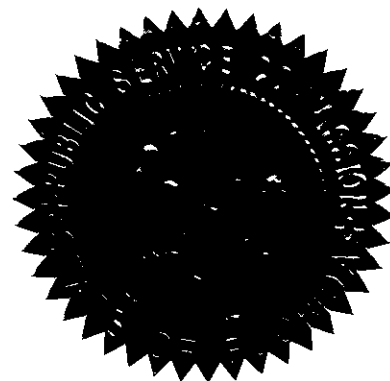


BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

PETITION FOR INCREASE IN DOCKET NO. 090079-EI
RATES BY PROGRESS ENERGY
FLORIDA, INC.

PETITION FOR LIMITED PROCEEDING DOCKET NO. 090144-EI
TO INCLUDE BARTOW REPOWERING
PROJECT IN BASE RATES, BY
PROGRESS ENERGY FLORIDA, INC.

PETITION FOR EXPEDITED APPROVAL DOCKET NO. 090145-EU
OF THE DEFERRAL OF PENSION
EXPENSES, AUTHORIZATION TO
CHARGE STORM HARDENING EXPENSES
TO THE STORM DAMAGE RESERVE, AND
VARIANCE FROM OR WAIVER OF
RULE 25-6.0143(1)(C), (D), AND
(F), F. A. C., BY PROGRESS
ENERGY FLORIDA, INC.



VOLUME 5

Pages 428 through 619

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PROCEEDINGS: HEARING

COMMISSIONERS
PARTICIPATING: CHAIRMAN MATTHEW M. CARTER, II
COMMISSIONER LISA POLAK EDGAR
COMMISSIONER KATRINA J. McMURRIAN
COMMISSIONER NANCY ARGENZIANO
COMMISSIONER NATHAN A. SKOP

DATE: Tuesday, September 22, 2009

DOCUMENT NUMBER - DATE

09920 SEP 25 08

FPSC-COMMISSION CLERK

1 TIME: Commenced at 9:35 a.m.
2 PLACE: Betty Easley Conference Center
3 Room 148
4 4075 Esplanade Way
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P R O C E E D I N G S

1
2 (Transcript follows in sequence from
3 Volume 4.)

4 **CHAIRMAN CARTER:** We are back on the record.
5 Good morning to everyone. Yesterday we left off on the
6 cross-examination of Mr. Sorrick. But before we begin,
7 let's look to the parties and the staff. Are there any
8 preliminary matters?

9 First from the parties, any preliminary
10 matters?

11 **MS. VAN DYKE:** Mr. Chairman, I would just like
12 to introduce the other attorney from my office.

13 **CHAIRMAN CARTER:** Ms. Van Dyke, good morning
14 to you.

15 **MS. VAN DYKE:** Good morning, sir. Ellen
16 Evans.

17 **CHAIRMAN CARTER:** Ms. Evans, welcome to the
18 Florida Public Service Commission. Good deal.

19 Anything further from the parties?

20 Staff, any preliminary matters?

21 **MS. FLEMING:** No, Chairman, I'm not aware of
22 any preliminary matters. The parties and I did meet
23 last night after we adjourned the hearing, and we have
24 an aspirational goal for the number of witnesses that we
25 hope to get through today, and I hope the parties can

1 either meet or exceed that goal for today.

2 **CHAIRMAN CARTER:** All right. We're always
3 looking to do better. We've got to have, as
4 Commissioner Edgar says, some stretch goals. Try to do
5 better.

6 I think when we left last night, it was
7 Mr. Rehwinkel.

8 **MR. REHWINKEL:** Yes, sir.

9 **CHAIRMAN CARTER:** You're recognized. Good
10 morning.

11 **MR. REHWINKEL:** Thank you. Good morning, Mr.
12 Chairman, Commissioners.

13 **CROSS EXAMINATION CONTINUED**

14 **BY MR. REHWINKEL:**

15 **Q.** Good morning, Mr. Sorrick.

16 **A.** Good morning.

17 **Q.** Mr. Sorrick, yesterday as we were winding down
18 there were several questions that I had asked you that I
19 think you indicated your willingness to take a look at
20 some additional information, and one of them had to do
21 with overhaul expense. And I referenced you to
22 interrogatory -- Public Counsel's interrogatory, your
23 response to Public Counsel's Interrogatory 150. Do you
24 recall that?

25 **A.** Yes, sir.

1 **Q.** And before we recommenced today I provided
2 counsel, and I think you probably already had looked at
3 this, but I asked you -- my question to you was, was
4 your 2010 projected overhaul expense at least double
5 that of the overhaul expense in each of the prior four
6 years. That would be 2006, '07 and '08 actual and 2009
7 budget. Do you recall that?

8 **A.** Yes, sir, I do.

9 **Q.** After looking at that, could you verify
10 whether that's true or not?

11 **A.** I can verify. I guess this is where the
12 subject to check to comes in. I've checked and I can
13 verify that that is true.

14 **Q.** Okay. So the amount of \$53,641,870 for
15 overhauls for unplanned and planned outages is the 2010
16 projected amount; is that correct?

17 **A.** Yes, sir.

18 **Q.** Okay. I also had asked you a series of
19 questions about MFR Section C-6. Do you recall that?

20 **A.** Yes, sir, I do.

21 **Q.** And my questions were geared towards the power
22 and operations maintenance expense, O&M expense under
23 your, in your budget responsibility area. Do you recall
24 that?

25 **A.** Yes, sir.

1 **Q.** Okay. And I asked you a bunch of questions
2 subject to check, and I was wondering, did you do any
3 checking?

4 **A.** I did. Primarily the one that I, that I
5 checked on was the -- if you recall, we got into the
6 uncertainty, if you will, on the system control and load
7 dispatch portion, which for 2010's budget was I think
8 right at \$2.1 million.

9 **Q.** Yes, sir.

10 **A.** And that portion is, is not in the PGF budget
11 as it rolls up. And so we -- I do recall the exercise
12 that we went through with the additions and
13 subtractions. The one thing, however, in reviewing this
14 last night that I believe should -- well, let me preface
15 it this way. And so as I recall last night, we got down
16 to about a \$173 million number instead of the
17 \$175 million number. And through checking with some of
18 our finance folks and so forth, I think the one thing
19 that we have failed to add back in to get it to the 175
20 is the 1.9 million in security costs that are coming out
21 of, out of one of the clauses and into base rates to get
22 it back to the 175. That's my understanding.

23 **Q.** Okay. And when you talk about coming out of
24 the clauses, you mean coming out of one of the -- the
25 fuel or one of the recovery clauses?

1 **A.** Yes. Yes. One of the recovery clauses.

2 **Q.** And for what year is it, is it out of the
3 clause and into the base rates? When did that start?

4 **A.** Well, it's my understanding that we're
5 proposing that to go into the base rates in 2010.

6 **Q.** Okay. So I would ask you these questions
7 based on that information and what you learned overnight
8 with respect to the, the dollars on Line 9 of Page 4 of
9 7 of C-6, which is the system control and load dispatch
10 --

11 **A.** Yes.

12 **Q.** -- and other power supply expenses items;
13 right?

14 **A.** Can you repeat that? I'm sorry.

15 **Q.** That's, that's -- Line 9 is comprised in some
16 years of two components, not every year, but in some
17 years of two components, mostly system control and load
18 dispatch, and then every now and then an other supply,
19 very minor expense.

20 **A.** I see. Yes, sir.

21 **Q.** Okay.

22 **A.** I was not able to do the homework with the
23 other homework we were doing to follow up on, on those
24 other power supply expenses, so I --

25 **Q.** Very minor, immaterial numbers; right?

1 **A.** They have been historically, yeah.

2 **Q.** Yes. Okay. My question to you is -- and I
3 understand about the security expenses. So the, the
4 dollars that are, that we could look at for comparative
5 purposes for 2006, '07, '08, '09, and your projected
6 2010 would be those items that we went through in the,
7 in the questioning yesterday minus the Line 9 items on
8 Page 4 of 7 of C-6; is that correct?

9 **A.** I would still agree with that. Yes.

10 **Q.** Okay. So -- okay. Could I ask you to turn to
11 C-41? Do you have C-41 of the MFRs with you?

12 **A.** Yes, sir.

13 **Q.** And I would ask you to turn to Page 149 of the
14 MFRs, which is Page 2 of 18 of Schedule C-41.

15 **A.** Page 149?

16 **Q.** Yes, sir.

17 **A.** Okay.

18 **Q.** Okay. Now is this where -- are these three
19 pages, 2 of 18, 3 of 18 and 4 of 18, are those your
20 responsibility within the C-41 schedule?

21 **A.** Yes, sir.

22 **Q.** Okay. Now can you tell me with respect to
23 your direct testimony what these three pages represent
24 as far as, as the justification that you contribute to
25 Progress Energy's 2010 rate case?

1 A. Yes. These all try to capture the amount,
2 again, primarily of major maintenance, and I think I
3 discussed that in some detail last night, that is, that
4 is due in 2010. And it consists -- we've tried to, I
5 wouldn't say prioritize it, but put these in categories
6 to maybe better understand the groupings. And we do
7 have major maintenance drivers from new units, the newer
8 units on the fleet, and, and I explained last night how
9 the major maintenance intervals on our combined cycle
10 fleet register and we work towards those intervals. And
11 between staffing of the new plants and the major
12 maintenance requirements of those plants, we have about
13 a \$21.3 million need for those activities.

14 Again, on the cost side, when you talk about
15 projects, we've got 15, a little over \$15 million for
16 projects at Crystal River. We've got some Crystal River
17 4 turbine work, we've got some Crystal River 2 turbine
18 work in that \$15 million. And then we have another
19 \$14.7 million for maintenance that's due, again,
20 combustion turbine and combined cycle, but we called
21 (phonetic) that from the existing fleet, which would be,
22 in our definition, pre Hines power block 3. And those
23 are just major maintenance items that are coming due,
24 including some generator work.

25 We've got some material, labor and material

1 cost increases at Crystal River associated with some
2 boiler work, and then the incremental security costs for
3 the 1.2 million or, I'm sorry, 1.9 million.

4 Q. Okay. Now the purpose of this schedule, is it
5 not, to, is to provide your justification for why these
6 different components vary from the benchmark; is that
7 correct?

8 A. That's my understanding.

9 Q. Okay. Now do you know how --

10 A. Well, can I ask a clarifying question? By the
11 benchmark, you're talking the PSC utility benchmark?

12 Q. Yes. I'm talking about the O&M benchmark that
13 is referenced in C-41 here.

14 A. Yes.

15 Q. Okay. Now do you understand how that O&M
16 benchmark is calculated?

17 A. I would say I have an elementary understanding
18 of that.

19 Q. Okay. What is that elementary understanding?

20 A. My, my elementary understanding is that the
21 2006 year level of O&M expenses were taken and a factor
22 was applied, and why I believe this is elementary, I'm
23 not sure exactly all the components of the factor that
24 was applied to escalate the 2006 cost into a, what I
25 would call a projected or benchmark cost for either, I

1 think 2010.

2 Q. Okay. So if -- and I know this is not your
3 schedule, but if you look on Page 147 of the C-41 MFRs,
4 is this, is this what your understanding is, is these
5 factors that are developed here are applied to your 2006
6 numbers to get to 2010 benchmark and then the
7 Commission; is that correct?

8 A. Yes, sir.

9 Q. Okay. So, and what your schedules describe
10 here on Page 3 and 4 of 18 are the reasons why, if, if
11 they do, these elements of the O&M expenses that are
12 under your responsibility, why those expenses exceed
13 that developed benchmark; is that correct?

14 A. Yes. That was our intent.

15 Q. Okay. So the, the description, the -- strike
16 that.

17 So the text on Pages 3 and 4 of C-41, which is
18 on Pages 150 and 151, are your explanations for those
19 variances; is that right?

20 A. Yeah.

21 Q. Yes, sir?

22 A. Well, I mean, let me be clear. What we've
23 tried to do is one of the, one of the problems, one of
24 the practical issues -- I guess not necessarily a
25 problem -- with the benchmark is it did not, it did not

1 consider in my opinion the major maintenance
2 requirements for new generation to the fleet. And that
3 is a large driver for what we have.

4 It also doesn't -- and, again, I'm not an
5 accountant and I still don't want to be an accountant,
6 even though I did some accounting homework overnight.
7 But it, it took a single point in time in 2006 and
8 escalated it and it did not necessarily give room to
9 consider for actually what's going on in the fleet.

10 Q. Okay.

11 A. With new additions and the major maintenance
12 requirements that come due.

13 Q. Well, let me ask you about these items. Now
14 Page 2 of 18 summarizes the variances that are generated
15 by the calculations that you do to get your benchmark
16 number and then compare those to your projected numbers;
17 is that right?

18 A. Yes.

19 Q. Okay. And then on Page 3, let's take in the
20 new generation section, you have a variance, a positive
21 variance of \$21.3 million; is that right?

22 A. Yes.

23 Q. And what that represents is that your 2010 O&M
24 expenses for new, projected O&M expenses for new
25 generation exceed the benchmark for those same

1 categories by \$21.3 million; is that right?

2 **A.** I'm not sure what you mean by the same
3 categories.

4 **Q.** Well, when you develop the benchmark, you go
5 to the 21 -- these same items that go in the new
6 generation category, you take those items and you factor
7 them up by these factors that are on Page 47 -- Page 147
8 to get your benchmark; right?

9 **A.** My understanding was that we took the, just
10 the 2006 number and factored it up, not necessarily the
11 way we've broken it out here.

12 **Q.** Okay. So what I'm trying to figure out is
13 you're trying to compare apples to apples; is that
14 right?

15 **A.** What I'm trying to explain here are the
16 drivers for why the 2010 ask is more than the
17 2010 benchmark.

18 **Q.** Okay.

19 **A.** On an aggregate overall basis.

20 **Q.** I just want to make sure I understand. You
21 have identified an overall variance from the benchmark
22 of \$53.1 million; correct?

23 **A.** Correct.

24 **Q.** Okay. And that's on Page 2 of 18. And you
25 have identified variances within six categories: New

1 generation, retirement, additional outage projects,
2 maintenance on existing fleet, labor and material cost
3 increases and incremental security; is that right?

4 **A.** Yes.

5 **Q.** Okay.

6 **A.** What I'm not sure, however, to your earlier
7 question is if those same categories were, were part of
8 the 2006 benchmark. We, we tried to categorize them in
9 a way that made sense that people can understand what
10 was driving these variances from an overall perspective.

11 **Q.** Okay. So what the -- the language -- what
12 you're describing here in your, in the text of your
13 explanation is not comparing new generation expenditures
14 projected for 2010 to the same types of expenses for
15 2006?

16 **A.** No. We, again, it's my understanding that we
17 just had a 2006 number for production steam, a 2006
18 number for production other, and that's what the
19 benchmark was based on. And when you roll those up in
20 aggregate, we were 51, or, I'm sorry, 53.1 million, and
21 I guess we needed 53 million more dollars. And so in
22 C-41 I tried to explain the categories of the cost
23 drivers to get to that \$53 million variance.

24 **Q.** Okay. Well, on Page 3 of 18 under New
25 Generation, you have a discussion there about the Bartow

1 combined cycle plant. Do you see that?

2 **A.** Yes, sir.

3 **Q.** Okay. And part of the statement is there
4 that, that the costs will increase significantly over
5 2006 levels since 2010 is the first scheduled year of
6 full operation of the plant; is that right?

7 **A.** Yes. It didn't exist in 2006.

8 **Q.** I understand. Are there expenses associated
9 with maintenance of the Bartow plant that you will incur
10 in the first year of operation that you do not expect to
11 reoccur in subsequent years, other types of expenses,
12 maintenance expenses?

13 **A.** I'd say actually I believe it'll be the other
14 way. Because since it's a new plant, since it's a new
15 plant, a lot of the equipment and components are under
16 warranty. And so as we have what we would term infant
17 mortality issues on different components within the
18 plants, as we have other types of issues within the
19 plants, those will generally be covered under
20 manufacturer or contractor warranties for the first
21 year. And so actually the first year O&M -- and our,
22 and we're basing, I'm basing this off of some of the
23 other units, the Hines units that we brought into
24 commercial operation, for example -- the first year O&M
25 expenses can actually be somewhat depressed from what

1 you'll see going forward because warranties handle a lot
2 of issues. Where once you get past that first year of
3 commercial operation, those, those are all on the O&M
4 tab or capital tab, depending on what they are.

5 Q. Okay. So your testimony is that there are not
6 O&M expenses associated with Bartow that, that are a
7 level that you don't expect to reoccur in the future?

8 A. All right. Can you ask that one again?

9 Q. Yes. Your testimony is that there are
10 expenses associated with O&M maintenance at Bartow that
11 are of a level -- let me, let me try it one more time.

12 Your testimony is that there are expenses
13 associated with maintenance at the Bartow plant that
14 will reoccur at the same or greater level in the future?

15 A. I'm still having a hard time weeding through
16 that question. I'm sorry.

17 Q. Okay. Well, I may address that at a later
18 point. Let me move on to, to Page, the bottom of Page 3
19 of 18 and the top of Page 2 of -- 4 of 18.

20 A. Okay.

21 Q. You discuss these additional outage projects
22 and you're discussing a \$9.9 million expenditure related
23 to a major boiler and turbine outage. Do you see that?

24 A. Yes.

25 Q. At the bottom of Page 3 of 18?

1 **A.** Yes.

2 **Q.** And the discussion goes on to the next page,
3 and you, you state, starting on Line 2 of that page,
4 "PEF would normally schedule these maintenance outages
5 in the normal course of its operations, but PEF decided
6 to accelerate them to capture synergies and outage costs
7 with the outage for the FGD." That's flue gas
8 desulfurization?

9 **A.** That's right.

10 **Q.** "And SCR work as well as minimize lost
11 generation instead of taking on additional outage." Do
12 you see that?

13 **A.** Yes. What we, what we basically decided to
14 do, because of our clean air construction, and we've
15 done the same thing at Crystal River 5, those outages to
16 tie in the clean air equipment are about 90 days in
17 duration. And it did not make sense to us to perform a
18 90-day outage in the spring of 2010 on Unit 4 and then
19 wait for a year and perform another 60-day outage on
20 Crystal River 4 when all that could be combined into one
21 outage, therefore, or thereby foregoing the spring
22 turbine outage, turbine and boiler outage in 2011.

23 **Q.** Okay.

24 **A.** And so that's, that's the, excuse me, that's
25 the, what I'm referring to here on the end of Line 3 and

1 Line 4, as well as minimize lost generation due to
2 taking an additional outage. I think Mr. Young talked a
3 little bit about a mid-cycle outage and trying to avoid
4 that with a steam generator replacement. It's a similar
5 concept. We were trying to avoid double outages on a
6 unit when we could fit one within the other.

7 Q. Okay. Isn't it, isn't it true when you talk
8 about accelerate, that the, that this work would have
9 originally been done at a later period in time?

10 A. It would have been done in 2011.

11 Q. Okay. So the work that you did here, this
12 \$9.9 million, was originally going to be done in 2011.
13 It will not now be done in 2011; is that right?

14 A. Not the total amount of the 9.9 million,
15 because part of that is for turbine outage at Crystal
16 River 2.

17 Q. Okay.

18 A. But, but a portion of that would have been.

19 Q. When you say would have been, would have been
20 in '11 --

21 A. Would have been normally -- absent, absent the
22 clean area projects, would have normally been scheduled
23 in 2011.

24 Q. Okay. And what was that portion?

25 A. I don't have the exact breakdown, but, subject

1 to check, it would be probably about six of the
2 9 million.

3 Q. Okay.

4 A. Roughly two-thirds, I think.

5 Q. Has your -- go ahead.

6 A. I'd just like to say one thing. Had we, had
7 we kept it on that schedule though and performed that
8 work in 2011, with the other projects that we see
9 rolling up in 2011, which are actually rolling up to be
10 our overall needs, if you'll remember that was one of
11 the other homework assignments that I had, are, are
12 above the 2010 asked already. So, and so, again, that's
13 very preliminary numbers in where we're at, but this
14 would have just shoved even more into 2011, making 2011
15 an even bigger year.

16 Q. So you had a roughly 25 percent increase in
17 your O&M expense for, from '09 to projected '10, and
18 you're expecting that '11 is going to be even greater?

19 A. Right now our preliminary work that we've
20 pulled together shows 2011 on a -- if you look at it
21 apples to apples from the 175 that we were at yesterday,
22 it's at about 177. And 2012 appears to be right now
23 about 180. And, again, that's driving, that's all
24 driven by the major maintenance requirements on the
25 fleet as we run the fleet.

1 We talked some last night about the different
2 types of outages, and we're beginning on Hines power
3 block 2 and power block 3 to get into the major, the
4 major inspection type outages, which again are the very
5 expensive outages to perform on these combustion
6 turbines. And, interestingly enough, in 2012 we believe
7 we'll start seeing some hot gas path inspections on the
8 new Bartow units already.

9 **Q.** So you didn't expect to, when you, when you
10 put these CTs in, you did not expect to achieve
11 efficiencies in O&M?

12 **A.** We expected to see increases in our major
13 maintenance requirements because we understand these are
14 expensive machines to maintain. Again, the design of a
15 combustion turbine is to literally consume itself. And
16 if you don't do this periodic maintenance, that is what
17 it'll do, it'll consume itself. And instead of being
18 able to take the various parts and components out and
19 refurbish them over a few cycles, you'll burn the parts
20 up in one cycle and you'll be paying full replacement
21 costs to replace parts instead of being able to
22 refurbish the parts and reuse them.

23 So we expected, we expected major maintenance
24 requirements to go up. And we also expected from an
25 operational standpoint, you used the word efficiency, as

1 we continue to operate our combined cycle fleet, we'll
2 see, we'll see efficiencies across our operations. But,
3 again, the major driver here from a cost standpoint is,
4 is the major maintenance on the units.

5 Q. Can I ask you to turn to Page 25 of your
6 direct?

7 A. Yes.

8 Q. And ask you to look at Lines 9 through 22.

9 A. Okay.

10 Q. Okay. Is it your testimony here that the
11 costs have nothing to do with mere escalation?

12 A. No. My, my point here was that we have
13 \$7.3 million of additional costs, that some of that
14 portion of 7.3 can be attributed to escalation.

15 The other point that I make is the large part
16 of that 53 million is driven by, by basically the
17 physical requirements to maintain the equipment. That
18 it's not -- I'm not standing behind saying we're, we
19 need \$53 million because our costs have escalated that
20 much. That's, that's not what I'm saying. I'm saying
21 that we have these requirements to perform the major
22 maintenance on the fleet. And certainly some of those
23 costs have escalated, but a lot of this is, is based on
24 what's coming due and the outages that we need to
25 perform.

1 **Q.** Is it your testimony -- have you done any
2 studies that show that maintenance costs have increased
3 above CPI?

4 **A.** I personally have not done any studies to that
5 effect.

6 **Q.** Okay. Has the company done any that you're
7 aware of?

8 **A.** Not that I'm aware of.

9 **Q.** Okay.

10 **A.** But the thing I'd say again is it's not just
11 maintenance costs. It's the type of maintenance and the
12 timing of maintenance as it comes due. It would be one
13 thing to have a, a year full of combustion inspections.
14 It's another when you get into this cycle where you've
15 got a lot of hot gas paths and major inspections that
16 are planned on top of that. So that's where I'm not
17 saying that that's a cost escalation. I'm saying that's
18 an additional maintenance requirement to the fleet.

19 **Q.** So your testimony here is that CPI is, is not
20 appropriate to use for benchmarking because facts and
21 circumstances are what's driving the cost?

22 **A.** My testimony here is that if you just take a
23 number and a point in time and escalate it, whether it's
24 by CPI or, or any other escalation -- well, not any
25 other, but other escalation indexes to that extent, it

1 may not cover the whole picture. It may not cover the
2 new equipment that you've installed and now have to
3 maintain. It may not cover the types of maintenance
4 that you have to do.

5 **Q.** What is your definition of supporting
6 documentation with respect to justifying your O&M
7 expenses?

8 **A.** My definition would be the documentation that
9 we use to, to identify the cost.

10 **Q.** And did you provide that documentation as part
11 of your direct testimony?

12 **A.** I provided the documentation that was asked
13 for in the, in the discovery phase.

14 **Q.** Okay. But not as part of your, what you filed
15 as your, with your testimony?

16 **A.** I'm not sure I follow.

17 **Q.** Well, do you consider the explanation on C-41
18 to be your documentation for the increase in O&M
19 expenses?

20 **A.** I would say I provided our documentation in
21 the MFR preparation and the, and the discovery.

22 One of the things that we have from our
23 experience in operating and maintaining the fleet is we
24 have a, we have a lot of historical knowledge and
25 understanding of what different things cost. So I know

1 there were some questions raised of why we don't have
2 either invoices or, or formal quotes for a lot of our
3 work. And it just doesn't make sense to us to
4 necessarily go out for a formal quote for hundreds of
5 lines of maintenance when we have a good understanding
6 of what that cost is.

7 It's almost like saying how long is it going
8 to take to drive from, from St. Petersburg to
9 Tallahassee? Well, by experience we know it takes four
10 to four and a half hours. We don't necessarily need to
11 go out and ask a lot of people to confirm that.

12 **Q.** Let me ask you to look on Page 26 of your
13 direct.

14 **A.** Okay.

15 **Q.** And take you down to Line 21 and 22. It
16 states there, the maintenance work in 2010, "The
17 maintenance work in 2010 under the LTSA is estimated at
18 \$4.6 million." Do you see that?

19 **A.** Yes.

20 **Q.** And the LTSA is the Long-Term Service
21 Agreement for Bartow?

22 **A.** Yes.

23 **Q.** Is that the warranty that you referred to, or
24 no?

25 **A.** No. We have a, we have a Long-Term Service

1 Agreement with Siemens to perform the major maintenance
2 on the engines at Bartow.

3 Q. Okay. Now let's go back to C-41, Page 3 of
4 18. Do you have that?

5 A. Yes, sir.

6 Q. Now your -- you discuss the LTSA.

7 A. On Line 21, is that were you're at?

8 Q. Yes. Well, in that paragraph there. I think
9 it starts further up.

10 A. Yeah, in that paragraph. Yeah. Let me, if
11 you don't mind, read that for a second.

12 (Pause.)

13 Yes.

14 Q. Okay. Now do you recall being asked in
15 discovery to provide supporting documentation for this
16 LTSA expense?

17 A. I do.

18 Q. And is it true -- isn't it true that the
19 response referred us to look at this C-41, Page 3 of 18,
20 for that?

21 A. I believe we had two responses or two
22 requests.

23 Q. Okay.

24 A. And one did reference back to C, C-41. The
25 other one pulled out the information from the LTSA in

1 line item form and provided that information on line
2 item form from the LTSA.

