

BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 120015-EI

In the Matter of:

PETITION FOR INCREASE IN RATES
BY FLORIDA POWER & LIGHT COMPANY.

VOLUME 6

Pages 572 through 731

COMMISSION
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PARTICIPATING: CHAIRMAN RONALD A. BRISÉ
COMMISSIONER LISA POLAK EDGAR
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COMMISSIONER EDUARDO E. BALBIS
COMMISSIONER JULIE I. BROWN

DATE: Tuesday, August 21, 2012

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23
24
25

I N D E X

WITNESSES

NAME:	PAGE NO.
ERIC SILAGY	575
Cross-Examination by Mr. Hendricks	575
Cross-Examination by Mr. Young	586
Redirect Examination by Mr. Litchfield	598
ROSEMARY MORLEY	609
Direct Examination by Mr. Rubin	610
Cross-Examination by Mr. Moyle	656
Cross-Examination by Mr. Wiseman	667
Cross-Examination by Mr. Wright	702
Cross-Examination by Mr. Saporito	703
Cross-Examination by Mr. Harris	710
Redirect Examination by Mr. Rubin	721

	EXHIBITS		
	NUMBER:	ID	ADMTD.
1			
2			
3	135		600
	136		600
4	137		600
	138		726
5	139		726
	482		600
6	484		602
	485		602
7	486		602
	488		606
8	489		606
	490		606
9	491		606
	492		606
10	493		606
	495		606
11	496		606
	497		606
12	498		608
	499		608
13	500		608
	502	675	726
14	503	683	726
	504	684	726
15	505	686	726
	506	690	726
16	507	692	726
	508	694	726
17	509	699	726
	510	702	727
18			
19			
20			
21	CERTIFICATE OF REPORTER		731
22			
23			
24			
25			

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P R O C E E D I N G S

(Transcript follows in sequence from
Volume 5.)

CROSS-EXAMINATION

BY MR. HENDRICKS:

Q Good afternoon.

A Good afternoon.

Q We may be the only two University of Texas
graduates in the room.

A Welcome.

Q There may be a few others sitting around.

CHAIRMAN BRISE: Mr. Hendricks, if you can
speak into the mic so we can hear.

MR. HENDRICKS: I apologize.

BY MR. HENDRICKS:

Q If you could look at page 5 of your direct
testimony.

A Yes, sir.

Q There's a sentence there at lines 13 through
15 about striving for efficiency and excellence.
"Efficiency" is a good word, we just heard about that
from our Chairman as well.

If you read that sentence, it would appear to
me that we're talking about efficiency and excellence
in our operations. And you mean operations, sort of

1 all of the operations of the company, not just what we
2 think of as operations -- as operation -- operations
3 and maintenance or some particular segment, but you're
4 speaking about FPL as a company; is that correct?

5 A Well, I think here my -- when I was putting
6 this together, it was more of efficiency and
7 excellence, again, in operations specific to
8 deliverabilities -- deliveries -- pardon me -- of
9 reliability and satisfaction of service. That
10 covers -- the way I look at it is our operations,
11 generation, distribution, transmission, customer
12 service.

13 Q Okay. But all of FPL operation?

14 A Yes. But I was thinking operationally when I
15 was putting this.

16 Q That was just a matter -- I wanted to clarify
17 that a little bit.

18 A Sure.

19 Q If you would turn over to page 8, lines 13
20 through 16.

21 A Thirteen through 16?

22 Q I believe so, yes.

23 A Yes, sir. Okay.

24 Q Let me know when you're there.

25 A Okay.

1 Q It's really the comment about the Cape
2 Canaveral Plant projected to save customers about
3 \$600 million over the life of the project.

4 A Yes, sir, I see that.

5 Q With respect to that, could you provide a
6 little definition of how that was calculated?

7 A Sure.

8 Q I'm not looking for the superb details, but
9 just to understand what's included and what's not.

10 A Sure. What we did is we looked at what was
11 the fossil heat rate of the plant that was there, that
12 was actually constructed back in the early 1960s just
13 before the Apollo Moon Program, and compared that then
14 to -- and the system heat rate, so the heat rate of
15 that plant, as well as our system heat rate, all of the
16 generation fleet. And then we compared that with what
17 our system heat rate will be when this new plant at
18 Canaveral comes on line.

19 That delta multiplied by the fuel curve
20 going forward is the savings that we project based on
21 today's current fuel curve that customers will actually
22 enjoy above and beyond the \$1 billion cost of the
23 plant.

24 So obviously if the fuel curve -- gas prices
25 are relatively low today. If gas prices go up, then

1 the savings will actually go up along with that.

2 Q Okay. So this -- when you say above the --
3 600 million over the life of the project, you're
4 referring to \$600 million over the billion dollar round
5 number --

6 A Yes, sir.

7 Q -- cost of the construction?

8 A I'm sorry to interrupt you. Yes, sir, that's
9 correct.

10 Q And that presumably is not discounted with
11 the present value or anything like that, that's just
12 taken as the amount that -- just the nominal total of
13 all of the dollars over the life at the plant?

14 A You know, honestly, I would have to go back
15 and look at the calculation again just to make sure. I
16 wouldn't want to mislead you on it, but I believe
17 that's correct.

18 But don't -- I would rather have that
19 subject checked, but I believe it's the cumulative
20 value of the project over and above the cost of it, the
21 savings that our customers will actually realize.

22 Q And in determining the cost of the facility,
23 was the prior facility retired that this replaced?
24 This is a modernization project, right?

25 A Yes, sir, it's a modernization project. The

1 previous facility was actually blown up specifically.
2 We actually tore it down. And it is a building on the
3 exact same site.

4 We do this because it's an opportunity to
5 leverage what we already have insofar as land,
6 transmission, water, because this is actually located
7 in an area where we're able to utilize water from the
8 intercoastal waterway. So it's a way that we actually
9 can save a lot of money for the customers because we
10 don't have to go out and buy new property, build new --
11 completely new infrastructure related to transmission
12 or water and other things like that. So it is a
13 modernization of an existing site. But the old plant
14 is gone.

15 **Q If we could look briefly at line -- on**
16 **page 10, looking at lines -- I guess it's 4 through 13.**
17 **In this set of data -- in this testimony, you refer to**
18 **the ROE of 11.25 and .25 percent performance added as**
19 **being something that you're supporting. And the**
20 **statements in here talk about sound regulatory policy,**
21 **I believe?**

22 **A Yes, sir.**

23 **Q And in this context, I take from this, you**
24 **know, that you're saying that sound regulatory policy**
25 **is consistent with this recommendation or your**

1 **interpretation of it is consistent with this**
2 **recommendation?**

3 A Yes, sir. The sound regulatory policy
4 relates to what I believe would be sound regulatory
5 policy to approve the .25 percent basis point at or for
6 superior performance, not the specific reference.

7 Q So then let me just ask you a few questions
8 about the ROE and related matters. Would you agree
9 that the potential investors in FPL are NextEra Energy
10 in the case of equity, consider the regulatory ROE an
11 important factor in comparing FPL and NextEra Energy to
12 other potential investments?

13 A Yes, sir, I would. I'm sure Witness Dewhurst
14 can go into great detail with you on this, but yes,
15 sir.

16 Q I'm sure they will.

17 Would you also agree that they would consider
18 the debt equity ratio to be an important factor?

19 A I can't speak with any real knowledge on how
20 they would view the exact debt equity ratio, but I
21 think they look at the overall strength and financial
22 health of the company when determining to make an
23 investment, so that is a component of it, yes, sir.

24 Q And would you also agree that they consider
25 the returns available on alternative similar

1 **investments that are available at the time in**
2 **determining the price they would pay to invest in FPL?**

3 A Yes, sir, I believe investors do look at
4 where their options are to place their investments,
5 their money, and to get the return, absolutely.

6 Q **Would you say then that it would follow that**
7 **changes in the ROE, the debt equity ratio, or the**
8 **market conditions could cause different values of the**
9 **other two factors to be appropriate, that is, that**
10 **there's a linkage between all of those in the way**
11 **investors evaluate an investment?**

12 A I think it's always difficult to actually get
13 in the heads of investors. They look at the variety of
14 factors. But I think what is clear -- and Witness
15 Dewhurst can go into great detail because he meets with
16 investors on a much more frequent basis than I do or
17 ever have -- but they clearly look at a variety of
18 factors.

19 And return on equity, capital structure,
20 regulatory environment, certainty, the risk profile of
21 the corporation from a geographic standpoint, all of
22 those come into play in their decision-making process.
23 How they place weight where I think is a very
24 individualized type of decision.

25 Q **I'm not going to ask you about --**

1 MR. MOYLE: Mr. Chairman, I just would like
2 to move to strike that last thing. I think
3 Mr. Silagy himself acknowledged that, you know, to
4 answer the question he's having to put himself in
5 the position of investors and speculate as to
6 investors, again, I can't put myself in the mind
7 of the investors. So this whole line with respect
8 to what would investors do, you know, I think
9 it's -- and I made this objection, and it's all
10 based on hearsay as to what somebody not in this
11 room, is not subject to cross-examination, would
12 or would not do in a given particular set of
13 circumstances.

14 MR. LITCHFIELD: Mr. Chairman, I think
15 Mr. Silagy's comment with respect to, you know, he
16 can't put himself in the mind of an investor, that
17 has reference to a particular investor. And
18 that's true for any of us here in the room. But
19 as a general statement, I think he expressed his
20 understanding in response to a question by
21 Mr. Hendricks.

22 Now, having said that, I would also suggest,
23 as I have to other counsel, that Mr. Hendricks in
24 this particular case, we've got Mr. Dewhurst
25 coming, and a lot of these questions are probably

1 more appropriate for them as well.

2 So that's also part of the efficiency of the
3 process is asking the right questions of the right
4 witness as opposed to asking the same questions of
5 three or four different witnesses.

6 MR. HENDRICKS: Yeah, actually, you sort of
7 preempted my comment that I was going to save the
8 detailed questions about capital structure for
9 another witness.

10 CHAIRMAN BRISE: Sure. I'm going to --

11 MR. HENDRICKS: I was just trying to
12 establish that all of these factors, at least in
13 many people's minds, and I'd think, you know,
14 in --

15 CHAIRMAN BRISE: Understood. Let me deal
16 with the objection. Let me deal with the
17 objection.

18 MR. HENDRICKS: My apologies. Go ahead.

19 CHAIRMAN BRISE: I'm going to overrule the
20 objection and you may proceed with your questions.

21 MR. HENDRICKS: Thank you.

22 BY MR. HENDRICKS:

23 **Q Also on page 10, you use the term "drivers,"**
24 **I believe -- if I can find it here. It's a term I've**
25 **often seen in consulting, but I don't believe I've seen**

1 it in this context very often. And I was just
2 wondering about how you intended us to take the term
3 "drivers" to take away from that particular choice of
4 words.

5 A Right. Just the context that our witnesses
6 will be able to provide detailed information on the
7 factors, maybe is another way of putting it, that are
8 impacting our request for a base rate increase.

9 Q These would be some important factors that
10 are affecting the decision?

11 A Absolutely, such as the surplus depreciation
12 going away, the impacts of inflation, those would all
13 be factors.

