

BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

In the Matter of:

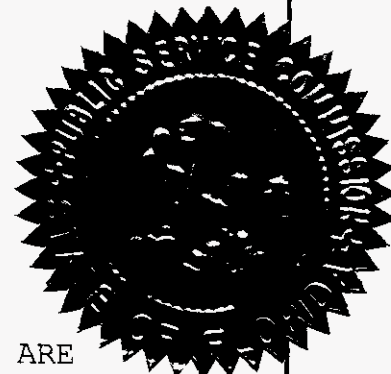
PETITION FOR INCREASE IN RATES DOCKET NO. 080677-EI
BY FLORIDA POWER & LIGHT COMPANY.

2009 DEPRECIATION AND DISMANTLEMENT DOCKET NO. 090130-EI
STUDY BY FLORIDA POWER & LIGHT
COMPANY.

VOLUME 10

Pages 1104 through 1253

ELECTRONIC VERSIONS OF THIS TRANSCRIPT ARE
A CONVENIENCE COPY ONLY AND ARE NOT
THE OFFICIAL TRANSCRIPT OF THE HEARING,
THE .PDF VERSION INCLUDES PREFILED TESTIMONY.



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: Thursday, August 27, 2009

TIME: Commenced at 9:30 a.m.

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

REPORTED BY: JANE FAUROT, RPR
(850) 413-6732

PARTICIPATING: (As heretofore noted.)

DOCUMENT NUMBER-DATE
09068 SEP-18
FPSC-COMMISSION CLERK

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

I N D E X

WITNESSES

NAME:	PAGE NO.
Rosemary Morley	
Cross-Examination by Mr. Wright	1113
Cross-Examination by Ms. Brown	1117
Philip Q. Hanser	
Direct Examination by Mr. Ross	1148
Prefiled Direct Testimony Inserted	1150
Errata Sheet to Prefiled Testimony	1173
Cross-Examination by Ms. Christensen	1176
Cross-Examination by Ms. Kaufman	1191
Cross-Examination by Ms. Bradley	1202
Robert E. Barrett, Jr.	
Direct Examination by Mr. Butler	1209
Prefiled Direct Testimony Inserted	1212
Errata Sheet to Prefiled Testimony	1248

EXHIBITS

NUMBER:		ID.	ADMTD.
412	UF Projections Bands	1123	1128
413	University of Florida Forecast Accuracy	1126	1128
40 - 50			1127
404 - 411			1128
51 - 52	PQH-1 and PQH 2	1174	1253
414	Data for MAP Calculation From OPC's POD No. 14	1182	1205
53 - 72	REB-1 through REB-20	1249	

P R O C E E D I N G S

1
2 (Transcript follows in sequence from
3 Volume 9.)

4 **CHAIRMAN CARTER:** We are back on the record.
5 Mr. Wright, do you mind if we deal with a
6 preliminary matter before you get back in?

7 **MR. WRIGHT:** Of course not, Mr. Chairman.
8 Thank you for asking.

9 **CHAIRMAN CARTER:** Thank you.

10 Mr. Butler, you're recognized.

11 **MR. BUTLER:** Thank you, Mr. Chairman. I think
12 that we have an extremely articulate spokesman for the
13 group in Mr. McGlothlin.

14 **CHAIRMAN CARTER:** Mr. McGlothlin, you're
15 recognized, sir.

16 **MR. MCGLOTHLIN:** I'll take the first stab at
17 it. Chairman Carter and Commissioners, during the lunch
18 break the intervenors conferred among our ourselves and
19 then conferred with the company in an effort to find
20 some way to save some time requirements and position
21 ourselves to finish the hearing in the allotted time
22 while giving priority to those things that we think are
23 important. And we have a proposal that I think has been
24 embraced in concept by the intervenors and the company
25 that would consist of two main components.

1 First of all, the intervenors would agree to
2 stipulate the testimony of three FPL witnesses into the
3 record without any cross without requiring their
4 appearance. They would be Mr. Spoor, Ms. Sonnelitter,
5 and Mr. Reed. And the company -- the other component
6 would be the agreement on the part of the company to
7 combine both the direct and rebuttal portions of several
8 witnesses who otherwise would come on separately for
9 both purposes. And those are Mr. Hanser, Mr. Hardy, Mr.
10 Bennett, Mr. Clarke, Mr. Harris, Dr. Avera,
11 Mr. Pimentel, Mr. Ender.

12 And there is a third component, and that is
13 for planning purposes the intervenors' witnesses would
14 appear at a time certain. The intervenors' witnesses
15 would appear for their testimony on Monday and half of
16 Wednesday, and the parties would work toward fitting
17 them in in that amount of time. And the company's offer
18 to combine certain appearances has one caveat, and that
19 is with respect to certain of those witnesses, they
20 would appear following the intervenor witnesses. And
21 they are Mr. Hardy, Mr. Clarke, Dr. Avera, Mr. Pimentel.

22 **MS. BENNETT:** Mr. Chairman.

23 **MR. McGLOTHLIN:** Before you take staff's
24 comments --

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

1 **MR. McGLOTHLIN:** -- I have been corrected.
2 The understanding is that all of those witnesses who are
3 being proffered for the combined purpose would follow
4 intervenor witnesses.

5 **CHAIRMAN CARTER:** I beg your pardon?

6 **MR. McGLOTHLIN:** The current proposal on the
7 table is that all of the witnesses who are combining the
8 direct and rebuttal would follow the intervenor
9 witnesses as opposed to the --

10 **CHAIRMAN CARTER:** Mr. Wright, before I go to
11 staff.

12 **MR. WRIGHT:** Thank you, Mr. Chairman. I just
13 had a query. There are a lot of moving parts and a lot
14 of conversation. I thought I had been told that
15 Mr. Hanser, who is next in the order of witnesses after
16 Dr. Morley, was also going to be combined and included
17 in that group that would be taken up after the
18 intervenors' witnesses. I don't care, I just want to
19 know.

20 **CHAIRMAN CARTER:** Okay. Let's get some
21 straightening.

22 Mr. McGlothlin.

23 **MR. McGLOTHLIN:** Mr. Hanser is among those.

24 **MR. WRIGHT:** I didn't hear that. I'm sorry.

25 **CHAIRMAN CARTER:** Are you okay now,

1 Mr. Wright?

2 **MR. WRIGHT:** Yes, sir. Thank you.

3 **CHAIRMAN CARTER:** Okay. Anybody else before I
4 go to staff?

5 **MR. BUTLER:** Mr. Chairman.

6 **CHAIRMAN CARTER:** Mr. Butler and then
7 Mr. Moyle.

8 **MR. BUTLER:** There are -- I think that that is
9 substantially an accurate recitation. There are a
10 couple of wrinkles here that I do need to raise and
11 clarify on it. One is with respect to Mr. Spoor, who
12 the intervenors have proposed to stipulate. Two things,
13 one there have been questions about some reliability
14 complaints that were deferred to him by Mr. Olivera the
15 other day, and I think it may be important for him to be
16 able to cover those.

17 I also note that Mr. Beck and I had agreed
18 that the questions about the LED street light program
19 that you may recall we added an issue at the beginning
20 of the hearing to cover that. The intent was that
21 Mr. Beck would be examining Mr. Spoor about that
22 subject. So it may be that there is very little
23 examination for him, but I think that it doesn't look
24 like it may be feasible for him to be excused as a
25 witness.

1 The other wrinkle is that we would not agree
2 to have Mr. Reed's testimony stipulated and him not
3 appear. I think he is a pretty central part of a lot of
4 the things that we have presented in the case and we
5 would want him to make an appearance. Otherwise, I
6 think that what Mr. McGlothlin had suggested is
7 accurate.

8 **CHAIRMAN CARTER:** Ms. Bennett. Hang on a
9 second. Mr. Moyle.

10 **MR. MOYLE:** I just wanted to make one
11 clarifying point. I mean, I think this is a good
12 direction we are going in, particularly with the
13 combination of direct and rebuttal. And we are trying
14 to work through as many of FPL's witnesses as we can. I
15 think we have kind of reached a very tentative
16 understanding. To the extent that we are ready on
17 rebuttal, we will do them tomorrow. But to the extent
18 that we are not, I think Mr. Butler agreed to push them
19 back after the intervenor witnesses.

20 **MR. BUTLER:** That is correct.

21 **CHAIRMAN CARTER:** Okay.

22 Ms. Bennett.

23 **MS. BENNETT:** Two of the witnesses, Spoor and
24 Sonnelitter, that were proposed to be stipulated -- and
25 Reed, actually -- staff has a bunch of exhibits that

1 need to come in through those witnesses and they have
2 not been stipulated in. So we can't agree to excusing
3 those witnesses.

4 **CHAIRMAN CARTER:** Okay. Let's do this,
5 because it started out sounding real good, but that's
6 okay. It is a point of beginning. At least let me give
7 you guys an opportunity to talk, so at least we are
8 saying the same thing. Let's do that. And then we
9 will -- because I don't want to disadvantage any party,
10 including staff, but I do want to be able to be where we
11 can all be on the same page. It is very important that
12 we are all communicating at the same level.

13 Let's do this. Commissioners, let's give the
14 parties a shot at least coming up with a communicable
15 representation of what you are doing, okay, so everybody
16 is comfortable with that. How about -- what is that
17 clock -- is that clock right back there? No. I'm going
18 to have to go by my clock here. My clock says 2:53.
19 Why don't we give you guys about another 15 minutes.
20 Would that work, Mr. Moyle?

21 **MR. MOYLE:** Yes.

22 **CHAIRMAN CARTER:** And that will put us at --
23 well, come back at 15 after.

24 (Off the record.)

25 **CHAIRMAN CARTER:** We are back on the record.

1 And what we decided we would do, nobody could read
2 Mr. McGlothlin's handwriting, so they decided they would
3 get it all typed up. So in the meantime, we will go
4 with Mr. Wright. You may continue.

5 **MR. WRIGHT:** Thank you, Mr. Chairman. I don't
6 have a lot more. Let me see if I can do this as quickly
7 as possible.

8 CROSS EXAMINATION

9 **BY MR. WRIGHT:**

10 **Q.** Dr. Morley, am I correct that it is your sales
11 forecast that is used in the company's Ten-Year Site
12 Plan?

13 **A.** Yes.

14 **Q.** Thank you. Did you model the impacts of
15 higher rates on nonpaying customers in your work?

16 **A.** Higher rates on nonpaying customers? No.

17 **Q.** Okay. Did you model the impact of rates being
18 higher than they would otherwise be on the company's bad
19 debt expense?

20 **A.** No.

21 **Q.** Did you model the impacts of rates being
22 higher than they might otherwise be on the number of
23 inactive accounts?

24 **A.** No.

25 **Q.** In your sales forecasting, did you model the

1 prices of electricity in other states for any usage
2 sector?

3 **A.** No. We find that FPL's price is the
4 appropriate fit in the model, not other companies'
5 price.

6 **Q.** I believe you testified that you relied on the
7 University of Florida population forecast?

8 **A.** That is correct.

9 **Q.** If you know, does their population forecast
10 take account of relative utility prices in Florida and
11 in other states?

12 **A.** I am going to answer it this way is I have
13 read about their methodology and talked to them also
14 about the methodology. They have never brought up
15 electric prices.

16 **Q.** Just to clarify an answer, let's move back and
17 clarify a couple of things that we did before the break.
18 Unfortunately, I gave you an exhibit that turned out not
19 to be the current version of the exhibit. I gave you
20 the original form of AJO-2, which showed rates
21 increasing from \$39-and-something to \$51-and-something.
22 And I think the correct numbers are shown in revised
23 AJO-2, and they show a base rate as of today of \$42 per
24 thousand residential kilowatt hours, is that accurate?

25 **A.** Yes. That is what I see on this exhibit.

1 **Q.** And the projected base rate per thousand
2 kilowatt hours of residential service is \$51.10, is that
3 correct?

4 **A.** Yes.

5 **Q.** Okay. Just to close the loop on the questions
6 I was asking you right when we took the break, is it a
7 fair characterization of your testimony that if rates
8 are -- if rates were to be \$9 per thousand residential
9 kilowatt hours less than otherwise, i.e., if the
10 company's increase is not granted, sales would be
11 greater to the residential sector, but you can't tell us
12 by how much?

13 **A.** Yes. There is a relationship between price
14 and usage that is taken into account in our forecast,
15 but I can't, you know, isolate that impact without
16 taking into account the other components of the
17 forecast.

18 **Q.** Do you know whether your forecast included the
19 company's projected lower fuel costs in its price
20 calculation for 2010?

21 **A.** Yes, it includes a projection of lower fuel
22 cost.

23 **Q.** Okay. In your deposition I think Mr. Moyle
24 asked you that question and you weren't sure. Is it
25 fair to say you checked since then and confirmed the

1 answer you just gave me?

2 **A.** Yes.

3 **Q.** Thank you. Did you or anyone else at Florida
4 Power and Light perform any analysis of the impact on
5 Florida's economy, and I would suggest gross state
6 product as the measure thereof, if the rate increase
7 requested by FPL were not granted?

8 **A.** No.

9 **MR. WRIGHT:** If I might have just less than a
10 minute, Mr. Chair.

11 **BY MR. WRIGHT:**

12 **Q.** I think that I have one more question, and I
13 think you answered it earlier, but I just want to make
14 sure. The forecast of sales shown in your Exhibit RM-11
15 is the sales forecast used by the company in this case,
16 correct?

17 **A.** That is correct.

18 **Q.** And it was not modified after you filed your
19 direct testimony, correct?

20 **A.** Correct.

21 **MR. WRIGHT:** Thank you. That's all I have,
22 Mr. Chairman. Thank you, Doctor Morley.

23 **CHAIRMAN CARTER:** Thank you, Mr. Wright. And
24 to Mr. Wright and Dr. Morley, some of my favorite people
25 are accountants and economists.

1 **UNIDENTIFIED SPEAKER:** You said it right. I
2 heard accountant.

3 **CHAIRMAN CARTER:** Accountants and economists,
4 some of my favorite. And you guys are two of the best
5 economists I know with the exception maybe of Connie
6 Kummer. But, you know, everybody can't be Connie
7 Kummer.

8 Staff, you're recognized.

9 CROSS EXAMINATION

10 **BY MS. BROWN:**

11 **Q.** Good afternoon, Dr. Morley.

12 **A.** Good afternoon.

13 **Q.** I have a few questions to ask you from your
14 deposition considering the decision that was made this
15 morning not to include them in the record. I am just
16 going to ask you a couple of questions. It seems like I
17 have asked you these same questions a lot of times.

18 These have to do with the origin of your
19 forecast used in this docket. Would it be correct to
20 say that in the normal course of business you produce
21 your short and long-term forecast -- load forecasts on
22 an annual basis, and that those forecasts are used for
23 multiple purposes within the company?

24 **A.** Yes.

25 **Q.** Was the forecast used in this docket produced

1 as part of your normal annual forecasting cycle?

2 **A.** Yes.

3 **Q.** Did you file testimony in FPL's EnergySecure
4 Pipeline need determination case, Docket 090172?

5 **A.** Yes, I did.

6 **Q.** And is it true that the purpose of that
7 testimony was to present the load forecast used in that
8 docket, which I understand to be the same as the
9 forecast used in this docket?

10 **A.** Yes, that is correct.

11 **Q.** And would it be fair to say that the load
12 forecast you present in this docket was not crafted just
13 for use here or in the EnergySecure Pipeline case, but
14 includes the 2009 Ten-Year Site Plan and the nuclear
15 power plant cost-recovery dockets?

16 **A.** That is correct, and it was also the forecast
17 used in the recent goals docket.

18 **Q.** That's right. Thank you.

19 Now, Dr. Morley, I think you were handed a
20 document which is Staff's 5th Set of Production of
21 Documents Number 55. Do you see that?

22 **A.** Yes, I do.

23 **MS. BROWN:** For the Chairman's information,
24 that document is recorded as Number 55-B on staff's pink
25 sheet, Number 47.

1 **BY MS. BROWN:**

2 Q. Are you familiar with this document?

3 A. I certainly am.

4 Q. I gather it was prepared by you?

5 A. Yes.

6 Q. And it addresses how closely FPL's load
7 forecast of kilowatt hour sales and numbers of customers
8 has tracked actual kilowatt hour sales and customers
9 through June 2009, is that correct?

10 A. Yes, it is.

11 Q. Could you briefly describe for the Commission
12 what this document shows?

13 A. Yes, I could. As I may have mentioned
14 earlier, we track the forecast very closely, and I think
15 with what the first page shows is what we call the sales
16 variance based on weather normalized billed sales. And
17 it shows that through June of this year, our retail
18 sales is within 0.2 percent of the actuals. In other
19 words, our sales forecast is very close to actuals.

20 Q. If you were asked to provide this same -- this
21 information today, would the information provided here
22 be the same?

23 A. Yes. The overall story would be the same. We
24 have, in fact, updated this document through July, and
25 it also shows that our forecast is very accurate. And

1 just by way of comparison, if we looked at OPC's
2 forecast, their bill variance through June, it would be
3 a negative 3 percent. So that's the difference. Our
4 forecast through June is within 0.2 percent. OPC's
5 forecast -- overforecast is by 3 percent.

6 Q. And I think earlier you were describing to the
7 Commission that your forecast was spot on, I think was
8 the way you phrased it. Can you tell me how this 2009
9 year-to-date forecast accuracy for total megawatt hours
10 sales compares to the forecast accuracy of total
11 megawatt hour sales over the last few years?

12 A. Yes. Typically, we like to be within like one
13 percent. Sometimes we haven't been, but we typically
14 like to be that close. And, of course, this is
15 indicating that we are actually better than that. So we
16 have very good forecasting accuracy this year.

17 Q. Just a second. Now, just a minute ago you
18 indicated that you had filed testimony in FPL's pipeline
19 need determination case, and you filed both direct and
20 rebuttal testimony in that case, didn't you?

21 A. Yes, I did.

22 Q. And just to reiterate, the forecast used in
23 the pipeline case is the same that you filed in this
24 case, correct?

25 A. Correct.

1 **Q.** Do you recall from your August 12th deposition
2 that staff asked you a few questions about your rebuttal
3 testimony in that docket specifically concerning Florida
4 Gas Transmission Witness Langston's testimony that FPL's
5 population projections are overstated in light of the
6 University of Florida's March 2009 population
7 projections?

8 **A.** Yes, I do. And I believe what I was saying in
9 that case is that the University of Florida's long-term
10 population growth, and by that I mean going out ten
11 years or more, if you look at the data historically,
12 they have tended to understate long-term population
13 growth. But as I believe I said in that case, is their
14 shorter term accuracy has been much better.

15 **Q.** Would it be fair to characterize your
16 testimony in the pipeline case to say that because FPL's
17 forecast falls between the mid-band and high-band
18 population March 2009 projections from the University of
19 Florida, that that fact helps support your contention
20 that your forecasts are reasonable?

21 **A.** Yes. That was one of a number of facts that
22 supported our forecast in that case.

23 **Q.** And in your deposition, do you recall
24 providing a Late-Filed Deposition Exhibit 1, titled the
25 University of Florida's Projection Bands, that showed

1 how your forecast fell between these two bands?

2 **A.** Yes, I do.

3 **Q.** Now, I have handed that Late-Filed Exhibit 1
4 to you. Do you have it before you?

5 **A.** I do.

6 **Q.** Can you describe it for the Commission
7 briefly.

8 **A.** Yes. We see here there is a solid line for
9 Florida Power and Light's population projection, and
10 that population projection was based on the October 2008
11 University of Florida population projections.
12 Subsequent to that time, the University of Florida
13 issued another population projection in March 2009.
14 That midband, which is shown as the boxed points, is
15 shown there, and we see for like 2010 that Florida Power
16 and Light's population forecast is actually slightly
17 higher than the most recent midband projection for the
18 University of Florida. The University of Florida also
19 issues high and low bands. They are also shown here,
20 and, obviously, the high band is the highest line shown
21 and the low band is the lower line shown.

22 **MS. BROWN:** Mr. Chairman, I would like to have
23 this exhibit marked since it is not -- it's no longer a
24 part of the deposition.

25 **CHAIRMAN CARTER:** That will be Number 412,

1 412.

2 **MS. BROWN:** And I suppose we could call this
3 UF Projection Bands.

4 **CHAIRMAN CARTER:** UF Projection Bands. Okay.

5 (Exhibit Number 412 marked for
6 identification.)

7 **BY MS. BROWN:**

8 **Q.** Now, Dr. Morley, also in your deposition you
9 were asked to produce Late-Filed Deposition Number 2,
10 looking at the University of Florida's population
11 forecast accuracy over a two-year forecasting horizon.
12 Do you remember that?

13 **A.** Yes, I do.

14 **Q.** And we have provided you with a copy of that
15 Late-Filed Exhibit 2.

16 **A.** I have it.

17 **Q.** Can you explain what this late-filed
18 deposition exhibit shows?

19 **A.** Yes. What this does is it looks at the
20 University of Florida's forecasting error for population
21 going out two years into the future. And what we see
22 here is there was a period of time in the mid-1990s till
23 about 2000 where the University of Florida did
24 underforecast population. That is what the positive
25 bar -- the positive bar is underforecasting population.