3 Q. Okay.

4 A. We typically would not make a contract like an
5 LTSA public. Those are typically held very close to the
6 vest for business purposes, not only from our standpoint
7 but also from the OEM standpoint.

8 Q. OEM meaning?

9 A. Original equipment manufacturer.

10 Q. Okay.

11 A. Which in this case would be Siemens.

12 Q. All right. So is it your testimony that Page
13 3 of 18 is supporting documentation for the \$4.6 million
14 LTSA cost?

15 A. I'd say that's part of the supporting
16 documentation. Again, we pulled out what the line items
17 are that make up that \$4.6 million in another, in
18 another discovery request and provided that.

19 Q. Do you know what the number of that discovery
20 request was?

21 A. Offhand I do not.

22 Q. Okay. Can you tell me -- can the, can someone
23 look at what's on 3 of 18 with respect to the LTSA and
24 determine how the estimate that's, that's in your
25 projected 2010 expenses, how that was developed?

1 **A.** Can you ask that again?

2 **Q.** Yes. Can, can someone look at the description
3 here of the LTSA related expense of \$4.6 million, and
4 can they tell from this to the extent it is supporting
5 documentation how that number was developed?

6 **A.** Probably not in detail. But the answer to the
7 other piece of discovery they could.

8 **Q.** Okay. Let me ask you hypothetically, if you,
9 if you have a major repair done to your car, like a
10 transmission replacement that is not under warranty,
11 would you require that to be provided -- would you
12 require to be provided some form of estimate that
13 provides some level of detail as to how the cost
14 estimate was determined?

15 **A.** It depends on the situation.

16 **Q.** Okay. Well, in that --

17 **A.** And when I say that is if, if I had, if I had
18 a fleet of, let's say, 20 or 30 service trucks and I
19 used a garage or we had our own mechanics that perform
20 that, then, no, I wouldn't, because I would have a good
21 understanding of the cost already.

22 **Q.** Well, in my hypothetical, if you took that car
23 to a, to a place that you had never been to before.

24 **A.** Yes. Yeah. Then we would certainly, I would
25 certainly want an idea of what it was going to cost.

1 **Q.** Isn't it true that when the company was asked
2 for supporting documentation for the \$63 million of
3 increased costs in this area, that you, the response was
4 to see Page 3 of 18 of MFR C-41?

5 **A.** That may have been one of the responses. I
6 know that we received several other requests and we
7 provided a lot of discovery on, on different cost basis.

8 **Q.** Okay.

9 **A.** And I -- and, again, I know that some of the
10 responses may not have met some, some of the parties'
11 expectations.

12 **Q.** Let me ask you about 2009. What is in the MFR
13 is a budget for 2009 in your area. And I think that,
14 for the areas that we talked about, excluding the Line 9
15 on Page 4 and any security costs, which I don't think
16 were in there in 2009; correct?

17 **A.** Correct.

18 **Q.** I think those sum to 137,304,000. Does that
19 sound right, subject to check?

20 **A.** To be honest with you, I left the sheet of
21 paper that I wrote all that down on last night. So,
22 subject to check, I would --

23 **Q.** Okay.

24 **A.** I'd prefer not to add those back up in my, in
25 my head again.

1 **Q.** I understand. And I won't make you do it on
2 the stand.

3 Has that number changed in any way? Is that
4 still your budget?

5 **A.** The '09 budget?

6 **Q.** Yes.

7 **A.** We, we are right now forecasting to come in
8 about \$3.5 million below that.

9 **Q.** Okay. Why is that?

10 **A.** Because of cost cutting initiatives that we've
11 done, primarily what I would call belt tightening type
12 activities with, with travel and, and more discretionary
13 type spending.

14 **Q.** Did you do a similar belt tightening for 2010
15 projections?

16 **A.** We have looked at rolling those forward, yes,
17 sir.

18 **Q.** So what would that impact be?

19 **A.** Well, that's included in our number, in our
20 ask.

21 **Q.** Okay. Well, let me, let me then ask you this.
22 My assumption was that, that when you did the MFRs, the
23 C schedule for the MFRs, you developed, or you had a
24 budget for \$136 million, subject to check.

25 **A.** Subject to check, yes, sir.

1 **Q.** And the same process or the same processes
2 that you used to do that generated a 2010 projected
3 number of about 173.7 million, subject to check,
4 ignoring the security stuff.

5 **A.** Yeah.

6 **Q.** Is that correct?

7 **A.** Yes, sir.

8 **Q.** Okay.

9 **A.** Okay. I see what you're getting at.

10 **Q.** So my question is that now that you've done a
11 little more belt tightening and looking at 2009, what
12 has been the carryover of that process to the projected
13 2010?

14 **A.** Yeah, I see what you're saying. We, we have
15 not changed anything in the C-41. We, we will continue
16 to look at managing our cost, as we have in our regular
17 course of business, not just in 2009. We've, we've
18 taken the long view here and we continually try to
19 manage our costs and keep our costs low. For one thing,
20 just from a selfish standpoint, from the generation
21 fleet, the, the better we can manage our costs, the more
22 maintenance we can perform on our equipment, the better
23 it's going to perform.

24 **Q.** So I guess my question to you is, have you, is
25 there a, is there a different number -- would -- let

1 me -- well, let me step back and ask it to you this way.

2 Would, wouldn't it be fair for the customers
3 to expect that, for purposes of setting rates that your
4 request to the Commission in this area of O&M expense
5 would be based on what you expect to spend, not what you
6 might have filed on March 20th?

7 **A.** I would say that would be fair.

8 **Q.** Okay. So is there a new number in that --

9 **A.** No, I don't have a new number at this time.

10 **Q.** Okay. Has one been looked at at some level?

11 **A.** The number we're still working towards in my
12 department is this, I think you've got it written down,
13 the 173.7.

14 **Q.** Seven. Yeah.

15 **A.** Okay. Plus the 1.9 million in security costs,
16 subject to check.

17 **Q.** Okay. Okay. So your testimony is you've
18 looked at and you've tightened the belt in 2009, but you
19 haven't done that for 2010?

20 **A.** We haven't finished 2009 yet, so --

21 **Q.** But your latest view of the 2009 budget is
22 that you're going to come in some 3-point something
23 million dollars lower than the budget?

24 **A.** We're working that way. Yes, sir.

25 **Q.** Okay. But you don't know similar kind of

1 processes generating a different number for 2010?

2 **A.** No, we have not gone back, at least in my
3 department, to, to look at that, the implications for
4 2010 yet.

5 **Q.** Okay. Do you know whether in the process of
6 looking at a 2010 budget whether there were any expenses
7 that were planned for, originally planned for 2009 that
8 were deferred into 2010?

9 **A.** I'm not aware of any. I mean, that's a
10 difficult question to answer because we do have moving
11 parts back and forth. And part of what drives that is
12 when you, when you make a forecast of how much a
13 particular unit is going to run, especially a simple
14 cycle combustion turbine, that there are a lot of
15 variables in that. I mean, there could be variables on
16 how the baseloaded fleet performs. There are variables
17 on how our neighboring utilities perform. The weather
18 can be a variable. And so there are certainly times
19 that you'll see puts and takes.

20 So, for example, a unit may run a lot more
21 than you expect it to because of a certain issue that's
22 specific to that unit, and its maintenance pulls back
23 into a current year or a, or a earlier year. And you
24 may have a unit that, that doesn't quite run as much as
25 you expect, and so that may fly back. So I'm not sure I

1 can answer that with the information I have right here.

2 Q. Okay. Do you -- isn't it true that the
3 company -- well, I'm not going to ask that.

4 MR. REHWINKEL: Mr. Chairman, those are all
5 the questions I have of Mr. Sorrick on his direct.

6 Thank you, Mr. Sorrick.

7 THE WITNESS: Thank you.

8 CHAIRMAN CARTER: Thank you, Mr. Rehwinkel.

9 Ms. Bradley.

10 MS. BRADLEY: No questions.

11 CHAIRMAN CARTER: Thank you.

12 Mr. Moyle.

13 MR. MOYLE: Yes. Thank you, Mr. Chairman.

14 CHAIRMAN CARTER: You're recognized.

15 CROSS EXAMINATION

16 BY MR. MOYLE:

17 Q. I just want to follow up on that point that
18 Mr. Rehwinkel raised with you about your 2009 budget.
19 As I understand it, you had testified that because of
20 belt tightening there was approximately a \$3 million
21 savings; is that right?

22 A. About 3 million.

23 Q. Okay.

24 A. About 3.5.

25 Q. And you also indicated that you anticipate

1 that would be carried forward in 2010; correct?

2 **A.** I would anticipate that we'll continue looking
3 at, at how we can manage our costs better on an ongoing
4 basis. But I'd also say that's nothing that we just
5 started. We've been, we've been trying to do that for
6 the last, I mean, since I've been involved in management
7 since like 1994. So that's been, that's been what we've
8 tried to do is manage our costs the best we can.

9 **Q.** As we sit here today, you're not aware of
10 anything that would prevent you from carrying forward
11 that \$3 million savings into 2010, are you?

12 **A.** I think there are some of the details in that
13 that I don't believe are going to be sustainable. If
14 you cut out certain expenses that aren't sustainable,
15 then, then in time it may be a temporary solution, but
16 it doesn't necessarily translate into a permanent
17 ability to do that. So I guess I say that to say not
18 exactly. I mean, it may, there may be things in there
19 that don't carry over.

20 **Q.** Right. I guess what I was trying just to pin
21 down and focus on is, as we sit here today, you're not
22 aware of anything specifically that's going to say or
23 dictate, you know what, that \$3 million savings is not
24 available in 2010 because of X or Y; correct?

25 **A.** I think, I think -- I can't agree with that,

1 because we, we have gone into areas and cut things like
2 travel for regional engineers and travel for shop
3 surveillance on, on, on parts that are being refurbished
4 during major maintenance outages. And with the amount
5 of major maintenance that's coming up, it's not
6 sustainable to depress those levels of travel expenses
7 if we want to make sure that we're getting the best job
8 in the shops from a technical standpoint.

9 We'd all love to be able to send our parts to
10 vendors and just let them do the repairs and not have to
11 check on them, but that's really not the world we live
12 in. We have to put technical experts in those shops.
13 And so this year we've been able to depress the travel
14 for things like that. But as we go into more and more
15 major maintenance and more and more parts refurbishment
16 requirements, we're going to have to put people in those
17 shops.

18 So that's an example that I just can't agree
19 that, that that's, it's necessarily going to be an
20 automatic rollover from year to year.

21 Q. And just so I'm clear with respect to that
22 answer, you have high quality vendors, correct, that you
23 contract with?

24 A. We do.

25 Q. But, but you, when you have a part that needs

1 to be repaired by them, you're not comfortable just
2 shipping it back to them and asking them to make the
3 repair without also sending personnel to go along with
4 the part to make sure the repair is done properly?

5 **A.** Well, let's take, let's take an example of a,
6 of a first stage bucket and an advanced technology
7 combustion turbine. A set of those will cost between
8 3.5 and \$4 million to replace. A repair on those will
9 cost roughly four or five hundred thousand dollars. And
10 if they get those wrong, then it can crash the whole
11 machine. And so what we try to do -- we certainly go
12 into our shops and we have a process to approve a shop
13 to be able to work on certain components. And we have
14 some shops that we allow to work on, on some components
15 and not other components because that's where their
16 strengths lie. So we do have a technical process to
17 qualify a vendor's shop.

18 But we also, I guess, live by the, by the
19 motto of trust but verify. We know they can do the
20 work. But when you're talking about the kind of money
21 and if they get something wrong, the stakes are too high
22 to just let them have their way.

23 Because I'd say even though we have high
24 quality vendors, they're trying to cut their costs in
25 ways too, and we need to make sure that we get a quality

1 product back. I don't think it would be very prudent
2 otherwise to just let them ship stuff back if we don't
3 understand the quality of it.

4 Q. The, let me direct you to some of your
5 testimony, if I could. On Page 1, on Line 18 you talk
6 about, and I quote, you recommend retirement of
7 generation facilities. I didn't see anything in your
8 testimony in which you were talking about specific dates
9 of retirement for generation facilities. Am I correct
10 in that?

11 A. That's correct. I work with our system
12 planning folks on a myriad of issues, and that is one.
13 I give input and consideration for new units and what
14 the operational and maintenance requirements would be
15 for, for whatever new units they consider. And I also
16 talk to them about our fleet in general, the condition
17 of the fleet, what units may or may not be ready for
18 retirement. So I'd say that's also a Mr. Crisp
19 question, but that's what I was alluding to.

20 Q. Okay. You talk about part of your
21 responsibilities are to attract, hire and retain
22 employees on Page 2 your testimony, Line 8. I'll just
23 direct you to it.

24 A. Yes.

25 Q. Wouldn't you agree or haven't you found that

1 in this economic environment with unemployment at high
2 levels that the ability to hire and attract employees
3 has, has increased?

4 **A.** Not necessarily. I'll give you an example.
5 Because some of these -- and, again, it depends on the
6 position, granted, but some of our positions require an
7 extensive technical knowledge. And we've had a position
8 open for probably -- well, I know it was open for over a
9 year to hire a principal electrical engineer to help us
10 with generators and large motors. And you would think
11 that, with the situation as it is, that there would be a
12 lot of viable candidates for that, that position. It
13 just hasn't been so. So I wouldn't necessarily agree
14 with that. Some positions, yes, but not all positions.

15 **Q.** You would agree from a, from a general market
16 standpoint that there's -- you know, you referred me to
17 a specialized position. I'm just trying to understand
18 from a general market standpoint, you would agree that
19 there is quite a bit of supply right now in terms of the
20 workforce, correct, as compared to past years?

21 **A.** Well, quite a bit's relative. So I would say
22 there are people out looking. But I would also say a
23 lot of people are more and more satisfied with what they
24 have, and, and the job they have and the known that they
25 have in their company in an uncertain time is more

1 attractive I think to a lot of people than jumping to a
2 brand-new company and an unknown situation.

3 Q. So with respect to retainage, given your
4 answer, you would indicate that, given this economic
5 environment, you'd find it easier to retain people; is
6 that right?

7 A. I'm not sure easier, if I would use the word
8 easier. We've had, we've had some people decide that
9 they want to leave. And so I think it just depends on
10 everybody's personal situation. I do believe that most
11 people that have a job want to keep their job during
12 this time.

13 Q. Do you know what the unemployment rate
14 currently is in, in Florida?

15 A. I don't. I heard some discussion on that
16 yesterday, and I don't remember what was shown to
17 Mr. Dolan.

18 Q. On Page 4, Line 20, you use the term "foreign
19 fuel," and I was curious as to what you were trying to
20 communicate by the use of the term "foreign fuel."

21 A. Well, the Bartow steam plant burns Number 6
22 fuel oil, which is a bunker C type, type fuel oil, and
23 we basically replaced that with domestic natural gas.

24 Q. So would, would it maybe be more accurate to
25 indicate to reduce the dependence on oil as compared to

1 foreign fuel? Is that right?

2 **A.** I think either one of those is fair.

3 **Q.** Okay.

4 **A.** Yes.

5 **Q.** And as we sit here today, what percentage of
6 oil does Progress have in its system, oil-fired
7 generating units?

8 **A.** I don't have that information. I know that
9 we, we have a fair amount of peakers that are all
10 running on Number 2 fuel. The Anclote unit, we've made
11 modifications to it where it can burn natural gas up to
12 40 percent of its capacity, and we're able to dispatch
13 that unit more and more on natural gas and get off
14 Number 6 oil there. But I don't have the percentages
15 for you. That would be something Mr. Weintraub could
16 probably provide, or maybe did in his testimony. I
17 don't know.

18 **Q.** Let me -- I want to ask you about the Bartow
19 unit. And does it help if I refer you to pages of your
20 testimony or can we just have a conversation?

21 **A.** We can have a conversation, and if I need a
22 reference, I'll ask for it. How's that?

23 **Q.** Okay. That'll save us a little time.

24 **A.** Okay.

25 **Q.** Bartow is a four-on-four-on-one; correct?

1 **A.** It's a four-on-one, which means it's got four
2 combustion turbines that feed one steam turbine. And
3 so, so really the configuration, you have four
4 combustion turbines that feed four heat recovery steam
5 generators or four HRSGs is what we call them that
6 create the steam to go into one steam turbine. So you
7 have four CTs on the site, you have one steam turbine on
8 the site, you have five generators on the site.

9 **Q.** Okay. And I did -- in your testimony I guess
10 you say four times four times one. I guess that
11 confused me.

12 **A.** The second four would be the HRSGs. Yes, sir.

13 **Q.** Okay. And that's Page 6, Line 11, if you need
14 to look at it, refer to it.

15 You could replicate that, could you not, if
16 all of the sudden, you know, your company needed another
17 12, 1,300 megawatts in power, you know, you could,
18 assuming you could get site certification and need
19 determination, you could replicate that four-on-one
20 design; correct?

21 **A.** I guess if your question is from a
22 hypothetical could we build another four-on-one or could
23 any company go build another four-on-one, the answer
24 would be yes, you could, from a hypothetical.

25 **Q.** Right. And even beyond a hypothetical. I

1 mean, you did it in Bartow. You could do it.

2 A. Yeah. Practically you could -- any company
3 with the means could go build a four-on-one.

4 Q. Okay. And the cost on this, the capital cost
5 roughly \$800 million; is that correct?

6 A. I believe that's true.

7 Q. Are you, do you have any information, are you
8 aware, do you track the purchased power agreements that
9 you all have?

10 A. No, I really don't.

11 Q. So you don't -- you're not aware of purchased
12 power agreements that have been turned back to the
13 company in the amount of approximately 250 megawatts?

14 A. No, I'm not. That's, that's out of my area of
15 responsibility.

16 Q. Okay. Do you have any -- I was going to ask
17 you a question about the cost of the four-on,
18 four-on-one unit as compared to the, you know, the Levy
19 project. Do you have any information about the Levy
20 project capital costs?

21 A. I do not.

22 Q. So if I told you it was 17.2 billion, you
23 wouldn't have information one way or the other on that?

24 A. No. I --

25 Q. If you assumed it was 17.2 billion, you would

1 agree that, that there's a lot more four-on-ones that
2 could be built from a capital aspect than Levy; correct?

3 **MR. BURNETT:** Objection, Mr. Chair. This is
4 getting into system planning and economics and the
5 economic evaluation, and this witness testified he has
6 no knowledge.

7 **CHAIRMAN CARTER:** To the objection, Mr. Moyle.

8 **MR. MOYLE:** I'll move on.

9 **CHAIRMAN CARTER:** Okay.

10 **BY MR. MOYLE:**

11 **Q.** Did you happen to read other witnesses'
12 testimony?

13 **A.** No.

14 **Q.** So let me ask you to assume something. Assume
15 that Mr. Dale Oliver -- you know Mr. Oliver; right?

16 **A.** I do know Mr. Oliver.

17 **Q.** Okay. And assume that he indicated in his
18 rebuttal testimony that, that O&M costs are reasonable
19 on their face because they are at the Commission's O&M
20 benchmark. Does that, does that seem to make sense to
21 you?

22 **A.** I guess I'd prefer not to assume that that's
23 what Mr. Oliver said, since I haven't read any of his
24 testimony or rebuttal testimony. And I would add
25 further that I don't know the specifics of Mr. Oliver's

1 request or, for that matter, his business.

2 Q. All right. Well, let's just leave, leave him
3 out of it. Let's leave Mr. Oliver out of it.

4 And would you agree that it, that the O&M
5 benchmarks established by this Commission set reasonable
6 levels for O&M?

7 A. Again, I believe, and I believe I answered
8 this previously, I believe what the O&M benchmark misses
9 as it specifically relates to my business is the
10 addition of new units and the additional major
11 maintenance requirements that are brought in for those
12 units.

13 I, I would say in a hypothetical, if you had,
14 if all your costs were constant and, and there's no
15 variability with new scope or anything like that, then I
16 would believe that they would be reasonable. However, I
17 don't believe the utility benchmark takes into
18 consideration new scope and new requirements.

19 Q. So, so you had indicated in response to a
20 question by Mr. Rehwinkel that you weren't real sure of
21 the, of all of the components and the inputs with
22 respect to the, to, to the benchmark. What
23 understanding, if any, do you have with respect to new
24 units coming in, how it's treated with respect to the
25 benchmark?

1 **A.** Actually, actually what I think I responded to
2 Mr. Rehwinkel was I was not, I was not aware of all the
3 components of the factor that was made up.

4 **Q.** Fair enough.

5 **A.** And so my understanding, again, elementary
6 understanding of this is that you take the 2006 number
7 and you escalate it by these factors. And I don't
8 believe that takes into consideration if you add new
9 units or new scope or scope, again, from a combined
10 cycle standpoint that start rolling in with these big
11 hot gas paths and majors into the years. That the only
12 way in my opinion from a mathematical standpoint that
13 could be handled is if you had that scope in 2006, if
14 you had the same exact scope in 2006 and you escalated
15 it, then that would be a reasonable proxy for what you
16 should see with the same exact scope in 2010.

17 And I guess what I've tried to convey through
18 my testimony and through answering, especially
19 Mr. Rehwinkel's questions, is we, we certainly don't
20 have the same amount of scope in 2010 as we had in 2006.

21 **Q.** Are combined cycle units typically serving
22 intermediate load?

23 **A.** Typically I would say intermediate to
24 baseload.

25 **Q.** Okay. And just so we're clear, when we say

1 intermediate or baseload, just explain that.

2 **A.** I would define baseload to be a unit that is
3 on as much as it can physically run. Crystal River 3 is
4 a good example of that. Once you get beyond the nuclear
5 unit, then a lot of that is driven by the dispatch
6 order, fuel costs. And so you'll see some combined
7 cycles that unit, that run quite a bit because of the
8 low cost of natural gas right now. Typically Crystal
9 River and the coal units, 1, 2, 4 and 5, will be
10 baseloaded. So that means that they turn on and don't
11 come off too much. They may ramp down in load some for
12 low load periods at nights and maybe the weekend, but
13 they don't come off a whole lot.

14 **Q.** You spent some time in your testimony,
15 specifically with respect to O&M, talking about combined
16 cycle and combustion turbine units; correct?

17 **A.** Yes.

18 **Q.** Okay. And I think you indicate that there's
19 variability or ranges in which the combined cycles can
20 operate. And I guess what I was going to ask you is
21 isn't it largely true that with respect to combined
22 cycles, given that they're serving intermediate and
23 baseload, that the maintenance for, for them is
24 analogous to the length of time it takes to drive from
25 Tallahassee to St. Pete?

1 **A.** The maintenance is driven -- certainly if you
2 turn on a combined cycle and you let it run 8,000 hours
3 a year, then you know you're going to have a combustion
4 inspection every year. And that would make, make
5 planning much, much easier. As they run more or less,
6 if you run 6,000 hours a year, if you run 8,200 hours a
7 year, you're compiling major maintenance at different
8 rates.

9 Now what makes this somewhat variable is what
10 is the next maintenance interval that you're about to
11 trigger? Is it a hot gas path, is it a combustion
12 inspection, is it a major inspection?

13 **Q.** You would agree that, that it's easier to
14 predict the operations and the run time of combined
15 cycles than it is combustion turbines; correct?

16 **A.** Simple cycle units?

17 **Q.** I'm sorry. Simple cycle.

18 **A.** As a general statement, I would agree with
19 that. However, I think there are a lot of different
20 variables that go into even that -- I mean, simple cycle
21 units, their position on the grid, what other ancillary
22 services that they may provide in the form of system
23 support or in the form of fast start to cover reserve
24 calls -- generally I would agree with that. But weather
25 and different system conditions can, can change the

1 best-laid plans.

2 Q. Let me direct your attention to your direct
3 testimony, Page 26, Line 4. And actually it's just the
4 top of that page, sentences 1 through 5. If you'd take
5 a quick look at that.

6 A. Okay.

7 Q. The, the use of the terms "unique mechanical
8 and operational characteristics of CC," which I presume
9 means combined cycle; correct?

10 A. Yes, sir.

11 Q. And CT means combustion turbine; correct?

12 A. Yes, sir. And I would use, I would further
13 clarify that to mean simple cycle combustion turbine.

14 Q. Okay. And it was my impression that these
15 machines made by major vendors were pretty much the
16 same, whether you had one operating in Florida or Texas
17 or, or California, and -- would you agree with that?

18 A. I would agree with that if you had the same
19 makeup. Our, our fleet of combustion turbines, we
20 have -- bear with me for just a second. If you'll
21 indulge me here.

22 Q. Take your time.

23 A. We have, we have nine or ten different types
24 of combustion turbines on our fleet that all carry
25 unique characteristics. An example would be we have

1 several aero-derivative based units. Those are Pratt &
2 Whitney type engines that are more jet engines that have
3 been modified for power turbine applications that are
4 fast start units. They can go from the push of a button
5 to be at baseload at 40 megawatts within five minutes,
6 and they serve one application. And the maintenance
7 requirements on those units are different than a 70A
8 with a dry load noncombustion system that you start it,
9 it goes through a purge cycle, takes 25 minutes to half
10 an hour to hit the line, and then you ramp it up a lot
11 slower. It's a much bigger machine. Those are heavy
12 frame units.

13 So I can't just agree with the general
14 statement -- and maybe I'm misunderstanding it. But a
15 combustion turbine is a combustion turbine whether it's
16 in Florida or in Texas. There are a lot of differences.

17 Q. I guess what I'm trying to understand, I think
18 you've explained it, is when you talk about unique
19 mechanical and operational characteristics of these
20 units and refer to a combined cycle and combustion
21 turbine, you're not suggesting that the combined cycles
22 and combustion turbines that are deployed on Progress
23 Energy Florida's system are unique in that they're one
24 of a kind coming out of a manufacturer; correct?

25 A. Right.

1 Q. You're saying that you have a wide variety of
2 them.

3 A. Yes.

4 Q. Therefore, you have, it's kind of like -- to
5 use TVs. If you had four TVs in your house, you know,
6 you might have them from four different manufacturers;
7 correct?

8 A. Well, even, even beyond that. You may have,
9 you may have an old tube, tube TV with a new plasma
10 screen with something in the middle.

11 Q. Let me direct you to Page 24, and you have on
12 Line 3 a statement about reserve calls.

13 A. Yes, sir.

14 Q. And you say that you, Progress Florida
15 represents about 25 percent of the state's generating
16 capacity but was responsible for only 12 percent of the,
17 of the reserve calls. What is a reserve call?

18 A. A reserve call would be when a unit trips, a
19 call from neighboring utilities for reserves to cover
20 the trip of that unit.

