and
20 you put the snug plug behind it because of the
21 interstitial leaks that take place around a wall outlet.
22 They provide a little hot water card that you take this
23 card and put it in a cup with hot water and you can then
24 see just how warm that water setting is on your, on your
25 water heater so you can lower it.

1 I can go on and on and on and tell you the
2 things that we do, much of which -- like that example I
3 gave yesterday with Seminole County schools where they
4 saved over \$500,000 just from a series of those types of
5 things that we talked about that we don't take credit
6 for.

7 **Q.** Thank you, Mr. Masiello.

8 **A.** You're welcome.

9 **Q.** If Progress's customers on their own practiced
10 all the measures that were eliminated based on the
11 two-year payback period, what would happen to Progress's
12 sales?

13 **A.** Well, obviously the sales would go down fairly
14 significantly.

15 **Q.** So then if, if the sales were to go down
16 fairly significant, as you've stated, as a result of
17 customers practicing DSM measures, what impact would
18 that have on Progress's rates?

19 **A.** Well, it has, you know, impacts where it would
20 go down and it would go up. I mean, there were some
21 things that would drive it down. For example, fuel
22 would, would go down as a result of it. But yet there's
23 unrecovered fixed costs as well that would then drive it
24 up. You would also have generation in place that you
25 would have to scale back to some extent, which would

1 impact its efficiencies. So there would be negative
2 impacts on rates there. So it's a variety of things
3 that would go on to the rate. But otherwise it would be
4 upward.

5 Q. Now if Progress provided an incentive to these
6 customers for these measures that were eliminated under
7 the two-year payback period, what would be the impact on
8 Progress's rates?

9 A. Those measures mostly that are under the
10 two-year payback end up -- are not RIM cost-effective,
11 the majority of them are not RIM cost-effective.
12 Therefore, you would have a cross-subsidization;
13 therefore, rates would go up.

14 Q. And with respect to incentives, are those
15 generally recovered through the ECCR factor; is that
16 correct?

17 A. Incentives for approved programs are recovered
18 through our ECCR factor.

19 Q. Okay.

20 MS. FLEMING: At this time I'd like to hand
21 out an exhibit, a blue cover page, and have it marked
22 for identification, please.

23 CHAIRMAN CARTER: Okay. Commissioners, that
24 means that we're now up to Number 154. Number 154 for
25 your records.

1 Short title?

2 **MS. FLEMING:** Progress Response to ROG 42.

3 **CHAIRMAN CARTER:** Okay.

4 (Exhibit 154 marked for identification.)

5 **BY MS. FLEMING:**

6 **Q.** Have you had a chance to look at this
7 document, Mr. Masiello?

8 **A.** Yes, I have.

9 **Q.** And are you familiar with this document?

10 **A.** Yes, I am.

11 **Q.** In Interrogatory Number 42 staff asked
12 Progress to identify the estimated price of carbon and
13 emission rates; is that correct?

14 **A.** That is correct.

15 **Q.** And are the costs here correct and accurate as
16 Progress provided to staff?

17 **A.** They look correct.

18 **Q.** Okay. And at this time I'd like you to refer
19 to Exhibit 138 which is to your left, the yellow
20 handout.

21 Looking at the Progress Energy column, are the
22 costs depicted on this chart identical to the costs
23 provided in response to Interrogatory Number 42?

24 **A.** They are correct.

25 **Q.** Okay. Thank you.

1 **MS. FLEMING:** And finally we have one more
2 exhibit to hand out. This is already contained as part
3 of staff's stipulated exhibit. This is just for ease of
4 reference. And what we're handing out is Progress's
5 2009 Ten-Year Site Plan, Schedules 3.1, 3.2 and 3.3.

6 **CHAIRMAN CARTER:** That's already in, so we
7 don't need a number.

8 **MS. FLEMING:** That's correct.

9 **CHAIRMAN CARTER:** Okay. You may proceed.

10 **BY MS. FLEMING:**

11 **Q.** Mr. Masiello, are you familiar with this
12 document?

13 **A.** Somewhat familiar.

14 **Q.** Okay. Would you agree that Schedules 3.1, 3.2
15 and 3.3 are from Progress's 2009 Ten-Year Site Plan?

16 **A.** I would agree.

17 **Q.** And are the values for conservation listed in
18 these schedules based upon existing programs?

19 **A.** Existing programs and projected out through
20 2018.

21 **Q.** Okay.

22 **MS. FLEMING:** Thank you. We have no further
23 questions.

24 **CHAIRMAN CARTER:** Thank you.

25 Commissioners?

1 Commissioner McMurrin, you're recognized.

2 **COMMISSIONER McMURRIAN:** Thank you.

3 Mr. Masiello, I know we talked --

4 **COMMISSIONER SKOP:** Mr. Chair?

5 **CHAIRMAN CARTER:** One second, Commissioner.

6 Commissioner McMurrin has the floor.

7 **COMMISSIONER SKOP:** Thank you.

8 **COMMISSIONER McMURRIAN:** Thank you, Chairman.

9 I know we talked a lot about yesterday and
10 even some this morning about the two-year payback
11 criteria. And I just wonder if you can help me
12 understand a little bit better both, you know, where and
13 how that originated and, you know, what is the
14 rationale, what was or is the rationale behind that
15 two-year payback criteria.

16 **THE WITNESS:** When we look at participation
17 curves -- and participation curves, if you can imagine,
18 are a variety of studies that come from various
19 consultants and researchers in this field. And
20 essentially what they look at is based on -- one of the
21 metrics that they would look at would be based on the
22 payback of a measure, just what percentage of the
23 population would you suspect or expect to take advantage
24 of that measure.

25 We have measured curves from KEMA, ACEEE and

1 others that show generally when you get to a two-year
2 payback, you would see about 40 percent of the
3 population would implement the measure. When you go
4 down to a one-year payback, you see that number will
5 grow to 66 percent of the population.

6 So in the free rider analysis we drew a line
7 and said that at that two-year payback, at that curve is
8 where you really begin to see penetration start to
9 exceed what would otherwise warrant an incentive. It's
10 a prudent business decision in the DSM world.

11 **COMMISSIONER McMURRIAN:** Thank you.

12 **CHAIRMAN CARTER:** Thank you.

13 Commissioner Skop, you're recognized.

14 **COMMISSIONER SKOP:** Thank you, Mr. Chair.

15 Good morning, Mr. Masiello.

16 **THE WITNESS:** Good morning.

17 **COMMISSIONER SKOP:** Just quick questions. I'd
18 like to go back to the SolarWise program that Progress
19 offers.

20 **THE WITNESS:** Yes.

21 **COMMISSIONER SKOP:** And with respect to that
22 program, can you tell me how many installed kilowatts
23 capacity are on schools?

24 **THE WITNESS:** Sure. The SolarWise for School
25 now has 13 schools already in the program, and those

1 systems range anywhere from a 4 kW system to a 2 kW
2 system. So at this time we have roughly about 40 kW of
3 PV in those schools. As we continue to apply new
4 strategies in signing up students, this fall we're
5 starting something entirely new, and we're going to
6 bring the students in to help enlist our customers to
7 sign up for the program so we can get the donations
8 that's required to do those installations. So we think
9 this grassroots effort will help to further increase
10 participation in that program, and we're excited for
11 that opportunity.

12 **COMMISSIONER SKOP:** Okay. With respect to
13 that program, is that donation-based or is that in terms
14 of energy efficiency cost-effective on a, on a RIM Test
15 or Participant Test or a total resource cost basis?

16 **THE WITNESS:** Good question. This is sort of
17 one of those unique things that we do to be innovative
18 and to help promote activities of this nature. As you
19 know, this is not only putting PV on schools, it's also
20 putting curriculum with students and it's allowing
21 students to go online and see the cost-effectiveness and
22 efficiencies of the system. They can do
23 cost-effectiveness runs, mathematical computations on
24 overall efficiencies.

25 But the way we've designed this program is

1 that we understand that our customers want to be able to
2 do something. Research typically shows that that's the
3 case. But unfortunately when it comes time to doing
4 something, it means you have to spend money. And
5 generally we see is that generally they don't want to
6 spend the money. So I think that's the case with many
7 of us. We want to do, but then there's a cost
8 associated with it. And unfortunately that's creating a
9 problem.

10 So we came up with a solution. And the
11 solution was to take our demand response program where a
12 customer can go on a program where we install a box in
13 their home free of charge. That box allows us to do
14 load control during peak period. So they're helping us.
15 As a result of helping us, we pay them up to \$150 a year
16 for being on that program. They can now take that \$150
17 and donate it for us to put these systems on the
18 schools.

19 So what it does is it deals with that social
20 consciousness that's so critical, because they want to
21 do something. So they're doing it. They're not only
22 getting on the demand response program, they're helping
23 us meet our peak. They're also able to take this money
24 that they would not otherwise have and donate it to
25 schools.

1 And so the program has proven to be somewhat
2 effective. I'd like to see greater participation. We
3 have some unique ideas on how we think we can do that.
4 We're going to enlist the students to work with their
5 schools and have a variety of activities that we'll work
6 with them on to get more people enlisted so they can
7 help get that PV in. And then that PV system will be
8 dedicated to that school, so it'll give them some
9 additional motivation. So we're excited about that.

10 **COMMISSIONER SKOP:** Okay. So if I understood
11 you correctly, basically you're leveraging existing
12 demand-side management features to allow consumers to
13 make a conscious choice as to whether to put solar PV on
14 schools; is that correct?

15 **THE WITNESS:** That's correct.

16 **COMMISSIONER SKOP:** Okay. And then just -- I
17 guess my point would be if we look at energy efficiency
18 and, you know, I know that the SunSense for business and
19 SunSense for residential have been mentioned as possible
20 programs that would provide for rebate or incentives to
21 encourage distributed solar PV generation.

22 I think my point is in terms of the value of
23 doing this on schools is multifunctioned, as you
24 mentioned. You're getting the energy efficiency by
25 supporting renewables, but you're also getting that

1 educational value of not only concurrent education by
2 allowing students to actually visualize what's, you
3 know, happening in terms of the energy transformation
4 process and also projected cost run savings, but I think
5 the greater benefit is that students take that home to
6 their families and encourage their parents to embrace
7 energy efficiency, energy conservation, and in a sense
8 it's almost educating a future group of consumers that
9 will ultimately have to make conscious energy choices.

10 It seems to me on that alone, notwithstanding
11 the current budgetary constraints that schools are faced
12 with, it would seem that a worthwhile goal or initiative
13 would be to try and find a cost-effective manner of
14 putting solar on every school in Florida, if our
15 investor-owned utilities were able to do so in some way,
16 form or fashion.

17 But I see a -- you know, you have the cost of
18 doing the energy conservation or energy efficiency or
19 renewable program itself, and that's about, you know,
20 anywhere from six to \$7,000 per kilowatt per standard
21 solar PV panel. But if you were able to do that, the
22 intangible benefits, again, the educational value as
23 well as the budgetary savings to the schools could be
24 substantial.

25 So, again, I just wanted to flesh that out a

1 little bit. If you have something to add, I'd be happy
2 to hear it.

3 But thank you, Ms. Brownless, and also
4 Ms. Fleming. I commend Ms. Fleming for the questions
5 she asked because that answered quite a few of the other
6 questions.

7 But I thought it was worthwhile to talk about
8 the SolarWise program a little bit in relation to the
9 educational value and also the budgetary issues for
10 schools and the benefit that might inure from trying to
11 do more of that throughout the state.

12 **THE WITNESS:** Well, thank you. And I would
13 say, just to add to that, is that our new sort of
14 marketing approach for that program, I expect great
15 things from, our goal is to do every school within our
16 service territory.

17 And the one other item I would add is one of
18 the other fallouts from this is working with the Florida
19 Solar Energy Center we have developed energy curriculum
20 with those schools that aid in the FCAT scores for
21 students. To date we've done 100,000 audits with the
22 students. The students take home an audit survey that
23 they work with their parents. They actually get into
24 the attics with them, they take a look at their heating
25 and cooling systems, they take a look at windows and

1 doors, they take that little card to check the
2 temperature of the hot water. And then from that they
3 fill out a very comprehensive report and get a
4 customized report showing the cost and savings of
5 measures, what needs to be done in that home. And it
6 ranges from compact fluorescent lights to clock
7 thermostats to faucet aerators to showerheads, and the
8 list goes on and on and on. And then we have the
9 teachers have the students come back in and do a little
10 essay or presentation on what they found. All been very
11 effective.

12 And anybody who has had a child who's had to
13 remind you to put your seatbelt on or to stop you from
14 smoking, you know how effective they can be in getting a
15 parent to do the right thing. So we think this is
16 beneficial. And I'm sorry that I didn't mention this as
17 an additional piece of our education, but it's just one
18 other piece that we do.

19 **COMMISSIONER SKOP:** Absolutely. And just one
20 other point in passing, because I would want to -- just
21 I appreciate the comments you made about helping
22 Seminole County in terms of some of the audits. Again,
23 I'm a proud product of Seminole County and the public
24 education system, so I do appreciate that.

25 And, Mr. Chair, thank you.

1 **CHAIRMAN CARTER:** Thank you, Commissioner.
2 Commissioners, anything further?
3 Redirect?

4 **MR. BURNETT:** Thank you, sir.

5 **REDIRECT EXAMINATION**

6 **BY MR. BURNETT:**

7 **Q.** Mr. Masiello, do you have what's been marked
8 as Exhibit 151 with you today?

9 **A.** I do.

10 **Q.** Okay. And do you recall yesterday Mr. Cavros
11 was asking you some questions about four measures on
12 Exhibit 151? I believe they were two air conditioner
13 measures and two shower measures; is that correct?

14 **A.** I do. Yes.

15 **Q.** Okay. With respect to those four measures
16 that you were being questioned on yesterday, you and Mr.
17 Cavros were discussing some penetration numbers. Do you
18 recall that?

19 **A.** Yes, I do.

20 **Q.** Okay. With respect to those numbers,
21 Mr. Masiello, were those numbers estimates of actual
22 penetration rates today of those programs or of future
23 penetration rates for those programs, or none of the
24 above, something else?

25 **A.** Yesterday those numbers did throw me a bit in

1 terms of the context as to perhaps the effectiveness of
2 our programs. And so that you know, just to put it in
3 perspective, the Form 151 that we were looking at
4 yesterday talks about the future penetration, not the
5 existing penetration. Now that did throw me a bit
6 because there was a correction to that form that went
7 from, for example, on AC maintenance outdoor coil
8 cleaning, which I happened to mention to you that we
9 have a program that we're training contractors, et
10 cetera, that form was corrected and went from 2.6 to
11 3.2. Not significantly higher.

12 But unfortunately what that's looking at is
13 future penetration for that program. It does not look
14 at existing penetration. On a similar form you'll find
15 that existing penetration is 40 percent, not 2.6.

16 Likewise, the second item was proper
17 refrigerant charging and air flow. I can tell you over
18 the past couple of years we've been working with our
19 contractors diligently because we feel this is an
20 important step. Contractors need to make sure they're
21 installing properly the HVA system, HVAC system with
22 proper refrigerant charging. Otherwise, the system will
23 not get the efficiency it needs.

24 Additionally, the air flow, if the system is
25 not moving enough air through it, it's not going to get

1 the efficiency it needs. So we've been working strongly
2 with them. And there's a lot to do there. There's a
3 lot of work that needs to be done.

4 But let me give you an example of those
5 numbers. Yesterday we were looking at a number of 6.3,
6 which was adjusted to 11.5. Again, that's future
7 potential penetration. The current penetration is not
8 6.3, it's 60 percent. And it goes on. Showerheads was
9 demonstrated to be at 7.5. That was corrected to be
10 18.6 as the future. Current is 43 percent. And even
11 though we know customers put them in and they take them
12 out, apparently some are keeping them in there. And
13 then finally faucet aerators were at 11.5. That was
14 adjusted to 33. And the penetration currently is
15 somewhere around 33 percent as well. So I just wanted
16 to make that correction in terms of that we compare the
17 right, the right scenarios that we're talking about.

18 **MR. BURNETT:** Thank you, sir. Nothing
19 further.

20 **CHAIRMAN CARTER:** Exhibits?

21 **MR. BURNETT:** Yes, sir. We would move
22 Mr. Masiello's prefiled direct testimony and hearing
23 Exhibits 35 through 52 into evidence.

24 **CHAIRMAN CARTER:** Are there any objections?
25 Without objection, show it done.

1 (Exhibits 35 through 52 admitted into the
2 record.)

3 Hang on before we take on the others. Let's
4 just get those first. That's through to 52. Goes all
5 the way up to 52 for your records, Commissioners.

6 Now let's flip over to the, as I call it, the
7 other sheets. Exhibit 148.

8 **MS. KAUFMAN:** Chairman, FIPUG would move 148.

9 **CHAIRMAN CARTER:** Are there any objections?
10 Without objection, show it done.

11 (Exhibit 148 entered into the record.)

12 Exhibit 149?

13 **MS. KAUFMAN:** FIPUG would move 149.

14 **CHAIRMAN CARTER:** Are there any objections?
15 Without objection, show it done.

16 (Exhibit 149 entered into the record.)

17 Now, Mr. Cavros, on 150, that's a request for
18 the capacity calculation. That will be a late-filed
19 exhibit. So when that's provided, we'll just go ahead
20 on and add that in.

21 **MR. CAVROS:** Mr. Chairman?

22 **CHAIRMAN CARTER:** Yes, sir.

23 **MR. CAVROS:** I think that if Mr. Masiello has
24 had an opportunity to do that calculation, we'd be
25 willing to waive filing that late, if he's had an

1 opportunity to actually do that calculation.

2 **CHAIRMAN CARTER:** Okay. Mr. Burnett, you can
3 just have it placed into the record so everyone will
4 have the updated numbers on those calculations.

5 **MR. BURNETT:** Yes, sir, that would be fine.
6 We can, we can I believe do that calculation and get
7 that in today.

8 **CHAIRMAN CARTER:** Okay. And that'll be,
9 that'll be Exhibit Number 150. We'll just make it
10 Exhibit 150. Is that okay, Mr. Cavros?

11 **MR. CAVROS:** That's fine. Thanks.

12 **CHAIRMAN CARTER:** Okay. Excellent.
13 Excellent. Okay. So without objection show it done.

14 (Exhibit 150 entered into the record.)

15 Exhibit Number 151?

16 **MR. CAVROS:** I'd move that in as the PEF
17 Penetration --

18 **CHAIRMAN CARTER:** Any objections?

19 **MS. HELTON:** Mr. Chairman?

20 **CHAIRMAN CARTER:** Wait. Hold the phone. Yes,
21 ma'am.

22 **MS. HELTON:** Let me, if I could have your
23 permission to say on the record, I was confused
24 yesterday when I was discussing with Mr. Burnett about
25 Exhibit 151. I was under the impression that those were

1 numbers from Progress. I did not understand that those
2 were actually Itron's numbers.

3 **CHAIRMAN CARTER:** Okay.

4 **MS. HELTON:** And I have since learned that I'm
5 not sure that we still have the corrected version of
6 Number 151. If we can find out from Ms. Clark when we
7 will get that, maybe the best thing to do would be to
8 provide that to all the parties and let everyone have an
9 opportunity to make sure that they're comfortable with
10 it before we move it into the record.

11 **CHAIRMAN CARTER:** Okay. So let's do that on
12 151. We'll just do a -- now you guys don't forget.
13 Let's kind of get that together, because I think there
14 was an addition to that that we're going to have updated
15 numbers; is that correct? Okay. So we'll come back at
16 the appropriate time. So, staff, just kind of give me a
17 reminder on that.

18 Exhibit 152.

19 **MS. BROWNLESS:** FSC would move those. Those
20 are our interrogatory responses.

21 **CHAIRMAN CARTER:** And that's a composite.
22 Remember, Ms. Brownless gave us -- I think it's four or
23 five -- is it five or four? That's a composite exhibit?

24 **MS. BROWNLESS:** That's a composite exhibit,
25 yes, sir.

1 **CHAIRMAN CARTER:** Okay. Are there any
2 objections? Without objection, show it done.

3 (Exhibit 152 entered into the record.)

4 Exhibit 153. Ms. Brownless?

5 **MS. BROWNLESS:** Yes, sir. We would move that.
6 That is the Progress website.

7 **CHAIRMAN CARTER:** Mr. Burnett, any objections?

8 **MR. BURNETT:** Yes, sir. And I believe
9 consistent with your ruling yesterday, pages --
10 unnumbered Pages 4 through 9 all deal with Progress
11 Energy Carolinas. We would object to those, but no
12 objection as to the other pages dealing with Progress
13 Energy Florida.

14 **CHAIRMAN CARTER:** Okay. Well, consistent with
15 the ruling, we'll just strip off the Carolinas and add
16 the rest.

17 Is that fine, Ms. Brownless?

18 **MS. BROWNLESS:** Yes, sir.

19 **CHAIRMAN CARTER:** Okay. Staff, just kind of
20 make sure we make that correction. Show it done.
21 That's Exhibit Number 153.

22 (Exhibit 153 entered into the record.)

23 Commissioners, now we move to Exhibit 154.

24 Staff?

25 **MS. FLEMING:** Staff would ask that Exhibit 154

1 be moved into the record.

2 **CHAIRMAN CARTER:** Are there any objections?
3 Without objection, show it done.

4 (Exhibit 154 entered into the record.)

5 Anything further for this witness on direct?
6 Thank you, Mr. Masiello. You may be excused.

7 **THE WITNESS:** Thank you.

8 **CHAIRMAN CARTER:** Okay. Call your next
9 witness.

10 **MR. BEASLEY:** Tampa Electric calls Mr. Howard
11 Bryant.

12 **CHAIRMAN CARTER:** Okay. Mr. Howard Bryant.
13 Whereupon,

14 **HOWARD BRYANT**

15 was called as a witness on behalf of Tampa Electric
16 Company and, having been duly sworn, testified as
17 follows:

18 **DIRECT EXAMINATION**

19 **BY MR. BEASLEY:**

20 **Q.** Mr. Bryant, would you please state your name,
21 your business address and your position with Tampa
22 Electric Company?

23 **A.** Yes. My name is Howard Bryant. My business
24 address is 702 North Franklin Street, Tampa, Florida,
25 33602. And my position with the company is Manager of

1 Rates.

2 Q. Mr. Bryant, were you in the room yesterday
3 when you and the rest of the witnesses were sworn in?

4 A. Yes, sir.

5 Q. Thank you. Did you prepare and submit in this
6 proceeding a document entitled Direct Testimony of
7 Howard T. Bryant, consisting of some 43 pages?

8 A. Yes.

9 Q. Do you have any corrections to make to that
10 testimony?

11 A. No.

12 Q. If I were to ask you the questions contained
13 in that testimony, would your answers be the same?

14 A. Yes.

15 MR. BEASLEY: I would ask that Mr. Bryant's
16 direct testimony be inserted into the record as though
17 read.

18 COMMISSIONER EDGAR: The prefiled direct
19 testimony will be inserted into the record as though
20 read.

21 MR. BEASLEY: Thank you.

22 BY MR. BEASLEY:

23 Q. Mr. Bryant, the exhibit that accompanied that
24 testimony, which is identified as Exhibit -- hearing
25 Exhibit 53 in the composite list of exhibits, was that

1 document prepared under your direction or supervision?

2 **A.** Yes.

3 **Q.** Do you have any corrections to make to it?

4 **A.** No.

5 (Exhibit 53 marked for identification.)

6

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1 Environmental Cost Recovery Clause ("ECRC"), and retail
2 rate design.

3
4 **Q.** Have you previously testified before the Florida Public
5 Service Commission ("Commission")?

6
7 **A.** Yes. I have testified before this Commission on
8 conservation and load management activities, DSM goals
9 setting and DSM plan approval dockets, and other ECCR
10 dockets since 1993, and ECRC activities since 2001.

11
12 **Q.** What is the purpose of your testimony in this proceeding?

13
14 **A.** The purpose of my testimony is to present, for Commission
15 review and approval, Tampa Electric's proposed numerical
16 DSM goals for 2010-2019. Tampa Electric's proposed goals
17 are based upon the analytical work performed by the
18 company and Itron, Inc. ("Itron"), a consulting and
19 analysis services firm with over 20 years of experience
20 in the field of DSM evaluations. The goals are separated
21 into summer demand, winter demand and annual energy
22 components for both residential and commercial/industrial
23 sectors. In support of the proposed DSM goals, my
24 testimony will demonstrate that the process Tampa
25 Electric utilized to establish its reasonably achievable,

1 cost-effective goals comports with the requirements of
2 Rule 25-17.0021, Florida Administrative Code ("F.A.C.").
3

4 **Q.** Have you prepared an exhibit in support of your
5 testimony?
6

7 **A.** Yes. Under my direction and supervision, I have prepared
8 an exhibit entitled, "Exhibit of Howard T. Bryant." It
9 consists of eight documents and has been identified as
10 Exhibit No. _____ (HTB-1). Document No. 1 contains Tampa
11 Electric's proposed DSM goals for 2010-2019; Document No.
12 2 provides the comprehensive DSM measure list utilized in
13 this proceeding; Document No. 3 contains Tampa Electric's
14 avoided cost data used for cost-effectiveness
15 evaluations; Document No. 4 lists the DSM measures
16 associated with the Rate Impact Measure ("RIM") economic
17 potential; Document No. 5 lists the DSM measures
18 associated with the Total Resource Cost ("TRC") economic
19 potential; Document No. 6 provides the 2010-2019
20 estimated annual DSM achievable potential for the RIM and
21 TRC tests; Document No. 7 lists the DSM measures
22 associated with the 2010-2019 RIM and TRC estimated
23 achievable potentials; Document No. 8 provides the DSM
24 Economic Potential Cost-Effectiveness Sensitivity
25 Analyses; and Document No. 9 provides the 2010-2019

1 residential bill impacts for three scenarios: 1) no
2 incremental DSM added to the forecast, 2) the RIM
3 achievable potential added to the forecast, and 3) the
4 TRC achievable potential added to the forecast.

5
6 **TAMPA ELECTRIC'S PROPOSED DSM GOALS**

7
8 **Q.** What overall DSM goals are appropriate and reasonably
9 achievable for Tampa Electric for the period 2010-2019?

10
11 **A.** The appropriate and reasonable cumulative DSM goals for
12 Tampa Electric for the period 2010-2019 are segmented
13 into the residential and commercial/industrial sectors
14 and provided at the generator level. For the residential
15 sector, the proposed goals are 33.3 MW of summer demand,
16 28.5 MW of winter demand and 59.0 GWH of annual energy.
17 For the commercial/industrial sector, the proposed goals
18 are 48.5 MW of summer demand, 12.4 MW of winter demand
19 and 142.7 GWH of annual energy. These goals were
20 developed using the Commission-approved cost-
21 effectiveness methodology and are based on the RIM test.
22 Document No. 1 of my exhibit details the incremental and
23 cumulative annual amounts that comprise these goals.

24
25 **Q.** How do Tampa Electric's proposed DSM goals for the

1 upcoming period of 2010-2019 compare to the company's
2 current DSM goals for the 2005-2014 period?

3
4 **A.** Tampa Electric's cumulative proposed goals across the
5 residential and commercial/industrial sectors for the
6 2010-2019 period are 81.8 MW of summer demand, 40.9 MW of
7 winter demand and 201.7 GWH of annual energy. The total
8 cumulative goals at the generator level for the current
9 2005-2014 period are 70.6 MW of summer demand, 70.9 MW of
10 winter demand and 116.5 GWH of annual energy.

11
12 **Q.** How does Tampa Electric's DSM goals accomplishments
13 compare to other utilities in the nation?