1 It did underforecast population by between 2 and
2 3 percent or so. However, since 2000, that trend has
3 not been present in the same way. And, in fact, it has
4 been going down the last couple of years. And, in fact,
5 in the most recent two years available, the University
6 of Florida overforecasted the population going out two
7 years. And that is, you know, most significant this
8 year. Where we see that very large negative bar, that
9 means that the University of Florida overestimated the
10 2009 Florida population by over 4 percent.

11 Q. I think not being a statistician or dealing
12 with graphs very much, that this exhibit is somewhat
13 counter-intuitive. So I would like to have you look at
14 1994 where the shaded bar goes up almost to two percent,
15 and what this is showing, isn't it, is that the
16 population of Florida grew almost two percent more than
17 the University of Florida thought it was going to, is
18 that correct?

19 A. I think you have it.

20 Q. Good. I think you really have already
21 answered this question, but would you agree that from
22 1994 through 2005 this exhibit shows that the University
23 of Florida consistently underestimated Florida's actual
24 population growth?

25 A. I think that is true. If I could add

1 something to it. That error was still much less than
2 their long-term forecasting error. I believe that their
3 long-term forecasting error was more in the area of
4 5.7 percent. That is the figure I remember. So this
5 shows that there was a tendency to also underestimate
6 the two-year forecast, but it was by a much smaller
7 margin.

8 Q. Well, with respect to the forecasting that is
9 shown on this graph, would you accept, subject to check,
10 that from 1994 through 2005, the University of Florida
11 underforecasted Florida's population growth over a
12 two-year forecast horizon by an average of 2.1 percent?

13 A. I think I would, but could you give me the
14 ending period again?

15 Q. 2005.

16 A. Yes, I agree, subject to check.

17 Q. And then in 2006 and 2007, the University of
18 Florida overforecasted population growth for 2008 and
19 2009, correct?

20 A. Correct.

21 Q. Is it reasonable to conclude that the likely
22 cause of the overforecast in 2006 and 2007 is that the
23 forecasters at the University of Florida, like most of
24 us, didn't see the economic downturn of 2008 and 2009
25 coming?

1 **A.** I don't know if I could agree with that. I
2 think in reading some of their material, they started
3 talking about the slow down in population growth almost
4 a year or two ago. So I don't think they didn't foresee
5 it. I think that they did not foresee the impact on
6 population that we have actually experienced, you know,
7 the magnitude.

8 **MS. BROWN:** And with that, that is all the
9 questions I have. Thank you, Dr. Morley.

10 **THE WITNESS:** You're welcome.

11 **CHAIRMAN CARTER:** Hang on a second.
12 Ms. Brown, on the last document that you gave us, did
13 you need a number for this?

14 **MS. BROWN:** Oh, yes. I'm sorry.

15 **CHAIRMAN CARTER:** Okay. That will 413, 4-1-3.

16 **MS. BROWN:** And we can call it --

17 **CHAIRMAN CARTER:** A short title, please.

18 **MS. BROWN:** -- University of Florida Forecast
19 Accuracy.

20 **CHAIRMAN CARTER:** Okay. University of Florida
21 Forecast Accuracy.

22 (Exhibit Number 413 marked for
23 identification.)

24 **CHAIRMAN CARTER:** Commissioner McMurrian.

25 **COMMISSIONER McMURRIAN:** Thank you, Mr.

1 Chairman. Just one clarification for me. On this last
2 exhibit that we were looking at, Dr. Morley, is this in
3 comparison -- is this comparing -- with respect to the
4 forecast error that this shows, is this comparing the
5 medium case that we were looking at on that last
6 exhibit, is it the University of Florida medium case
7 that they are comparing the actual results to, or is it
8 low or high? Do you understand what I'm asking?

9 **THE WITNESS:** I do. And it is comparing the
10 midband or the medium case.

11 **COMMISSIONER McMURRIAN:** Okay. I assumed so,
12 but I couldn't tell for sure.

13 Thank you, Mr. Chairman.

14 **CHAIRMAN CARTER:** Thank you.

15 Commissioners. Redirect?

16 **MR. ROSS:** No redirect, Mr. Chairman.

17 **CHAIRMAN CARTER:** A wise man.

18 Okay. Exhibits.

19 **MR. ROSS:** FPL moves admission of Exhibits 40
20 through 50.

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

23 (Exhibit Numbers 40 through 50 admitted into
24 the record.)

25 **CHAIRMAN CARTER:** Now, let's hang on a second.

1 We are going to need to move to the back pages, guys.
2 Okay. Starting at exhibit -- Mr. Wiseman, I think you
3 have got 405 through 411, I believe it is.

4 **MR. WISEMAN:** Yes, Mr. Chairman, and I would
5 move the admission of Exhibits 405 through 411.

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

8 (Exhibit Numbers 404 through 411 admitted into
9 the record.)

10 **MS. BROWN:** Staff would Exhibit 412 and 413.

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

13 (Exhibit Numbers 412 and 413 admitted into the
14 record.)

15 **MS. BROWN:** And, Mr. Chairman, if I might ask
16 at this point --

17 **CHAIRMAN CARTER:** You're recognized.

18 **MS. BROWN:** -- if the parties have any
19 objection to the admission of Staff's Fifth Request for
20 Production of Documents Number 55-B, which we would like
21 to check off on our list and move into the record as
22 staff's composite exhibit at the end of the hearing.

23 **CHAIRMAN CARTER:** Are there any objections
24 from the parties?

25 Mr. Wright.

1 **MR. WRIGHT:** No objection, Mr. Chairman. If I
2 could just receive instructions from the staff as to
3 where exactly that is, so that I can show it checked off
4 on my exhibit list, also.

5 **CHAIRMAN CARTER:** Okay. Ms. Brown.

6 **MS. BROWN:** It is on the pink sheet. Do you
7 have the pink sheet?

8 **CHAIRMAN CARTER:** You know when I worked for
9 Merrill Lynch the pink sheets meant something different.

10 **MR. WRIGHT:** I don't know about no pink sheet.

11 **MS. BROWN:** I have the pink sheet, and it is
12 Number 47 on the pink sheet.

13 **MR. WRIGHT:** Okay.

14 **CHAIRMAN CARTER:** Let's take a minute. Let's
15 take a minute and make sure we are all on the same page.

16 **MR. WRIGHT:** Mr. Chairman, I understand that
17 the pink sheet is essentially replicated within the
18 listing under Exhibit 35.

19 **MS. BROWN:** Yes, that is correct.

20 **MR. WRIGHT:** So if I go to Number 47 under
21 Exhibit 35 on Exhibit 1, that is what we are talking
22 about here, right?

23 **MS. BROWN:** Yes.

24 **CHAIRMAN CARTER:** And I think out of fairness
25 to the parties, I think staff is keeping a track of

1 those, so at the appropriate time when they move those
2 in we will be able to deal with that. So I just wanted
3 to make sure --

4 **MR. WRIGHT:** Yes, sir. And I just wanted my
5 checklist on the comprehensive exhibit list to match.
6 Thank you.

7 **CHAIRMAN CARTER:** Okay. No problem. Any
8 further questions on that matter?

9 Nothing further for this witness? Thank you,
10 Dr. Morley.

11 **THE WITNESS:** You're welcome.

12 **CHAIRMAN CARTER:** All right. You have
13 restored my confidence in economists, you and Mr.
14 Wright.

15 **THE WITNESS:** Thank you.

16 **CHAIRMAN CARTER:** Thank you. You may be
17 excused.

18 Call your next witness.

19 **MR. ROSS:** FPL calls Dr. Philip Hanser.

20 **CHAIRMAN CARTER:** Okay. Dr. Philip Hanser.

21 By the way, Dr. Morley, I did get a B in that
22 economics class.

23 **MS. MORLEY:** I'm glad to hear that.

24 **CHAIRMAN CARTER:** Even though it was
25 8:00 o'clock in the morning. Have a good day.

1 (Off the record.)

2 **MR. McGLOTHLIN:** Chairman Carter, I think we
3 are ready to talk about the order of witnesses at
4 whatever point you wish.

5 **CHAIRMAN CARTER:** Okay. Let's do this before
6 we get -- you can have a seat and be comfortable. Let's
7 do this before we get going. You know, Mr. McGlothlin,
8 in your absence, I did use your name in vain. And what
9 I said was the reason that we had the confusion was
10 nobody could read your writing. So let's pass it out,
11 and then we'll kind of -- we'll go from there. Make
12 sure everyone has a copy. Please leave one for
13 Commissioner Argenziano. Thank you.

14 Do all the parties have a copy of the -- this
15 is a one-pager. Ms. Bennett, do you have one?

16 **MR. McGLOTHLIN:** I had no difficulty reading
17 it. I can't understand --

18 **CHAIRMAN CARTER:** I think that's what got us
19 all, Mr. McGlothlin, you had your -- I think the way you
20 make your Ss, it was throwing everybody off.

21 **MR. McGLOTHLIN:** I see.

22 **CHAIRMAN CARTER:** Hang on one second. Let's
23 see if everybody is in place. Ms. Bennett, do you have
24 one now?

25 **MS. BENNETT:** I do. Thank you.

1 **CHAIRMAN CARTER:** Do all the parties have
2 copy? It is a one-pager.

3 Okay. Mr. McGlothlin, you are recognized.

4 **MR. MCGLOTHLIN:** I will walk through this.
5 The work out has changed somewhat since I first
6 described it. There have been a couple of conferences
7 in huddle since then. The arrangement is that
8 Mr. Spoor, whom we thought we may be able to stipulate
9 will instead appear tomorrow and Friday.

10 There remains the potential ability to
11 stipulate Ms. Sonnelitter, but we need to see the
12 exhibits that staff intends to sponsor through her to
13 see if those can be stipulated before that can be nailed
14 down.

15 Mr. Reed is not stipulated, instead he will be
16 a rebuttal witness next week.

17 As I described earlier, the intervenor
18 witnesses will appear on Monday and the first half of
19 Wednesday, with the exception of Dr. Woolridge, who you
20 may recall has limited availability next week, and we
21 had arranged earlier that he would appear on Thursday.

22 FPL has agreed to combine the direct and
23 rebuttal of Hardy, Bennett, Clarke, Avera, and Pimentel.
24 You should note on the handout and the record should
25 reflect that the understanding and the agreement is that

1 Witnesses Avera and Pimentel will appear after all the
2 intervenor witnesses have completed their testimony.

3 **CHAIRMAN CARTER:** You are talking about Number
4 5 now, is that correct?

5 **MR. McGLOTHLIN:** That's correct.

6 **CHAIRMAN CARTER:** Okay.

7 **MR. McGLOTHLIN:** And with those arrangements,
8 the sequence of the witnesses for today and tomorrow
9 becomes Hanser, Barrett, Santos, Slattery, Ousdahl for
10 her direct testimony only. And we should note that
11 Witness Hanser has filed direct and rebuttal. The
12 understanding among parties is that he will appear today
13 in his direct capacity. The intervenors may elect to
14 reserve all of their cross until next week when he comes
15 back on rebuttal.

16 With respect to the intervenor witnesses,
17 because of conflicting schedules, SFHHA Witness Baron
18 will be the first to appear on Monday. After his
19 testimony, the OPC witnesses beginning with Jacob Pous
20 will appear. After that we will revert to the other
21 witnesses of SFHHA and then FIPUG.

22 **COMMISSIONER ARGENZIANO:** Excuse me. Could I
23 ask you to speak up a little? I'm having a hard time
24 hearing you.

25 **CHAIRMAN CARTER:** I'm going to ask him to

1 start all over, Commissioner, so you can take it from
2 the top.

3 **COMMISSIONER ARGENZIANO:** Thank you.

4 **CHAIRMAN CARTER:** Chris, could you raise
5 Mr. McGlothlin's volume on his microphone.

6 **MR. POTTS:** Yes, sir.

7 **CHAIRMAN CARTER:** Mr. McGlothlin.

8 **MR. MCGLOTHLIN:** Yes. Can you hear me better
9 if I get this much closer?

10 **COMMISSIONER ARGENZIANO:** Yes, thank you.

11 **MR. MCGLOTHLIN:** The agreement is as follows:
12 Mr. Spoor, FPL Witness Spoor, will appear on
13 Friday.

14 The parties will review staff's exhibits that
15 they intend to sponsor through Ms. Sonnelitter. If we
16 have no objection to those, there is the potential to
17 stipulate Ms. Sonnelitter without her appearance.

18 Mr. Reed, rebuttal witness for FPL, was first
19 identified as one who might be stipulated. That is no
20 longer the case. He will appear as a rebuttal witness
21 next week.

22 The intervenor witnesses will appear on Monday
23 and the first half of Wednesday with the exception of
24 Dr. Woolridge, OPC witness, who because of his limited
25 availability, is already scheduled for next Thursday.

1 FPL will combine appearances, direct and
2 rebuttal of the following witnesses: Hardy, Bennett,
3 Clarke, Avera, Pimentel. The expectation is that
4 Bennett will appear tomorrow for both his direct and
5 rebuttal testimony. Clarke, because of scheduling
6 difficulties, now has a time certain for Wednesday
7 afternoon. Avera and Pimentel, the understanding and
8 agreement is that they will appear after all intervenor
9 witnesses have completed their testimony.

10 With those arrangements, the sequence for FPL
11 witnesses beginning now will be Hanser, who will appear
12 today only for direct testimony. Intervenors may elect
13 to reserve their cross until he appears for rebuttal
14 next week. Thereafter, Barrett, Santos, Slattery,
15 Ousdahl, direct only, Harris, direct only, and Ender.
16 And that may not be the total remainder of the case, but
17 it will certainly get us through tomorrow.

18 **COMMISSIONER ARGENZIANO:** Excuse me,
19 Mr. Chair.

20 **CHAIRMAN CARTER:** Commissioner Argenziano.

21 **COMMISSIONER ARGENZIANO:** Can you tell me
22 again, repeat again when Slattery is due, because I
23 don't have those confidential numbers. They were not
24 sent to me and I need to get those.

25 **CHAIRMAN CARTER:** It is probably going to be

1 tomorrow based upon the representation. Is that your
2 understanding, Mr. McGlothlin?

3 **MR. MCGLOTHLIN:** That is my expectation, sir,
4 yes.

5 **COMMISSIONER ARGENZIANO:** I won't have those
6 numbers by tomorrow. I need to try to see if we can
7 change that.

8 **CHAIRMAN CARTER:** Commissioner, if you don't
9 have the numbers, we will move Mr. Slattery around in
10 the batting order.

11 **COMMISSIONER ARGENZIANO:** Thank you very much.

12 **CHAIRMAN CARTER:** No problem.

13 **MR. MCGLOTHLIN:** And just to complete what I
14 said earlier about the intervenor witnesses on Monday,
15 because of scheduling difficulties, SFHHA Witness Baron
16 will be taken out of order and will be first, followed
17 by OPC witnesses, with the exception of Dr. Woolridge,
18 and then FIPUG witness after that.

19 **CHAIRMAN CARTER:** Okay. We will work as much
20 as possible to accommodate you guys. Saying that, let
21 me make sure that we are all on the same page.

22 Mr. Wright.

23 **MR. WRIGHT:** One quick question. I think I
24 know the answer, but better to be sure. Mr. Reed, I
25 understand, is not stipulated. Do I understand

1 correctly that he will present both his direct and
2 rebuttal combined toward the end of the week? Is that
3 accurate?

4 **CHAIRMAN CARTER:** Mr. McGlothlin, is that
5 correct, or Mr. Butler?

6 **MR. BUTLER:** One moment, Mr. Chairman.

7 **CHAIRMAN CARTER:** Okay. Turn your microphone
8 on.

9 **MR. WRIGHT:** It may --

10 **MR. BUTLER:** That will be fine.

11 **MR. WRIGHT:** Anything is fine, I just wanted
12 to make sure I knew when he was coming up. So he will
13 be combined?

14 **CHAIRMAN CARTER:** Mr. Butler.

15 **MR. BUTLER:** That's right. That is okay with
16 us. And is that the plan of the intervenors that he
17 would be combined for direct and rebuttal?

18 **MR. MCGLOTHLIN:** That was our working
19 assumption, yes.

20 **MR. BUTLER:** Okay.

21 **CHAIRMAN CARTER:** And what we will do, guys
22 and dolls, is if there is problem, just bring it to my
23 attention, and we will work with you. We will
24 accommodate you.

25 Ms. Bennett.

1 **MS. BENNETT:** I am an optimist, but I'm
2 assuming we are not going to get through this line-up of
3 witnesses tomorrow for FPL. Are the parties proposing,
4 then, that the intervenors go Monday anyway, and that
5 the rest of the witnesses will come at the end of the
6 week?

7 **CHAIRMAN CARTER:** Mr. McGlothlin, is that your
8 understanding?

9 **MR. MCGLOTHLIN:** That is my understanding of
10 FPL's preference, and that was one of the things that we
11 agreed to was to take them in a block on Monday and part
12 of Wednesday.

13 **CHAIRMAN CARTER:** Mr. Butler.

14 **MR. BUTLER:** The order is correct. You know,
15 if we -- we see it as pretty important to try to get
16 through these people before we go into our
17 cross-examination or the presentation of the intervenor
18 witnesses, mainly out of concern that we not leave too
19 much to be done in the two and a half days from
20 Wednesday afternoon until Friday of next week.

21 We certainly are prepared, if it is the
22 Commission's pleasure, to go either late tomorrow night
23 and/or Saturday, if necessary, to be sure that we get
24 through that series of the direct witnesses in time.

25 **CHAIRMAN CARTER:** Don't count on Saturday.

1 It's not in the cards.

2 **MR. BUTLER:** Okay. Well, then, late tomorrow
3 as necessary is certainly something that we are prepared
4 to accommodate.

5 **CHAIRMAN CARTER:** We will work to try to
6 accommodate everyone and all, but let's --

7 **MR. MCGLOTHLIN:** The intervenors also
8 anticipate the possibility of extra time and are
9 certainly willing to work toward that end, as well.

10 **CHAIRMAN CARTER:** Well, as I said, we will
11 work with you, and we have -- everybody knew the
12 schedule going into this, and if there is a problem and
13 we don't get what we need to get to, we will just have
14 to go back and recalibrate and do what we need to do.
15 But I sincerely appreciate the parties working together,
16 but Saturday is not part of the deal right now. Okay.

17 **MR. BUTLER:** That's all right. One other
18 thing I wanted to clarify, Mr. Chairman.

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

20 **MR. BUTLER:** On Item 6 where it lists the
21 series of FPL witnesses that we would be taking as many
22 of them as we can in the next day and a half is that
23 really all of those are direct only. It is a little bit
24 unclear here and potentially ambiguous, the words direct
25 only appear for Ms. Ousdahl, but I think those are all

1 ones that are -- where we would be presenting their
2 direct and then they would be coming back with rebuttal
3 next week. I just want to make that clear.

4 **CHAIRMAN CARTER:** With the understanding on
5 Witness Slattery, because we did have some information
6 that was going to come in through Witness Slattery, and
7 also Commissioner Argenziano was waiting on the receipt
8 of the confidential information. So we will
9 accommodate, but also I want to make sure that
10 Commissioner Argenziano has that information before we
11 start dealing with Witness Slattery. So, as I said to
12 you guys on day one, we will work as much as possible to
13 accommodate you, and I want everyone to have a fair
14 hearing, and we will work it out. It will work out.

15 Ms. Bradley.

16 **MS. BRADLEY:** I do have a question since you
17 raised the issue of the confidential documents. Can we
18 have access to that sometime other than when we are in
19 here so we can prepare our cross of Ms. Slattery?

20 **CHAIRMAN CARTER:** I will let you and Mr.
21 Butler talk about that during the break, okay?

22 **MS. BRADLEY:** Okay.

23 **CHAIRMAN CARTER:** Mr. Wright, you had a
24 question.

25 Ms. Kaufman, did you have a --

1 **MS. KAUFMAN:** I did have a question, Mr.
2 Chairman.

3 **CHAIRMAN CARTER:** You are recognized.

4 **MS. KAUFMAN:** And that was to Mr. Butler, if
5 that's appropriate. I thought that Mr. Ender also was
6 putting on his direct and rebuttal at the same time.

7 **CHAIRMAN CARTER:** We can all blame
8 Mr. McGlothlin if there is a problem.

9 **MS. KAUFMAN:** I would never do that.

10 **CHAIRMAN CARTER:** Oh, Mr. Kelly is gone, so I
11 can't throw him under the bus in front of his boss.

12 **MR. BUTLER:** That is consistent --

13 **CHAIRMAN CARTER:** Turn your microphone on.

14 **MR. BUTLER:** That is consistent with our list.
15 We wouldn't have an objection to combining the
16 examination of direct and rebuttal for Mr. Ender.

17 **CHAIRMAN CARTER:** Mr. Wright.

18 **MS. KAUFMAN:** I thought that was true for Mr.
19 Harris.

20 **CHAIRMAN CARTER:** I'm sorry. Go ahead, Ms.
21 Kaufman.

22 **MS. KAUFMAN:** I thought that was what true for
23 Mr. Harris, as well. I think we just all want to be
24 sure exactly what we ought to be preparing for.

25 **CHAIRMAN CARTER:** Here is what we will do. As

1 we get to the witnesses, we will just make that
2 determination at that point in time so everyone will be
3 on the same page, okay? Because right now we have got
4 Witness Hanser.