14 Q Thank you.

15 If we could -- let's see, I'm trying to
16 figure out which page this is. It looks like it's
17 page 17.

18 A I'm there.

19 Q Okay. Let me get there. The question that
20 you answered starting up on line 4 there is "How should
21 FPL's request be viewed from a customer perspective";
22 is that correct?

23 A Yes, sir.

24 Q I'm trying to follow my notes here. I've got
25 them a little jumbled trying to write this stuff down.

1 Would you agree that from a customer's point
2 of view, it is important for FPL to manage the risks of
3 increases in future customer bills that might be due to
4 the cost of financing the infrastructure investments
5 that you have discussed today?

6 A Yes, sir.

7 Q Thank you.

8 Speaking as the FPL president, is it your
9 judgment that delivering value for customers in the
10 future requires managing substantial infrastructure
11 investments efficiently -- and efficiently financing
12 those investments?

13 MR. MOYLE: This is duplicative also,
14 Mr. Chairman. Duplicative.

15 CHAIRMAN BRISE: I think that's ground that
16 we have covered today already.

17 MR. HENDRICKS: Okay. Very good. I'll move
18 on.

19 BY MR. HENDRICKS:

20 Q One last question and then I'm sure you'll be
21 glad to go. You did refer recently to the largest
22 investment program that FPL has ever had. I'm going to
23 reserve specific questions about capital structure for
24 the appropriate FPL witnesses, but I will ask you if
25 there are any general policies, guidelines, or

1 management reviews at your level that address
2 infrastructure financing efficiency in managing the
3 risks for customers going forward from the customers'
4 view?

5 A Again, I would say from a -- if I answered
6 your question correctly -- capital efficiency question,
7 I think Witness Dewhurst is the best to answer that
8 question.

9 Q So you wouldn't identify any specific reviews
10 or guidelines or principles that exist at your level?

11 A What I can provide you with is an answer that
12 goes really towards how we try to operate the business
13 generally, and that is very efficiently. So I think
14 it's all encompassing, we try to do what we can to
15 maximize efficiency.

16 I focus on the operations every day to try
17 to make sure that we're doing that efficiently. And
18 Mr. Dewhurst is the Chief Financial Officer of the
19 parent company and really focuses on the financial
20 aspects of it.

21 Q Thank you.

22 CHAIRMAN BRISE: All right. Thank you.

23 Staff.

24 MR. YOUNG: Yes, sir.

25 CROSS-EXAMINATION

1 BY MR. YOUNG:

2 Q Keeping on page 17 of your prefiled direct
3 testimony.

4 A Yes, sir, I'm there.

5 Q All right. At line 4 you were asked "How
6 should FPL's request be viewed from a customer's
7 perspective," correct?

8 A Correct.

9 Q And you gave your response. And in your
10 response -- in your answer, you tried to explain how
11 customers should view FPL's request, correct?

12 A That's correct.

13 Q And as part of that explanation, looking at
14 lines 15 and 16, you state that "FPL's total typical
15 residential bill has gone down by 13 percent between
16 2006 to 2007," correct?

17 A That's correct.

18 Q Do you know what percentage change for that
19 period relates to the base rate portion of the bill?

20 A I don't know that off the top of my head.

21 Q Okay. Earlier you stated that customers and
22 the economy have benefited from FPL's effort to keep
23 the bills lower?

24 A That's correct.

25 Q Other than -- bills lower than other

1 **utilities, you stated that correct, right?**

2 A I believe so.

3 **Q I mean, did I paraphrase you correct?**

4 A I will agree. I don't remember exactly what
5 I said, yeah.

6 **Q All right. If FPL customers must pay for**
7 **more electricity, how does that benefit them or the**
8 **economy?**

9 A It benefits them because we're able to
10 provide an electric bill over time that also continues
11 to be the lowest bill in the state. Again, there's
12 a -- we talked about it a little earlier -- point in
13 time as to how customers look at this. And so, you
14 know, I look at the customer experience and the value
15 proposition holistically.

16 The bill is an important aspect of it, but
17 also maintaining, you know, exceptional reliability and
18 customer service is something that our customers expect
19 and I think they value as well. So what our base rate
20 increase does is provide us the opportunity to continue
21 to provide that value proposition, and I look at it
22 holistically.

23 **Q Okay. Thank you.**

24 A You're welcome.

25 MR. YOUNG: No further questions.

1 CHAIRMAN BRISE: All right. Commissioners.
2 Commissioners Balbis.

3 COMMISSIONER BALBIS: Thank you,
4 Mr. Chairman, and thank you, Mr. Silagy. I know
5 it's been a long day. In fact, I don't believe
6 Commissioner Graham had a mustache when we started
7 today, so thank you for your patience.

8 I have a few questions for you. And I'll
9 point to a page of your testimony, but with only
10 21 pages -- and you seem to be very familiar with
11 it -- we don't have to refer to it. But on
12 page 12, you discuss efficiencies and productivity
13 improvements.

14 And my question for you is what specific
15 actions has FPL taken since the last rate case to
16 either maintain or lower O&M costs and achieve
17 those efficiency and productivity improvements?

18 THE WITNESS: We've undertaken a variety of
19 different efforts throughout the company. Witness
20 Kennedy can tell you about specifically what we've
21 done, and power generation is an example.

22 What Witness Santos will be able to talk to
23 you about, we've done customer service. You know,
24 medical is another good example of this where we
25 work hard every single year to try to make sure

1 that we are managing what is an ever-increasing
2 expense related to medical. And I think we've
3 done an amazing job of that, as an example,
4 because just in the last few years, we've been
5 able to keep the cost of medical within FPL from
6 going up at significantly lower levels than on the
7 industry average. And that translates into tens
8 of millions of dollars of savings for our
9 customers every year. And so just to use that as
10 a little more detailed example.

11 You know, we've implemented programs that
12 really focus on preventative type of medical
13 because we are effectively self-insured. And so
14 we look at, you know, ways that we can get
15 employees to focus on their health in advance
16 rather than until they actually become ill and
17 providing them with everything from, you know, an
18 opportunity to meet with a dietitian or go online
19 to learn about better ways -- because obesity, as
20 an example, is we found the number one driver
21 actually in medical costs.

22 So it's a focus -- I know that sounds very
23 granular -- but it's just that kind of focus in
24 every part of our business that we try to drive
25 efficiencies out because, you know, a million

1 here, a million there, with the size of our
2 company, everything is going to be a million here
3 and a million there that we can address adds up
4 into real cost savings.

5 COMMISSIONER BALBIS: Okay. Thank you.

6 And following that line concerning staffing
7 levels or staffing expenses, again, have any
8 specific actions being taken by FPL since the last
9 rate case to maintain the costs or lower the
10 costs?

11 THE WITNESS: Yeah. We rigorously -- and
12 Witness Slattery can go into the details on how we
13 rigorously benchmark our salaries as compared to
14 other utilities, as well as industries. We work
15 very hard to maintain the proper staffing levels
16 based on our growth. We spend a lot of time --
17 twice a year we go through a rigorous performance
18 review process, as an example, with every single
19 one of our employees. And that is to make sure
20 that we are driving also performance and a culture
21 of excellence throughout the organization.

22 And that culture of excellence is one of the
23 things that I believe really drives and permeates
24 the entire organization in a way that gives us the
25 opportunity to actually capture those

1 efficiencies. It is not an accident that we are
2 in the top 10 percent nationally on nonfuel O&M.
3 And that savings, you know, every day customers
4 enjoy. At a billion-six a year, that is something
5 you only achieve through a culture type of
6 excellence. It's not something that two or three
7 people have; you have to have that down at the --
8 you know, where the rubber meets the road, where
9 the guys are out on the line, men and women are
10 out there restoring power or generating power, it
11 has to permeate the entire culture. So that's
12 kind of the approach that we have with it.

13 COMMISSIONER BALBIS: Okay. And that would
14 pertain to have you undergone any reorganizations
15 to try to achieve additional efficiencies or does
16 that pertain to the overall culture that you
17 explained? Is there anything specific that has
18 been done or that you've identified since being
19 president for less than a year that FPL is going
20 to do or has done?

21 THE WITNESS: Sure. We look at the
22 organization regularly to try to determine, you
23 know what's the best structure, are the right
24 people in the right seats, and try to make sure
25 that we're being as efficient as possible.

1 Right after the last rate case, we actually
2 did have, I think it was 300 employees that we let
3 go. But we are always looking at the organization
4 from an efficiency standpoint.

5 COMMISSIONER BALBIS: Okay. And just one
6 more question, or a couple of questions.
7 Concerning natural gas price stability, you
8 indicated on page 17 in your testimony on lower
9 fuel costs, and you also mentioned in response to
10 cross-examination the hedging program, which I
11 know we've had a hedging workshop and that's been
12 discussed.

13 But other than the hedging program FPL has in
14 place, what is FPL doing to try and minimize any
15 supply interruptions or price fluctuations since
16 natural gas is such a high percentage of your
17 generation and fuel source?

18 THE WITNESS: Well, we are very proactive on
19 trying to find ways to make sure that we secure
20 supply. I am not going to sugarcoat it; I am
21 concerned about the existence of two pipelines
22 here in Florida. We are spending a lot of time on
23 trying to find an alternative solution, a third
24 pipeline. Obviously that's bigger than just FPL.
25 There will be other beneficiaries of that from the

1 standpoint of the other utilities.

2 I personally believe that the shale gas
3 reserves that have been exploited and are being
4 drilled in the United States are real. I've
5 personally gone out to some of those reserves to
6 understand what's going on, to meet with the gas
7 companies.

8 We take it very seriously to understand what
9 is going on in the marketplace, what are the
10 opportunities to secure natural gas, what's the
11 likelihood of the forecast, because ultimately
12 these price curves are their forecasts, so by
13 definition they're wrong because they're
14 forecasts. But they're an indicator, a leading
15 indicator.

16 So all the way up to me personally have been
17 involved with trying to understand really what's
18 going on in the marketplace, what do we expect to
19 see in prices going forward in supply, security
20 supply, and in delivery. And a third pipeline
21 eventually, I think, for this state is a must. I
22 personally believe very strongly that we're
23 eventually going to need, sooner rather than
24 later, because we have a state -- Florida is the
25 second largest user of natural gas in the nation.

1 And Texas is one, California is three.

2 And when you look at the fact that Texas has
3 production, Texas has gas storage, if you look at
4 a map of their pipelines it's like a spaghetti
5 bowl. Florida has no production, it has no
6 storage, and it has two primary pipelines that
7 serve the state, two big trunk lines.

8 I don't think that's a wise way to run a
9 delivery system, so we're going to be very
10 creative in trying to come up with a way that
11 makes sense for customers today and longterm,
12 because that is a longterm investment that will
13 benefit generations to come.

14 COMMISSIONER BALBIS: Okay. Thank you.
15 That's all I have.

16 CHAIRMAN BRISE: Commissioner Brown.

17 COMMISSIONER BROWN: Thank you. And thank
18 you, Mr. Silagy, for your patience as a witness.
19 It's been a long day for all of us, and you've
20 been very patient, so thank you for that.

21 You said earlier sometime this morning, I
22 think, that your ROE is in the bottom third of the
23 nation. And I'm just curious as to where you're
24 ranked compared to other similarly-situated
25 utilities that are in states that have cost

1 recovery mechanisms like Florida does.