14
15 **A.** Tampa Electric's accomplishments are significantly
16 greater than most other utilities in the U.S. Tampa
17 Electric began its DSM efforts in the late 1970s prior to
18 the 1980 legislative enactment of the Florida Energy
19 Efficiency and Conservation Act ("FEECA"). Since then,
20 the company has aggressively sought Commission approval
21 for numerous DSM programs designed to promote energy
22 efficient technologies and to change customer behavioral
23 patterns such that energy savings occur with minimal
24 affect on customer comfort. Additionally, the company
25 has modified existing DSM programs over time to promote

1 evolving technologies and to maintain program cost-
2 effectiveness.

3
4 From the inception of Tampa Electric's programs through
5 2008, the company has achieved 660 MW of winter
6 reduction, 232 MW of summer reduction and 647 GWH of
7 annual energy savings. These peak load reductions have
8 eliminated the need for the equivalent of more than three
9 power plants of 180 MW of winter capacity. Of greater
10 significance is the fact that this accomplishment was
11 achieved without subsidizing or penalizing customers who
12 were not participants. Tampa Electric achieved this
13 level of reduction by offering only those DSM programs
14 that reduce rates for all customers, both DSM
15 participants and non-participants alike.

16
17 The reality of these continuing efforts by Tampa Electric
18 is demonstrated by the statistics from the Energy
19 Information Administration ("EIA") of the Department of
20 Energy. For the 2001-2007 period, EIA has nationally
21 ranked Tampa Electric as high as the 96th percentile for
22 cumulative conservation and the 90th percentile for load
23 management achievements.

24
25 **OVERALL COLLABORATIVE PROCESS TO DEVELOP DSM SAVINGS**

1 Q. Please describe the overall collaborative process used to
2 develop each member's proposed DSM savings.

3
4 A. There were several key steps in the overall collaborative
5 process that sequentially supported the development of
6 each utility's proposed DSM goals. These steps included:
7 1) the establishment of a collaborative team among the
8 FEECA utilities, the Southern Alliance for Clean Energy
9 ("SACE"), and the National Resources Defense Council
10 ("NRDC"); 2) the selection of a consultant capable of
11 performing the requisite tasks associated with a
12 comprehensive DSM evaluation for all FEECA utilities; 3)
13 the identification of a comprehensive list of DSM
14 measures that met the requirements of Rule 25-17.0021,
15 F.A.C., 4) the establishment of technical, economic and
16 achievable potentials through systematic cost-
17 effectiveness evaluations of the DSM measures; and 5) the
18 establishment of each utility's proposed DSM savings.

19
20 Q. Why was a collaborative approach taken?

21
22 A. A collaborative approach was taken primarily due to the
23 size of the task and the similarity of the activities
24 across all FEECA utilities. Also, SACE and NRDC
25 requested intervenor status in each utility's docket;

1 therefore, it was felt that a collaborative effort was a
2 more efficient manner to facilitate major aspects of the
3 goals setting process.

4

5 **Q.** Please identify the FEECA utilities.

6

7 **A.** FEECA utilities are those utilities that fall under the
8 requirements of Sections 366.80 and 366.82, F.S.
9 Specific to electric utilities, the group includes Tampa
10 Electric, Florida Power and Light Company, Progress
11 Energy Florida, Gulf Power Company, Florida Public
12 Utilities Company, Jacksonville Electric Authority, and
13 Orlando Public Utilities.

14

15 **Q.** Has the collaborative process brought value to the
16 overall DSM goals setting process?

17

18 **A.** Yes. At the outset, the entire team participated in the
19 Request for Proposal process for selecting a consultant
20 to conduct the DSM potential study. This included the
21 identification of several potential consultants and the
22 ultimate selection of Itron. Once Itron was selected,
23 the team, along with Itron, established the comprehensive
24 list of DSM measures for evaluation. Additionally, many
25 meetings, conference calls, and presentations that

1 included Itron have occurred to assist in applying
2 consistent methodologies to the evaluation process. SACE
3 and NRDC have provided expertise in areas of measure
4 incentive levels, program development aspects such as
5 capturing lost opportunities, and providing judgment as
6 to the appropriateness of the technical potential.
7 Ultimately, the collaborative team worked as close as
8 possible to provide reasonable achievable potential DSM
9 goals for each member utility while respecting key
10 differences among the group. To suggest the
11 collaborative team has been in total agreement on all
12 matters throughout the process would be incorrect;
13 however, each member has contributed value to the
14 process.

15
16 **Q.** As the utility consultant to the DSM goals setting
17 process, what were Itron's responsibilities?
18

19 **A.** Itron's responsibilities to each member of the
20 collaborative team were categorized into four major
21 areas. These areas were:

- 22 • Develop DSM measures and estimate the technical
23 potential;
- 24 • Collect building characteristics and end-use measure
25 saturation data;

- 1 • Estimate the economic and achievable potentials; and
- 2 • Provide regulatory support, reporting and project
- 3 management.

4

5 As these areas of responsibility were executed, there

6 were frequent exchanges of data and calibration checks

7 made in order to provide the best estimates of the three

8 potentials. Additional details surrounding these key

9 areas can be found in the direct testimony of Itron

10 witness Michael Rufo.

11

12 **Q.** Please identify the comprehensive DSM measure list

13 developed.

14

15 **A.** Tampa Electric's comprehensive DSM measure list developed

16 by input from all collaborative members was comprised of

17 67 residential sector measures, 82 commercial sector

18 measures, and 118 industrial sector measures for a

19 combined total of 267 DSM measures. For residential, the

20 measures were applied to new and existing building

21 vintages in the single family, multi-family and mobile

22 home building types. Commercially, the measures were

23 applied to new and existing building vintages in the

24 college, food store, hospital, office, lodging,

25 restaurant, retail, school, warehouse, other health care

1 and miscellaneous building types. For industrial, the
2 measures were applied to the existing building vintage in
3 the food processing, textiles, lumber, paper-pulp,
4 printing, chemicals, petroleum, rubber-plastics, stone-
5 clay-glass, primary metals, fabrication metals,
6 industrial machinery, electronics, transportation
7 equipment, instruments and miscellaneous building types.
8 When the comprehensive DSM measure list was applied to
9 the various building types within each sector, a total of
10 almost 2,300 specific DSM measure applications was
11 developed for evaluation. Document No. 2 of my exhibit
12 provides Tampa Electric's comprehensive DSM measure list.

13
14 **Q.** Other than the energy efficiency, demand response and
15 renewable measures identified by the collaborative team,
16 what other DSM measures were identified for potential
17 inclusion in the DSM goals?

18
19 **A.** In addition to the 267 energy efficiency, demand response
20 and renewable measures, Tampa Electric identified three
21 natural gas measures for potential inclusion. The
22 specifics on these measures will be addressed later in my
23 testimony.

24
25 **TAMPA ELECTRIC'S PROCESS TO DEVELOP ITS SPECIFIC DSM GOALS**

1 Q. What was Tampa Electric's first step in developing its
2 specific DSM goals?

3
4 A. Tampa Electric's first step in developing its DSM goals
5 was to assist Itron with establishing the company's
6 technical potential. The technical potential is the
7 total amount of DSM technically feasible in the company's
8 service area based on the comprehensive DSM measure list
9 established by the collaborative team. As stated on page
10 ES-1 in Itron's report for Tampa Electric, the
11 "...technical potential is a theoretical construct that
12 represents the upper bound of [energy efficiency],
13 [demand response] and [photovoltaic] potential from a
14 technical feasibility sense, regardless of cost or
15 acceptability to customers. Specifically, technical
16 potential does not account for other real-world
17 constraints such as product availability,
18 contractor/vendor capacity, cost-effectiveness, or
19 customer preferences." The report further states, "...the
20 technical potential estimates for [energy efficiency],
21 [demand response], and [photovoltaics] are not strictly
22 additive." This is due to the interactive affect of
23 certain measures on end uses. With this backdrop, the
24 energy efficiency demand and energy values represented by
25 the technical potential are 1,412 MW of summer demand,

1 903 MW of winter demand and 5,853 GWH of annual energy.
2 The demand response demand reduction values represented
3 by the technical potential are 550 MW of summer demand
4 and 485 MW of winter demand. Finally, the photovoltaic
5 demand and energy values represented by the technical
6 potential are 2,854 MW of summer demand, 436 MW of winter
7 demand and 7,693 GWH of annual energy.

8
9 **Q.** Has Tampa Electric filed the Itron technical potential
10 final report?

11
12 **A.** Yes. Tampa Electric filed the report, dated April 6,
13 2009, entitled "Technical Potential for Electric Energy
14 and Peak Demand Savings in Tampa Electric Company - Final
15 Report." That report was logged in at the Commission
16 Clerk's office on April 28, 2009, and assigned FPSC
17 Document No. 03950-09. Rather than making that
18 voluminous report an exhibit to my testimony I adopt by
19 reference the report filed with the Commission.

20
21 **Q.** Once the technical potential was established, what was
22 Tampa Electric's next step?

23
24 **A.** The next step involved initiating Tampa Electric's
25 integrated resource planning ("IRP") process. The

1 company's IRP process has been utilized and approved in
2 all previous DSM goals setting proceedings and is clearly
3 delineated in the company's annual Ten-Year Site Plan
4 filing. The IRP process began by establishing Tampa
5 Electric's supply-only resource plan for the base years
6 of 2010 through 2019. The supply-only resource plan was
7 developed by having no additional DSM impacting the
8 company's forecast after 2009. In so doing, the avoided
9 unit for the upcoming cost-effectiveness analyses was
10 identified. Document No. 3 of my exhibit provides the
11 detail of this avoided unit.

12
13 **Q.** Once the avoided unit information was determined, what
14 was the next step in the process?

15
16 **A.** The next step for Tampa Electric was to establish its
17 economic potential. The company developed its economic
18 potential by utilizing the Commission's approved cost-
19 effectiveness tests, namely, the RIM and TRC tests. When
20 calculating the RIM test, only lost revenues were
21 considered on the cost side of the equation. For the TRC
22 test, only the customer's equipment cost was considered
23 on the cost side of the equation. For both the RIM and
24 TRC tests, the benefits were comprised of supply side
25 costs that included the avoided generator, transmission

1 and distribution, and fuel costs.

2
3 Tampa Electric's economic potential established under the
4 RIM test evaluation resulted in 250 individual measures
5 remaining from the original list. The measures that
6 remained are provided in Document No. 4 of my exhibit.
7 The resulting demand and energy values of the economic
8 potential were 1,465 MW of summer demand, 919 MW of
9 winter demand and 6,629 GWH of annual energy.

10
11 Tampa Electric's economic potential established under the
12 TRC test evaluation resulted in 251 individual measures
13 remaining from the original list. The measures that
14 remained are provided in Document No. 5 of my exhibit.
15 The resulting demand and energy values of the economic
16 potential were 1,339 MW of summer demand, 799 MW of
17 winter demand and 6,266 GWH of annual energy.

18
19 **Q.** After the RIM and TRC economic potentials were
20 determined, what was the next step in Tampa Electric's
21 process?

22
23 **A.** The next step in Tampa Electric's process was to perform
24 a systematic analysis to determine the appropriate
25 incentive for each measure under the RIM and TRC economic

1 potential scenarios. Since this step required the
2 identification of measures that could cost-effectively
3 manage the application of incentives, it was necessary to
4 employ a series of screenings such that when completed,
5 the appropriate measures would remain.

6
7 **Q.** Please describe the steps involved in the screening
8 process.

9
10 **A.** The first step in the screening process was to screen
11 those measures out of the RIM and TRC economic potential
12 scenarios by evaluating their cost-effectiveness for the
13 inclusion of administrative costs but with no incentives.
14 Tampa Electric developed the administrative costs though
15 its experience with the same or similar measures
16 contained in existing DSM programs. Under the RIM test
17 evaluation, this screening resulted in 146 measures
18 remaining with summer demand savings of 877 MW, winter
19 demand savings of 505 MW, and annual energy savings of
20 3,447 GWH. Under the TRC test evaluation, this screening
21 resulted 225 measures remaining with summer demand
22 savings of 926 MW, winter demand savings of 496 MW, and
23 annual energy savings of 4,013 GWH.

24
25 The second step in the screening process was to screen

1 those measures out of the RIM and TRC potential scenarios
2 that had a participant payback of two years or less
3 without a utility incentive. The introduction of this
4 screening level required not only the use of the RIM and
5 TRC tests, but also the Participants' test in conjunction
6 with each. The collaborative team established the two-
7 year payback criterion to minimize free ridership. Free
8 ridership is the situation where a customer's investment
9 in a DSM measure will naturally pay for itself over a
10 relatively short period of time. The two-year or less
11 period of time is sufficient motivation for a customer's
12 natural adoption of the DSM measure. Simplistically, it
13 was thought that Tampa Electric, and ultimately its
14 customers, should not pay specific customers to do what
15 they would do on their own without an incentive.
16 Therefore, the two-year payback criterion minimized free
17 ridership. By utilizing this naturally occurring free
18 ridership screen, 113 measures remained under the RIM and
19 Participants' tests evaluation and had summer demand
20 savings of 574 MW, winter demand savings of 175 MW, and
21 annual energy savings of 2,066 GWH. Under the TRC and
22 Participants' tests evaluation, 196 measures remained
23 with 785 MW of summer demand savings, 328 MW of winter
24 demand savings, and 3,705 GWH of annual energy savings.

25

1 The third step in the screening process was the
2 development of the incentive levels to be applied to the
3 remaining measures. For this step, the collaborative
4 team chose three incentive levels for evaluation. As
5 these incentive levels were applied, cost-effectiveness
6 was maintained under the RIM and TRC methodologies and in
7 conjunction with the Participants' test. The first level
8 was an incentive applied to the incremental measure cost
9 such that the measure payback for the customer was
10 decreased to two years. This screen typically identified
11 the maximum incentive available for each measure. The
12 second level was an incentive equal to the lesser of 50
13 percent of the incremental cost of the measure or an
14 incentive that provides a two-year payback. The third
15 level was an incentive equal to either 33 percent of the
16 incremental cost of the measure or an incentive that
17 provides a two-year payback, whichever is less.

18
19 **Q.** Once the third step in the screening process was
20 completed, what did Tampa Electric do with the results?

21
22 **A.** At the completion of the screening process, the results
23 of each incentive level under the RIM and TRC scenarios
24 were provided to Itron. Itron, in turn, through their
25 supply curve adoption modeling, developed the achievable

1 DSM potential for each incentive level under both RIM and
2 TRC scenarios. This actually created six different DSM
3 achievable potentials.
4

5 **Q.** How did Tampa Electric utilize the achievable potential
6 data received from Itron?
7

8 **A.** Tampa Electric selected the achievable potential that was
9 associated with the maximum incentive level, namely, the
10 two-year payback. This was done for both RIM and TRC
11 scenarios and provided the largest achievable potential
12 for each scenario.
13

14 **Q.** Based on the Itron data, what are Tampa Electric's
15 estimated energy efficiency DSM achievable potential
16 goals for the 2010-2019 period under the RIM and TRC
17 scenarios?
18

19 **A.** For the 2010-2019 period, Tampa Electric's estimated
20 energy efficiency DSM achievable potential goals under
21 the RIM scenario are 65.3 MW of summer demand savings,
22 28.8 MW of winter demand savings, and 201.7 GWH of annual
23 energy savings. Under the TRC scenario Tampa Electric's
24 estimated energy efficiency DSM achievable potential
25 goals are 102.7 MW of summer demand savings, 61.1 MW of

1 winter demand savings, and 310.3 GWH of annual energy
2 savings. These values are stated at the generator level.

3
4 **Q.** Do these estimated DSM achievable potential goals include
5 demand response, renewable and natural gas measures?

6
7 **A.** No. These estimated DSM achievable potential goals only
8 account for energy efficiency measures. Tampa Electric
9 evaluated the potential of demand response, renewable and
10 natural gas measures separately.

11
12 **Q.** Please describe the method Tampa Electric employed to
13 estimate the achievable potential demand and energy
14 savings from demand response, renewable and natural gas
15 measures.

16
17 **A.** The achievable potential for demand response and
18 renewable measures was developed separately by Itron.
19 Tampa Electric utilized internal data to evaluate natural
20 gas measures.

21
22 For demand response, Itron utilized its expertise to
23 estimate the achievable potential for dispatchable and
24 non-dispatchable demand response. Dispatchable is
25 analogous to direct load control and non-dispatchable is

1 dependent upon the customer's decision to control their
2 usage based on pricing. Sometimes called critical peak
3 pricing, non-dispatchable demand response is a relatively
4 new DSM measure that requires advanced technologies,
5 dynamic tariffs and advanced communications networks.
6 Based on Itron modeling of the various forms of demand
7 response, Tampa Electric selected Itron's high scenario
8 estimate of demand response for its achievable potential
9 goals. The associated demand and energy components are
10 16.5 MW of summer demand savings, 12.1 MW of winter
11 demand savings, and no GWH of annual energy savings.

12
13 For renewables, Itron evaluated photovoltaic ("PV")
14 measures that could be applied to various building types
15 in the residential and commercial sectors; however, solar
16 water heating measures were evaluated through the energy
17 efficiency process previously discussed. For PV
18 evaluation under the RIM scenario, the measures did not
19 fail cost-effectiveness screening until incentives were
20 applied. Under the TRC scenario, the measures failed
21 from the outset. Therefore, based on the evaluation
22 results, no PV contribution to the company's estimated
23 achievable potential was available.

24
25 As previously stated, Tampa Electric evaluated the

1 potential for commercially available natural gas measures
2 based on its own internal data. The residential gas
3 measures evaluated included conventional and tankless
4 water heaters. The commercial gas measure evaluated was
5 a conventional water heater. The measures were evaluated
6 under the RIM and TRC cost-effectiveness criteria and
7 failed both tests at the initial screening level;
8 therefore, the measures provided no contribution to the
9 company's estimated DSM achievable potential goals.

10
11 **Q.** Based on the estimated achievable potentials for energy
12 efficiency and demand response, what is Tampa Electric's
13 total estimated maximum achievable potential for DSM
14 measures?

15
16 **A.** When the estimated achievable potentials for energy
17 efficiency and demand response are combined, Tampa
18 Electric's total estimated maximum DSM achievable
19 potential for the 2010-2019 period under the RIM scenario
20 is 81.8 MW of summer demand savings, 40.9 MW of winter
21 demand savings, and 201.7 GWH of annual energy savings.
22 Tampa Electric's total estimated maximum achievable
23 potential for the 2010-2019 period under the TRC scenario
24 is 119.2 MW of summer demand savings, 73.2 MW of winter
25 demand savings, and 310.3 GWH of annual energy savings.

1 These are generator level values. Document No. 6 of my
2 exhibit provides the annual and cumulative totals for the
3 RIM and TRC cost-effectiveness scenarios. Document No. 7
4 of my exhibit provides the list of measures that were
5 used to form the 2010-2019 estimated maximum achievable
6 potentials for the RIM and TRC scenarios.

7
8 **Q.** What are Tampa Electric's proposed residential and
9 commercial/industrial DSM goals for the 2010-2019 period?

10
11 **A.** For the 2010-2019 period, Tampa Electric's proposed DSM
12 goals for the residential and commercial/industrial
13 sectors are the generator level achievable potential
14 demand and energy results developed by Itron under the
15 RIM maximum incentive scenario. Specifically, the
16 residential sector DSM goals are 33.3 MW of summer demand
17 savings, 28.5 MW of winter demand savings, and 59.0 GWH
18 of annual energy savings. The commercial/industrial
19 sector DSM goals are 48.5 MW of summer demand savings,
20 12.4 MW of winter demand savings, and 142.7 GWH of annual
21 energy savings. Document No. 1 of my exhibit provides
22 the annual and cumulative amounts for both sectors for
23 the 2010-2019 period. Document No. 7 provides a listing,
24 under the RIM scenario, of the measures broken into
25 sectors that were used to form the company's proposed DSM

1 goals.

2

3 **Q.** What is the cost-effectiveness basis for Tampa Electric's
4 proposed DSM goals?

5

6 **A.** The cost-effectiveness basis for Tampa Electric's goals
7 is the RIM test in conjunction with the Participants'
8 test. The RIM test, when used in tandem with the
9 Participants' test, provides a cost-effective, fair,
10 reasonable and equitable determination of DSM
11 expenditures for both the participants and the non-
12 participants. The RIM test puts the least amount of
13 upward pressure on rates while allowing for significant
14 accomplishments of DSM measure deployment. Furthermore,
15 the RIM test does not promote cross-subsidization among
16 participants and non-participants. Finally, history
17 indicates that this Commission's decisions in the past to
18 approve a utility's DSM goals based on the RIM test have
19 not hindered the DSM performance of the Florida utilities
20 relative to other utilities in the industry. According
21 to EIA, since 2001, Florida's four largest investor-owned
22 utilities have consistently ranked among the nation's
23 leaders for cumulative energy efficiency accomplishments
24 with the top three utilities having achieved rankings in
25 the top ten. Based on these results and the fairness of

1 the methodology, Tampa Electric believes its DSM goals
2 for the 2010-2019 period should continue to be
3 established on the RIM test basis.
4

5 **ADHERENCE TO F.A.C. RULE AND STATUTORY DSM GOALS SETTING**
6 **REQUIREMENTS**
7

8 **Q.** Does the evaluation process utilized by Tampa Electric to
9 establish its proposed DSM goals for the 2010-2019 period
10 address the requirements of Rule 25-17.0021, F.A.C.?
11

12 **A.** Yes. The Rule requires a utility to 1) project its
13 proposed DSM goals in both the residential and
14 commercial/industrial sectors, 2) give consideration to
15 measures applicable for new and existing construction, 3)
16 ensure that major end-use categories specified in the
17 Rule be assessed, and 4) consider such things as
18 overlapping measures, appliance efficiency standards,
19 interactions with building codes, free riders, rebound
20 effects and the utility's latest monitoring and
21 evaluation data. To the extent data was available, the
22 comprehensive DSM measure list developed by the
23 collaborative process, the company's utilization of Itron
24 as a leading DSM consulting firm in the industry, and
25 Tampa Electric's overall evaluation process from its

1 technical potential to its proposed DSM goals for the
2 2010-2019 period comport with Rule 25-17.0021, F.A.C.

3
4 **Q.** Has Tampa Electric provided an adequate assessment of the
5 full technical potential of all available demand-side
6 conservation and efficiency measures, including demand-
7 side renewable energy systems?

8
9 **A.** Yes. Tampa Electric has been an integral member of a
10 statewide collaborative process that developed a
11 comprehensive DSM measure list and conducted an adequate
12 assessment of the full technical potential of all
13 available demand-side conservation and efficiency
14 measures that included renewable energy systems. A total
15 of 270 measures, including energy efficiency, demand
16 response, renewable energy and natural gas measures were
17 identified and evaluated by Itron and Tampa Electric.

18
19 **Q.** Section 366.82(3), F.S., requires utilities to perform an
20 adequate assessment of supply-side conservation measures.
21 Has Tampa Electric performed that assessment and, if not,
22 why?

23
24 **A.** Tampa Electric has not performed an assessment of supply-
25 side conservation measures. The company recognizes this

1 is a requirement of the statute; however, the enormity of
2 the task to adequately assess supply-side conservation
3 measures to the degree this Commission would expect is
4 unreasonable for the timeline of this docket. Given the
5 immediate need of properly assessing the demand-side
6 conservation and efficiency measures in this docket,
7 Tampa Electric believes a better approach is to complete
8 all work associated with establishing DSM goals for the
9 2010-2019 period and then perform an assessment of
10 supply-side conservation measures. In so doing, adequate
11 time will be available to properly evaluate the new
12 requirement of supply-side conservation measures.

13
14 **Q.** Has Tampa Electric provided an adequate assessment of the
15 achievable potential of all available demand-side
16 conservation and efficiency measures, including demand-
17 side renewable energy systems?

18
19 **A.** Yes. Tampa Electric has been an integral member of a
20 statewide collaborative process that has conducted an
21 adequate assessment of the full technical, economic and
22 achievable potentials of all available demand-side
23 conservation and efficiency measures including renewable
24 energy systems and natural gas measures. The company
25 employed a reasonable approach to identifying

1 administrative costs and incentives for the measures and
2 evaluated the measures against the appropriate supply-
3 side avoided cost data.

4
5 **Q.** Should the Commission establish separate goals for
6 demand-side renewable energy systems?

7
8 **A.** No. Tampa Electric evaluated demand-side renewable
9 energy systems as an integral part of its overall DSM
10 measure evaluation process. The company believes that
11 the appropriate renewable energy measures that contribute
12 to demand and energy reductions on the customer side of
13 the meter should simply be a part of the company's
14 overall DSM goals and not stand alone as a separate
15 requirement.

16
17 **Q.** Should the Commission establish additional goals for
18 efficiency improvements in generation, transmission and
19 distribution?

20
21 **A.** Tampa Electric believes that efficiency improvements in
22 generation, transmission and distribution are supply-side
23 options and that the Commission should evaluate these
24 efficiency improvements in light of any potential goals
25 in a separate proceeding from the current docket for

1 demand-side goals.

2

3 **Q.** Should the Commission establish separate goals for
4 residential and commercial/industrial customer
5 participation in utility energy audit programs for the
6 period 2010-2019?

7

8 **A.** No. Tampa Electric does not believe it is necessary to
9 establish separate performance goals for residential and
10 commercial/industrial customer participation in utility
11 energy audit programs for a number of reasons. First,
12 history from throughout the 1980s indicates that
13 performing audits just for the sake of performing audits
14 may not garner the intended results originally sought.
15 Second, the company's customary practice today is to make
16 known to its customers the availability of energy audits
17 far more frequently than the minimum F.A.C. Rule
18 requirement of twice a year. Third, customer service
19 representatives utilize the availability of the various
20 types of energy audits as an initial offering to assist
21 customers who voice concerns over the magnitude of their
22 electric bills. Fourth, Tampa Electric counts the demand
23 and energy savings that result from the performance of
24 energy audits toward its DSM goals accomplishments which
25 is motivation in itself to conduct a meaningful number of

1 audits on customer facilities. Finally, Tampa Electric
2 would prefer to use its resources for a more targeted
3 approach with specific programs that have greater
4 potential for savings than to routinely attempt to
5 perform a certain number of audits with less potential
6 savings.

7
8 **Q.** Do Tampa Electric's proposed DSM goals adequately reflect
9 the costs and benefits to customers participating in the
10 measure?

11
12 **A.** Yes. Through the statewide work of Itron and the local
13 market input relative to baselines and incremental
14 equipment costs supplied by Tampa Electric, the company's
15 proposed DSM goals adequately reflect the costs and
16 benefits to customers who will participate in the program
17 promoting the measure.

18
19 **Q.** Do Tampa Electric's proposed DSM goals adequately reflect
20 the costs and benefits to the general body of ratepayers
21 as a whole, including utility incentives and participant
22 contributions?

23
24 **A.** Yes. The surest way to adequately reflect the costs and
25 benefits to the general body of ratepayers as a whole is

1 to continue to employ the use of the RIM test for DSM
2 goals setting and program approval. The Commission has a
3 longstanding practice of utilizing the RIM test to
4 provide fair, equitable and reasonable treatment for all
5 ratepayers while minimizing overall rate impacts of DSM
6 expenditures and Tampa Electric strongly encourages the
7 Commission to continue this practice.

8
9 **Q.** Do Tampa Electric's proposed DSM goals adequately reflect
10 the costs imposed by state and federal regulations on the
11 emission of greenhouse gases?

12
13 **A.** Yes. To date, laws for the emissions of greenhouse gases
14 have not been enacted at the federal or state levels;
15 however, Tampa Electric did include an estimated cost
16 associated with CO₂ regulation in its evaluations. This
17 estimate is based on a mid-range value of proposed
18 legislation before Congress. The inclusion of an
19 estimated cost for greenhouse gas puts DSM measures on a
20 more level playing field with supply-side options.

21
22 **Q.** What is Tampa Electric's position relative to the
23 Commission establishing incentives to promote both
24 customer-owned and utility-owned energy efficiency and
25 demand-side renewable energy systems?