5 Commissioner McMurrin.

6 **COMMISSIONER McMURRIAN:** I'm sorry to
7 interrupt you, Chairman, but I guess I was thinking that
8 they need to know so they can prepare for whether they
9 are asking questions for direct and rebuttal ahead of
10 time. I think that's what they are -- I see nodding of
11 heads.

12 **MS. KAUFMAN:** Yes, ma'am.

13 **COMMISSIONER McMURRIAN:** They need to know
14 now.

15 **CHAIRMAN CARTER:** Oh, you guys want it to be
16 easy, that's what you're asking.

17 **MS. BRADLEY:** No. We want to be prepared.

18 **CHAIRMAN CARTER:** Okay. Let's go back --
19 let's go back, then, Ms. Kaufman and Ms. Bradley. On
20 Number 6 on the list, and I think what they were saying
21 about Number 6 was whether these witnesses would be
22 direct and rebuttal or direct only. Was that the
23 question?

24 **MS. KAUFMAN:** Yes.

25 **CHAIRMAN CARTER:** Yes, ma'am. Ms. Kaufman.

1 **MS. KAUFMAN:** And I thought I heard Mr. Butler
2 say that they should all be direct only, and that didn't
3 jibe with what my understanding was. So I was just
4 trying to get some clarity on that.

5 **MR. BUTLER:** My apologies. As I go through, I
6 think it is sort of I was half right. This list doesn't
7 have as many on here as direct only as it should. But
8 there are some that should be combined. Let me just run
9 through. It's always useful to be sure that we are all
10 on the same page.

11 We are talking about Mr. Hanser will be
12 appearing right now for direct only, I believe, at the
13 intervenors' request because of lack of time to prepare
14 for his rebuttal examination. Mr. Barrett will be
15 appearing for direct only. Ms. Santos will be appearing
16 for direct only. Ms. Ousdahl -- I'm sorry. Ms.
17 Slattery will be appearing for direct only.

18 **CHAIRMAN CARTER:** And draw a box around
19 Slattery pending delivery of information, okay?

20 **MS. KAUFMAN:** Yes, sir.

21 **MR. BUTLER:** Ms. Ousdahl, direct only. But
22 then you are correct, Mr. Harris and Mr. Ender are the
23 ones that we had agreed could be combined.

24 **MS. KAUFMAN:** Thank you, Mr. Chairman.

25 **CHAIRMAN CARTER:** On Harris and Ender, they

1 are direct and rebuttal, is that what you said?

2 **MR. BUTLER:** That's right.

3 **CHAIRMAN CARTER:** Okay.

4 Mr. Wright, did you have a question before we
5 go further?

6 **MR. WRIGHT:** Mr. Butler just answered most of
7 it. I believe that Witness Harris has only direct
8 testimony. And I guess I understand now that Mr. Ender,
9 whenever he comes up, will be direct and rebuttal, such
10 that if we got to -- no?

11 **MR. McGLOTHLIN:** Mr. Chairman, counsel for
12 SFHHA has reminded me that there was a caveat with
13 respect to Witness Ender, and that is we would take him
14 in both capacities if the parties have had an
15 opportunity to prepare for his rebuttal testimony when
16 it comes up. Otherwise, we would take him for direct
17 only.

18 **CHAIRMAN CARTER:** Okay. All right. That's
19 fine.

20 And thank you, Commissioner McMurrian, for
21 that. I was putting my foot on the gas there, you know,
22 getting ready. But that's cool. We will do that.

23 And, again, under Number 6 the sequence after
24 Morley would be Hanser, direct; Barret, direct; Santos,
25 direct. We are drawing a box around Slattery until we

1 get the information. Ousdahl, direct. Harris is direct
2 and rebuttal, is that correct? No.

3 **MR. BUTLER:** It is just direct because there
4 isn't rebuttal.

5 **CHAIRMAN CARTER:** Okay. Harris is direct.
6 Mr. Wright, you told me that, didn't you? Harris is
7 direct, and Ender is direct and rebuttal, assuming --
8 Mr. Wiseman, assuming you have an opportunity to review
9 that. Is that correct?

10 **MR. WISEMAN:** Yes. Otherwise he would be just
11 direct, and then he will come back for rebuttal.

12 **CHAIRMAN CARTER:** Okay. That's fine.

13 **MR. BUTLER:** Mr. Chairman.

14 **CHAIRMAN CARTER:** Okay. Yes, sir.

15 **MR. BUTLER:** One other thing I just wanted to
16 state on the record is that we are agreeing to this
17 arrangement and to consolidating some of our witnesses
18 and working this out with the goal that everybody used
19 their very best efforts to complete this by the end of
20 the allotted time, next Friday. It is obviously very
21 important to all of the parties concerned, certainly
22 including, but not limited to FPL, to have a full and
23 complete hearing on this case within the allotted
24 hearing days, and that is certainly the spirit in which
25 we have approached agreeing to these accommodations on

1 schedule.

2 **CHAIRMAN CARTER:** That is the spirit in which
3 we took it, and I think that is why -- and as I said, I
4 appreciate you guys working together. That is why I
5 wanted to give you an opportunity to talk among
6 yourselves and come up with something.

7 We realize there may be some -- we know about
8 Slattery, but there may be a problem with Ender, based
9 upon what Mr. Wiseman said, so we are going to try to
10 accommodate everyone on that. But I think if we just go
11 forward, we will be able to get there. Okay. Anything
12 further?

13 Ms. Bennett.

14 **MS. BENNETT:** I don't want us to ignore there
15 is two up on the top of the list, Mr. Spoor, who will
16 come in on Friday, also; and Mr. Bennett, who will also
17 be coming in on Friday. So in addition to these on the
18 list, Number 6, you are going to have to add two other
19 witnesses.

20 **CHAIRMAN CARTER:** Oh, 5, and -- I guess what
21 it is is there is no actual -- you just put the numbers
22 in for ease of understanding, right, Mr. McGlothlin?

23 **MR. MCGLOTHLIN:** They seem to line up with the
24 component parts of the arrangement. What they don't do
25 is spell out a complete order. Counsel is right,

1 Mr. Spoor and Mr. Bennett would appear on Friday, and we
2 did not try to fit them under Number 6, but they are
3 part of the task for Friday.

4 **MS. BENNETT:** And possibly Mr. Hanser rebuttal
5 on Friday.

6 **CHAIRMAN CARTER:** Okay. I'm looking at blank
7 faces, so maybe not.

8 **MR. MCGLOTHLIN:** That is not consistent with
9 what I thought the arrangement was. Mr. Butler can
10 speak to that.

11 **MR. BUTLER:** We would not have an objection to
12 that, but my understanding was that the intervenors were
13 not -- didn't feel comfortable with doing rebuttal
14 tomorrow for Mr. Hanser. Is that correct, Mr.
15 McGlothlin?

16 **CHAIRMAN CARTER:** Look, either we are all on
17 the same page or we are not. So let's not -- if
18 everyone is not there, then we are not there, okay?
19 Okay. All right. Who is on first?

20 **MR. ROSS:** Mr. Chairman.

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

22 **MR. ROSS:** Mr. Hanser is on the stand.

23 **CHAIRMAN CARTER:** You are recognized.

24 **MR. ROSS:** And he has not been sworn.

25 **CHAIRMAN CARTER:** Okay. Mr. Hanser, would you

1 please stand and raise your right hand.

2 (Witness sworn.)

3 PHILIP Q. HANSER

4 was called as a witness on behalf of Florida Power and
5 Light Company, and having been duly sworn, testified as
6 follows:

7 DIRECT EXAMINATION

8 **BY MR. ROSS:**

9 Q. Would you please state your name and business
10 address.

11 A. My name is Philip Q. Hanser. My address is 44
12 Brattle Street, Cambridge, Massachusetts.

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

14 A. I am employed by the Brattle Group, where I am
15 a principal and director.

16 Q. Have you prepared and caused to be filed 23
17 pages of prefiled direct testimony in this proceeding?

18 A. Yes, I have.

19 Q. Do you have any changes or revisions to your
20 prefiled direct testimony?

21 A. No, I do not.

22 Q. If I asked you the same questions contained in
23 your direct testimony, would your answers be the same?

24 A. Yes, they would.

25 **MR. ROSS:** Mr. Chairman, or Madam Chairman, I

1 ask that the prefiled direct testimony of Mr. Hanser be
2 inserted into the record as though read.

3 **CHAIRMAN CARTER:** The prefiled testimony of
4 the witness will be inserted into the record as though
5 read.

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

1 **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**2 **FLORIDA POWER & LIGHT COMPANY**3 **DIRECT TESTIMONY OF PHILIP Q HANSER**4 **DOCKET NO. 080677-EI**

5

6

Q. Please state your name and business address.

7

A. My name is Philip Q Hanser. My business address is *The Brattle Group*, 44
8 Brattle Street, Cambridge, MA 02138.

9

Q. By whom are you employed and what is your position?

10

A. I am a Principal of *The Brattle Group*, an economic and management
11 consulting firm with offices in Cambridge, Massachusetts; Washington, D.C.;
12 San Francisco, California; London, England; and Brussels, Belgium.

13

**Q. Please describe your educational background and professional
14 experience.**

15

A. I hold an A.B. in Economics and Mathematics from The Florida State
16 University and a Phil.M. in Economics and Mathematical Statistics from
17 Columbia University. I completed the Ph.D. candidacy requirements in
18 Economics and Mathematical Statistics at Columbia University. I have been a
19 Principal at *The Brattle Group* in its Cambridge office for the last ten years
20 and have over 25 years of experience in the electric power industry. I have
21 worked for major utilities in North America on topics related to load
22 forecasting and weather normalization. I have testified previously before the
23 Federal Energy Regulatory Commission and various state public utility

1 commissions, as well as in federal and state courts, as an expert witness. My
2 statement of qualifications, including testimony I have given over the past
3 fifteen years, is attached as Exhibit PQH-1.

4 **Q. On whose behalf are you testifying?**

5 A. I am testifying on behalf of Florida Power & Light Company ("FPL" or the
6 "Company").

7 **Q. Are you sponsoring any exhibits in this case?**

8 A. Yes. I am sponsoring the following exhibits:

- 9 • PQH-1– *Statement of Qualifications*
10 • PQH-2– FPL's Monthly NEL and Total Customer Model Descriptions

11 **Q. Are you sponsoring or co-sponsoring any Minimum Filing Requirements**
12 **in this case?**

13 A. No.

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

15 A. The purpose of my testimony is to provide an expert opinion on the
16 reasonableness of: (i) FPL's total customer and monthly net energy for load
17 (NEL) forecasting models; (ii) inputs used in these forecasting models; (iii)
18 adjustments made to the forecasting models; and (iv) FPL's overall
19 forecasting approach for forecasting monthly NEL and total customers.

20 **Q. Please summarize your testimony.**

21 A. Based on my extensive review of FPL's models, assumptions, and outputs, I
22 have concluded that the overall approach used by the Company to prepare its

1 forecast of monthly NEL and total customers is reasonable. Specifically, I
2 have found that:

- 3 i. FPL's total customer and monthly NEL models are statistically and
4 economically valid with strong predictive capabilities;
- 5 ii. The models use valid and accurately constructed inputs based on
6 sound assumptions; and
- 7 iii. Adjustments made to the model predictions are reasonable and
8 improve the accuracy of the forecasts.

9 In terms of the last point, FPL has appropriately addressed the current
10 industry-wide phenomenon of over-forecasting by adjusting the results of its
11 monthly NEL model. These adjustments improve the overall accuracy of the
12 NEL forecast and are consistent with sound forecasting methods. Absent
13 these adjustments, the forecasted level of NEL would likely be over-stated.

14 **Q. Were you able to replicate FPL's monthly NEL and total customer
15 models?**

16 A. Yes. I re-estimated FPL's monthly NEL and total customer models using the
17 underlying data provided by FPL and replicated the parameters of FPL's
18 monthly NEL and total customer models.

19 **Q. Were you able to replicate FPL's monthly NEL and total customer
20 forecasts?**

21 A. Yes. Using FPL's monthly NEL and total customer models, drivers of the
22 models for the forecasting period and adjustment factors as provided by FPL,
23 I successfully replicated FPL's monthly NEL and total customer forecasts.

1 **Q. Why did you start your review of FPL's monthly NEL and total customer**
2 **models by replicating the models and the forecasts generated by these**
3 **models?**

4 A. Replication is a key step in reviewing any quantitative analysis, including
5 forecasting. My ability to replicate FPL's monthly NEL and total customer
6 models as well as the forecasts allows me to conclude that these models and
7 forecasts are transparent, reproducible, and free from computational errors.

8

9 **TOTAL CUSTOMER AND MONTHLY NEL FORECASTING MODELS**

10

11 **Q. Please describe the total customer forecasting model.**

12 A. The term "total customers" is defined as the average monthly number of total
13 FPL customers. The total customer forecasting model is a monthly statistical
14 regression model that explains the total number of customers using as
15 variables an intercept term, Florida's monthly population, and several
16 indicator variables for the months of the year to capture the seasonal variation
17 in the number of customers. Due to the time-series nature of the data and the
18 potential correlation in residual terms, the model also includes an
19 autoregressive error term lagged one month and a seasonal multiplicative
20 autoregressive error term lagged 12 months. Total customers is primarily
21 driven by Florida's population. This model is estimated using data starting in
22 January 1990 and extending through October 2008. Exhibit PQH-2 provides
23 the econometric specification of the total customer model.

1 **Q. Please describe FPL's monthly NEL forecasting model.**

2 A. NEL refers to FPL's total generation net of plant use. The monthly NEL
3 forecasting model is also a statistical regression model that explains the "NEL
4 per customer" using as variables an intercept term, the real price of electricity,
5 heating degree-hours, cooling degree-hours, Florida real household disposable
6 income, an indicator variable for February, and another indicator variable for
7 March 2003. The model also includes an autoregressive error term lagged one
8 month in order to address the correlation of residual errors over time. This
9 model is estimated using the data starting in January 1998 and extending
10 through October 2008. Exhibit PQH-2 provides the econometric specification
11 of the monthly NEL model.

12

13 **VALIDATION OF THE INPUTS TO THE MONTHLY NEL AND TOTAL**
14 **CUSTOMER MODELS**

15

16 **Q. Please describe the development of the actual variables used in the**
17 **estimation of the monthly NEL and total customer models.**

18 A. As described below, the variables used in the monthly NEL and total customer
19 models are either obtained from outside sources or developed from other
20 variables as follows:

21 i. The Florida Population series is obtained from the University of
22 Florida's Bureau of Economic & Business Research (BEBR). The
23 annual population series is converted into a monthly series. The

1 annual population numbers provided by University of Florida are as of
2 April of each year, therefore interpolations are made from April of one
3 year to April of the next year.

4 ii. The NEL per customer series is constructed in two steps. First, the
5 observed NEL data are adjusted upwards for hurricane impacts. Then,
6 the adjusted NEL data are divided by the number of total customers to
7 obtain NEL per customer (in MWh per customer).

8 iii. The real price of electricity is constructed in the following steps. In
9 the first step, the system price of electricity, which is provided by FPL,
10 is divided by the Consumer Price Index (CPI). Next, twelve month
11 moving averages of the real prices are calculated to obtain the real
12 price of electricity used in the monthly NEL models.

13 iv. Heating degree-hours are calculated by subtracting the observed
14 hourly composite temperature across FPL's service territory from a
15 base temperature of 66° (negative values are ignored). The heating
16 degree-hours are then summed together for the day and divided by
17 twenty four to obtain daily heating degree-hours, which are then
18 summed for the given month to obtain a monthly value.

19 v. Cooling degree-hours are calculated by subtracting a base temperature
20 of 72° from the actual hourly composite temperature across FPL's
21 service territory (negative values are ignored). The cooling degree-
22 hours are then summed for the entire day and divided by twenty four

1 to obtain daily average cooling degree-hours, which are then summed
2 for the given month to obtain a monthly value.

3 vi. Florida real household disposable income (in 2000 dollars) is defined
4 as total personal income less income taxes, adjusted for inflation and
5 divided by the total number of households. This series is provided by
6 Global Insight, a well-known economic forecasting firm.

7 **Q. Were you able to reconstruct the actual variables used in the estimation**
8 **of the monthly NEL and total customer models from the underlying raw**
9 **data?**

10 A. Yes. I have successfully replicated the actual variables used in the estimation
11 of the monthly NEL and total customer models from the underlying raw data
12 provided by FPL.

13 **Q. Are these variables constructed accurately from the underlying raw data**
14 **and based on sound assumptions?**

15 A. Yes. The underlying raw data used to construct these variables are developed
16 by FPL and other reputable organizations such as Global Insights and ITRON
17 Inc., a well-known provider of utility forecasting software and services. My
18 review and subsequent reconstruction of model variables show that they are
19 constructed accurately from the underlying raw data and are based on sound
20 assumptions.

1 **Q. Is there sufficient variation in the variables used to estimate these**
2 **models?**

3 A. Yes. All variables used in the estimation of monthly NEL and total customer
4 models exhibit substantial variation on both a month to month and year to
5 year basis. This variation permits the identification of the relationship
6 between the dependent variables (monthly NEL per customer and total
7 customers) and their respective independent variables, and enhances the
8 precision with which the relationship can be estimated.

9 **Q. Please describe the development of the forecast variables used in the**
10 **forecasts of the monthly NEL and total customer levels.**

11 A. In order to forecast the monthly NEL per customer and total customer values
12 from the estimated equations, one needs to have forecasts of the explanatory,
13 or independent, variables. In the FPL models, the forecast period starts in
14 January 2009 and extends through December 2011. Development of the
15 forecasted explanatory variables are described below:

- 16 i. The Florida annual population forecasts are provided by University of
17 Florida BEBR and converted into monthly values using the method
18 described above.
- 19 ii. The real price of electricity forecasts are developed using FPL's
20 system price of electricity and CPI forecasts. The CPI forecasts are
21 based on the average of Global Insight's trend and pessimistic CPI
22 scenarios.

- 1 iii. The heating degree-hour forecasts are based on the average monthly
2 heating degree-hour values from 1988 through 2007.
- 3 iv. The cooling degree-hour forecasts are based on the average monthly
4 cooling degree-hour values from 1988 through 2007.
- 5 v. The Florida real household disposable income forecasts are based on
6 Global Insight's forecasts. FPL also examined the prior history of real
7 household disposable income, especially the 1973 through 1976
8 recession period. FPL established an analogy between the 1973 - 1976
9 recession and the current recession and forecasts the real household
10 disposable income using growth rates based on this analogy.

11 **Q. Were you able to replicate the forecasted variables used in the forecasts**
12 **of the monthly NEL and total customers?**

13 A. Yes. I have successfully replicated the forecasted variables used in the
14 forecasts of the monthly NEL and total customer models using the data
15 provided by FPL.

16 **Q. How were you able to replicate the forecasted variables?**

17 A. I reconstructed the forecasts of these variables using the methodology
18 described and the underlying data provided by FPL.

19 **Q. What is the significance of being able to replicate these variables?**

20 A. The forecasted variables are the drivers of FPL's monthly NEL and total
21 customer forecasts. By replicating these variables, I verify that the variables
22 driving the forecasts are transparent, reproducible and are not prone to
23 computational errors.

1 **Q. Are these variables forecasted reasonably and accurately from the**
2 **underlying data?**

3 A. Yes. My review and subsequent reconstruction of these variables show that
4 they are forecasted accurately under a reasonable set of assumptions.

5
6 **ASSESSMENT OF THE MONTHLY NEL AND**
7 **TOTAL CUSTOMER MODELS**

8
9 **Q. Is FPL's total customer forecasting model reasonable?**

10 A. Yes. All of the estimated coefficients from the model have the expected
11 signs. All coefficients except for the constant term are statistically significant
12 at least at the five percent level. The Florida population variable has a
13 positive and significant coefficient which implies that the total number of
14 customers increases with the increase in the Florida population. The adjusted
15 R-squared from the regression is 0.99, which implies that the model
16 successfully explains 99 percent of the variation in the dependent variable,
17 *i.e.*, total number of customers. The Durbin-Watson (DW) test statistic
18 indicates whether the autocorrelation in the residuals has been successfully
19 removed by the inclusion of the autoregressive terms. Although the DW
20 statistic of 1.61 implies that there is potentially some residual autocorrelation
21 remaining in the error terms this is not an issue given the strong significance
22 of all the coefficients.

1 **Q. What measure do you rely on to assess the predictive power of the FPL**
2 **monthly NEL and total customer models?**

3 A. In order to assess the predictive power of the FPL forecasting model, we
4 calculate a statistic called the mean absolute percentage error (MAPE).
5 MAPE is a standard measure of accuracy in time series regressions and shows
6 the average absolute percentage error that could not be explained by the
7 model. The smaller the MAPE value, the more powerful the forecasting
8 model. It is possible to calculate two types of MAPE values in a forecasting
9 setting. The first is called an “in-sample MAPE” which is based on estimating
10 the regression model over the entire sample period and calculating the MAPE
11 over the same period. The other is called an “out-of-sample MAPE” and it is
12 based on estimating the regression model on a portion of the full sample
13 period and using the remaining portion of the sample to calculate the MAPE
14 value.