2 Did that factor into your analysis?

3 THE WITNESS: Yes, ma'am, it did. I don't
4 know the exact answer to your question to be able
5 to give the ROE on the top, bottom third, or
6 bottom quarter of that. But I know we looked
7 across a broad range of where ROEs are, not just
8 nationally, but also even in the southeast. As a
9 matter of fact, I think that was in one of the
10 exhibits that was in the opening statement
11 provided by Mr. Litchfield.

12 So we kind of benchmarked against a variety
13 of jurisdictions, including, like I said, the
14 Southeast, which I think all of those are
15 regulated utilities. I may be wrong. I would
16 have to think about that. But, you know, we have
17 tried to look at it across the spectrum.

18 COMMISSIONER BALBIS: Okay. Thank you.
19 That's all.

20 THE WITNESS: You're welcome.

21 CHAIRMAN BRISE: All right. Mr. Silagy, I
22 have one question for you. On page 7 of your
23 testimony between lines 12 and 18, you recognize
24 the tough economic times that Floridians face.
25 And really my question is what sacrifices has

1 upper management and the executive side of the
2 company been willing to make as sacrifices are
3 being made by consumers?

4 THE WITNESS: Well, as just one example, in
5 this rate case, we are not seeking any executive
6 incentive compensation to be paid by for
7 customers. So that's just one example of ways
8 that we are trying very hard to be as efficient as
9 possible, and respectful, recognizing the, you
10 know, economic times we are in.

11 I personally believe that is a legitimate
12 business expense. It is part of what allows us to
13 retrain -- retain -- pardon me -- and attract the
14 best people. And I think, you know, that is also
15 an indicator of why we are in the very top decile
16 or best in class in many of the benchmarks. But
17 in an effort to try to, you know, recognize that
18 these are difficult economic times, we are not
19 seeking recovery for that.

20 Another area as an example is we are not
21 seeking recovery in this case for storm accrual.
22 We are moving forward with a mechanism in place
23 that was crafted under the settlement agreement.
24 But I think, you know, that is something that we
25 recognize embeds additional risk as compared to

1 having an inadequately funded reserve account.

2 CHAIRMAN BRISE: All right. Thank you very
3 much. That's all the questions I have for you.
4 Commissioners.

5 (No response.)

6 CHAIRMAN BRISE: Okay. Seeing none.
7 Redirect, Mr. Litchfield.

8 MR. LITCHFIELD: Thank you. I believe I have
9 one, maybe two redirect for Mr. Silagy.

10 REDIRECT EXAMINATION

11 BY MR. LITCHFIELD:

12 Q Mr. Silagy, do you recall your discussion
13 with Mr. Wright in which he put in front of you
14 Schedule A-1?

15 A Yes.

16 Q My question to you is without base rate
17 relief requested in this proceeding, what would FPL's
18 earned return be in 2013?

19 A Our book ROE will be 8.23 percent.

20 Q Okay. One last question. Mr. Wright asked
21 you about -- I believe it was Mr. Wright -- asked you
22 about customer choice. And I guess my question to you
23 is considering all 55 utilities in the state of Florida
24 in terms of reliability and price, as a customer, of
25 which you are one, which utility would you take service

1 from?

2 A Of Florida Power & Light.

3 Q **Easiest question of the day for you. Thank**
4 **you.**

5 CHAIRMAN BRISE: Thank you. Thank you,
6 Mr. Silagy, for your testimony today.

7 THE WITNESS: Thank you.

8 CHAIRMAN BRISE: At this time, we're going to
9 call --

10 MR. LITCHFIELD: Exhibits.

11 MS. HELTON: Yeah, wait.

12 CHAIRMAN BRISE: Oh, exhibits. Thank you.
13 Thank you. We're going to deal with exhibits.
14 It's one of those days.

15 MR. LITCHFIELD: I don't know if it's helpful
16 for me simply to identify the subset of exhibits
17 that I object to rather than go through the list,
18 but at your pleasure, Mr. Chairman.

19 MR. YOUNG: Aren't you going to move 35
20 through 37?

21 MR. LITCHFIELD: Oh, yes. Thank you.

22 MR. YOUNG: 135 through 137.

23 MR. LITCHFIELD: Thank you, sir. Yes, I
24 would like to move 35 through 37. These are
25 Mr. Silagy --

1 MR. YOUNG: 135.

2 MR. LITCHFIELD: 135 through 137.

3 CHAIRMAN BRISE: 135 through -- is it 137?

4 MR. YOUNG: Yes, sir.

5 (Exhibit Nos. 135 through 137 received in
6 evidence.)

7 MR. LITCHFIELD: And ask that Mr. Silagy be
8 excused.

9 CHAIRMAN BRISE: All right. That can be
10 done.

11 Mr. Silagy, you're excused.

12 MS. HELTON: I think Mr. Moyle had the next
13 set.

14 MR. MOYLE: Right. I think 182 no one had
15 objection to, is an excerpt of the MFRs that, I
16 assume, will be coming in. But mine was MFR E-13
17 and we marked it as 482.

18 CHAIRMAN BRISE: 482?

19 MS. HELTON: I think you meant 482.

20 MR. MOYLE: 482. So I assume that comes in.

21 (Exhibit No. 482 received in evidence.)

22 MR. MOYLE: And I think Mr. Litchfield had an
23 objection to 483, which I asked the witness
24 questions about that was entitled "Exhibit
25 Regarding Cost of Return on Equity Increase versus

1 Increase Cost of Debt."

2 MR. LITCHFIELD: I think I objected before
3 there were any questions on this exhibit, so we
4 would oppose its introduction into the record at
5 this time.

6 CHAIRMAN BRISE: Right. Were there questions
7 posed on that?

8 MR. MOYLE: Well, I think there were in that
9 I asked him what the ROE increase sought from ten
10 to 11 and a half was, and he said 240, and that's
11 in there.

12 MR. LITCHFIELD: But that was prior to this
13 exhibit.

14 MR. MOYLE: Right.

15 MS. HELTON: My notes say that no questions
16 were asked about the exhibit.

17 CHAIRMAN BRISE: Okay. So with that --

18 MR. MOYLE: I'll tell you what, just to make
19 it easy, everybody said Mr. Dewhurst is the guy,
20 so I'll just wait and use it with Mr. Dewhurst.

21 CHAIRMAN BRISE: Okay. So we'll withdraw
22 that.

23 MR. WISEMAN: Mr. Chairman, the hospital, if
24 memory serves, had just one, which was 484.

25 CHAIRMAN BRISE: 484?

1 MR. WISEMAN: We would ask to have that
2 admitted at this time.

3 CHAIRMAN BRISE: Okay.

4 MR. WISEMAN: Thank you.

5 (Deposition Exhibit No. 484 received in
6 evidence.)

7 CHAIRMAN BRISE: 485?

8 MR. WRIGHT: Mr. Chairman, we would move the
9 admission of exhibits 485 and 486. And there are
10 more, but I thought I would just do those two
11 since they are sequential.

12 CHAIRMAN BRISE: Right. 485 and 486. 486
13 was the interrogatory 150.

14 MR. WRIGHT: 485 was prior testimony by
15 presidents of Florida Investor and Utilities. 486
16 was the accounting report from the Public Service
17 Commission, the PSC Revenue Reductions and
18 Increases summary.

19 CHAIRMAN BRISE: Okay.

20 MR. LITCHFIELD: No objection.

21 CHAIRMAN BRISE: All right. No objections to
22 that, so then that will be entered into the
23 record.

24 (Exhibit Nos. 485 and 486 received in
25 evidence.)

1 MR. WRIGHT: And I'm not sure where mister --
2 I'll give it a shot. I would move 488 through
3 497.

4 CHAIRMAN BRISE: Okay. But let's deal with
5 487 first, which is the MFRs.

6 MR. YOUNG: Yeah, I think the company can
7 speak to that.

8 MR. BUTLER: Our plan is to move that in at
9 the end of our direct case, so we'll hold off
10 until then.

11 CHAIRMAN BRISE: Okay.

12 MR. BUTLER: If that's okay with the Chair.

13 CHAIRMAN BRISE: Okay. Thank you. 488
14 through --

15 MR. WRIGHT: 497, Mr. Chairman.

16 CHAIRMAN BRISE: Okay. 488 through 497. Are
17 there any objections on any of those?

18 MR. LITCHFIELD: Yes. I got an objection on
19 495 and 496, which I would simply propose, again,
20 that these, similar to Mr. Moyle's cross-exhibit
21 that he's going to use with Mr. Dewhurst, these
22 are exhibits that I think Mr. Wright intends to
23 use with him. I would prefer to wait at that time
24 to have those offered into evidence.

25 CHAIRMAN BRISE: Sure. Were there any

1 questions dealing with that?

2 MS. HELTON: According to my notes, there
3 were questions. But I guess we'll hear from
4 Mr. Wright whether he objects to that approach
5 or --

6 MR. WRIGHT: Mr. Chairman, I don't think
7 there's any real doubt as to the authenticity of
8 these documents. One is from FPL -- sorry --
9 NextEra Energy's own website, and the other is
10 from a commonly available website, YahooFinance,
11 that is sort of commonly recognized and referred
12 to by persons in 2012. They are what they are.

13 I don't see any reason to keep them out at
14 this time. And I agree that I'll ask my more
15 detailed questions with respect to these exhibits
16 of Mr. Dewhurst, but I don't see any reason to
17 keep them out at this time.

18 MR. LITCHFIELD: Well, they may well be
19 exactly what Mr. Wright purports they are, but
20 he's going to talk to somebody who is the CFO of
21 the company and I would like him to weigh in on
22 these exhibits prior to them being admitted into
23 the record.

24 MS. HELTON: Well, that brings up another
25 subject, Mr. Chairman. In my opinion, if a party

1 is going to object to the use of an exhibit during
2 the proceeding and object to an exhibit being
3 admitted into the record of a proceeding, then
4 that objection needs to be made contemporaneously
5 with the identification and then when we get to
6 the -- if we get to a line of questioning that is
7 objectionable at that point in time, so that
8 everyone is on notice and so that the party
9 offering the exhibit can do what he or she must do
10 to try to salvage the use of the exhibit in the
11 proceeding.

12 So I don't recall, because I don't have any
13 notes, that Power & Light specifically objected to
14 those two exhibits at the time that Mr. Wright was
15 using them.

16 MR. LITCHFIELD: It may have been after the
17 first question or two, but we don't need to go
18 back and look at the record. I'm fine if the
19 preference is they go in now, that's fine, they go
20 in now.

21 CHAIRMAN BRISE: Sure.

22 MR. LITCHFIELD: But I would like
23 Mr. Dewhurst to have the opportunity to opine on
24 their authenticity and the interpretation thereof.

25 CHAIRMAN BRISE: Okay. So we'll accept those

1 into the record.

2 (Exhibit Nos. 488 through 497 received in
3 evidence.)

4 CHAIRMAN BRISE: 497 and 498.

5 MR. WRIGHT: I thought that I moved all
6 through 497. And I think the only objection came
7 with respect to 495 and 496.