21 Q. Do you know, who has the most reserve calls,
22 if you know?

23 A. I don't know that.

24 Q. You would agree, would you not, that when you,
25 when a unit trips, that's an unforced (sic.) outage; is

1 that right? I'm sorry. A forced outage typically?

2 **A.** It may not turn into a forced outage. It
3 would be a, certainly a system upset, an unplanned
4 system upset. But it may not -- so, for example, you
5 may have, you may have a situation in the power plant,
6 let's call it one of the coal units, and you may trip a
7 piece of equipment that will trip the boiler off line.
8 Well, there's enough residual energy in the steam system
9 that the turbine may not immediately trip. And if it's
10 as simple as starting another piece of equipment, you
11 may be able to get the boiler back before the unit
12 trips. That wouldn't necessarily turn into a forced
13 outage.

14 Another example would be if the unit does trip
15 and come all the way down, you may understand quickly
16 why the unit tripped, and it may not, may not turn into
17 a forced outage. It's a unit trip that you can turn
18 around quickly.

19 **Q.** Okay. But with respect to maintaining the
20 system, reserve calls generally are measured by in
21 excess of a 200-megawatt loss, is that right, according
22 to your testimony?

23 **A.** Yes.

24 **Q.** Okay. And in terms of managing the system,
25 you would also agree, would you not, that the ability to

1 shed load through interruptible customers is a, is a
2 benefit to the company?

3 **A.** I'd say you're getting out of my area of, of
4 expertise there. I would characterize my job as trying
5 to make sure from an unplanned basis that never happens.
6 My job is to try to keep as, enough generation on to
7 match whatever load we have. So I --

8 **Q.** So you don't consider yourself qualified to
9 answer, to answer that question?

10 **A.** No, I don't.

11 **Q.** Let me -- I have a few other things I just
12 want to ask you about on your direct testimony.

13 **A.** Okay.

14 **Q.** You refer to the HPI Program. And --

15 **A.** Can I get to that?

16 **Q.** Eighteen, Page 18 is where it is.

17 **A.** Okay.

18 **Q.** The Number 5, you talk about an event deemed
19 by management to be significant by virtue of the value
20 of lessons learned. I was a little unclear as to what
21 you were trying to communicate there. Would you give me
22 an example of a, of a Type 5 event, please?

23 **A.** Yes. You may have -- well, if you look at a
24 safety event, for example, it may not result in an OSHA
25 recordable accident, but it may have significant, it may

1 be a significant near miss, and it may have been
2 precipitated by a human performance activity that you
3 certainly want to get out to the rest of the fleet
4 because it could have caused a significant event. And
5 I'm being vague because I don't have a ready example.

6 But it's not inconceivable that if a person
7 was working with an electrical piece of equipment and
8 they manipulated the equipment where an arc flash
9 occurred but the employee didn't get hurt, okay, by, by
10 the letter of the law -- not the law -- by the letter of
11 our, of our process and program, we would not have to
12 call that a significant human performance event because
13 an OSHA recordable event didn't happen, it didn't cause
14 asset damage more than \$25,000, and so forth.

15 But that may be something that we want to say,
16 hey, everybody in our system here in Florida and in the
17 Carolinas needs to know that when you take this action,
18 it may cause an electrical flash and the next employee
19 may not be as lucky. He may not have been standing just
20 off to the side enough.

21 And so that would be one that management would
22 say, no, we need to, we need to call this one a
23 significant human performance event, and we need to not
24 only capture it as such, but we need to communicate it
25 throughout the system so that nobody else puts themselves

1 in this situation.

2 Q. Thank you. That's helpful.

3 And then, and then you have measured this,
4 this human performance improvement, you all have made
5 improvement with respect to this measurement; is that
6 correct?

7 A. Yes, we have.

8 Q. Okay. And with respect to significant
9 environmental impact, what's the threshold that you use
10 for measuring that significant environmental impact, and
11 has it changed over the period of your measurement?

12 A. From the standpoint of a significant
13 environmental impact, there is a corporate definition.
14 I don't have that with me right now. But it would be
15 one that, something that would rise to the level of this
16 would be more than just a reportable spill of oil to the
17 ground. This would be one that would, as an example, is
18 if you had a massive oil release in Tampa Bay, that
19 would be a significant environmental event. And, I
20 mean, that's obviously something that we work very hard
21 to avoid.

22 Q. A couple of questions about deferred
23 maintenance on Page 30. Now isn't it a practice that
24 can be used in the utility industry to defer
25 maintenance?

1 **A.** Yes, it can be used.

2 **Q.** Okay. And, I mean, that can be used to, to
3 manage cash flow, to manage cost. If something can be
4 put off for some time and not materially affect the
5 performance of, of your units, then that might be an
6 example of a deferred maintenance item; correct?

7 **A.** It might be. What, what we talk to here is as
8 these maintenance activities come due, we want to, we
9 want to continue to be proactive for the benefit of our
10 fleet. And once you get into a situation where you're
11 deferring maintenance, you're taking an awful lot of
12 risk on the equipment that you defer, on your
13 reliability measurements, and on your costs, quite
14 frankly, because you'll run into more forced outages and
15 you'll run into higher repair costs.

16 **Q.** And, and do you have any studies or have you
17 conducted any analysis to support that, that conclusion,
18 that by deferring maintenance, that you're going to have
19 more forced outages?

20 **A.** I would say that, no, I don't have any --

21 **Q.** Okay.

22 **A.** -- studies.

23 **Q.** And let's use a, a commercial rental property
24 as a hypothetical. If you had an apartment building
25 that had four units and the roof was past its life, if

1 you will, but it was watertight and it wasn't
2 necessarily leaking, that might be an example in that
3 context of a, of an item where you could say let me see
4 if I can get a few more years out of this roof before I
5 replace it; correct?

6 **A.** With minimal risk. We could also use the
7 example of an airplane engine, that if you defer
8 maintenance, there's a lot more risk to something like
9 that.

10 **Q.** And to talk about risk, the risk, if you
11 deferred maintenance, would be the unit might not work
12 as, as designed; correct? You might have a problem crop
13 up.

14 **A.** That would be one risk.

15 **Q.** Okay.

16 **A.** Catastrophic failure of components would be
17 one risk. Prolonged outages, even if you don't have a
18 catastrophic failure of components, would be one risk,
19 and you could have a unit down for, for several weeks to
20 months at a time.

21 **Q.** As part of your belt tightening efforts, did,
22 did you look at and -- well, as part of your belt
23 tightening efforts, did you defer maintenance on, on any
24 items?

25 **A.** In 2009, those belt tightening activities?

1 Q. 2009 or 2010.

2 A. No.

3 Q. And, and with respect to -- and if this isn't
4 your area of, of expertise, let me know.

5 A. Okay.

6 Q. But, you know, we talk about risk. Do you
7 know that, that as, as to whether Progress Energy was
8 able to operate its system in a safe, efficient and
9 reliable manner at a reserve margin of 15 percent from a
10 historical perspective?

11 A. That would be outside of my area of expertise.

12 Q. One, one final line. You talk about the
13 fossil dismantlement cost study. Do you see that on
14 Page 31 of your testimony?

15 A. Yes, sir.

16 Q. You're familiar with the terms brownfield and
17 greenfield?

18 A. Yes.

19 Q. Okay. And a greenfield is, is, is essentially
20 a virgin site capable of being used for just about
21 anything, a park, a residential development; you would
22 agree with that generally?

23 A. I would generally, yes.

24 Q. And a brownfield is a site that probably had a
25 previous use, oftentimes industrial, where there may be

1 some, some soil issues or some pollution issues;
2 correct?

3 **A.** Generally I would agree. Yes.

4 **Q.** Okay. And with respect to the dismantlement
5 studies, does Progress strive to restore sites to a
6 greenfield level, or do you know?

7 **A.** Well, here's, here's what I would say about
8 the dismantlement study. The answer is, no, I'm not
9 sure. And what I would say about this is the generation
10 witness has historically sponsored portions of the
11 dismantlement study. And so I have sponsored this to
12 the extent to that we've hired Burns & McDonnell to do
13 the study. And so, really, if you want to ask any of
14 the dismantlement questions, I believe we have Mr. Kopp
15 from Burns & McDonnell that'll be here later in the
16 proceedings, and he, he would be much more qualified to
17 answer detailed questions like that.

18 **Q.** Okay. And that's fair, and I may explore that
19 with him.

20 But just a couple more general questions, and
21 I think you're conversant on, on the idea. You would
22 also agree that it would cost more money to restore a
23 site to a greenfield status as compared to a brownfield
24 status; correct?

25 **A.** Yes. In general I agree with that principle.

1 **Q.** And, and you would also agree that to the
2 extent that there was a desire to, you know, all other
3 things being equal, to put in something like a park or a
4 residential community, that, that might be better suited
5 for a greenfield site as compared to a brownfield site;
6 correct?

7 **A.** Yeah. I guess I would say all other things
8 being equal -- well, I'm not sure I could agree with
9 that. All other things being equal, which in my
10 experience has been they never are, I think it would
11 just depend on the specifics of the situation, and I
12 guess I'm not comfortable speculating on that.

13 **MR. MOYLE:** If I could have just one second.

14 **CHAIRMAN CARTER:** Absolutely.

15 (Pause.)

16 **MR. MOYLE:** Thank you for your, for your time.

17 **THE WITNESS:** Thank you.

18 **CHAIRMAN CARTER:** Thank you, Mr. Moyle.

19 Mr. Brew, good morning.

20 **MR. BREW:** Good morning, Mr. Chairman.

21 **CROSS EXAMINATION**

22 **BY MR. BREW:**

23 **Q.** Good morning, Mr. Sorrick.

24 **A.** Good morning.

25 **Q.** It's an interesting process, isn't it?

1 **A.** Yes, it is. I think there are other words for
2 it, but interesting is --

3 **Q.** Touché. We had that discussion earlier.

4 A brief discussion about your CTs.

5 **A.** Yes, sir.

6 **Q.** They will typically run one to 300 hours a
7 year?

8 **A.** You're talking our simple cycle CTs?

9 **Q.** Yes.

10 **A.** Most of our simple cycle fleet we don't
11 measure in hours, we measure in starts.

12 **Q.** Okay.

13 **A.** And now the aero-derivative engines, the Pratt
14 & Whitneys that I was talking about, those do accrue on
15 hours basis and not starts basis. But most of the heavy
16 frames are on starts, so we measure them more in starts
17 than we necessarily do in hours. And I would say it
18 depends on the year and depends on a lot of factors.
19 Again, system and transmission issues can, can cause
20 more or less runs. Weather is certainly a big factor,
21 so --

22 **Q.** Well, let's back down a little bit. Would you
23 agree that most of the time they're not running?

24 **A.** Well, it depends on how you --

25 **Q.** Out of the 8,760 hours in a year.

1 **A.** Yeah.

2 **Q.** At least 80 percent of the time they're not
3 running?

4 **A.** I would say most of the time they're not
5 running.

6 **Q.** Okay.

7 **A.** However, we do have units that run, that are
8 started upwards of 250 or 300 days a year.

9 **Q.** Okay.

10 **A.** So.

11 **Q.** When they're -- but so normally they're in a
12 cold mode, they're not running?

13 **A.** Well, again, normally -- there are a lot of
14 times when they're off, if that's what you mean.

15 **Q.** Well, if you measure them in terms of starts,
16 starting them is a start from a cold condition?

17 **A.** Yes.

18 **Q.** Okay. And accepting for a moment the
19 aero-derivative --

20 **A.** Yes.

21 **Q.** -- the, the, you mentioned the older GE type
22 machines. They would take, I think you said, a half
23 hour or so to get started up?

24 **A.** Roughly. Yes.

25 **Q.** From black start. So from a, an ancillary

1 service perspective in terms of providing spending
2 reserve, those units typically wouldn't be available in,
3 in ten minutes to, to connect to load.

4 **A.** That's right. Typically they wouldn't. But
5 the fleet of aero-derivative units that we have would
6 be.

7 **Q.** Okay. And, and so the aero-derivatives can
8 start up quicker and so they can be online, say, within
9 ten minutes, which is typically what you'd look for for
10 spending reserves?

11 **A.** Yes. Typically they can be at baseload within
12 five minutes.

13 **Q.** Okay. And, but you said they have different
14 maintenance requirements, the aero-derivatives?

15 **A.** They do.

16 **Q.** Okay. And so the, the aero-derivative CTs
17 would be more valuable to you operationally in terms of
18 being able to account for spending reserves.

19 **A.** Our aero-derivative fleet provides us with a
20 tremendous amount of flexibility.

21 **Q.** Okay. More so than the older CTs that take
22 longer to start up from black start.

23 **A.** Well, I think they provide some flexibility.
24 But if you're just talking the ability to get online and
25 produce a lot of megawatts quickly, our aero fleet, our

1 aero-derivative fleet is, is very valuable. Yes.

2 **Q.** And that's what you'd be looking at, the
3 ability to quickly provide a lot of megawatts to the
4 system.

5 **A.** Yeah. I think in the situation that you're
6 talking about.

7 **Q.** Right.

8 **A.** Yes.

9 **Q.** Okay. You talked earlier about reserve calls.

10 **A.** Yes.

11 **Q.** Do you recall that? And that's generally
12 calls from related interconnected systems?

13 **A.** I believe that's correct.

14 **Q.** When there's a problem in their system and you
15 need to supply generation to help them out?

16 **A.** Yes.

17 **Q.** Okay. And that typically would be when you
18 have a major generating unit or a transmission line
19 trip?

20 **A.** I'm aware of the generation piece of that.
21 I'm not as sure on the transmission piece of that.

22 **Q.** Okay. But there would be a system condition,
23 a drop in frequency or something like that that you
24 would need to respond?

25 **A.** I think that's fair. Yes.

1 **Q.** Okay.

2 **A.** And typically what we would do is we would
3 start the appropriate number of aero-derivative units,
4 or we may have units that aren't at baseload yet and are
5 already online but can be ramped up. So it just depends
6 on -- I mean, there again, it could be a lot of factors.
7 Time of day, season of the year, outage season, or if
8 you're in the middle of the summer. But we would start
9 aero-derivative units up, and if it's going to be a
10 prolonged issue, then we'll also start the frame units
11 up because those are typically cheaper to run than the
12 aero-derivative units. And we would run the jets until
13 we, we have the frame units on and loaded. A lot of
14 different configurations there.

15 **Q.** So -- are you done?

16 **A.** Yes. I'm sorry.

17 **Q.** So the jets are faster startup?

18 **A.** The aero units. Yes, sir.

19 **Q.** But they're more expensive to run.

20 **A.** A little higher heat rate. Mostly on, they
21 operate mostly on fuel oil. And we have, we have a
22 reasonable number of our heavy frame units that burn
23 natural gas.

24 **Q.** So, so you like the aero units to be available
25 quickly, but you don't want to run them for a long time?

1 **A.** Yes.

2 **Q.** Okay.

3 **A.** In general I'm saying that.

4 **Q.** In general. Okay. And in general you, you'd
5 like to have resources on your system that can respond
6 quickly and reliably?

7 **A.** Yes.

8 **Q.** Particularly in response to a reserve call or
9 a system -- or a problem on your system?

10 **A.** Yes. Absolutely.

11 **Q.** Whether it's voltage or frequency?

12 **A.** Yes.

13 **Q.** Okay. Don't interruptible loads on your
14 system provide that same benefit?

15 **A.** I'll be honest, I have not delved into
16 interruptible loads, customers or whatever. I've,
17 I've --

18 **Q.** You're a generation guy?

19 **A.** I'm a generation guy. Yes, sir.

20 **Q.** Okay. So if I could drop 50 megawatts as fast
21 as you could start up your aero-derivative turbines,
22 that might provide a comparable system benefit?

23 **A.** I think you'd have to ask Mr. Crisp or one of
24 the other witnesses.

25 **Q.** Okay. On Page 19 of your testimony you have a

1 question and answer that talks about organizational
2 changes in the Progress Energy Florida Power Generation
3 Group. Do you see that?

4 **A.** Yes, sir.

5 **Q.** And you specifically talk about the Crystal
6 River Maintenance Organization. Do you see that?

7 **A.** Yes, sir.

8 **Q.** And moving over to Page -- the sentence that
9 begins at the bottom of the page and moves over to Page
10 20 says, "This realignment has resulted in efficiency
11 gains, enhanced forced outage response, which minimizes
12 impacts to EFR," which is equivalent forced outage rate?

13 **A.** Yes, sir.

14 **Q.** "And overtime savings." Do you see that?

15 **A.** Yes.

16 **Q.** Now the next sentence quantifies savings,
17 overtime savings of a million dollars. Do you see that?

18 **A.** Yes, sir.

19 **Q.** Is that an annual figure or is that over the
20 three years?

21 **A.** That, that was -- I'm not sure. I believe
22 that was an annual figure.

23 **Q.** Okay. And the efficiency gains you're talking
24 about, is that in fuel savings, O&M savings?

25 **A.** Well, what, what -- the context there was

1 actually the efficiency, one of the organization and the
2 efficiency of responding to forced outages.

3 We had a situation -- and Crystal River is a
4 large energy complex, and we had a situation before this
5 site maintenance based on requirements from our
6 collective bargaining contract with our union and the
7 way things were done on that site to -- first of all, we
8 didn't cover a lot of off hours on straight time. And
9 so if you had an upset, for example, before this change
10 in the middle of the night that required an electrician
11 and an mechanic, then you would have to go through an
12 extensive call-out list, sometimes calling up to 80 or
13 100 people to get the two people out there that you
14 needed to work on the problem. So, as you can see,
15 there are some logistical issues that sometimes could
16 take hours to get somebody to work on the equipment.

17 What we've done in this organization is now we
18 cover six days a week, 24 hours a day with maintenance
19 resources onsite on straight time. So if you need that
20 same electrician and mechanic, they're already onsite at
21 straight time rates.

22 Q. Okay. So on Line 1, when you refer to
23 efficiency gains, you mean in your organization. You
24 don't mean fuel savings or some other savings that
25 you're quantifying?

1 **A.** Yes. By and large that's true. Now I do
2 think there are some, some probably benefits that would
3 roll over to that. That if you have the electrician and
4 mechanic in this example that can address something in
5 an hour instead of taking three hours to call out and
6 get onsite, then you can sometime return the unit either
7 to full power, if it's a derate, or return the unit to
8 service quicker. So there, there may be some there.
9 But in the context, that efficiency gains was really in
10 the organization.

11 **Q.** So, but with respect to the latter, you
12 haven't quantified any of those potential gains in your
13 testimony here?

14 **A.** No.

15 **Q.** Okay. So the only quantified savings that
16 you're pointing to is the million dollars in overtime
17 savings?

18 **A.** Yes.

19 **Q.** And the next sentence says that money has been
20 reinvested into additional maintenance activities. Does
21 that mean you haven't reviewed your budget by that
22 million-dollar savings, so it doesn't go back to
23 ratepayers?

24 **A.** That's right.

25 **Q.** Okay.

1 **A.** That means that we're getting to maintenance
2 on the site that we otherwise would not have necessarily
3 gotten to.

4 **Q.** So you haven't reduced your budget in any
5 sense to reflect those savings?

6 **A.** No.

7 **Q.** Okay. Are you projecting any overall
8 productivity improvements as a result of this
9 realignment?

10 **A.** From, from this realignment?

11 **Q.** Yes.

12 **A.** For the CRMO (phonetic)? We would expect to
13 continue to see some of this savings roll forward.
14 However, I think that's, I think that one has been
15 included in our number for C-41.

16 **Q.** Okay.

17 **A.** Because we went to this in, I believe, 2006.

18 **Q.** That's what your testimony says.

19 **A.** Yes.

20 **Q.** So are you, so are you projecting ongoing
21 productivity savings as a result, or are you reinvesting
22 the money? I'm trying to figure out if there's any
23 reduced cost for ratepayers.

24 **A.** Well, I would say that we've projected down in
25 overtime, in the overtime budget, and we've re,

1 reinvested this in plant maintenance activities.

2 Q. Okay. So there's no reduction in overall
3 budget?

4 A. No, I don't believe so.

5 MR. BREW: Okay. That's all I have. Thank
6 you.

7 CHAIRMAN CARTER: Thank you, Mr. Brew.

8 Ms. Van Dyke.

9 MS. VAN DYKE: No questions.

10 CHAIRMAN CARTER: Thank you.

11 Mr. Wright, before you go, give me some kind
12 of idea, because Linda is going to be with us all
13 morning and I wanted to find a proper breaking point for
14 her.

15 MR. WRIGHT: Mr. Chair -- Mr. Chairman, I
16 truly believe that my cross is fairly brief. I think
17 less than 15 minutes.

18 CHAIRMAN CARTER: Okay. Let's give it a shot.
19 You're recognized. Mr. Wright.

20 MR. WRIGHT: Time me.

21 CHAIRMAN CARTER: I won't time you. Go ahead.

22 THE WITNESS: Can I time you? No, I'm just
23 kidding.

24 MR. WRIGHT: Put the lights on. Put the
25 lights on him, too.

1 **THE WITNESS:** I should have pushed a button,
2 huh?

3 (Laughter.)

4 **CROSS EXAMINATION**

5 **BY MR. WRIGHT:**

6 **Q.** Good morning, Mr. Sorrick.

7 **A.** Good morning.

8 **Q.** We haven't met, but I'm Schef Wright and I
9 represent the Florida Retail Federation in this
10 proceeding. I have just a few questions for you or a
11 few brief lines.

12 First, to follow up on, on some discussion you
13 had with Mr. Rehwinkel and Mr. Moyle, do you know
14 exactly how the Commission benchmark O&M for production
15 steam is calculated?

16 **A.** Exactly, no.

17 **Q.** Okay.

18 **A.** I think I went through my elementary
19 understanding.

20 **Q.** All righty. You reference an industry
21 benchmarking study called the GKS Gold benchmarking
22 study in your testimony.

23 **A.** Yes.

24 **Q.** Okay. Do you know specifically what the
25 inputs are into, into the analyses reflected in that

1 study?

2 A. Can you help me with a reference, first of
3 all, just to get grounded?

4 Q. I can. Give me just a second.

5 A. Yeah. I'll keep looking, too.

6 Q. I believe -- hang on.

7 A. I've got it. It's at the bottom of Page 24.

8 Q. I was close. 25.

9 A. Yeah. Specifically with me I do not have
10 those inputs. I know this was a point of discovery, and
11 we provided both the benchmark study and a letter from
12 GKS.

13 Q. Okay. But as you sit here today, you can't
14 tell us exactly what the inputs are; is that true?

15 A. I don't recall. And I guess I need a little
16 more granularity on exactly what you mean by, by inputs.
17 I know it was several utilities that, that units were,
18 their different units were segmented in different
19 large-size coal, medium-size coal, large-size oil, so
20 forth. But the details I don't have in front of me.

21 Q. Well, you just mentioned several utilities.
22 Do you know how many utilities?

23 A. I don't offhand. But, again, it's included in
24 that study.

25 Q. Okay. Do you know how many units?

1 **A.** I don't.

2 **Q.** Generating units? Are you familiar with any
3 adjustments to the input data that GKS Gold might have
4 made in that analysis?

5 **A.** I'm not.

6 **Q.** So basically your testimony really is just
7 based on the results of that analysis; is that accurate?

8 **A.** Yes.

9 **Q.** Okay. Thank you. At Page 1 of your
10 testimony, you test -- you state that it's part of your
11 responsibility to develop and implement strategic and
12 tactical plans to operate and maintain Progress's
13 generation fleet.

14 My question, follow-on question is does this
15 mean that you are the senior management person within
16 Progress Energy Florida who signs off the generation O&M
17 plans?

18 **A.** Within Progress Energy Florida, yes.

19 **Q.** Okay. And also on, are you the senior person
20 who signs off on how those plans are implemented within
21 Progress Energy Florida?

22 **A.** Within Progress Energy Florida, yes. Now just
23 to clarify, I, I do have a boss and she's not in
24 Progress Energy Florida. She -- we report to the
25 overall -- I report to the Senior Vice President of

1 Power Operations Group. And so ultimately my manager
2 would certainly have input and veto authority on, on
3 this as well.

4 Q. And that Senior Vice President is in Power
5 Operations Group, did you say?

6 A. Yes.

7 Q. Is she an employee of Progress Energy
8 Corporation or Service Corp, or do you know?

9 A. I don't know specifically.

10 Q. It's all right.

11 A. I know where her office is in Raleigh and I
12 know who her boss is.

13 Q. Well, that's, that's a good answer. Who's her
14 boss, by the way? Who's in that position?

15 A. Bill Johnson.

16 Q. Oh, there you go.

17 Thank you. At Page 14 of your testimony, I
18 just want to talk a little bit about your testimony and
19 then a couple of questions.

20 With regard to your heading, Fleet Major
21 Maintenance Program, you state that the majority of the
22 PGF -- that's Power Generation Florida; correct?

23 A. Right.

24 Q. Annual project budget is spent on major
25 maintenance activities; correct?

1 **A.** Yes.

2 **Q.** And that the purpose of these, these are
3 designed to invest O&M and capital dollars so as to
4 optimize Progress's generating fleet; correct?

5 **A.** Yes.

6 **Q.** And then down at the bottom of the page you
7 talk about parts repairs that are designed to extend the
8 beneficial use of most unit parts, thus prolonging their
9 useful life. Is that accurate?

10 **A.** Yes. And I --

11 **Q.** I left out a couple of words, but --

12 **A.** Yes. And I alluded to that in my earlier
13 conversations that while these, especially the
14 combustion turbine based generation units consume
15 themselves, the idea is that you can take parts out if
16 you do it proactively and refurbish them and use them
17 for several cycles instead of just burning them up and
18 buying new.

19 **Q.** Thank you. Is it a fair inference from your
20 testimony here about optimizing the fleet and prolonging
21 the useful life of -- let me ask you this. Forget that
22 line.

23 When you say thus prolonging their useful
24 life, are you talking about the unit parts or are you
25 talking about the power generation units themselves, or

1 both?

2 **A.** Both. Both. I'm sorry.

3 **Q.** Thank you.

4 **A.** Yeah. Because if you extend the lives of the
5 parts, then, then the units can operate longer.

6 **Q.** So it would be a fair inference, wouldn't it,
7 that, that a major purpose of Progress's major
8 maintenance program is to extend and prolong the useful
9 life of your generating plants?

10 **A.** I'd say that our, our major purpose is to
11 perform proactive maintenance that keeps the units
12 reliable and, and we're able to run it as cheaply as we
13 can instead of reducing a lot of parts and throwing
14 units away before we would otherwise have to.

15 These, these units are, and I know I'm being
16 redundant here, but if you treat these units badly, it's
17 not unlike your car. If you drive your car and you
18 decide you're just never going to change the oil in your
19 car, eventually you're going to throw that car away or
20 at least the engine in that car and you're going to
21 incur a major expense.