1 **A.** Tampa Electric is generally supportive of the Commission
2 adopting strategic incentives in this area. Section
3 366.82(8), F.S., contemplates "...financial rewards for
4 utilities that exceed their goals..." Tampa Electric
5 believes this statutory provision can provide a useful
6 purpose and may serve as a viable approach towards
7 addressing a utility's performance as it strives to meet
8 future DSM goals. The traditional application of
9 Commission cost-effectiveness modeling has undergone a
10 modification in this docket with the inclusion of carbon
11 costs. There may be other changes which may adversely
12 affect the company's base revenues. In light of the
13 recent legislation and potential modifications to cost-
14 effectiveness modeling, Tampa Electric expects to explore
15 financial rewards for DSM performance at the appropriate
16 time.

17

18 **MISCELLANEOUS INFORMATION REQUESTED BY COMMISSION STAFF**

19

20 **Q.** Please describe how Tampa Electric conducted the
21 sensitivity analyses requested by Commission Staff.

22

23 **A.** Tampa Electric's sensitivity analyses were conducted on
24 the RIM and TRC economic potentials with regard to the
25 following factors: 1) high and low capital costs for

1 generation, 2) high fuel and CO₂ costs, 3) low fuel and
2 CO₂ costs, and 4) no future CO₂ costs. Specifically, the
3 capital cost factor was varied by plus or minus 10
4 percent from the base case. The fuel cost factor was
5 varied in a similar manner as to Tampa Electric's
6 sensitivity conducted in the fuel docket, namely, a 25
7 percent variation on the cost of gas. Since a mid-range
8 CO₂ cost from proposed national legislation was included
9 in all cost-effectiveness analyses conducted from the
10 outset of this docket, Tampa Electric varied the
11 sensitivity analyses by the high and low CO₂ estimates
12 from the proposed legislation.

13
14 **Q.** For Tampa Electric, please describe the results of the
15 sensitivity analyses when applied to the 2010-2019 RIM
16 and TRC DSM economic potentials.

17
18 **A.** Tampa Electric's sensitivity analyses on the 2010-2019
19 RIM and TRC DSM economic potentials were conducted by
20 determining the change in four components for both
21 potentials. These components were the total number of
22 individual measures across housing and building types
23 that passed RIM or TRC tests, annual energy, summer
24 demand and winter demand. Document No. 8 provides the
25 detailed results of the analyses.

1 For the RIM economic potential results, the greatest
2 level of sensitivity was associated with the carbon cost
3 factor. Whether carbon was evaluated as a separate
4 factor or in conjunction with fuel, the percent change
5 from the base case was the most dramatic. Specifically,
6 the no carbon scenario produced component results that
7 ranged from 31 to 52 percent of the base case while the
8 fuel and carbon scenarios produced component results that
9 ranged from 65 to 127 percent of the base case.
10 Concerning the capital cost factor, the variability was
11 almost non-existent. Specifically, the change from high
12 to low capital scenarios produced a maximum percentage
13 change from the base case of only two percent to any one
14 component.

15
16 For the TRC economic potential results, the overall
17 sensitivities of the four components relative to the
18 various scenarios were somewhat less dramatic.
19 Specifically, the no carbon scenario produced component
20 results that ranged from 75 to 92 percent of the base
21 case, the fuel plus carbon scenarios produced component
22 results that ranged from 90 to 106 percent of the base
23 case, while the capital cost scenarios produced component
24 results that ranged from 75 to 100 percent of the base
25 case.

1 **Q.** Should the results of these sensitivity analyses be used
2 in any manner to influence or establish Tampa Electric's
3 DSM goals for the 2010-2019 period?
4

5 **A.** No. Tampa Electric believes the sensitivity analyses
6 simply provide a relative indication as to how cost-
7 effectiveness evaluations may be affected by changes in
8 assumptions. There is no basis to conclude the
9 assumption changes modeled by the company for this
10 exercise will in some manner become more plausible than
11 the actual assumptions provided by the company's resource
12 planning experts. The experience of the resource
13 planning professionals is far more reliable than
14 arbitrary increases or decreases of certain planning
15 assumptions, and, as such, cannot be utilized to
16 establish DSM goals above or below those DSM goals
17 proposed by Tampa Electric in this proceeding.
18

19 **Q.** For Tampa Electric, what is the 2010-2019 annual bill
20 impact on residential customers using 1,200 kWh/month
21 with no incremental DSM added?
22

23 **A.** To make the determination of the 1,200 kWh/month annual
24 residential bill impact for the 2010-2019 period relative
25 to no incremental DSM, Tampa Electric's approach was to

1 provide a total bill estimate that included all of the
2 normal components that comprise a typical residential
3 bill, namely, base rate, recovery clauses and customer
4 charge. Also, for the no incremental DSM analysis, it
5 was necessary to include the costs for maintaining
6 existing DSM on the company's system. This principally
7 included load management costs associated with
8 maintaining the existing level of load management on the
9 system as well as energy audit costs necessary to
10 continue compliance with Rule 25-17.003, F.A.C. Three
11 major bill components were affected by the analysis.
12 These components were the base rate, fuel clause and ECCR
13 clause. The result of this analysis for the 2010-2019
14 period is contained in Document No. 9 of my exhibit and
15 demonstrates the estimated ten-year total cost for a
16 1,200 kWh/month bill would be \$18,522.

17
18 **Q.** For Tampa Electric, what are the 2010-2019 annual bill
19 impacts on residential customers using 1,200 kWh/month
20 for the projected RIM achievable portfolio, the projected
21 TRC achievable portfolio, and the company's proposed DSM
22 goals?

23
24 **A.** To make the determination of the 1,200 kWh/month annual
25 residential bill impact for the 2010-2019 period relative

1 to the projected RIM and TRC achievable portfolios, Tampa
2 Electric's approach was similar to the no DSM incremental
3 scenario previously described. The only difference was
4 identifying the impact of the two portfolios on the no
5 incremental DSM case. Again, three major components of
6 the bill were affected. These were the base rate, fuel
7 clause and ECCR clause. The results of these analyses
8 for the 2010-2019 period are contained in Document No. 9
9 of my exhibit and demonstrate the estimated ten-year
10 total cost for a 1,200 kWh/month bill would be \$18,368
11 for the RIM portfolio and \$18,423 for the TRC portfolio.
12 Since Tampa Electric's proposed DSM goals for the 2010-
13 2019 period are the RIM achievable potential portfolio,
14 it was not necessary to conduct additional analysis.

15
16 It is important to realize the dollar amounts for the RIM
17 and TRC achievable portfolios are estimates for only one
18 customer's electric bill. A more realistic view is
19 gained by looking at the impact across the company's
20 entire system and thus its entire customer base. The
21 estimated ECCR clause cost to deliver the RIM portfolio
22 for the 2010-2019 period is \$414 million. The estimated
23 ECCR clause cost to deliver the TRC portfolio for the
24 2010-2019 period is \$503 million. Therefore, the TRC
25 portfolio is an \$89 million greater burden for customers.

1 Furthermore, the RIM portfolio, by definition of the RIM
2 test, is cost-effective for both participating and non-
3 participating customers; therefore, there are no losers.
4 However, the TRC portfolio is cost-effective for program
5 participants but not for non-participants. Under the TRC
6 portfolio, non-participants will actually be subsidizing
7 the program participants for their DSM efforts.
8 Therefore, the RIM portfolio is the cost-effective, less
9 expensive, more reasonable and equitable approach to take
10 to provide another resource to assist the company in
11 meeting future system needs.

12
13 **CONCLUSIONS**

14
15 **Q.** What overall DSM goals are reasonably achievable for
16 Tampa Electric for the 2010-2019 period?

17
18 **A.** Based on the analysis performed by Tampa Electric for
19 this current DSM goals setting process, the company's
20 reasonably achievable generator level RIM-based DSM goals
21 for the 2010-2019 period are 81.8 MW of summer demand
22 savings, 40.9 MW of winter demand savings, and 201.7 GWH
23 of annual energy savings. These amounts are detailed on
24 an annual basis for both the residential and
25 commercial/industrial sectors in Document No. 1 of my

1 exhibit.

2
3 By accomplishing these DSM goals, Tampa Electric will
4 increase overall energy efficiency in its service area
5 and lower electric rates for all customers. The company
6 is quite aware that keeping electric rates as low as
7 possible while advancing broad scale efforts of overall
8 conservation is important to its customers and therefore
9 the company.

10
11 **Q.** Does the methodology used by Tampa Electric to set DSM
12 goals for the 2010-2019 period comport with statutory and
13 F.A.C. requirements?

14
15 **A.** Yes. Tampa Electric, through the coordinated effort of
16 the FEECA utilities and intervenors, began its evaluation
17 process with a comprehensive list of potential DSM
18 measures for residential and commercial and industrial
19 sectors, applied those measures over multiple
20 construction and building types, and considered several
21 aspects of measure interaction as well as free ridership.
22 Tampa Electric adhered to recent statutory requirements
23 by developing estimated technical and achievable
24 potentials, properly reflecting cost and benefits to all
25 customers, addressing green house gas and providing a

1 reasonable approach to address supply-side efficiency
2 goals and DSM incentives for utilities in the near term.
3 Additionally, Tampa Electric utilized a sound, proven
4 approach that has been used and approved in principle by
5 this Commission in past DSM goals setting proceedings.
6

7 **Q.** Do Tampa Electric's proposed DSM goals provide a cost-
8 effective means for all ratepayers to help meet the need
9 for additional generation through 2019?
10

11 **A.** Yes. Through the use of the RIM test, Tampa Electric has
12 assured its ratepayers that the most cost-effective
13 resources will be used to meet future capacity needs.
14

15 **Q.** Should Tampa Electric's proposed 2010-2019 DSM goals be
16 approved?
17

18 **A.** Yes. Tampa Electric's proposed 2010-2019 DSM goals meet
19 rule and statutory requirements, are cost-effective for
20 participants and non-participants, help to minimize the
21 rate impact for future capacity needs, address the
22 desires and needs of its customers, and are reasonably
23 achievable.
24

25 **Q.** Does this conclude your testimony?

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A. Yes.

1 BY MR. BEASLEY:

2 Q. Okay. Have you prepared a summary of your
3 testimony?

4 A. Yes, I have.

5 Q. Would you please summarize it?

6 A. Sure.

7 Good morning, Commissioners. My direct
8 testimony addresses the comprehensive, thorough approach
9 undertaken by Tampa Electric to establish and propose to
10 this Commission its DSM goals for the 2010 through 2019
11 period.

12 Tampa Electric's proposed DSM goals are based
13 upon the company's most recent planning process. They
14 are aggressive goals, but at the same time they are
15 reasonably achievable and cost-effective for all
16 ratepayers. In developing these goals we adhered to the
17 requirements contained in the Commission's rule
18 governing DSM goals for electric utilities, Rule
19 25-17.0021 of the *Florida Administrative Code*.

20 Additionally, the company's proposed goals
21 have been developed with a keen awareness of the Florida
22 Legislature's recent modifications to the FEECA
23 statutes, including consideration of greenhouse gases.

24 Tampa Electric's process for DSM goals
25 development was a structured one that followed a

1 carefully developed plan to comply with all relevant
2 statutory and rule requirements. Our efforts were part
3 of a larger collaborative team effort by all FEECA
4 utilities as well as NRDC and SACE, and that began in
5 early 1988 -- no, ma'am -- in early 2008.

6 The DSM goals currently proposed by Tampa
7 Electric and the other FEECA utilities are the product
8 of a lengthy process that represents the single most
9 comprehensive DSM work effort by the Florida utilities
10 dating back to the first goal setting proceedings of
11 1993.

12 Specifically, Tampa Electric's proposed DSM
13 goals have been developed through the careful evaluation
14 of some 270 measures applied across residential and
15 commercial industrial market segments for new and
16 existing construction involving some 30 different
17 building types. So in total 2,300 individual rigorous
18 analyses were performed. Throughout the evaluation
19 process the company conducted its work with the trusted
20 assistance of Itron, a well-respected consulting firm in
21 the area of DSM.

22 Tampa Electric's DSM goals are based on an
23 enhanced RIM Test that incorporates the consideration of
24 carbon costs and the Participant Test. By utilizing
25 these two tests, statutory requirements to consider

1 impacts to both the participant and the general body of
2 ratepayers are accomplished and allow the Commission to
3 continue its long-standing goal of setting aggressive
4 but reasonably achievable and cost-effective DSM goals
5 while minimizing upward pressure on customer rates.

6 To sum up, our proposed DSM goals were
7 carefully developed in a manner fully compliant with
8 FEECA and your implementing rule. They achieve the
9 proper balance of being aggressive in the pursuit of
10 demand and energy savings, but at the same time
11 cost-effective and fair for all of our customers. Based
12 on this and other matters discussed in great detail in
13 my direct testimony, Tampa Electric urges the Commission
14 to approve the DSM goals that we have proposed.

15 **MR. BEASLEY:** Thank you, sir.

16 We tender Mr. Bryant for questions.

17 **COMMISSIONER EDGAR:** Thank you.

18 Ms. Kaufman, questions on cross?

19 **MS. KAUFMAN:** I do. Thank you, Madam Chair.

20 **CROSS EXAMINATION**

21 **BY MS. KAUFMAN:**

22 **Q.** Good morning, Mr. Bryant. How are you?

23 **A.** Good. Thanks.

24 **Q.** As you know, I'm Vicki Kaufman. I'm here on
25 behalf of the Florida Industrial Power Users Group.

1 In your summary when you were discussing
2 E-RIM, you said that included in that are enhanced
3 carbon costs?

4 A. That's an enhanced test with carbon costs
5 included, yes.

6 Q. Does that include SOx and NOx as well?

7 A. Yes. Our evaluation contained those emissions
8 as well.

9 Q. I want to talk to you a little bit about the
10 RIM Test or the E-RIM Test. And I think I asked you in
11 your deposition last week if you are familiar with the
12 Commission's cost-effectiveness manual that's part of
13 its rule in this case.

14 A. Yes.

15 Q. And in your deposition we went through some of
16 the inputs and the -- let's say the costs and benefits
17 that you -- that Tampa Electric provides into the RIM
18 Test; correct?

19 A. Uh-huh. Yes.

20 Q. When you were doing those calculations for
21 this case, I think we've heard some other witnesses say,
22 is it correct that some of the inputs to the test were
23 provided by Tampa Electric and others were provided by
24 Itron?

25 A. In terms -- yes. In terms of the avoided unit

1 data, those were inputs from Tampa Electric. And in
2 terms of the specific measures, those were inputs from
3 Itron.

4 Q. Okay. We talked a little bit in your
5 deposition about lost revenues, which is a component of
6 the test; correct?

7 A. Yes, it is. Of the E-RIM Test, yes.

8 Q. Yes, sir. The E-RIM Test. And we went
9 through those components. And if I recall, you told me
10 that there is what is categorized as an other category
11 in the lost revenues calculation; is that right?

12 A. I would -- no. There's not an other category
13 in lost revenues. There's simply an other category that
14 can be a component of the cost side of the equation for
15 the E-RIM Test.

16 Q. Got you. So there's -- we might call it a
17 miscellaneous category for the cost side.

18 A. I think that would be, I think that would be
19 appropriate. Yes.

20 Q. Okay. And it's correct, isn't it, that Tampa
21 Electric has not included anything in that other
22 category for quite some time when it's calculated the
23 RIM Test?

24 A. Right.

25 Q. Okay. But you don't know, do you, whether or

1 not any of the other utilities have included anything in
2 that other category?

3 A. I do not know.

4 Q. Okay. Would you also agree with me,
5 Mr. Bryant, that in the Commission's cost-effectiveness
6 manual lost revenues is not a defined term?

7 A. It's not defined in terms of identifying
8 specifically what is to be included. That would be
9 correct.

10 Q. Okay. And is it possible that different
11 utilities might be including different things in the
12 lost revenue category?

13 A. I think it's possible.

14 Q. You have not reviewed the other utilities' RIM
15 calculations in this case, have you?

16 A. No, I have not.

17 Q. So you can't say whether or not the utilities
18 are performing the RIM Test in the same way that Tampa
19 Electric is?

20 A. Not specifically.

21 Q. Mr. Bryant, you're familiar with industrial
22 cogeneration, are you not?

23 A. To an extent, yes.

24 Q. How long have you been with Tampa Electric?

25 A. I was going to say too long, but my boss isn't

1 here. No. I'm teasing. I've been with the company
2 approximately 28 years.

3 Q. Okay. So you're familiar with cogeneration?

4 A. I can talk about it at a high level.

5 Q. Okay. That's all -- that's a good level for
6 me as well.

7 Can you just give us a brief explanation what
8 industrial cogeneration is?

9 A. Yes. I think to the extent you and I would be
10 recognizing cogeneration, we would probably be talking
11 about waste heat coming from industrial facilities
12 through processes and the capture of that waste heat to
13 be able to be turned into some energy production or a
14 production of energy.

15 Q. So would you agree that it's a, it's a fairly
16 efficient method because it utilizes waste heat that
17 would otherwise be dissipated?

18 A. It certainly captures waste heat. The
19 efficiency of it would be directed specifically to the
20 application being utilized. But you certainly are
21 capturing waste heat.

22 Q. You have cogeneration on the Tampa Electric
23 system now, do you not?

24 A. Yes, we do.

25 MS. KAUFMAN: Okay. I have an exhibit that

1 I'd like to distribute, Madam Chair.

2 COMMISSIONER EDGAR: Okay.

3 MS. KAUFMAN: It's two different documents.
4 Previously I've been marking them separately, but if
5 it's your pleasure to make them a composite, that would
6 be fine.

7 COMMISSIONER EDGAR: And, Ms. Kaufman, what do
8 we have?

9 MS. KAUFMAN: Madam Chair, the top page is an
10 excerpt from Tampa Electric's E Schedules. And the
11 second page is a response of Mr. Bryant to -- or
12 actually it's a late-filed deposition exhibit. And
13 actually, Madam Chair, I believe the deposition exhibit
14 is already in the record.

15 COMMISSIONER EDGAR: And I'm seeing nods from
16 our staff --

17 MS. FLEMING: That is correct.

18 COMMISSIONER EDGAR: -- that it is. Okay.
19 Then we will just mark the one page out of the two
20 different documents that you distributed. I'm showing
21 that we are on 155.

22 MS. KAUFMAN: Tampa Electric Projected Energy
23 Costs.

24 COMMISSIONER EDGAR: Works for me.

25 (Exhibit 155 marked for identification.)

1 BY MS. KAUFMAN:

2 Q. Mr. Bryant, you've got those two documents
3 now?

4 A. Yes, ma'am.

5 Q. Let's look at 155. Would you accept, subject
6 to check, that this is an excerpt from Tampa Electric's
7 fuel filing?

8 A. I'm not familiar, but I will take your word.
9 Yes, ma'am.

10 Q. Okay. If you look up in the -- well, if you
11 look at the title and if you look up in the right-hand
12 corner, would you agree that these are your estimated
13 projected fuel costs for 2009?

14 A. Yes. That's what it says.

15 Q. Okay. Now look with me on Line 22, all the
16 way to the right.

17 A. Okay.

18 Q. These numbers are expressed in kilowatt hours,
19 but would you agree that your projected cost in megawatt
20 hours is about \$78?

21 A. That is correct.

22 Q. Okay. And that, that is your cost that
23 consumers pay for fuel; correct?

24 A. That is an estimate of what --

25 Q. An estimate.

1 A. -- of what will be applied on what I believe
2 to be an average cost for 2009. So, again, it's an
3 estimate for '09.

4 Q. Got you. Now if you take a look at your
5 deposition, late-filed deposition exhibit which I asked
6 you to provide in your deposition, these are the actual
7 prices that Tampa Electric paid in July to its
8 cogenerators; correct? And it's actually shown on an
9 hour-by-hour basis.

10 A. Yes, it is.

11 Q. And if you can just -- I'm assuming you've
12 reviewed this, since you provided it.

13 A. I didn't add them up, but I reviewed it.

14 Q. Is it true and accurate to the best of your
15 knowledge?

16 A. Yes, it is.

17 Q. Okay. If you can just scan those prices,
18 would you agree with me that these prices are
19 substantially lower than the \$78 price?

20 A. I see some in the \$58, \$54 range, I see some
21 in the 30, 31. I see some -- I see 47s, 42s, 29s. So
22 generally speaking these would be prices that are lower
23 than the \$1 estimate that we were previously
24 referencing, the difference being this is actual, having
25 actually occurred on our system relative to the time of

1 as-available energy coming to us, this being an estimate
2 on system average for the entire system.

3 Q. Understood. Let me switch topics, Mr. Bryant.
4 I've asked some of the other FEECA utilities this. I
5 assume that you have reviewed the goals that have been
6 proposed by the GDS proponents?

7 A. Yes.

8 Q. For Tampa Electric only?

9 A. Yes.

10 Q. And have you calculated the magnitude of the
11 difference between the goals Tampa Electric is proposing
12 and the goals that GDS is proposing?

13 A. I have, I have calculated an estimate based on
14 the information we have. Yes.

15 Q. Can you, can you tell us what that is?

16 A. Sure. I'll do it in two steps. First the
17 magnitude. The magnitude is some six to eight times
18 higher, and that transfers or translates into some
19 \$893 million over the ten-year period of additional
20 monies that our ratepayers would need to incur if those
21 goals were adopted. So in essence that would be roughly
22 \$89 million a year additional.

23 Q. And those dollars, the additional \$89 million
24 would be recovered through the Environmental Cost
25 Recovery Clause?

1 A. No, ma'am. Through the Energy Conservation
2 Cost Recovery Clause.

3 Q. I'm sorry. I'm sorry. That's what I meant.

4 A. Yes, ma'am.

5 Q. So if these GDS goals were adopted, I guess in
6 the fall we will have the hearing on those charges, that
7 customers could expect their adjustment charges to
8 increase substantially?

9 A. That would probably be the earliest time that
10 you would see the dollar impact occur, but that would be
11 a logical time for them to occur.

12 Q. Tampa Electric just received a base rate
13 increase, didn't it?

14 A. Yes, ma'am.

15 Q. And it also received permission for another
16 increase in 2010, didn't it?

17 A. I believe that is correct. I think it's a
18 step increase, if I'm not mistaken.

19 **MS. KAUFMAN:** Thank you, Madam Chair.

20 Thank you, Mr. Bryant.

21 **THE WITNESS:** Sure.

22 **CHAIRMAN CARTER:** Thank you.

23 Mr. Cavros?

24 **MR. CAVROS:** Good morning, Chairman. Good
25 morning, Commissioners.

CROSS EXAMINATION

1
2 BY MR. CAVROS:

3 Q. Good morning, Mr. Bryant.

4 A. Hi.

5 Q. Mr. Bryant, what are the costs that are
6 included in the RIM Test?

7 A. The cost side of the equation in the RIM Test
8 would be the incentives, it would be the program
9 administrative cost, and it would be a category that's
10 typically been entitled lost revenues, but those are the
11 three primary components of the cost side of the RIM
12 Test.

13 Q. Okay. And what are the costs that are
14 included in the TRC Test?

15 A. The TRC Test would include the program
16 administrative cost and the full incremental capital
17 cost for the customer, as well as any O&M cost that
18 might be associated with a particular measure under
19 consideration.

20 Q. Okay. So in the TRC Test, the utility
21 incentive is a component of the dollars on the cost
22 side?

23 A. It's not explicit in the TRC Test, but one
24 can -- since the full incremental cost is being
25 identified, one can deduce that contained in that number

1 is the incentive, if there is an incentive applicable.

2 Q. Thank you.

3 MR. CAVROS: And I would like at this time to
4 refer and introduce an excerpt from the
5 cost-effectiveness manual for demand-side management.

6 CHAIRMAN CARTER: You want it marked for
7 identification?

8 MR. CAVROS: Marked for identification, yes,
9 sir.

10 CHAIRMAN CARTER: Okay. That takes us to
11 Number 156. 156. Title, short title, Mr. Cavros?

12 MR. CAVROS: Oh. Cost-Effectiveness Manual.

13 CHAIRMAN CARTER: Excellent. Thank you.

14 (Exhibit 156 marked for identification.)

15 You may proceed.

16 MR. CAVROS: Thank you.

17 BY MR. CAVROS:

18 Q. Mr. Bryant, if you could take a look at Page 5
19 under general description of costs, the second sentence
20 states, "All equipment costs, installation, operation
21 and maintenance and administrative costs, no matter who
22 pays for them, are included in this test."

23 This effectively confirms your description,
24 your previous description; is that correct?

25 A. I believe it does.

1 Q. Okay. And this manual is incorporated by
2 reference in Commission Rule 25-17.008; is that correct?

3 A. Yes, that's the, that's the reference point
4 for this methodology.

5 Q. Okay. And, Mr. Bryant, Section 366.82(3)(b)
6 has been referred to a lot in this proceeding. It calls
7 for the -- it says, "The Commission shall consider the
8 costs and benefits to the general body of ratepayers,
9 utility incentive and participant contributions," is
10 that correct?

11 A. You said subpart (b)?

12 Q. Subpart (b), yes, sir.

13 A. Okay. Yes, that's correct.

14 Q. And you called for the RIM Test to exclusively
15 meet the requirements of 366.82(3)(b); is that correct?

16 A. We believe the RIM Test, the E-RIM Test --

17 Q. I'm sorry.

18 A. -- is the -- I have trouble there too. Old
19 dogs have hard habits learning new tricks. But
20 nevertheless, the E-RIM, yes, is our belief as to the
21 appropriate way to manage that particular consideration.

22 Q. Thank you. And is there anything in Florida
23 statute requiring the Commission to use the RIM Test?

24 A. There's nothing requiring it to use the RIM
25 Test, nor is there anything requiring it to use the TRC

1 Test. When you look at the words, and the word
2 operative there, the operative word is consideration. I
3 think it gives liberty to the Commission, but yet I do
4 believe this statute must be exercised or the authority
5 given in the statute must be exercised in tandem with
6 366.03, 366.81.

7 Q. And this is based on your education as an
8 energy efficiency practitioner, not as any formal legal
9 training; right?

10 A. That's a nonlawyer opinion. That is correct.

11 Q. And therefore it's your opinion that the
12 Commission is free to use whatever test they see fit; is
13 that correct?

14 A. As long as the Commission operates within the
15 other confines of the statute which requires it to
16 manage rates, to not create subsidization, things of
17 that nature.

18 Q. Mr. Bryant, there's no reason why the
19 Commission couldn't use the TRC Test to set goals if it
20 wished and use the RIM Test to inform it of rate
21 impacts; right?

22 A. It would have that option. That is correct.

23 Q. Okay. Thank you. I just wanted to shift to
24 avoided cost for a second. The avoided cost is a factor
25 that's included on the benefit side of both the RIM Test

1 and the TRC Test; is that correct?

2 A. That is correct.

3 Q. Okay. And as the cost of -- a cost -- so as a
4 cost per kW kilowatt of avoided unit increases,
5 generally you're likely to have more measures become
6 cost-effective; is that right?

7 A. I would generally agree with that, as long as
8 you are looking at one measure and looking at what
9 happens to the cost-effectiveness of that measure as you
10 increase the supply cost. And so in general one would
11 surmise that, all other things being equal, a few more
12 measures would become cost-effective as the supply side
13 increases.

14 And that's borne out, I think, in one of the
15 responses we made to an interrogatory in terms of the
16 sensitivities that the staff asked us to conduct, and
17 that was to look at high and low capital costs as well
18 as some other components on the supply side and what
19 would it do to cost-effectiveness. And so that is in
20 our sensitivities, and in general it does cause an
21 increase.

22 Q. So generally moving from, say, combustion
23 turbine, which -- moving from combustion turbine to
24 natural gas combined cycle to coal to perhaps sources
25 that have a higher kW cost, you -- and given the

1 assumptions you just laid out, if they're built in the
2 same time horizon, you would see a relative -- you would
3 see more measures become more cost-effective.