15 **Q. Does FPL’s total customer forecasting model generate reasonable**
16 **predictions?**

17 A. Yes. I have calculated in-sample and out-of-sample MAPE values for the
18 FPL’s total customer forecasts. I calculated the in-sample MAPE as 0.07
19 percent by estimating the model and determining the percentage errors over
20 the January 1990 through October 2008 period. I calculated the out-of-sample
21 MAPE as 0.20 percent by estimating the model over the January 1990 through
22 December 2006 period and determining the percentage errors over the January

1 2007 through October 2008 period. Both MAPE values are very small and
2 indicate that FPL's total customer model generates precise predictions.

3 **Q. Is FPL's monthly NEL forecasting model reasonable?**

4 A. Yes. All of the estimated coefficients from FPL's monthly NEL forecasting
5 model are statistically significant and have signs consistent with economic
6 theory. The coefficient of the real household disposable income variable is
7 statistically significant and has a positive sign which implies that the NEL per
8 customer increases with increases in real household disposable income. The
9 heating degree-hour variable has a positive and significant coefficient. The
10 colder the weather, the greater the load, most likely from customers' use of
11 electric heating, which yields higher NEL per customer. The cooling degree-
12 hour variable also has a positive and significant coefficient implying that
13 warmer weather increases FPL's load, most likely from customers' air
14 conditioning use. The real price of electricity has a negative and significant
15 coefficient which implies that the NEL per customer falls as the real price of
16 electricity increases. The indicator variable for February is negative and
17 significant. This is expected since the NEL is lower as a result of February
18 having fewer days. Finally, the indicator variable for March 2003 is positive
19 and significant and captures a one time surge in the load that was experienced
20 in March 2003. The adjusted R-squared from the regression is 0.98 which
21 implies that the model successfully explains 98 percent of the variation in the
22 dependent variable, *i.e.*, NEL per customer. The DW statistic is 2.17 and

1 implies that inclusion of the AR (1) term has addressed any issue of
2 autocorrelation in the error terms.

3 **Q. Does FPL's monthly NEL forecasting model generate reasonable**
4 **predictions?**

5 A. Yes. My assessment of the predictive power of FPL's monthly NEL
6 forecasting model is based upon calculating in-sample and out-of-sample
7 MAPE statistics of the model's forecasts for the historical period over which it
8 was estimated.

9 **Q. What is the in-sample MAPE statistic calculated for FPL's monthly NEL**
10 **forecasting model?**

11 A. I calculated the in-sample MAPE as 1.75 percent by estimating the model and
12 determining the percentage errors over the January 1998 through October
13 2008 period.

14 **Q. What is the out-of-sample MAPE statistic calculated for FPL's monthly**
15 **NEL forecasting model?**

16 A. I calculated the out-of-sample MAPE as 3.73 percent by estimating the model
17 over the January 1998 through December 2006 period and determining the
18 percentage errors over the January 2007 through October 2008 period.

19 **Q. What do these in-sample and out-of-sample MAPE statistics indicate**
20 **about the model?**

21 A. Both of these MAPE values are small and within the acceptable limits to deem
22 a forecasting model to be a reliable forecasting model. The deviations of the

1 predicted values from the actual values expressed as percentages of the actual
2 values are lower than six percent in absolute terms in all cases.

3 **Q. Do you expect the MAPE statistics to differ between the total customer
4 and NEL models?**

5 A. Yes, I do expect the MAPE statistics to be different because the variables that
6 are being forecast in the two models differ substantially in their potential to
7 vary from month to month. As noted above, the total customer variable is
8 driven by Florida population which, although it exhibits some month to month
9 variation, is nonetheless quite stable in its trend. On the other hand, NEL per
10 customer is affected by factors such as weather which exhibit substantial
11 variability.

12 **Q. Do you observe an over-forecasting tendency in FPL's monthly NEL
13 forecasting model?**

14 A. Yes. Starting in March 2008, the NEL per customer predictions from FPL's
15 monthly NEL forecasting model are above the actual values of NEL per
16 customer. I use the mean percentage error (MPE), which is a measure of bias
17 in the forecasts to gauge the over-forecasting phenomenon in the NEL model.
18 MPE takes the average of all percentage errors for a given forecast period.
19 Because there are negative and positive percentage errors, this procedure
20 allows cancelling out of the errors. MPE calculated over the January 1998
21 through October 2008 period is -0.04 percent which is very close to zero and
22 indicates no overall bias. When MPE is calculated over the January 1998
23 through February 2008 period, the value of MPE is 0.16 percent which is

1 again small and indicates no overall bias. However, when MPE is calculated
2 for the March 2008 through October 2008 period, the MPE is -3.08 percent
3 which is still small, but definitely non-zero. Therefore, I conclude that FPL's
4 monthly NEL model begins to over-forecast starting in early 2008.

5 **Q. Is the over-forecasting phenomenon unique to FPL's monthly NEL**
6 **models?**

7 A. Absolutely not. In fact, recently more and more utilities are experiencing this
8 over-forecasting phenomenon. This issue is being widely discussed. The
9 article in the November 21, 2008 issue of the Wall Street Journal titled
10 "Surprise Drop in Power Delivers Jolt to Utilities" discusses the recent
11 declines in electricity sales experienced by Xcel Energy Inc, Duke Energy
12 Corp. and American Electric Power Co.

13 **Q. What are the causes of this phenomenon?**

14 A. This phenomenon arises because econometric models used to forecast the
15 future are, by necessity and construction, based on historic data. The most
16 recent history is a substantial departure from the past. For example, the recent
17 sudden and relatively precipitous change in economic conditions is largely not
18 observed in the historical period upon which the model is based. Indeed, it
19 appears that such economic changes have not been generally seen for three
20 decades. Extending the model's historical data basis back that far would not
21 likely improve the model's forecasting capability because since that time
22 numerous changes have taken place in how FPL's customers use energy. In
23 addition, there are other factors which contribute to this phenomenon, such as

1 changes in federally mandated efficiency standards, for which there is
2 minimal history and whose impacts, by legislative mandate, will likely
3 increase over time.

4 **Q. Are there ways to address the over-forecasting phenomenon?**

5 A. Yes. Two techniques are used and accepted. One technique is to introduce an
6 explanatory variable. In some cases, this technique may suffice to correct for
7 the over-forecasting phenomenon. The alternative technique is to introduce
8 appropriate ex-post adjustments to the predictions to correct for the over-
9 forecasting.

10 **Q. Does FPL's forecast address this over-forecasting phenomenon?**

11 A. Yes. FPL addresses the over-forecasting phenomenon using ex post
12 adjustments that reduce the forecasted NEL values from the monthly NEL
13 models. Development and implementation of these adjustments are described
14 in the next section.

15

16 **ADJUSTMENTS TO THE MONTHLY NEL PREDICTIONS**

17

18 **Q. What adjustments does FPL make to the forecasts generated by the**
19 **monthly NEL models?**

20 A. FPL makes four adjustments to the forecasts generated by the monthly NEL
21 model to obtain the final NEL forecasts. First, FPL adjusts the NEL model
22 predictions for incremental energy impacts expected to result from federally
23 mandated efficiency standards, such as those from the Energy Policy Act of

1 2005 (EPACT) and the Energy Independence and Security Act of 2007
2 (EISA), as well as those from the increased adoption of compact fluorescent
3 lamps. The second is a re-anchoring adjustment, which adjusts for the
4 average level of over-forecasting in 2008. Third, FPL adjusts its forecast for
5 recent unusual levels of minimal usage customers which has exacerbated the
6 trend in over-forecasting. Finally, the forecast is adjusted for two wholesale
7 contracts which are not included in the NEL forecast. These adjustments are
8 all appropriate forms of ex-post forecasting adjustments to produce a more
9 accurate and unbiased forecast. Each is discussed further below.

10 **Q. Please describe how FPL implements these adjustments to the NEL**
11 **forecasts.**

12 A. FPL implemented the adjustments to the NEL forecasts following the steps
13 below:

- 14 i. FPL calculates the NEL forecast multiplying the predicted NEL per
15 customer from the NEL forecasting model by the total customer
16 forecast from the total customer forecasting model.
- 17 ii. Next, the re-anchoring adjustment is made. The NEL 2008 model
18 forecast is adjusted by the incremental energy efficiency impacts, and
19 the Seminole contract. The resulting 2008 forecasts are then used to
20 determine by how much the model should be re-anchored to the 2008
21 actual values.

1 iii. Starting in 2009, the NEL per customer forecasts from the model are
2 multiplied by the total customer forecasts and then adjusted downward
3 by the re-anchoring and minimal usage customer adjustment factors.

4 iv. The resulting forecasts from these adjustments are then further
5 adjusted by the estimates of energy efficiency impacts, the Lee County
6 contract, and Seminole contract, to obtain the final NEL forecasts.

7 **Q. How does FPL adjust its forecast for federally mandated energy**
8 **efficiency standards?**

9 A. FPL adjusts the NEL model predictions for impacts expected to result from
10 federally mandated energy efficiency standards, such as those from EPACT
11 and EISA, as well as those from the increased adoption of compact
12 fluorescent lamps because these impacts are not fully embedded in the historic
13 data. As a result, predictions from the NEL model do not incorporate the
14 incremental energy impacts brought about by the annual change in the
15 appliance stock due to these federal energy efficiency standards. FPL uses
16 energy impact estimates provided by ITRON to reduce the NEL predicted by
17 the forecasting model.

18 **Q. How does FPL perform its re-anchoring adjustment?**

19 A. For each month in 2008, FPL calculates the percentage difference between the
20 actual NEL and the predicted NEL accounting for the incremental energy
21 efficiency impacts, and Seminole contract. On average, predicted load is 1.29
22 percent higher than the actual load after these adjustments. Therefore, FPL

1 adjusts the NEL forecasts downward by 1.29 percent starting in January 2009,
2 thus, re-anchoring the base from which the forecast is calculated.

3 **Q. How does FPL adjust for the unusual level of minimal usage customers in**
4 **its service territory?**

5 A. FPL adjusts the NEL forecasts to address the unusual increase in the number
6 of minimal usage customers in its service territory. A minimal usage
7 customer is defined as a residential customer whose monthly usage is between
8 1 kWh and 200 kWh. While there have always been minimal usage customers
9 in FPL's service territory, the number of such customers has increased
10 noticeably through the end of 2008 and that trend is expected to continue
11 going forward for at least the next two years. As a result, FPL adjusts the
12 NEL forecasts downward by 0.9 percent, 1.1 percent, and 0.55 percent in
13 2009, 2010, and 2011, respectively. FPL developed these minimal usage
14 customer adjustment factors based on the deviations of projected minimal
15 usage customer ratios from the historic average of seven percent. The steps
16 for these calculations are:

- 17 i. Using the billing data, FPL determines the number of minimal usage
18 customers as a percentage of the total number of residential customers
19 by month.
- 20 ii. FPL extrapolates these ratios for 2009 and 2010 and then calculates
21 the deviations of these ratios from the historic average of seven
22 percent.

- 1 iii. Next, using the total number of residential customers in 2009 and 2010
2 and the ratios calculated in (ii), the increase in the number of minimal
3 usage customers in 2009 and 2010 is calculated.
- 4 iv. Multiplying the increase in the minimal usage customers by the annual
5 consumption of an average customer, FPL finds the average sales lost
6 as a result of the increase in the number of minimal usage customers.
- 7 v. Finally, the reduction in sales due to the increased number of minimal
8 usage customers is calculated as the ratio of the total forecasted billed
9 sales in 2009 and 2010. These ratios yield the minimal usage
10 customer adjustment factors that are used to adjust the monthly NEL
11 forecast. The adjustment factor for 2011 is half of the 2010 value.

12 **Q. How does FPL adjust its forecasts for wholesale contracts?**

- 13 A. FPL makes adjustments to its NEL forecasts for two new wholesale contracts:
- 14 i. The first contract is a partial requirements service contract with Lee
15 County Electric Cooperative (LCEC) which will start in 2010 and
16 extend through 2011. FPL increases its NEL forecast by the amount
17 of the projected service that will be required by LCEC. The LCEC
18 average monthly requirement is projected to be 102,362 MWh in 2010
19 and 103,642 MWh in 2011. That forecast was provided by FPL.
- 20 ii. The second contract is a power sale contract to Seminole Electric
21 Cooperative which has started in December 2008 and will extend
22 through December 2009. FPL increases its NEL forecast by 10,390
23 MWh on average over the course of this period to reflect the projected

1 energy sold to Seminole. FPL provided the information for this
2 estimate.

3 **Q. Are adjustments standard in the load forecast practice?**

4 A. Yes. Adjusting statistical forecasts is a standard way forecasters incorporate
5 new information into the forecasting process. Integration of the new
6 information increases the accuracy of the forecasts if implemented
7 appropriately.

8 **Q. Were the adjustments FPL made appropriate?**

9 A. Yes. Each of these adjustments has a separate basis for appropriateness which
10 I discuss below.

11 **Q. Why was the federally mandated energy efficiency adjustment
12 appropriate?**

13 A. FPL models were estimated using historical data which do not incorporate
14 incremental energy impacts expected to be realized in the forecasting period.
15 For that reason, FPL used the energy efficiency impacts provided by ITRON
16 to account for these incremental impacts outside of the model. As a result of
17 my review of the ITRON estimates, I conclude that these estimates introduce
18 reasonable monthly energy efficiency impacts. Moreover, ITRON's average
19 efficiency impacts are comparable to other independent estimates of energy
20 efficiency impacts from the federally mandated efficiency standards such as
21 the American Council for an Energy Efficient Economy (ACEEE).

1 **Q. Why was the re-anchoring adjustment appropriate?**

2 A. As noted earlier in my testimony, beginning in March 2008, FPL's monthly
3 NEL forecasting model consistently over-forecasts the monthly NEL per
4 customer. Thus, FPL adjusted the forecasts to mitigate this tendency of the
5 model, in essence, re-anchoring the place from which the model begins its
6 forecast. If the model had not exhibited such a tendency in a consistent way,
7 this re-anchoring would not have been deemed appropriate. As described
8 earlier in my testimony, FPL calculates the average deviation of the forecasts
9 from the observed values in 2008 as 1.29 percent and re-anchors the forecasts
10 for 2009, 2010, and 2011 using this number. This approach is appropriate as
11 it incorporates the most recent full-year historic information on FPL's
12 monthly NEL model over-forecasting tendency. I note that the effect of this is
13 to essentially shift the forecast downward by this factor, but it does not affect
14 the overall trend of the forecast.

15 **Q. Why was the minimal usage customer adjustment appropriate?**

16 A. FPL has detected a noticeable increase in the number of minimal usage
17 customers through the end of 2008. However, FPL model predictions would
18 not reflect the impacts of the increasing trend in the minimal usage customers
19 as the models are estimated using the historic data which has little history of
20 such a behavior. For that reason, FPL adjusted the forecasts for the impact of
21 the increasing number of minimal usage customers outside of the model. As
22 discussed earlier in my testimony, FPL utilized the billing data to trace the
23 changes in the number of minimal usage customers and to infer the impact of

1 the increase in the number of *minimal usage* customers on the monthly NEL.
2 This is an appropriate adjustment for incorporating new developments to the
3 forecasts that would otherwise be excluded.

4 **Q. Why were the Lee County and Seminole contract adjustments**
5 **appropriate?**

6 A. These are known contracted loads and are not forecasted by FPL's model.
7 Therefore, they should be accounted for outside of the model through an ex-
8 post adjustment that FPL has made. These adjustments are appropriate as the
9 contracted loads are not incorporated in the NEL model, but would certainly
10 affect the overall level of monthly NEL.

11 **Q. Please summarize your review of FPL's forecasting models.**

12 A. FPL's models are reasonably constructed and estimated and perform well for
13 the period over which they were estimated. FPL has appropriately addressed
14 any factors that would adversely affect the quality of the forecast and which
15 could not be accounted for solely in the estimated models.

16 **Q. Does this conclude your direct testimony?**

17 A. Yes.

ERRATA SHEET

() DIRECT TESTIMONY, OR (X) REBUTTAL TESTIMONY (PLEASE MARK ONE WITH "X")
WITNESS: Robert E. Barrett, Jr.

<u>PAGE #</u>	<u>LINE #</u>	<u>CHANGE</u>
6	7	Change "\$22 million" to "\$28 million"
12	21	Change "MFR C-37" to "MFR-C36"
Exhibit REB-22		
1	20	Change "\$22 million" to "\$28 million"
Exhibit REB-23		
1	36	Should read "(6) Projects shifted from late 2008 and budgeted in 2009. No Impact on 2010 test year."

1 **BY MR. ROSS:**

2 Q. Mr. Hanser, are you also sponsoring any
3 exhibits to your direct testimony?

4 A. Yes, I am.

5 Q. And do those exhibits consist of 23 pages,
6 also shown as Exhibit PQH-1 and PQH 2 on staff's exhibit
7 list?

8 A. Yes.

9 **MR. ROSS:** Mr. Chairman, I would note that Mr.
10 Hanser's exhibits have been premarked for identification
11 as Exhibits 51 and 52.

12 **CHAIRMAN CARTER:** For identification purposes,
13 51 and 52.

14 (Exhibit Numbers 51 and 52 marked for
15 identification.)

16 **CHAIRMAN CARTER:** Mr. Hanser, you weren't here
17 when I did -- were you here this morning when I
18 explained the sequence of the lights?

19 **THE WITNESS:** No. But if you would go over it
20 again, it would be helpful.

21 **CHAIRMAN CARTER:** Oh, I enjoy this part of it.
22 Is that as you are doing your summary, green is good.
23 When the amber light comes on, you have two minutes
24 left. When the red light comes on, you have 30 seconds
25 left. Okay. At the end of the 30 seconds, when the red

1 light goes on, your mike goes dead. Okay. You may
2 proceed.

3 **THE WITNESS:** Fair enough.

4 **BY MR. ROSS:**

5 **Q.** Mr. Hanser, have you prepared a summary of
6 your direct testimony?

7 **A.** Yes, I have.

8 **Q.** Would you please provide that summary to the
9 Commission?

10 **A.** Good afternoon, Commissioners. My role in
11 this case is to perform an independent review of Florida
12 Power and Light's net energy for load in total customer
13 models, the assumption, the outputs to determine whether
14 the overall approach employed by Florida Power and Light
15 Company is reasonable. Based on my review, I have
16 concluded that the overall approach used by FPL to
17 prepare its forecast of monthly net energy for load and
18 total customers is reasonable.

19 As a first step of the review process, I
20 reviewed the inputs of these models. The models employ
21 valid and accurately constructed inputs based on sound
22 assumptions.

23 Next, I replicated the company's models and
24 conducted statistical tests to assess the predictive
25 power of the models. These analyses demonstrate that

1 the company's total customer and monthly NEL models are
2 statistically and economically valid with strong
3 predictive capabilities.

4 Finally, I reviewed the company's adjustments
5 through the results of its monthly NEL model to address
6 an overforecasting tendency of the model which began in
7 early 2008. The company's adjustments made to the model
8 predictions are reasonable, appropriately address the
9 current industry-wide phenomena of overforecasting, and
10 as a result improve the accuracy of the forecasts.
11 Absent these adjustments, the forecasted level of NEL
12 would likely be overstated.

13 Overall, FPL's net energy for load and total
14 customer models are reasonably constructed, estimated
15 and performed well for the period over which they were
16 estimated.

17 **MR. ROSS:** I tender the witness for cross.

18 **CHAIRMAN CARTER:** Ms. Christensen.

19 CROSS EXAMINATION

20 **BY MS. CHRISTENSEN:**

21 **Q.** Good afternoon, Mr. Hanser. A few questions
22 for you. On Page 13 of your direct testimony, you
23 discuss the calculation of the MAPE, which is the mean
24 absolute percentage error statistic from the NEL model.
25 You note in that in sample, MAPE is 1.75 percent by

1 estimating the model and determining the percentage
2 errors over the January 1998 through October 2008
3 period, is that correct?

4 **A.** If I could have a copy of my testimony.

5 **CHAIRMAN CARTER:** Okay. Let's hang on a
6 second. Would somebody give him a copy? Mr. Butler, do
7 you have a copy?

8 **THE WITNESS:** Thank you. Page 13?

9 **BY MS. CHRISTENSEN:**

10 **Q.** Page 13 of your direct testimony.

11 On Page 13, you calculated the mean absolute
12 percentage error rate for the NEL model as 1.75 percent?

13 **A.** That is correct.

14 **Q.** Okay. And that was over the period of
15 January 1998 through 2008, correct?

16 **A.** That is correct.

17 **Q.** And would it be correct to say that the mean
18 absolute percentage error calculates errors without
19 taking into account whether or not they are a positive
20 or a negative number?

21 **A.** Yes. Do you mind if I take a second to
22 explain what the MAPE is?

23 **Q.** Certainly.

24 **A.** Okay. So when you do a forecasting model and
25 you do a prediction, there is a forecast that comes out

1 of the model, and then there is the observed data
2 associated with the forecast. And the MAPE basically
3 tries to -- it takes the difference between the two, and
4 just simply takes the absolute value. That is to say,
5 if it is negative it assigns a positive value to the
6 difference; if it is positive, it stays positive. So it
7 applies the absolute value function and then calculates
8 that relative to the value of the prediction which
9 creates a percentage, and that tells you then the
10 percentage error relative to what the actual value is.
11 And so the net result is that the MAPE is always
12 positive.

13 Q. Thank you for the explanation. You calculated
14 an out-of-sample MAPE as 3.73 percent by estimating the
15 model over a January 1998 through December 2006 in
16 determining the percentage errors over January 2007
17 through October 2008, correct?