22 And so that's what this is getting to, is to,
23 is to try to say we don't, we want to treat these units
24 right, we want to be proactive on the maintenance, and
25 we certainly don't want to throw them away before their

1 useful life would have otherwise been, been expended, I
2 guess. And the "I guess" is on the expended, not on my
3 thought. I'm sorry. I was looking for that word.

4 Q. Well, let me try again. Is it then a purpose
5 of your maintenance program to keep the units running as
6 long as they're supposed to?

7 A. Yes.

8 Q. Does it have the effect of extending their
9 lives beyond that?

10 A. Well, and, again, it depends on the situation,
11 Mr. Wright. It could, it could in certain situations.
12 In certain situations, as you near the end of the useful
13 service life, you may be faced with some extensive O&M
14 and capital expenditures to prolong that life. A good
15 example is the Bartow steam units that we just retired,
16 the Unit 2 boiler, it basically leaked like a sieve at
17 the end of its life. And had we decided we needed to
18 prolong the life there, we would have been looking at a
19 very expensive, basically a boiler replacement to extend
20 that life. So I believe it depends on a lot of
21 different factors.

22 Q. Okay. Back at Page 1 you also testified that
23 it is your responsibility to recommend retirement of
24 generation facilities; correct?

25 A. Yes.

1 **Q.** Do you have the primary responsibility for
2 recommending retirements of Progress generating units?

3 **A.** I would call it more of a shared
4 responsibility, working with the system planning
5 organization.

6 **Q.** And that's Mr. Crisp; right?

7 **A.** Yes.

8 **Q.** Now the way -- I know Mr. Crisp and I know
9 what he does, and from your testimony and your, written
10 and live, I think I have a pretty good idea of what you
11 do. Would I be correct that you're, you're more the
12 mechanical unit specific guy in the, in the retirement
13 evaluation?

14 **A.** Yes.

15 **Q.** And Mr. Crisp is more the long-term system
16 reliability guy?

17 **A.** Yes. Yes.

18 **Q.** Okay. Who ultimately decides whether a unit
19 is going to be retired?

20 **A.** That's a good question. It's been my
21 experience that that rolls up and there's a lot of
22 discussion within the organization, certainly within my
23 organization, Mr. Crisp, Mr. Crisp's organization. And
24 then that would roll up through our senior management
25 committee ultimately to, to make those types of

1 decisions.

2 **Q.** Are the projected retirements of Progress's
3 generating units as shown in Progress's Ten-Year Site
4 Plan based at least in part on your recommendations?

5 **A.** They're, they're based on certainly
6 collaboration between Mr. Crisp and I.

7 **MR. WRIGHT:** Mr. Chairman, I'd like to ask a
8 colleague to -- well, maybe I get to do it this morning.

9 **CHAIRMAN CARTER:** Mr. Rehwinkel would be glad
10 to help you.

11 **MR. WRIGHT:** Thanks.

12 **CHAIRMAN CARTER:** Do you need a number?

13 **MR. WRIGHT:** I do, Mr. Chairman. Maybe 269?

14 **CHAIRMAN CARTER:** No.

15 **MR. WRIGHT:** No? Sorry.

16 **CHAIRMAN CARTER:** 268. Good effort.

17 How about a short title, Mr. Wright?

18 **MR. WRIGHT:** PEF 2009 TYSP Excerpt.

19 **CHAIRMAN CARTER:** PEF 2009 TSYP Excerpt.

20 **MR. WRIGHT:** Yes, sir.

21 **CHAIRMAN CARTER:** Okay.

22 **MR. WRIGHT:** I do have, I have a single copy
23 of the entire document right, right here. It's, as you
24 can see, it's somewhat thick. But if Progress wants to
25 preserve optional completeness, I'm happy for them so to

1 do.

2 (Exhibit 268 marked for identification.)

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

4 **MR. WRIGHT:** Thank you, Mr. Chairman.

5 (Pause.)

6 Mr. Chairman, thanks.

7 **BY MR. WRIGHT:**

8 **Q.** Mr. Sorrick --

9 **A.** Yes, sir.

10 **Q.** -- have you had a chance to look over this
11 document?

12 **A.** Yes.

13 **MR. WRIGHT:** Okay. Good. I was pausing, Mr.
14 Chairman, to give the witness a chance to review it. He
15 was making some notes and I didn't want to interrupt his
16 train of thought.

17 **CHAIRMAN CARTER:** Okay.

18 **BY MR. WRIGHT:**

19 **Q.** To the best of your knowledge, Mr. Sorrick,
20 are the retirements reflected in this schedule accurate?

21 **A.** Yes.

22 **Q.** Okay. I'd like to just ask you --

23 **A.** Well, just let me clarify. In my short
24 perusal of this, you're talking under Column 11; right?

25 **Q.** Yes, sir.

1 **A.** Yes.

2 **Q.** And so the, I see that the Bartow 1, 2 and 3
3 units were projected to be retired in June of 2009;
4 correct?

5 **A.** Yes. And they were coincident with the Bartow
6 combined cycle commercial operation.

7 **Q.** Thank you. That was my understanding. So
8 that's good.

9 There's a footnote that is repeated some nine
10 times in the, in Column 11, and it's identified by five
11 asterisks or maybe we can call it the five-star
12 footnote. That identifies projected retirements or cold
13 storage actions; is that correct?

14 **A.** Yes.

15 **Q.** And I know the type is small and sketchy
16 because this is a Xerox copy of a print of a PDF from
17 the PSC's website, but I read this to indicate with
18 respect to the Suwannee steam units that they are
19 estimated to be shut down by October of 2015. Is that
20 correct?

21 **A.** To the best that I can make out on this
22 document, I would agree with you, yes.

23 **Q.** Well, and based on your knowledge of the
24 system, is that about right?

25 **A.** Yes. It's about right.

1 **Q.** Okay. And similarly the remainder of the
2 five-star footnote indicates that the Avon Park,
3 Higgins, Rio Pinar and Turner CTs, at least those
4 flagged by the footnote, are estimated to be put in cold
5 standby or retired by what I think is June of 2016.

6 **A.** Yes.

7 **Q.** Is that accurate?

8 **A.** Yes.

9 **Q.** Okay. Are there any projected retirement
10 dates, to your knowledge, for the Bartow CTs Numbers
11 P1 through P4?

12 **A.** Not to my knowledge.

13 **Q.** Same question for the Bayboro CTs, P1 through
14 P4.

15 **A.** Not to my knowledge.

16 **Q.** Same question for the DeBary CTs, P1 through
17 P6.

18 **A.** No. Not to my knowledge again.

19 **Q.** Same --

20 **A.** Same for all the DeBary units and the
21 Intercession City units.

22 **Q.** Great.

23 **MR. WRIGHT:** Then you answered the rest of my
24 questions, and I'm done, Madam Chairman.

25 Thank you very much, Mr. Sorrick.

1 **THE WITNESS:** Thank you.

2 **COMMISSIONER EDGAR:** Thank you. Are there --
3 and that does complete -- yes. Are there questions from
4 staff for this witness?

5 **MR. YOUNG:** No, Madam Chairman. But in lieu
6 of cross questions, the parties have agreed to, that
7 staff can enter items Number 24 on the Comprehensive
8 Exhibit List and 25.

9 **COMMISSIONER EDGAR:** Is that everyone's
10 understanding?

11 **MR. YOUNG:** And 26.

12 **COMMISSIONER EDGAR:** No objection, 24, 25 and
13 26?

14 **MR. YOUNG:** Yes.

15 **MR. WRIGHT:** No objection, Madam Chairman.

16 **MR. YOUNG:** I don't see Mr. Moyle, but it's my
17 understanding that's the agreement among the parties.

18 **COMMISSIONER EDGAR:** Okay. Okay. Then at
19 this time, hearing no objection, we will enter Exhibits
20 24, 25 and 26 into the record.

21 (Exhibits 24, 25, and 26 admitted into the
22 record.)

23 **MR. WRIGHT:** If it's appropriate, Madam
24 Chairman, I would move 268.

25 **COMMISSIONER EDGAR:** Well, I'm not sure we're

1 quite there yet, so hold on just a moment. That is
2 basically in lieu of cross; is that correct?

3 **MR. YOUNG:** Yes, ma'am.

4 **COMMISSIONER EDGAR:** Okay. Commissioners, are
5 there any questions on cross for this witness?

6 Hearing none, is there any redirect?

7 **MR. BURNETT:** Yes, ma'am. Thank you.

8 **REDIRECT EXAMINATION**

9 **BY MR. BURNETT:**

10 **Q.** Mr. Sorrick, do you still have in front of you
11 the response to a rate case in our question 150 that was
12 presented to you by Mr. Rehwinkel?

13 **A.** Yes.

14 **Q.** And do you recall that Mr. Rehwinkel asked you
15 some questions with respect to the, the numbers for 2010
16 versus the other years on there?

17 **A.** Yes.

18 **Q.** Why are the 2010 overhaul expenditures larger
19 than those seen in prior years?

20 **A.** Well, again, those are driven by our major
21 maintenance requirements. The new units, the existing
22 combined cycle and combustion turbine requirements and
23 some requirements at our steam turbine units are all
24 drivers in that, in that cost increase. And, again,
25 those major maintenance intervals are driven by, by time

1 of service, and so they're, they're required for us to
2 do if we're going to maintain a proactive maintenance
3 program.

4 Q. Thank you, sir. And do you also recall that
5 Mr. Rehwinkel asked you some questions about supporting
6 documentation for your O&M expenses; do you recall that?

7 A. Yes.

8 Q. And in response to one of his questions with
9 regard to some of the discovery, you gave the response
10 that some of the discovery responses you provided did
11 not meet some of the parties' expectations. Do you
12 remember saying that?

13 A. I did.

14 Q. What did you mean by that?

15 A. Well, I know that in some of the Intervenor
16 testimony there were -- again, I guess some of the
17 Intervenors' witnesses did not believe that we had
18 proved that we needed what we said we needed based on
19 the discovery that we presented.

20 Q. And, Mr. Sorricks, is this a topic that you
21 address in several pages of your rebuttal testimony?

22 A. Yes, I did.

23 Q. Thank you.

24 **MR. BURNETT:** Nothing further, Madam Chair.

25 **COMMISSIONER EDGAR:** Okay. Thank you. I

1 think that concludes the testimony for this witness.

2 And, Mr. Wright, that now brings me to you.

3 **MR. WRIGHT:** Thank you, Madam Chairman. I
4 would move 268.

5 **MR. BURNETT:** No objection, ma'am. And I
6 would also move 55 and 56.

7 **COMMISSIONER EDGAR:** Okay. Then at this time
8 268, exhibit marked 268 will be entered into the record.

9 (Exhibit 268 admitted into the record.)

10 And, Mr. Burnett, did you say 55?

11 **MR. BURNETT:** Yes, ma'am. 55 and 56.

12 **COMMISSIONER EDGAR:** Okay. Hearing no
13 objections, Exhibits 55 and 56 are admitted into the
14 record at this time.

15 (Exhibits 55 and 56 admitted into the record.)

16 **MR. WRIGHT:** Thank you, Madam Chairman.

17 **COMMISSIONER EDGAR:** Thank you. The witness
18 is excused.

19 **THE WITNESS:** Thank you.

20 **COMMISSIONER EDGAR:** Thank you.

21 Am I correct that that brings us to the next
22 two witnesses who have been stipulated?

23 **MR. BURNETT:** Yes, ma'am.

24 **COMMISSIONER EDGAR:** Okay. Let's go ahead and
25 do what we need to do for those, and then we'll take a

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short break.

MR. BURNETT: Yes, ma'am. With your leave, if I could pass the mike to Mr. Melson.

COMMISSIONER EDGAR: Absolutely. Mr. Melson.

MR. MELSON: Commissioners, as you indicated, the next witness is Kevin Murray. His testimony had actually been filed in the Bartow limited proceeding docket, and when that docket was consolidated with this one, was moved into this docket. So we'd ask that his prefiled direct testimony be inserted into the record as though read.

COMMISSIONER EDGAR: Okay. And with again the understanding that that was stipulated and agreed to at the beginning of the hearing, the prefiled testimony of Witness Murray will be entered into the record as though read.

MR. MELSON: And Mr. Murray had no exhibits.

COMMISSIONER EDGAR: Thank you.

MR. MELSON: Did staff have some stipulated exhibits for him?

MS. FLEMING: All of the staff exhibits for Murray and Weintraub were already moved into the record as part of staff's composite Exhibit 20.

In re: Petition of Progress Energy Florida for limited proceeding
To include the Bartow Repowering project in base rates
Docket No _____

DIRECT TESTIMONY OF

KEVIN MURRAY

1 **I. Introduction and Summary.**

2 **Q. Please state your name and business address.**

3 A. My name is Kevin Murray. My business address is 299 First Avenue North, St.
4 Petersburg, Florida 33701.

5
6 **Q. By whom are you employed and in what capacity?**

7 A. I am employed by Progress Energy Florida ("PEF" or "Company") as General
8 Manager of Plant Construction Projects.

9
10 **Q. What are the duties and responsibilities of your position with Progress
11 Energy Florida?**

12 A. As General Manager of Plant Construction Projects, I am responsible for the
13 oversight of PEF's major fossil generation projects, including the Bartow
14 Repowering Project.

15
16 **Q. Please describe your educational background and professional
17 experience.**

18 A. I received my Bachelor of Science Degree in Mechanical Engineering from the
19 University of Arizona. I have 15 years of professional experience in engineering
20 and project management within the electric power industry. I started my career
21 in the power industry with Westinghouse Power Generation (now Siemens)

1 based in Orlando, where I was employed as an engineer working on power
2 plant proposals. During this time, I received an award for my work on a project
3 in Thailand. I then went to work for El Paso Corporation as an engineer and
4 then as a project manager. I was involved in the development and construction
5 of power projects in both North and South America, including a 1-year
6 residency in Brazil. I joined Progress Energy in 2004 and served as the director
7 of engineering for the Company's new fossil power projects. In 2008, I was
8 promoted to General Manager of Projects for Progress Energy Florida, which
9 includes responsibility for implementing the Bartow Repowering Project.

10
11 **Q. What is the purpose of your direct testimony?**

12 A. The purpose of my testimony is to describe the Company's Bartow Repowering
13 Project, including the key benefits that the project will provide to the Company
14 and its customers.

15
16 **Q. Please summarize your testimony**

17 A. Progress Energy Florida is in the process of repowering the Bartow Power Plant
18 in Pinellas County to upgrade the existing conventional heavy oil-fired steam
19 units to state of the art natural gas-fired combined cycle technology with
20 distillate oil backup. All four combustion turbines were first test fired in
21 November and December 2008 and we expect the plant to commence
22 operation by its scheduled June 1, 2009 in-service date.

23 The Bartow Repowering Project is part of the Company's "Balanced
24 Solution," which includes upgrading existing plants to provide safe, cost-

1 effective and environmentally responsible sources of large-scale power
2 generation.

3 The project is designed to nearly triple the plant's generating capacity
4 while at the same time reducing air emissions and eliminating the use of heavy
5 fuel oil. The project will increase electric system reliability by increasing
6 dispatch flexibility and by providing additional generating capacity near the
7 Pinellas County load center. It will also satisfy the Company's need for
8 additional capacity beginning in the summer of 2009 in a cost-effective manner.
9 The repowered Bartow Plant will reduce future fuel costs and result in cleaner
10 air. By utilizing an existing plant site, the project will avoid the need to develop a
11 new site in the area.

12 We have managed the project to minimize construction impacts on the
13 surrounding community. It has had a positive economic impact on the Pinellas
14 County region by bringing approximately 500 high-quality construction jobs to
15 the area and increasing tax payments to Pinellas County and the local school
16 system.

17 The project is the most cost-effective alternative for meeting the
18 Company's capacity needs while at the same time ensuring compliance with
19 environmental requirements. Finally, we have managed the Bartow repowering
20 in a manner that ensures a high quality result at a reasonable cost.

22 **II. The Bartow Repowering Project.**

23 **Q. Please describe the Bartow repowering project.**

1 A. The current Bartow Power Plant operates on 1950s-era technology. It
2 generates power from three units fired on heavy (No. 6) fuel oil and is capable
3 of generating approximately 450 MW of power.

4 In 2005, the Company studied ways to meet its need for additional
5 capacity by summer 2009 in a cost-effective, environmentally sensitive manner.
6 The analysis showed that repowering the Bartow facility to operate as a natural
7 gas-fired, combined cycle plant was the most cost-effective way to meet the
8 Company's reliability needs, while at the same time substantially reducing SO₂
9 and NOx emissions from the site.

10 Additional analysis during the study phase showed that the best
11 configuration would be to replace the three existing steam units with four gas-
12 fired combustion turbines (CTs), four heat recovery steam generators
13 (HRSGs), and one steam turbine – or what is referred to as a 4x4x1 combined
14 cycle configuration.

15 The repowering project will increase the generating capacity of the Bartow
16 Power Plant to about 1,279 MW, or an increase of approximately 827 MW. The
17 project will take advantage of existing site assets, such as the water intake
18 structures, discharge canals, the fuel oil barge unloader, existing 115kV lines,
19 existing 230kV lines, and the 230/115 kV switchyards. The project includes
20 additional transmission and substation improvements required to integrate the
21 project into the electric grid and to handle the increased electric output from the
22 site.

23
24 **Q. Has the repowered Bartow plant been designed to increase the**
25 **Company's dispatch flexibility?**

1 A. Yes. The plant design includes auxiliary duct firing for the HRSGs and steam
2 power augmentation for the CTs to provide optimum peaking capacity. By-pass
3 stack dampers installed on all four CTs will provide the option to operate the
4 plant in simple cycle mode, as well as in combined cycle mode. This plant can
5 also be operated in a 3x3x1, 2x2x1 or 1x1x1 combined cycle mode during
6 periods of low system load. Because the steam turbine can be kept warm even
7 during periods of low load, the design significantly reduces plant start-up time
8 compared to the existing oil-fired units. Taken together, these design features
9 provide maximum output, operational ease, and system dispatch flexibility.
10

11 **Q. What transmission and substation improvements are being made to**
12 **support integrating the project into the electric grid?**

13 A. The transmission improvements associated with the project include: expansion
14 and upgrades to the Bartow and Northeast substations; the addition of three
15 230 kV underground circuits between those two substations; rebuilding an
16 existing 230 kV line between the Northeast and 40th Street substations;
17 installing a new 115 kV line between the Northeast and 32nd Street substations;
18 installing a new transformer at the 51st Street substation and looping an existing
19 230 kV line into that substation; and replacing a 115 kV breaker at the Central
20 Plaza substation.
21

22 **Q. Has PEF secured a reliable and adequate source of natural gas fuel**
23 **supply?**

24 A. Yes, PEF has entered into an agreement with Gulfstream Natural Gas System
25 for Firm Pipeline Transportation (FT) capacity to access gas supply for the

1 Bartow plant. The total FT capacity contracted for is 155,000 Dths/day for a
2 term of 23 years. This is roughly equivalent to the total daily gas demand of the
3 re-powered plant at full load for 16 hours. To provide natural gas to the plant,
4 Gulfstream has constructed approximately 17 miles of 20" pipeline from its
5 existing pipeline in the Tampa Bay to the Bartow site. In addition, Gulfstream
6 has added compression at its compressor station in Coden, Alabama, and
7 constructed a new compression station in Manatee County, Florida, to support
8 the project.

9 The gas transportation contract provides for an initial 80,000 Dths/day
10 of natural gas to support testing and startup of the CTs in 2008. The contract
11 provides for the full 155,000 Dths/day to be available by January 1, 2009. The
12 terms of the contract with Gulfstream are reasonable and consistent with
13 industry standards.

14
15 **III. Benefits of the Project**

16 **Q. Please summarize the benefits of the repowering project.**

17 A. Repowering the Bartow plant will add approximately 827 MW of capacity in
18 June 2009. This increase avoids a capacity purchase in summer 2009, the
19 Hines 5 combined cycle unit, and CTs originally planned for 2010 and 2012.
20 Under current planning assumptions, PEF still requires additional capacity by
21 summer 2009 to meet its 20% minimum reserve margin obligation and the
22 Bartow repowering meets that need.

23 The design of the Bartow repowering reduces plant start-up time and
24 increases dispatch flexibility. The addition of new capacity near the Pinellas

1 County load center, and the related transmission upgrades, will address low
2 voltage conditions that can exist in the area during periods of peak demand.

3 The Bartow repowering will significantly reduce the site's emissions,
4 including a 98 percent reduction in SO₂ emissions and reduced NOx emissions.
5 This will enable the Company to meet the Clean Air Interstate Rule (CAIR)
6 requirements without installing costly Selective Catalytic Reduction ("SCR") at
7 the Anclote Plant.

8 The Bartow repowering project has become part of the Company's
9 "Balanced Solution" for meeting its customers' needs, and the project is
10 consistent with the goals set forth in Florida's Energy and Climate Change
11 Action Plan, submitted to the Governor by his Action Team. Part of this plan
12 emphasizes achieving efficiency improvements at existing plants by repowering
13 existing plants to use natural gas in place of oil, which is what the Bartow
14 repowering project will do.

15 During construction, PEF has added nearly 500 jobs to the area workforce
16 which has provided an economic boost to the community. In addition, the local
17 economy has received a financial boost from taxes and increased revenue
18 during the construction project and will benefit from a higher tax base in the
19 future.

20
21 **IV. Implementation of the Bartow Repowering Project.**

22 **Q. Please describe how the Bartow Repowering Project is managed.**

23 A. A key project team was organized to consider alternatives for projected
24 generation needs. A portfolio of initiatives was developed to analyze generation
25 and transmission alternatives. The project team, together with PEF's System

1 Planning & Regulatory Performance Unit, developed an Integrated Project Plan
2 summarizing the key project decision points. The integrated resource planning
3 process essentially matches PEF's projected needs with the most cost-effective
4 power plant additions.

5 The project team is responsible for approving project milestone
6 progression and funding for both generation and transmission upgrades. The
7 team also developed a contracting and procurement strategy and assembled
8 predominantly firm-price contracts with qualified suppliers that are responsible
9 for the execution of various aspects of the project. The team mitigated cost and
10 performance risk by capturing favorable contract terms and conditions such as
11 retention provisions, performance guarantees, and reliability guarantees. The
12 project team provides regular updates to Senior Management in the areas of
13 cost, schedule, performance, risk, safety and environmental issues.

14
15 **Q. When will the project be complete?**

16 A. Both the generation and transmission components of the project are on-
17 schedule for commercial operation by June 1, 2009.

18
19 **Q. What is the estimated cost for the Bartow Repowering Project?**

20 A. The estimated cost for the project is \$800.2 million. This includes new
21 generation capital expenditures of \$560.3 million, transmission capital
22 expenditures of \$143.0 million, and \$96.9 million in AFUDC.

23
24 **Q. In your opinion, is the project prudent and will it be completed at a**
25 **reasonable cost?**

1 A. Yes. The initial study of the 4x4x1 configuration showed \$171 million NPV of
2 after-tax cash flow savings from the Bartow repowering project compared to the
3 base case alternative. Although the projected savings has varied over time as
4 the project has evolved, the project continues to provide significant savings to
5 our customers by meeting our generation and environmental needs in a cost-
6 effective manner. As I have described in my testimony, the reasonableness of
7 the project costs has been assured by our procurement practices, including
8 competitive bidding and the use of predominantly firm price contracts where
9 appropriate, the purchase of a secondary market steam turbine, and our cost
10 control activities.

11
12 **Q. Does this conclude your testimony?**

13 A. Yes.
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1 **MR. MELSON:** Thank you. We would also ask
2 that the prefiled direct testimony of Sasha Weintraub be
3 entered into the record as though read.

4 **COMMISSIONER EDGAR:** Okay. And, again, per
5 the discussion and agreement at the beginning of the
6 hearing, the prefiled testimony of Witness Weintraub
7 will be entered into the record as though read.

8 **MR. MELSON:** And we would move Exhibits 40 --
9 excuse me, 57, 58, 59, 60 and 61, which were his
10 SAW-1 through SAW-5.

11 **COMMISSIONER EDGAR:** Okay. And hearing no
12 objection, exhibits marked 57 through 61 will be entered
13 into the record.

14 (Exhibit 57 through 61 identified and admitted
15 into the record.)

In re: Petition for rate increase by Progress Energy Florida, Inc.**Docket No. 090079-EI****DIRECT TESTIMONY OF****SASHA WEINTRAUB**

1

I. INTRODUCTION AND SUMMARY.

2

Q. Please state your name and business address.

3

A. My name is Sasha A. J. Weintraub. My business address is 410 South
Wilmington Street, Raleigh, North Carolina, 27601.

5

6

Q. By whom are you employed and in what capacity?

7

A. I am employed by Progress Energy Carolinas, Inc. ("PEC") as Vice President
Fuels and Power Optimization.

9

10

Q. What are your duties and responsibilities in that position?

11

A. I am responsible for the procurement of coal, natural gas, and fuel oil for the
Progress Energy Florida, Inc. ("PEF" or the "Company") and PEC generation
fleet. I am also responsible for portfolio management and short term power
trading for both PEF and PEC. In addition, I am responsible for the Company's
coal, natural gas, and fuel oil price forecasts used for fuel filings and resource
planning purposes in connection with the Company's Ten Year Site Plan filing
each year.