4 A. I think any time you compare calculations of
5 cost-effectiveness against two different technologies,
6 one being more expensive on a kW basis, dollar per kW
7 basis, one would see it be providing more cost-effective
8 measures. The same is true, however, if you just simply
9 isolate a CT or a combined cycle. And just simply the
10 fact that that technology in and of itself can increase,
11 you would see slightly more measures being
12 cost-effective, again, borne out by the sensitivities
13 that we've provided in response to the staff directional
14 guidelines for testimony.

15 Q. Okay. And your avoided, your avoided cost
16 calculation for the benefit cost test was performed by
17 TECO; is that correct?

18 A. That's correct.

19 Q. Okay. So Itron did not calculate that for you
20 or had any part in calculating that?

21 A. That is correct.

22 Q. Okay. Thank you. Could you define free
23 riders, please, Mr. Bryant?

24 A. Free riders would be participants in a DSM
25 program that otherwise would have installed a given

1 measure absent the influence of the incentives of that
2 DSM program.

3 Q. Okay. And do you -- were you here earlier for
4 Mr. Masiello's testimony?

5 A. Yes.

6 Q. Okay. Would you agree generally with
7 Mr. Masiello that measures that are excluded for the
8 two-year payback also don't pass RIM or generally don't
9 pass RIM?

10 A. I didn't do the calculation because those
11 measures were removed in the screening process prior to
12 application of incentives, for example. So to determine
13 what their cost-effectiveness would be as an end result,
14 we did not do that.

15 Q. I guess this goes to my next question. Then
16 you agree then that measures that don't pass RIM never
17 make it to the two-year payback criteria screen.

18 A. No, I do not. If you examine the steps that
19 Tampa Electric employed as it moved from technical
20 potential all the way to the achievable potential, the
21 technical potential was -- it contained all measures,
22 two-year payback or not, it contained as a theoretical
23 construct all measures.

24 The first step along the way of the analysis
25 was to develop the economic potential, and that was done

1 by staff direction under the RIM Test and under the TRC
2 Test. In terms of developing the economic potential
3 under the RIM Test, the only inclusion of costs were the
4 lost revenue calculation. In terms of delivering or
5 determining the TRC economic potential, the cost
6 involved there was the incremental cost of the equipment
7 itself. So those two cost parameters were employed in
8 those two tests to develop the economic potential.

9 At that point in time Tampa Electric then
10 employed another series of screens, if you will,
11 cost-effectiveness screens, and we began by utilizing
12 the administrative cost. And the administrative cost
13 was applied to both RIM and TRC and it developed
14 measures that fell out.

15 And then the next step in the process, again,
16 both for RIM and TRC, was to employ the free ridership
17 estimate. And that free ridership estimate was applied
18 and a certain number of measures fell out. At that
19 point in time we determined through the three scenarios
20 of incentive levels how much incentive could be applied
21 to these measures, and then we gave the maximum
22 incentive that could be applied to all of those measures
23 to Itron for adopting modeling. Once Itron provided the
24 adoption modeling, that became in essence our goals, and
25 that's how -- that's when we filed the E-RIM portfolio

1 for our proposed goals.

2 Q. Okay. So if a, if a test passed -- if a
3 measure passed the TRC Test, it could still be removed
4 from the achievable potential analysis because it didn't
5 pass the two-year payback criteria; is that correct?

6 A. Any, any step along the way that I just
7 described, when a measure failed cost-effectiveness, it
8 was removed from further consideration.

9 Q. Okay. Thank you. And do the number of free
10 riders for a measure remain the same regardless of the
11 incentive that you provide?

12 A. That is correct.

13 Q. And TECO advocates for a blanket exclusion of
14 all measures that meet the two-year payback criteria.

15 A. Our goals have been set by removing the
16 estimate of free riders, which we use the two-year
17 payback criterion to do that.

18 Q. Okay. Very good. And that cuts across all
19 classes, correct: Residential, commercial, industrial?

20 A. It was a universal application, yes.

21 Q. Okay. Thank you. And is it true that TECO
22 hasn't specifically studied on whether -- hasn't, hasn't
23 performed studies on whether customers are actually
24 implementing these measures that are excluded because of
25 the two-year payback criteria?

1 A. We have not made a study within the State of
2 Florida. However, we have employed more, I'll call them
3 national, but certainly within the utility industry
4 agencies that have done studies on these particular
5 types of behavioral patterns of customers and utilized
6 their expertise, their studies to give application to
7 free ridership management.

8 Q. Okay. And TECO has never explored penetration
9 rates of measures with less than a two-year payback in
10 Florida; is that correct?

11 A. Not to my knowledge.

12 Q. So you don't know if your customers are
13 actually implementing these measures; is that right?

14 A. We wouldn't know specifically. However, we
15 make every effort to provide education of what those
16 measures are on a case-by-case site-specific basis.

17 MR. CAVROS: Okay. And at this time I would
18 like to distribute and refer to Itron's response to
19 NRDC's first set of interrogatories. This --

20 CHAIRMAN CARTER: Do you need to mark it or
21 are you just going to use it for cross examination?

22 MR. CAVROS: I would like to mark it as an
23 exhibit as well.

24 CHAIRMAN CARTER: Okay. Commissioners, for
25 your records that will be Exhibit Number 157.

1 **MR. CAVROS:** And that would be entitled TECO
2 Penetration Rates.

3 **CHAIRMAN CARTER:** TECO Penetration Rates.
4 Excellent.

5 (Exhibit 157 marked for identification.)

6 Commissioners, while he's passing that out,
7 for planning purposes my goal for today -- it's going to
8 be a marathon day, so we'll probably break for lunch
9 around 1:00. So that will give staff an opportunity to
10 prepare as well as give the parties an opportunity to
11 kind of collect their thoughts and get their exhibits
12 and things of that nature together. So my plans for
13 today is we'll have a lunch break around 1:00 today.
14 I'll speak more about that at the time in terms of how
15 long it'll be. But it will certainly be enough time for
16 you to have something to eat as well as look over your
17 notes and all.

18 **MR. CAVROS:** May I proceed, Chairman?

19 **CHAIRMAN CARTER:** You may proceed.

20 **MR. CAVROS:** Thank you.

21 **BY MR. CAVROS:**

22 **Q.** Mr. Bryant, it should be open, this should be
23 open to Page 38, and it should be highlighted.

24 **A.** Yes.

25 **Q.** Great. Thanks. And if you look at the

1 highlighted row, it refers to -- it's a commercial
2 existing measure for Building Type 2, and it's the EMS
3 optimization measure, or -- that is correct. Yeah. And
4 under the row that says cumulative year, ten-year
5 penetration rate TRC, that says 21.3 percent; is that
6 correct?

7 A. Yes.

8 Q. And then if you could just simply flip over
9 the document to Page 39, and there we have TECO
10 commercial existing for Building Type Number 4, the EMS
11 optimization measure. And if you look under the
12 cumulative year ten-year penetration rate TRC column,
13 that says 16.1 percent; is that correct?

14 A. Yes.

15 Q. And then if you simply turn that page, that
16 should take you to Page 41, and there we also have a
17 highlighted line. And this would be TECO commercial
18 measure for Building Type Number 8 with an EMS
19 optimization, and under the cumulative year ten --
20 ten-year penetration rate for TRC it says 7.7 percent;
21 is that correct?

22 A. Yes.

23 Q. Okay. Great. Now isn't it true that you have
24 differing -- based on this document, isn't it true that
25 you have different penetration rates on the EM -- in the

1 EMS optimization measure within the same commercial
2 class of customers?

3 A. I don't know if this is referring to future or
4 historical. But, nevertheless, as you identified that
5 measure across three different building types, there are
6 numbers that indicate there's a difference in the
7 cumulative ten-year penetration rate under the TRC. Now
8 whether that's E-TRC or TRC, I don't know. But under
9 that column, yes.

10 Q. Okay. Very good. So then you would agree
11 that you can have differing penetration rates within a
12 class of customers for the same measure?

13 A. I think that's a fair statement.

14 Q. Okay. And you can generally increase the
15 penetration rates of these measures with an incentive;
16 is that a fair statement?

17 A. I would qualify my yes by making this fact
18 known. Tampa Electric experienced in its residential
19 marketplace an opportunity to increase its incentive for
20 the heat pump rebate program. We did that, I believe,
21 in 2005, if I'm not mistaken. But, nevertheless, that
22 incentive increased, and yet the two future years beyond
23 that incentive increase participation actually
24 decreased. So I don't think we can make a blanket
25 statement that suggests that every time we increase an

1 incentive we'll thereby get an increased penetration
2 rate, when occasionally there's history that suggests
3 that did not happen.

4 Q. Sure. But given those, those --
5 notwithstanding those specific instances like the one
6 you just pointed out, generally if you increase the
7 incentive level of a measure, you will increase
8 penetration.

9 A. Depending on the measure, that could perhaps
10 be true.

11 Q. Okay. Thank you. And how many years has TECO
12 been doing DSM?

13 A. Since we were required to do it by this
14 Commission, which I think started probably in the latter
15 part of 1980.

16 Q. Okay. And how long have you had a low income
17 program?

18 A. We've had a specific low income program for
19 about a year and a half, if I'm not mistaken.

20 Q. Okay. Thank you. And do you have any data on
21 your low income participation levels?

22 A. Not in terms of the number of people that are
23 being reached or any kind of percentages.

24 Q. Okay. And a few more questions and we'll be
25 done.

1 The potential test the Collaborative undertook
2 was comprised of generally three parts, a technical, an
3 economic and an achievable portion; is that correct?

4 A. I wouldn't call them tests, but those were
5 certainly results or, or -- well, they were results that
6 were accomplished. And you had a technical potential
7 result, you had an economic potential that the utilities
8 developed, and then you have the ultimate achievable
9 potential, which was done in unison or in tandem with
10 Itron and, and the utility.

11 Q. I apologize. I should have referred to it as
12 a study.

13 Would you agree that one of the factors in
14 measure adoption -- let me backtrack for a second. The
15 achievable potential models adoption curves for various
16 measures; is that correct?

17 A. I'm not sure I heard the question. I know
18 you're making a statement. Help me one more time.

19 Q. Yeah. Sure. Let me re-ask that.

20 The achievable potential portion of the study
21 generally models the adoption curves of various
22 measures.

23 A. I believe that's correct.

24 Q. Okay. And would you agree that one factor in
25 measure adoption is cost-effectiveness to the customer?

1 A. I would say that's correct.

2 Q. Okay. And is it fair to describe
3 cost-effectiveness to the customer, would it be fair to
4 describe that that measures the payback to the customer
5 of that measure?

6 A. Help me with the question one more time.

7 Q. Sure. Okay. Well, let me -- in fact let me
8 ask it sort of as a more open question.

9 What, how would you define cost-effectiveness
10 to the customer?

11 A. The savings on the electric bill is greater
12 than the incremental cost of the installation of the
13 equipment.

14 Q. Thank you. That was much better than my
15 attempt.

16 So the offering of an incentive influences the
17 cost-effectiveness to the customer; isn't that correct?

18 A. It has an impact on the Participant Test, yes.

19 Q. Okay. And the incentive for measures are
20 decided at the economical portion of the study, the
21 economic potential portion of the study; is that
22 correct?

23 A. That would be incorrect. The incentives were
24 developed after the economic potential had been
25 developed, and then you move from economic to achievable

1 through a series of screening procedures that I
2 previously referenced, one being administrative cost,
3 one being the establishment of the two-year payback for
4 free ridership containment, and then the third being the
5 application of the various incentives.

6 So at that point in time incentives were
7 developed.

8 Q. Right. Okay. But --

9 A. And the utilities, just for point of
10 clarification, the utilities, the Collaborative in fact
11 utilized the maximum potential incentive for all
12 measures given to Itron for adoption modeling.

13 Q. Okay. Fair enough.

14 Mr. Bryant, does TECO earn a rate of return on
15 nonload management energy efficiency measures?

16 A. No, it does not.

17 Q. Okay. And does TECO earn a rate of return on
18 supply-side assets?

19 A. Yes, it does.

20 MR. CAVROS: Okay. That's it for me. Thank
21 you.

22 CHAIRMAN CARTER: Thank you, Mr. Cavros.

23 **CROSS EXAMINATION**

24 **BY MS. BROWNLESS:**

25 Q. Good morning, Mr. Bryant.

1 A. Good morning.

2 Q. Nice to see you again.

3 **MS. BROWNLESS:** I have some interrogatories to
4 hand out, so if I can just do those right now.

5 **CHAIRMAN CARTER:** Why don't we do this.
6 Since -- let's go off the record for a moment.

7 (Recess taken.)

8 We are back on the record. And when we left,
9 Ms. Brownless, you're recognized.

10 **MS. BROWNLESS:** Thank you.

11 **BY MS. BROWNLESS:**

12 Q. Good morning, Mr. Bryant. How are you today?

13 A. Hi. Good, thanks.

14 Q. I previously passed out to everybody a --
15 copies of the Florida Solar Coalition's responses to
16 interrogatories Numbers 1 through 7 and 8 through 13.
17 Did you have a chance to look through those, sir?

18 A. I'm using my own copy. So if you'll trust me,
19 yes, I did.

20 Q. Okay. Thank you so much.

21 **CHAIRMAN CARTER:** Ms. Brownless, do you need
22 those marked?

23 **MS. BROWNLESS:** Yes, please. And I think they
24 would be 158; is that correct?

25 **CHAIRMAN CARTER:** You want to just do a

1 composite?

2 MS. BROWNLESS: Yes, please.

3 CHAIRMAN CARTER: Okay. Commissioners, for
4 the record, it will be Exhibit 158.

5 A short title, Ms. Brownless?

6 MS. BROWNLESS: FSC Interrogatories.

7 CHAIRMAN CARTER: I love it.

8 (Exhibit 158 marked for identification.)

9 MS. BROWNLESS: I'm getting better.

10 CHAIRMAN CARTER: Thank you. You may proceed.

11 BY MS. BROWNLESS:

12 Q. And would your answers today be the same as
13 those that you gave in the interrogatories?

14 A. Yes.

15 Q. Okay. Let's see. With regard to
16 Interrogatory Number 8, if I could just turn to that.

17 A. Number 8?

18 Q. Yes, sir.

19 A. Okay.

20 Q. Okay. What is the type and size in megawatts
21 of the avoided unit that TECO is utilizing in its RIM,
22 TRC and Participant Tests?

23 A. Yes. Yes. The numbers expressed in Number 8
24 are in kilowatts, and so you would divide by 1,000. And
25 so it is a CT, and it is 61 megawatts of winter

1 capacity, 56 megawatts of summer capacity, and that's
2 being used in the E-RIM and E-TRC.

3 Q. Excuse me. I --

4 A. That's okay. I'm -- I slip too.

5 Q. Thank you. Turning to Interrogatory Number 9,
6 previously when you were talking to Mr. Cavros, you
7 described the method by which TECO did its economic
8 potential screening; right?

9 A. Yes.

10 Q. Okay. And it was in a series of steps; is
11 that correct?

12 A. The economic was the first step along the way.

13 Q. Okay. Did you calculate in the, looking at
14 Interrogatory Number 9 here, for the PV powered pool
15 pumps, which would be A, did you calculate lost revenues
16 using Itron cost measures and Itron kilowatt hour
17 figures?

18 A. Yes.

19 Q. And am I correct that those figures would be
20 the same for each member of the Collaborative?

21 A. I couldn't speak to that issue because each
22 member of the Collaborative had the opportunity to
23 review inputs on the front end. And if there was
24 specific data that indicated their estimate was a little
25 out of focus, then that particular utility provided what

1 the adjusted, if you will, dollar amount might be.

2 I don't recall that we did that, but that
3 opportunity presented itself for each, each utility.
4 But to suggest that I know if it was the same across all
5 of them, I do not know.

6 Q. Okay. The -- in the TRC Test that you
7 performed here, was the customer equipment cost -- who
8 provided the customer equipment cost that would be in
9 the denominator of that calculation?

10 A. Itron.

11 Q. Okay. Where did the incentive level come from
12 in these tests for the RIM Test?

13 A. To the extent that any of these renewable type
14 measures made it from the technical potential into the
15 economic and then past the administrative cost,
16 certainly didn't get ruled out on a two-year payback,
17 but then the incentive application was applied, the
18 utility did the incentive application.

19 Q. Okay. And how -- well, let me ask this
20 question. I've identified the specific measures that
21 were identified by Mr. Rufo in the Itron study: PV
22 powered pool pumps, solar water heaters for residential
23 and commercial, rooftop solar PV, PV mounted on
24 commercial parking lot structures and PV solar
25 commercial. Those were the measures that were in the

1 Itron study.

2 A. Yes.

3 Q. Did any of these measures make it far enough
4 along in TECO's study to get incentive levels assigned
5 to them?

6 A. They, they made it far enough along for
7 incentive application to be given, but it did not make
8 it beyond cost-effectiveness once those incentive levels
9 were applied.

10 Q. Okay. And how did you come up with the
11 incentive levels for these measures?

12 A. Sure. Sure. There were three steps that were
13 employed.

14 Q. Okay.

15 A. The first step was to maximize the incentive,
16 and relative to the RIM Test, E-RIM -- see, I'm doing
17 it -- the E-RIM Test.

18 Q. And can I stop you there?

19 A. Yes.

20 Q. And when you say maximizing incentive -- and
21 I'm going to go back to my, my little chart --

22 A. Okay. Sure.

23 Q. -- from the cost-effectiveness manual, and I
24 think I've given that to you.

25 A. Sure.

1 Q. How does one maximize the incentive using the
2 E-RIM Test?

3 A. Sure. It's simply a matter of having your
4 model apply the greatest amount of incentive up to a
5 two-year payback and then determining if that amount of
6 incentive would maintain its cost-effectiveness in the
7 E-RIM Test. If it did not, then the process became
8 iterative until it found a lower incentive such that the
9 E-RIM Test would pass at 1.01. That's the application
10 of the incentive relative to the E-RIM Test.

11 Once the determination of the incentive at
12 1.01 had been made, the next step was to take that
13 incentive and see if it would make the participant whole
14 or would it make their cost benefit be greater than,
15 excuse me, be greater than 1.0. If --

16 Q. Okay. And can I stop you there?

17 A. Sure.

18 Q. Because of the way the Participant Tests work,
19 essentially what you're doing is making sure that the
20 customer, the customers' equipment costs and O&M costs
21 are equal to his bill reductions plus the incentive; is
22 that right?

23 A. Yes.

24 Q. I'm sorry. Go ahead.

25 A. No, that's -- and so to the extent that an

1 incentive was finally found to be cost-effective at the
2 RIM level of 1.01, then the determination was made as to
3 whether that level of incentive would again make the
4 customer decision be cost-effective. And if it was not,
5 then it fell from the analysis and did not go any
6 further.

7 Q. Okay. So with regard to the measures that
8 were identified in Interrogatory Number 9 --

9 A. Yes.

10 Q. -- did any of these measures make it any
11 further?

12 A. No. Three of them failed at just the
13 administrative level itself, which means it never went
14 to incentive application. Those three measures were
15 solar water heating for residential and commercial and
16 the PV pool pump for residential. The other remaining
17 measures, which would have been the PV applications,
18 they made it through administrative, they made it
19 through the two-year payback screen. And then when it
20 was time for the application of the incentives, there
21 became no incentive that would allow them to be
22 cost-effective under the E-RIM Test.

23 Q. Okay. In other words, no incentive level that
24 would allow the Participant Test to equal one or more?

25 A. Yes, I believe that is true. Because, again,

1 your RIM -- your E-RIM was established at 1.01. And so
2 you knew a dollar value. Now the question was could you
3 look at the Participant Test and see if that dollar
4 value would work for the customer. If it did, you had
5 one that went into the achievable determination. If it
6 did not, then it fell from the mix.

7 Q. Okay. Thank you. Now if I look at
8 Interrogatories Number 9 and 10, and I'm just looking at
9 the values that are listed here, in step one I'm just
10 looking at PV powered pool pumps, for example. The RIM
11 is 6.25, and then at step two it's -- oh, I see -- .96;
12 is that right?

13 A. I do see the 6.25 on Number 9, Part A. Help
14 me with the next one where you're finding --

15 Q. In 10 it's down at the bottom on the first
16 page.

17 A. Number 10.

18 Q. So it goes from 6.25 RIM on Page 1 -- or Page
19 2.

20 A. Yes. Yes.

21 Q. And it goes to .96 on Page 4.

22 A. Yes.

23 Q. And that's with the application of the
24 administrative costs only.

25 A. Correct.

1 Q. Okay. What type of administrative costs have
2 caused the effectiveness to be reduced to that degree?

3 A. The administrative cost that was applied came
4 from the historical information we had on other programs
5 that we have delivered for a number of years, and then
6 therefore made application of those costs because it was
7 the best proxy that we had.

8 Q. Okay. And what is included in those
9 administrative costs?

10 A. The administrative cost includes marketing, it
11 would include any fieldwork that would be necessary on
12 the front end, if that application needed it, it would
13 include any inspection that might be appropriate at the
14 end of the installation to make sure that it met program
15 standards.

16 Q. Okay.

17 A. As well as -- one other key item would be
18 simply the fact of, of the database administration and
19 just simply the tracking internally, the administrative
20 back office type activity that would be necessary to
21 manage the tracking of DSM programs.

22 Q. In other words, to figure out what savings
23 were actually being realized or not?

24 A. That's only a small component. But in essence
25 it's the overall administration, the back office work as

1 well as the marketing and advertising monies that, that
2 could be applied based on history.

3 Q. Okay. Now in Interrogatory Number 13 you gave
4 me the cost for the CO2 regulation that TECO used; is
5 that correct?

6 A. Yes.

7 Q. Okay. But the other part of this was to
8 explain how the CO2 costs were included in the E-RIM and
9 the E-TRC Tests. Can you help me with that?

10 A. Sure. Sure. It simply was another item that
11 was a part of the supply-side cost or the supply-side
12 resources that was included into the calculation. So
13 under the -- I guess I'll call it the old RIM Test or
14 the old TRC --

15 Q. Yeah.

16 A. -- you had all the components of the avoided
17 unit, which would have been its, its dollar per kW for
18 installation, you would have had its fixed costs, you
19 would have had its variable costs, you would have had
20 the fuel associated with that avoided unit, you would
21 have had replacement costs associated with the energy
22 that is needing to be supplied because you've now
23 eliminated a part of that avoided unit because of the
24 DSM, and then you had the marginal cost.

25 Now you come along and you have the

1 introduction of the carbon cost and you introduce that
2 onto that side of the equation and give application to
3 the kilowatt hours that are being saved by the measure.

4 Q. Okay. And is that consistent with the
5 application of -- did you hear Dr. Sim's testimony on
6 this point?

7 A. I did, but I can't recall specifically what he
8 says or said, I should say.

9 Q. So you don't know whether this basically
10 agrees with what Florida Power & Light did or not?

11 A. Not specifically. My assumption is we're
12 close. You know, I'm probably within a 1-point range on
13 horseshoes.

14 Q. Okey-doke. I provided you with a copy of
15 Tampa Electric Company's 4th Quarter 2008 FERC Form 1;
16 is that correct?

17 A. Yes. Here it is.

18 Q. If you look on Line 10, which is the total
19 sales to ultimate customers.

20 A. Yes.

21 Q. Okay. Can you tell the Commission what that
22 number is?

23 A. Do you want Column B or C?

24 Q. I want Column B.

25 A. Column B is 1,983,708,732.

1 Q. Thank you. At this time TECO did not include
2 any solar thermal or solar PV programs in the
3 development of its megawatt goals; correct?

4 A. Let me clarify. At this stage of the process
5 we are not dealing with programs. We're dealing with
6 measures. And so there were no PV or solar measures
7 that made it into the achievable potential.

8 Q. Thank you. Are you familiar with
9 Mr. Spellman's recommendations with regard to
10 demand-side management measures and solar technologies?

11 A. I'm familiar with his proposal to the extent I
12 have read it and have pause for concern.

13 Q. Okay. And I've just handed you Page 76 of
14 Mr. Spellman's testimony where his recommendation with
15 regard to dollars allocated to solar programs is stated;
16 is that correct?

17 A. Yes.

18 Q. And for TECO, what is the dollar amount a year
19 that he's recommending?

20 A. One million -- I'm sorry. I apologize for
21 cutting you off.

22 Q. Sure.

23 A. His recommendation is \$1,531,018 per year for
24 a five-year time period.

25 Q. Okay. And you spoke to Ms. Kaufman before

1 about the impacts of the GDS recommendations on your
2 rates; is that right?

3 A. Yes.

4 Q. Okay. Did that include this recommendation?

5 A. No, it did not.

6 Q. These dollars?

7 A. No, it did not.

8 Q. Do you believe that the cost of solar PV has
9 decreased over the last five years?

10 A. Our experience from the solar PV systems that
11 we have installed in our area would indicate that they
12 have not decreased.

13 Q. And that's solar PV systems that have been
14 paid for and utilized by TECO or on customers' premises?

15 A. It's a combination. But we've been engaged in
16 both the interconnection and activities associated with
17 hooking up customers' PV systems as well as the systems
18 that we have placed on our, on our system.

19 Q. Okay. Do you believe that the cost of solar
20 water heating technology has decreased over the last
21 five years?

22 A. That's an interesting question because my
23 experience in terms of the cost of solar water heating
24 goes back into the 1980s, when in fact there was, if I'm
25 not mistaken, a credit. I think it came from the state,

1 but nevertheless there was a credit.

2 The interesting phenomenon that occurred in
3 the 1980s was when the availability of the credit was
4 there, interestingly enough the install cost from the
5 installers seemed to rise, I wouldn't say equal to, but
6 they would, they would certainly rise. As we today look
7 at the cost for solar installation and we talk with
8 contractors doing installs in our area, we find the same
9 thing occurring in the sense that there are credits
10 available. And to the extent that contractors have been
11 aware of those credits, there's been seemingly a
12 tendency for them to raise their price as well.

13 So to suggest that there's been a decrease
14 over time in the last five years, I don't think I could
15 make that statement with certainty.

16 Q. Okay. Do you think that there's been a
17 decrease in the cost of PV technology, the actual PV
18 facilities itself, equipment?

19 A. The prices we see today are \$7 to \$10 a watt,
20 \$7,000 to \$10,000 per kW. I don't see that being less
21 today than it was five years ago.

22 Q. For the actual equipment?

23 A. Yes.

24 Q. Okay. Do you believe that the cost of solar
25 PV, should Mr. Spellman's recommendation go into effect,

1 would decrease over the next five years?

2 A. I couldn't make a judgment on that as to what
3 would happen. The troubling part about Mr. Spellman's
4 recommendation is the fact that his question asks should
5 there be R&D available for renewable programs. But then
6 when you read his response, basically his response seems
7 to suggest it's going to be used for one-time rebates,
8 which tends to tell me there's a disconnect between
9 using one-time rebates versus doing actual R&D on
10 renewable applications.

11 Q. Okay. What about the cost of PV over the next
12 five years?

13 A. Wouldn't -- if history repeats itself, which
14 it has a tendency to do, then that would suggest maybe
15 we're not going to see decreases.

16 Q. Would an expansion of vendors assist in the
17 pricing problem?

18 A. I don't know if that would work or not.
19 Because in order to get an expansion of vendors, you
20 would first need to have an expansion of opportunities
21 for vendors to be in that marketplace and operate there,
22 and I don't know that that's necessarily happening.

23 Q. If there were more incentives available,
24 incentives from Tampa Electric in addition to the
25 federal tax credit that's now available, you don't think

1 that would increase the number of people interested in
2 doing this type of work?