18 A. Yes. What I did was reestimated the model
19 over a shorter period, the period January 1998 through
20 December of 2006, and then calculated its prediction
21 capability using the MAPE statistic as the basis for
22 that calculation. And that statistic for going forward
23 for the period January '98 -- January of 2007 through
24 October of 2008 was 3.73 percent.

25 Q. Okay. And you concluded that these MAPE

1 values were small and within acceptable limits to deem a
2 forecast model to be reliable in forecasting, correct?

3 **A.** Yes.

4 **Q.** Now, on Pages 14 and 15 of your direct
5 testimony -- are you there? You note that the mean
6 percentage error was a negative 3.08 percent for the
7 period of March 2008 through October 2008, is that
8 correct?

9 **A.** Actually, I think it is on Page 15. It begins
10 on Page 14.

11 **Q.** Okay. And the mean percentage error you
12 calculated was a negative 3.08 percent, correct?

13 **A.** That is correct.

14 **Q.** Okay.

15 **A.** That is a different statistic than the MAPE,
16 because that statistic takes a look at simply the
17 differences on a percentage basis, but it doesn't apply
18 the absolute value function. And so the net result is
19 the mean percentage error can be signed; that is, it can
20 be negative or positive. If it is negative, then, in
21 fact, the model is overforecasting. If it's positive,
22 then the model is underforecasting.

23 **Q.** Okay. And when you calculated this you noted
24 the negative 3.08 percent was still a small percentage,
25 but would not be categorized as zero or a non-zero.

1 **A.** That is correct.

2 **Q.** And in your experience, what is the limit of
3 an acceptable mean percentage error before you deem the
4 model unreliable?

5 **A.** There is no fixed -- how should I say, line
6 that sort of demarcates one from the other. Generally,
7 if the models in the past have been within a certain
8 range and it looks like the model suddenly deviates from
9 that, then generally you sort of say, well, this doesn't
10 look like I have done a good job of estimating or
11 forecasting using the model.

12 Three percent is sort of the upper bound in a
13 way. You certainly wouldn't want to go to five percent,
14 and so three percent is at least a strong signal to you
15 that something is not quite right in terms of the model.
16 That is particularly true in a model which is a time
17 series model. That is to say the data comes from a
18 sequence of data over time. Different criteria would be
19 used if the model was for a cross section, that is at a
20 slice in time. The reason being that data that comes
21 from time series moves together generally, and so the
22 tendency is economic variables tend to move together.
23 Those models do better.

24 **Q.** Okay. So let me make sure I understand. If
25 the model is at three percent, or above the

1 three percent, you are not going to discard the model,
2 but you would be looking to correct the model? Is that
3 what I am understanding your --

4 **A.** Either correct the model or find some way to
5 modify the forecast to account for information that may
6 not be included in the model.

7 **Q.** Okay. And in correcting the model you would
8 be looking at different independent variables that may
9 correct or bring it back into a less than three percent
10 mean percentage?

11 **A.** Yes. You would want to either adapt the
12 model, modify the model's output, so that, in fact, the
13 forecast came within a range that you found more
14 acceptable.

15 **Q.** Okay. Now, the re-anchoring adjustment is
16 calculated as the average of the monthly differences
17 between the NEL forecast adjusted for energy efficiency,
18 wholesale efficiency, and the actual NEL, correct?

19 **A.** It is the average error that is made over the
20 period January of 2008 through the end of October of
21 2008.

22 **Q.** Okay. And since this is an average of errors,
23 it is calculated in the same manner as the mean
24 percentage error? In other words, you would take the
25 average of the 12-month period, or whatever period of

1 time you are looking at?

2 **A.** Yes.

3 **Q.** Okay. And this was a negative 1.29 for 2008,
4 the mean percentage error?

5 **A.** Yes.

6 **Q.** Okay. I have a handout that I would like you
7 to take a look at.

8 **CHAIRMAN CARTER:** You need a number?

9 **MS. CHRISTENSEN:** Yes, I do, sir.

10 **CHAIRMAN CARTER:** Okay. We are at 4-1-4, 414.
11 4-1-4. Short title.

12 **MS. CHRISTENSEN:** A short title would be Data
13 for MAPE Calculation from OPC's POD Number 14. That's
14 longer than I --

15 **CHAIRMAN CARTER:** Okay. Data for MAPE
16 Calculation from OPC's POD Number 14. Did I get it
17 close?

18 **MS. CHRISTENSEN:** That's it.

19 **CHAIRMAN CARTER:** Okay.

20 (Exhibit Number 414 marked for
21 identification.)

22 **BY MS. CHRISTENSEN:**

23 **Q.** Okay. If you look at the first page of the
24 handout, the yellow highlighted portion.

25

1 **A.** You mean the first page of real data?

2 **Q.** The yellow data, that would be the differences
3 between the actual NEL and the predicted NEL, is that
4 correct?

5 **A.** Yes.

6 **Q.** Okay. Using that data -- do you have a
7 calculator? Could you calculate the mean absolute
8 percentage error for 2008 after the adjustments for
9 energy efficiency and wholesales?

10 **A.** You will have to pardon me, I am not an
11 accountant.

12 **Q.** I thought a statistician would come with his
13 own calculator, as well.

14 **A.** You know, statisticians gave up calculators
15 about 20 years ago when computers came to be used and
16 useful.

17 **Q.** No pocket calculator, no pocket computer.

18 **CHAIRMAN CARTER:** Well, we just finished
19 hazing the economists, so now we are going to haze the
20 statisticians now, right. Who else have we got to haze?

21 **THE WITNESS:** I come up with 2.03.

22 **BY MS. CHRISTENSEN:**

23 **Q.** That sounds correct to me.

24 **A.** Is that right?

25 **Q.** Yes.

1 **A.** You know, I would rather do this in Excel, but
2 --

3 **Q.** Thank you. Now I am going to move to a
4 slightly different question. When a model becomes
5 unreliable, and I think you had said this earlier, you
6 would agree that you generally evaluate additional
7 variables to see if you can identify an independent
8 variable that improves the model, is that correct?

9 **A.** Well, you could -- there are lots of different
10 things you can choose to do. Certainly you would try
11 throwing other variables into the model to see how -- if
12 they improve the explanatory power. It may be that you
13 can't add variables. One of the problems that arises,
14 for example, with econometric models is it is very
15 difficult to deal with energy efficiency and energy
16 efficiency kinds of things, because -- let me see if I
17 can sort of step back for a second.

18 Energy efficiency requires accounting, so to
19 speak, of the devices and things that are out there, and
20 how many things are going to be changed out, and so on
21 and so forth. An econometric model doesn't have that
22 kind of specificity in it, and so it necessarily means
23 that there is no way to explicitly incorporate in
24 econometric models generally how to deal with
25 improvements in energy efficiency as a means of reducing

1 demand.

2 Those kinds of models are known as end-use
3 models, and I helped develop one of them. And so that
4 calculation tends to be a side calculation that is done
5 outside and then used to modify the econometric model.
6 There may be other variables that are simply buried in
7 the model, which the variables in the econometric model
8 represent kind of summaries of what is going on.

9 So, for example, we don't -- you may not have
10 a model with an explicit employment rate in it because
11 you have got income, and so income is a variable. It is
12 so highly correlated and it is representative of what is
13 going relative to, say, employment. You wouldn't
14 include both variables.

15 So, yes, you might want to try to add
16 variables, or if you had outside information that you
17 could bring to bear on the model which you thought was
18 relevant and which may be incomplete in some sense, you
19 might choose to modify the forecast to incorporate that
20 information.

21 **Q.** Okay. Well, let me pick up on a theme, which
22 is if you had been responsible for developing the NEL
23 model, would you have considered additional independent
24 variables?

25 **A.** Yes, I might have. I think in the case of

1 this particular model and this particular situation, the
2 time period over which it is estimated is such that I
3 would be, to some degree, at a loss to figure out what
4 additional variables I would bring to bear on this in
5 the sense that in the time period in which it is
6 estimated, there is basically a significant and
7 substantial change in economic conditions, which is
8 substantially different from the history in a great way.
9 And so what I might prefer to do, and I think which is
10 what FPL did, is bring outside information to bear to
11 modify the forecast rather than trying to create a model
12 which somehow incorporated everything that I wanted it
13 to.

14 Q. Well, let me refer you to Page 16 of your
15 testimony. In there you indicate that another technique
16 to address a model that is overforecasting, which was
17 the problem with the FPL model, would be to introduce an
18 ex-post adjustment to correct for overforecasting. And
19 could you give us an example of some types of ex-post
20 adjustments you have recommended in models that you have
21 developed, let's say, over the last year?

22 A. Well, I've already mentioned one, which was
23 this question of energy efficiency. It is essentially
24 impossible to include energy efficiency in an
25 econometric model. In the past year.

1 **Q.** Let me ask you this. Have you recommended a
2 re-anchoring adjustment to any models that you have
3 developed in the last year?

4 **A.** I haven't recommended it in the past year. I
5 have in the past. Not in the last 12 months, but in
6 some prior times. For example, NEMS, the National
7 Energy Modeling System, consistently re-anchors its
8 residential forecast every time it does a forecast.
9 Essentially what it does is it takes whatever is the
10 observed level of consumption and then re-anchors the
11 residential forecast to the observed data, and then
12 bases its forecast from there on.

13 So re-anchoring is a procedure that is at
14 least buried in the federal models that we use for
15 forecasting. I suggest the possibility of re-anchoring
16 when I see that, in fact, in general, the coefficients
17 that are associated with particular variables seem
18 reasonable, but, in fact, there has been some
19 fundamental shift in some sense in the model. And so to
20 deal with that shift, I have suggested that modifying
21 the model in terms of its intercepts, which is
22 equivalent to re-anchoring.

23 **Q.** Let me ask you this, did you review FPL's
24 ex-post adjustments in detail?

25 **A.** Yes.

1 **Q.** Okay. And did you notice that FPL has
2 calculated the re-anchoring adjustment based on the
3 NEL's model output as adjusted for energy efficiency and
4 wholesale increments?

5 **A.** Yes, I did.

6 **Q.** Okay. And did you also notice that in the
7 2009 through 2011 time period FPL was applying the
8 re-anchoring and the minimum use adjustments to the NEL
9 model forecast before applying the energy efficiency and
10 wholesale adjustments?

11 **A.** Yes, I did.

12 **Q.** Okay. Did you review FPL's minimum use
13 calculations?

14 **A.** I reviewed the data that they provided me and
15 its general calculation, yes.

16 **Q.** Okay. And do you agree that the use per
17 customer for each month of the regression data includes
18 the minimum use accounts?

19 **A.** Yes.

20 **Q.** And so it is fair to say that the minimum use
21 accounts are reflected in each month from January 1998
22 through October 2008 in the historical data base?

23 **A.** Yes.

24 **Q.** If you were to make an adjustment to the model
25 to try to include additional explanatory variables for

1 the minimum use accounts, would you develop the minimum
2 use accounts for each month from January 1998 through
3 October 2008 and use that as an explanatory variable?

4 **A.** No.

5 **Q.** If you didn't have that information, would you
6 use the vacancy rates for each of the historical months?

7 **A.** No.

8 **Q.** Okay. Would you agree that if either one of
9 these variables, either the minimum use or the vacancy
10 rate was significant it would provide an additional
11 explanation for the change in the per use customer?

12 **A.** That is a hypothetical that I would have to
13 take a look at the model to see what was going on. I
14 have seen variables thrown into models that in some
15 sense created more problems than they solved,
16 particularly if you had thrown in a variable like
17 vacancy and simultaneously perhaps you put in the
18 minimum use. You would find yourself where the two
19 variables, which are normally supposed to be
20 independent, highly correlated with one another. That
21 problem that arises when you do modeling like that
22 increases the variance of the model. That is known as
23 multi-caulinary (phonetic). That is a terrible name,
24 but basically what it means is that over time these
25 variables are sort of marching in step together and the

1 net result is it reduces the overall accuracy of the
2 model.

3 And so the choice of throwing a variable in
4 isn't just to sort of say, oh, throw a variable in. You
5 know, let's go throw the kitchen sink into the equation,
6 because, I don't know, maybe it will work. That is a
7 bad way to do models. It violates to start with the
8 principle of Ockham's razor in terms of having the
9 minimum number of variables. And I have seen the
10 attempt to use vacancy rates in other situations and it
11 tends not be a good variable.

12 Q. Well, let me ask you this. In developing the
13 explanatory variable, would it be appropriate to use a
14 historical minimum use percentage from 2003 as the
15 minimum use percentage in 1998?

16 A. Say that again, now.

17 Q. Let me strike that question, and let me move
18 on to a different area of your testimony. On Page 22 of
19 your direct testimony, you explain that FPL had detected
20 a noticeable increase in the number of minimum use
21 customers through the end of 2008, is that correct?

22 A. Yes.

23 Q. Okay. Is it fair to say that the average use
24 per customer in 2008 would have been negatively affected
25 by that increase in minimum use customers?

1 **Q.** Good afternoon, Mr. Hanser.

2 **A.** Good afternoon.

3 **Q.** I am Vicki Gordon-Kaufman, and I am here on
4 behalf of the Florida Industrial Power Users Group.
5 Have you been in the hearing all week?

6 **A.** Yes.

7 **Q.** Congratulations. And you were here for Dr.
8 Morley's testimony, were you not?

9 **A.** Yes, I was.

10 **Q.** And for Mr. Olivera's?

11 **A.** I was here for most of it. I cannot say that
12 I was at full attention necessarily through all pieces
13 of Mr. Olivera's testimony. My apologies to Mr.
14 Olivera.

15 **Q.** Okay. I just want to get a better sense, if I
16 can, of what your role was, what you were asked to do in
17 this case. And your direct testimony on Page 2, towards
18 the bottom, beginning at about Line 15 and going to the
19 end, and it actually goes over to the top of Page 3, but
20 is that a description of what we might call your scope
21 of work?

22 **A.** Yes, it is.

23 **Q.** And if I understand it, essentially you were
24 asked to review the work of FPL, is that correct?

25 **A.** Yes.

1 Q. Okay. So you didn't perform any independent
2 or outside analysis other than reviewing what FPL had
3 done and opining on that?

4 A. Well, FPL asked me to review the model in the
5 following sense: Basically, perform a kind of an audit
6 function, that is to say, make sure the data has been
7 properly input into the models, that it is properly
8 estimated, and that the results are replicable, and so
9 and so forth.

10 Also, they asked me -- because I have done a
11 lot of forecasting, I am going on next year will be my
12 30th year in the utility business doing forecasting and
13 things. I started when I was 12. And so one of the
14 issues that they were concerned about was is this kind
15 of means of doing the forecasting sort of unusual or
16 different, you know, out of the norm in some sense. And
17 so they also asked me to review the model from that
18 standpoint.

19 So I had both kind of an audit function to
20 replicate the results, check the data, and so on, and
21 also to review to see if anything that they were doing
22 seemed, you know, very much out of the ordinary, so to
23 speak.

24 Q. I understand, but I think you would agree with
25 me that essentially what you did was to review their

1 work, and their inputs, and their assumptions, and first
2 you attempted to replicate it, and you were able to do
3 that, correct?

4 A. That is correct.

5 Q. And then you gave your opinion in regard to
6 whether what they had done you thought was appropriate
7 or not?

8 A. Yes, I did.

9 Q. Okay. Can you tell us when you were retained
10 by FPL to perform this work?

11 A. Late January.

12 Q. Of 2009?

13 A. Of 2009.

14 Q. And your testimony was filed on March 18th, is
15 that correct?

16 A. That is correct.

17 Q. So about six weeks, would that be about right?

18 A. Yes. Maybe seven.

19 Q. Who was it that specifically retained you at
20 FPL?

21 A. I believe my retention letter came from Bob
22 Barrett.

23 Q. From Mr. Barrett. And was there a designated
24 contact person for you to work with at FPL?

25 A. Yes, Rosemary Morley.

1 Q. Okay. So did you work closely with Dr. Morley
2 in performing your review?

3 A. Yes, I did.

4 Q. Have you ever done work for FPL before?

5 A. Yes, I have.

6 Q. The same sort of work that you have done in
7 this case?

8 A. Slightly different work than this in this
9 case. We also were working on various issues around
10 forecasting.

11 Q. Were you a participant in FPL's 2005 rate
12 case?

13 A. No.

14 Q. Was your firm?

15 A. Not that I know of. There are other -- I have
16 other partners in my firm, some of whom do cost of
17 capital and other issues, and so I'm not familiar enough
18 with the 2005 rate case to know that they weren't
19 possibly involved in that, but I was not involved.

20 Q. And I should have limited that to forecasting.
21 As far as you know, nobody in that area from your firm
22 was involved in the 2005 rate case?

23 A. No, not that I know of.

24 Q. Okay. Now, when you reviewed the models and
25 the inputs that FPL provided to you, you were looking at

1 forecasts for 2009, 2010, and 2011, correct?

2 A. Yes.

3 Q. And in that capacity -- we have heard some
4 discussion today -- you were reviewing the customer
5 forecasts and the net energy for load, right?

6 A. The total customer forecast and the net energy
7 for load, yes.

8 Q. And is it your understanding that the data
9 upon which FPL based its projections that you reviewed
10 was from the fall of 2008?

11 A. My understanding was that the data, population
12 data was from the University of Florida's BEBR from
13 October of 2008. Some of the data came from, I believe,
14 July of 2008, but it was all as close to the end of the
15 year as possible.

16 Q. So summer and fall of 2008 is the data that
17 FPL relied on and that you took a look at?

18 A. That is my understanding.

19 Q. In advance of filing your testimony in this
20 case, did you provide any sort of report to FPL in
21 regard to your review?

22 A. I never -- I did not provide a written report
23 to FPL.

24 Q. Okay. So, the first time that you set forth
25 your conclusions were in, I would assume, drafts of your

1 testimony?

2 **A.** That is correct.

3 **Q.** Did you work with anybody at FPL in regard to
4 your testimony?

5 **A.** I wrote my testimony. I'm not sure what you
6 mean. I certainly consulted with Dr. Morley about the
7 models and things in the process of doing my testimony,
8 but I wrote the testimony myself.

9 **Q.** Did Dr. Morley review your testimony before it
10 was filed?

11 **A.** I believe that she saw my conclusions before
12 it was filed.

13 **Q.** Did she suggest any changes to it?

14 **A.** No. The changes were all mine that I --

15 **Q.** How often during the course of your six or
16 seven weeks do you think that you were in contact with
17 Dr. Morley or people on her team?

18 **A.** Probably at least once a day, either e-mailing
19 information back and forth, asking questions about the
20 data, that sort of thing.

21 **Q.** Since you have been in the hearing room at
22 least most of the time, I think you have already heard
23 several witnesses --

24 **A.** I haven't been in the hearing room. Let me
25 correct. I was in an observation room where I could see

1 the hearing. So I don't want to give people the wrong
2 impression.

3 Q. Okay. Well, let me rephrase that. Thank you.

4 Since you have been following the hearing at
5 least for most of the time, I'm sure you have heard a
6 lot of discussion about this economic -- the economic
7 uncertainty that we are experiencing at this time, is
8 that right? Have you heard discussion of that?

9 A. I have heard a great deal of discussion about
10 the current economic situation.

11 Q. And you would agree, would you not, that we
12 are in some very uncertain financial times?

13 A. Well, I think the -- I wouldn't use the term
14 uncertain times. I would describe it as being a
15 transitional time. I think at this point in time most
16 economists are forecasting that we are -- we have sort
17 of bottomed out, so to speak, and that conditions are in
18 the process of improving. So I think in some degree the
19 degree of uncertainty about where we are going to be is
20 substantially less than it was say six-months ago or so.

21 Q. But would you agree that it is still somewhat
22 uncertain?

23 A. The economy is always somewhat uncertain.

24 Q. And would you also agree with me that
25 certainly the closer that we get to the forecast period

1 the more accurate the forecast is?

2 **A.** Well, generally, forecasts are, you know, as a
3 general rule, more accurate the closer you are between
4 the time that you are forecasting and the current
5 period. It is generally the case, but it is not always
6 the case. You know, for example, the poor weather man.
7 He can generally talk about, you know, trends in the
8 weather and what winters are going to look like, but
9 whether he can tell you it is going to snow three inches
10 tomorrow or four inches -- you don't know about these
11 things, but where I come from that is an issue.

12 So, it isn't necessarily the case that being
13 close necessarily implies an improvement in the quality
14 of the forecast. We would like to think that that is
15 the case, but that is not a fixed rule.

16 **Q.** Right, but I thought you said at the beginning
17 of your answer that generally you would agree that is
18 the case?

19 **A.** Yes.

20 **Q.** Okay. Now, I think you said you were here for
21 Dr. Morley's testimony. Did you hear Ms. Christensen
22 take her through a number of variables that are involved
23 in forecasting, such as household income, and it is
24 interesting that you should mention it, but weather,
25 heating degree days, cooling degree days?

1 **A.** Yes, I heard that discussion.

2 **Q.** And would you agree with me those sorts of
3 variables are somewhat unpredictable?

4 **A.** Well, the weather variable tends to be a not
5 so unpredictable variable, actually. Those are 20-year
6 averages, and so there is a relative consistency in the
7 pattern. The income variable is a forecast, and the
8 price variable is basically performed on the basis of
9 understanding how Florida Power and Light projects its
10 potential revenues. The uncertainty there probably is
11 in both regulatory treatment and in the forecast of the
12 inflation rate, because that is involved in both.