8 MR. LITCHFIELD: I apologize. There is --
9 let's see. Well, now I can't recall the
10 discussion on 494, but I've got it marked as
11 objectionable. In fact, I think -- I'm not sure
12 that anything was asked of Mr. Silagy with regard
13 to this article. In fact, my notes here have
14 Mr. Wright then in response to my objection moving
15 on and saying, well, regardless of what the
16 article says and then posed his questions.

17 So, again, it's a news article. I'm not sure
18 that this should be entered into the record. I
19 don't recall that any questions were really asked
20 about this.

21 CHAIRMAN BRISE: Sure. Mr. Wright.

22 MR. WRIGHT: Well, I did in fact ask a
23 question. I pointed Mr. Silagy to the news
24 article where it said FPL will halt construction.
25 He said I have no --

1 MR. LITCHFIELD: And I objected that it was a
2 news article and -- anyway, sorry, Mr. Wright.

3 CHAIRMAN BRISE: Go right ahead, Mr. Wright.

4 MR. WRIGHT: Mr. Silagy responded that he
5 didn't agree with that and it was not the first
6 time that something had been presented incorrectly
7 in the press.

8 CHAIRMAN BRISE: Right.

9 MR. WRIGHT: That's okay, I'll withdrawal
10 that one.

11 CHAIRMAN BRISE: Okay. Thank you.

12 MR. WRIGHT: You bet.

13 CHAIRMAN BRISE: So 494 will be withdrawn?

14 MR. WRIGHT: 494, yes, sir.

15 CHAIRMAN BRISE: Okay. Moving on.

16 Mr. Saporito.

17 Did you have --

18 MR. WRIGHT: Were you going to go ahead and
19 enter 486, five, six and then 488 through 497
20 except 495?

21 CHAIRMAN BRISE: 494.

22 MR. WRIGHT: 494, sorry.

23 CHAIRMAN BRISE: Right.

24 MR. WRIGHT: A lot going on.

25 CHAIRMAN BRISE: Yes.

1 MR. WRIGHT: So I'm good through 497 with the
2 understanding that I have withdrawn 494.

3 CHAIRMAN BRISE: 494.

4 MR. WRIGHT: Thank you, sir.

5 CHAIRMAN BRISE: Mr. Saporito.

6 MR. SAPORITO: Yes, Mr. Chairman. At this
7 time, I would like to move 498 through 501 into
8 the record.

9 MR. LITCHFIELD: And FPL simply has the one
10 objection with regard to what is the third page,
11 including the cover page, in Exhibit 501.

12 CHAIRMAN BRISE: Right. And I think we dealt
13 with that one at the time.

14 MR. LITCHFIELD: Yes.

15 MR. SAPORITO: So that one was stricken,
16 okay.

17 CHAIRMAN BRISE: So those will be moved into
18 the record.

19 (Exhibit Nos. 498 through 500 received in
20 evidence.)

21 MR. WRIGHT: I did not understand which
22 exhibit the exception was applying.

23 MS. HELTON: Exhibit 501.

24 CHAIRMAN BRISE: 501.

25 MR. YOUNG: The last page.

1 MR. WRIGHT: Thank you.

2 CHAIRMAN BRISE: The last page of 501.

3 MR. WRIGHT: Thank you.

4 CHAIRMAN BRISE: We weren't sure on the
5 source.

6 MR. WRIGHT: Thank you very much.

7 CHAIRMAN BRISE: Okay. Were there any other
8 exhibits that we missed?

9 MR. LITCHFIELD: No, sir.

10 CHAIRMAN BRISE: All right. Mr. Litchfield.

11 MR. LITCHFIELD: Thank you. I'm going to
12 yield the seat to my colleague to present
13 Ms. Morley.

14 MR. RUBIN: Good afternoon, Chairman. Ken
15 Rubin for Florida Power & Light Company.

16 CHAIRMAN BRISE: Good afternoon.

17 MR. RUBIN: Dr. Morley, who is our next
18 witness, has not yet been sworn.

19 CHAIRMAN BRISE: Okay.

20 Thereupon,

21 ROSEMARY MORLEY

22 was called as a witness, having been first duly sworn,
23 was examined and testified as follows:

24 MR. RUBIN: Thank you, Mr. Chairman. May I
25 proceed?

1 CHAIRMAN BRISE: Yes, you may.

2 DIRECT EXAMINATION

3 BY MR. RUBIN:

4 Q Please state your name and business address
5 for the record.

6 A Rosemary Morley, 700 Universe Boulevard, Juno
7 Beach, Florida.

8 Q By whom are you employed and in what
9 capacity?

10 A The director of load forecasting at Florida
11 Power & Light.

12 Q Have you prepared and caused to be filed 42
13 pages of prefiled direct testimony in this proceeding
14 on March 19th, 2012?

15 A Yes, I have.

16 Q Do you have any changes or revisions to your
17 prefiled direct testimony?

18 A No, I do not.

19 MR. RUBIN: Mr. Chairman, I would ask that
20 the prefiled direct testimony of Dr. Morley be
21 inserted into the record as though read.

22 CHAIRMAN BRISE: Okay. Without objection,
23 the prefiled testimony of Dr. Morley will be
24 entered into the record as though read.

25 (Whereupon, testimony inserted.)

1 **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**
2 **FLORIDA POWER & LIGHT COMPANY**
3 **DIRECT TESTIMONY OF DR. ROSEMARY MORLEY**
4 **DOCKET NO. 120015-EI**
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TABLE OF CONTENTS

1

2

3 **I. INTRODUCTION..... 3**

4 **II. GENERAL OVERVIEW..... 6**

5 **III. CUSTOMER GROWTH FORECAST 13**

6 **IV. FORECAST OF NET ENERGY FOR LOAD 16**

7 **V. DELIVERED AND BILLED SALES 30**

8 **VI. CUSTOMERS AND SALES BY REVENUE CLASS 32**

9 **VII. MONTHLY PEAK FORECAST..... 35**

10 **VIII. INFLATION FORECAST 40**

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I. INTRODUCTION

1

2

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

4 A. My name is Dr. Rosemary Morley, and my business address is Florida Power
5 & Light Company, 700 Universe Blvd., Juno Beach, Florida 33408.

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

7 A. I am employed by Florida Power & Light Company ("FPL" or the
8 "Company") as the Director of Load Forecasting and Analysis.

9 **Q. Please describe your duties and responsibilities as FPL's Director of Load
10 Forecasting and Analysis.**

11 A. I am responsible for the development of FPL's peak demand, energy,
12 customer and economic forecasts.

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

15 A. I hold a Bachelor of Arts ("B.A.") degree with honors in economics from the
16 University of Maryland and a Master of Arts ("M.A.") degree in economics
17 from Northwestern University. In 2005 I received a Doctorate in Business
18 Administration ("D.B.A.") from Nova Southeastern University. I began my
19 career with FPL in 1983 as an Assistant Economist. I have since held a
20 variety of positions in the forecasting, planning, and regulatory areas. I
21 assumed my current position in 2007. I have received designation as a
22 certified professional forecaster ("CPF") from the Institute of Business

1 Forecasting and Planning and am a member of the National Association of
2 Business Economists.

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

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

- 5 • RM-1 Minimum Filing Requirements Sponsored and Co-sponsored by
6 Dr. Rosemary Morley
- 7 • RM-2 Weather-normalized Calendar Net Energy for Load

8 **Q. Are you sponsoring or co-sponsoring any Minimum Filing Requirements**
9 **("MFRs") filed in this case?**

10 A. Yes. Exhibit RM-1 shows my sponsorship and co-sponsorship of MFRs.

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

12 A. The purpose of my testimony is to describe FPL's load forecasting process,
13 identify the underlying methodologies and assumptions, and review the results
14 of FPL's forecasts. These forecasts include forecasts of net energy for load,
15 retail delivered sales, peak demands and customers and sales by revenue class.

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

17 A. My testimony begins by providing an overview of FPL's load forecast. The
18 load forecast presented in this case is FPL's official company forecast for all
19 planning purposes, including the Need Determination for the Modernization
20 of Port Everglades (Docket No. 110309-EI). FPL's load forecasting process
21 relies on statistically sound methods and inputs from leading industry experts.
22 Moreover, FPL has a proven record of developing accurate, reliable forecasts.
23 The fact that actual weather-normalized 2010 net energy for load was within

1 0.3% of FPL's forecasted net energy for load projected in the last rate case is
2 evidence of FPL's proven track record in this area.

3
4 My testimony then addresses the specifics of FPL's forecast of customers and
5 sales. Overall, FPL's forecast represents a balanced view based on the
6 assumption of moderate, but positive customer and sales growth. Although
7 below the record-setting pace reached during the housing boom, the
8 forecasted customer growth in 2013 is projected to be the company's highest
9 since 2007. By 2013, a cumulative increase of almost 105,000 customers
10 since 2010 is projected. Likewise, the forecasted growth rates in weather-
11 normalized net energy for load in 2012 and 2013 are the highest growth rates
12 since 2006. Retail delivered sales are expected to follow a similar pattern
13 with weather-normalized retail delivered sales in 2013 also increasing at its
14 fastest rate since 2006.

15
16 My testimony next discusses the methodologies supporting FPL's forecast of
17 customers and sales by revenue class, along with FPL's forecast of peak
18 demands. These forecasts are consistent with the forecasts of total company
19 sales and customers presented in this testimony. In addition, the forecasts of
20 customers and sales by revenue class are based on sound statistical methods
21 and inputs provided by industry experts. The same reliance on sound
22 statistical methods and inputs provided by industry experts holds true for
23 FPL's forecast of peak demands. FPL's forecast of customers, sales, and peak

1 demands all rely on a consistent set of assumptions regarding weather, the
2 economy, and other critical drivers.

3

4 My testimony concludes by presenting FPL's inflation forecast. FPL relies on
5 industry expert, IHS Global Insight, as the source for its inflation forecast.
6 This forecast calls for a 1.9% increase in the consumer price index in 2012
7 and a 2.0% increase in 2013. These forecasted increases are consistent with
8 the consensus view that while inflation is likely to remain low, we can
9 continue to expect some increases in the overall level of prices over the next
10 few years.

11

12

II. GENERAL OVERVIEW

13

14 **Q. Please describe the objective of FPL's load forecasting process.**

15 **A.** The objective of FPL's load forecast is to project future levels of customer
16 growth, net energy for load, and peak demands. Net energy for load is a
17 measure of electric sales which takes into account the Megawatt Hours
18 ("MWh") FPL generates and the net flow of interchange sales into and out of
19 the FPL system. Peak demands refer to the highest hourly integrated net
20 energy for load in a given period, for example, a year or month.

21

1 **Q. Historically, what criteria has the FPSC used in evaluating utilities' load**
2 **forecasts?**

3 A. Historically, the FPSC has evaluated utilities' load forecasts based on the use
4 of statistically sound forecasting methods and reasonable input assumptions
5 (Docket Nos. 110018-EU, 080317-EI, 080148-EI, 040817-EI and 020262-EI).
6 The FPSC has also considered whether a load forecast is applied consistently,
7 that is, whether a load forecast used for one purpose, such as a rate filing, is
8 the same forecast used for other purposes, such as generation planning
9 (Docket No. 080317-EI). A consistently used forecast suggests a solid and
10 unbiased set of forecasting assumptions and methodologies which can be
11 relied upon for multiple purposes. Additionally, the FPSC has considered
12 whether a load forecast appears reasonable given historical trends (Docket
13 Nos. 080317-EI, 080148-EI, 040817-EI, and 020262-EI). Finally, the FPSC
14 has considered whether the utility has a record of providing accurate, reliable
15 forecasts (Dockets Nos. 920324-EI and 910890-EI).