3 A. Perhaps it would. But in order for Tampa
4 Electric to give an incentive, that would suggest we
5 then begin to rely on the E-TRC Test, which I think the
6 information that's been provided in interrogatories
7 suggests that even at the E-TRC level solar is still not
8 a cost-effective application regardless of the
9 incentive.

10 Q. I'm just assuming that Mr. Spellman's
11 recommendation would go into effect.

12 A. Right.

13 Q. If you look at the response to Interrogatory
14 Number 7 --

15 A. I think that's the first set; is that correct?

16 Q. Yes, sir.

17 A. Okay. Yes.

18 Q. It indicates that less than 2 percent of
19 existing residential homes in Florida have solar water
20 heaters installed; is that correct?

21 A. Is that written there? Because help me just a
22 little bit.

23 Q. Yes, sir. It's right about there.

24 A. Okay.

25 Q. Do you see that?

1 A. Yes.

2 Q. Okay. So obviously -- and I believe it also
3 goes down to say that they're stating that there's a
4 technical potential to reflect a 75 percent market share
5 for solar water heaters after ten years; right?

6 A. And the key operative word is "technical
7 potential."

8 Q. Yes, sir. I understand that.

9 A. Okay. Which is a theoretical construct.

10 Q. But that is true, that's what it says; right?

11 A. It does say that.

12 Q. Okay. And would you agree that that's a
13 significant potential market?

14 A. To the extent, to the extent one could capture
15 the technical potential in a theoretical construct,
16 that's much greater than the 2. 75 is greater than 2.

17 Q. Okay. Have you evaluated each solar
18 technology that we've discussed today identified by
19 Itron on a standalone basis?

20 A. Yes.

21 Q. Okay. Do you intend to explore combined load
22 control and water heating or load control and PV?

23 A. That would be a program design issue, but
24 Tampa Electric is a tad bit hamstrunged in that area
25 because our load management program, direct load

1 control, is not an open opportunity for customers today.
2 It was determined by this Commission that it was no
3 longer cost-effective in 2005. So we do not have new
4 sign-ups for direct load control load management.

5 Q. Okay. And direct load control is where you
6 have the box and you can turn it off and turn it on?

7 A. Yes. Yes.

8 Q. Have you explored developing a total portfolio
9 that passes the RIM Test as opposed to looking at
10 individual measures that pass the RIM Test?

11 A. That has not been our historical practice, and
12 so at this point in time I would say that Tampa Electric
13 would not be doing that.

14 Q. Okay. And any opinions that you've expressed
15 today concerning the PSC, the PSC rule, Section 366.82
16 or House Bill 7135 would be based upon your expertise in
17 the utility field rather than your expertise as an
18 attorney; correct?

19 A. Absolutely.

20 Q. I have one other question. In response to Mr.
21 Cavros, I believe you said that under staff's direction
22 you used the RIM and TRC for screening; is that correct?

23 A. E-RIM and E-TRC.

24 Q. I'm sorry. Forgive me. E-RIM and E-TRC for
25 screening.

1 A. But I would need to qualify what I mean by
2 screening to place it in the proper context. Those
3 screenings were done at the economic level in order to
4 determine what would be the relative impact on
5 increasing the capital cost up or down, and the
6 Collaborative chose 10 percent. Those screenings were
7 done in combining fuel and carbon and increasing those
8 up or down for a high/low situation. And then the other
9 screen was used as a no-carbon indication as to what
10 would happen at the E-RIM, E-TRC level of economic
11 potential relative to no carbon.

12 So that was the screening that was done. It
13 was removing things basically from the supply side of
14 the equation and trying to determine what would happen
15 to the economic potential if those input variables on
16 the supply side were varied up and down from the base
17 case, which was the proposed goals.

18 Q. Right. And so really what you're talking
19 about there are the staff sensitivity studies?

20 A. Correct.

21 Q. Okay. Is it true that any time revenues in a
22 utility's service area decrease, there is upward
23 pressure on rates, all else being the same?

24 A. That would depend -- well, I guess you would
25 need to have a rate case in order to indicate that there

1 would finally be the opportunity for upward pressure to
2 occur. And so for Tampa Electric we went from roughly
3 92, 93 until just this, this year, this past year --
4 yeah, recently at any rate, 2009 -- we went that long
5 without upward pressure on base rates even though we had
6 substantial accomplishments in the area of DSM.

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

8 **THE WITNESS:** Sure.

9 **CHAIRMAN CARTER:** Are you completed, Ms.
10 Brownless?

11 **MS. BROWNLESS:** Yes, sir.

12 **CHAIRMAN CARTER:** Thank you.

13 Staff?

14 **MR. SAYLER:** Good morning, Mr. Chairman. Erik
15 Sayler on behalf of Commission staff. We do have a,
16 hopefully a quick series of questions for Mr. Bryant. I
17 recall that you had mentioned taking a break at about
18 11:30. Do you want me to just proceed, Mr. Chairman?

19 **CHAIRMAN CARTER:** I changed my mind about the
20 break.

21 **MR. SAYLER:** All right. Thank you.

22 **CROSS EXAMINATION**

23 **BY MR. SAYLER:**

24 **Q.** Good morning, Mr. Bryant. How are you today?

25 **A.** Fine. Thank you.

1 Q. All right. I've tried to streamline my
2 questions in predominantly yes or nos, and feel free to
3 elaborate if you feel the need.

4 With regards to CO2 costs, are greenhouse
5 gases defined in the revised or amended FEECA statute?

6 A. No, they're not.

7 Q. All right. And how does TECO define
8 greenhouse gases?

9 A. The question is posed to our environmental
10 people, and our environmental folks define greenhouse
11 gases as CO2, methane, but they recognize that SOx and
12 NOx are emissions but they're not considered to be a
13 greenhouse gas in their definition.

14 Q. Thank you. Are SOx and NOx emissions which
15 are currently regulated?

16 A. Yes, they are.

17 Q. All right. But CO2 as an emission is not
18 being currently regulated.

19 A. That's correct.

20 Q. All right. Earlier we had passed out what has
21 been identified as staff's Exhibit 138. It hasn't been
22 entered into the record. Do you have a copy of that
23 available?

24 A. Yes, sir.

25 Q. Have you had a chance to review the carbon

1 costs listed for TECO in the handout?

2 A. Yes, sir.

3 Q. All right. Do the carbon costs represented on
4 the chart accurately represent the costs TECO assumed
5 for this docket?

6 A. Yes, they do.

7 Q. All right. The next series of questions
8 concern the Ten-Year Site Plan, and we are passing those
9 out. I'll give everyone a moment.

10 Before you see the handout, Mr. Bryant, are
11 you familiar with TECO's Ten-Year Site Plan?

12 A. At a high level, yes.

13 Q. All right. Thank you.

14 A. Thank you.

15 CHAIRMAN CARTER: Staff, you're using this
16 just for cross-examination?

17 MR. SAYLER: Yes, sir.

18 CHAIRMAN CARTER: Okay. Good.

19 MR. SAYLER: It is already in the record and
20 this is just a demonstrative handout.

21 CHAIRMAN CARTER: Thank you. You may proceed.

22 MR. SAYLER: Thank you.

23 BY MR. SAYLER:

24 Q. Mr. Bryant, this handout depicts schedules
25 3.1 through 3.3 of TECO's 2009 Ten-Year Site Plan; is

1 that correct?

2 A. Yes, sir.

3 Q. All right. And for that Ten-Year Site Plan,
4 did TECO include projected savings from its currently
5 approved demand-side management programs in its Ten-Year
6 Site Plan?

7 A. Yes, we did.

8 Q. All right. If you refer to Schedules 3.1 and
9 3.2, TECO's projected demand-side savings from DSM are
10 identified in Columns 6 through 9; is that correct?

11 A. Yes.

12 Q. Similarly for Schedule 3.3, Columns 3 and 4
13 also illustrate TECO's projected demand-side savings
14 from DSM; is that correct?

15 A. Yes, they do.

16 Q. All right. And just once again, all the
17 conservation values listed in these schedules is based
18 upon TECO's existing DSM programs; correct?

19 A. That's correct.

20 Q. All right. Thank you. My next series of
21 questions concerns demand-side renewable measures
22 evaluated by TECO. TECO evaluated demand-side renewable
23 measures such as solar thermal, solar PV and geothermal
24 heat pumps; is that correct?

25 A. Yes, we did.

1 Q. All right. And all the demand-side renewable
2 measures which were evaluated by TECO were determined
3 not to be cost-effective; is that correct?

4 A. A qualified yes to the extent that they did
5 not make it all the way through to the achievable
6 potential development.

7 Q. That's fair enough. Thank you.

8 And you believe that TECO has adequately
9 addressed demand-side renewable systems in its proposed
10 goals; correct?

11 A. I believe we did.

12 Q. All right. And I believe you stated earlier
13 in your testimony and at the deposition that the
14 Commission should not establish separate goals for
15 demand-side renewable energy systems.

16 A. Yes, that's correct.

17 Q. Has TECO considered packaging some of these
18 non-cost-effective demand-side renewable systems with
19 other cost-effective measures or -- singular measure or
20 measures in order to create a net cost-effective
21 program?

22 A. No, we have not.

23 Q. All right. Can you elaborate on why TECO
24 hasn't done that?

25 A. Sure. To the extent that you begin to

1 incorporate a standalone non-cost-effective measure with
2 a standalone cost-effective measure, you are now
3 creating an opportunity for in essence a subsidy to be
4 created. And so you are bringing in something
5 non-cost-effective, utilizing -- or I say utilizing, but
6 applying the cost to do that measure across all of your
7 other ratepayers, and we believe that the E-RIM Test
8 should stand on its own merit on a case-by-case basis
9 for each of those measures and would prefer, certainly
10 encourage and certainly believe that that's not the
11 appropriate application for the RIM Test on a combined
12 basis.

13 Q. Okay. Have you considered packaging those?

14 A. No, we have not.

15 Q. All right. Referring to the amended FEECA
16 statute, Section 366.81 and 366.82, is the Commission
17 required to encourage the development of demand-side
18 renewable energy systems?

19 A. 366.82, which particular paragraph? I'm
20 sorry.

21 Q. Subsection (2).

22 A. (2)? They are, they are required to take a
23 look at it and make a determination as to whether it's
24 appropriate to include goals in that particular area.

25 Q. All right. Thank you.

1 A. Sure.

2 Q. Earlier today there's been some discussion
3 about two-year payback measures. With regard to
4 two-year payback measures, does TECO have any specific
5 programs designed to educate customers about these
6 particular DSM measures that have two-year paybacks or
7 less?

8 A. For Tampa Electric we do not identify or have
9 not identified specific two-year payback measures such
10 that we would go into the marketplace and begin to say
11 here's a set of measures and these ought to be adopted
12 because of their payback period.

13 On the other hand, what we do is provide a
14 number of ways for customers to be aware of the no-cost,
15 low-cost type measures, such as many of the two-year
16 payback measures. We find a way to notify the customer
17 of that.

18 And the way we do that is through energy
19 audits. And there's multiple types of energy audits,
20 but certainly there's the on-site, there is the one
21 that's done online, there is the one that can be done by
22 way of the telephone in terms of trying to meet the
23 various needs of the customers that we have today and
24 their busy schedules.

25 But in those audits the opportunity exists for

1 us to address very specific applications of measures
2 that would apply to their particular facility or their
3 particular residence. And if the question comes up
4 about, as an example, low flow showerheads, we would
5 make the recommendation -- in fact, it is a
6 recommendation on the energy audit -- as well as making
7 the recommendation that an annual cleaning of the air
8 conditioning system, maintenance, if you will, should be
9 done. So you find within the context of the audit the
10 opportunity to do that, and you do it on a site-specific
11 basis.

12 Q. All right. If TECO's customers were to
13 implement all the two-year payback measures on their own
14 without any incentives, would that increase or decrease
15 potentially TECO's sales?

16 A. That would decrease sales.

17 Q. All right. And if sales were to decrease as a
18 result of customers' practicing these two-year payback
19 measures on their own, what could TECO do in order to
20 remedy those decrease in sales?

21 A. One option to the utility would be to seek a
22 rate increase. But short of doing that, I think the
23 utility would first stop and take a look at their
24 operation and determine if there are other means of
25 helping its operational costs on a total basis such that

1 you could still function without the rate increase. No
2 utility wants to raise its rates. And so to that extent
3 that would be the first stop along the way. But
4 ultimately if rates were degrading, there would perhaps
5 come a point in time where a rate increase would be
6 sought.

7 Q. All right. With regard to incentives, if
8 incentives were provided for two-year payback measures,
9 would those be recovered through the energy conservation
10 cost recovery factor?

11 A. Yes, they would.

12 MR. SAYLER: All right. Thank you, Mr.
13 Bryant. Staff has no further questions at this time.

14 THE WITNESS: Thanks.

15 CHAIRMAN CARTER: Thank you.

16 From the bench? Commissioner Skop, you're
17 recognized.

18 COMMISSIONER SKOP: Thank you, Mr. Chairman.

19 Good morning, Mr. Bryant.

20 THE WITNESS: Good morning.

21 COMMISSIONER SKOP: I have several questions
22 for you. If you could please, I guess, start by turning
23 your attention to Page 23 of your prefiled testimony.
24 And beginning on Lines 18 through 20 you discuss the PV
25 evaluation under both the RIM scenario and under the TRC

1 scenario. Can you please explain that in a little
2 further detail? And also relate that to Interrogatory 9
3 on Page 2 of 2 where it discusses the results of rooftop
4 solar PV under both the RIM Test and TRC Test.

5 **THE WITNESS:** Okay. Let me make sure I get my
6 roadmap here. I'm on Page 23, and that's where we
7 discuss the evaluation of the measures, and then you
8 want me to compare it to Interrogatory Number 9?

9 **COMMISSIONER SKOP:** Yes.

10 **THE WITNESS:** And that is -- was that from the
11 Florida Solar Coalition?

12 **COMMISSIONER SKOP:** I believe that was the
13 interrogatory that Ms. Brownless was asking questions
14 on.

15 **THE WITNESS:** Okay. Okay. Sure. Okay. So
16 the question is how did we walk through that evaluation
17 process to get to the end result that we did?

18 **COMMISSIONER SKOP:** Yes. And what does the
19 analysis show in terms of, in terms of the data
20 presented in the interrogatory?

21 **THE WITNESS:** Sure. Sure. The process was
22 one of receiving the data inputs from Itron, applying
23 the cost-effectiveness, the E-RIM, the E-TRC, and doing
24 it at the various levels that I had previously
25 described. So the first stop along the way would have

1 simply been doing the evaluation at the RIM Test level
2 for just the lost revenue component.

3 For the E-TRC, the evaluation was one of doing
4 the evaluation at just the administrative, I'm sorry, at
5 just the incremental capital cost for that particular
6 piece of equipment. To the extent that those measures
7 passed those levels of cost-effectiveness, the next
8 stage, and at that point in time had they passed, they
9 would have been a component of the economic potential.

10 At that point in time the utility, Tampa
11 Electric, began a series of evaluations, starting first
12 by applying administrative costs to those particular
13 measures. At either the E-RIM or the E-TRC level, if
14 the administrative cost was such that it degraded
15 cost-effectiveness to below 1.01, then it fell from the
16 evaluation.

17 To the extent that it stayed above 1.01, then
18 it went into the next series of -- or the next screen in
19 the series, which was the two-year payback. If it
20 stayed outside the window of a two-year payback, then it
21 went into the incentive application, and that's where we
22 attempted to apply different levels of incentives in
23 order to maintain cost-effectiveness on the E-RIM basis
24 and/or maintain cost-effectiveness on the participant's
25 basis at being greater than 1.0. So that's -- those are

1 the steps along the way.

2 Now as you look at Interrogatory Number 9,
3 you'll notice that there's some RIM values that appear
4 quite large, 6.25, 10.5, things along those lines. What
5 that is indicating is that the full evaluation process
6 had not been done at that stage. So it was simply at
7 the early stage where just lost revenue was being
8 applied.

9 **COMMISSIONER SKOP:** Excuse me. Can I stop you
10 there in terms of the -- are you on, when you refer back
11 to the interrogatories, are you starting with Page 1 of
12 1 for the PV pool pumps?

13 **THE WITNESS:** Yes. Under 9A as an example.

14 **COMMISSIONER SKOP:** Okay.

15 **THE WITNESS:** I'm sorry. So, again, you'll
16 see a RIM value of 6.25. If you drop down to B, you'll
17 see RIM values of 10.54 and so forth. That indicates
18 that at that level of evaluation it was still
19 cost-effective. And that, if I'm not mistaken, was
20 taking the measures from the technical potential and
21 seeing if we could move them into the economic
22 potential.

23 So given the value of the RIM Test there,
24 those measures made it into the economic potential
25 evaluation and then were further subjected in the later

1 screening steps to administrative costs and then
2 ultimately any incentive application.

3 **COMMISSIONER SKOP:** Okay. So based on what
4 I'm looking at in terms of Interrogatory 9, but more
5 specifically on Item D and F where it discusses rooftop
6 solar for residential and commercial, am I correct to
7 understand that under the evaluation -- and again I may
8 not be looking at this in the totality, there may be
9 other screenings that cause this to fall under the RIM
10 threshold -- but at that point in the analysis under
11 both RIM Tests it would be cost-effective? Is that a
12 correct way to understand what I'm looking at?

13 **THE WITNESS:** You are looking at values of D,
14 E and E of 1.13 for the RIM Test, and those indicate
15 that it's cost-effective at the economic potential
16 level.

17 **COMMISSIONER SKOP:** Okay. And at what levels
18 do those applications fail the RIM Test?

19 **THE WITNESS:** At the point in time where you
20 begin to offer an incentive such that the incentive
21 makes the participant whole or cost-effective, and can
22 that level of incentive be supported then under the
23 E-RIM Test.

24 **COMMISSIONER SKOP:** Okay. Well, I guess
25 I'm -- in the prior witness from Progress, they

1 discussed initiatives that would facilitate solar PV via
2 initiatives, I mean, via rebates, one-time rebate. So
3 are you saying that that's not possible, or was your
4 incentive at such a high level that it purposefully
5 caused the RIM Test to fail?

6 **THE WITNESS:** No. No. The way the incentive
7 is applied, was applied and is applied in our evaluation
8 process was to determine by starting first at the
9 maximum incentive that could be applied under the RIM
10 Test, and so that number could have been any, any level
11 whatsoever, but it's simply a calculation.

12 Whatever that value happened to be, it was
13 then applied to the Participant Test to see if that was
14 enough money for that participant to stay
15 cost-effective. And if that was not enough money, then
16 the RIM Test would, E-RIM Test would not allow any
17 further incentive, it had already been maxed out at the
18 1.01 level, and it wasn't enough money to allow the
19 participant to become whole, and so therefore that's the
20 point in time that it fell from being determined or
21 being a component of the achievable potential.

22 **COMMISSIONER SKOP:** So I guess maybe I'm
23 missing something, but why would, from your analysis
24 versus Progress's analysis for the sake of discussion,
25 why would the analysis yield two separate outcomes?

1 **THE WITNESS:** I don't, I don't know their
2 inputs, I don't know their funding sources. I heard
3 Mr. Masiello talk about other funding sources other than
4 just simply pure incentive dollars that you typically
5 would apply to a DSM or in this case a PV measure. So
6 I'm not, I'm not familiar enough to understand why one
7 would be different than the other.

8 Certainly one item, and I wouldn't call this
9 item the linchpin, but one item would be the difference
10 in your capital cost for your piece of equipment and the
11 timing of the install of that capital cost or of that
12 capital piece of equipment.

13 **COMMISSIONER SKOP:** Okay. And with respect to
14 the rooftop solar PV installations, again under the
15 economic stimulus package I believe there's a 30 percent
16 convertible investment tax credit, my understanding,
17 based on refinement of the eligibility requirements.
18 That's not applicable to the individual taxpayer. It's
19 only available to corporate entities.

20 Has that analysis been factored into the
21 calculation that was performed to see whether that
22 federal incentive would change the outcome again? If,
23 if one were able to capture the federal incentive, does
24 that change the outcome in terms of the analysis, in
25 terms of the screening tests that have been performed

1 either under RIM, Participant or the TRC test?

2 **THE WITNESS:** It would not change it because
3 in fact we used it in the evaluation process and gave
4 application of it in the Participant Test. Absolutely.

5 **COMMISSIONER SKOP:** So that, so that was the
6 convertible investment tax credit where the 30 percent
7 was applied from the Treasury up-front as opposed to the
8 investment tax credit that would be spread over time?

9 **THE WITNESS:** Yes. That is correct.

10 **COMMISSIONER SKOP:** Okay. All right. I just
11 wanted to briefly, because I know we're pressed for
12 time, so, Mr. Chair, just one additional question.

13 With respect to Interrogatory 8, which
14 discusses the avoided unit, why is a combustion cycling,
15 excuse me, why is a combustion turbine peaking unit the
16 appropriate avoided unit for evaluating the
17 cost-effectiveness of DSM measures?

18 **THE WITNESS:** That is the next unit, next most
19 immediate unit in Tampa Electric's expansion plan that
20 has yet to be evaluated through a need determination,
21 and this was too small for that evaluation. But also
22 it's not been permitted, construction has not started,
23 so it's on the immediate horizon, bringing the highest
24 value of dollars closest to us to do the greatest
25 opportunity that can be done for the evaluation of DSM

1 measures.

2 COMMISSIONER SKOP: Okay. You mentioned
3 highest value of dollars. If you can look at HTB-1 on
4 Page 54, which is the avoided unit parameters for the
5 DSM goal setting, please.

6 THE WITNESS: Yes.

7 COMMISSIONER SKOP: And looking under those
8 assumptions, with respect to fuel forecast, was a high,
9 medium or low fuel forecast utilized? And what was
10 the -- I guess I see on line item five natural gas for
11 2012 of 8.33 per, dollars per MBtu. Is that a constant
12 number that was applied in the evaluation of that unit?

13 THE WITNESS: Whether it's a high or low
14 number I do not know. It does come from our resource
15 planning people. But there is an escalation rate that
16 is applied starting in essence in year one and carrying
17 forth.

18 COMMISSIONER SKOP: The escalation rate
19 doesn't really concern me to the extent that that
20 affects the capacity payment. And on a combined
21 cycle -- I mean on a peaking unit the capacity payment
22 would be very low. I imagine it would be about 2.3
23 dollars per kilowatt or something like that. But
24 certainly it's the lowest capacity payment where the
25 expense on the combustion turbine would be on the fuel

1 side in terms of the heat rate. But I guess I'm trying
2 to rationalize the various assumptions that went into
3 that to the extent that typically you would expect if
4 fuel prices continue to rise for natural gas, that the
5 combustion turbine would be a pretty expensive option on
6 the fuel side, not on the capacity side. But as you
7 move up to other generating resources that are baseload,
8 for instance, a combined cycle plant or even a
9 coal-based capacity payment, those capacity payments are
10 much higher and much less variable to fuel volatility.

11 So I'm trying to just gain a better
12 understanding of what assumptions were used as the basis
13 for the screening test. And I think that's the only
14 questions I had. So, thank you, Madam Chair.

15 **COMMISSIONER EDGAR:** Commissioner McMurrian?

16 **COMMISSIONER McMURRIAN:** Thank you, Madam
17 Chair.

18 Mr. Bryant, earlier you had questions from
19 Ms. Brownless and Mr. Sayler about the, about whether or
20 not TECO had considered combining non-cost-effective
21 measures with cost-effective measures, and I just want
22 to understand that better. Because I think you said
23 something about subsidization and I want you to explain
24 that more. And I guess in a way similar to some of the
25 questions we were talking about a minute ago -- I think

1 earlier we were talking about a program by another
2 utility where they combine solar and maybe direct load
3 control, I think, if I got that right.

4 And I just want to, maybe using that as some
5 kind of example, to think if TECO were to do something
6 like that, what is -- explain how the subsidization
7 would work in your mind. I want to understand that
8 better.

9 **THE WITNESS:** Sure. And, again, what I will
10 say has no reference point to what any other utility is
11 doing, but just simply as an example. If you were to
12 look at solar water heating and do some type of
13 combining with load management, Tampa Electric's
14 position is that each of those measures should stand on
15 its own merit and be cost-effective. If, however, solar
16 water heating is non-cost-effective from a RIM, an E-RIM
17 basis and then you simply add to it, add that measure to
18 an already cost-effective measure, you are now beginning
19 to, first off, erode overall savings because you have a
20 non-cost-effective measure being included with a
21 cost-effective measure. But you begin an erosion
22 process where you are starting to promote, if you will,
23 an item that's not cost-effective on its own, and we
24 believe that customers should pay for all items that are
25 cost-effective on a total basis. In other words, total

1 meaning every item that we offer needs to stand on its
2 own and be cost-effective.

3 We would suggest that if you combine
4 non-cost-effective, that that's not an appropriate
5 utilization of resources because you are creating in
6 essence then the subsidy issue because you are taking
7 money from other ratepayers to give an incentive to the
8 customer who has the combined measure in order to
9 promote a measure that's not cost-effective.

10 **COMMISSIONER McMURRIAN:** So you're saying --
11 Madam Chair?

12 So you're saying that essentially if you were
13 to continue to provide, as TECO does, just a load
14 management program and not trying to combine it with
15 some solar program or something else that wasn't
16 cost-effective, that the savings would be greater to the
17 general body of ratepayers to do it that way as opposed
18 to trying to combine it with something that wouldn't be
19 cost-effective on its own?

20 **THE WITNESS:** What I'm saying is that -- and I
21 may not totally understand your question, but what I'm
22 saying is that each measure we believe should stand on
23 its own. If, for instance, you have two measures that
24 are cost-effective on their own but there's an
25 opportunity to, I'll use the word market or deliver into

1 the, into the, into the area both measures in some sort
2 of combination, that would be appropriate. They're both
3 winners, if you will. But to the extent one is a loser
4 and one is a winner in terms of cost-effectiveness, we
5 believe that they ought to stand on their own merit and
6 be cost-effective.

7 I don't know if I did a good job there or not,
8 but --

9 **COMMISSIONER McMURRIAN:** I think that's, I
10 think that's what I'm saying. You're saying if you, if
11 you combined a non-cost-effective program with one that
12 was cost-effective, I think what you're saying is the
13 potential for the savings on the cost-effective program
14 to be eroded somewhat by combining it with a
15 non-cost-effective. But is it the -- is that what
16 you're saying, or am I --

17 **THE WITNESS:** You're beginning to erode the
18 overall cost-effectiveness of the measures in
19 combination that are now being provided. So where you
20 may have a standalone load management program, and I'll
21 just use hypothetical numbers because, again, ours, our
22 direct load control is closed, but if you have an E-RIM
23 value of 1.2 for load management and you have a
24 standalone solar water heating program of .5, if you
25 combine them and you pull the cost-effectiveness down to

1 1.01, you will have more savings in terms of energy
2 reduction, in terms of potential capacity on your
3 system.

4 But what you are doing in order to promote
5 that is you're taking money from customers and applying
6 it to a smaller subset such that that subset is being in
7 essence subsidized for a non-cost-effective standalone
8 measure in and of itself. And we don't believe that's
9 an appropriate use of incentive dollars. We think every
10 measure should stand on its own and be cost-effective.

11 Does that help?

12 **COMMISSIONER McMURRIAN:** I think that helped.
13 I think where we were talking past each other maybe was
14 when I was saying savings I was meaning to the customer.

15 **THE WITNESS:** Yeah. I mean, if --

16 **COMMISSIONER McMURRIAN:** And I think maybe
17 you -- maybe that could also be used as savings on a
18 kilowatt hour basis or kilowatt basis.

19 **THE WITNESS:** The customer, the customer would
20 definitely save more because we have incented them, even
21 though we don't believe it's appropriate, under the
22 example we would have incented them to install another
23 measure. And when you, when you have load management
24 and another measure, the opportunity for your demand in
25 energy savings will increase. But we don't think that's

1 an appropriate use of funding.