18

19

Q. Please describe your educational background and professional experience.

1 A. I have a Bachelor of Science ("BS") degree in Engineering from Rensselaer
2 Polytechnic Institute, I have a Master's in Mechanical Engineering from
3 Columbia University, and I have a Ph.D. in Industrial Engineering from North
4 Carolina State University. From February of 2003 until June of 2005 I was the
5 Director of Coal Marketing and Trading for Progress Fuels Corporation, a
6 former subsidiary of Progress Energy. Before assuming my current position, I
7 was the Director of Coal Procurement for PEF and PEC.
8

9 **Q. Have you previously testified before the Florida Public Service**
10 **Commission?**

11 A. Yes. I have previously testified for PEF in a proceeding involving coal
12 procurement for two of PEF's coal-fired units. I also testified for PEF in the
13 Company's need determination proceeding for Levy Units 1 and 2.
14

15 **Q. What is the purpose of your testimony?**

16 A. The purpose of my testimony is to explain the Company's fuel price forecasts
17 and inventory target levels.
18

19 **Q. Have you prepared exhibits to your testimony?**

20 A. Yes. I sponsor the following exhibits, which are attached to my prefiled
21 testimony:

- 22 • Exhibit No. ___ (SAW-1), a list of the Minimum Filing Requirements
23 (MFR) schedules I am sponsoring or co-sponsoring;
- 24 • Exhibit No. ___ (SAW-2), the Company's fuel price forecast;
- 25 • Exhibit No. ___ (SAW-3), the Company's fuel inventories;

1 following fuels:

- 2 • Coal - 1.3% sulfur (2.1 lbs SO₂/MMBtu) and a weighted average of
- 3 0.7% and 2.9% sulfur (1.2 and 5.0 lbs SO₂/MMBtu)
- 4 • Residual/Heavy/No. 6 Oil - 1.0% and 1.34% sulfur (1.1 and 1.5 lbs
- 5 SO₂/MMBtu)
- 6 • No. 2/Light/Distillate Oil - 0.0015 lbs SO₂/MMBtu and 0.5 lbs
- 7 SO₂/MMBtu
- 8 • Natural Gas

9
10 **Q. Turning now to the individual fuels included in the forecast, will you please**
11 **explain why PEF's forecast reflects two different coal price projections?**

12 A. PEF's forecast reflects different coal prices because the Company utilizes
13 different grades of coal at its Crystal River Plant. Specifically, Crystal River
14 Units 1 & 2 burn coal with an approximate 2.1 lbs. SO₂/MMBtu and Crystal
15 River Units 4 & 5 burn coal with an approximate 1.2 lbs. SO₂/MMBtu. In the
16 latter part of 2010, Crystal River Units 4 & 5 will be capable of burning higher
17 sulfur coal (5.0 lbs. SO₂/MMBtu) due to the installation of wet scrubber flue
18 gas desulfurization (FGD) systems. Different grades of coal are sold at
19 different prices in the market. Thus, the Company must forecast prices for each
20 of the different grades of coal it plans to utilize at its Crystal River Plant. The
21 spot market commodity price projection shown for Crystal River Units 4 and 5
22 on Exhibit ___ (SAW-2) is the weighted average price for 2010 of the low and
23 high sulfur coals.

24
25 **Q. What factors are taken into account in developing the Company's coal**

1 **price forecast?**

2 A. The Company's coal forecast is impacted by a variety of factors, including the
3 source of the coal, the varying type and quality characteristics, forecasted burn
4 requirements, price and volume commitments under existing contracts, the
5 forecasted market and conditions for spot purchases, and transportation costs to
6 the point of use.

7 Most of the coal currently consumed at PEF's generating plants is mined
8 in the Central Appalachian region and South America. In the future, the
9 addition of wet scrubber FGD systems to comply with environmental
10 regulations will allow the Company to further diversify its fuel portfolio and
11 procure coal from other regions, such as the Illinois Basin. The Company
12 calculates the volume of coal needed to fulfill the burn requirements at the
13 Crystal River Units. The Company then reviews the price and volume
14 commitments in its current coal contracts. If further volume is needed, the
15 Company utilizes the market for spot purchases to fulfill this requirement. This
16 analysis results in an overall commodity price forecast that includes the
17 expected mix of contract and spot market coal. The Company also prepares a
18 separate transportation price forecast for both water and rail transport. The
19 delivered price of coal shown in the MFRs represents the sum of the
20 commodity and transportation price forecasts.

21
22 **Q. Focusing next on oil prices, please explain why several different prices**
23 **have been projected in the Company's study for oil.**

24 A. The Company procures and burns different qualities of oil. The 1.0% sulfur
25 residual oil is currently used by the Company at the Suwannee River steam

1 plants. The Anclote steam plant can use up to an annual maximum of 1.5%
2 sulfur residual oil. The different grades of No. 2 oil are used at PEF's
3 combustion turbines for generation and at steam plants for start-up. Like coal,
4 different grades of oil are sold at different market prices based on type and
5 quality. Accordingly, the Company forecasts each of them separately.
6

7 **Q. Other than the type of oil, what are the key assumptions that affect the**
8 **price forecast for oil?**

9 A. The projected oil prices are based on estimates of the contract prices for oil,
10 spot prices of oil, and the cost of delivery to PEF's plant locations. The fuel oil
11 prices all assume bulk, waterborne deliveries to the West Coast Florida
12 Terminal used by the Company indexed to U. S Gulf Coast market prices. As
13 in the case of coal, transportation costs to individual plants are forecasted
14 separately and are added to the commodity prices to produce a delivered price
15 forecast for each site.
16

17 **Q. How is the price of natural gas forecasted?**

18 A. The natural gas forecast is based on the contract structures and estimates of spot
19 market prices expected to be in effect during the forecast period for the cost of
20 the fuel into the pipelines which deliver it into Florida. Transportation costs,
21 including fixed demand charges and variable transportation charges to specific
22 plants, are forecasted separately.
23

24 III. FUEL INVENTORIES

25 **Q. Which of these fuels does the Company keep in inventory?**

1 A. As shown in Exhibit No. ____ (SAW-3), the fuels currently maintained in
2 inventory are coal, natural gas, residual oil and No. 2 oil. The Company also
3 maintains nuclear fuel in inventory, as reflected in MFR B-16.
4

5 **Q. What is the objective of the Company's fuel inventory target levels for coal,
6 natural gas, residual oil, and No. 2 oil?**

7 A. The Company's objective in establishing fuel inventory target levels is to
8 maintain fuel inventories that ensure a competitively priced, reliable and secure
9 fuel supply to support the economic dispatch and operation of the Company's
10 generation fleet. In determining adequate inventory levels, the Company
11 considers several factors, including:

- 12 1. Projected system fuel requirements and costs based on the system
13 constraints and estimated demand;
- 14 2. Fuel storage, transportation source and flexibility, and fuel handling
15 capabilities;
- 16 3. Lead times to secure supply and deliver to on-site and off-site
17 inventory locations under different market and operating conditions;
- 18 4. Potential delays and interruptions in fuel supply caused by events
19 outside the control of the Company; and,
- 20 5. Current and future fuel market conditions.

21
22 **Q. Would you describe generally the procedure followed in establishing the
23 Company's fuel inventory target levels?**

24 A. Using the factors identified above, target inventory levels are evaluated for each
25 fuel type both on a total system basis and for each generating facility. Actual

1 inventory levels are monitored daily. Inventory targets are reviewed and
2 revised as necessary when warranted by changes in unit availability, dispatch
3 economics, and transportation or logistics constraints. The target levels are
4 used as inputs to the Company's financial model for the projection of fuel
5 expense and inventory balances.

6
7 **Oil Inventory**

8 **Q. How were the oil inventory target levels identified in this case developed?**

9 A. The inventory target level for each generating plant that uses oil as a primary or
10 back-up fuel was established by the process that I have described. In
11 establishing these targets, the Company also considered the storage capacity at
12 each plant site, the source of the fuel oil supply, the amount and location of
13 off-site storage leased by PEF, expected plant burn requirements, the specific
14 delivery modes used to deliver fuel oil to each plant, and fuel supply risks that
15 the Company cannot control. Based upon this analysis, the Company
16 established the inventory target levels for oil that are recorded in the MFRs.
17 The system target levels are also shown by oil type in Exhibit No. __ (SAW-3).

18
19 **Q. What is PEF's inventory plan for residual oil?**

20 A. The Company's residual oil inventory plan is to maintain the level of oil
21 necessary to provide for the reliable and economic operation of its generating
22 units. Generation facilities that run on residual oil are critical to maintain the
23 Company's overall system reliability. The Company projects an average of
24 approximately 745,000 barrels of residual oil in inventory in 2010, as reflected
25 in Exhibit No. ____ (SAW-3). This amount is made up of approximately

1 650,000 barrels (18.2 days at full burn) for Anclote and approximately 95,000
2 barrels (14.9 days at full burn) for Suwannee. These amounts are consistent
3 with the inventory levels the Company has been maintaining for Anclote and
4 Suwannee; however, the system-wide residual fuel inventory for 2010 is lower
5 than recent levels due to the repowering of the Bartow oil-fired plant with
6 natural gas by June 1, 2009.

7
8 **Q. What is PEF's inventory plan for No. 2 fuel oil?**

9 **A.** The Company's No. 2 fuel oil inventory plan is to maintain the level of oil
10 necessary to provide reliable supply for its peaking facilities and adequate back-
11 up fuel supply for its combined cycle ("CC") units. The Company has added
12 several new intermediate CC units to the system since the Company's last fuel
13 inventory levels were approved, including the repowered Bartow Plant which is
14 scheduled for commercial operation by June 1, 2009. These units run mostly
15 on natural gas, but use No. 2 oil as a back-up fuel.

16 The Company projects to average approximately 1,106,700 barrels of
17 No. 2 oil inventory in 2010, as reflected in my Exhibit No. __ (SAW-3).

18 Approximately 60% to 65% of the inventory (660,000 to 720,000 barrels) will
19 be stored at the Company's ten separate CT peaking unit sites. An additional
20 218,000 barrels will be stored at the Hines and Bartow CC unit sites as back-up
21 fuel to natural gas. The Company projects storing approximately 15,000 barrels
22 at the Crystal River and Anclote sites as start-up fuel for the steam generators.
23 Finally, 150,000 to 210,000 barrels will be stored at the Martin Storage facility,
24 which is a storage facility for which PEF contracts at the Port of Tampa. The
25 total amount of No. 2 fuel oil inventory is consistent with the amount the

1 Company has been maintaining, when adjusted for the additional No. 2 back-up
2 fuel required for the repowered Bartow plant.

3
4 **Q. Why is it important that the Company maintain adequate oil inventory at**
5 **each separate plant site?**

6 A. PEF's oil peaking units are critically important to maintain reliable operations
7 during peak demand periods. They are also necessary to provide generation
8 when unplanned supply curtailments occur and unforeseen generation events
9 impact the Company's other baseload and intermediate generation units. For
10 example, unscheduled outages at either of the major coal-fired units, the nuclear
11 unit, or the large combined cycle natural gas facilities can cause significant
12 variations in the amount of fuel oil burned. In addition, interruptions to the
13 natural gas supply and/or higher than expected load requirements could result in
14 the need to run the oil peaking units longer than expected.

15 Each site must have adequate onsite storage to ensure sufficient fuel
16 supply during these times of need. Because the units are in different
17 geographic locations, PEF's inventory plan must address inventory needs and
18 storage capacity at each generating site. Inventory is not easily moved between
19 CT unit locations. At the Intercession City site, PEF must maintain an inventory
20 of two different grades of No. 2 fuel, since fuel oil is not interchangeable
21 between all units at the site due to quality specifications and environmental
22 permit requirements.

23 Typically it takes two to three weeks from the moment PEF places a
24 delivery order for No. 2 fuel oil to the moment the oil reaches the site. Any
25 number of events can interrupt the delivery of light oil. In particular, barge

1 delays due to potential or active storms, rough seas, and refinery outages can all
2 affect product availability. For example, during the summer of 2008,
3 Hurricanes Gustav and Ike resulted in the temporary closing of several
4 refineries and ports and the interruption of PEF's normal shipments of No. 2
5 oil. Without on-site storage, PEF would not be able to ensure the reliable
6 operation of its peaking units during normal and contingency situations.

7
8 **Q. Could PEF simply move fuel oil from one site to another if shipments to a**
9 **particular site were delayed?**

10 **A.** No. Moving fuel oil between locations is not operationally practical or prudent.
11 For example, the Company maintains approximately 240,000 barrels of No. 2
12 oil inventory at the Intercession City combustion turbine site. PEF cannot rely
13 on that inventory to readily fuel the CT units at Shady Hills, which are located
14 some 85 miles away. The fuel oil would have to be trucked from Intercession
15 City to Shady Hills, which takes time and money. Further, Intercession City
16 has only one connection available to load trucks. Assuming that the
17 Intercession City units did not need the oil to operate, and that trucks were
18 available, it would take 274 truck loads to provide the 48,000 barrels to Shady
19 Hills. At the rate of one truck per hour loading 24 hours a day, seven days per
20 week, it would take 11 days to provide Shady Hills with 51 hours (or 2.1 days)
21 of light oil supply. When the PEF Energy Control Center notifies the CT unit
22 operators to begin generating electricity, these units must be ready at that
23 moment and cannot wait for a shipment of inventory from another site. Thus, a
24 sufficient amount of No. 2 oil inventory at each CT site is imperative.

25

1 **Q. Why does the Company maintain an inventory of No. 2 oil at the Port of**
2 **Tampa?**

3 A. PEF maintains storage at the Port of Tampa to reduce the significant logistical
4 risk and time lag that exist for the Company in procuring and shipping No. 2 oil
5 to its units when needed. Supplying fuel oil to PEF's plants has inherent risks
6 due to the way the product is procured and transported to the state and
7 ultimately to PEF's generating sites. The offsite storage provides a significant
8 benefit to PEF as it gives the Company much greater flexibility to secure No. 2
9 oil in advance and to schedule deliveries from suppliers at more regular
10 intervals or with broader delivery windows. The availability of the off-site
11 inventory increases supply security and reliability by allowing PEF to buy fuel
12 oil over time, and to effectively schedule fuel deliveries to its generation fleet
13 from the Port of Tampa inventory without being concerned with the timing of
14 any one barge or series of barge shipments. This flexibility is even more
15 important during extreme load events or during supply disruptions, when PEF
16 could otherwise face both supply risks and transportation risks and delays.

17 The need for and value of this storage was evident after PEF struggled
18 in 2005 to get and maintain sufficient fuel oil supply to our units in the face of
19 significant delays caused by hurricanes, higher loads, and unexpected and
20 unforeseen unit derates that put greater demand on our peaking units. In
21 addition, during the 2008 hurricanes, when the refineries in the Gulf of Mexico
22 closed, it was difficult to procure supplies of oil.

23 In addition to these supply and delivery risks, forecasting fuel oil burns
24 at peaking units is more difficult than forecasting other fuels, such as coal and
25 natural gas, which are used at base-load and intermediate plants. As such, PEF

1 must be prepared to deliver large quantities of fuel oil at any time to respond to
2 load variation, unforeseen unit outages and other fuel events. The inventory of
3 No. 2 oil at the Port of Tampa meets this objective.
4

5 **Q. How does the State of Florida and the Company obtain its fuel oil?**

6 A. According to the Department of Environmental Protection's Florida Energy
7 Plan released in January 2006, the State of Florida depends almost exclusively
8 on other states and nations for supplies of oil and ranks first among all states in
9 the amount of electricity produced from oil. Florida receives approximately 98
10 percent of its fuel oil by sea via barge and tanker ships. Fuel oil is supplied by
11 domestic and international refineries as well as the pipeline spur in Bainbridge,
12 Georgia. PEF purchases its fuel oil from suppliers who have access to
13 inventories, refineries, and terminals in the Gulf Coast, Midwest and West and
14 transport the fuel oil to Florida and ultimately to PEF generation facilities via
15 barge, pipeline, rail, and truck.

16 With respect to managing and meeting its No. 2 oil system generation
17 and inventory requirements, PEF purchases No. 2 oil primarily under term
18 agreements based on published market based indexes and utilizes leased off-site
19 inventory at the Port of Tampa for delivery of No. 2 oil to its plant facilities by
20 barge, pipeline, rail, and truck.

21 With respect to residual fuel oil, the Anclote plant is supplied via a 33.5
22 mile oil pipeline which originates from dedicated inventory located at the
23 Bartow plant site. The Bartow plant site has unloading facilities where residual
24 fuel oil is delivered via barges which originate from the Gulf Coast. Residual
25 fuel oil is delivered to the Suwannee plant by truck deliveries from terminals

1 located in Florida and by rail from sources outside the state.

2

3 **Q. What impact do these fuel supply arrangements have on PEF's fuel**
4 **inventory management?**

5 A. Fuel oil deliveries must be managed and arranged in advance given the
6 relatively long lead times to obtain the fuel supply and transport it to PEF's
7 facilities. In addition, PEF faces significant risks to the timely delivery of fuel
8 oil. These include rail congestion, strikes, flooding, fogs, river flooding,
9 tropical storms, hurricanes, refinery outages, and equipment breakdowns. All
10 of these factors can increase the time from when an order is placed for delivery
11 of fuel oil to when it reaches the site. The farther the supply point is from the
12 delivery point, or the more variables that exist, the longer the time period could
13 be for delivery. As noted above, barge shipments were significantly impacted
14 as a result of the hurricanes in 2005. This also occurred during the hurricanes
15 in 2008. In addition, the amount of fuel oil that is available can be impacted as
16 a result of sustained refinery outages in the Gulf Coast.

17

18 **Q. How do the residual and No. 2 oil inventory target levels compare with the**
19 **Commission's guidelines established in Order No. 12645 in Docket No.**
20 **830001-EU?**

21 A. As can be seen in Exhibit No. ___ (SAW-4), PEF's residual and No. 2 oil
22 inventory targets exceed the guidelines.

23

24 **Q. Please explain why the residual and No. 2 oil inventory levels exceed the**
25 **guidelines.**

- 1 A. For all the reasons discussed above, sound fuel management practices require
2 PEF to maintain oil inventory levels that exceed the 1983 guidelines. The
3 factors supporting the fuel inventory levels above the guidelines include:
- 4 • the difficulty in predicting fuel oil needs due to the fact that oil-fired
5 combustion turbine units are called on both during periods of peak demand
6 and in the event of unplanned outages or derates of intermediate or baseload
7 units;
 - 8 • the diverse geographic location of the generating sites, and the
9 impracticality of transferring fuel between those sites, which necessitates
10 maintaining inventory at a variety of locations;
 - 11 • the fact that units at a large generating site may have different fuel quality
12 requirements, which requires the Company to maintain inventories of
13 multiple grades of fuels at a single site;
 - 14 • the relatively long lead time to obtain fuel supplies or to replenish
15 inventories due to the fact that PEF, like other Florida utilities, must import
16 virtually all of its fuel oil from sources outside the State; and
 - 17 • the risk of supply curtailments or transportation delays posed by hurricanes
18 and tropical storms which can impact both PEF's service territory as well as
19 fuel handling facilities along the Gulf coast.

20
21 If PEF fails to maintain fuel oil inventories at the planned levels, it exposes the
22 Company and its customers to fuel cost, operations, and reliability risks. These
23 risks include buying much more expensive oil, running out of fuel oil prior to
24 shipments arriving, buying more expensive purchased power, and putting the
25 power grid at greater risk due to fuel shortages. The Company needs fuel

1 inventory levels above the guideline amounts not only to support the projected
2 burn levels, but also to effectively manage a secure and reliable supply of fuel
3 for normal and contingency circumstances.
4

5 **Q. Is it speculative to plan for the contingency events you describe?**

6 A. Absolutely not. Experience shows how critical the steam and peaking units,
7 and thus the oil inventory levels, can be. In 2005, the effects of Hurricanes
8 Katrina, Rita, and Wilma disrupted coal barge shipments into Crystal River and
9 decreased the supply of natural gas from the Gulf of Mexico. In addition,
10 because these storm events interrupted the delivery of oil shipments to the
11 various oil plants, PEF relied solely on on-site inventory for days. These fuel
12 supply disruptions were coupled with higher load requirements due to warmer
13 weather, as well as an unexpected de-rate at Crystal River 5, a coal-fired unit.
14 The combination of these events resulted in the inventory levels for Anclote
15 dropping to 6.4 days (based on the units running at full load). After these
16 events, the Company decided to target, and has generally targeted to maintain,
17 an inventory level of approximately 18 days of full burn for the Anclote plant.

18 To further illustrate this risk, if there are prolonged natural gas
19 curtailments and/or fuel oil delivery delays, PEF may have to solely rely on its
20 No. 2 fuel oil inventory at its large combustion turbine sites and at its
21 intermediate natural gas generation sites. If this were to occur, the Intercession
22 City, Debary and Hines sites, which maintain PEF's largest on-site inventories,
23 have on average only 104 hours of inventory, meaning those units could only
24 operate 4.3 days. It is thus imperative for the Company to have sufficient
25 inventory levels of oil to adequately protect its ratepayers in the event of supply

1 interruptions.

2

3 **Coal Inventory**

4 **Q. How does PEF develop its coal inventory levels?**

5 A. PEF uses its fuel inventory objectives and procedures to maintain coal
6 inventories at optimum levels consistent with operational and financial
7 considerations. For coal inventory, additional considerations include potential
8 supply problems with mining sources, barge transportation, and rail
9 transportation. The storage capacity available near New Orleans (International
10 Marine Terminal or "IMT") and at the United Bulk Terminal ("UBT") is also a
11 consideration when evaluating coal inventories at Crystal River. In addition,
12 the Crystal River coal inventory levels are affected by the risk that hurricanes
13 and tropical storms in the Gulf of Mexico pose to the supply of coal to the site.

14

15 **Q. Can you provide any specific examples to illustrate the impact that**
16 **hurricanes can have on coal inventory levels at PEF?**

17 A. Yes. The 2005 hurricane season, which I described above in connection with
18 oil inventories, also severely impacted coal inventories at Crystal River, where
19 all PEF's coal-fired generating units are located. Coal can be delivered by rail
20 or barge to Crystal River, but the majority of coal is delivered by barge.
21 Domestic barge coal comes down the Mississippi River on river barges, and is
22 then loaded onto Gulf barges at one of two terminals for shipment across the
23 Gulf of Mexico. All the coal PEF purchases from South America are shipped
24 across the Gulf of Mexico as well.

25

During 2005, hurricanes in the Gulf of Mexico prevented coal barges

1 from being delivered into Crystal River, causing inventory levels at Crystal
2 River to drop significantly. Generally the Company targets coal inventory
3 levels equal to 45 days of running the plants at full capacity. As can be seen in
4 Exhibit No. __ (SAW-5), by December 2005, the Company's inventory levels
5 dropped to 22 days for all four Crystal River units. In the last four months of
6 the year, PEF burned more coal than was delivered to the site.

7
8 **Q. Has the Company seen any interruptions in coal deliveries since 2005?**

9 A. Yes, the summer of 2008 was particularly challenging in terms of obtaining
10 timely coal shipments. First, an oil spill in the Mississippi River interrupted
11 shipments of barge coal. Then Hurricanes Gustav and Ike, while they
12 fortunately did not directly impact PEF's service territory, did prevent barges
13 from crossing the Gulf of Mexico. In addition, congestion on the railroads can
14 also interrupt or delay coal deliveries. In September 2008, coal inventory levels
15 at Crystal River fell to 22 days (at full burn), as compared to the target of 45
16 days.

17
18 **Q. What is the Company's projected coal inventory for 2010?**

19 A. For 2010, the Company projects to average 360,000 tons of coal inventory at
20 Crystal River 1 & 2, 600,000 tons of coal inventory at Crystal River 4 & 5, and
21 827,200 tons of coal either in transit or at off-site storage, as reflected in my
22 Exhibit No. __ (SAW-3).

23
24 **Q. How do the coal inventory target levels compare with the guideline**
25 **established in Order No. 12645 in Docket No. 830001-EU?**

1 A. As can be seen in Exhibit No. ___ (SAW-4), PEF's coal inventories exceed the
2 guideline established in 1983. The on-site inventory levels are consistent with
3 the target of 45 days at full burn that we have attempted to maintain since our
4 experience with supply interruptions during the 2005 hurricane season. The off-
5 site inventories are larger than we have maintained in recent years. The increase
6 in off-site inventories is required to support fuel switching to higher sulfur
7 coals, such as Illinois Basin coal, in 2010 in response to the installation of
8 scrubbers at Crystal River Units 4 & 5. The Company will begin building an
9 off-site inventory of higher sulfur coal in 2009. At the same time, we need to
10 maintain an inventory of lower sulfur coal to support plant operations until the
11 scrubbers have been installed and tested, and the change-over to higher sulfur
12 coal can be completed in late 2010.

13

14 **Natural Gas Inventory**

15 **Q. Is there a target inventory level for natural gas in the Commission's**
16 **guidelines established in Order No. 12645 in Docket No. 830001-EU?**

17 A. No, there is no Commission guideline for natural gas inventory levels.

18

19 **Q. What natural gas inventory does the Company maintain?**

20 A. As shown on Exhibit No. ___ (SAW-3), the Company maintains a total of
21 1,250,000 MMBtu's of contracted natural gas inventory. This contracted for
22 inventory level was established in accordance with the Company's objectives
23 that I have previously described. The natural gas inventory level is represented
24 by contracts that began in May of 2008, in which PEF leases natural gas storage
25 capacity from two companies for a total of five years. The first contract is with

1 Bay Gas Storage Company for high deliverability natural gas storage from an
2 onshore salt cavern facility in Mobile, Alabama with capacity of 500,000
3 MMBtu's. The second contract, with SG Resources Mississippi, L.L.C.
4 ("SGR"), permits PEF to store up to 750,000 MMBtu's at SGR's onshore salt
5 cavern facility in Greene County, Mississippi.

6
7 **Q. What are the reasons to maintain an inventory of natural gas?**

8 **A.** PEF contracted for this natural gas storage for a few key reasons. First, PEF
9 has a growing portfolio of natural gas-fired generation. Approximately 47
10 percent of actual generation from PEF's owned generation in 2010 is expected
11 to come from combined cycle or combustion turbine units fueled by natural gas.
12 Thus it is increasingly important that PEF has a secure and reliable natural gas
13 supply to support its natural gas generation needs. Diversifying its flowing
14 supply and providing for back-up are both essential components of the
15 Company's strategy to meet this need. The contracted storage will increase the
16 reliability of gas supply by providing backup supply in emergency conditions.
17 For example, PEF withdrew gas from storage to meet system needs when
18 normal gas supplies were disrupted by hurricanes in 2008. Under the storage
19 contracts, PEF has the capability to withdraw the storage gas at the rate of
20 125,000 MMBtu/day over a 10-day period. This can meet a portion of the
21 Company's natural gas requirements when supplies are curtailed. Second,
22 natural gas storage can be used to manage price risk. For example, because
23 PEF has natural gas in storage, it may be able to minimize fuel costs by
24 utilizing storage gas versus buying from the market when the market price is
25 higher than its average cost of gas in storage. Finally, the storage capacity can

1 provide PEF more opportunities to manage daily and monthly pipeline
2 imbalances.

3

4 **Q. In your opinion, are PEF's projected fuel inventory levels appropriate?**

5 A. Yes. For all the reasons I have discussed, I believe that maintaining these fuel
6 inventory levels is reasonable and prudent, and in the best interest of the
7 Company and its ratepayers.

8

9 **Q. Does this complete your testimony?**

10 A. Yes, it does.

1 **MR. MELSON:** And, Commissioner, one more
2 procedural matter. We had talked yesterday about moving
3 the MFRs into the record, and Mr. Rehwinkel had made the
4 excellent suggestion that we provide a list of the
5 supplemental and revised MFRs. I've got that. The
6 parties have seen it. If you'd like, I could hand that
7 out now and we'd move that exhibit.

8 **COMMISSIONER EDGAR:** Okay. Let's go ahead.