16 **Q. Does the load forecast supported by FPL in this proceeding meet these**
17 **criteria?**

18 A. Yes, the load forecast FPL is supporting in this case meets the criteria the
19 FPSC has historically used in evaluating utilities' load forecasts. The load
20 forecast supported by FPL should be approved in this proceeding.

21

1 **Q. Does the load forecast supported by FPL in this proceeding rely on**
2 **statistically sound methods?**

3 A. Yes, the load forecast supported by FPL in this proceeding relies on
4 statistically sound methods. FPL relies on econometrics as the primary tool
5 for forecasting customer growth, net energy for load, and peak demands. An
6 econometric model is a numerical representation, obtained through statistical
7 estimation techniques, of the degree of relationship between a dependent
8 variable, e.g., the level of net energy for load, and the independent
9 (explanatory) variables. A change in any of the independent variables will
10 result in a corresponding change in the dependent variable. On an historical
11 basis, econometric models have proven to be highly effective in explaining
12 changes in the level of customer or load growth. FPL has consistently relied
13 on econometric models for various forecasting purposes, and the modeling
14 results have been reviewed and accepted by this Commission in past
15 proceedings.

16 **Q. Does the load forecast supported by FPL in this proceeding incorporate**
17 **reasonable input assumptions?**

18 A. Yes, the load forecast supported by FPL in this proceeding incorporates
19 reasonable input assumptions. FPL has found that population growth,
20 weather, the economy, and changes in the appliance stock and efficiency
21 standards are the primary drivers of future electricity needs. Accordingly, the
22 models used to forecast customer growth, net energy for load, and peak
23 demand rely on independent variables representing these various drivers.

1 Moreover, FPL relies on leading industry experts for projections of these
2 independent variables. Population projections are produced by the University
3 of Florida's Bureau of Economic and Business Research ("BEBR") in
4 conjunction with the Office of Economic and Demographic Research
5 ("EDR") of the state legislature. The projected economic conditions are from
6 IHS Global Insight, a reputable economic forecasting firm. Estimates of
7 changes in the appliance stock and efficiency standards are provided by
8 ITRON, one of the leading consultants on energy issues. Independent
9 variables based on inputs from each of these respected industry experts have
10 proven to be statistically significant factors influencing FPL's net energy for
11 load and peak demands.

12 **Q. Is the load forecast supported in this proceeding FPL's official load**
13 **forecast for all business purposes?**

14 A. Yes. The load forecast supported in this proceeding is the company's official
15 forecast for all planning and budgeting purposes. Consequently, it is the same
16 forecast utilized for generation planning purposes, including the Need
17 Determination for the Modernization of Port Everglades (Docket No. 110309-
18 EI). It is also the same forecast utilized in the mid-course correction to FPL's
19 2012 fuel adjustment factors in Docket No. 110001-EI.

20 **Q. Is the load forecast that FPL supports in this proceeding reasonable given**
21 **historical trends?**

22 A. Yes. FPL's load forecast is reasonable given historical trends. The projected
23 levels of net energy for load in 2012 and 2013 are well within the range

1 recently experienced. Overall, FPL's load forecast represents a balanced view
2 showing modest, but positive increases in customers and sales.

3 **Q. Does FPL have a proven record of providing accurate, reliable forecasts?**

4 A. Yes. For example, FPL forecasted net energy for load of 110,207 Gigawatt
5 Hours ("GWh") for the fiscal year 2010 in the last rate case. This projection
6 was within 0.3% of actual weather-normalized net energy for load for the
7 year. This represents an excellent degree of forecasting accuracy and supports
8 FPL's forecasting methodology.

9 **Q. Are actual weather-normalized sales the appropriate gauge of forecasting**
10 **accuracy?**

11 A. Yes. Actual weather-normalized sales are a better reflection of trends in
12 electric usage than the unadjusted level of actual sales, which may be
13 influenced by erratic and unpredictable weather fluctuations. Quite simply,
14 actual weather-normalized sales are based on long-term or "normal" weather
15 conditions for a given month. Likewise, forecasted electric sales are based on
16 the assumption of normal weather conditions, that is, the weather conditions
17 which have occurred on average over the long-term. A variance analysis
18 comparing actual weather-normalized sales with forecasted sales creates an
19 "apples to apples" comparison. Unlike other inputs, the sales forecast is
20 developed with the understanding that actual weather conditions will likely
21 deviate from the normal conditions assumed in the forecast. This makes the
22 assumption of normal weather conditions unique relative to other inputs into
23 the sales forecast, such as economic conditions, customer growth, and so

1 forth. As a result, it is standard industry practice to use actual weather-
2 normalized sales in determining forecasting accuracy. For example, electric
3 utilities in Florida have routinely relied on weather-normalized sales variances
4 in their rate filings consistent with the FPSC's policy that rates be based on
5 weather-normalized sales (Docket No. 100410-EI). However, the use of
6 weather-normalized sales variances is not limited to rate proceedings. The
7 Florida Reliability Coordinating Council states that utilities should use
8 weather-normalized variance as the appropriate measure of forecasting
9 accuracy.

10 **Q. Is FPL's method of computing actual weather-normalized sales consistent**
11 **with standard business practices?**

12 A. Yes. FPL relies on a twenty year history in order to determine normal
13 weather patterns. This is the same time period utilized by Gulf Power and
14 Tampa Electric Company in their most recent rate proceedings. It should also
15 be noted that the twenty year horizon is also the same period utilized to
16 determine weather conditions in FPL's load forecast. Thus, the method of
17 computing actual weather-normalized sales is consistent with the weather
18 outlook assumed in the load forecast utilized for all planning purposes,
19 including long-term generation planning.

20 **Q. Did the Commission adopt FPL's 2010 forecast of net energy for load in**
21 **the last rate case?**

22 A. No. The FPSC in the last rate case approved one of the alternative forecasts
23 offered by the Office of Public Counsel. The FPSC approved forecast also

1 included the assumption of normal weather, but projected a higher level of net
2 energy for load in 2010 relative to FPL's forecast. Specifically, the FPSC
3 approved forecast for 2010 was 111,300 GWh, 1.0% higher than the forecast
4 filed by FPL. The FPSC approved forecast exceeded actual weather-
5 normalized net energy for load for the fiscal year by 1.3%. As a result, the
6 FPSC approved forecast was a less accurate prediction of actual weather-
7 normalized sales than was FPL's forecast.

8 **Q. Was the load forecast approved by the FPSC in the last rate case**
9 **approved for use in any other docket or for any other purpose?**

10 A. No. The load forecast approved by the FPSC in the last rate case was not
11 approved for use in any other docket or for any other purpose. Consequently,
12 the load forecast approved by the FPSC for rate making purposes was not
13 consistent with the load forecast used for other planning purposes, including
14 long-term generation planning.

15 **Q. If the FPSC approves a load forecast other than the one supported by**
16 **FPL in this proceeding, should the approved load forecast's impact on**
17 **generation planning be considered?**

18 A. Yes. Maintaining consistency and integrity in the load forecasting process
19 would suggest that the same load forecast used for rate making purposes
20 should be used for other purposes, including generation planning. This is the
21 case with the load forecast FPL is supporting in this case. If the FPSC
22 approves a load forecast other than the one supported by FPL in this

1 proceeding, it would be appropriate to consider what impact the approved
2 forecast might have on generation planning.

3

4

III. CUSTOMER GROWTH FORECAST

5

6 **Q. How many customers receive their electric service from FPL?**

7 A. FPL currently serves over 4.5 million customers. This represents a population
8 of almost nine million people and includes customers in thirty-five Florida
9 counties. FPL's long-term customer growth has been substantial. The
10 number of customers has doubled since 1981. Even with the economic
11 slowdown over the last decade the number of customers has increased by
12 more than 20% since 1999.

13 **Q. Based on projections for 2012 what is FPL's cumulative customer growth
14 since 1985?**

15 A. FPL is projecting to serve approximately 4.6 million customers in 2012, an
16 increase of 75% from the 2.6 million customers served in 1985. This
17 represents a cumulative gain of approximately two million customers since
18 1985.

19 **Q. Please explain the development of FPL's customer growth forecast.**

20 A. The growth of customers in FPL's service territory is a primary driver of the
21 growth in the level of net energy for load and peak demand. In order to
22 project the growth in the number of customers, FPL utilized the August 2011

1 Florida population projections from EDR, the most current projections
2 available at the time the forecast was developed.

3 **Q. What rate of population growth is EDR projecting in its August 2011**
4 **forecast?**

5 A. In the near term, EDR is forecasting a continuation of the low rates of
6 population growth Florida has experienced in recent years. Specifically, a
7 consistent 0.6% annual rate of population growth is projected between 2010
8 and 2012. By 2013, EDR is projecting a higher 0.9% rate of population
9 growth. Indeed, EDR is projecting that 2013 will have the state's highest
10 population growth in six years with an annual increase of about 171,000.
11 Cumulatively, EDR is projecting a population increase of more than 390,000
12 between 2010 and 2013.

13 **Q. How does EDR's August 2011 population forecast compare with their**
14 **prior projections?**

15 A. In the short-run, EDR's August 2011 population forecast is somewhat lower
16 than the projections that had been developed in February 2011 and November
17 2010. Nevertheless, long-term percentage growth rates are comparable under
18 the November 2010, February 2011 and August 2011 population forecasts.

19 **Q. Has EDR revised its projected population growth since August 2011?**

20 A. No. Although EDR held a population conference on November 30, 2011, it
21 elected not to make any changes to the rates of population growth projected
22 for 2012 or 2013. EDR did revise its population estimate for the year 2011,

1 but this change resulted in a trivial increase of 230 Floridians or around
2 0.001% of the state's population base.

3 **Q. What is FPL's forecasted customer growth?**

4 A. The number of customers is expected to grow by 32,124 or 0.7% in 2012.
5 With higher population growth, the number of customers is then projected to
6 increase by 45,975 or 1.0% in 2013. In 2013, the number of customers is
7 projected to reach 4,625,149, resulting in a cumulative increase of almost
8 105,000 customers since 2010.

9 **Q. How do FPL's projected customer growth rates compare with the growth
10 rates experienced in recent years?**

11 A. FPL's projected customer growth rates are significantly higher than the
12 depressed levels of customer growth experienced during the recent economic
13 downturn. FPL's customer growth averaged less than 8,000 per year between
14 2007 and 2010 versus the growth of 32,124 projected for 2012 and 45,975
15 projected for 2013. In fact, the forecasted customer growth in 2013 is
16 projected to be the company's highest since 2007.

17 **Q. Is FPL's projected customer growth reasonable?**

18 A. Yes. The forecast incorporates the most recent EDR population projections
19 available at the time the forecast was developed, relies on the forecasting
20 methods previously reviewed and accepted by the Commission, and is
21 consistent with historical trends in customer growth.