13 **Q.** And I think in one of your prior answers that
14 you were talking about the fact that perhaps the
15 economic uncertainty is becoming less. Would you agree
16 that, again, the closer we get to the period of coming
17 out of the recession, for example, the better our
18 predictions will be of what is going to occur?

19 **A.** Generally, that is the case. But, for
20 example, the recession that we had here, that was
21 initiated, I don't know, I guess this is now close to a
22 year ago, was quite precipitous and quite sudden in some
23 ways. And so you could have been, you know, quite close
24 and not quite have gotten it.

25 I think in the sense that this is a period

1 of -- how shall we say it, greater normalcy, for lack of
2 a better way to describe it in terms of the way the
3 economic conditions go, that this period going forward
4 might be, in fact, in some ways easier to predict what
5 is going to happen than, for example, when we first
6 entered this recession.

7 Q. But I think you would agree that the closer
8 you come to that period -- in other words, the closer we
9 get to 2011 be more accurate our prediction of the
10 economic parameters would be?

11 A. We like to think that is the case.

12 Q. Ms. Christensen also asked you, I think, about
13 the adjustments that FPL made to their model, and I
14 think you talk about those on the bottom of Page 16 of
15 your testimony, beginning at Line 20. I'm sorry, are
16 you there?

17 A. Yes.

18 Q. And FPL made four adjustments to the model
19 that you have described on the bottom of Page 16 going
20 over to the top of Page 17, is that right?

21 A. Yes.

22 Q. Okay. And am I correct that you adopted or --
23 adopted each of those assumptions, found that they were
24 accurate and appropriate?

25 A. Yes.

1 Q. Did you suggest any additional assumptions?

2 A. No.

3 Q. Did you suggest any additional adjustments to
4 their model?

5 A. No.

6 Q. Did you suggest any changes to their model?

7 A. No.

8 MS. KAUFMAN: Thank you, Mr. Hanser. Thank
9 you, Mr. Chairman.

10 CHAIRMAN CARTER: Thank you, Ms. Kaufman.
11 Ms. Bradley.

12 MS. BRADLEY: Thank you, Mr. Chairman.

13 CROSS EXAMINATION

14 BY MS. BRADLEY:

15 Q. In response to something you said a minute ago
16 about an observation room, you said you sat in an
17 observation room and watched all the proceedings?

18 A. Florida Power and Light has a room where there
19 is a monitor, and you can see the -- watch the
20 proceedings.

21 Q. And was there any discussion about how to
22 respond to different questions that Dr. Morley was
23 asked?

24 A. I was here for Dr. Morley's presentation of
25 her testimony, so I was not over there.

1 **Q.** Okay. Were there other people in the witness
2 room -- observation room, I think you called it?

3 **A.** There were other -- yes, there were.

4 **MS. BRADLEY:** Okay. Thank you.

5 **CHAIRMAN CARTER:** Thank you.

6 FRF.

7 **MR. LaVIA:** J. LaVia for the Retail
8 Federation. No questions.

9 **CHAIRMAN CARTER:** Okay. Commissioners, I'm
10 going to go to staff, and then I will come back to the
11 bench.

12 Staff, you are recognized.

13 **MS. WILLIALMS:** Staff has no questions.

14 **CHAIRMAN CARTER:** Commissioners.

15 **COMMISSIONER ARGENZIANO:** Mr. Chair. Mr.
16 Chair.

17 **CHAIRMAN CARTER:** Commissioner Argenziano.

18 **COMMISSIONER ARGENZIANO:** Yes. Can you hear
19 me okay?

20 **CHAIRMAN CARTER:** Yes, ma'am.

21 **COMMISSIONER ARGENZIANO:** Okay. I have a
22 different question, not the individual, so when we are
23 ready, could you come back to me. It is regarding our
24 time frame and not going Saturday, so I don't want to
25 mess up the plan right now how things are going. When

1 there is a little break in that, I would like to come
2 back and talk to you about that.

3 **CHAIRMAN CARTER:** About the time, you mean?

4 **COMMISSIONER ARGENZIANO:** Yes. No, about the
5 time frame. You had mentioned before that we are
6 probably not going to meet on Saturday, which I thought
7 originally we were going to. And, basically -- I will
8 just say it now. I want to know if we don't finish this
9 case now, when is the next slot that we have in PSC time
10 in our schedule that this will come back up again.

11 So whenever you are ready. I didn't want to
12 jump in there, but I just thought about it now, and I
13 would like to know before we end the day.

14 **CHAIRMAN CARTER:** Okay.

15 **COMMISSIONER ARGENZIANO:** Okay. Thank you.

16 **CHAIRMAN CARTER:** Redirect.

17 **MR. ROSS:** No redirect, Mr. Chairman.

18 **CHAIRMAN CARTER:** Okay. Exhibits.

19 **MR. ROSS:** FPL moves admission of Exhibits 51
20 and 52.

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

23 (Exhibit Numbers 51 and 52 admitted into the
24 record.)

25 **CHAIRMAN CARTER:** Okay. Let's move to Ms.

1 Christensen.

2 **MS. CHRISTENSEN:** Yes. I would move 414.

3 **CHAIRMAN CARTER:** 414. Are there any
4 objections? Without objection, show it done.

5 (Exhibit Number 414 admitted into the record.)

6 **CHAIRMAN CARTER:** Anything further for this
7 witness? You may be excused.

8 Commissioner Argenziano.

9 **COMMISSIONER ARGENZIANO:** Yes.

10 **CHAIRMAN CARTER:** You mentioned that we had
11 talked about Saturday. That was not on our schedule,
12 but what were you saying about the schedule?

13 **COMMISSIONER ARGENZIANO:** Staff advised me we
14 were going to meet on Saturday, and that was what I
15 heard was going on. What I want to know is when we
16 probably will if we don't finish in our allotted
17 schedule time for this case. When is the next time we
18 have on our schedule that would bring it up again?

19 **CHAIRMAN CARTER:** Well, we are looking at the
20 schedule now, but staff was not authorized to say that
21 we were meeting on Saturday, because that is not
22 factual.

23 **COMMISSIONER ARGENZIANO:** Gee, that's a
24 surprise. Sorry. I don't mean that to staff. Even my
25 staff said Saturday. I just don't seem to get a lot of

1 the correct information.

2 **CHAIRMAN CARTER:** No, no, it was probably --
3 it was probably -- Commissioner, in all fairness to you,
4 it was probably staff talking about trying to come up
5 with some time while the parties were talking. That may
6 have been during the discussion then, so that is
7 probably where that came from.

8 In all fairness to the parties, Commissioner,
9 while they were discussing, I wanted them to discuss
10 whatever was within their -- what they wanted to discuss
11 and all like that, without putting any parameters on it
12 or anything like that, but then to come back to us. So
13 that's probably where that came from.

14 **COMMISSIONER ARGENZIANO:** Okay. Okay. Then
15 when would be the next available time if we don't go
16 through the case in this slotted time, that it would
17 come back to us?

18 **CHAIRMAN CARTER:** If we don't finish in our
19 allotted time, we will have to look and see what is
20 ahead of us. I have not had an opportunity to look at
21 the calendar, but I will give it some thought.

22 **COMMISSIONER ARGENZIANO:** That is what I'm
23 asking staff. If they could let me know before the end
24 of the day, that would be good, so I have some idea in
25 case this does happen.

1 **CHAIRMAN CARTER:** They won't know by then.
2 They won't know by the end of the day.

3 **COMMISSIONER ARGENZIANO:** They can't look at
4 the calendar now?

5 **CHAIRMAN CARTER:** No. Well, they could look
6 at it, but they won't know by the end of the day,
7 because we would have to look at it and see what we have
8 there. And I will get back to you as soon as I have an
9 opportunity to look at it and see what is in front of us
10 and all.

11 **COMMISSIONER ARGENZIANO:** Okay. Then I guess
12 I will get the schedule, too, and take a look and see
13 what is on it.

14 **CHAIRMAN CARTER:** Okay.

15 **COMMISSIONER ARGENZIANO:** And if they can help
16 out, that would be great.

17 **CHAIRMAN CARTER:** And we will talk about it.
18 I just want to look and see -- my plans on the schedule,
19 Commissioner --

20 **COMMISSIONER ARGENZIANO:** Uh-huh.

21 **CHAIRMAN CARTER:** -- is to see how far we get.
22 And I think the parties have kind of -- they have kind
23 of accelerated the process by what they said to us this
24 afternoon in terms of how they are proposing the order
25 and all. And what I would like to do is see probably by

1 Wednesday or so how far we have gotten. And then if we
2 need to move some things or pick up another day, then we
3 could look at the calendar ahead of us, and then pull
4 out some days. And before finalizing, I would like to
5 run it past each one of you before we lock in a date.

6 **COMMISSIONER ARGENZIANO:** Sure. Okay. And
7 they could just keep us apprised, and look -- start
8 looking ahead, that would be good.

9 **CHAIRMAN CARTER:** Okay. That will be fine.

10 **COMMISSIONER ARGENZIANO:** Thank you.

11 **CHAIRMAN CARTER:** All right. Call your next
12 witness.

13 **MR. BUTLER:** Thank you, Mr. Chairman. I would
14 just note as well while Mr. Barrett is taking the stand
15 that whatever we can do to accommodate to making
16 additional time, including starting early in the
17 morning, if that is helpful, we are certainly prepared
18 to do so.

19 **CHAIRMAN CARTER:** I'm sorry, Mr. Butler, I
20 didn't get -- you sounded muffled to me.

21 **MR. BUTLER:** I just said that whatever we can
22 do, including starting early in the morning, if it is
23 helpful to make additional time and help us to get
24 finished within the allotted time, we are certainly
25 prepared to accommodate that.

1 **CHAIRMAN CARTER:** Okay. We will take all of
2 that into consideration. I want to make sure it is
3 beneficial to all of the parties, as well as to the
4 Commission staff, and to the Commissioners, so we have
5 got a lot of variables to plug into that. All right.

6 **MR. BUTLER:** Thank you. Our next witness is
7 Mr. Barrett. And, Mr. Barrett, have you been previously
8 sworn?

9 **THE WITNESS:** No, I have not.

10 **MR. BUTLER:** Okay.

11 **CHAIRMAN CARTER:** Mr. Barrett, would you
12 please stand and raise your right hand?

13 (Witness sworn.)

14 ROBERT E. BARRETT, JR.

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

18 DIRECT EXAMINATION

19 **BY MR. BUTLER:**

20 **Q.** Would you please state your name and business
21 address for the record?

22 **A.** Robert E. Barrett, Jr., 700 Universe Boulevard
23 in Juno Beach, Florida.

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

25 **A.** I am employed by Florida Power and Light

1 Company as Vice President of Finance.

2 Q. Have you prepared and caused to be filed 36
3 pages of prefiled direct testimony in this proceeding?

4 A. Yes, I have.

5 Q. And have you also prepared and caused to be
6 filed an errata to that testimony that was filed on
7 August 21, 2009?

8 A. Yes.

9 Q. Beyond the errata that were filed on August
10 21, do you have any further changes or revisions to your
11 prefiled direct testimony?

12 A. By the errata, I assume you mean filed with
13 Kim Ousdahl's testimony of KO-16?

14 Q. I'm sorry. No, I am referring just to the
15 errata sheet that was filed last Friday, the minor
16 changes to your own testimony.

17 A. No.

18 Q. Okay. With those changes, if I asked you the
19 questions contained in your direct testimony, would your
20 answers be the same?

21 A. Yes.

22 MR. BUTLER: Mr. Chairman, I would ask that
23 Mr. Barrett's prefiled direct testimony be inserted into
24 the record as though read.

25 CHAIRMAN CARTER: The prefiled testimony of

1 the witness will be inserted into the record as though
2 read.

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

1 **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

2 **FLORIDA POWER & LIGHT COMPANY**

3 **DIRECT TESTIMONY OF ROBERT E. BARRETT, JR.**

4 **DOCKET NO. 080677-EI**

5
6 **Q. Please state your name and business address.**

7 A. My name is Robert E. Barrett, Jr. My business address is Florida Power &
8 Light Company, 700 Universe Boulevard, Juno Beach, Florida 33408.

9 **Q. By whom are you employed and what is your position?**

10 A. I am employed by Florida Power & Light Company ("FPL" or the
11 "Company") as Vice President of Finance.

12 **Q. Please describe your duties and responsibilities in that position.**

13 A. I am responsible for FPL's financial forecast, analysis of financial results,
14 corporate budgeting, resource assessment and planning, and load forecast
15 activities.

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

18 A. I have a Bachelor of Business Administration degree from the University of
19 Miami, 1982, with a major in Finance. I received a Master of Business
20 Administration from Florida International University in 1985. I have been
21 employed by FPL, or its affiliate NextEra Energy Resources, since 1982 and
22 have held a variety of positions of increasing responsibility including:
23 Financial Analyst; Manager of Financial Forecasting; Director of Quality,

1 Planning and Analysis; Director of Corporate Planning; Director of Investor
2 Relations; Vice President of Business Development for NextEra Energy
3 Resources and my current position as Vice President of Finance for FPL.

4 **Q. Are you sponsoring any exhibits in this case?**

5 A. Yes. I am sponsoring the following exhibits:

- 6 • REB-1 – Listing of MFRs and Schedules Sponsored in Whole or in
7 Part by Robert E. Barrett, Jr.
- 8 • REB-2 – Planning Process Guidelines
- 9 • REB-3 – MFR F-5 Forecasting Flowcharts and Models
- 10 • REB-4 – MFR F-8 Major Forecast Assumptions
- 11 • REB-5 – Budget and Actual Net Income 2004 through 2008
- 12 • REB-6 – Size and Diversity of Florida Economy
- 13 • REB-7 – Non-Agricultural Florida Employment
- 14 • REB-8 – Florida Population Growth
- 15 • REB-9 – Florida Housing Starts
- 16 • REB-10 – Real Disposable Income per Household
- 17 • REB-11 – Florida Personal Bankruptcies
- 18 • REB-12 – Foreclosure Rates
- 19 • REB-13 – Consumer Price Index
- 20 • REB-14 – FPL New Service Accounts
- 21 • REB-15 – FPL Total Customer Growth
- 22 • REB-16 – Capital Expenditure Reductions
- 23 • REB-17 – Drivers of the Increase in Revenue Requirements for 2010

- 1 ● REB-18 – FPL Capital Expenditures 1985 through 2008
- 2 ● REB-19 – Base Revenue Decline 2006 to 2010
- 3 ● REB-20 – Drivers of the Increase in Revenue Requirements for 2011

4 **Q. Are you sponsoring or co-sponsoring any Minimum Filing Requirements**
5 **(MFRs) in this case?**

6 A. Yes. Exhibit REB-1 shows my sponsorship and co-sponsorship of MFRs as
7 well as 2009 Supplemental MFR schedules that FPL has agreed with the
8 Florida Public Service Commission (“FPSC” or the “Commission”) Staff and
9 the Office of Public Counsel to file.

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

11 A. My testimony will:

12 (1) Discuss the process FPL uses in the preparation and approval of the
13 financial forecast upon which the MFRs are based;

14 (2) Provide an overview of the general business conditions affecting the
15 forecast assumptions;

16 (3) Explain the major cost drivers since 2006 -- the Test Year in FPL’s last
17 base rate proceeding, which was the basis of the 2005 Rate Stipulation and
18 Settlement Agreement (2005 Rate Settlement); and

19 (4) Discuss the necessity for the 2011 Subsequent Year Adjustment and for
20 the Generation Base Rate Adjustment (GBRA) mechanism.

21 **Q. Please summarize your testimony.**

22 A. The MFRs filed in this proceeding have been prepared according to a
23 rigorous, established budget/forecast process, relying on inputs from internal

1 and external subject experts, processed through financial models widely used
2 in the industry, and with sufficient review and approval to ensure their
3 reliability for use in setting rates in this proceeding.

4
5 FPL's 2010 proposed base revenue increase is \$1,044 million which reflects
6 both increases in revenue requirements and a reduction in base revenues since
7 2006, the Test Year last used for establishing base rates. The primary drivers
8 of the deficiency are changes in depreciation, inflation, regulatory
9 commitments, system growth, long term infrastructure investments, an annual
10 accrual to the Storm Damage and Property Insurance Reserve (Storm
11 Reserve), and the deterioration in the overall business and economic
12 environment. Despite these significant cost pressures, FPL's productivity
13 improvements partially mitigate the impact of increasing costs to customers.
14 FPL's 2011 revenue deficiency, exclusive of the costs associated with West
15 County Unit 3, is an additional \$247 million and is largely due to system
16 growth, increased investments in long term projects, increased regulatory
17 commitments and inflation.

18
19 An increase in FPL's base rates as requested in this proceeding would support
20 investments intended to keep customer bills among the lowest in the state and
21 well below the national average while also maintaining system reliability,
22 increasing generation of clean energy and helping to ensure greater fuel
23 efficiency and fuel diversity.

1

2

In addition to requesting the 2010 base rate increase and the 2011 Subsequent Year Adjustment, FPL seeks to continue the application of the GBRA mechanism as an effective and efficient way to reflect the costs of new power plant additions in a way that is equitable and efficient from the perspective of customers, the Commission and the Company.

3

4

5

6

7

8

FORECASTING AND MFR PREPARATION PROCESS

9

10 **Q. What role did you play in the development of FPL's forecast?**

11 A. As FPL's Vice President of Finance, I have overall responsibility for
12 developing the customer and sales forecast, the operations and maintenance
13 (O&M) budget, the capital expenditure budget, and the per books forecast. As
14 part of this responsibility, I provided guidance to the business units to ensure
15 that corporate assumptions were followed. I am also a member of the budget
16 review committee (Review Committee). Key members of the Committee are
17 the FPL President, the FPL Executive Vice President, Finance and Chief
18 Financial Officer, and the FPL Vice President, Accounting and Chief
19 Accounting Officer. The Review Committee is responsible for reviewing the
20 forecasts to ensure reasonableness and completeness for budget planning
21 purposes.

22 **Q. What forecast years have been included in this filing?**

23 A. FPL has provided forecasted information for 2009, 2010 and 2011 for use in

1 this proceeding. Based upon the expiration of the minimum term on
2 December 31, 2009, of the 2005 Rate Settlement, the Company is proposing
3 that new rates be effective January 1, 2010 and be set at a level sufficient to
4 cover the Company's revenue requirements in 2010. Accordingly, FPL
5 proposes that 2010 be the Test Year in this proceeding. The 2009 budget year
6 is included as the Prior Year consistent with the Commission's filing
7 requirements. FPL has also included a forecast of 2011 (Subsequent Year) in
8 support of FPL's requested Subsequent Year Adjustment.

9 **Q. Why is a Subsequent Year Adjustment appropriate and necessary in this**
10 **proceeding?**

11 A. Given the significant time and financial resource commitments involved in
12 fully litigated base rate proceedings, the Commission, the Company, and other
13 stakeholders would benefit by minimizing the frequency of these costly
14 proceedings. One mechanism by which the Commission can address this
15 issue is through the use of a Subsequent Year Adjustment for 2011, the year
16 following the Test Year. Such a Subsequent Year Adjustment, together with
17 continuation of the existing GBRA, will ensure that rates in effect in 2011 are
18 adequate to cover the Company's forecasted revenue requirements without the
19 need for another separate base rate proceeding. The forecasted information
20 for 2011, as well as the 2010 Test Year submitted in this proceeding, have
21 been developed to the same standard as the information in the Company's
22 2009 budget and, as such, are appropriate for ratemaking in this proceeding.

1 **Q. What does the 2011 forecast include and how reliable is the forecast?**

2 A. The 2011 forecast includes all of the per books forecasted information for
3 2011, including the 2011 revenue requirements associated with West County
4 Energy Center (West County) Unit 3, previously approved in a Need
5 Determination order by this Commission (Order No. PSC-08-0591-FOF-EI in
6 Docket No. 080203-EI). FPL is proposing that base rates be adjusted in 2011
7 to reflect the incremental base revenue required to cover the increased cost of
8 service and return on investment in 2011, excluding that of West County Unit
9 3. These West County Unit 3 costs have been removed from the 2011 forecast
10 via a Company Adjustment, and are being addressed for recovery through the
11 proposed continuation of the Generation Base Rate Adjustment (GBRA)
12 mechanism. As previously mentioned, FPL has applied the same rigor to its
13 forecast of 2011 as it did for 2009 and 2010, in order to be confident that the
14 costs proposed are appropriate for setting rates in this proceeding.

15 **Q. How is the company proposing to recover the revenue requirements**
16 **associated with West County Unit 3?**

17 A. FPL recommends that the Commission allow for the recovery of all revenue
18 requirements associated with West County Unit 3 through the GBRA
19 mechanism. As described later in my testimony, FPL is proposing a
20 continuation of the GBRA mechanism as part of this base rate proceeding.
21 The GBRA mechanism, introduced in the 2005 Rate Settlement (Docket No.
22 050045), was applied to recover the costs associated with Turkey Point Unit 5
23 in 2007 and will be applied to the West County Units 1 and 2 in 2009. It is an

1 effective way to ensure appropriate recovery of Commission approved
2 generation additions. As a result of the proposed recovery of West County
3 Unit 3 through the GBRA, all of the 2011 operating and capital revenue
4 requirements associated with West County Unit 3, which FPL expects to place
5 into service in mid-2011, have been removed per a company adjustment with
6 the assumption that they will be recovered through the GBRA process.