9 Mr. Rehwinkel, does that work for you?

10 **MR. REHWINKEL:** Yes. I appreciate the
11 consideration. And after discussion with Mr. Melson,
12 we're satisfied that the list here is the MFRs that
13 we've all been provided copies with.

14 **COMMISSIONER EDGAR:** Okay. And that is the
15 exhibit marked on the Comprehensive, thank you, Exhibit
16 List as 47?

17 **MR. MELSON:** Yes, ma'am.

18 **COMMISSIONER EDGAR:** Okay. And so with that
19 discussion, Exhibit 47 is entered into the record at
20 this time.

21 (Exhibit 47 identified and admitted into the
22 record.)

23 **MR. MELSON:** And Commissioner?

24 **COMMISSIONER EDGAR:** Yes, sir.

25 **MR. MELSON:** I would ask that you mark this

1 single sheet as the next numbered exhibit.

2 **COMMISSIONER EDGAR:** Okay, Mr. Melson, we will
3 mark as 269.

4 **MR. MELSON:** Document title, PEF
5 Supplemental/Revised MFRs.

6 **COMMISSIONER EDGAR:** Which will be so titled.

7 **MR. MELSON:** And we would move that exhibit.

8 **COMMISSIONER EDGAR:** And as Mr. Rehwinkel has
9 concurred earlier, hearing no objection, Exhibit 269 is
10 entered into the record.

11 (Exhibit 269 marked for identification and
12 admitted into the record.)

13 **MR. BURNETT:** And, Madam Chairman, PEF owed
14 the record a complete copy of Exhibit 265. We have that
15 available, if it's your pleasure to take it up at this
16 time, or we can do it at any time.

17 **COMMISSIONER EDGAR:** That was the exhibit that
18 Mr. Wright had supplied an excerpt, and then per the
19 discussion yesterday, you were going to distribute and
20 mark for -- okay. So we can go ahead and note for the
21 record that the exhibit marked 265 which was discussed
22 as an excerpt yesterday, that the full and complete
23 report is being submitted to all parties and to the
24 Clerk and will be so admitted as Exhibit 265.

25 (Exhibit 265 admitted into the record.)

1 **MR. BURNETT:** Yes, ma'am. Thank you.

2 **COMMISSIONER EDGAR:** Okay. Anything else that
3 we can take care of? Okay. Hearing none, we had
4 promised our court reporter and the rest of us a short
5 break, so we will come back and pick up with the next
6 witness at quarter to. We are on break.

7 (Recess taken.)

8 If we could all gather. Okay. We are back
9 from break and we are back on the record.

10 Mr. Burnett, your witness.

11 **MR. BURNETT:** Thank you, ma'am. We call Dale
12 Oliver.

13 **DALE OLIVER**

14 was called as a witness on behalf of Progress Energy
15 Florida and, having been duly sworn, testified as
16 follows:

17 **DIRECT EXAMINATION**

18 **BY MR. BURNETT:**

19 **Q.** Good morning, Mr. Oliver. Will you please
20 introduce yourself to the Commission and provide your
21 business address?

22 **A.** I will. Dale Oliver, Vice President,
23 Transmission Operations and Planning for Progress Energy
24 Florida, 299 1st Avenue North, St. Petersburg, Florida.

25 **Q.** And you've been previously sworn, correct,

1 sir?

2 **A.** I have.

3 **Q.** And have you filed direct testimony and
4 exhibits in this proceeding?

5 **A.** I have.

6 **MR. BURNETT:** And, Madam Chair, for the, for
7 the information, those have been premarked, the
8 exhibits, as 62 and 63.

9 **COMMISSIONER EDGAR:** Thank you.

10 (Exhibits 62 and 63 identified for the
11 record.)

12 **BY MR. BURNETT:**

13 **Q.** Do you have any changes to make to your
14 prefiled testimony or exhibits?

15 **A.** I do not.

16 **Q.** If I asked you the same questions in your
17 prefiled direct testimony today, would you give the same
18 answers that are in that testimony?

19 **A.** I would.

20 **MR. BURNETT:** Madam Chair, we request that the
21 prefiled direct testimony be entered into the record as
22 read today.

23 **COMMISSIONER EDGAR:** The prefiled testimony of
24 this witness will be entered into the record as though
25 read.

Petition for increase in rates by Progress Energy Florida

DOCKET No.090079-EI

DIRECT TESTIMONY OF

DALE OLIVER

1 **I. INTRODUCTION AND SUMMARY**

2 **Q. Please state your name and business address.**

3 A. My name is Dale Oliver. My business address is 299 First Avenue North, St.
4 Petersburg, Florida 33701.

5
6 **Q. By whom are you employed and in what capacity?**

7 A. I am employed by Progress Energy Florida, Inc. ("PEF" or the "Company") as its
8 Vice President, Transmission Operations & Planning Department ("TOPD",
9 "Transmission" or the "Department"). In this role, I have overall responsibility
10 for PEF's transmission system, including its design, construction, operation and
11 maintenance, in order to provide reliable transmission service to PEF's retail and
12 wholesale customers. I am also responsible for the integration of PEF's
13 transmission system with the Florida transmission grid.

14
15 **Q. Please describe your educational background and professional experience.**

16 A. I received a bachelor's degree in electrical engineering from Georgia Tech in
17 1981 and an MBA from Georgia State University in 2001. Prior to assuming my
18 current role in February, 2007, I was the Regional Vice President for PEF's South
19 Coastal Region from October, 2005 to February, 2007, and from May 2004 to

1 October, 2005 the Company's Regional Vice President for the South Central
2 Region. From 2001 to 2004, I was PEF's Director of Transmission Engineering
3 and the Director of the Company's Commitment to Excellence ("CTE") program.
4 Prior to joining PEF in January 2001, I held a number of supervisory and
5 management positions in the transmission maintenance and operations areas for
6 the Southern Company's Georgia Power subsidiary in Atlanta, Georgia. I am a
7 registered professional engineer in the states of Florida and Georgia.

8
9 **Q. What is the purpose of your direct testimony?**

10 A. The purpose of my direct testimony is to support the reasonableness of PEF's
11 transmission capital and O&M expenses.

12
13 **Q. Are you sponsoring any Minimum Filing Requirements Schedules?**

14 A. Yes. The Minimum Filing Requirements (MFRs) Schedules that I sponsor or co-
15 sponsor are listed in Exhibit No. ___ (JDO-1) to my testimony. These MFR
16 Schedules are true and correct, subject to being updated during the course of this
17 proceeding.

18
19 **Q. Do you have any exhibits to your testimony?**

20 A. Yes, I have prepared or supervised the preparation of the following exhibits to my
21 direct testimony:

- 22 • Exhibit No. __ (JDO-1), a summary of sponsored or co-sponsored schedules
23 of the Company's Minimum Filing Requirements (MFRs); and

- 1 • Exhibit No. __ (JDO-2), a summary of Transmission capital projects, with
2 total capital project cost, (1) to comply with federal reliability standards, (2) to
3 comply with regional reliability initiatives, (3) to accommodate new
4 generation and reliability needs from expansion, and (4) to maintain the
5 system.

6 These exhibits are true and correct.

7
8 **Q. Please summarize your testimony.**

- 9 A. PEF requires transmission capital expenditures of \$185.2 million and O&M
10 expenses of approximately \$45.3 million in 2010. These expenditures enable the
11 Company to strike a reasonable balance between the high quality of service that
12 our regulators and our customers expect and a reasonable cost for transmission
13 service. PEF's O&M expenses are further reasonable and necessary because they
14 are \$ 0.03 million or 0.0% above the Commission O&M benchmark cost of \$38.4
15 million.

16 PEF has successfully provided reliable transmission service to its customers
17 at a reasonable cost for years. PEF's reliability performance is consistent and at
18 levels that drive customer satisfaction with our service. PEF's transmission
19 reliability and operations has consistently ranked high among forty utilities across
20 the country. PEF needs its requested transmission capital and O&M expenditures
21 to meet the expanded capacity demands placed on the system, increasingly
22 stringent federal reliability standards, and the Commission's storm hardening
23 initiatives, while maintaining the reliable system operation that our customers

1 expect. PEF has demonstrated an ability to successfully operate the Transmission
2 side of its business by balancing the need to maintain excellence in reliability
3 with providing transmission service at a reasonable cost.
4

5 **II. PEF'S TRANSMISSION SYSTEM.**

6 **Q. Please generally describe PEF's transmission system.**

7 A. PEF is part of a nationwide interconnected and Florida intraconnected power
8 network that enables interconnected utilities to exchange power. As a result,
9 PEF's transmission system is subject to regulation with respect to the reliability
10 of its system by both the Federal Energy Regulatory Commission ("FERC") and
11 the Florida Public Service Commission ("PSC" or the "Commission"). PEF's
12 transmission system includes approximately 5,000 circuit miles of transmission
13 lines, including 500 kV, 230kV, 115 kV, and 69 kV lines, transmission
14 substations, towers, poles, and related equipment and material across 20,000
15 square miles in west central Florida and the densely populated areas around
16 Orlando, St. Petersburg, and Clearwater. Within Florida, PEF's system is
17 interconnected with the other investor-owned utilities, twenty-two municipal
18 electric utilities, and nine rural electric cooperatives. By improving, maintaining,
19 and adding to this transmission system when necessary, PEF reliably delivers
20 power from generation resources to be distributed to its customers' homes and
21 businesses around-the-clock, each day.
22

1 **Q. What has the Company done to maintain and improve transmission system**
2 **reliability since 2005?**

3 A. Our base line for transmission system reliability was our 2002-2004 CTE
4 program. The CTE program included a number of capital and O&M initiatives
5 that improved the reliable delivery of power to our customers. From this base
6 line, in each of the past four years we have assessed our system performance in
7 the previous year and established priorities for the next year. For example, our
8 annual, targeted maintenance capital expenditure plan prioritizes the replacement
9 of transmission capital units according to the age, condition, and significance of
10 the replacement of that unit to the overall reliability of the system. This
11 maintenance capital expenditure plan focuses on transmission poles, pole
12 insulators, static wire, transmission line conductor, substation transformers,
13 breakers, capacitors, relays, and battery banks.

14 Our transmission O&M initiatives the past four years also built upon our
15 CTE initiatives by focusing on initiatives that offered the greatest benefit to
16 system reliability. To illustrate, O&M initiative spending since 2005 included
17 vegetation management, line bonding and grounding, relay calibration, and
18 transformer inspections in addition to our routine O&M expenditures for the
19 transmission system.

20 Our annual process of planning our capital, maintenance capital, and O&M
21 expenditures has resulted in the strengthening of our transmission grid and the
22 enhancement of the operation of our transmission system, with continued,
23 improved reliability performance for our customers over the last four years.

1

2

Q. How does the Company measure transmission reliability performance?

3

A. PEF regularly analyzes reliability data to assess and track the performance of its transmission system using generally accepted reliability measures or indices in the electric utility industry. These indices include (1) the Circuit System Average Interruption Duration Index or "Circuit SAIDI", which tracks the average duration of a transmission-related outage; (2) the System Average Interruption Frequency Index ("SAIFI"), which tracks the average frequency of transmission-caused outages; (3) the System Average Interruption Frequency Index for Momentaries ("SAIFI-M"), which tracks the average frequency of transmission-caused outages for outages of less than a minute; and (4) the System Average Restoration Index ("SARI"), which tracks the time required to re-energize circuits following an outage. These reliability indices are regularly used by utilities and regulators to assess reliability performance by tracking changes in the results of these indices from one period of time to another, later period and comparing the direction of the change and the magnitude of the change from the earlier period to that later period of time.

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Q. What are the results of these reliability performance indices for PEF's transmission system?

20

21

A. For the latest completed five-year window (2003-2007), PEF's transmission system reliability improved. All of these reliability indices that PEF regularly tracks showed positive trends. Specifically, Circuit SAIDI decreased by 23.4%,

22

23

1 SAIFI decreased by 7.9%, SAIFI-M decreased by 10.1%, and SARI decreased by
2 20.6%. These positive trends demonstrate that PEF is providing customers with
3 reliable transmission service. They further demonstrate that PEF has reasonably
4 and prudently maintained its transmission system over time, when the
5 transmission system has expanded and the existing transmission assets have
6 further aged, adding to the cost to maintain and improve system reliability. Our
7 reliability performance under increasing cost pressures indicates our commitment
8 to excellent customer service.

9
10 **Q. Are there other ways that PEF monitors its transmission performance?**

11 A. Yes. PEF annually participates in a benchmarking study managed by an outside
12 contractor. This benchmarking study, known as the *SGS Transmission Reliability*
13 *Benchmarking Study*, includes approximately 40 other utilities from around the
14 country comprising almost half of the transmission circuit miles in the United
15 States. PEF has consistently compared well against the benchmark group for
16 several years now, and particularly given the often harsh conditions under which
17 our system operates.

18
19 **Q. Has PEF maintained the reliable transmission of power to customers at a**
20 **reasonable cost?**

21 A. Yes. Since 2005, PEF has continued to incorporate best practices in the industry
22 to manage and control its transmission-related capital and O&M costs. For
23 example, we set up an organizational model that includes a unit in the

1 Transmission Maintenance Section called Maintenance Resource Management
2 that is comprised of Resource Coordinators who are responsible for planning and
3 scheduling all capital and O&M-related work performed in our transmission
4 areas. This group provides efficient and organized maintenance work scheduled
5 and monitored at 15-minute increments, where appropriate. They also procure
6 necessary materials and closely monitor their delivery to ensure their timely and
7 cost-effective use to maintain the system. Our results over the last three years
8 demonstrate that the Maintenance Resource Management processes are working
9 and contributing to overall reliability improvement at a reasonable cost.

10 Additionally, in 2007 we created a new Project Support group in our Project
11 Management unit that focuses on optimizing the scheduling, procurement of
12 materials, and management of contract support work. This Project Support group
13 improved the organization of maintenance, planning, engineering, and
14 construction group projects with resulting cost savings. Also in 2007, a
15 Transmission Finance group comprised of several business financial analysts was
16 created to more efficiently achieve our operational objectives by providing
17 improved budgeting, cost management, and business planning support.
18 Transmission Finance continuously works with Transmission to facilitate
19 informed decision making, increase productivity, decrease costs, and establish
20 effective internal controls. As a result, of these measures and others, PEF's
21 Transmission management efficiently provides our customers with reliable
22 transmission service.
23

1 **Q. Can you provide us with some of the other ways Transmission ensures the**
2 **Company is providing reliable transmission service to customers in an**
3 **efficient, cost-effective manner?**

4 A. Yes. Our improved safety record has also contributed to the delivery of reliable
5 transmission service to customers at a reasonable cost. Transmission has
6 demonstrated continually improving safety records since 2002. Our OSHA-
7 recordable injury totals have improved from eleven injuries for 2002 to five
8 injuries for 2008. The corresponding improvement in OSHA injury rates was
9 from 3.04 in 2002 to 1.05 in 2008. These improvements were made with
10 increases in employees and, accordingly, the hours worked. Transmission
11 employs over 400 employees working nearly 1,000,000 hours annually,
12 performing tasks that have inherent risk much of that time. As a result, we have
13 an excellent safety record that demonstrates our commitment to a safety culture.
14 Customers benefit directly from our exemplary safety record in transmission
15 because the Company does not experience the lost time and inefficiencies that
16 result from job-site injuries and the required investigations, "lessons learned"
17 practices, and time and cost of dealing with potential employee and third party
18 claims.

19 Additionally, our training programs benefit our customers by improving our
20 ability to efficiently and reliably provide customers transmission services. One
21 example is the training program for System Dispatchers at our Energy Control
22 Center (ECC). PEF Dispatchers must be certified at the Reliability Authority
23 level by the North American Reliability Corporation ("NERC"), which was

1 established as a result of the Federal Energy Policy Act of 2005 ("EPAct") to
2 develop and enforce mandatory transmission reliability standards. As a result,
3 they are required to obtain 200 Continuing Education Hours (CEH's) over a
4 three-year period to maintain their certification. To acquire these CEH's, the ECC
5 Training team annually provides 80 hours of training classes that consist of
6 presentations, discussions, simulation (including hours of one-on-one simulation
7 training), and debriefs on operational and other issues. Additional training hours
8 consist of computer-based and written material based on Plantview modules and
9 PEF ECC Procedures and Policies. Overall, PEF System Dispatchers will receive
10 120 to 140 hours of training annually to maintain their performance skills in an
11 ever changing transmission system. This training is also required for PEF to
12 comply with Federal Energy Regulatory Commission ("FERC"), NERC, and
13 Florida Reliability Coordinating Council ("FRCC") regulation.

14 All other Transmission personnel are required to receive training as well.
15 This training includes OSHA Compliance, Safety, Environmental, and skill-based
16 technical training. Our training programs continually increase our employees'
17 ability to provide efficient, safe, and reliable transmission service to our customers.

18 Our new outage management software application, known as the
19 Transmission Outage Management System (TOMS), implemented since 2005, also
20 improves the efficient delivery of reliable transmission service to our customers.
21 TOMS manages outages in a well-organized manner, listing the physical location
22 of the event (i.e. nearest street address and nearest substation or transmission line
23 structure number), tracks the number of customers affected by the particular event,

1 and tabulates the number of calls that have been received for the event. TOMS also
2 provides information on the location and magnitude of the short circuit associated
3 with the outage, if there is one. This information is not only extremely helpful in a
4 storm scenario when multiple outages are underway, but it is also useful for any
5 outage that occurs on the transmission system. TOMS has resulted in our ability to
6 respond to transmission outages in a very organized and thus efficient fashion, in
7 both storm and non-storm conditions.

8
9 **Q. Can the Company continue to provide customers with reliable transmission**
10 **service?**

11 A. Yes, but maintaining our record of reliable transmission service requires
12 additional capital and O&M investment in the transmission system. One reason
13 is that PEF's transmission system is simply larger today compared to 2005. The
14 transmission system therefore includes additional transmission assets that must be
15 maintained. Another reason is that PEF must continue to invest in capital
16 additions to the transmission system to meet increased customer capacity demand
17 on the system and to replace a continually aging infrastructure. These capital and
18 O&M investment needs coincide with labor, material, fuel, real estate corridor,
19 and permitting cost escalations, requiring additional funding for these
20 investments.

21 There is another reason too for our additional capital and O&M investments
22 in the transmission system. Regulatory initiatives at both the federal and state
23 level mandate changes in the way transmission planning occurs and change the

1 way we operate and maintain our transmission system. These regulatory
2 initiatives further require PEF to incur additional capital and O&M expenditures
3 to comply with the regulatory initiatives.
4

5 **III. FEDERAL AND STATE REGULATORY RELIABILITY INITIATIVES.**

6 **Q. What are the federal reliability initiatives that affect Transmission planning**
7 **and investment?**

8 **A.** EPAct in 2005 directed the FERC to establish an Electric Reliability Organization
9 (“ERO”) to establish and enforce national transmission reliability standards. The
10 FERC complied by certifying NERC as its ERO and the FERC authorized NERC
11 to make the previously voluntary reliability standards mandatory, adopt new or
12 more stringent mandatory reliability standards, and enforce them. The NERC
13 adopted more stringent and new mandatory reliability standards pursuant to the
14 FERC’s authorization and direction. Noncompliance with these reliability
15 standards subjects electric utilities to enforcement actions and penalties.

16 The FERC further issued various Orders directing the operation and
17 regulation of electric utility transmission systems and requiring increased
18 transparency in the planning of transmission systems between electric utilities
19 and/or any interested stakeholders in the transmission system. Also, in
20 conjunction with NERC’s transmission planning and reliability activities, the
21 FRCC has taken an increasingly active role in transmission planning and
22 reliability from a regional perspective.

1 Compliance with the FERC, NERC, and FRCC orders, reliability standards,
2 and planning coordination initiatives requires Transmission to implement new
3 processes and augment existing planning processes. Transmission must also
4 incur capital and O&M expenses to comply with these standards and initiatives.
5

6 **Q. Can you explain how these federal regulatory directives or initiatives have**
7 **influenced PEF's transmission planning?**

8 A. Yes, I can. The most straight-forward impact results from the NERC designation
9 as the ERO with increased control over transmission reliability. The NERC
10 adopted and the FERC approved more stringent transmission reliability standards.
11 An administrative process and potentially significant fines follow from
12 noncompliance with these standards. To comply with these NERC reliability
13 standards, PEF must plan for and invest in Transmission capital projects that,
14 absent these standards, are not mandatory and therefore required.

15 Additionally, FERC Order 890 establishes Nine Principles of Transmission
16 Planning. These principles mandate more transparency in the transmission
17 planning process and require additional administrative processes and increased
18 regulatory scrutiny to ensure that transparency is achieved. PEF has historically
19 been open and helpful in the transmission planning process with PEF's customers,
20 and with the NERC and FRCC, but the additional administration and regulatory
21 scrutiny means additional cost to PEF in the transmission planning process for both
22 PEF's internal transmission planning analyses and analyses performed in joint
23 planning efforts with other utilities.

1 The increased federal activity in transmission planning and reliability
2 through the FERC and the NERC has also led to additional transmission planning
3 and reliability activity at the regional level. Within Florida, the FRCC provides
4 technical assistance to identify the reliability need for large transmission projects.
5 As the NERC's activity in transmission planning has increased so has the FRCC's,
6 resulting in a several-fold increase in the FRCC reliability workload since the
7 beginning of 2005. The increased FRCC activity resulted in increased findings of
8 the need to construct transmission capital projects to mitigate reliability excursions
9 from FRCC and NERC criteria. These findings translate into increased
10 transmission costs for PEF.

11 Finally, the FRCC's increased activity in transmission reliability planning
12 has led the FRCC to focus on the reliability of the PEF 69 kV system. PEF
13 presently has over 2,000 circuit miles of 69 kV lines serving dozens of PEF and
14 Rural Electric Cooperative substations. A significant portion of the 69 kV system
15 provides flow-through, grid-related reliability support, and thus it functions
16 practically the same as the Bulk Electric System ("BES"). Thus, the 69 kV system
17 is important to the reliability of PEF's system even though it is not covered by any
18 existing NERC standard. PEF has continually invested in the 69 kV system to
19 maintain its reliability because of its importance to PEF's overall system and
20 customers. With the additional emphasis that the FRCC has placed on the 69 kV
21 system, PEF is making even further investments in that system.

22

1 Q. You also mentioned state regulatory initiatives that have impacted PEF's
2 transmission capital and O&M requirements. Can you explain what those
3 state regulatory initiatives are?

4 A. Yes. The Commission has issued two Orders and enacted Rule 25-6.0342,
5 Florida Administrative Code (F.A.C.), to require Florida investor owned utilities
6 ("IOUs") to harden their systems against potential storm outages and damage. In
7 February 2006, the FPSC issued Order No. PSC-06-0144-PAA-EI, requiring all
8 Florida IOUs to implement an eight-year wood pole inspection cycle program.
9 Consequently, PEF now files a Wood Pole Inspection Plan every three years with
10 an inspection report submitted annually. The annual reports contain 1) the
11 methods PEF used to determine National Electrical Safety Code ("NESC")
12 compliance, 2) an explanation of the inspected poles selection criteria including
13 geographic location and the rationale for including each selection criterion, 3)
14 summary data and results of PEF's previous wood pole inspections addressing
15 the strength, structural integrity and loading requirements, and 4) the cause for
16 the poles failing inspection and actions taken by PEF to correct each pole failure.

17 In April 2006, the Commission also issued Order No. PSC-06-0351-PAA-
18 EI, requiring all IOUs to file plans and estimated implementation costs for ten
19 ongoing storm preparedness initiatives identified by the Commission. PEF
20 consequently filed its Storm Preparedness Plan on June 1, 2006. PEF's Plan
21 implemented processes meeting the requirements of the Commission's ten storm
22 preparedness initiatives. In February 2007, the Commission enacted Rule 25-

1 6.0342, F.A.C. This rule mandates various storm hardening requirements for
2 Florida electric utility transmission and distribution systems.

3 The Rule requires, at a minimum, that each IOU's storm hardening plan
4 address the following: (1) Compliance with the NESC; (2) Extreme wind loading
5 (EWL) standards for: (i) new construction, (ii) major planned work, including
6 expansion, rebuild, or relocation of existing facilities, and (iii) critical
7 infrastructure facilities and along major thoroughfares; (3) Mitigation of damage
8 due to flooding and storm surges; (4) Placement of facilities to facilitate safe and
9 efficient access for installation and maintenance; (5) A deployment strategy
10 including: (i) the facilities affected, (ii) technical design specifications,
11 construction standards, and construction methodologies, (iii) the communities and
12 areas where the electric infrastructure improvements are to be made, (iv) the
13 impact on joint use facilities on which third-party attachments exist, (v) an
14 estimate of the costs and benefits to the utility of making the electric
15 infrastructure improvements, and (vi) an estimate of the costs and benefits to
16 third-party attachers affected by the electric infrastructure improvements; and (6)
17 Attachment standards and procedures for third-party attachers.

18 On May 7, 2007, PEF filed its 2007 Electric Infrastructure Storm Hardening
19 Plan (Docket No. 070298-EI). This Plan consolidated the requirements of the
20 previous Orders and the new Rule into a single plan. As a result, PEF is meeting
21 all storm hardening requirements and initiatives for its transmission system, at
22 additional capital and O&M cost to PEF.
23

1 **IV. TRANSMISSION CAPITAL AND O&M REQUIREMENTS.**

2 **Q. What are PEF's transmission capital and O&M expenditure requirements**
3 **for 2010?**

4 A. PEF requires \$185.2 million in transmission capital spending and \$45.3 million in
5 O&M expenses.

6
7 **Q. How much of the required transmission capital spending is required by**
8 **NERC and FRCC reliability initiatives and expansion?**

9 A. \$140.3 million of the \$185.2 million in transmission capital spending is allocated
10 for planning, engineering, and construction expenditures for expansion of the
11 PEF transmission system for NERC reliability initiatives and additional
12 generation. The scope of PEF's transmission work required by the NERC
13 Standards, in particular the NERC Transmission Planning (TPL) Standards, has
14 increased significantly. PEF has successfully managed this increase in scope by
15 recently completing several major capital projects and remaining on schedule to
16 complete many others. Examples include the Vandolah - Hardee 230 kV line
17 upgrade and the Lake Bryan - Windmere 230 kV circuit number 2 construction
18 and circuit number 1 rebuild. Implementation of these projects and others assist
19 PEF in complying with the NERC TPL standards, increase the reliability of the
20 grid in the Central Florida area, and demonstrate our continuing commitment to
21 our customers and stakeholders to provide reliable transmission service in
22 compliance with regulatory reliability standards. My Exhibit No. ____ (JDO-2),

1 has a more detailed list of PEF NERC compliance-related transmission projects
2 in Section A of that Exhibit.