22

1 **Q. What is FPL's forecast of new service accounts?**

2 A. FPL is projecting 32,582 new service accounts ("NSAs") in 2012 and 41,187
3 NSAs in 2013. While somewhat low by historical standards, this represents
4 an increase from the 24,101 NSAs recorded in 2011. The cumulative number
5 of NSAs for the years 2011 through 2013 is projected to be 97,870. FPL's
6 forecast of NSAs takes into account projected trends in construction activity
7 and recent actuals. It is also consistent with the pattern of gradual
8 improvement indicated by FPL's customer forecast.

9

10 **IV. FORECAST OF NET ENERGY FOR LOAD**

11

12 **Q. What are the primary determinants of net energy for load?**

13 A. In addition to customer growth, the primary determinants of net energy for
14 load include the economy, weather, changes in appliance stock and efficiency
15 standards and the addition of new wholesale contracts. Accordingly, FPL
16 forecasts energy use per customer, defined as net energy for load divided by
17 the number of customers, using an econometric model with explanatory
18 variables representing these factors.

19 **Q. How are weather conditions incorporated into the energy use per
20 customer model?**

21 A. The weather variables included in the energy use per customer model are
22 cooling degree hours using a base of 72 degrees and winter heating degree
23 days using a base of 66 degrees. In addition, a second measure of heating

1 degree days is included using a base of 45 degrees in order to capture the
2 additional heating load resulting from sustained periods of unusually cold
3 weather. As previously discussed, the forecast assumes normal weather
4 conditions based on twenty year historical averages.

5 **Q. Please describe economic conditions in Florida in recent years.**

6 A. The most recent recession, often referred to as the Great Recession, took an
7 especially heavy toll on the Florida economy. Although the Great Recession
8 officially started in December 2007 and ended in June 2009 according to the
9 National Bureau of Economic Research, the recession's impact on Florida
10 extended well beyond this time period. Beginning in July 2007 and extending
11 until September 2010, Florida experienced a persistent pattern of year-over-
12 year declines in employment. While job losses were initially concentrated in
13 the construction sector, ultimately almost every industry was affected.
14 Cumulatively, almost 900,000 jobs were lost in Florida during this downturn,
15 equivalent to more than 10% of the workforce.

16 **Q. What economic outlook is assumed in FPL's energy use per customer
17 model?**

18 A. FPL's economic assumptions are provided by IHS Global Insight, one of the
19 leading economic forecasting firms. While acknowledging the recovery has a
20 long way to go, IHS Global Insight's outlook on the Florida economy is one
21 of "cautious optimism." Florida added more than 50,000 jobs in the first eight
22 months of 2011, leading IHS Global Insight to conclude that the state's labor
23 market is on the mend. Indeed, by year-end 2011 Florida was adding jobs at

1 an estimated annual rate of more than 100,000, more than in any year since
2 2006. While significant problems persist in the housing market, IHS Global
3 Insight's forecast indicates a positive, if somewhat modest, economic growth
4 for the state. IHS Global Insight's forecast anticipates that the moderately
5 positive increases in Florida's real per capita income experienced in 2011 will
6 continue into 2012 and 2013 while the employment growth will also continue
7 to steadily improve.

8 **Q. Does IHS Global Insight's forecast assume a double-dip recession?**

9 A. No. The base case forecast from IHS Global Insight incorporated into the
10 sales forecast does not assume a double-dip recession. A double-dip recession
11 refers to two recessions occurring in close proximity to each other. As noted
12 earlier, the Great Recession officially occurred between December 2007 and
13 June 2009. While the effects of the Great Recession continued to linger for
14 months, particularly in Florida, national output, as measured by the real gross
15 domestic product ("GDP"), has registered positive growth since the third
16 quarter of 2009. IHS Global Insight estimates real GDP growth of 1.8% in
17 2011 followed by growth of 1.6% in 2012 and 2.5% in 2013. These positive
18 growth rates in real GDP, although modest by historical standards, assume
19 that the economy will not lapse into another recession. Nevertheless, IHS
20 Global Insight does acknowledge that there is a risk of an outright contraction
21 in the economy. As of November 2011, IHS placed the risks of a double-dip
22 recession at 40%. Thus, there is a risk that the economic assumptions
23 incorporated into the sales forecast are too optimistic. If economic

1 assumptions prove to be too optimistic, then the actual level of weather-
2 normalized sales is likely to be below the level presented in FPL's forecast.

3 **Q. How are economic conditions incorporated into the energy use per**
4 **customer model?**

5 A. The impact of the economy is captured through a composite variable based on
6 Florida real per capita income and the percent of the state's population that is
7 employed. Thus, this composite economic variable encompasses two of the
8 primary drivers of the economy: employment and income levels. Florida's
9 real personal income and employment levels are provided by IHS Global
10 Insight. The population forecast is provided by EDR. Due to heavy
11 employment losses during the recession, this composite variable declined
12 between 2007 and 2010. With a modest improvement in the economy, a 1.6%
13 increase in this variable is estimated for 2011, followed by 2.2% growth in
14 2012. By 2013, a 2.4% increase in the Florida real per capita income
15 weighted by the percent of the population employed is projected. This would
16 be the strongest increase in this variable since 2006.

17 **Q. Does FPL use any other measures of the economy in forecasting energy**
18 **use per customer?**

19 A. Yes. FPL uses two additional measures of the economy in forecasting energy
20 use per customer. The first measure is designed to capture the influence the
21 housing market has on the economy and ultimately on energy use per
22 customer. The second is designed to capture the impact that variations in
23 energy prices have on electricity usage.

1 **Q. Why does FPL use a measure of the housing market in forecasting energy**
2 **use per customer?**

3 A. The increase in empty homes resulting from the housing crisis was a
4 significant factor in the Great Recession recently impacting our state. As the
5 housing market slowly recovers and these empty homes are gradually re-
6 occupied, a positive impact on the economy is expected. To capture this
7 trend, a proxy for empty homes was developed based on the ratio of inactive
8 meters to total customers. The use of this proxy is supported by FPL's
9 econometric model which shows that the ratio of inactive meters to total
10 customers is a statistically significant factor in the determination of energy use
11 per customer. FPL's forecast of the ratio of inactive meters to total customers
12 is based on its forecast of total customers and inactive meters. The forecast of
13 total customers is based on the econometric model previously discussed. The
14 forecast of inactive meters is based on the historical relationship between
15 customers, NSAs and inactive meters.

16 **Q. What does FPL's forecast of the ratio of inactive meters to total**
17 **customers show?**

18 A. FPL's forecast shows a continued decline in the ratio of inactive meters to
19 total customers. This ratio peaked at 7.1% in September 2009 during the
20 height of the housing crisis. With small but steady decreases in the number of
21 empty homes, the ratio of inactive meters to total customers dropped to 6.1%
22 by the end of 2011. This steady improvement in the housing market is
23 projected to continue with the ratio of inactive meters to total customers

1 falling to 5.7% by the end of 2012 and 5.1% by the end of 2013. As empty
2 homes are re-occupied, consumer confidence is likely to increase as should
3 customers' willingness to spend on all goods and services, including
4 electricity. As a proxy for empty homes, the decline in the ratio of inactive
5 meters to total customers is projected to have a positive impact on use per
6 customer.

7 **Q. How does FPL measure the impact that rising energy prices have on**
8 **electric consumption?**

9 A. FPL uses IHS Global Insight's forecast of the consumer price index for energy
10 to measure the impact rising energy prices have on electric consumption. IHS
11 Global Insight shows a sharp 15% increase in the consumer price index for
12 energy in 2011. However, price increases are expected to moderate and IHS
13 Global Insight is projecting a 1.2% increase in the consumer price index for
14 energy in 2012 followed by a 3.7% increase in 2013.

15 **Q. How does FPL capture the influence of changes in the appliance stock**
16 **and efficiency standards in its forecast?**

17 A. FPL includes a variable on energy efficiency standards in its energy use per
18 customer model based on end-use estimates developed by ITRON, a leading
19 energy consulting firm. ITRON's estimates quantify the reduction in energy
20 use resulting from federal efficiency standards, such as those codified in the
21 Energy Policy Act of 2005 ("EPAAct") and the Energy Independence and
22 Security Act of 2007 ("EISA"). The variable in the energy use per customer
23 model is based on weather-sensitive end-use efficiency estimates from

1 ITRON. As is the case for all variables in the energy use per customer model,
2 the net impact on sales is based on the value of the independent variable (in
3 this case weather-sensitive end-use efficiency estimates) and the model
4 coefficient. In the case of energy efficiency standards, the input from ITRON
5 represents the savings from specific weather-sensitive appliance standards
6 based strictly on an engineering analysis of the equipment at issue. The net
7 impact on usage, including any behavioral changes, is captured by applying
8 the model coefficient to the input from ITRON. It should be noted that the
9 impact from energy efficiency standards as discussed here do not include the
10 impact from utility-sponsored demand-side management ("DSM") programs.
11 The impact of incremental DSM is discussed later in my testimony.

12 **Q. How is the output from the energy use per customer model incorporated**
13 **into the net energy for load forecast?**

14 A. The output from the energy use per customer model is multiplied by the
15 forecasted number of customers. The result is a preliminary estimate of net
16 energy for load. Incremental wholesale loads are then added to this
17 preliminary estimate of the forecasted net energy for load.

18 **Q. Why is the forecast adjusted to include incremental wholesale loads?**

19 A. The forecast is adjusted for incremental wholesale loads in order to reflect
20 additional load not otherwise reflected in FPL's historical load levels resulting
21 from new or modified wholesale contracts. The largest of these contracts is
22 the power sales contract to Lee County, a not-for-profit electric distribution
23 cooperative serving a five-county area in Southwest Florida. In August 2007,

1 the parties came to an agreement by which FPL became Lee County's power
2 supplier beginning in 2010. Based on information provided by the customer,
3 Lee County's contribution to FPL's net energy for load is forecasted to grow
4 from an estimated 1,198 GWh in 2011 to 1,224 GWh in 2012 and 1,243 GWh
5 in 2013. Projections of Lee County's contribution to net energy for load are
6 included as a line item adjustment increasing FPL's forecasted net energy for
7 load.

8 **Q. Are adjustments made for any other new or expanded wholesale**
9 **contracts?**

10 A. Yes. FPL has been serving the Florida Keys Electric Cooperative under a
11 partial requirements service agreement since January 1992. Effective May
12 2011, FPL began serving the Florida Keys Electric Cooperative as a full
13 requirements customer. FPL is expected to serve approximately 35 MW of
14 additional load as a result of the Florida Keys Electric Cooperative's change
15 from a partial requirements customer to a full requirements customer. This
16 additional load from the Florida Keys Electric Cooperative is expected to
17 result in an additional 213 GWh of sales which is also included as a line item
18 adjustment increasing the net energy for load forecast. Lastly, FPL began
19 providing full requirements service to the City of Wauchula effective October
20 2011. Service to the City of Wauchula is expected to add an additional 66
21 GWh to FPL's net energy for load.

22

1 **Q. Are adjustments also made to reflect the expected termination of any**
2 **existing wholesale contracts?**

3 A. Yes. Existing contracts with the City of Key West and Metro-Dade County
4 are scheduled to terminate in 2013. The termination of these contracts is
5 expected to reduce the 2013 forecast of net energy for load by 144 GWh. On
6 balance, the combination of new, expanded and terminated wholesale
7 contracts is expected to add 1,379 GWh to the 2013 forecast of energy for
8 load, an increase of about 1.2%.