7 **Q. Please summarize the process used to develop FPL's filing in this docket.**

8 A. FPL follows a rigorous and long standing process in the development and
9 approval of its O&M and capital expenditures budgets, financial forecasts and
10 MFRs. The process began with the development and approval of the
11 Company's planning and budget assumptions. These assumptions include
12 assumptions for inflation, customer growth, new service accounts, pay
13 programs, postage, vehicle reimbursement rates and other miscellaneous
14 items. These assumptions were prepared by various subject matter experts,
15 reviewed and approved by me, and ultimately reviewed and approved by the
16 Review Committee. Once approved, these assumptions, together with detailed
17 budget instructions, were issued to the operating and staff units of the
18 Company as the Planning Process Guidelines on May 21, 2008. (See Exhibit
19 REB-2).

20
21 The 2009 planning process resulted in the 2009 O&M and capital budgets, the
22 O&M forecasts for 2010 and 2011 and the forecasted capital expenditures for
23 2010 through 2013. Using the assumptions and Planning Process Guidelines,

1 each of the major business units prepared a 2009 business plan that described
2 their business unit objectives and challenges, as well as a preliminary funds
3 request to support those business objectives. These business plans were
4 presented by the respective business unit executives and reviewed by the
5 Review Committee in June 2008. This review session offered each business
6 executive the opportunity to present their business plan and receive feedback
7 from their peers and the Review Committee. The open forum format
8 employed in this session allowed for cross-functional collaboration and
9 challenge as each executive discussed their opportunities and issues in the
10 context of the impact on the total Company.

11
12 Detailed individual sessions were subsequently held with each business unit
13 executive to review and challenge their requested levels of funding in
14 consideration of their specific operational and business objectives. These
15 review and challenge sessions also considered the changing economic
16 environment and the corresponding implications for the funding needs of the
17 business. After these individual sessions were held with each business unit
18 executive there were two subsequent review meetings where funding requests
19 were again challenged and the estimated impacts of the worsening economic
20 conditions were considered. Final approvals were made in late 2008.
21 Accordingly, the final budgets/forecasts approved by FPL's Review
22 Committee reflected the Company's best assessment of the business
23 environment.

1 **Q. How were forecasts other than O&M and capital expenditures**
2 **developed?**

3 A. Concurrent with the development of the detailed O&M and capital
4 expenditure budgets, other key components of the financial forecast were
5 developed, including the energy sales and revenue forecast as well as forecasts
6 of other base revenues. The energy sales forecast is the subject of FPL witness
7 Morley's direct testimony. The sales and revenue forecasts were reviewed and
8 approved for use in the financial forecast by FPL's Review Committee.

9
10 Other inputs into the financial forecast were prepared and provided by other
11 subject matter experts. These include taxes other than income taxes, various
12 income tax items, non-clause fuel and capacity charges, miscellaneous below-
13 the-line income and expense items, various working capital items and
14 financing plans. These inputs were collectively reviewed and approved by me
15 with the resulting comprehensive forecast reviewed and approved by the
16 Review Committee.

17 **Q. How are all of the various inputs combined into a consolidated financial**
18 **forecast?**

19 A. All of the above mentioned items were provided as inputs to the Consolidated
20 Financial Model (CFM). The CFM is a utility financial forecast model that is
21 widely used in the industry and has been in use at FPL since 1999. Based on
22 the assumptions and inputs mentioned above, the CFM model calculated the
23 remaining expense items including depreciation, interest and Allowance for

1 Funds Used During Construction (AFUDC). The CFM produces balance sheet
2 and income statement detail at the level necessary for the development of
3 jurisdictional separation factors and the cost of service study. This forecast is
4 then transferred to the Regulatory Information System (RIS). FPL developed
5 the RIS integrated database to assist in preparing the MFRs. The completed
6 financial forecast was then reviewed and approved by the Review Committee
7 and is the source of forecast information for the MFRs filed in this
8 proceeding.

9
10 FPL prepares its O&M budget and forecasts at a budget activity level,
11 consistent with the way it manages its business, and does not normally include
12 Federal Energy Regulatory Commission Uniform System of Accounts (FERC
13 accounts) detail. Since this additional level of detail is needed to meet the
14 requirements of certain MFRs, FPL converts the budget and forecasts at a
15 budget activity level to FERC accounts. The conversion process relies
16 primarily on historical relationships of actual costs and budget activities to
17 FERC accounts but allows for appropriate adjustments resulting in a
18 reasonable expression of the forecast by FERC account. Once the business
19 units complete their budgets and forecasts, the information is fed to both the
20 CFM and the FERC Functionalization System for conversion to FERC
21 accounts.

22
23 As previously mentioned, once the forecast in the CFM is complete, it is

1 transferred into the RIS, which integrates various FPL systems normally used
2 in the forecasting and regulatory process. The system provides data validation
3 and control routines to ensure consistency of data between the RIS and feeder
4 systems. Additionally, the system produces exception reports, financial data
5 output validations and MFR control reports to verify the accuracy and
6 consistency of MFRs.

7
8 The balance sheet and income statement detail from the CFM is used by RIS
9 to develop forecasted regulatory adjustments in the same manner as it does for
10 historical regulatory adjustments in the Surveillance Report. These
11 adjustments, along with the balance sheet and income statement detail, are
12 then transferred to the Cost of Service System (COSS), which develops
13 jurisdictional separation factors. The jurisdictional separation study results
14 are then transferred back to the RIS, which calculates FPSC jurisdictional
15 adjusted net operating income (NOI) rate base and capital structure. The
16 results are then stored in the RIS database.

17
18 The jurisdictional adjusted results for NOI, rate base and capital structure are
19 then transferred to the COSS to develop the Cost of Service Study. The Cost
20 of Service Study calculates the revenue requirements at the individual rate
21 class level. The RIS databases are also used to prepare rate base, NOI and
22 capital structure on a per book and jurisdictional adjusted basis. The same
23 tool that is used to create many of the MFRs also provides for MFR data

1 integrity and control. All MFRs were reviewed and approved by the
2 originating business unit and the MFR sponsors. Exhibit REB-3 contains a
3 flowchart of the forecasting process and models.

4 **Q. Has FPL followed the same process for developing all forecast years,**
5 **including the 2010 Test Year and 2011 Subsequent Year, as it did for the**
6 **2009 budget year?**

7 A. Yes. As described above, FPL prepares forecasts of O&M expense for the
8 budget year plus two additional years at a budget activity level. The 2009
9 O&M budget is prepared at a monthly level of detail whereas the 2010 and
10 2011 O&M forecasts are prepared at an annual level of detail.

11
12 Capital expenditure forecasts are prepared for the budget year, 2009, plus four
13 additional years, 2010 through 2013, at a budget activity (i.e., project) level of
14 detail. The first three years are prepared at a monthly level of detail and the
15 final two years are prepared at an annual level of detail. Additionally, the
16 capital expenditures forecast for all five years is the subject of external
17 financial disclosure in the Company's 10-K and 10-Q filings with the
18 Securities and Exchange Commission (SEC) and is subject to an internal
19 Sarbanes-Oxley review and approval process.

20
21 Though all years are prepared with the same level of business detail and
22 diligence, the budget year typically is subject to more intense review as it
23 forms the basis for operating and financial plans for the coming year. For the

1 2009 planning process, however, the 2010 Test Year and 2011 Subsequent
2 Year received the same level of close scrutiny in their review and approval as
3 did the 2009 budget year in anticipation of their use in this proceeding. As a
4 result, FPL's 2010 Test Year and 2011 Subsequent Year forecasts are just as
5 reasonable and appropriate for ratemaking purposes as the 2009 budget would
6 be.

7 **Q. What are the major assumptions that FPL used in developing its**
8 **forecast?**

9 A. The major assumptions used by FPL in developing its forecast are listed in
10 MFR F-8, which is my Exhibit REB-4.

11 **Q. Have FPL forecasts been accurate in the past?**

12 A. Yes. As shown on Exhibit REB-5, on average, FPL's actual net income
13 results varied 2.3 percent from budget over the past five years, indicating that
14 FPL's process for budgeting is highly effective in predicting future operating
15 results and can be relied upon in a rate setting procedure.

16
17 In 2006, the Test Year used in FPL's last base rate filing with this
18 Commission, excluding the impact of storm costs that the Commission
19 subsequently determined were not recoverable through the storm reserve, net
20 income was equal to the official budget. In 2007, net income was within 0.2
21 percent of the official budget. Despite the overall accuracy of the net income
22 forecast, there are always offsetting variances, including weather, that cause
23 some variability in the underlying components of the forecast. In most years,

1 these items have a neutral effect on the annual FPL budget to actual
2 comparison since they offset each other over the course of a complete year.

3 **Q. How accurate was the budget for 2008?**

4 A. Actual results varied from budget in 2008 more than usual, due to the impact
5 of the housing downturn and ensuing recession on customer growth, sales and
6 revenues. FPL's budget for 2008 was prepared in the fall of 2007 at about the
7 time economic weakness began to manifest itself in the underlying indicators.
8 In response to the changing economic outlook, FPL monitored its sales and
9 customer assumptions and made adjustments as needed during 2008 as
10 economic conditions continued to deteriorate. FPL has no control over these
11 external economic realities and the resulting impacts on its sales and revenues.
12 However, FPL does have some control on the expense side and took prudent
13 actions to reduce costs in response to revised growth estimates. Most notably,
14 the Company reduced capital expenditures on growth-related projects and
15 sought opportunities to streamline operating expenses. All of these reductions
16 were focused on areas that do not impact safety, customer reliability, or other
17 cost-effective operations; however, not all of these reductions are sustainable
18 for the long term. Despite these actions, the 2008 net income budget proved to
19 be optimistic and actual net income for 2008 was about 10 percent below
20 budget. The customer and sales forecasts are discussed in more detail in FPL
21 witness Morley's direct testimony.

1 **OVERVIEW OF GENERAL BUSINESS CONDITIONS**

2

3 **Q. Please describe the general business conditions affecting the underlying**
4 **assumptions in this forecast.**

5 **A** Florida is the fourth largest state in the U.S. in Gross Domestic Product (GDP)
6 and is fairly diverse, with the largest sector of the economy comprising only
7 20 percent of the total (see Exhibit REB-6). Until 2007, Florida also led the
8 nation in job creation (see Exhibit REB-7), and has experienced faster
9 population growth than the nation (see Exhibit REB-8). Florida's economic
10 diversity and robust population growth have historically helped the state be
11 more resilient during times of economic weakness affecting the nation.

12

13 As demonstrated in Exhibit REB-9, Florida experienced a housing
14 construction boom from 2003 through 2005, which fueled a rapid increase in
15 home prices and corresponding economic activity. On a rolling 12-month
16 basis, FPL added an average of 101,000 customers annually during this
17 period. By early 2007 the housing "bubble" burst, and FPL's customer
18 growth fell precipitously soon after. By mid 2008, FPL's customer count
19 actually fell over a 12-month period, and by December 2008 FPL had a net
20 loss of about 11,000 customers over December 2007.

21

22 Likewise, economic activity in Florida began to slow. Non-agricultural
23 employment has been declining since August 2007 (Exhibit REB-7) and real

1 household personal income contracted during 2008 (Exhibit REB-10).
2 Personal bankruptcies (Exhibit REB-11) and mortgage foreclosures (Exhibit
3 REB-12) were up sharply in 2008. The Consumer Price Index (CPI) was up
4 in 2008 with the South Florida CPI continuing to exceed the national average
5 (Exhibit REB-13). All of these factors have combined to plunge Florida into
6 an economic deterioration not seen since the early 1970s.

7 **Q. What specific assumptions in this forecast have been affected by this**
8 **economic downturn?**

9 A. Every major assumption used in the forecast reflects the severe economic
10 downturn. Revenues have been adversely affected by lower customer growth
11 directly attributable to the bust in the housing market, and lower usage per
12 customer. Costs of goods and services reflect both global commodity markets
13 and local and national labor markets. Although commodity prices have begun
14 to moderate, this follows a period of sharp increases. Economic weakness,
15 notably unemployment, foreclosures and bankruptcies, also give rise to
16 increased levels of bad debt and increasing costs of collections. FPL witness
17 Morley provides a more complete discussion of the customer, sales and
18 economic variables. Additionally, the global financial crisis has impacted
19 FPL's access to, and cost of, capital, as evidenced in FPL witness Pimentel's
20 testimony.

21 **Q. When did these economic factors begin to deteriorate?**

22 A. Most of the deterioration in the economy affected FPL beginning in late 2007
23 and early 2008. Prior to that time, FPL experienced robust customer growth

1 requiring substantial capital investment to continue to provide safe, reliable
2 electric service. During 2006 and 2007, FPL added 223,000 new service
3 accounts and saw a net increase in customers of 195,000 (see Exhibits REB-
4 14 and REB-15). Serving these new accounts required substantial capital
5 investment and corresponding increases in operating costs. Likewise,
6 commodity prices saw sharp increases from 2006 to early 2008, further adding
7 pressure to FPL's cost structure.

8
9 It was the rapid swing from boom to bust, occurring in late 2007 and
10 continuing through 2008, combined with the evolving views among economic
11 experts regarding the depth and length of the downturn, that have had the
12 largest impact on this forecast. For example, the University of Florida, FPL's
13 source of forecasted population for the state of Florida, has issued four
14 forecasts between November 2007 and October 2008, each one lower than the
15 previous forecast. The consensus view of the economy by the end of 2008 was
16 substantially more pessimistic than the outlook at the start of the year. The
17 financial and credit markets crisis that became apparent in October 2008 are
18 further examples of the uncertainty prevalent during FPL's 2008 planning
19 process.

20 **Q. How has FPL responded to the changes in the economic environment?**

21 A. FPL's response to the economic downturn has been on two simultaneous
22 fronts. First, FPL updated its forecast assumptions numerous times during
23 2008, using the most current reliable estimates from internal and external

1 subject experts. The biggest impact has been a reduction in the number of
2 customers and the level of sales and corresponding revenues FPL will realize
3 since 2007. FPL anticipates that this economic downturn will continue to
4 have an impact through 2011 and beyond. This reduction in sales is real and
5 measurable and is primarily attributable to lower customer growth and lower
6 usage per customer. These items are discussed more fully in FPL witness
7 Morley's testimony.

8
9 Second, as the Company has refined its view of customer growth and usage,
10 FPL has actively sought opportunities to revise its operating and capital
11 expenditures to reflect the lower growth expectations. A significant portion of
12 FPL's typical capital budget is dedicated to meeting the needs of future
13 customers. As growth expectations were revised downward, FPL has been
14 able to make significant capital expenditure reductions without impacting
15 expenditures related to safety, customer reliability and other cost-effective
16 operations for current customers. FPL has been able to reduce planned capital
17 expenditures in 2008 by nearly \$530 million and has reduced its initial
18 spending plans for 2009 by more than \$450 million (see Exhibit REB-16).
19 This reduction in capital spending has the direct result of avoiding an increase
20 in customer revenue requirements in 2010 by approximately \$130 million.
21 FPL's forecasts for 2010 and 2011, as discussed previously, are consistent
22 with the 2009 budget and appropriately reflect the forecast assumptions in
23 those years.

1 **Q. What assumptions has the Company made for the forecast years with**
2 **respect to the economic environment?**

3 A. Generally speaking, the forecast of customer growth is based on the October
4 2008 population forecast from the University of Florida, as discussed in FPL
5 witness Morley's testimony. The economic variables used in developing the
6 sales forecast assume a lingering recession lasting through 2010 with modest
7 growth beyond that. The economic and sales assumptions are the subject of
8 FPL witness Morley's direct testimony. The Company believes that, due to its
9 strong balance sheet, FPL will continue to have access to the capital markets
10 for financing its construction needs. However, the cost of capital is likely to
11 be higher due to Florida's ongoing economic situation and the weakened
12 financial market at a national level. Please refer to FPL witness Pimentel's
13 direct testimony for additional detail.

14 **Q. Given the economic uncertainty and volatility, how reliable is the**
15 **Company's forecast of the revenue requirements for the Test Year and**
16 **Subsequent Year?**

17 A. Though the economic environment is highly uncertain, the Company has
18 prepared its forecast using a rigorous process utilizing the reliable advice of
19 internal and external subject experts. Accordingly, the forecast is reasonable
20 and is reliable for use in this proceeding. The forecasted revenue requirements
21 reflect the Company's best assessment of the expected economic environment
22 during the period. If economic conditions were to improve faster than

1 anticipated, resulting in more growth during the forecast period, revenue
2 requirements likely would need to increase to support that increased growth.

3

4 **DRIVERS OF INCREASES IN REVENUE REQUIREMENTS**

5

6 **Q. What is the total amount of FPL's requested base revenue increase in**
7 **2010 and how is it calculated?**

8 A. FPL's requested base revenue increase for 2010 is \$1,044 million and is
9 determined as the difference between FPL's projected net operating income of
10 \$726 million and FPL's required net operating income of \$1,365 million
11 multiplied by the revenue expansion factor of 1.63342. For further detail
12 regarding the calculation of these revenue requirements, please refer to FPL
13 witness Ousdahl's testimony.

14 **Q. What comprises this requested base revenue increase of \$1,044 million?**

15 A. The \$1,044 million base revenue increase is discussed below as resulting from
16 the growth in revenue requirements from 2006, the Test Year last used in
17 determining the appropriate level of FPL's base rates, and 2010, the proposed
18 Test Year in this filing. Additionally, the requested base revenue increase also
19 takes into account the change in the level of FPL's base revenues during that
20 same time period.

21 **Q. Is 2006 a reasonable basis for evaluating the Company's projected**
22 **deficiency?**

23 A. Yes, 2006 provides a reasonable basis for evaluating the Company's 2010

1 projected revenue deficiency. First, 2006 was the test year last used for
2 evaluating the appropriateness of the Company's base rates. Secondly, it is
3 also the base year used in developing the Commission's O&M benchmark,
4 MFR C-41.

5 **Q. Have you performed any analysis of the reasons for the increase in**
6 **revenue deficiency from 2006 to 2010?**

7 A. Yes. In addition to the required MFRs filed as part of this proceeding we also
8 prepared a "driver analysis" of the \$1,044 million revenue deficiency.

9 **Q. What is a driver analysis and how was it performed?**

10 A. A driver analysis looks at the total increase in revenue deficiency and breaks it
11 down into the primary reasons, or drivers, of the increase. The analysis began
12 with a determination of the drivers that would be the basis of the analysis. The
13 primary drivers were Depreciation Changes, Inflation, Regulatory
14 Commitments, System Growth, Long Term Infrastructure Improvements,
15 Storm Damage and Property Insurance Reserve Accrual (Storm Reserve
16 Accrual), Economic Conditions, Productivity Improvements, Other Revenue
17 Growth and All Other. These are described in more detail below. Most of
18 these drivers are external and thus outside of the direct control of the
19 Company.

20
21 The revenue requirements associated with each driver were then quantified by
22 analyzing the O&M and capital expenditures associated with each driver over
23 the 2006 to 2010 period. While total capital expenditures in 2007 through

1 2010 that contributed to requested revenues were approximately \$5.6 billion,
 2 the focus of the driver analysis was the retail base revenue requirement impact
 3 of those expenditures. The purpose of the analysis is to capture the broad
 4 categories of cost drivers associated with the revenue deficiency, not to
 5 supersede or replace the specific discussion of cost drivers provided by the
 6 witnesses in this case or that are delineated in the MFRs filed in this case.

7 **Q. What are the approximate amounts of the increase in revenue deficiency**
 8 **from 2006 to 2010 that are associated with each of the primary drivers?**

9 A. The primary drivers of the \$1,044 million increase in revenue deficiency are
 10 illustrated on Exhibit REB-17 and are summarized as follows:

11	Depreciation Changes	\$266 million
12	Inflation	\$236 million
13	Regulatory Commitments	\$177 million
14	System Growth	\$178 million
15	Long Term Infrastructure Investments	\$170 million
16	Storm Reserve Accrual	\$150 million
17	Economic Conditions	\$128 million
18	Productivity Improvements	(\$178) million
19	Other Revenue Growth	(\$ 43) million
20	All Other	(\$ 40) million
21	TOTAL	\$1,044 million

22 **Q. What comprises the “Depreciation Changes” driver?**

23 A. The Depreciation Changes driver is comprised of three discrete items. First,

1 \$125 million represents the discontinuation of the annual depreciation credit
2 that the Company has taken in 2006 through 2009 as authorized in the 2005
3 Settlement Agreement. This depreciation credit, authorized by the
4 Commission, was a key component of the Company's ability to avoid a rate
5 increase in 2006. Secondly, \$52 million represents the revenue requirement in
6 2010 associated with the cumulative effect on the net Plant in Service balance
7 of the \$125 million depreciation credits taken in 2006 through 2009. Lastly,
8 \$89 million reflects the revenue requirement of changes to depreciation
9 expense, including the impact on rate base, that results from new rates and
10 other changes delineated in the comprehensive depreciation study filed as part
11 of this proceeding and reflected as a Company Adjustment in the testimony of
12 FPL witness Ousdahl. The increase in 2010 revenue requirements attributable
13 to Depreciation Changes is \$266 million.