2 **COMMISSIONER McMURRIAN:** I guess one other
3 question. To the extent though that you have a customer
4 base that wants some certain programs provided and you
5 could see that that would encourage a utility like
6 yourself to perhaps, to perhaps look for ways to provide
7 those kinds of options to consumers in a way that would
8 meet a cost-effectiveness test though, would you not?

9 **THE WITNESS:** Well, I think what we will do at
10 the time of program design, which is not too many weeks
11 down the road, is we'll begin to look now for those
12 opportunities where we can bring together measures that
13 are cost-effective. And if we can combine them in a
14 program such that we can deliver the full package, all
15 cost-effective on their own, but yet deliver the greater
16 package and have perhaps, I'll call it an economy of
17 scale in terms of administration or marketing or, you
18 know, with those program costs, to the extent we can do
19 that, we would consider that.

20 But, again, we don't believe that bringing
21 together a non-cost-effective measure and marrying it,
22 if you will, with a cost-effective measure is an
23 appropriate use of the funding of ratepayer dollars who
24 are not participating in that given program.

25 **COMMISSIONER McMURRIAN:** Okay. Thank you.

1 Madam Chair, that's all I have.

2 COMMISSIONER EDGAR: Commissioner Skop?

3 COMMISSIONER SKOP: Thank you, Madam Chair.

4 Just one follow-up to Commissioner McMurrian's question.

5 With respect to, I guess, bundling, if I heard
6 correctly, that TECO does not believe in bundling a
7 cost-effective project or initiative with one that would
8 not be cost-effective to accomplish more?

9 THE WITNESS: Correct.

10 COMMISSIONER SKOP: Thank you.

11 COMMISSIONER EDGAR: Are there questions on
12 redirect?

13 MR. BEASLEY: No, ma'am. No redirect. And
14 I'd like to move the admission of Exhibit 53.

15 COMMISSIONER EDGAR: Okay. Exhibit 53 will be
16 entered into the record.

17 (Exhibit 53 admitted into the record.)

18 That brings me to 155, Ms. Kaufman.

19 MS. KAUFMAN: Yes, Madam Chair. I'd like to
20 move 155.

21 COMMISSIONER EDGAR: Any objection? Hearing
22 none, 155 will be entered into the record.

23 (Exhibit 155 admitted into the record.)

24 Mr. Cavros?

25 MR. CAVROS: I'm sorry. 156,

1 Cost-Effectiveness Manual.

2 COMMISSIONER EDGAR: Yes. Okay. Any
3 objection to Exhibit 156?

4 MR. BEASLEY: No objection.

5 COMMISSIONER EDGAR: Okay. Hearing no
6 objection, 156 is entered into the record.

7 (Exhibit 156 admitted into the record.)

8 157?

9 MR. BEASLEY: No objection.

10 COMMISSIONER EDGAR: No objection. At the
11 NRDC's request, Exhibit 157 is entered into the record.

12 (Exhibit 157 admitted into the record.)

13 And that brings us to 158, Ms. Brownless.

14 MS. BROWNLESS: Yes. Florida Solar
15 Coalition's interrogatories.

16 MR. BEASLEY: No objection.

17 COMMISSIONER EDGAR: No objection. 158 is
18 entered into the record.

19 (Exhibit 158 admitted into the record.)

20 Thank you, Mr. Bryant.

21 THE WITNESS: Thank you.

22 COMMISSIONER EDGAR: Okay. We will push
23 ahead, and I believe that brings us to Witness Floyd.

24 MR. GRIFFIN: Madam Chair, at this time Gulf
25 Power would call Mr. Floyd to the stand.

1 **MS. BROWNLESS:** Madam Chair, would it be
2 possible to have a five-minute comfort break?

3 **COMMISSIONER EDGAR:** Yes. We can do that. We
4 will come back, and I'm going to follow our Chairman's
5 lead here, which is not my natural inclination, so we
6 will come back at three minutes after. And we will go
7 until 1:00 and then we will take a lunch break. Okay?

8 **MS. BROWNLESS:** Thank you.

9 **COMMISSIONER EDGAR:** You're welcome.

10 (Recess taken.)

11 Let's gather our places and go ahead and get
12 started and see how much we can get done before lunch
13 break. Okay. We are back on the record.

14 Mr. Griffin, has your witness been sworn?

15 **JOHN N. FLOYD**

16 was called as a witness on behalf of Gulf Power Company
17 and, having been duly sworn, testified as follows:

18 **DIRECT EXAMINATION**

19 **BY MR. GRIFFIN:**

20 **Q.** Mr. Floyd, have you previously been sworn?

21 **A.** Yes.

22 **Q.** Please state your name and business address,
23 sir.

24 **A.** My name is John N. Floyd. I work for Gulf
25 Power Company. My business address is One Energy Place.

1 That's in Pensacola, Florida, zip code 32520.

2 Q. And in what capacity are you employed by Gulf
3 Power Company?

4 A. I'm the team leader of the economic evaluation
5 and market reporting function in our marketing
6 organization.

7 Q. And are you the same John N. Floyd that, who
8 filed prefiled direct testimony on June 1st, 2009,
9 consisting of 30 pages?

10 A. Yes, I am.

11 Q. And do you have any changes or corrections to
12 that testimony?

13 A. No, I do not.

14 Q. And if I were to ask you the same questions
15 today, would your answers be the same?

16 A. Yes.

17 **MR. GRIFFIN:** Okay. Madam Chair, we would ask
18 that Mr. Floyd's prefiled direct testimony be inserted
19 into the record as though read.

20 **COMMISSIONER EDGAR:** The prefiled direct
21 testimony of the witness will be entered into the record
22 as though read.

23 **BY MR. GRIFFIN:**

24 Q. And, Mr. Floyd, did you also have one exhibit
25 that was attached to your testimony?

1 A. Yes.

2 Q. And that consisted of 11 schedules?

3 A. Yes.

4 **MR. GRIFFIN:** Okay. Madam Chair, we would
5 also note that we have another exhibit, and I don't know
6 if my colleague has passed that out yet. That's the
7 errata sheet to Mr. Floyd's deposition. That has yet to
8 be identified, but I think it would be Number 159 --

9 **COMMISSIONER EDGAR:** Yes, sir. 159.

10 **MR. GRIFFIN:** -- at this point. So we would
11 ask that that be marked as 159 for identification.

12 **COMMISSIONER EDGAR:** Okay. We will mark as
13 159, labeled Errata - Witness Floyd.

14 (Exhibit 159 marked for identification.)

15 **BY MR. GRIFFIN:**

16 Q. Okay. Mr. Floyd, do you have any changes or
17 corrections to either of your exhibits?

18 A. Yes, I do have an amendment to my exhibit with
19 my prefiled testimony.

20 Q. And that was JNF-1?

21 A. Yes, that's correct.

22 Q. And that was Schedule 11?

23 A. Schedule, Schedule 10.

24 Q. Schedule 10. Okay.

25

1 Gulf Power Company

2 Before the Florida Public Service Commission

3 Prepared Direct Testimony and Exhibit of

4 John N. Floyd

5 Docket No. 080410-EG

6 Commission Review of Numeric Conservation Goals

7 June 1, 2009

8

9 Q. Will you please state your name, business address, employer and
10 position?

11 A. My name is John N. Floyd, and my business address is One Energy
12 Place, Pensacola, Florida 32520. I am employed by Gulf Power
13 Company as the Economic Evaluation and Market Reporting Team
14 Leader.

15 Q. Mr. Floyd, please describe your educational background and business
16 experience.

17 A. I received a Bachelor Degree in Electrical Engineering from Auburn
18 University in 1985. After serving four years in the U.S. Air Force, I began
19 my career in the electric utility industry at Gulf Power in 1990 and have
20 held various positions within the Company in Power Generation, Metering,
21 Power Delivery Distribution, and Marketing. In my present position, I am
22 responsible for Energy Conservation Cost Recovery (ECCR) filings,
23 economic evaluations, market research, and other marketing services
24 activities.

25 Q. Have you previously testified before this Commission?

A. Yes.

1 Q. Mr. Floyd, what is the purpose of your testimony?

2 A. The purpose of my testimony is to propose seasonal peak demand and
3 annual energy conservation goals for Gulf Power for the period 2010
4 through 2019.

5

6 Q. Please describe how your testimony is organized.

7 A. My testimony is organized as follows:

8 Section 1: Proposed Goals and Accomplishments

9 Section 2: Overall Process to Develop Goals

10 Section 3: Statutory Adherence

11 Section 4: Additional Supporting Information

12 Section 5: Conclusions

13

14 Q. Have you prepared an exhibit in support of your testimony?

15 A. Yes, I have.

16 Counsel: We ask that Mr. Floyd's exhibit consisting of 11
17 schedules be marked for identification as:

18 Exhibit No. _____ (JNF-1)

19

20 **Section 1: Proposed Goals and Accomplishments**

21 Q. What residential and commercial/industrial goals are appropriate and
22 reasonably achievable for Gulf Power Company for seasonal peak
23 demand and energy conservation for the period 2010 through 2019?

24 A. The Company's proposed seasonal peak demand and annual energy

25

1 conservation goals for the period 2010 through 2019 are contained in
2 Schedule 1 of my exhibit (JNF-1). In total, Gulf is proposing a summer
3 peak demand goal of 68.9 MW, winter peak demand goal of 46.2 MW,
4 and cumulative annual energy conservation goal of 159 GWh. These
5 goals are based upon Gulf's planning process and the results of technical
6 and achievable potential studies conducted by Itron, Inc., Consulting and
7 Analytical Services (Itron). The goals represent the total cost-effective
8 winter and summer peak MW demand reductions and the annual GWh
9 savings at the generator which are reasonably achievable through
10 implementation of demand-side programs in Gulf Power's service area for
11 the residential and commercial/industrial customer classes. The basis for
12 the goals are the MW and GWh associated with estimated maximum
13 adoption of measures that passed both the Rate Impact Measure (RIM)
14 and the Participant's Test (PT) as reflected in the achievable potential
15 results prepared by Itron for Gulf Power.

16
17 Q. How do Gulf Power's proposed Demand-Side Management (DSM) goals
18 for the period of 2010 through 2019 compare to Gulf Power's current DSM
19 goals for the period of 2005 through 2014?

20 A. The cumulative annual energy conservation goals being proposed for the
21 period 2010 through 2019 are higher than the goals currently approved in
22 Commission Order No. PSC-04-0764-PAA-EG. The proposed seasonal
23 peak demand goals are lower than currently approved goals. A
24 comparison of the goals can be found in Schedule 2 of my exhibit.

25

1 Q. Please describe how Gulf Power has endeavored to achieve the
2 objectives of the Florida Energy Efficiency and Conservation Act
3 (FEECA).

4 A. Gulf has a thirty-five year history of promoting energy efficiency and
5 conservation as a way for customers to save money and increase comfort
6 while at the same time reducing the generating capacity required to serve
7 our customer base. This approach began in the 1970's with the
8 introduction of the GoodCents Home program as a way to increase the
9 efficiency of residential energy use by constructing homes with long-term
10 operating cost and comfort in mind. This program not only provided
11 increased comfort and savings to the homeowner, but also provided
12 additional value in the sale and resale of homes meeting this standard.
13 Over the years, the concepts behind this program have been universally
14 adopted in the utility industry and have influenced building code standards
15 as cost-effective means of achieving improvements in energy utilization in
16 both the residential and commercial sectors.

17 Gulf has also been a leader in innovative approaches to DSM.
18 Beginning in the 1990's, Gulf introduced the concept of home energy
19 management combined with variable pricing, including critical peak pricing
20 (CPP). Providing appropriate pricing to reflect changes in the marginal
21 cost of generating electricity during the day allows the customer to be in
22 control of their energy purchases. Coupled with a smart thermostat, this
23 program gives customers the ability to adjust the operation of heating
24 ventilation and cooling (HVAC), water heating, and pool pumps to operate
25 in a manner that is acceptable to their budget and lifestyle while providing

1 benefits in the form of reduced demand during peak periods.

2 Gulf also introduced this variable pricing philosophy in the large
3 commercial/industrial market through a real-time pricing program that has
4 demonstrated significant demand response during peak times while
5 providing increased value to the customers who have the ability to
6 manage their energy consumption.

7 Recognizing a need to explore additional opportunities associated
8 with end-use renewable technologies, Gulf Power, in 2008, received
9 Commission approval of a one year pilot program to evaluate the level of
10 customer interest in and benefits of solar thermal water heating. This
11 program is currently ongoing and will be evaluated at the end of 2009.

12

13 Q. Please describe the progress Gulf has made towards achieving the goals
14 set in Order No. PSC-04-0764-PAA-EG for the period 2005 through
15 2008?

16 A. Schedule 3 of my exhibit provides a summary of Gulf Power's progress
17 toward goal achievement. During this period, Gulf has exceeded the
18 goals for seasonal peak demand reductions and annual energy reductions
19 for the commercial/industrial sector. For the residential sector, however,
20 Gulf has not met its goals for seasonal peak demand reductions and
21 annual energy reductions.

22 Gulf's under-achievement in the residential sector has been
23 primarily due to customer participation in the GoodCents Select program,
24 which has been renamed "Energy Select," being well under projections.
25 Participation projections for this program account for almost 90% of the

1 summer peak demand savings goal and approximately 75% of the annual
2 energy reduction goal. Impacts from the 2004 and 2005 hurricane
3 seasons, growing communication technology incompatibilities due to
4 customer elimination of land line telephone service, delays in
5 development and delivery of hardware from the manufacturer, and
6 resulting suspension of active promotion of the program from August of
7 2007 through March of 2009 have contributed to lower than projected net
8 program participants during this period.

9
10 Q. Does Gulf believe Energy Select can be a viable part of its DSM Plan
11 going forward?

12 A. Yes. Energy Select is Gulf's home energy management with critical peak
13 pricing (CPP) program. The fundamental concepts behind the Energy
14 Select program are sound and do provide dependable demand reductions
15 at peak times as well as high customer satisfaction. In addition, with
16 second generation control units being deployed in 2009 and ongoing
17 deployment of Gulf's automated metering infrastructure (AMI), the
18 opportunity exists to overcome some of the technology barriers that
19 currently limit the program's applicability. Gulf's proposed goals for the
20 period 2010 through 2019 include the achievable potential for Demand
21 Response (DR) associated with this approach to customer-controlled
22 peak demand reductions.

23
24
25

1 **Section 2: Overall Process to Develop DSM Goals**

2 Q. Please provide an overview of the process used to determine the
3 proposed goal levels.

4 A. Gulf Power developed proposed goals based on a progressive process of
5 1) determining the full technical potential for energy efficiency savings; 2)
6 determining the subset of that potential that is cost-effective under both
7 the RIM and Total Resource Cost (TRC) cost-effectiveness screens as
8 compared to Gulf's resource needs from the most recent integrated
9 resource plan; and 3) determining the theoretical achievable potential of
10 energy and demand savings based on modeling of multiple adoption
11 scenarios considering the unique circumstances of our service area,
12 existing programmatic activity, and historical experience.

13 This process was guided by Itron under contract to Florida Power &
14 Light (FP&L) on behalf of the seven Florida utilities subject to
15 requirements of the Florida Energy Efficiency and Conservation Act
16 (FEECA). Itron was assisted in this work by KEMA, Inc., an international
17 energy consulting firm.

18
19 Q. Have there been any changes in Gulf's integrated planning process since
20 the last conservation goals setting process?

21 A. No. Gulf continues to conduct integrated resource planning in conjunction
22 with other Southern electric system operating companies. The
23 Company's planning process evaluates the cost of new generating
24 capacity additions after incorporating the effects of its approved
25 conservation and energy efficiency programs in order to produce an

1 integrated resource plan that meets the needs of our customers in a cost-
2 effective and reliable manner.

3

4 Q. What avoided unit did Gulf use in development of these proposed goals?

5 A. Consistent with Gulf's integrated planning process, the measures
6 evaluated in this process, as well as Gulf Power's purchased power
7 agreement (PPA) with Shell Energy North America (US), L.P. that is
8 currently before this Commission for approval, were evaluated against a
9 2014 combined cycle generating resource need identified in the most
10 recent integrated resource plan for Gulf Power as reflected in Gulf's April
11 2009 Ten-Year Site Plan (TYSP).

12

13 Q. Please describe the collaborative among the utilities and other entities.

14 A. Florida Power & Light (FP&L), Progress Energy Florida (PEF), Tampa
15 Electric Company (TECO), Gulf Power, Jacksonville Electric Authority
16 (JEA), Orlando Utilities Commission (OUC), Florida Public Utilities (FPU),
17 and two non-utility interested parties, the Southern Alliance for Clean
18 Energy (SACE) and the Natural Resources Defense Council (NRDC),
19 hereafter referred to as the collaborative, formed a mutually beneficial
20 working group to progress through the preparation of proposed DSM
21 goals for the period 2010 through 2019.

22 The Commission staff also participated as an observer in this
23 process by attending weekly project status conference calls and
24 coordinating workshop presentations and report submission.

25

1 Q. Why was a collaborative approach utilized?

2 A. The collaborative approach used in this goal setting process had several
3 benefits. *First, utilizing a collaborative approach offered an opportunity for*
4 consistency across the utilities in development of the Technical Potential
5 Study. The collaborative successfully developed a common scope for the
6 study and jointly selected a consultant, Itron, to conduct the study. This
7 approach also provided an opportunity for each of the participating utilities
8 to gain insight from experiences of the others, which has led to more
9 robust results along each phase of the study. The collaborative also
10 provided a cooperative mechanism for non-utility interested party
11 involvement in preparation of the proposed DSM goals. In this case,
12 SACE and NRDC assisted in development of the project scope, vendor
13 selection, identification of measures to be evaluated, and review of
14 results. The collaborative offered an excellent forum for members to
15 discuss aspects of the studies, make decisions, and generally progress
16 through the goals development process together.

17
18 Q. Please describe the process of how the collaborative selected Itron to be
19 the consulting firm utilized to provide the necessary assistance in the DSM
20 goals setting process.

21 A. First, the collaborative members developed the Scope of Work and
22 request for proposal (RFP) for the Technical Potential Study. Each
23 member submitted names of consultants to be considered. After
24 discussion and review, the collaborative agreed to submit the RFP to
25 eleven potential vendors. Four vendors responded with intent to offer a

1 proposal. Once clarifying questions were answered, three vendors
2 ultimately offered a proposal.

3 The proposals were evaluated by each member of the collaborative
4 independently utilizing a scoring matrix. Once these evaluations were
5 completed, the scores were compiled and averaged such that each utility
6 member and SACE/NRDC had an equal vote in selection of the winning
7 bidder.

8 The Itron/KEMA proposal achieved the best overall score and Itron
9 was subsequently selected to conduct the Technical Potential Study.
10 Itron offered the most thorough proposal for assessing the technical
11 potential by taking a "bottom-up" approach of assessing actual end-use
12 penetrations and opportunities for increased efficiency. The RFP also
13 included provisions for optional tasks to perform the Economic and
14 Achievable Studies once the Technical Potential Study was complete. In
15 January 2009, Itron's contract was modified to include the tasks of
16 Economic and Achievable Studies in support of the FEECA utilities' DSM
17 goal preparation.

18
19 Q. In general, what was the scope of Itron's work in preparation of goals for
20 this filing?

21 A. Itron first developed the total technical potential for energy efficiency in
22 Gulf Power's service area on an end-use measure basis for the residential
23 and commercial/industrial customer classes. Next, after Gulf Power
24 performed cost-effectiveness screening of these measures based on the
25 measure costs and savings estimates provided in the technical potential

1 results, Itron developed estimates of achievable potential on a measure
2 by measure basis for three different incentive scenarios for both a RIM
3 and TRC-based portfolio.

4 Itron also developed methodologies to estimate technical and
5 achievable potential for DR measures and demand-side Solar
6 Photovoltaic (PV) systems.

7
8 Q. How was the comprehensive energy efficiency measure list developed
9 among the collaborative?

10 A. As in the case of previous goals proceedings, the starting point for the
11 measure list to be studied was the Synergistic Resources Corporation
12 (SRC) Electricity Conservation and Energy Efficiency in Florida study
13 commissioned by the Florida Energy Office in 1993. Collaborative
14 members then submitted additional measures for consideration based on
15 existing Commission approved utility programs and other technologies not
16 considered in the 1993 study, nor currently part of any Florida utility DSM
17 program. All proposed measures were reviewed and approved by the
18 collaborative.

19
20 Q. Were there other measures included in the measure list for evaluation that
21 were not identified by the collaborative?

22 A. Yes. Itron proposed additional measures that had been recently analyzed
23 in previous technical potential studies in other jurisdictions. These
24 additions included measures in all residential, commercial, and industrial
25 categories. The study considered 257 unique energy efficient end-use

1 measures, including 61 residential, 78 commercial, and 118 industrial
2 measures. Each measure was evaluated in multiple building-types and
3 against multiple base cases resulting in a total of 2,346 individual energy
4 and demand savings calculations.

5 Itron also evaluated 7 DR and 3 PV measures. In total, the
6 Technical Potential Study included 267 measures, as listed in Schedule 4
7 of my exhibit, in the development of Gulf's proposed goals.

8
9 Q. How were the measure costs and savings for the participant developed?

10 A. The measure costs and savings were initially prepared by Itron for
11 collaborative members' review. This data came from a variety of sources
12 including Florida-specific utility program experience and Florida Solar
13 Energy Center (FSEC) research.

14 Additional information about Itron's sources for this data can be
15 found in Section 3.4 of the Technical Potential for Electric Energy and
16 Peak Demand Savings for Gulf Power Final Report by Itron. A true and
17 correct copy of this report, which was previously filed with the Commission
18 in Docket No. 080410-EG and assigned Document Number 03587-09, is
19 hereby incorporated by reference in my testimony.

20
21 Q. Were natural gas substitution measures considered in the evaluations?

22 A. Yes. In accordance with FPSC Rule 25-17.0021, Gulf Power did consider
23 natural gas water heating measures in both residential and commercial
24 sectors and found them not to be cost-effective. Since Gulf is a summer
25 peaking utility, consideration was not given to natural gas heating

1 substitution measures because they could only reduce winter peak
2 demand.

3
4 Q. Please provide an overview of the process used to determine the full
5 technical potential of energy efficiency measures.

6 A. Once the measure list was finalized, Itron began the process of
7 determining the technical potential associated with these measures by
8 utilizing a "bottom-up" approach. This approach included an assessment
9 of the current penetration of end-use measures in Gulf Power's service
10 area, the number of technically feasible opportunities for implementation
11 of the energy efficient measures, and the resulting energy and demand
12 savings potential. For the commercial sector, KEMA conducted
13 approximately 600 on-site surveys across the state in order to better
14 define building characteristics and baseline end-use equipment
15 saturations. Forty-eight of these surveys were conducted in Gulf Power's
16 service area.

17 In order to account for the overlapping savings of some measures,
18 Itron developed an adoption supply-curve for the entire list of measures
19 based on the participant test results. In other words, measures having
20 higher participant test results were assumed to be adopted before
21 measures of lower participant test results for measures that produced
22 overlapping benefits. For example, a building envelope measure that
23 provides a certain level of energy and demand savings may be adopted
24 before an HVAC measure whose benefits would assume some of those
25 same savings if the building envelope measure had a higher participant

1 test result. The energy and demand benefits for the HVAC measure, in
2 this case, would be adjusted downward in order to avoid double counting.
3 Full details of this process can be found in Section 3 of the Technical
4 Potential for Electric Energy and Peak Demand Savings for Gulf Power
5 Final Report by Itron.

6
7 Q. How was the economic potential for the energy efficiency measures
8 determined?

9 A. Once the technical potential was finalized, Gulf Power began assessing
10 the cost-effectiveness of these measures with their associated adjusted
11 savings benefits and measure costs from the technical potential results.
12 Gulf Power used the avoided cost data associated with its most current
13 integrated resource plan as the basis for these evaluations and
14 subsequent screening using Commission approved cost-effectiveness
15 criteria, namely RIM and TRC. For this screening no administrative costs,
16 program costs, or incentives were included in the RIM and TRC
17 calculations in order to provide the largest set of measures for further
18 consideration.

19 Two sets of economic potential were developed: a set based on
20 measures that passed RIM and a set that passed TRC. Schedule 5 of my
21 exhibit contains the list of the energy efficiency measures included in the
22 economic potential for both the RIM and TRC portfolios.

23
24 Q. Was there additional screening performed on the measure list?

25 A. Yes. This screening included consideration of administrative and program

1 costs in order to ensure any measures passing through for achievable
2 potential modeling would be cost-effective in each of the RIM and TRC
3 portfolios. In addition, measures that had cost/savings combinations that
4 resulted in customer payback of less than two years without any
5 incentives were screened from the final achievable potential analysis.

6 Further screening of the measures was conducted to determine
7 which measures also passed the PT. For measures not initially passing
8 the PT in the RIM portfolio, incentive dollars were applied to increase the
9 PT score to the point the RIM score fell to 1.0. Measures that still did not
10 pass the PT with these maximum incentives were eliminated from further
11 consideration. For the TRC screen, the incentive is not considered in the
12 test so the incentive level was increased to a maximum amount that
13 brought the customer payback to two years. If this incentive level did not
14 bring the PT score to at least 1.0, the measure was eliminated from
15 further consideration.

16

17 Q. At the completion of the screening process, how many measures
18 remained?

19 A. At the completion of the screening process, 143 energy efficiency
20 measures remained and were provided to Itron for achievable potential
21 modeling. Schedule 6 of my exhibit contains the list of measures included
22 in the RIM/PT and TRC/PT achievable potential portfolios.

23

24 Q. How was the achievable potential estimated in this study?

25 A. The achievable potential phase of the energy efficiency study was

1 accomplished by Itron utilizing KEMA's DSM ASSYST model. The
2 achievable potential for energy efficiency measures was estimated by
3 assessing likely market penetration based on trends in customer
4 awareness, measure cost, measure savings, and both energy and non-
5 energy related measure characteristics.

6 As the primary sensitivity to achievable potential, the collaborative
7 agreed to have Itron model adoption estimates for the following incentive
8 scenarios for both the RIM/PT and TRC/PT portfolios:

- 9 a. An incentive of 33% of the incremental cost of the measure
10 (low).
- 11 b. An incentive of 50% of the incremental cost of the measure
12 (medium).
- 13 c. The necessary incentive to bring the customer payback to two
14 years (high).

15 In all cases, the incentive is capped at a maximum value that would
16 produce a two year customer payback or a minimum RIM score of 1.01
17 (as applicable).

18 Itron adjusted the achievable potential to remove effects of
19 "naturally occurring" adoption. In Itron's methodology, naturally occurring
20 adoption includes "free riders" and is an estimate of the amount of energy
21 efficiency projected to occur without further utility program intervention.
22 Additional details about the specific assumptions and variables in the
23 DSM ASSYST model can be found in Mr. Mike Rufo's testimony.

24
25

1 Q. How were Gulf Power's market penetration rates for these DSM goals
2 developed?

3 A. The market penetration rates for Gulf Power were predicted in the DSM
4 ASSYST model based on factors including the level of market awareness
5 created through program marketing, the level of incentive available to the
6 participant, and the overall cost-effectiveness of the measure to the
7 customer.

8 Additional detail about the specific assumptions and variables in
9 the DSM ASSYST model can be found in Mr. Mike Rufo's testimony.

10

11 Q. How were DR measures identified and evaluated for technical and
12 achievable potential?

13 A. Itron used a methodology that made assumptions about three key factors
14 to determine technical potential for DR; the availability of communications
15 networks, the availability and end-use demand reduction capabilities of
16 DR enabling technologies, and the availability of dynamic pricing options.