3 PEF is also expanding its transmission system to accommodate new
4 generation on the system and additional transmission reliability needs. Sections
5 B and C of my Exhibit No. ____ (JDO-2) provide detailed lists of major
6 transmission projects relating to the generation additions and other major
7 transmission reliability needs. Additionally, PEF is building additional new 69
8 kV lines or rebuilding existing ones. All new 69 kV construction is built to 115
9 kV specifications to provide increased reliability and performance. As I
10 explained, PEF's additional investment in its 69 kV system in part satisfies the
11 FRCC's interest in enhanced reliability of the 69 kV system. PEF's major 69 kV
12 transmission capital projects are listed in Section D of Exhibit No. ____ (JDO-2).

13
14 **Q. How did PEF determine that these transmission projects were required?**

15 A. Each calendar year, transmission planning performs analyses for the long-term,
16 ten-year transmission planning cycle, i.e. beginning one year out from present
17 day through year ten. These analyses are performed from three distinct planning
18 perspectives. First, the analyses by transmission planning must demonstrate that
19 the PEF system will be in compliance for the ten-year planning period with the
20 mandatory NERC reliability standards, specifically NER Reliability Standards
21 TPL-001-0, TPL-002-0, TPL-003-0, TPL-004-0 and FAC-010-2. If the analysis
22 shows that the PEF system deviates from these standards PEF must initiate either

1 an operational mitigation strategy or a new transmission capital project to bring
2 the system back in compliance with the standards.

3 Second, an analysis is performed to demonstrate transmission system
4 compliance with FRCC reliability standards. This analysis is similar to the
5 analysis performed to ensure system compliance with the NERC reliability
6 standards. The primary difference between the two analyses is that the FRCC
7 treats the 69 kV system as if it is part of the BES. The lower bound under current
8 NERC Reliability Standards is 100 kV. Third, additional analysis is performed to
9 address the interconnection of new retail delivery points, such as new residential
10 or commercial developments that require capital expansion of PEF's existing
11 transmission system.

12 After these analyses are complete, PEF's transmission planning process
13 requires the review of proposed transmission projects by other PEF areas affected
14 by the proposal for feasibility and possible alternatives, if necessary. PEF's
15 Project Review Group (PRG) subjects proposed transmission projects to multiple
16 phases of review before a project is approved and included in the Transmission
17 capital budget. All transmission capital projects are therefore carefully reviewed
18 and scrutinized to ensure they are needed to provide customers with reliable
19 transmission service at a reasonable cost.

20
21 **Q. How much of the required transmission capital is for maintenance capital**
22 **expenditures?**

1 A. PEF needs \$44.9 million for maintenance capital expenditures. Required
2 maintenance capital expenditures are generally based on assessments of our
3 system performance the previous year, with priority assigned to replace
4 transmission capital property units according to age, condition, and significance
5 with respect to system reliability. Additional maintenance capital work is
6 required to comply with NERC TPL reliability activities. Further, PEF must
7 perform maintenance capital work as part of its storm hardening plan to comply
8 with the Commission's storm preparedness initiatives in the storm hardening
9 orders and rule. In sum, PEF prioritizes maintenance capital expenditures to
10 deliver the most cost-effective, reliable power that its customers already enjoy
11 and have come to expect, consistent with federal and state regulations, initiatives,
12 and policies.

13 PEF's \$44.9 million maintenance capital expenditures include \$16.8 million
14 for line improvements. An additional \$12.9 million is for emergency spare
15 power transformers, \$12.0 million is for substation equipment replacement and
16 refurbishment, and \$3.2 million is for needed vehicle replacements, operating
17 system upgrades, tools and test equipment. All of these maintenance capital
18 expenditures are required to replace aging infrastructure, strengthen the
19 transmission grid, and enhance the operation of our system, resulting in safe and
20 reliable service to the Company's customers.

21
22 **Q. Please explain PEF's required transmission O&M expenses.**

1 A. PEF needs \$45.3 million for transmission O&M expenses. This funding is
2 needed to perform required maintenance to maintain reliability and to satisfy
3 federal and state regulatory requirements and policies.

4 For example, PEF has undertaken measures to significantly increase its tree-
5 trimming initiatives in order to comply with NERC Standard FAC-003-1.
6 Enhanced vegetation management is also an aspect of the Commission's storm
7 hardening initiatives. Vegetation management within and adjacent to existing
8 transmission corridors is a critical component of transmission maintenance,
9 assuring the safe and reliable operation of the transmission system. It includes
10 tree trimming, hand cutting, mowing, danger tree removal, a proactive herbicide
11 program and aerial patrols to assess system conditions. The \$45.3 million O&M
12 costs includes a \$2.1 million increase to the transmission vegetation management
13 program as compared to benchmark spending, bringing the overall program
14 spending up to \$9.3 million for 2010.

15 PEF has also undertaken major initiatives to maintain relays, instrument
16 transformers, Special Protection Systems (SPSs), Under-Voltage Load Shedding
17 Schemes (UVLS), Under-Frequency Load Shedding Schemes (UFLS) and
18 substation control house battery banks to comply with the NERC Protection and
19 Control (PRC) Standards. Additional maintenance capital is required for
20 substation maintenance, the inspection of transmission lines, dispatch load, and
21 planning the transmission system. Also included in the \$45.3 million O&M
22 expenses are specific reliability initiatives of \$2.0 million for line bonding and
23 grounding, bushing replacements, and cap and insulator replacements. These

1 reliability programs are incremental to base funding and assist PEF in preventing
2 outages before they occur, enabling PEF to continue to deliver the cost-effective,
3 reliable power to our customers that they expect.
4

5 **Q. Are PEF's required 2010 Transmission capital and O&M expenses**
6 **reasonable?**

7 A. Yes, they are reasonable and necessary for PEF to continue to provide reliable
8 transmission service to its customers in compliance with NERC and FRCC
9 reliability standards and the Commission's storm hardening initiatives.

10 PEF's O&M expenses are further reasonable and necessary because they
11 are \$ 0.03 million or 0.0% above the Commission O&M benchmark cost of \$38.4
12 million. This calculation excludes the \$6.9 million PEF will incur to comply with
13 FERC Order 890. FERC Order 890 did not exist in 2006 and therefore these
14 costs were not and could not be included in the base costs for the Commission's
15 O&M benchmark test. Further, because PEF must incur these costs to comply
16 with a FERC Order, they are beyond PEF's control.

17 PEF's required O&M expenses will support basic operation and
18 maintenance activities to strengthen the grid and enhance the operation of our
19 system. These expenditures are therefore reasonable and necessary to ensure
20 compliance with NERC and FRCC Reliability Standards, to comply with
21 Commission storm hardening initiatives, and to provide excellent customer
22 service.
23

1 Q. Does this conclude your testimony?

2 A. Yes.

3

4

1 **BY MR. BURNETT:**

2 **Q.** And, Mr. Oliver, do you have a summary of your
3 prefiled direct testimony?

4 **A.** I do.

5 **Q.** And keeping in mind the lights in front of
6 you, please give your summary.

7 **A.** I will.

8 Good morning, Commissioners. I am the Vice
9 President of Progress Energy Florida's Transmission
10 Operations and Planning Department. In this role I have
11 overall responsibility for PEF's transmission system,
12 including its planning, design, construction,
13 operations, and maintenance in order to provide reliable
14 transmission service to PEF's retail and wholesale
15 customers.

16 PEF requires \$185.2 million in transmission
17 capital expenditures and 45 million -- 45.3 million in
18 transmission O&M expenses in 2010. These expenditures
19 enable the company to strike a reasonable balance
20 between the high quality of service that our regulators
21 and our customers expect and a reasonable cost for
22 transmission service.

23 PEF has been successfully provided -- has
24 successfully provided reliable transmission service to
25 its customers at a reasonable cost for years. PEF's

1 reliability performance is consistent and at levels that
2 drive customer satisfaction with our service. PEF's
3 transmission reliability and operations has consistently
4 ranked high among Florida utilities across the country.

5 PEF needs its requested transmission capital
6 and O&M expenditures to meet the expanded capacity
7 demands placed on the system, increasingly stringent
8 federal reliability standards, and the Commission's
9 storm hardening initiatives, while maintaining the
10 reliable system operations that our customers expect.

11 PEF has demonstrated an ability to
12 successfully operate the transmission side of its
13 business by balancing the need to maintain excellence
14 and reliability with providing transmission service at a
15 reasonable cost.

16 This concludes my summary, and I am prepared
17 to answer any questions that you may have.

18 **MR. BURNETT:** Madam Chair, we'd tender
19 Mr. Oliver.

20 **COMMISSIONER EDGAR:** Okay. Before we begin
21 cross, Mr. Burnett, let me just check with you, this
22 that has been passed out that is red but 265, this is
23 not confidential; correct?

24 **MR. BURNETT:** Madam Chairman, it is, in fact
25 is.

1 **COMMISSIONER EDGAR:** It is.

2 **MR. BURNETT:** And Ms. Triplett advised me I
3 should have told you so when we moved that. So my
4 apologies.

5 **COMMISSIONER EDGAR:** Okay. Well, then, I was
6 not aware of that, but for me and for anybody else who
7 was not aware of it, please note that 265, which is the
8 full report, is in a red folder purposely.

9 **MR. BURNETT:** Yes, ma'am. Sorry about that.

10 **COMMISSIONER EDGAR:** That's all right. All
11 right. Thank you, Mr. Burnett.

12 Mr. Rehwinkel for cross.

13 **MR. REHWINKEL:** Thank you, Madam Chairman.

14 **CROSS EXAMINATION**

15 **BY MR. REHWINKEL:**

16 **Q.** Good morning, Mr. Oliver.

17 **A.** Almost.

18 **Q.** My name is Charles Rehwinkel. I'm with the
19 Office of Public Counsel.

20 **A.** Good morning.

21 **Q.** Can I ask you, please, to turn to your direct
22 testimony at Page 3, and once you're there, look at
23 Lines 13 through 15.

24 **A.** Okay.

25 **Q.** Is it your testimony there on Page 3, Line 13

1 through 15, that the costs for transmission O&M in this
2 2000 -- projected test year 2010 are reasonable because
3 they're within the Commission's O&M benchmark?

4 **A.** It is.

5 **Q.** Mr. Oliver, do you have MFR C-6 with you?

6 **A.** I do.

7 **Q.** I'm going to ask you a series of questions --
8 well, let me ask you this. Were you here for
9 Mr. Sorrick's testimony last night?

10 **A.** I was.

11 **Q.** Okay. I'm going to ask you a series of
12 questions similar to what I asked him about the
13 transmission O&M costs. And what I would like to do is
14 ask you if I'm correct that for 2010 that the O&M for
15 transmission in your responsibility area is on Page 4
16 and Page 6 of C-6, on Page 4, Line 25, and on Page 6,
17 Line 28. Are those the amounts?

18 **A.** They are.

19 **Q.** Okay. And I'm going to ask you about the
20 dollar amounts. And if you agree with them, you can
21 state so. If you want to agree subject to check, I will
22 accept that as well. Or if you disagree, certainly you
23 can state.

24 If I look for 2010, the projected amount, is
25 it true that it is 45.3 million?

1 **A.** That's correct.

2 **Q.** Okay. And that is in Column G of those two
3 pages, 4 and 6, Lines 25 and 28 respectively; is that
4 correct?

5 **A.** Uh-huh. That's right.

6 **Q.** Okay. For 2009, the corresponding amount, is
7 it, isn't it true that it's \$35.085 million?

8 **A.** That's correct.

9 **Q.** Okay. And for 2008 -- and 2009 is a budgeted
10 amount; correct?

11 **A.** That's correct.

12 **Q.** For 2008 your reported actual amount of
13 transmission O&M is 35.241 million?

14 **A.** Correct.

15 **Q.** And for 2007 the actual reported amount is
16 34.016 million?

17 **A.** That's correct.

18 **Q.** And for 2006 the actual reported amount is
19 33.675 million?

20 **A.** Correct.

21 **Q.** Okay. Would you agree with me that for 2006
22 through 2009 the O&M expense for transmission is a
23 fairly level amount?

24 **A.** I would.

25 **Q.** Okay. And for 2010 would you agree with me

1 that the increase from the budgeted amount to the
2 projected amount -- budgeted amount for 2009 to the
3 projected amount for 2010 is approximately 29 percent?

4 **A.** It is. Yes.

5 **Q.** Okay. Is it just a coincidence that this
6 increase in transmission O&M coincides with the 2010
7 test year?

8 **A.** No, it's not.

9 **Q.** It's not a coincidence?

10 **A.** It's not a coincidence.

11 **Q.** Okay. Can you refer, look to Page 21 of your
12 direct testimony, please?

13 **A.** Let me go back. Would you re -- would you ask
14 that question again?

15 **Q.** Which one?

16 **A.** Is it a coincidence?

17 **Q.** Yes. My question to you, is it a coincidence
18 that that 2010 projected expense is 29 percent higher
19 than 2009, is it a coincidence that that increase comes
20 in a test year?

21 **A.** I think it is a coincidence that it does, yes.

22 **Q.** Okay.

23 **A.** What was that page again to refer to?

24 **Q.** It's Page 21. I just wanted to see if
25 Mr. Burnett would do redirect on that question.

1 **A.** I had to think, I had to think about it a
2 second.

3 **Q.** I understand.

4 On Page 21 do you suggest that because of the
5 favorable benchmark, the favorable performance of 2010
6 projections against the PSC's O&M benchmark, that the
7 \$2.1 million increase in vegetative management expenses
8 is reasonable?

9 **A.** I would say that the \$2.1 million in
10 vegetation management is reasonable because of some NERC
11 compliance requirements that we have undertaken that
12 really came into effect in the 2008 time frame that have
13 caused us to ramp up our vegetation management on lines
14 that are 200 kV and above.

15 And so for, for this year we had utilized
16 vegetation management money from some of the other
17 voltage levels to reach that. So it's kind of a robbing
18 Peter to pay Paul kind of, kind of exercise. We need to
19 refund back into the lower voltage vegetation management
20 where we're having to step up to the higher voltage
21 levels.

22 **Q.** Okay. So is it your testimony that the O&M
23 benchmark, the performance against the O&M benchmark is,
24 has nothing to do with the reasonableness of the number?

25 **A.** You know, I don't really know what goes into

1 the benchmark multiplier and those calculations, to be
2 honest with you.

3 What I do know is, you know, what we require
4 to do our business to meet the standards that the
5 Commission and our customers require.

6 Q. Okay. What was requested -- well, let me ask
7 you this. The NERC standard that you're referring to is
8 FAC-003-01?

9 A. Correct. That's it.

10 Q. Okay. What was requested in 2010 for
11 vegetative management? Is it \$9.3 million?

12 A. 9.3 million total. Yes.

13 Q. Okay. And that's the same number that's on
14 Page 21, Line 14?

15 A. That's it. Yes.

16 Q. Okay. Isn't it true that the effective date
17 for NERC standard FAC-003-01 was April 7, 2006?

18 A. FAC-003 was actually June of '07.

19 Q. Okay. So when did you start taking action
20 with respect to vegetative management related to that
21 NERC standard?

22 A. Well, we've always -- we have always trimmed
23 and maintained our rights-of-way to a manner to really
24 kind of coincide with our customers and really, since in
25 all the time that I have been involved in this program,

1 we've really maintained the rights-of-way and have had
2 very few vegetation management issues on our
3 rights-of-way.

4 What FAC-003 mandated in '07 was a full width
5 clearing of 200 kV and above right-of-ways from floor to
6 ceiling, and really kind of mandated how unacceptable,
7 or the unacceptability and the enforcement that would be
8 handed out if you had a grow-in to those 200 kV and
9 above lines.

10 So we've always maintained those rights-of-way
11 well, but we had done the maintenance in consideration
12 of our customers. I'm not sure there's another thing in
13 our business that is as sensitive as when we began to
14 cut customers' trees. And, you know, going into this
15 level of vegetation management on these 200 kV and above
16 lines has gotten us into cutting a lot of oak trees and
17 a lot of very decorative and ornamental trees that
18 reside on customers' property.

19 The Commission has probably heard about some
20 of those, and it has, it has just raised that level of
21 vegetation management to a whole different magnitude of
22 importance to us.

23 Q. You say it has. Are you talking about NERC?

24 A. Yes.

25 Q. The standard FAC --

1 **A.** FA -- well, there's FAC-003 and the mandatory
2 or the -- mandatory compliance as well as the
3 enforcement that can be handed down if you violate those
4 rules, up to a million dollars a day.

5 **Q.** Okay. And just for the court reporter's
6 benefit, NERC is N-E-R-C, all caps?

7 **A.** N-E-R-C, all caps. Yes.

8 **Q.** I just want to make sure I understand. The
9 factor -- the standard went into effect in June of 2007,
10 you say.

11 **A.** Right.

12 **Q.** Did the standard, when it went into effect in
13 June of 2007, did it change the way you perform
14 vegetative management?

15 **A.** It did on 200 kV and above lines. Yes.

16 **Q.** And in that year?

17 **A.** In, in that year.

18 **Q.** Okay. And for the year prior you did not
19 change anything?

20 **A.** No. No. We had a good vegetation management
21 program that was part of our storm hardening agreements
22 with the Commission and we were abiding by those. But
23 the NERC FAC-003 goes over and above the hardening
24 requirements.

25 **MR. REHWINKEL:** Okay. Madam Chairman, at this

1 time I'd like to pass out an answer to an interrogatory.
2 I really don't need this marked as an exhibit. I just
3 want to ask him some questions about it.

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

5 **MR. REHWINKEL:** And if I could ask for --
6 Mr. Poucher will help.

7 **BY MR. REHWINKEL:**

8 **Q.** I'm going to ask you some questions as soon as
9 this document has been distributed, Mr. Oliver, about
10 the company's response to Interrogatory 238. Are you
11 familiar with that?

12 **A.** I am.

13 **Q.** Is this an answer that you assisted in
14 answering?

15 **A.** It is.

16 **Q.** Okay. And I'm really just passing this out
17 for your recollection purposes.

18 Would you agree with me that in 2006 you
19 expended \$6,347,798 on vegetative management activities?

20 **A.** Yes.

21 **Q.** And you trimmed as a part of those activities
22 966 miles?

23 **A.** Correct.

24 **Q.** And would you also agree with me that for 2007
25 you expended \$6,939,355?

1 **A.** Yes.

2 **Q.** And in doing so trimmed 843 miles?

3 **A.** Yes.

4 **Q.** Okay. And then in 2008 you expended
5 \$5,916,832?

6 **A.** Yes.

7 **Q.** And, as a part of that, trimmed 360 miles; is
8 that correct?

9 **A.** Yes. That's right.

10 **Q.** And for 2009 the budget for vegetative
11 management was nine -- was \$6,554,550?

12 **A.** Correct.

13 **Q.** Okay. Can you explain to me or to the
14 Commission why a vegetative management program that went
15 into, that was modified as the result of a federal NERC
16 standard did not significantly impact vegetative
17 management spending in 2007, 2008 or 2009?

18 **A.** Say that again.

19 **Q.** Can you explain to me why vegetative
20 management, why the NERC mandated changes did not impact
21 your expenditures for 2007, 2008 and 2009 relative to
22 the \$9.3 million requested in 2010?

23 **A.** I believe I can. The -- and I mentioned this
24 before. What -- you know, our, our vegetation
25 management budgets are, are budgets and we fix those

1 and, and have tried to live within those for all of our
2 vegetation management programs.

3 In '07, as we mentioned, the standard went
4 into effect. In '08 was the first full year of our
5 trimming of these what I'll call NERC compliant 200 kV
6 and above lines.

7 So what you'll see there is we actually -- a
8 predominance of our system is 69 kV. We have roughly
9 5,000 miles of transmission line, roughly half of that
10 69 kV. And so most of our trimming dollars each year
11 are expended on that 69 kV system. It's the one that we
12 serve most of our customers off of and it's probably the
13 one that courses through some of the more rural and
14 forested areas of our service territory.

15 So what, what we, what we did is, maintaining
16 the same budget, is we had to move funds over from the
17 trimming of the 69 kV lines to doing, if you see the
18 double star down at the bottom, what we call emergent
19 and reactive trimming on the 230 and above lines to make
20 sure that we, we cleaned those rights-of-way from full
21 width to the ceiling.

22 And so I think it's reasonable that you see a
23 reduction in the number of miles trimmed because we had
24 treated those as emergent and reactive during the '08
25 time frame. And really what our intent to do by

1 increasing the vegetation management budget for '10 and
2 going forward is to, is to treat that as part of our,
3 our routine trimming and to put the, to do the 69 kV
4 back to the amounts that we were.

5 Q. Okay. Thank you. Can you please turn to Page
6 22 of your direct testimony.

7 A. Okay.

8 Q. What are the, the costs for compliance with
9 FERC 890 that you're requesting for 2010?

10 A. We have estimated our costs to comply with
11 FERC Order 890 for the 2010 and going forward periods to
12 be \$6.9 million per year. And what this, what this
13 amounts to is we have a number of transmission lines
14 that reside in our control area that belong to Seminole
15 Electric Cooperative as well as Florida Municipal Power
16 Agency that we use in day-to-day transactions on the
17 system. With FERC Order 890, beginning this year and
18 continuing on we have to provide payments and credits to
19 those transmission owners for the use of their system.

20 This has not been an expenditure that we've
21 had to, payments that we've had to make to them before.
22 It actually started this year and continues, continues
23 on. But it's for the, for using their transmission
24 system that's part of our system.

25 Q. Okay. Just so I understand your answer, when

1 you say this year, you mean 2009?

2 **A.** Actually we will expend some funds in 2009 to
3 comply with this.

4 **Q.** Okay. And the \$6.9 million that are shown in
5 your testimony on Page 22, Line 12, actually are
6 payments to the other companies?

7 **A.** Uh-huh. Right. Those will be payments to
8 Seminole and FMPA for the right to use their
9 transmission system that is in our control area.

10 **Q.** When was FERC, FERC 890, when did that
11 requirement become a law?

12 **A.** The first customers went on to, into those
13 requirements beginning in September of this year, and
14 FMPA actually begins next year.

15 **Q.** Okay. So was the, the regulation issued in
16 2007?

17 **A.** The regulation -- and, and as we began to --
18 the notification of it came out in 2007. By the time
19 the rules, regulations and those type things and the
20 actual order came out as to how we were going to have to
21 do this was actually earlier this -- early '08, I'm
22 sorry, in '08.

23 **Q.** Okay.

24 **A.** And it was really across the country. This
25 is, this was applied to all utilities really across the

1 country as a form of kind of the open access
2 transmission reform that became FERC Order 890, which
3 really addresses how we jointly plan and, with other
4 utilities within the state, and gives the other
5 utilities in the state recognition for the systems that
6 they have.

7 Q. Okay. So you stated that the, the first
8 customers that would impact this order with respect to
9 your use of transmission came online in 2009?

10 A. 2009.

11 Q. Okay. So there would be, there would have
12 been no costs incurred in 2008 in relation to this
13 order?

14 A. No. No. No costs in '08.

15 Q. Okay.

16 A. A small cost in '09, but the full hit will be
17 in 2010.

18 Q. Okay. And the small cost is solely related to
19 the customer?

20 A. That's right.

21 Q. Okay. Can you please turn to Page 21, back to
22 Page 21, and look at Lines 21 through 23?

23 A. Right.

24 Q. This is where you state that, you reference
25 \$2 million in 2010 projected expenses for line bonding

1 and grounding, bushing replacements, and cap and
2 insulator replacements; is that correct?

3 **A.** That's correct.

4 **Q.** And the \$2 million refers to all four of those
5 activities?

6 **A.** Actually it's three. Line bonding and
7 grounding is one activity, bushing replacements are one
8 activity, and cap and insulator replacements are one
9 activity.

10 **Q.** Okay. Is that the total amount for those
11 activities, or is that the amount of increase for those
12 activities?

13 **A.** This is, this is an incremental over and above
14 in these areas. What we do today, we do these programs
15 today that provide significant reliability enhancements
16 to our customers, and they're ones that we want to -- we
17 get a, I think a huge value for doing these, and these
18 are programs that we want to add to what we're currently
19 doing.

20 **Q.** Can you tell me what the -- with that
21 \$2 million incremental change, can you tell me what the
22 total amount in 2010 is for those activities?

23 **A.** It would be 2 million.

24 **Q.** So 2 million is the total cost?

25 **A.** Is the, is the total among those three.

1 **Q.** Okay. I, and I, I think -- my confusion was I
2 thought you used the term incremental, so I thought it
3 was the increase.

4 **A.** It is -- what we are, what we're asking for
5 here is a total of \$2 million to do additional line
6 bonding and grounding, bushing replacements, and cap and
7 insulator replacements going forward.

8 **Q.** Okay. So does that suggest that there, there
9 are, there's a base amount of dollars?

10 **A.** There is a base amount that you would find in
11 some of these FERC amounts that we already do today.
12 Yes.

13 **Q.** Okay. Do you know what that base amount is?

14 **A.** I do not.

15 **Q.** Is it as ascertainable?

16 **A.** I don't know how easily it would be. I can, I
17 can, I can try to get that number for you at a break.
18 It would not, it would, it would not be at a level that
19 we're asking for here. I think it would be less than
20 that.

21 **Q.** Okay. If you got it for me on a break and you
22 were not coming back, is there anyone else who would be
23 able to answer it?

24 **A.** I mean, I could give the information to
25 Mr. Burnett.

1 **Q.** Okay.

2 **MR. BURNETT:** Mr. Chair, we could certainly
3 provide it when he comes back for rebuttal, if that
4 works.

5 **THE WITNESS:** Oh, yeah. I'll be back for
6 rebuttal.

7 **BY MR. REHWINKEL:**

8 **Q.** All right. What I would like to do is ask
9 if -- I tell you what, let me ask the last question here
10 and then maybe we can, if we need to do any additional
11 information gathering, we can maybe combine it.

12 Can you turn to MFR C-41, please, and I would
13 ask you to turn to Page 8.

14 **A.** Okay.

15 **Q.** I'm sorry. Do you -- I think I need to ask
16 you to look at MFR C-41 for 2009, and I don't think
17 that's in these.

18 **MR. REHWINKEL:** Mr. Chairman, if I could just
19 get a moment, I need to refer to one of the supplemental
20 MFRs, I think.

21 **CHAIRMAN CARTER:** Absolutely. Not a problem.

22 While Mr. Rehwinkel is looking, Commissioners,
23 for planning purposes, we're going to maintain our
24 calendar. We'll probably do our normal lunch break
25 1:00 to 2:15. We'll go again until 8:00 tonight, and

1 until further notice we'll be on that schedule. With
2 the way we're doing with our court reporters, we've
3 agreed to give them a break in the morning and a break
4 in the afternoon. And that, that also will help the
5 parties too.