9 **Q. Are there any other adjustments to the net energy for load forecast in**
10 **addition to those for incremental wholesale load?**

11 A. Yes. FPL includes adjustments for the incremental load resulting from plug-
12 in electric vehicles and from the Economic Development Rider and Existing
13 Facility Economic Development Rider. In addition, FPL reduces net energy
14 for load based on the incremental impact of DSM programs.

15 **Q. Why is an adjustment being made for plug-in electric vehicles?**

16 A. The forecast is adjusted for plug-in electric vehicles in order to reflect
17 additional load not otherwise captured in FPL's historical load levels. The
18 load from plug-in electric vehicles in 2011 is estimated to be only about 6
19 GWh. By 2013, the load from plug-in electric vehicles is projected to
20 increase to almost 38 GWh, an increase of about 500%.

21 **Q. How is the load from plug-in electric vehicles projected?**

22 A. Projections on the number of plug-in electric vehicles in FPL's service
23 territory were developed by the company's Customer Service Business Unit.

1 Projections of the U.S. market for plug-in electric vehicles were first
2 developed based on a review of multiple forecasts from leading experts and
3 discussions with knowledgeable professionals in the automotive industry.
4 FPL's share of the U.S. market for plug-in electric vehicles was then
5 estimated based on the share of U.S. hybrid electric vehicles (excluding plug-
6 in electric vehicles) that is currently located in FPL's service area. The
7 contribution to net energy for load from plug-in electric vehicles was then
8 derived from the vehicle forecast using an estimate of kWh per vehicle.

9 **Q. Why are adjustments being made for the Economic Development Rider**
10 **and Existing Facility Economic Development Rider?**

11 A. Under both the Economic Development Rider and Existing Facility Economic
12 Development Rider, customers are provided discounts for adding new or
13 incremental load. To qualify for either rider, customers are required to verify
14 that the availability of the rider was a significant factor in their location or
15 expansion decision. The Economic Development Rider was modified in July
16 2011 to allow customers with new or incremental load of at least 350 kW to
17 qualify for the rider. Customers had previously been required to have at least
18 5,000 kW of new or incremental load to qualify for the rider and there was
19 very limited customer participation. The lower threshold is expected to result
20 in a significant increase in customer participation on the rider. Effective July
21 2011, a new rider specifically for customers adding at least 350 kW of new
22 load by occupying a currently vacant premise was also approved. The
23 Economic Development Rider and Existing Facilities Economic Development

1 Rider are expected to add incremental load to net energy for load between
2 2013 and 2016. Based on estimates developed by FPL's Economic
3 Development group, in conjunction with the Customer Service and Regulatory
4 Business Units, the Economic Development Rider and Existing Facilities
5 Economic Development Rider are projected to add about 93 GWh to net
6 energy for load in 2013.

7 **Q. Why are adjustments being made for the impact of incremental DSM?**

8 A. Adjustments are being made for the impact of incremental DSM in order to
9 reflect reductions in load not otherwise reflected in history. The effects of
10 DSM energy efficiency programs occurring through 2011 are assumed to be
11 embedded in actual usage data for forecasting purposes. The impact of
12 incremental DSM that FPL plans to implement in the future is treated as a line
13 item reduction to the forecast. The impact of incremental DSM is consistent
14 with Commission Order No. PSC-11-0346-PAA-EG issued in Docket No.
15 100155-EG.

16 **Q. Have adjustments to the net energy for load forecast been incorporated
17 into prior forecasts?**

18 A. Yes. The 2011 Ten Year Site Plan forecast incorporated adjustments for
19 incremental wholesale load and new load resulting from plug-in electric
20 vehicles. In fact, these adjustments have been incorporated into FPL's long
21 term forecast since the 2009 Ten Year Site Plan. In addition, the resource
22 planning process has treated incremental DSM as a line item reduction to the
23 sales forecast for several years. Because the changes to the Economic

1 Development Rider and the addition of the Existing Facilities Economic
2 Development Rider were only recently approved, their impact was not
3 incorporated into prior forecasts.

4 **Q. What is FPL's forecasted net energy for load?**

5 A. FPL is forecasting net energy for load of 111,021 GWh in 2012 or an increase
6 of about 1.4% over actual weather-normalized 2011. Moderate growth is
7 expected to continue in 2013, with net energy for load increasing by 1.1% to
8 reach 112,201 GWh.

9 **Q. How does the level of FPL's forecasted net energy for load compare with**
10 **recent actuals?**

11 A. The level of forecasted net energy for load for 2012 and 2013 is projected to
12 remain below the historical high point in sales attained prior to the Great
13 Recession, but above the low point in sales reached in 2009. As Exhibit RM-
14 2 shows, actual weather-normalized net energy for load reached its high point
15 in 2007 before falling to its recent lowest point two years later during the
16 height of the Great Recession. The forecasted net energy for load for 2012 is
17 projected to be almost 2,000 GWh higher than the low point in sales reached
18 in 2009. By 2013, the forecasted net energy for load is projected to be 3,169
19 GWh above 2009 sales. However, even with this growth, the forecasted net
20 energy for load in 2013 is more than 2,000 GWh below the historical high
21 point in sales reached in 2007.

22

1 **Q. How do FPL's forecasted growth rates in net energy for load compare**
2 **with recent actuals?**

3 A. The forecasted growth rates in net energy for load in 2012 and 2013 are the
4 highest growth rates since 2006. Weather-normalized net energy for load is
5 forecasted to grow by 1.4% in 2012 and 1.1% in 2013. By contrast, actual
6 weather-normalized net energy for load declined in 2008, 2009 and 2011, and
7 the 0.8% increase in actual weather-normalized sales in 2010 was due largely
8 to the sales to the Lee County Cooperative.

9 **Q. Is FPL's methodology for forecasting net energy for load the same**
10 **methodology utilized by the company in its last rate case?**

11 A. Fundamentally, yes. Both forecasts rely on econometric models and inputs
12 representing the major factors influencing electric sales, including weather,
13 the economy, energy efficiency standards and so forth. Some refinements
14 have been made. For example, the impact of empty homes and energy
15 efficiency standards were addressed in the last rate case through out-of-model
16 adjustments. In the current forecast, empty homes and energy efficiency
17 standards are incorporated as specific variables in the model. Thus, the
18 impact of empty homes and energy efficiency standards in the current forecast
19 is statistically supported and determined by the econometric model used to
20 forecast sales.

21

1 **Q. Is FPL's net energy for load forecast based on an econometric model with**
2 **a strong goodness of fit and a high degree of statistical significance?**

3 A. Yes. Goodness of fit refers to how closely the predicted values of a model
4 match the actual observed values. The energy use per customer model used to
5 forecast FPL's net energy for load has a strong goodness of fit as
6 demonstrated by the model's adjusted R square of 99.4%. This means that
7 99.4% of the variability in energy use per customer is explained by the model.
8 In addition, the coefficients for all of the variables have the expected sign (+/-)
9 and are statistically significant. This indicates that the variables influencing
10 net energy for load have been properly identified and their predicted impact is
11 statistically sound. Finally, the model has a Durbin-Watson statistic of 2.062,
12 indicating the absence of significant autocorrelation. The absence of
13 significant autocorrelation is a desirable quality in a well-constructed model.
14 Overall, the model has excellent diagnostic statistics.

15 **Q. Is FPL's net energy for load forecast reasonable?**

16 A. Yes. FPL's net energy for load forecast is based on assumptions developed by
17 industry experts, is consistent with historical patterns, and relies on
18 methodologies which have proven to be accurate based on actual weather-
19 normalized net energy for load. FPL's net energy for load forecast is based on
20 an econometric model with a strong goodness of fit and a high degree of
21 statistical significance. FPL is confident that the relationship that exists
22 between the level of net energy for load and the economy, weather, customers,

1 energy efficiency standards, and other variables have been properly assessed
2 and numerically quantified.

3

4

V. DELIVERED AND BILLED SALES

5

6 **Q. How do delivered sales differ from billed sales?**

7 A. Because meters are read throughout the month, billed sales in any given
8 month reflect a mix of usage from the current and prior month. Delivered
9 sales, on the other hand, are based on customer usage in the current month.
10 Delivered sales are derived from net energy for load less line losses and
11 company use. Delivered sales are a component of billed sales, but billed sales
12 also reflect the changes in unbilled sales (i.e. sales delivered in one month, but
13 not billed until the following month).

14 **Q. How is FPL's forecast of delivered sales developed?**

15 A. Historical patterns in monthly losses, including line losses and company use,
16 are first examined. Based on recent actuals, monthly loss factors are then
17 projected. A preliminary estimate of delivered sales was then developed by
18 applying these projected monthly loss factors to the forecast of net energy for
19 load. An adjustment was then made for the decrease in line losses expected as
20 a result of the deployment of smart meters.

21

1 **Q. Why is the deployment of smart meters expected to result in a reduction in**
2 **line losses?**

3 A. The deployment of smart meters is expected to result in a number of
4 efficiency improvements, including better theft detection. As a result of these
5 efficiency improvements, line losses, which include theft and unaccounted for
6 usage, are expected to be lower.

7 **Q. What impact is this reduction in line losses expected to have on delivered**
8 **sales?**

9 A. A 0.29% increase in delivered sales is expected in 2013 as a result of the
10 reduction in line losses associated with the deployment of smart meters. A
11 very small 0.02% decline in net energy for load is also expected due to a
12 reduction in usage by non-paying customers.

13 **Q. How is FPL's forecast of billed sales developed?**

14 A. Billed sales are based on delivered sales plus the unbilled sales for the prior
15 month minus the unbilled sales for the current month. Unbilled sales are
16 estimated based on the historical pattern between unbilled sales and net
17 energy for load by month.

18 **Q. Is the reduction in line losses associated with the deployment of smart**
19 **meters also expected to have an impact on billed sales?**

20 A. Yes. Allowing for lags in the billing cycle, there is ultimately a one-for-one
21 relationship between delivered sales and billed sales. Hence, the decrease in
22 line losses resulting from the deployment of smart meters is also expected to
23 result in an increase in billed sales. As a result of the reduction in line losses

1 associated with the deployment of smart meters any rate relief approved in
2 this proceeding will be spread over more kWh resulting in a smaller
3 cents/kWh increase.

4 **Q. What is FPL's forecast of retail delivered sales?**

5 A. Retail delivered sales are expected to reach 101,757 GWh in 2012, a 1.1%
6 increase from the weather-normalized level estimated for 2011. In 2013,
7 retail delivered sales are expected to reach 103,315 GWh, a 1.5% increase
8 from 2012.

9 **Q. How does FPL's forecast of retail delivered sales compare with recent**
10 **actuals?**

11 A. The 1.5% increase in retail delivered sales forecasted for 2013 would be the
12 largest increase in weather-normalized retail delivered sales since 2006, a
13 span of seven years. Relative to recent actuals, the growth in retail weather-
14 normalized sales in 2013 reflects moderately higher increases in customer
15 growth and moderate improvements in the economy.