14 **Q. How is the "Inflation" driver defined?**

15 **A.** Inflation represents the increased costs for goods and services in 2010
16 compared to the same goods or services in 2006. Generally, the period 2006
17 through 2010 can be characterized as inflationary. Changes to the CPI since
18 2006, including the forecast through 2010, indicate that inflation will have
19 added about 11 percent to the cost of goods and services in 2010 relative to
20 2006. The forecast of CPI for 2009 through 2011 is derived from third party
21 subject experts and is discussed in more detail by FPL witness Morley. Use
22 of CPI is a fair approximation of the impact of inflation on the Company's
23 costs; however, some of the Company's costs escalate at rates different than

1 CPI. Medical and dental costs, for instance, have escalated much faster than
2 CPI. With the exception of those employee benefit costs that have escalated
3 faster than CPI, the change in CPI was used to quantify the approximate
4 impact of inflation as a driver. In the aggregate, inflation represents an
5 increase in revenue requirements since 2006 of \$236 million.

6 **Q. What comprises the “Regulatory Commitments” driver?**

7 A. The Regulatory Commitments driver reflects the growth in revenue
8 requirements from 2006 to 2010 related to commitments made to state and
9 federal governmental and regulatory bodies. Some examples of these
10 commitments are the storm hardening expenditures and other storm-related
11 commitments made to the FPSC; expenditures required by the Nuclear
12 Regulatory Commission (NRC) to remediate alloy 600 issues including the
13 replacement of the reactor vessel head at St. Lucie Unit 2; increased
14 compliance costs for North American Electric Reliability Corporation
15 (NERC) and Federal Energy Regulatory Commission (FERC) reliability
16 issues; and, increases to fees paid to regulatory bodies. Collectively, these
17 regulatory commitments have increased revenue requirements in 2010
18 compared with 2006 by \$177 million.

19 **Q. What comprises the “System Growth” driver?**

20 A. System Growth represents the revenue requirements associated with new
21 service accounts and customer growth. Costs associated with Turkey Point 5
22 and West County 1 and 2 have been excluded from the calculation of the
23 System Growth driver as these costs were recoverable under the GBRA

1 mechanism. For the period 2006 through 2008, FPL added 280,916 new
2 service accounts which resulted in 187,834 net new customer accounts.
3 Revenue requirements to support System Growth include the costs of
4 expanding the transmission and distribution infrastructure and the
5 corresponding increase to the costs associated with operating and maintaining
6 those facilities and serving those new customers. Though the projected
7 system growth in 2009 and 2010 is minimal, reflecting the lower growth
8 assumption, the total System Growth since 2006 has increased the 2010
9 revenue requirements by \$178 million.

10 **Q. How has system growth affected the Company's investment of capital**
11 **expenditures since 1985, the last year FPL received a general base rate**
12 **increase?**

13 A. As shown on Exhibit REB-18, from 1985 through 2008 FPL has invested
14 almost \$26 billion in capital expenditures. This includes approximately \$5.8
15 billion for the construction of new generating capacity and \$11.7 billion in
16 transmission and distribution expenditures.

17 **Q. What comprises the "Long Term Infrastructure Investments" driver?**

18 A. Long Term Infrastructure Investments includes those expenditures that are
19 unique and designed to make FPL's infrastructure stronger, smarter, cleaner
20 and more efficient which will provide incremental customer benefits over the
21 long term. Often benefits enabled by these investments are realized through
22 recovery mechanisms other than base rates. For example, FPL replaced the
23 steam generators at St. Lucie Unit 2 in 2007. This investment was critical in

1 the decision to extend the life of the unit an additional 20 years. This
2 investment required significant amounts of capital but will ensure the ongoing
3 reliability and availability of safe, clean and affordable nuclear power for
4 which customers will see benefits through lower fuel bills. Please see FPL
5 witness Stall's testimony for further discussion. Another example is FPL's
6 investment in the Advanced Metering Infrastructure (AMI) project. This
7 substantial investment of capital will provide or enable ongoing incremental
8 benefits to customers for many years to come. FPL witness Santos discusses
9 the AMI project in more detail. Additionally, Information Management
10 system improvements, such as an SAP upgrade project, a nuclear fleet-wide
11 Nuclear Asset Management System (NAMS), and a Customer Information
12 System (CIS III) upgrade project, will allow FPL to better manage work,
13 assets, people, and finances, thus reducing costs while enhancing many
14 aspects of service to customers. FPL witness Bennett discusses these projects
15 in more detail. The increase in 2010 revenue requirements attributable to Long
16 Term Infrastructure Investments is estimated to be \$170 million.

17 **Q. What comprises the "Storm Reserve Accrual" driver?**

18 **A.** As part of the 2005 Rate Settlement, FPL ceased its practice of accruing to the
19 Storm Reserve. As part of this proceeding FPL is proposing to reinstitute an
20 accrual to the Storm Reserve representing the expected annual expense for
21 restoration activities related to tropical storms and other qualifying uninsured
22 events. The difference between this expected annual expense and actual loss
23 experience, if any, will be charged to the Company's funded Storm Reserve

1 account as discussed more fully by FPL witness Pimentel. The increase in
2 2010 revenue requirements attributable to the Storm Reserve Accrual is \$150
3 million.

4 **Q. How is the term “Economic Conditions” defined in your testimony and**
5 **what comprises this driver?**

6 A. The term Economic Conditions is used to identify increases in revenue
7 requirements from 2006 to 2010 that are measurable and directly related to the
8 current and projected downturn in the Florida economy and capital markets.

9 **Q. What has been the impact of the downturn in Economic Conditions on**
10 **the requested base revenue increase in 2010?**

11 A. The economic downturn has had the effect of both lowering revenues, through
12 lower customer growth and the elasticity effect on customer usage of less
13 economic activity, as well as raising the cost of service including bad debt,
14 collections activities and other costs.

15 **Q. Please describe the impact of the economic downturn on revenues.**

16 A. As discussed by FPL witness Morley, the economic downturn has negatively
17 impacted the level of FPL’s retail sales by reducing both customer growth and
18 energy use per customer. For the period 1999 to 2006 retail sales growth
19 averaged 2.9 percent annually. This was comprised of 2.3 percent growth in
20 the average number of customers and 0.6 percent growth in use per customer.
21 However, for the period 2006 to 2010, FPL’s retail sales are expected to
22 actually decline 0.6 percent on average annually. On a weather normalized
23 basis the average annual decline in sales from 2006 to 2010 is actually 0.8%.

1 **Q. How have projected revenues in 2010 been affected by this decline in**
2 **customer growth and energy usage?**

3 A. Retail base revenues in 2010 are projected to be \$98 million lower than they
4 were in 2006 excluding the revenues associated with GBRA for Turkey Point
5 Unit 5 and West County Units 1 and 2.

6 **Q. Is this the total impact on revenues due to the reduction in customer**
7 **growth and the decline in usage per customer?**

8 A. No. Using the historic average annual customer growth rate of 2.3 percent
9 noted above and the level of weather normalized energy usage experienced in
10 2006, base revenues in 2010 would have been \$353 million higher than
11 current projections. However, lower customer growth and the decline in usage
12 per customer together have reduced revenues by more than \$450 million when
13 compared to historic patterns (see Exhibit REB-19). The portion of lower
14 revenues attributable to lower customer growth has been partially mitigated by
15 the timely actions taken by management in 2008 that resulted in reductions in
16 O&M and capital expenditures discussed elsewhere in this testimony.
17 However, the portion that is attributable to lower use per customer, in part due
18 to the downturn in the economy, has eroded base revenues while not lowering
19 the cost to serve those customers. Overall, the projected base revenues for
20 2010, excluding revenues associated with the GBRA, are \$98 million lower
21 than retail base revenues in 2006 and represent a very conservative estimate of
22 the impact of the economic downturn on base revenues.

1 **Q. Are there aspects of FPL's cost of providing service that have increased**
2 **as a result of the economic downturn?**

3 A. Yes. Increases in bad debt expenses and collections related activities are a
4 direct result of the worsening economic conditions. FPL has taken prudent
5 action to mitigate the impact of these items through increased post write-off
6 recovery actions and other measures; however, costs have increased despite
7 these efforts. For a more detailed discussion of these measures, please see
8 FPL witness Santos' direct testimony. Additionally, the global credit crisis
9 and severe downturn in financial markets has had an adverse impact on the
10 expected revenue requirements for 2010. Notably, despite out-performing the
11 market as a whole, FPL's pension assets during 2008 significantly
12 underperformed the plan assumption of a 7.75 percent return. This will result
13 in increased pension expense in 2010 versus 2006.

14 **Q. What is the total impact of the Economic Conditions driver?**

15 A. The estimated total impact of the current economic downturn is an increase in
16 2010 revenue requirements of \$128 million.

17 **Q. How is "Productivity Improvement" defined and what comprises this**
18 **driver?**

19 A. Productivity Improvement represents the savings attributable to performing an
20 activity at a lower unit cost in 2010, adjusted for inflation, than it cost to
21 perform the same activity in 2006. For instance, the average O&M cost per
22 customer associated with distribution restoration activities was \$18.21 in
23 2006. FPL would have expected distribution restoration activities, adjusted

1 for inflation, to cost \$20.21 per customer in 2010 dollars. However,
2 restoration cost per customer forecasted for 2010 is \$14.05, or 30 percent
3 lower than what would have been expected. This difference in restoration
4 costs per customer, multiplied by the 2010 projected number of customers,
5 yields a productivity savings of approximately \$28 million. Restoration cost
6 is just one area where the Company has been able to increase productivity.
7 Productivity Improvement also includes increasing levels of capital efficiency
8 whereby FPL, in some cases, has been able to invest in maintaining its
9 infrastructure at levels lower than the cash flow provided by depreciation
10 resulting in reductions to rate base and corresponding lower customer revenue
11 requirements. The sum of all productivity improvement actions since 2006 is
12 estimated to have lowered 2010 revenue requirements by \$178 million.

13 **Q. What comprises the “Other Revenue Growth” driver?**

14 A. The Other Revenue Growth driver is comprised of growth in revenue accounts
15 other than the sales of electricity. This includes revenues from service fees,
16 pole attachment revenues, transmission service revenues, rents and other
17 miscellaneous revenues. Growth in these revenue sources since 2006 have
18 decreased the 2010 revenue deficiency by \$43 million.

19 **Q. What comprises the “All Other” driver?**

20 A. “All Other” consists primarily of the revenue requirement impact of other
21 changes in rate base such as net working capital and other changes in net
22 operating income not specifically identified above. Decreases in net working

1 capital and all other changes have combined to reduce the 2010 revenue
2 deficiency by \$40 million.

3 **Q. What are the primary drivers of the increase in revenue requirements for**
4 **2011 as compared to 2010?**

5 A. As shown on Exhibit REB-20, the primary drivers of the \$247 million
6 increase in revenue requirements are:

7	System Growth	\$68 million
8	Long Term Infrastructure Investments	\$68 million
9	Regulatory Commitments	\$42 million
10	Inflation	\$51 million
11	Economic Conditions	\$16 million
12	All Other	\$ 2 million
13	TOTAL	\$247 million

14 **Q. Has FPL compared its projected 2010 and 2011 O&M expenses to the**
15 **Commission's O&M benchmark?**

16 A. Yes. We have used 2006 as the benchmark base year, as this was the test year
17 in FPL's last rate proceeding. In each instance where a function's projected
18 O&M expenses exceed the benchmark, FPL's witness for that function has
19 provided a justification for the amount over the benchmark. In general, the
20 increases above the benchmark have resulted from external factors over which
21 FPL has no control such as regulatory commitments or economic conditions
22 that cause costs to increase at rates above measures of general inflation.
23 Changes in FPL's business have resulted in shifts among functions that also

1 affect the benchmark calculations. In all instances, FPL's witnesses show that
2 FPL's projected O&M expenses are reasonable, whether measured against the
3 Commission benchmark or otherwise.

4 **Q. What FPL witnesses discuss the functions that exceed the O&M
5 benchmark?**

6 A. The following functions benchmark higher in 2010 and 2011, using 2006 as
7 the base year, and will be addressed in the respective witnesses' testimony:
8 Nuclear - FPL witness Stall; Other Production - FPL witness Hardy; Other
9 Power Supply and Transmission - FPL witness Keener; Customer Accounts,
10 Customer Service, and Sales Expenses - FPL witness Santos. All of the other
11 functions are at or below the 2006-based benchmark.

12 **Q. How does FPL's level of O&M expenses in 2010 and 2011 compare to the
13 FPSC's benchmark using 1985 as the base year?**

14 A. FPL's O&M expenses in 2010 are \$1,067 million lower than the FPSC
15 benchmark, using 1985 as the base year. FPL's O&M expenses in 2011 are
16 \$1,062 million lower than the 1985 benchmark.

17

18 **GENERATION BASE RATE ADJUSTMENT (GBRA)**

19

20 **Q. Are there any mechanisms available to the Company to adjust base rates
21 outside of a base rate proceeding?**

22 A. As part of the 2005 Settlement Agreement, the Commission established the
23 GBRA mechanism to recover the costs for power plants that achieve

1 commercial operation during the term of the agreement and whose costs are
2 not recovered fully through a clause or clauses. The GBRA allows for an
3 adjustment to FPL's customer bills to reflect the first 12 months of revenue
4 requirements for any power plant approved through a Need Determination
5 process pursuant to the Florida Power Plant Siting Act. The GBRA
6 mechanism was first used by the Company to adjust rates for the inclusion of
7 Turkey Point Unit 5 in May 2007. The West County Units 1 and 2, scheduled
8 to go into commercial operation in 2009, will also result in adjustments to
9 base rates under the GBRA mechanism. However, the 2005 Rate Settlement
10 and its terms, including GBRA, will expire with the establishment of new base
11 rates in January 2010. Therefore the Company is petitioning the Commission,
12 as part of this proceeding, to approve the continuation of the GBRA
13 mechanism.

14 **Q. Why is the Company seeking a continuation of the GBRA mechanism?**

15 A. Simply put, because the GBRA has proven to be an effective and efficient
16 rate-making alternative. The Commission's approval of the GBRA
17 mechanism was an innovative and efficient way to deal with large plant
18 additions. It applies only to those plants that have been approved by the
19 Commission through a rigorous, public Need Determination hearing process.
20 The rate adjustment enacted through a GBRA mechanism is also subject to
21 review and true-up based upon differences in actual versus projected costs of
22 the new plant. In that regard, it affords significant protection for customers by
23 assuring that only the actual final costs are built into rates. It offers the

1 Company protection against under-recovery of significant, pre-approved
2 expenditures due to regulatory lag. It also offers all parties the potential for
3 less frequent fully litigated base rate proceedings that might be mitigated
4 through this separate recovery of large revenue requirements. It should also
5 be noted that, through the annual fuel cost recovery clause proceeding,
6 customers already are able to enjoy the benefits realized from new generation
7 projects, i.e., significant fuel cost savings, and the continuation of the GBRA
8 mechanism simply puts the recovery of the base costs of such projects on an
9 equal footing from a timing perspective.

10 **Q. How is the Company suggesting to apply the GBRA going forward?**

11 A. The Company proposes that, as part of this proceeding, the Commission
12 approve the continuation of the GBRA mechanism. If the GBRA mechanism
13 is continued, power plants that go into service subsequent to December 31,
14 2009 would qualify for GBRA treatment. It is anticipated that the next
15 application of the GBRA after December 31, 2009 would be for West County
16 Unit 3, scheduled to enter commercial operation in mid-2011.

17 **Q. Has the Company adjusted its forecast to remove the revenue
18 requirements associated with West County Unit 3 in 2011?**

19 A. Yes. The per books forecast for 2011 includes all of the base revenue
20 requirements for the Company, including the revenue requirements for West
21 County Unit 3. As addressed by FPL witness Ousdahl, the revenue
22 requirements for West County Unit 3 have then been removed through a

1 Company Adjustment. The resulting Company Adjusted forecast of revenue
2 requirements excludes West County Unit 3.

3 **Q. Does this conclude your direct testimony?**

4 **A. Yes.**

ERRATA SHEET

() DIRECT TESTIMONY, OR (X) REBUTTAL TESTIMONY (PLEASE MARK ONE WITH "X")

WITNESS: Robert E. Barrett, Jr.

<u>PAGE #</u>	<u>LINE #</u>	<u>CHANGE</u>
6	7	Change "\$22 million" to "\$28 million"
12	21	Change "MFR C-37" to "MFR-C36"
Exhibit REB-22		
1	20	Change "\$22 million" to "\$28 million"
Exhibit REB-23		
1	36	Should read "(6) Projects shifted from late 2008 and budgeted in 2009. No Impact on 2010 test year."

DOCUMENT NUMBER-DATE

08766 AUG 21 8

FPSC-COMMISSION CLERK

1 **BY MR. BUTLER:**

2 Q. Mr. Barrett, attached to your prefiled direct
3 testimony, do you have exhibits that were identified as
4 REB-1 through REB-20 attached to the testimony?

5 A. Yes.

6 Q. Were these prepared under your direction,
7 supervision, or control?

8 A. Yes.

9 **MR. BUTLER:** Mr. Chairman, I would note that
10 these have been pre-identified in staff's comprehensive
11 exhibit list as Exhibits 53 through 72.

12 **CHAIRMAN CARTER:** For the record, 53 to 72 for
13 identification purposes.

14 (Exhibit Numbers 53 through 72 marked for
15 identification.)

16 **MR. BUTLER:** Thank you.

17 **BY MR. BUTLER:**

18 Q. Would you please provide a summary of your
19 direct testimony, Mr. Barrett?

20 **CHAIRMAN CARTER:** Before you do your summary,
21 were you here when I talked to --

22 **THE WITNESS:** Yes, I was.

23 **CHAIRMAN CARTER:** Okay. Good.

24 **THE WITNESS:** Good afternoon, Commissioners.
25 My testimony is focused on four fundamental issues in

1 this proceeding. The reliability of the forecast for
2 the 2010 test year and 2011 subsequent year as filed,
3 the impact on the company of the current economic
4 environment, the cost drivers behind FPL's rate request,
5 and the recommendation to extend the use of the
6 generation base rate adjustment, or GBRA.

7 First, as the Vice President of Finance of
8 FPL, I oversee the development and approval of the
9 company's budgets which were the basis for the MFRs
10 presented in this proceeding. Our budget process is
11 rigorous. It includes the input of subject experts on
12 all major assumptions and it is extensively reviewed
13 prior to its approval by management. 2010 and 2011 were
14 prepared to this high standard.

15 The company's forecast has a good track record
16 of accuracy, and accordingly is very reliable for use by
17 this Commission in setting rates for the 2010 test year
18 and the subsequent year adjustment in 2011. Approving
19 the 2011 subsequent year increase at this time will also
20 save time and resources for this Commission, its staff,
21 and all parties to this proceeding.

22 Second, my testimony also provides an overview
23 of the general business environment that the company has
24 operated in over the past few years and what we
25 anticipate for the test year. The current recession,

1 which began in late 2007, has been characterized by a
2 collapse in the housing market, growing unemployment,
3 and, for the first time, by the third quarter of 2008 an
4 actual year over year decline in FPL's customers. In
5 response to this slowdown, the company has been able to
6 avoid almost a billion dollars of primarily growth
7 related expenditures, thereby reducing our request in
8 this proceeding.

9 As we look out to 2010 and beyond, we see a
10 slow recovery with only modest levels of customer
11 growth. However, there continues to be a need to invest
12 in our infrastructure to provide reliable service to our
13 customers. The actions the company took to reduce costs
14 in 2008 are fully reflected in the forecast prepared for
15 this proceeding, and, therefore, our projections for the
16 test years are reliable.

17 Third, my testimony explains the major cost
18 drivers since 2006 that have required the company to
19 request an increase in base revenues of \$1.044 billion.
20 Those drivers, as reflected on the chart behind me,
21 include depreciation changes, inflation, increased
22 regulatory commitments, system growth, infrastructure
23 investments, our request for a storm reserve accrual,
24 and the deteriorating economic conditions. These cost
25 pressures have been somewhat mitigated by FPL's

1 productivity improvement efforts.

2 Finally, my testimony explains why the
3 company's request for the continuation of the GBRA
4 mechanism is appropriate. The GBRA is an effective and
5 efficient mechanism for adjusting rates specific to
6 approved generating plant additions. Only plants that
7 have been reviewed and approved through the need
8 determination process qualify for GBRA treatment to
9 ensure that they have received adequate scrutiny by the
10 Commission.

11 The GBRA times the base rate increase with the
12 corresponding change in fuel rates thereby giving proper
13 price signals to customers. The GBRA also affords a
14 high level of cost protection for customers through its
15 true-up provision, and it is appropriate this Commission
16 approve its continued use.

17 This concludes my summary.

18 **MR. BUTLER:** Thank you, Mr. Barrett. I tender
19 the witness for cross-examination.

20 (Transcript continues in sequence with
21 Volume 11.)

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

STATE OF FLORIDA)
 :
 : CERTIFICATE OF REPORTER
COUNTY OF LEON)

I, JANE FAUROT, RPR, Chief, Hearing Reporter Services Section, FPSC Division of Commission Clerk, do hereby certify that the foregoing proceeding was heard at the time and place herein stated.

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

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

DATED THIS 1st day of September, 2009.



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