6 And also to the parties, if any time you guys
7 need an opportunity to visit with one another, please
8 let me know and we'll, we'll accommodate you. Staff,
9 that means you guys too. If you need to talk with the
10 parties about something, just let us know.

11 Mr. Rehwinkel.

12 **MR. REHWINKEL:** Mr. Chairman, if I could
13 approach the witness --

14 **CHAIRMAN CARTER:** You may approach.

15 **MR. REHWINKEL:** -- I'd like to show him MFR
16 C-41, Page 8 of 18 for the year 2009. And I have given
17 counsel this citation earlier, but I forgot it was from
18 a 2009 document.

19 **BY MR. REHWINKEL:**

20 **Q.** If you could take a second to familiarize
21 yourself with that document. Does -- are you familiar
22 with it?

23 **A.** I'm not. That's the first I've seen it.

24 **Q.** Okay. This document, I will represent to you,
25 is, is the corresponding O&M benchmark variance

1 explanation for part of your transmission area for 2009
2 rather than projected 2010. Would you agree with that?

3 **A.** I agree.

4 **Q.** And part of what that document contains is a
5 variance explanation for line bonding and grounding; is
6 that correct?

7 **A.** It does.

8 **Q.** Okay. Can you explain to me what the -- is it
9 ascertainable what the amount for line bonding and
10 grounding was in 2006 and what you're proposing for 2009
11 in your budget?

12 **A.** Again, subject to check, and I believe that I
13 will, in, in 2006 we did expend what I would call some
14 significant dollars on line bonding and grounding as
15 part of our Commitment to Excellence Program during that
16 time frame. And what that exact amount is I do not
17 know, but I know that we have those numbers and that I
18 can get those for you. And then, you know, we can do
19 that next week when I'm back for rebuttal, if that will
20 be sufficient.

21 **Q.** Okay. And as a part of that, can you tell me
22 what is in the budget for 2009?

23 **A.** I can do that, too, I believe.

24 **Q.** Okay.

25 **MR. REHWINKEL:** Mr. Chairman, and for

1 Mr. Burnett, if, if I could get that answer as well as
2 the, for 2010, the base amount, if you will, of line
3 bonding and grounding.

4 **BY MR. REHWINKEL:**

5 Q. Does that, do you understand what I'm asking?

6 A. Yeah. Base amount. I understand.

7 **MR. REHWINKEL:** Okay. Then, then I'll be
8 satisfied and I'll ask about those on rebuttal.

9 **CHAIRMAN CARTER:** On rebuttal? Okay.

10 **BY MR. REHWINKEL:**

11 Q. Mr. Oliver, one last line of questions. I
12 think we went over some amounts for your transmission
13 O&M earlier, and I think you agreed with me that for
14 2009 the amount was 35 million 085; is that right?

15 A. That's right.

16 Q. And this was the budget at the time, the
17 budget amount at the time the MFRs were filed or
18 prepared, which would be sometime in advance of
19 March 20th of this year; correct?

20 A. Right. Right.

21 Q. Have there been any updates or revisions to
22 your transmission O&M budget since then?

23 A. There have not.

24 Q. So that number is still what it is?

25 A. That number is still our budget target for

1 this year.

2 Q. Okay. What about for 2010, the 45.3 million
3 projected amount?

4 A. That is our budget for 2010 at this time.

5 Q. Okay. And there have been no changes to that?

6 A. No changes.

7 Q. No belt tightening going there?

8 A. Well, you know, as, as Mr. Sorrick discussed,
9 I think we're always looking for opportunities. And in
10 some of those cases it's an opportunity to maybe be more
11 efficient in one area where we may need to deploy
12 resources in another to maintain the service levels that
13 our customers expect. And so belt tightening, all the
14 time. But I think it's, you know, an opportunity to
15 also look and see where we may, there may be a higher
16 and more efficient use of the resources.

17 MR. REHWINKEL: Okay. Mr. Chairman, those are
18 all the questions I have.

19 CHAIRMAN CARTER: Thank you, Mr. Rehwinkel.

20 MR. REHWINKEL: Thank you, Mr. Oliver.

21 CHAIRMAN CARTER: Ms. Bradley.

22 MS. BRADLEY: Thank you.

23 CROSS EXAMINATION

24 BY MS. BRADLEY:

25 Q. Mr. Oliver, I just have a few questions. I

1 believe in your testimony that you talked about having
2 the overall responsibility for operation and maintenance
3 of your transmission system and the reliability of that
4 system?

5 **A.** That's correct.

6 **Q.** Okay. Did you go to any of the customer
7 service hearings?

8 **A.** I did not.

9 **Q.** Did you get any briefings or read the
10 transcripts or do anything?

11 **A.** I got briefings when issues came up that were
12 transmission-related from the, the distribution regional
13 executives when those issues came up. If I remember,
14 there were very few. I did not read the transcripts.

15 **Q.** Okay. Are you aware that there were
16 complaints involving power surges, power outages,
17 complaints about tree trimming, that type thing?

18 **A.** I mean, that's what I heard, I heard you say
19 yesterday, yes.

20 **Q.** And did you hear that from your staff as well?

21 **A.** I heard, again, I only heard the ones that
22 were directly related to the transmission system issues.
23 And most of those were, if I remember right, were issues
24 related to vegetation management and some of the tree
25 trimming activities. I do not remember any issues that

1 were transmission-related that were -- most of those
2 issues would occur on the distribution system.

3 Q. So you don't deal with the vegetation and all
4 of that?

5 A. On the transmission, yes, and we addressed
6 those. Not on distribution.

7 Q. Okay. Do you remember seeing a complaint from
8 a Mr., I think it was Grallinger in Clearwater, who was
9 complaining about numerous power surges, and they,
10 apparently they found a spliced service drop line when
11 they went out to check?

12 A. That would be a distribution issue.

13 Q. That would be distribution as well? Who
14 covers that?

15 A. Mr. Joyner will cover that.

16 MS. BRADLEY: Okay. I may have fewer
17 questions than I thought.

18 THE WITNESS: I think that's good.

19 (Laughter.)

20 MS. BRADLEY: I'm not sure how to take that.
21 Actually I think that's all of my questions. I'll save
22 the rest for Mr. Joyner.

23 CHAIRMAN CARTER: It was a compliment. It was
24 a compliment, Ms. Bradley.

25 MS. BRADLEY: Oh, okay.

1 **CHAIRMAN CARTER:** Mr. Moyle.

2 **MR. MOYLE:** Thank you, Mr. Chairman.

3 **CHAIRMAN CARTER:** Hang on. Mr. Rehwinkel is
4 retrieving his document. Did you get what you needed?

5 **MR. REHWINKEL:** He can have it. I think he's
6 going to use it to help him --

7 **CHAIRMAN CARTER:** Oh, with the questions?

8 **THE WITNESS:** Yeah, I made my notes on that.

9 **CHAIRMAN CARTER:** Excellent. Excellent.

10 **MR. REHWINKEL:** I'd rather him have it than me
11 in that case.

12 **CHAIRMAN CARTER:** Good.

13 Mr. Moyle, you're recognized.

14 **MR. MOYLE:** Thank you.

15 **CROSS EXAMINATION**

16 **BY MR. MOYLE:**

17 **Q.** Good afternoon. Jon Moyle on behalf of FIPUG.

18 **A.** Good afternoon.

19 **Q.** You're a ramblin' wreck engineer; correct?

20 **A.** I am.

21 **Q.** Okay. And you have overall responsibility for
22 the transmission system of Progress Energy Florida;
23 correct?

24 **A.** I do.

25 **Q.** And you've had that since 19, I'm sorry, since

1 2007?

2 **A.** 2007. Yes, sir.

3 **Q.** Okay. And since 2007 the transmission system
4 of Progress Energy has operated in a safe, reliable
5 fashion; correct?

6 **A.** I think it has, yes.

7 **Q.** And also it's operated in accordance with all
8 laws, rules, regulations as far as you know?

9 **A.** To my knowledge.

10 **Q.** Okay. You were asked a little bit about belt
11 tightening, and you would agree that, that from a
12 general sense that belt tightening has gone on with a
13 number of businesses throughout the State of Florida in
14 the last few years; correct?

15 **A.** I do.

16 **Q.** Okay. And specifically with respect to belt
17 tightening within the transmission area for which you
18 have responsibility, has there, has there been any belt
19 tightening that can be quantified to say, well, you
20 know, here's where we were and we reduced expenditures
21 by X, by Y as a specific result of an effort to reduce
22 expenditures?

23 **A.** Well, I think we have, you know, we've looked
24 at things like meals and travel, other, what I would
25 call some discretionary activities, going to conferences

1 and those type things, where we could, you know, that
2 may not be the highest and best use of the resources we
3 have. And I think if you look in, in, actually in some
4 of the testimony, we've employed a number of activities
5 within the business unit, work scheduling, management,
6 project management, project controls to help us be much
7 more efficient about how we do our business on a day in,
8 day out basis.

9 Q. Did you undertake any efforts within the
10 last -- well, since you've been in charge since 2007 to
11 try to reduce expenditures by a certain percentage?
12 Some businesses and others have said, look, we need to
13 cut costs by 5 percent, 10 percent, 15 percent. Has
14 your organization with respect to transmission gone
15 through any kind of similar exercise where a targeted
16 reduction number was identified and steps were taken to
17 try to hit that number?

18 A. I wouldn't say that we've gone after any
19 specific targeted numbers. We've, as I, as I said
20 earlier, we've tried to operate and set the budgets in
21 the most efficient manner that we can to meet the, to
22 meet the requirements, you know, that our customers and
23 the Commission desire us to operate at.

24 Q. And you were having a discussion with
25 Mr. Rehwinkel about some requirements that were the

1 result of a regulation 003. That has resulted in a, in
2 an increase of nearly 30 percent from 2006 to 2009, and
3 then in 2010 you have about a 30 percent increase; is
4 that right?

5 **A.** Well, I, you know, let's get, let's get the
6 numbers. FAC-003 is the vegetation management standard,
7 and what we're asking for between '09 and '10 is
8 2 million additional, roughly 2 million, a little bit
9 more. FERC Order 890, which is a FERC mandate on how we
10 treat others that have transmission lines in our control
11 area, is a separate issue.

12 Now if you go back and look on top of, of just
13 those two requirements, NERC has added over
14 90 additional mandatory requirements over the last two
15 years that have -- if you drill down through these
16 budgets, we have been able to comply and meet all the
17 requirements of those without any additional funding.

18 So it's not just those two, it's many, many
19 more that have added to our business. Our business over
20 the last two to three years has become much more
21 demanding from a regulatory and compliance standpoint.

22 **Q.** Yes, sir. And we'll have a chance to go
23 through those 90 NERC things after lunch. But before
24 then --

25 **A.** Okay.

1 **Q.** No. I'm kidding. Before, before then, you,
2 you would agree that the level of increase from 2009 to
3 2010 is 29, approximately 30 percent; correct?

4 **A.** It is. If you look at the numbers, it is,
5 yes.

6 **Q.** Okay. Let me refer you to certain portions of
7 your testimony. And on Page 11, Line 12, you state,
8 quote, "One reason is that the PEF transmission system
9 is simply larger today compared to 2005."

10 And how, how, how do you define larger? Can
11 you tell me how many additional transmission miles are,
12 are on the system from 2005 compared to today?

13 **A.** I can. And that is -- there is a chart in my
14 rebuttal that addresses that. But I believe if you go
15 back to '05, to this point in time, we're looking at
16 roughly about 200, roughly 200 miles of additional
17 transmission line have been added since 2005. I would
18 say we've added probably two dozen substations, a number
19 of transformer assets, circuit breakers. And, you know,
20 during that time the system was still experiencing a
21 tremendous growth in our customer base.

22 **Q.** And with respect to the -- transmission
23 mileage, you would agree that that's a common data point
24 for measuring transmission systems; correct?

25 **A.** It is. It is.

1 **Q.** All right. And you had referenced a chart in
2 your rebuttal -- and I don't, I don't know if we want to
3 get into it, but --

4 **A.** I don't have it with me, but --

5 **Q.** All right. I, I had glanced at it briefly.
6 And not to hold you to it or subject to check, but, but
7 can you tell me from a percentage basis what the
8 increase from 2005 to today represents with respect to
9 transmission miles?

10 **A.** Without the numbers, that would be hard for me
11 to do.

12 **Q.** Does, for 2005 would between 4,200 miles and
13 4,250 miles sound about right?

14 **A.** I would have to see -- I don't have, I don't
15 have the rebuttal.

16 **MR. MOYLE:** Can I approach?

17 **CHAIRMAN CARTER:** You may approach. Is this
18 rebuttal, Mr. Moyle?

19 **MR. MOYLE:** Well, it's a chart that he had in
20 his rebuttal.

21 **CHAIRMAN CARTER:** You want to cite it so we
22 can all be on the same page?

23 **MR. MOYLE:** Sure. It's found on Page 8, and
24 it's on 21 to 24.

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

1 **THE WITNESS:** I think what I was referring to
2 earlier was the growth from '03 to '08 was roughly
3 200 miles. From -- you mentioned '05?

4 **BY MR. MOYLE:**

5 **Q.** Yes, sir. And really what I want to do is I
6 want to track your direct testimony, the line I read
7 where you said the system is larger, and then, you know,
8 there was not any additional information about larger.
9 And so what I want to do is ask you, if you would, to
10 tell us how much larger the system is in terms of
11 transmission mileage.

12 **A.** Well, back to my testimony on Page 11, Line 12
13 and 13, I believe what I was referring to there was just
14 the physical line miles of the system. As far as a
15 percentage, it would be in the probably 5 percent range.

16 **Q.** And you would agree that with respect to the
17 transmission system operations that the transmission
18 lines typically constitute the majority of the costs;
19 correct?

20 **A.** They're probably a little bit more on the, on
21 the line side. Because it's so spread out, the
22 geography lends to that. So I think that would be, that
23 would be accurate.

24 **Q.** Okay. And if we just looked at the, the
25 increase in transmission lines and compared it to the

1 increase in O&M budget, you would agree that the O&M
2 budget has increased more than 5 percent from 2005;
3 correct?

4 **A.** That's -- just on the transmission line -- I'm
5 looking at the, at C-6, just looking at FERC Code 571,
6 and those numbers seem to be fairly consistent across
7 the board, with the exception of 2010 where we're asking
8 for the additional vegetation management.

9 **Q.** And, and there's a marked increased in 2010;
10 correct?

11 **A.** There is an increase in 2010 for, for what
12 I've already explained.

13 **Q.** Back on your Page 11, another reason that you
14 indicate you're investing in the transmission is because
15 of, on Line 16, quote, "increased customer capacity
16 demand on the system."

17 **A.** Right.

18 **Q.** What were you referring to there?

19 **A.** What I'm referring to is when you, when you
20 plan a power system, you have to plan for the demand
21 that's placed on the system, not necessarily the
22 day-to-day energy sales. And so the demand we set, we
23 actually set a winter peak this past February. And so
24 that's really from a, from an infrastructure standpoint
25 you have to plan for that demand. Even though I know

1 we've, we have evidence such that the customer numbers
2 have, have dropped, the demand is still there on the
3 system and we have to plan for that demand, peak demand.

4 **Q.** And just hypothetically, I mean, if customer
5 numbers drop, then it would follow that demand would
6 likely drop as well; correct?

7 **A.** Not necessarily. No, sir. Energy sales,
8 energy -- the energy component would drop, but not
9 necessarily the demand. Demand is a function of an
10 instantaneous requirement that the customer places on
11 the system. And, again, in February of this past year
12 we set a new winter peak.

13 **Q.** But from a standpoint of transmission
14 planning, to the extent, I -- mean, you could have say,
15 let's say a utility in Michigan or Ohio, they may have
16 set a peak back when the auto industry was going great
17 guns that arguably would not be particularly relevant
18 for analysis today; correct?

19 **A.** It could -- that's -- it could be. Yes. But
20 I think still, you know, we've demonstrated in February
21 that we set a peak, even with the economic times what
22 they are. So, you know, from a planning standpoint --
23 and then also when you look at transmission planning
24 standards, and I think they're again referenced in the
25 testimony, TPL 001, 2, 3 and 4, you also not plan for

1 that peak, but any contingency that may occur during
2 that peak, which is loss of an element or multiple
3 elements.

4 So it's, it's not an easy exercise to do. But
5 the fact that we did set a new peak this year does mean
6 that the customers are still demanding a very high
7 amount of energy at an instantaneous point on a, on a
8 certain day.

9 Q. Yes, sir. Now there was some discussion
10 earlier about, about interruptible customers. Are you
11 familiar with interruptible customers and any value they
12 may provide to your system?

13 A. I'm not familiar with, with -- I'm familiar
14 with interruptible customers. But from a rate
15 standpoint, those type things, I am not.

16 Q. How about from a system operation standpoint?

17 A. I, from a system operation standpoint I do,
18 yes.

19 Q. And from a system operation standpoint, to the
20 extent that you had a system issue come up and to the
21 extent that there was the ability to shed load related
22 to an interruptible customer, you would agree that is a
23 beneficial operational tool in your toolbox; correct?

24 A. It is.

25 Q. On Page 13, Line 17, you use the term

1 "transparency" with respect to the transmission planning
2 process. And I was unclear what you were trying to
3 communicate with the sentence found on Page 13, Lines 16
4 through 18. Would you please elaborate on that, if you
5 can?

6 **A.** Yeah. This is back in the FERC 890 order, and
7 which established these nine principles. And really
8 what it did is when you look at -- if you look at modern
9 day planning, we can't do planning in isolation, which
10 means when you, when you look at the State of Florida,
11 we have four investor-owned utilities, we have the
12 cooperatives, we have the municipals. And there was
13 probably a point in time when each, each did independent
14 planning, didn't consider the others.

15 I mean, I think what we mean by transparency
16 is that the process is very open, it is really
17 facilitated by the FRCC, the Florida Reliability
18 Coordinating Council, which ensures that we're all using
19 the same numbers, the same metrics, the same standards
20 and models when we do this planning. And I believe that
21 that is in FERC Order 890 what, what transparency means.

22 **Q.** Do you interact, you being Progress Energy
23 Florida, do you interact in and plan jointly with SERC,
24 the Southeastern Reliability Council?

25 **A.** We, we, we do not plan necessarily with SERC

1 except as part of the eastern interconnect. We do do
2 joint planning studies with the SERC utilities to our
3 north and to our west. Southern Company -- well, really
4 Southern Company all around. We do joint planning
5 studies with them, yes.

6 **Q.** Let me -- I want to talk to you a little bit
7 about, about storm hardening and extreme wind loading.
8 If you need to refer to your testimony, it's Pages 15,
9 16, so, but I don't know if it's essential.

10 **A.** Okay.

11 **Q.** Let me ask this question with respect to, you
12 use the term "extreme wind loading standards" on Page
13 16, Line 4. What are extreme wind loading standards?

14 **A.** Well, I think when you -- the, the extreme
15 wind loading standards are what can the, what can the
16 structure, whether it be a pole or whatever, what can it
17 stand from a wind, a, a wind coming straight across with
18 all of the wires and attachments that it has on it?

19 **Q.** And as we sit here today, what's the answer to
20 that question with respect to transmission poles?

21 **A.** Well, I think if, if, you know, you go back to
22 the '04, '05 storm time, we still on Progress Energy's
23 system have a number of wood poles. And in the areas
24 that the storms came through, quite honestly they did
25 not stand up very well. I was not in transmission at

1 the time, but I do know that a lot of those poles have
2 been replaced and that we, part of our storm hardening
3 process that's explained here is a six-year routine
4 schedule on pole inspections and a changing of all of
5 our wooden poles over a certain period of time to either
6 lightweight steel, light duty steel or concrete.

7 Q. And I used the term "generally transmission
8 poles." I presume that, that when I said that I was
9 talking 69 kV and above.

10 A. 69 and above. Yes, sir.

11 Q. Okay. And in -- thank you for clarifying the
12 old wood poles. But those are less and less on the
13 system today; correct?

14 A. That's correct.

15 Q. Okay. How many percentage wise are the, are
16 the old wood poles, if you know?

17 A. I don't have that number, but I think there
18 were some of those in the discovery. I think there's
19 some information on that. I just cannot recall it.

20 Q. All right. Similar to Mr. Rehwinkel, would
21 you mind taking a look at that before you get back on
22 for rebuttal?

23 A. And that would be, let me clarify, the number
24 of just really the percentage of, the percentage of each
25 type pole on the system, or just wood?

1 **Q.** The wooden poles that you were referring to
2 that were problematic during '04, '05. Are we good to
3 go on that?

4 **A.** Got it.

5 **Q.** As we sit here today, back on the extreme wind
6 loading discussion, what are your transmission poles,
7 the steel or the concrete, what are the design standards
8 for those on a wind --

9 **A.** I don't have, I don't have the design
10 standards with me. I can, again, on rebuttal I can, I
11 can bring that if you're interested in that information.

12 **Q.** I think I would be. But do you know, aren't
13 they designed to withstand hurricane strength winds?

14 **A.** They are. But I hesitate because I -- on what
15 category of hurricane strength winds?

16 **Q.** And would you provide that information to me
17 on rebuttal?

18 **MR. BURNETT:** Mr. Chair, if I, if I could
19 get --

20 **CHAIRMAN CARTER:** Mr. Burnett.

21 **MR. BURNETT:** Thank you, sir. If I could get
22 clarification if Mr. Moyle has a specific event, moment
23 (phonetic), parameter and specification class from the
24 NERC that he has in mind, perhaps we could be more
25 focused.

1 **CHAIRMAN CARTER:** Mr. Moyle.

2 **MR. MOYLE:** Well, I just, in discussions with
3 the witness I think we've talked about there's a one
4 through five hurricane category. I was interested in
5 understanding as to what level the poles are designed
6 to, the transmission poles are designed to.

7 **MR. BURNETT:** Mr. Chair, perhaps we can work
8 offline for the specifications, but we're happy to be
9 helpful with Mr. Moyle.

10 **CHAIRMAN CARTER:** Okay. And you're just going
11 to bring it when you do rebuttal?

12 **THE WITNESS:** I mean, I can do that. If we're
13 just looking for whatever the wind speed is, I think we
14 can do that.

15 **BY MR. MOYLE:**

16 **Q.** Yes, sir. And you would agree, would you not,
17 as we continue this conversation, that to the extent
18 something is designed to withstand a wind speed, let's
19 say of, you know, 100 miles an hour, that if it's
20 designed properly and installed properly, then it still
21 ought to, you know, work in the 100-mile-an-hour wind
22 event; correct?

23 **A.** Everything else isolated, yes.

24 **Q.** Okay. And, and you would also agree, would
25 you not, from an engineering perspective that to the

1 extent that design standards have been strengthened
2 following '04 and '05, that the company's risk of damage
3 related to hurricane events has been reduced; correct?

4 **A.** I'm not sure.

5 **Q.** All other things being equal, as it relates to
6 the design --

7 **A.** I'm not sure. I would, I would, I would
8 rather qualify that by understanding the number of wood
9 poles that we've still got left on the system, and I
10 think it would be a function of the number of wood poles
11 and the area where the storm hits, before I would be
12 comfortable answering that question.

13 **Q.** Let's come at it this way. Let's just assume
14 that, that, that previously you had ten wood poles that
15 weren't as good to standing up on hurricane force winds
16 of 100 miles an hour as compared to concrete and steel.
17 You replaced four of them, so now you have six wooden
18 poles and four concrete or steel. You would agree that
19 the system has improved with respect to its ability to
20 withstand 100-mile-an-hour winds based on that simple
21 hypothetical?

22 **A.** In that application and example, I would
23 agree. But I would think the orders of magnitudes of
24 wood poles would be quite, you know, if you looked at
25 the actual system, would be much different.

1 **Q.** Okay. And I appreciate your willingness to
2 help with that.

3 The other point is with respect to vegetation
4 management, you would also agree that vegetation
5 management activities have been enhanced following '04,
6 '05; correct?

7 **A.** I would say that -- let me qualify. Prior to
8 FAC-003, which has required us to put more resources on
9 the 200 and above kV lines, we, we have had to kind of
10 reallocate resources and move resources off of the 69
11 part of the system to the 200 kV and above to address
12 these mandatory issues.

13 So I would say that our 69 kV system is in
14 good shape, but we do need to, we do need to spend more
15 money there to get it, to get it to really what our
16 customers expect, I believe.

17 **Q.** Yes, sir. And I appreciate that. I'm just
18 trying to get from a general perspective. We would be
19 in agreement, would we not, that following the storm
20 events of 2004, 2005, after that this Commission moved
21 forward with some storm hardening measures; correct?

22 **A.** Right.

23 **Q.** And the result of those storm hardening
24 measures, they entered an order and you referenced the
25 order in your testimony. You would agree that the, the

1 transmission system of Progress Energy, as a result of
2 the vegetative management portion, is also in better
3 shape as it relates to potential damage from a hurricane
4 as compared to before the entry of that order, all other
5 things being equal; correct?

6 **A.** All other things being equal, yes, sir.

7 **Q.** Now you don't have any information, do you,
8 about, you know, the, the hurricane accrual monies or
9 funds?

10 **A.** No.

11 **Q.** No one has asked you to estimate damages
12 related to a potential hurricane?

13 **A.** No.

14 **Q.** Has Mr. Harris had any conversations with you?
15 Do you know Mr. Harris?

16 **A.** I do not.

17 **Q.** He's a hurricane witness, expert from Oakland,
18 California, that has some testimony in this case. But
19 y'all haven't consulted?

20 **A.** No.

21 **Q.** Let me direct you, if I could --

22 **CHAIRMAN CARTER:** You're going to another
23 line, Mr. Moyle?

24 **MR. MOYLE:** Yes, sir.

25 **CHAIRMAN CARTER:** Let's break then. You look

1 like you're getting your second wind there.

2 Let's go to lunch, everybody. We'll come back
3 at 2:15.

4 (Transcript continues in sequence with Volume
5 6.)

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1 STATE OF FLORIDA)
 2 : CERTIFICATE OF REPORTER
 3 COUNTY OF LEON)

4 I, LINDA BOLES, RPR, CRR, Official Commission
 5 Reporter, do hereby certify that the foregoing
 6 proceeding was heard at the time and place herein
 7 stated.

8 IT IS FURTHER CERTIFIED that I
 9 stenographically reported the said proceedings; that the
 10 same has been transcribed under my direct supervision;
 11 and that this transcript constitutes a true
 12 transcription of my notes of said proceedings.

13 I FURTHER CERTIFY that I am not a relative,
 14 employee, attorney or counsel of any of the parties, nor
 15 am I a relative or employee of any of the parties'
 16 attorneys or counsel connected with the action, nor am I
 17 financially interested in the action.

18 DATED THIS 25th day of September,
 19 2009.

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