17 In estimating achievable potential, Itron considered both customer-
18 controlled DR modeled as CPP-type programs and utility-controlled DR
19 modeled as direct load control (DLC). They made a number of
20 assumptions in developing potential adoption scenarios, including full
21 implementation of Advanced Metering Infrastructure (AMI), particularly
22 with regard to CPP programs. Itron did consider Gulf's program
23 experience in refining their CPP assumptions. Ultimately, the achievable
24 potential was projected based on ranges of customer enrollment and
25 represented as a "low enrollment" and "high enrollment" scenario.

1 Additional details about this process can be found in Section 4 of the
2 Technical Potential for Electric Energy and Peak Demand Savings for Gulf
3 Power Final Report by Itron and the testimony of Mr. Mike Rufo.

4

5 Q. How were renewable technologies identified and evaluated?

6 A. Renewable technologies were handled in two ways for the technical and
7 achievable potential studies. First, solar thermal water heating and PV
8 pool pumps were included in the energy efficiency study since they both
9 directly replace specific end-use loads and can be modeled like other
10 efficiency measures.

11 Itron handled rooftop PV using a separate methodology that first
12 estimated the total roof area of residential and commercial buildings plus
13 commercial parking lot shade structures suitable for siting PV systems.
14 Then Itron translated this area into estimates of annual energy and
15 capacity coincident with Gulf Power's summer and winter demand peaks
16 that could be produced by PV. Additional details about this process can
17 be found in Section 5 of the Technical Potential for Electric Energy and
18 Peak Demand Savings for Gulf Power Final Report by Itron and the
19 testimony of Mr. Mike Rufo.

20 Gulf Power conducted cost-effectiveness screening utilizing the
21 measure characteristics provided by Itron and concluded that the rooftop
22 PV measures do not pass the RIM/PT, or the TRC/PT combination of
23 cost-effectiveness tests. Consequently, Itron did not provide achievable
24 potential projections for these measures.

25

1 **Section 3: Statutory Adherence**

2 Q. Has Gulf Power provided an adequate assessment of the full technical
3 potential of all available demand-side conservation and efficiency
4 measures, including demand-side renewable energy systems?

5 A. Yes. Through the collaborative-sponsored study performed by Itron, an
6 adequate assessment of the full technical potential of all available
7 demand-side conservation and energy efficiency measures, including
8 demand-side renewables has been completed. This assessment included
9 the evaluation of 267 individual end-use energy efficiency, demand
10 response, and solar photovoltaic measures.

11

12 Q. Section 366.82(3), Florida Statutes, requires the Commission to evaluate
13 the full technical potential of supply-side conservation and efficiency
14 measures. Does Gulf Power's Technical Potential Study evaluate supply-
15 side conservation and efficiency measures and, if not, why?

16 A. Gulf Power has not conducted an assessment of supply-side conservation
17 and efficiency opportunities in the same manner as the demand-side
18 opportunities have been evaluated. Gulf does recognize that these
19 opportunities may exist and, in fact, considers energy efficiency in
20 selecting supply-side projects in all generation, transmission, and
21 distribution functions. However, the Commission has not developed
22 guidelines for such an evaluation that would provide a methodical
23 approach to identifying, quantifying, and proposing goals for supply-side
24 conservation and efficiency measures. For this reason Gulf Power
25 recommends addressing this portion of the statutory requirements in

1 section 366.82(3), Florida Statutes, in a separate proceeding.

2

3 Q. Has Gulf Power provided an adequate assessment of the achievable
4 potential of all available demand-side conservation and efficiency
5 measures, including demand-side renewable energy systems?

6 A. Yes. Through the collaborative-sponsored study performed by Itron, an
7 adequate assessment of the full achievable potential of demand-side
8 conservation and energy efficiency measures, including demand-side
9 renewables has been completed. This assessment included modeling
10 various projections of achievable potential for energy efficiency measures
11 based on customer incentive levels in both a RIM/PT and TRC/PT
12 portfolio.

13 Itron has also provided estimates of achievable potential for two
14 scenarios of incremental DR: low enrollment and high enrollment. Gulf
15 has included the achievable potential associated with the high enrollment
16 scenario in the Company's proposed goals.

17 All demand-side renewable energy systems were evaluated using
18 the same cost-effectiveness standards as other energy efficiency
19 measures. No renewable measures are cost-effective under these
20 standards and, therefore, none are reflected in the achievable potential
21 results. A summary of the achievable potential results can be found in
22 Schedule 9 of my exhibit.

23

24 Q. Should the Commission establish separate goals for demand-side
25 renewable energy systems?

1 A. No. Separate goals should not be established for demand-side
2 renewables. Instead, demand-side renewables should be evaluated and
3 included in Gulf Power's DSM plan based on the same criteria already
4 established for traditional end-use energy efficiency measures.

5 Gulf is currently evaluating solar thermal water heating through a
6 one-year pilot program approved by this Commission in 2008 and will
7 assess the opportunity for inclusion of this technology in our DSM plan
8 going forward. Gulf also continues to monitor performance and utility
9 system interaction of both small PV and wind generators as part of our
10 evaluation of demand-side renewable energy systems.

11

12 Q. Should the Commission establish additional goals for efficiency
13 improvements in generation, transmission and distribution?

14 A. Not at this time. As stated above, Gulf Power recommends that this matter
15 be considered in a separate proceeding following the conclusion of the
16 current goal-setting process.

17

18 Q. Should the Commission establish separate goals for residential and
19 commercial/industrial customer participation in utility energy audit
20 programs for the period 2010–2019?

21 A. No. Energy audits are an important component of achieving the proposed
22 goals through customer education of both general and program-specific
23 actions customers can take to reduce energy usage and, therefore,
24 should be included as part of the overall DSM goals. Gulf promotes the
25 availability of these audits beyond the minimum requirements of

1 Commission rules and depends on customer response to enhance
2 participation in other programs.

3

4 Q. What cost-effectiveness test should the Commission use to set DSM
5 goals for Gulf Power?

6 A. The Commission should use the combination RIM and PT cost-
7 effectiveness tests to set goals for Gulf Power. This combination of tests
8 provides a reasonable balance between participating and non-
9 participating customer benefits and provides a downward pressure on
10 overall electric rates while still supporting significant conservation activities
11 over the period 2010 through 2019.

12 In fact, utilizing this RIM based portfolio of proposed goals provides
13 more cost-effective achievable conservation than all but the high-incentive
14 TRC based portfolio. The only TRC based portfolio producing a higher
15 level of achievable potential assumes incentives of up to 100% of the
16 incremental cost of measures and would cost Gulf's customers an
17 additional \$209 million over the ten year period, more than double Itron's
18 cost estimate for the RIM based portfolio.

19 Using the combination of RIM and PT cost-effectiveness tests to
20 establish goals for Gulf Power is consistent with the requirements of
21 section 366.82(3), Florida Statutes, to consider impacts to participating
22 customers as well as non-participating customers, together comprising the
23 general body of customers.

24

25

1 Q. Do Gulf Power's proposed DSM goals adequately reflect the costs and
2 benefits to customers participating in the measure?

3 A. Yes. The measures included in development of the goals reflect the costs
4 and benefits to the participating customers. This is done by performing
5 the participant cost test and ensuring that all measures contemplated for
6 inclusion in the goals pass this test.

7

8 Q. Do Gulf Power's proposed DSM goals adequately reflect the costs and
9 benefits to the general body of ratepayers as a whole, including utility
10 incentives and participant contributions?

11 A. Yes. By passing the RIM test, Gulf's proposed goals reflect costs and
12 benefits that minimize overall rate impacts for the general body of
13 customers, whether or not they participate in one of the resulting
14 conservation programs. In addition, by only including measures that also
15 pass PT, these proposed goals adequately consider participant
16 contributions as a component of overall customer impact.

17

18 Q. Do Gulf Power's proposed DSM goals adequately reflect the costs
19 imposed by state and federal regulations on the emission of greenhouse
20 gases?

21 A. Yes. Although there are currently no state or federal regulations
22 governing the emission of greenhouse gases, assumptions for CO₂ cost
23 avoidance have been considered as a benefit in the evaluation of all
24 measures. Specifically, Gulf Power has included a "mid-range" CO₂ cost
25 projection as a component of fuel costs used in the economic screening of

1 measures. This "mid-range" assumption has a nominal value of \$20/ton
2 in 2014 and escalates for future years. This "mid-range" assumption falls
3 within a range of sensitivities Gulf Power has used to model impacts on
4 possible future expansion plans.

5
6 Q. What is Gulf Power's position relative to the Commission establishing
7 incentives to promote both customer-owned and utility-owned energy
8 efficiency and demand-side renewable energy systems?

9 A. Historically the Commission's preference for relying on the combination of
10 RIM and PT in the evaluation and approval of utility conservation
11 programs has provided the necessary structure to ensure that the
12 interests of all stakeholders are balanced. In practice, these tests have
13 provided incentives to customers through the payment of rebates, to the
14 utility by balancing the impacts of avoided cost benefits against revenue
15 impacts, and to the general body of customers by preventing cross-
16 subsidization between DSM program participants and non-participants.

17 If, in establishing Gulf Power's goals, the Commission were to
18 change its policy and establish goals which disturb the appropriate
19 balance between the interests of all stakeholders, Gulf believes that the
20 Commission should consider a utility incentive mechanism as a potential
21 remedy.

22
23 **Section 4: Additional Supporting Information**

24 Q. Please identify the projected technical potential for total energy and peak
25 demand savings for Gulf Power.

1 A. The Itron study breaks technical potential into three categories: energy
2 efficiency, demand response and customer-sited PV. This technical
3 potential represents *full implementation of all technically feasible*
4 *measures without regard to cost, acceptability to customers, or timeframe.*
5 The total technical potential for energy efficiency, demand response and
6 PV in Gulf Power's service area is shown in Tables 1, 2 and 3 of Schedule
7 7 of my exhibit.

8 These technical potential estimates are not additive and represent
9 *the upper bound of potential from a technical feasibility sense, regardless*
10 *of cost or acceptability to customers. They do not reflect what is cost-*
11 *effective or what is achievable in utility-sponsored programs.*

12
13 Q. Please identify the projected economic potential for energy and peak
14 demand savings and associated measures for Gulf Power based on both
15 the RIM and TRC cost-effectiveness test.

16 A. The economic potential is the subset of the technical potential that is cost
17 effective under the RIM or TRC cost-effectiveness test. Economic
18 potential is an intermediate step in determining the overall achievable
19 potential for end-use measure savings as discussed previously in my
20 testimony. Like the technical potential results, these numbers reflect full
21 implementation of measures with no time dimension and do not indicate
22 what is achievable in utility-sponsored programs.

23 The economic potential for measures passing the RIM and TRC test is
24 shown in Schedule 8 of my exhibit. As previously stated, the energy
25 efficiency measures that comprise the economic potential for each

1 the RIM and the TRC portfolios are listed in Schedule 5 of my exhibit.

2

3 Q. Please identify the projected achievable potential and associated
4 measures for Gulf Power based on the RIM/PT and TRC/PT cost-
5 effectiveness tests for the period 2010 through 2019.

6 A. Itron has provided projections of achievable potential for three scenarios
7 of customer incentive in both the RIM/PT and TRC/PT portfolios of energy
8 efficiency measures. These results represent a subset of the economic
9 potential that could be achieved over the ten year period 2010 through
10 2019 based on a number of factors discussed previously in my testimony.
11 The achievable potential represents a theoretical value based on the
12 supply-curve implementation of measures and does not necessarily reflect
13 the specific measures that may be feasible in the program design phase
14 of this process. The total achievable potential for each of these three
15 individual scenarios is included in Table 1, Schedule 9 of my exhibit.

16 In addition, Itron provided estimates of achievable potential for DR
17 in both a low enrollment and high enrollment scenario. These values are
18 shown in Table 2, Schedule 9 of my exhibit. As stated previously in my
19 testimony, there is no cost-effective achievable potential associated with
20 the PV measures.

21 As referenced earlier, the energy efficiency measure list for the
22 RIM/PT and TRC/PT achievable potential portfolios is provided in
23 Schedule 6 of my exhibit.

24 Gulf Power's proposed goals are the achievable potential results of
25 the RIM high incentive scenario and the high enrollment scenario for DR

1 as reflected in Schedule 1 of my exhibit.

2

3 Q. For Gulf Power, please describe the sensitivity of the economic potential
4 with regard to high and low capital costs for generation, high fuel and CO₂
5 costs, low fuel and CO₂ costs, and no future CO₂ costs.

6 A. Gulf performed five sensitivities of the economic potential for both TRC
7 and RIM passing measures. The sensitivities are (1) high capital cost,
8 (2) low capital cost, (3) low fuel/low CO₂ cost, (4) high fuel/high CO₂ cost,
9 and (5) no CO₂ cost. These sensitivities were accomplished as
10 adjustments to the avoided cost inputs of the cost-effectiveness
11 screening. It is important to recognize that any of these adjustments may
12 have led to different integrated resource plans as starting points for DSM
13 evaluation and, therefore, should not be considered proxies for the
14 achievable potential results. Similarly, the economic potential represented
15 by these sensitivities is by no means based on the same thorough
16 planning process utilized for the base case results. The results of the
17 sensitivities do show, however, that the baseline case Gulf used in this
18 goal setting process is on the higher-end of the ranges represented.

19 Complete details of the economic potential and associated number
20 of passing measures for each sensitivity are included as Schedule 10 of
21 my exhibit.

22

23 Q. For Gulf Power, what are the 2010-2019 annual bill impacts on residential
24 customers using 1,200 kWh/month with no incremental DSM added?

25 A. Gulf Power estimated the bill impacts for no incremental DSM by

1 calculating the costs associated with supplying the amount of energy and
2 demand defined in the proposed goals with the avoided supply-side unit.
3 This is the amount of increased load Gulf would have if the achievable
4 potential for energy efficiency and demand savings was not met through
5 DSM. This approach is analogous to how the benefits of reducing energy
6 and demand through DSM would be calculated.

7 This method, because it produces capacity and energy related
8 costs over a longer period than the ten year horizon of the proposed DSM
9 goals, can better represent cumulative bill impacts as a net present value
10 (NPV) equivalent. In this case, the NPV bill impact is \$180.32 for a
11 residential customer using 1,200 kWh per month. Calculating this bill
12 impact only during the first ten years does not reflect the substantial
13 capacity and energy costs associated with no DSM in future years. For
14 purposes of comparison, however, the calculated bill impact for each year
15 2010 through 2019 of this no DSM scenario is presented in Schedule 11
16 of my exhibit.

17
18 Q. For Gulf Power, what are the 2010-2019 annual bill impacts on residential
19 customers using 1,200 kWh/month for the projected TRC achievable
20 portfolio, the projected RIM achievable portfolio, and the Company's
21 proposed DSM goals?

22 A. The annual bill impacts for the RIM and TRC achievable portfolios as well
23 as Gulf's proposed goals are calculated by utilizing Itron's estimates of the
24 total costs of achieving the maximum energy and demand savings in each
25 of the RIM and TRC portfolios. Unlike the costs associated with the no

1 DSM case, the costs associated with achieving these energy and demand
2 reductions will conclude at the end of the ten year period 2010 through
3 2019.

4 For comparison to the no DSM estimate of \$180.32, these values
5 can also be represented in a NPV form as \$152.35 for the RIM portfolio
6 and \$282.50 for the TRC portfolio. Since Gulf's proposed goals are
7 equivalent to the RIM portfolio, this calculation demonstrates the bill
8 impact for achievement of these goals is less than the bill impact for no
9 incremental DSM. The annual bill impacts associated with achieving the
10 maximum energy and demand savings in the RIM and TRC portfolios is
11 provided in Schedule 11 of my exhibit.

12
13 **Section 5: Conclusions**

14 Q. How much DSM is reasonably achievable during the 2010-2019 period for
15 Gulf Power?

16 A. Based on Gulf's planning process and the results of Itron's achievable
17 potential projections for energy efficiency and demand response, a
18 cumulative annual total of 159 GWh energy reduction, 69 MW summer
19 peak demand reduction, and 46 MW winter peak demand reduction is
20 reasonably achievable for the period 2010 through 2019. Therefore, Gulf
21 Power is proposing these annual energy and seasonal peak demand
22 reductions as goals for the period 2010 through 2019 as shown in
23 Schedule 1 of my exhibit.

24
25 Q. Has Gulf Power used a sound and reasonable process consistent with

1 Florida's statutory and rule-based requirements to determine its 2010
2 through 2019 DSM goals?

3 A. Yes. Gulf Power has proposed goals based on a full assessment of
4 technical, economic, and achievable potential for demand-side
5 conservation and efficiency measures, including demand-side renewable
6 energy systems in a manner consistent with requirements of section
7 366.82(3), Florida Statutes, and FPSC Rule 25-17.0021.

8

9 Q. Should Gulf Power's proposed 2010-2019 DSM goals be approved?

10 A. Yes.

11

12 Q. Does this conclude your testimony?

13 A. Yes.

1 BY MR. GRIFFIN:

2 Q. All right. With that, Mr. Floyd, would you
3 please summarize your testimony.

4 A. Good afternoon, Commissioners. In my
5 testimony I address each of the issues in this docket,
6 including the company's proposed goals, changes in the
7 FEECA statute and other issues of interest.

8 First, Gulf is proposing goals for reducing
9 weather-sensitive peak demand and annual energy
10 consumption for the next ten-year period of 69 megawatts
11 summer peak, 46 megawatts winter peak and 159 gigawatt
12 hours annual energy. This proposed energy goal
13 represents a 184 percent increase in Gulf's energy goal
14 as currently approved by the Commission.

15 Gulf developed this proposed goal through a
16 thorough and methodical process beginning over a year
17 ago. This process started with the formation of a
18 collaborative between the seven Florida FEECA utilities
19 and representatives of SACE and NRDC. The objective of
20 this process was to progress through a robust and
21 thorough study of the technical potential for energy and
22 demand savings in each of our respective service areas.

23 The study was conducted by Itron on behalf of
24 the Florida utilities, and included evaluation of over
25 260 energy efficiency and demand-side renewable

1 measures. Savings potential of these measures was
2 evaluated over multiple building types in both the
3 residential and commercial industrial customer sectors
4 as required by the Commission rule.

5 Using Gulf's most recent planning process,
6 Gulf conducted economic screening of these measures to
7 determine the subset of this technical potential that is
8 cost-effective. And for this cost-effective screening,
9 Gulf for the first time also included consideration of
10 possible future carbon costs as an additional benefit in
11 evaluation of these energy efficiency measures.

12 The measures that were determined to be
13 cost-effective were provided to Itron for projecting the
14 achievable potential, that is the potential for savings
15 that's reasonably achievable by Gulf over the next
16 ten-year period.

17 Gulf has adopted Itron's projections of
18 achievable potential for energy efficiency and demand
19 response savings based on the enhanced RIM Test and
20 Participant's Test as the company's proposed goal. This
21 combination of cost-effectiveness tests provides the
22 most complete assessment of impacts to all stakeholders
23 and satisfies the revised FEECA statute requiring the
24 Commission to consider impacts to participating
25 customers, nonparticipating customers together making up

1 the general body of customers, and including incentives
2 paid to customers.

3 In addition to evaluating the achievable
4 potential for a low, medium and high scenario in both
5 the enhanced RIM and enhanced TRC-based portfolios, Gulf
6 also conducted sensitivity analysis for the economic
7 potential based on changes in generation capital costs,
8 generation fuel costs and carbon costs. And the results
9 of this sensitivity analysis support Gulf's proposed
10 goals as being aggressive under various future cost
11 scenarios.

12 Through this collaborative process Gulf has
13 provided an adequate assessment of the full technical
14 potential and achievable potential of all available
15 demand-side and energy conservation and efficiency
16 measures, including demand-side renewables.

17 In summary, Gulf has proposed goals that
18 represent a large increase in annual energy savings as
19 compared to currently approved goals under a framework
20 that places downward pressure on electric rates.

21 Thank you.

22 **COMMISSIONER EDGAR:** Thank you.

23 **MR. GRIFFIN:** We would tender the witness for
24 cross-examination.

25 **COMMISSIONER EDGAR:** Ms. Kaufman?

1 **MS. KAUFMAN:** Thank you, Madam Chair. During
2 the break I passed out two pieces of paper. The first
3 one is entitled fuel and purchased power cost recovery
4 cost calculation, Gulf Power, and I'd like to have a
5 number for that. The second one is as-available energy
6 prices, and that is already in the record, but it's just
7 for ease of reference.

8 **COMMISSIONER EDGAR:** Okay. So the first sheet
9 that you mentioned will be marked as 160.

10 **MS. KAUFMAN:** Thank you, Madam Chairman. All
11 the parties should already have that.

12 **COMMISSIONER EDGAR:** Okay. I'm just trying to
13 think of a title that would make our Chairman happy, so
14 --

15 **MS. KAUFMAN:** Oh. Gulf Projected Fuel Prices?

16 **COMMISSIONER EDGAR:** Works for me.

17 **MS. KAUFMAN:** Okay. Thank you. I forgot that
18 part.

19 (Exhibit 160 marked for identification.)

20 **CROSS EXAMINATION**

21 **BY MS. KAUFMAN:**

22 Q. Good afternoon, Mr. Floyd.

23 A. Hi.

24 Q. I'm Vicki Kaufman. I'm here on behalf of the
25 Florida Industrial Power Users Group. And I took your

1 deposition by phone last week, did I not?

2 A. Yes.

3 Q. Okay. Good to see you.

4 You said in your summary that you have applied
5 what we've referred to in this proceeding as the E-RIM
6 Test to the measures that Gulf has put forth in this
7 docket?

8 A. Yes, that's correct.

9 Q. Okay. And I think you told me in your
10 deposition that you have reviewed and are familiar with
11 the Commission's cost-effectiveness manual?

12 A. Yes.

13 Q. Okay. Would you agree with me that neither
14 that manual nor the cost-effectiveness rule defines
15 what's to be included in lost revenues?

16 A. Yes, I would agree with that.

17 Q. So it is possible, is it not, that utilities
18 are including different items in that category?

19 A. Yes, that is possible.

20 Q. You have not reviewed the RIM, the E-RIM
21 calculations of the other utilities, have you?

22 A. No, I have not.

23 Q. And so you don't know if the other FEECA
24 utilities are conducting the RIM Tests, the E-RIM Tests
25 in the same way that Gulf did, do you?

1 A. No, I do not.

2 Q. And I think we've heard some other witnesses
3 testify to this, but let me make sure I understand that
4 when Itron was performing work for the utilities, some
5 of the assumptions were provided by Itron and some of
6 them in your case were provided by Gulf Power; is that
7 right?

8 A. Yes, that's correct.

9 Q. Do you think it's important that all the
10 utilities perform the RIM, E-RIM Test or whatever test
11 the Commission decides about in the same way?

12 A. Yes, I do think that it's important. And as I
13 indicated in my deposition, it's my understanding that
14 each of the other utilities does perform that test
15 consistent with the Florida cost-effectiveness manual.

16 Q. But you -- excuse me. You haven't reviewed
17 their work, have you?

18 A. That's correct. I have not reviewed their
19 specific calculations.

20 Q. Okay. Now we talked a little bit in your
21 deposition about cogeneration; correct?

22 A. Yes.

23 Q. And I think you agreed that to the extent a
24 customer generates electricity in the cogeneration
25 process, that that's electricity that Gulf does not have

1 to generate; is that right?

2 A. Yes, that's correct.

3 Q. So would you agree that industrial
4 cogeneration can make a positive contribution to Gulf's
5 conservation efforts?

6 A. I've not evaluated it as a -- in a way that it
7 would make a contribution to Gulf's conservation
8 efforts. I do agree that it does displace generation
9 that Gulf would otherwise be providing to the customer.

10 Q. Okay. The exhibit that I distributed and that
11 the Chairman marked as Number 160, you should have that
12 in front of you.

13 A. Yes.

14 Q. Do you have that?

15 A. Yes, I do.

16 Q. Would you accept, subject to check, that this
17 is an excerpt from Gulf's fuel filing and it shows their
18 projected costs for 2009?

19 A. Yes, subject to check.

20 Q. And if you look at Line 14, all the way across
21 to the right, as I've said before, these numbers are in
22 kilowatt hours, but would you agree that the fuel cost
23 there is about \$57.28 per megawatt hour?

24 A. Yes.

25 Q. And when I took your deposition, I asked for

1 you to provide me with a late-filed exhibit showing the
2 prices that had been paid to cogenerators for the most
3 recent period that you had it; correct?

4 A. Yes, you did.

5 Q. And that is the second sheet, which is already
6 in the record, and it's called as-available energy
7 prices; correct?

8 A. Yes.

9 Q. And to your knowledge, is this information
10 true and correct?

11 A. To my knowledge.

12 Q. Okay. And what you've provided me are on an
13 hourly basis for June the actual prices that were paid;
14 correct?

15 A. Yes.

16 Q. Okay.

17 A. June 2009.

18 Q. Yes. June 2009. And if you just scan down
19 those prices, would you agree that there's substantially
20 less for the most part than the \$57.28?

21 A. Yes. There, there are a number of the values
22 that are less than that. There are some near that
23 value. But in general, yes, I would agree.

24 Q. Have you taken a look at the goals proposed by
25 GDS in this proceeding as compared to the goals that

1 Gulf has proposed?

2 A. Yes, I have. And I received an amended
3 projection of those goals last night. I have not
4 reviewed that fully, but, yes, I have received those.

5 Q. And I've asked some of the other utility
6 witnesses. Can you give us an idea just of the
7 magnitude of the difference between what Gulf proposed
8 and what GDS proposed? I guess perhaps it would have to
9 be based on before the revision.

10 A. Right. It's on the order of seven to eight
11 times the level of goals that Gulf proposed.

12 Q. Do you have a -- can you quantify that in
13 dollars?

14 A. No, I cannot quantify that in dollars.

15 Q. Okay. Would it be your opinion that if the
16 GDS goals were adopted, customers in all classes would
17 see a substantial increase in their conservation cost
18 recovery charge?

19 A. Yes. It would be in my opinion that in order
20 to achieve those goals, there would be a substantial
21 increase in expenditures necessary to achieve those
22 goals.

23 MS. KAUFMAN: Thank you, Mr. Floyd.

24 Thank you, Madam Chair.

25 COMMISSIONER EDGAR: Mr. Jacobs?

1 MR. JACOBS: Thank you, Madam Chair.

2 CROSS EXAMINATION

3 BY MR. JACOBS:

4 Q. Good morning, Mr. Floyd.

5 A. Good morning.

6 Q. My name is Leon Jacobs. I'm representing NRDC
7 and SACE.

8 Could you just briefly describe for us your
9 role in the establishment and development of the
10 conservation goals for Gulf?

11 A. Yes. As I indicated earlier, I'm the team
12 leader of our economic evaluation function at Gulf, and
13 one of my responsibilities is to supervise the
14 evaluation of energy efficiency measures and review
15 that. And in this regard that included supervising that
16 for the purposes of evaluating measures that are being
17 considered in this goal setting proceeding.

18 Q. I believe in your summary you indicated that
19 Gulf is proposing goals that are an increase over those
20 presently assigned -- approved, rather, for the company?

21 A. Yes, that's correct.

22 Q. Now that's somewhat different from your
23 original testimony. Because I think in your original
24 testimony you said that there was a proposed decrease;
25 is that correct?

1 A. No. Actually I believe my testimony indicated
2 also that the energy goal that I just referenced is an
3 increase over our current goal.

4 Q. I see. I see. Now is it, is it my
5 understanding of your testimony that you did not meet
6 those goals?

7 A. Yes, that is correct.

8 Q. Okay. And that is for how long of a period?

9 A. Gulf has not met its residential goals -- Gulf
10 has not met its overall goals for several of the past
11 years. I don't have the specific years right here in
12 front of me. But, yes, that is correct.

13 Q. Okay. Is it, is it your role at Gulf to
14 determine the essential development of inputs,
15 assumptions and so forth that would go into the
16 determination of cost-effectiveness and overall
17 development of goals?

18 A. Yes.

19 Q. Okay. In the context of that process, how do
20 you -- from a layman's perspective, how do you, and as
21 a, as a technician in charge of implementing this
22 responsibility, how do you assess the direction of the
23 statute to take consideration for the full body of
24 ratepayers? And I think I heard you address this
25 somewhat in your summary, but I just wanted to kind of

1 cover that again.

2 A. I'm sorry. Could you --

3 Q. How do you determine who the full body of
4 ratepayers are when you sit down to determine how to do
5 your economic analyses and your cost-effectiveness
6 analyses for your goals?

7 A. We look at that from the perspective of that
8 being participating customers as well as
9 nonparticipating customers in a DSM program.

10 Q. So the essential dividing line then is whether
11 or not you project they'll participate in a measure or
12 not participate in a measure; is that a fair statement?

13 A. Yes.

14 Q. Okay. Without, without asking you to do a
15 legal interpretation of the statute, have you done
16 analysis or are you aware of an analysis by Gulf that
17 tracks that back to the statute?

18 A. No, no legal analysis, no.

19 Q. Okay.

20 A. But just an interpretation of what the statute
21 is, is establishing for considerations in the goal
22 setting process.

23 Q. And so it would stand to reason that when you
24 do just a general assessment of costs and benefits, that
25 remains the dividing line. You look at the cost and

1 benefits of participants and the cost and benefits of
2 nonparticipants; is that a fair statement?

3 A. We look at it again in the context of the
4 cost-effectiveness tests that are prescribed by the
5 Commission for evaluation of DSM measures. And in that
6 regard, yes, the rate impact measure does consider the
7 impacts to nonparticipants.

8 Q. That was sort of my question, but, but I'll
9 move on.

10 How do you -- what do you do to ascertain the
11 level and degree to which consumers gain benefits from
12 any particular implementation of a measure?

13 A. Well, the primary consideration would be bill
14 savings that the participating customer would realize
15 through adoption of, of a measure, whether it be one
16 that's promoted within a Gulf Power DSM program or
17 whether it be a measure that's adopted outside of a Gulf
18 Power program. That would be the primary way that we
19 would assess the participant's benefit.

20 Q. Thank you. And there is some empirical
21 research on that from Gulf?

22 A. I'm not sure that there's empirical research.
23 It would just merely be the recognition that a customer
24 who adopts an energy efficiency measure and recognizes
25 some reduction in their consumption as a result of that

1 would realize bill savings. That's, that's what I mean
2 by that.

3 Q. Okay. So there's no real definitive
4 quantification of what those, what those savings would
5 be or how they would happen?

6 A. Well, we do estimate what those savings would
7 be as part of the evaluation process when we evaluate an
8 energy efficiency measure. We, you know, by assigning
9 the energy savings associated with that measure to the,
10 to the Participant Test, we can calculate what the
11 projected bill savings would be for a customer.

12 Q. Now we've heard a lot of discussion about this
13 concept of free riders. It's -- what -- how does Gulf
14 take a perspective or assess this idea of free riders?
15 And what I'm really trying to do is tie this line of
16 questioning together. But how do you come to some
17 understanding of what your, the status of free ridership
18 is as you do this analysis?

19 A. Free riders, as I think has been stated
20 earlier, would be the recognition of customers adopting
21 measures absent a utility program. And one of the
22 objectives in the goal setting process is to recognize
23 that and to establish goals that take that into account.
24 And so in this process, as has been explained before,
25 the Collaborative decided to utilize a payback criteria

1 of two years or less. If a measure had a simple payback
2 to a customer of less than two years, then that measure
3 was assumed to have a high adoption absent any utility
4 program. And so in that regard we treated that as a, as
5 a way to minimize the impact of free riders in
6 establishing the goals in this proceeding.

7 Q. So -- and that was done pretty much
8 consistently across the utilities; is that correct?

9 A. Yes, that's correct.

10 Q. But I've heard a lot of testimony, some this
11 morning, that in many cases there were, there were
12 factors that differed across the utilities. Are you
13 aware of any means or measures that was adopted in this,
14 in this tactic of the free -- of the two-year payback
15 which accounted for those differences across utilities?

16 A. Which differences are you referring to,
17 please?

18 Q. I understand there are differences in market
19 makeup, market penetrations and those sorts of things.
20 Do you agree that those would be factors in making this
21 assessment?

22 A. I do not agree that those would be factors in
23 determining whether a measure has less than a two-year
24 payback. There are clearly different penetration rates
25 of measures, you know, across the State of Florida due

1 to, you know, a number of, a number of factors. Some
2 measures have been promoted in some jurisdictions and
3 not in others, and that could lead to having different
4 penetration rates. But whether a measure, you know, for
5 a set cost and a set benefit, you know, whether it
6 produces a two-year payback or not, I would not
7 necessarily see that as being a big difference between
8 utilities.

9 Q. So it's your testimony then that you could
10 universally apply this across all utilities with all
11 inputs being varying and different, and that would be a
12 relatively safe assumption today?

13 A. Well, and we have utilized this criteria of a
14 two-year payback across, you know, among all of the
15 collaborative utilities in screening measures for the
16 purposes of this goal setting proceeding.

17 Now, you know, if you took a particular
18 measure and looked at an individual customer in a
19 jurisdiction, at Gulf Power, for example, you know,
20 based on what that measure costs and what the bill
21 savings would be based on Gulf Power's rates, that
22 customer would, you know, realize a particular cost
23 benefit ratio associated with that. And that might
24 differ, differ in Progress Energy's territory, for
25 example, depending on what their rates were, you know,

1 that that customer would realize the benefit from.

2 Q. Did Gulf take a look at a shorter payback
3 threshold in assessing, in making its determination of
4 applying this two-year payback?

5 A. No, Gulf did not.

6 Q. Are you -- I'm sorry.

7 A. Gulf has, you know, has associated free
8 ridership with a payback period. Two years was the
9 point that Gulf and the other utilities had the most
10 experience with. For example, Gulf currently offers a
11 commercial energy services program which allows Gulf to
12 offer customized incentives for commercial energy
13 efficiency projects, and that program has a cap at a
14 two-year payback. So that, that is an example of, you
15 know, experience that we have with that criteria that
16 was, you know, support for utilizing that same criteria
17 in this process.

18 Q. Thank you. Are you aware that any, any
19 systemic or empirical research has been done that
20 narrows in and makes a precise decision about this
21 two-year threshold?

22 A. No, I'm not.

23 Q. Okay. You indicate in your testimony that one
24 of the things that Gulf did do was you do a survey
25 process. Could you describe that for me?

1 A. I believe you're referring to my deposition.

2 Q. I'm sorry. It was your deposition. Forgive
3 me.

4 A. Okay. Yes. Gulf does conduct follow-up
5 surveys for audit participants. This is something that
6 Gulf has begun fairly recently. And, as a matter of
7 fact, I think we've provided a late-filed exhibit
8 regarding the results of one of those surveys. We
9 follow up a survey with audit participants approximately
10 three months after they have completed either an online
11 audit or a walk-through audit just to gain some feedback
12 on the types of actions that they've taken or, you know,
13 how many have implemented certain recommendations that
14 we've made during that audit.

15 Many of the recommendations and the things
16 that are talked about in that audit are measures that
17 happen to fall within the two-year payback window. And
18 so we have conducted some of that surveying to get some
19 feel for the types of participation in those, in those
20 kind of actions.

21 Q. Thank you. I believe you also -- and again I
22 think this is in your deposition -- that you also
23 indicated even with that, having done that, you don't
24 come away with any clear understanding of the, of the
25 adoption rates for measures that, that you eliminated in

1 your two-year screening. Is that a fair statement?

2 A. We have not used those survey results in any
3 way to influence the decision about utilizing the
4 two-year payback criteria here, although, you know,
5 based on the late-filed exhibit that we did provide, you
6 know, my interpretation is that seeing the adoption of
7 fluorescent lighting, for example, in the residential
8 market, I think it was over 50 percent of our audit
9 participants indicated that they had adopted that
10 measure. And I would say that's consistent with an
11 assumption that that is having a high penetration absent
12 any incentive being provided by the utility. So I see
13 that as supporting really that criteria of short payback
14 being used to minimize free ridership.

15 Q. And so am I -- I hear, I understand your
16 answer. My question, I believe, is is there a
17 systematic review which leads you to understand what the
18 adoption practices are on rates for these measures that
19 were eliminated by the two-year payback?

20 A. No. Other than what I've described, no.

21 Q. Okay. Is there feedback or follow-up on the
22 impact of your audits or your surveys? In other words,
23 can you tell whether or not that had, they in and of
24 themselves had an impact on your consumers?

25 A. Well, again, you know, one of the objectives

1 of this survey is to see, you know, how effective those
2 recommendations were in translating the actions by
3 customers. So in that regard, yes, that is a step that
4 we do to, to determine how effective the audit process
5 is.

6 Q. Now in this process do you look at practices
7 for offpeak hours?

8 A. I'm sorry?

9 Q. Do you look at practices or trends for
10 offpeak, excuse me, for offpeak hours?

11 A. Not specifically. The kinds of measures that
12 are being recommended or the kinds of actions that are
13 being recommended to customers are generally -- you
14 know, with the, with the objective of trying to help the
15 customer save money, they're not targeted to one
16 particular time frame.

17 Q. Okay. And so your, so in your opinion then it
18 would be only those measures which are targeted at the
19 peak can save customers money?

20 A. No, that's not what I said. I said the
21 only -- you know, the focus is on saving the customers
22 money. They're not targeted to any particular time
23 frame today.

24 Q. Okay. But it is true that you eliminated over
25 100 measures based on a two-year payback criteria;

1 correct?

2 A. Yes, that's correct.

3 Q. And you qualified 143 on the TRC; is that
4 correct?

5 A. Subject to check. I don't have that number in
6 front of me, but I'll go with yours.

7 Q. Okay. Now this is kind of disjointed, but I
8 want to ask this. If I'm not mistaken, you excluded the
9 measure of programmable thermostats from the -- is it
10 potential? I think it's from the potential study; is
11 that correct?

12 A. Well, the programmable thermostat was a
13 measure evaluated in the technical potential study. But
14 if it was screened out, it would not have been part of
15 the achievable potential study. Yes, that's correct.

16 Q. Is it not true that one of your, one of the
17 fundamental programs that you feature in your Energy
18 Select series makes use of a programmable thermostat?

19 A. Our Energy Select program does utilize a
20 programmable energy management system that is commonly
21 referred to as a programmable thermostat, although it is
22 quite a bit more sophisticated than a programmable
23 thermostat.

24 The energy management system that's used in
25 the Energy Select program first has the ability to

1 control both water heating and an additional appliance
2 in addition to the HVAC temperature settings. Also,
3 that energy management system interacts with a rate that
4 Gulf Power offers, the residential service variable
5 pricing rate, such that the combination of the pricing
6 component and the energy management system allows
7 customers to manage their electricity purchases by
8 responding to the varying prices throughout the day.
9 And that program does, has demonstrated, you know, real
10 results, real energy savings for customers.

11 A simple programmable thermostat, on the other
12 hand, is purely dependent on, on how the customer
13 utilizes that in order to change their behavior. The
14 programmable thermostat in itself does not save the
15 customer any money. It is only if they use that
16 thermostat to adjust their temperature settings
17 throughout the day.

18 Q. So it sounds like then you would have -- or
19 did you, let me ask this, did you ensure that this
20 combined offering was included as a, as a part of the
21 study?

22 A. The Energy Select program was not studied
23 specifically, although it was a part of the demand
24 response assessment that Itron conducted. They did
25 conduct an assessment of demand response potential for a

1 critical peak pricing type program, which is what our
2 Energy Select program is. And so in that regard the
3 potential savings associated with Energy Select were
4 estimated in this study.

5 Q. Now here's a concern that I have. I know that
6 in determining what measures were included there was a
7 lot of concern about overlapping.

8 A. Yes.

9 Q. How did -- in this particular offering how did
10 you describe that? Was this, was the programmable
11 thermostat part of this differentiated so it wasn't
12 overlapping? Do you recall how that happened? And let
13 me -- because my understanding is that in some matters
14 the overlapping part would have been eliminated from the
15 test. So my concern is if you included this combined
16 offering, how did you ensure that both the programmable
17 thermostat and the other demand response part of this
18 was taken as part of the study?

19 A. Well, first, the demand response measures were
20 evaluated separately outside of the energy efficiency
21 study. The energy efficiency, energy efficiency study
22 that included 257 measures has been, as has previously
23 been discussed, did account for overlapping effects of
24 some of those measures.

25 For example, you know, a heating and cooling

1 measure and an insulation measure have overlapping
2 savings. Both of those measures reduce the thermal load
3 on a building. And so in order to not double-count
4 those savings, our consultant, Itron, did account for
5 the overlapping effects of those measures.

6 I think that that's what you're asking me
7 about here. Is that, is that what you're looking for?

8 Q. I think -- let me, let me just ask it one more
9 time and let me kind of give a, a kind of background.
10 As I understand the Energy Select offering that you just
11 described, it combines a programmable thermostat with a
12 demand response component.

13 A. Right.

14 Q. I want to, I want to understand how that
15 combined offering was evaluated in your achievable
16 potential analysis. If I understand your answers thus
17 far is that we understand that a programmable thermostat
18 alone was excluded. So I'm trying to get to how do we,
19 how do we evaluate this combined?

20 A. Okay. I understand your question now. The
21 critical peak pricing program, Energy Select, was
22 evaluated as a demand response measure in Itron's
23 achievable potential study.

24 Q. Were there any other -- so then did you look
25 at any additional benefits that might come out to this

1 customer by having now this programmable thermostat in
2 their house? While it wasn't looked at as a, as a
3 reviewable measure on its own, now that you've included
4 in the context of a demand response, are there additive
5 benefits that that customer now gets from having that
6 programmable thermostat there and did you account for
7 those?

8 A. Well, first, I would not associate this
9 program with a, the programmable thermostat measure --

10 Q. Understood.

11 A. -- that I believe you're referring to. As I
12 described earlier, it's quite a bit more sophisticated
13 energy management system that's associated with the
14 Energy Select program.

15 Q. So this customer would not get any offpeak
16 benefits from now having this programmable thermostat,
17 which albeit came because of a demand response program.
18 Your interpretation is that there are no additive
19 benefits to this customer to have this thermostat
20 offpeak hours?

21 A. Gulf's experience actually has been that
22 customers who participate in this program save energy
23 throughout the course of the day. So it not only
24 provides demand response benefits, but it also provides
25 energy reduction benefits. So in that regards, yes, you

1 know, the program does provide those additional energy
2 savings benefits associated with utilization of this
3 energy management system.

4 Q. Thank you. You've had some measures of
5 success with your CFL program and audits; is that
6 correct?

7 A. Well, we don't promote the CFL exclusively.
8 That's one of the many recommendations that we make to
9 customers during an audit. Yes.

10 Q. Are you -- do you or are you required to
11 promote them in your audit program?

12 A. No, we're not.

13 Q. And is that not a very appropriate avenue or
14 means of looking at achievable potential?

15 A. I'm not sure I follow your question.

16 Q. CFLs, do you agree, traditionally experience a
17 very high, high rate of adoption; is that correct?

18 A. Yes. Our experience has been that they are
19 being adopted at a fairly high rate.

20 Q. And so if you're doing audits and you come
21 across customers who, who aren't aware of the benefits,
22 doesn't that seem like a very reasonable and very clear
23 opportunity?

24 A. Yes. As a matter of fact, we do just that.
25 We do talk to customers during audits about the benefits

1 of utilizing CFLs.

2 MR. JACOBS: Just one moment, Chairman.

3 CHAIRMAN CARTER: Okay. Take a moment.

4 (Pause.)

5 BY MR. JACOBS:

6 Q. So -- I'm sorry. So it is your present
7 practice then to, to make consumers aware of, of them in
8 doing these audits?

9 A. Yes. That's correct.

10 Q. But am I correct in understanding that you
11 don't consider these a viable measure in your achievable
12 potential?

13 A. They are a measure that was screened due to
14 having a less than two-year payback. And as I explained
15 earlier, that was used to minimize the free ridership
16 and the goal setting process. But these measures are
17 promoted along with other short payback measures. We do
18 provide education and awareness of these kinds of
19 measures through our audit programs, through our energy
20 education program, which is a pilot program that's been
21 approved by this Commission as a way to reach out and to
22 help create a greater awareness among our customer base
23 of the opportunities that are there to provide energy
24 savings. And many of those are low-cost, no-cost kinds
25 of things.

1 Q. You indicate then that the concern in
2 screening out CFLs was because of the concern of free
3 ridership, and I'm trying to find what that, what that
4 is on, on the chart, if you'll give me just a moment.

5 A. Sure.

6 (Pause.)

7 Q. That may take a bit longer. I'll bypass.
8 Maybe we can revisit that later.

9 A. Okay.

10 Q. Let me put this hypothetical to you. If, if
11 CFLs were enjoying an adoption rate of 85 percent, you'd
12 agree then that there's a fairly small degree of free
13 ridership for that element, for that measure?

14 A. No. Actually --

15 Q. I'm sorry. The reverse.

16 A. -- I'd say just the opposite. If CFLs had an
17 adoption of 85 percent, I would say that's a very high
18 free ridership.

19 Q. Okay.

20 A. That's essentially full adoption of the
21 measure.

22 Q. Correct. And so if your audits are showing
23 people who still are not aware, wouldn't it be just a
24 very simple means and measure to extend that awareness
25 during your audit?

1 A. Yes. As a matter of fact, as I said earlier,
2 that's exactly what we do, not only with our audit
3 program, with our energy education pilot program, with
4 home shows, with our website. We have a variety of ways
5 that we reach out to customers to educate them about the
6 opportunities associated with low-cost and no-cost
7 measures, many of those, you know, having a payback less
8 than two years.

9 Q. So isn't it really the case that you're
10 screening because it increases the level of lost
11 revenues? Isn't that really the reason why it gets, it
12 gets cut out of your achievable potential?

13 A. No. Actually, as I've just described here, we
14 have screened the two-year payback measures to reduce
15 the impact of free ridership in the goal setting
16 process.

17 Q. But, but still you, you do promote these
18 programs in your audits?

19 A. Yes, we do.

20 Q. Okay. When, when there is just a general and
21 significant concern about lost revenues, is there a
22 process by which Gulf undertakes to determine and
23 quantify the revenues that it loses through the
24 implementation of its conservation goals?

25 A. Gulf does not quantify lost revenues per se.

1 That is an outcome of the evaluation of measures under
2 the Rate Impact Measure Test that does provide the basis
3 for determining that, you know, measures that pass that
4 test are, are benefits both to the participating
5 customers as well as to nonparticipating customers.
6 Measures that fail that test indicate subsidy between
7 those two customer groups.

8 Q. So if I may paraphrase, there is this idea
9 that on a, on a front-end basis you look to assess and
10 address the idea of revenue impact by determining these
11 measures that have this -- through this rate impact
12 measure; is that a fair statement?

13 A. Yes, that's correct. We do that on the front
14 end.

15 Q. And I know that you're not a lawyer, but are
16 you aware of how the FEECA statute anticipates that
17 companies would, would do an analysis of the rate
18 impact?

19 A. I'm not a lawyer.

20 Q. What I'd like to do is just show you some
21 words and have you read them, and we'll see how we go
22 from there, if that's okay?

23 A. Okay. Sure.

24 MR. JACOBS: Mr. Chairman, I don't know if we
25 need to mark this. It's just a copy of the statute.

1 **CHAIRMAN CARTER:** So you're just using it for
2 cross-examination?

3 **MR. JACOBS:** Just for, just for --

4 **CHAIRMAN CARTER:** Okay. You may proceed.
5 I think Ms. Brownless would like to have a
6 copy.

7 **MR. JACOBS:** Mr. Chairman, as I'm thinking
8 about this, I may use this for another witness. I'm
9 sorry. Why don't we go ahead and mark it.

10 **CHAIRMAN CARTER:** Okay. For identification
11 purposes, Commissioners, this will be Exhibit 161.

12 Mr. Jacobs, a title?

13 **MR. JACOBS:** Copy of chapter -- of Section
14 362.82 (sic), *Florida Statutes*.

15 **COMMISSIONER EDGAR:** 366. But do we need to
16 mark for a statute?

17 **CHAIRMAN CARTER:** Are you going to use the
18 whole statute or are you just --

19 **MR. JACOBS:** No. We're going to be in
20 Subsection 11.

21 **CHAIRMAN CARTER:** Ms. Helton?

22 **MS. HELTON:** The statute is something I think
23 we might typically officially recognize instead of
24 admitting into evidence. But, I mean, I don't know that
25 we need to get wound up about it.

1 **CHAIRMAN CARTER:** Why don't we just that? For
2 ease of -- we'll just recognize it, but you can still
3 use it for cross-examination.

4 **MR. JACOBS:** Thank you. I'm happy to do it
5 that way.

6 **CHAIRMAN CARTER:** Okay. That's fine. So
7 let's, for this, Commissioners, for your records, 161 is
8 just, that will be a non -- just say it's a void number.
9 So 161 is void. Okay.

10 You may proceed, Mr. Jacobs.

11 **MR. JACOBS:** Thank you, Mr. Chairman.

12 **BY MR. JACOBS:**

13 **Q.** Mr. Floyd, I'd like to direct your attention
14 over to the second page of the handout you just
15 received, in subsection or paragraph (11), and there's
16 some highlighted language there. And I would represent
17 to you that this is, this statute is the governing
18 statute for the FEECA proceedings and process. Have you
19 had a chance to review that?

20 **A.** Yes, I just, I just briefly read over the
21 highlighted section.

22 **Q.** Okay. Now I want to just -- just to go back
23 to my prior question, I believe it was your, your
24 perspective on the whole idea of assessing rate impact
25 in FEECA proceedings that this whole idea of looking at

1 RIM is a front-end loaded -- let me -- front-end
2 focused, let me put it that way, a front-end focus where
3 you look in a prepost (phonetic) scenario and try and
4 understand how the rates are going to be impacted and
5 take steps to do it; is that correct?

6 A. Yes.

7 Q. The statute here says that each utility over
8 which the Commission has rate setting authority shall
9 estimate its costs and revenues for audits, conservation
10 programs and implementation of its plan for the
11 immediately following six-month period. Reasonable and
12 prudent unreimbursed costs projected to be incurred or
13 any portion of such costs may be added to the rates
14 which would otherwise be charged by the utility upon
15 approval by the Commission.

16 So as I'm understanding it, whereas the
17 statute anticipates that you would quantify those costs,
18 present them to the Commission and ask for the
19 Commission to make a prudency determination and then
20 adjust your rates, if necessary, the process that sounds
21 like is underway is that there's a prescriptive -- let
22 me ask this. Do you see that the process that you
23 undertake is consistent with the scope of this, of this
24 process?

25 A. Yes, I do. I, I interpret this to be related

1 to the Energy Conservation and Cost Recovery Clause
2 where periodically the company files projections of
3 costs for the subsequent or following period that the
4 company expects to incur, and then projects those costs
5 associated with audits, conservation programs and
6 implementation of its plan. That's my understanding of
7 what this is referring to here.

8 Q. Okay. I accept that. But it strikes me then
9 if you do a good job with screening out measures based
10 on a two-year payback and RIM, there would probably be
11 little, if any, need to undergo this process, wouldn't
12 there be?

13 A. Well, actually we undergo this process by
14 Commission -- I suppose it's a rule. I don't recall
15 exactly if it's the rule or the statute requires it.
16 But once a year we do project expenses associated with
17 our approved conservation programs and our audit
18 programs.

19 As I described earlier, since our audit
20 program addresses a number of the measures that were
21 screened out in this goal setting process by the
22 two-year payback criteria, then those costs would be
23 reflected in these annual filings that we make.

24 Q. But again -- again, if I'm understanding the
25 ultimate objective of doing those screenings and doing

1 those impact studies, potential studies,
2 cost-effectiveness studies -- I'll get it right -- would
3 be to alleviate your need to approach the Commission
4 because there would be no, no impacts, would there?

5 A. I'm not sure I follow your question. But I
6 can say for certainty that if Gulf promoted these
7 measures through incentives, there would be a need to
8 come to the Commission for rate recovery of that,
9 because --

10 Q. So only -- I'm sorry. I cut you off. Go
11 ahead.

12 A. And that's, there would be quite a bit of
13 expense associated with offering incentives for measures
14 that are otherwise being adopted as free riders. You
15 know, they would become free riders. These are measures
16 that are otherwise being adopted by customers based on
17 having a, you know, short payback.

18 Q. So if you did do incentives, at least you
19 would have this process to come and have those
20 incentives reviewed and done a prudency check; correct?

21 A. Yes. You had just asked me if we promoted
22 those measures, would there be a need to come and seek
23 recovery of that. I indicated yes.

24 Q. Okay. Okay. Same through advertising and
25 marketing and education, same thing on those, on those

1 areas?

2 A. Those are, those are expenses that the company
3 currently incurs and projects through this process
4 associated with our audit programs and other
5 conservation programs.

6 Q. So would there be any harm with balancing on
7 the front end incurring these costs in order to increase
8 penetration rates for particular measures if you could
9 come in this process and justify those costs?

10 A. The -- as I said earlier, you know, the
11 objective of utilizing the two-year payback was to
12 minimize the impact of free ridership, which is one of
13 the requirements in the goal setting process.

14 By incenting measures that are otherwise free
15 riders, effectively the customers are subsidizing the
16 cost of incentives associated with those measures. And
17 that's really what this whole process was trying to
18 avoid, was to unnecessarily be utilizing all of Gulf
19 Power's customers' funds to pay for customers to adopt
20 measures that they're otherwise adopting on their own or
21 adopting without any incentives.

22 Q. I'm looking and I'm struggling, but I don't
23 see where that's, that's addressed in this particular
24 statute. Is that your understanding, that it's
25 addressed in the statute? And I'm not asking you for a

1 legal interpretation, but just generally do you -- this
2 idea that no measure should really see the light of day
3 if it runs the risk of, of having one class of customers
4 support its introduction.

5 **MR. GRIFFIN:** Objection. I think that
6 mischaracterizes Mr. Floyd's testimony. I'm not sure
7 that's an --

8 **MR. JACOBS:** I'll withdraw that. It was, it
9 was a bad question. I'll withdraw it.

10 **CHAIRMAN CARTER:** Okay. I think everybody is
11 getting hungry. I was looking at Ms. Brownless.

12 **MR. JACOBS:** I would, I would not be the one
13 to stand in front of --

14 **CHAIRMAN CARTER:** Ms. Brownless, you're
15 getting hungry, aren't you?

16 **MS. BROWNLESS:** Yes, sir.

17 **CHAIRMAN CARTER:** Yes. Let's do this. This
18 seems like a good enough breaking point. And thanks to
19 our court reporter. She's been doing a yeoman's job
20 there. We'll come back, Commissioners, at 2:15.

21 (Transcript continues in sequence with Volume
22 4.)

1 STATE OF FLORIDA)
 : CERTIFICATE OF REPORTER
 2 COUNTY OF LEON)

3
 4 I, LINDA BOLES, RPR, CRR, Official Commission
 Reporter, do hereby certify that the foregoing
 5 proceeding was heard at the time and place herein
 stated.

6
 7 IT IS FURTHER CERTIFIED that I
 stenographically reported the said proceedings; that the
 same has been transcribed under my direct supervision;
 8 and that this transcript constitutes a true
 transcription of my notes of said proceedings.

9
 10 I FURTHER CERTIFY that I am not a relative,
 employee, attorney or counsel of any of the parties, nor
 am I a relative or employee of any of the parties'
 11 attorneys or counsel connected with the action, nor am I
 financially interested in the action.

12 DATED THIS 14th day of August,
 13 2009.

14
 15 Linda Boles
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 16 FPSC Official Commission Reporter
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