16

17 VI. CUSTOMERS AND SALES BY REVENUE CLASS

18

19 **Q. How does FPL forecast customers by revenue class?**

20 A. Econometric models are developed to forecast customers in the residential,
21 commercial, industrial, and street & highway revenue classes. Customer
22 forecasts for the wholesale, railroads, and other revenue classes are based on
23 class-specific information. The residential customer forecast is adjusted for

- 1 the difference between the sum of the revenue classes and the overall number
2 of customers derived from the total customer model. This adjustment is made
3 to the residential customer forecast because residential customers account for
4 the vast majority of FPL's customer base. By making this adjustment,
5 consistency between the total customer forecast and customer by revenue
6 class forecast is assured. In addition, using the total customer model to
7 project the total customers is preferable to using the summation of the
8 individual revenue class models because the statistical fit of the total customer
9 models equals or exceeds all of the individual revenue class models.
- 10 **Q. How does FPL forecast billed sales by revenue class?**
- 11 A. Separate econometric models are developed for the residential, commercial,
12 and industrial revenue classes. Sales forecasts for the wholesale, street &
13 highway lighting, railroads and other revenue classes are based on class-
14 specific information. The residential and commercial sales forecasts are then
15 proportionately adjusted for the difference between the sum of the revenue
16 classes and the overall billed sales derived from the total net energy for load
17 forecast. This adjustment is made to the residential and commercial forecast
18 because residential and commercial customers account for the vast majority of
19 FPL's sales. This adjustment assures consistency within the forecast.
- 20 **Q. Instead of adjusting residential and commercial sales, would it be
21 appropriate to adjust total FPL sales to match the sum of the individual
22 revenue class forecasts?**
- 23 A. No. Total sales is based on an econometric model with a superior statistical

1 fit relative to the individual revenue class models. Therefore, it is reasonable
2 to assume that the forecast of total FPL sales provides a more accurate
3 forecast relative to the sum of the individual revenue class forecasts.

4 **Q. Has FPL previously used this method of assuring consistency by**
5 **adjusting residential and commercial sales so that the sum of the**
6 **individual revenue classes matches total billed sales?**

7 A. Yes. Adjusting residential and commercial sales so that the sum of the
8 individual revenue classes matches total billed sales has been used for a
9 number of years. This method of assuring consistency has been reviewed and
10 accepted by the Commission in multiple proceedings, including Docket No.
11 080677-EI.

12 **Q. Are the assumptions incorporated into the individual sales and customer**
13 **forecasts by revenue class consistent with those used in the total customer**
14 **and total billed sales forecast?**

15 A. Yes. The specific assumptions regarding the weather, population growth and
16 the economy used in the individual sales and customer forecasts by revenue
17 class are consistent with those used in the total customer and total billed sales
18 forecast. As previously discussed, these assumptions are provided by leading
19 industry experts.

20 **Q. Is additional detail available on how the customer and sales forecasts by**
21 **revenue class are developed?**

22 A. Yes. MFR F-5 provides additional detail on the forecasting models
23 supporting the customer and sales forecasts by revenue class.

24

1 **Q. What is FPL's forecast of billed jurisdictional sales?**

2 A. Billed jurisdictional sales or billed retail sales are defined as total billed sales
3 less wholesale billed sales. FPL is forecasting billed jurisdictional sales of
4 101,686 GWh in 2012 and 103,200 GWh in 2013.

5 **Q. Is FPL's forecast of billed jurisdictional sales reasonable?**

6 A. Yes. The forecast is consistent with the forecasts of net energy for load and
7 billed sales previously discussed. The forecast is based on sound statistical
8 methods and inputs provided by industry experts. The forecast is reasonable
9 given historical trends in sales and relies on proven forecasting methods.

10

11

VII. MONTHLY PEAK FORECAST

12

13 **Q. How does FPL forecast monthly peaks?**

14 A. Econometric models are developed to forecast the annual summer and winter
15 peaks. The annual summer peak is assumed to occur in August since that
16 month has historically accounted for the highest percentage of annual summer
17 peak days. The annual winter peak is assumed to occur in January since that
18 month has historically accounted for the highest percentage of annual winter
19 peak days. The monthly peaks for April, May, June, July, September, and
20 October are projected based on each month's historical relationship to the
21 annual summer peak. The monthly peaks for February, March, November,
22 and December are projected based on each month's historical relationship to
23 the annual winter peak.

1 **Q. How does FPL forecast the annual summer peak?**

2 A. FPL uses an econometric model to forecast summer peak per customer. This
3 econometric model includes variables for the weather, the real price of
4 electricity, the economy, and energy efficiency standards. Consistent with the
5 model used to forecast net energy for load, the impact of the economy is
6 captured through a composite variable based on Florida real per capita income
7 and the percent of the state's population that is employed. Likewise, the
8 impact of energy efficiency standards is based on inputs provided by ITRON.
9 The summer peak per customer model also incorporates two weather series:
10 the maximum temperature on the day of the summer peak and the sum of the
11 cooling degree hours during the day prior to the peak day. A preliminary
12 forecast of the annual summer peak is obtained by multiplying the forecasted
13 summer peak per customer from this model by the total number of customers.

14 **Q. Are any adjustments made to the annual summer peak forecast?**

15 A. Yes. The annual summer peak forecast is adjusted for incremental wholesale
16 loads, new load resulting from plug-in electric vehicles and incremental load
17 resulting from the Economic Development Rider and Existing Facilities
18 Economic Development Rider.

19 **Q. Is FPL's summer peak demand forecast based on an econometric model
20 with a strong goodness of fit and a high degree of statistical significance?**

21 A. Yes. Goodness of fit refers to how closely the predicted values of a model
22 match the actual observed values. FPL's summer peak model has a strong
23 goodness of fit as demonstrated by the model's adjusted R square of 92.6%.

1 This means that 92.6% of the variability in the summer peak per customer is
2 explained by the model. In addition, the coefficients for all of the variables
3 have the expected sign (+/-) and are statistically significant. This indicates
4 that the variables influencing the summer peak demand have been properly
5 identified and their predicted impact is statistically sound. Finally, the model
6 has a Durbin-Watson statistic of 2.045 indicating the absence of significant
7 autocorrelation. The absence of significant autocorrelation is a desirable
8 quality in a well-constructed model. Overall, the summer peak model has
9 excellent diagnostic statistics.

10 **Q. How does FPL forecast the annual winter peak?**

11 A. Like the system summer peak model, the winter peak model is also an
12 econometric model. The winter peak model is a per-customer model that
13 includes two weather-related variables: the minimum temperature on the peak
14 day and the square of heating degree hours from the prior day until 9:00 a.m.
15 of the peak day. In addition, the model also includes a term for peaks
16 occurring during the weekends as these tend to be lower than weekday peaks.
17 The projected winter peak load per customer value is multiplied by the total
18 number of customers to derive a preliminary estimate of the forecasted winter
19 peak.

20 **Q. Are the same line item adjustments made to the summer peak forecast
21 also made to the winter peak forecast?**

22 A. Yes. The winter peak forecast is adjusted for incremental wholesale loads,
23 new load resulting from plug-in electric vehicles, and incremental load

1 resulting from the Economic Development Rider and Existing Facilities
2 Economic Development Rider.

3 **Q. How are energy efficiency standards treated in the winter peak forecast?**

4 A. ITRON developed estimates of the impact that energy efficiency standards are
5 likely to have on the winter peak, similar to the estimates developed for the
6 summer peak. The historical levels of the winter peak are first increased to
7 remove the historical impact of energy efficiency standards. The winter peak
8 per customer model is based on these adjusted historical levels. The future
9 impact from energy efficiency standards is then treated as a line item
10 adjustment reducing the level of the winter peak forecast.

11 **Q. Is FPL's winter peak demand forecast based on an econometric model
12 with a strong goodness of fit and a high degree of statistical significance?**

13 A. Yes. Goodness of fit refers to how closely the predicted values of a model
14 match the actual observed values. FPL's winter peak model has an adjusted R
15 square of 80.2%, meaning that 80.2% of the variability in the winter peak per
16 customer is explained by the model. This suggests a strong goodness of fit,
17 particularly given that the winter peak tends to be highly volatile from year to
18 year. In addition, the coefficients for all of the variables have the expected
19 sign (+/-) and are statistically significant. This indicates that the variables
20 influencing the winter peak demand have been properly identified and their
21 predicted impact is statistically sound. Finally, the model has a Durbin-
22 Watson statistic of 1.904 indicating the absence of significant autocorrelation.
23 The absence of significant autocorrelation is a desirable quality in a well-

1 constructed model. Overall, the winter peak model has excellent diagnostic
2 statistics.

3 **Q. Are the assumptions incorporated into the annual summer and winter**
4 **peak forecasts consistent with those used in the total customer and total**
5 **billed sales forecast?**

6 A. Yes. The specific assumptions regarding the weather, population growth, and
7 the economy used in the annual summer and winter peak forecasts are
8 consistent with those used in the total customer and total billed sales forecasts.
9 As previously discussed, these assumptions are provided by leading industry
10 experts.

11 **Q. What are FPL's forecasted annual summer and winter peaks?**

12 A. The annual winter peak is projected to reach 20,889 MW in 2012 and 21,101
13 MW in 2013 while the annual summer peak is projected to reach 21,623 MW
14 in 2012 and 21,931 MW by 2013.

15 **Q. Are FPL's forecasted annual winter and summer peaks reasonable?**

16 A. Yes. FPL's forecasted annual summer and winter peaks are based on
17 assumptions developed by industry experts, are consistent with historical
18 experience and rely on the forecasting methods previously reviewed and
19 accepted by the Commission. The models employed by FPL have a strong
20 goodness of fit and a high degree of statistical significance. FPL is confident
21 that the relationships that exist between the levels of peak demand, the
22 weather, customers, energy efficiency standards, and other variables have
23 been properly assessed and numerically quantified.

VIII. INFLATION FORECAST

1

2

3 **Q. What measures of inflation does FPL utilize in its budgeting process?**

4 A. FPL utilizes a forecast of the consumer price index ("CPI") as part of the
5 budgeting process. The same CPI forecast is also used in computing the
6 Commission's O&M Benchmark.

7 **Q. Based on the CPI what escalation in prices has been experienced in recent
8 years?**

9 A. Although the annual rate of inflation as measured by the CPI has been
10 relatively low by historical standards in recent years, the cumulative
11 escalation in prices has been significant. While the CPI increased at an annual
12 rate of 2.2% between 2006 and 2011, the cumulative increase in the index
13 between January 2006 and January 2012 was 14.2%. Of course, some
14 categories of goods and services have experienced substantially higher price
15 increases. For example, the cumulative increase in gasoline prices between
16 January 2006 and January 2012 was 41.4%. Likewise, the prices for food and
17 medical care experienced cumulative increases of 19.9% and 23.8%
18 respectively between January 2006 and January 2012.

19 **Q. What is the basis for FPL's CPI forecast?**

20 A. FPL relies on industry expert, IHS Global Insight, as the source for its CPI
21 forecast. In addition, FPL reviews the forecasts developed by other sources
22 and considers historical trends in order to ensure the reasonableness of IHS
23 Global Insight's forecast.

24

1 **Q. What is FPL's forecast of CPI?**

2 A. FPL is forecasting a 1.9% increase in the CPI in 2012 and a 2.0% increase in
3 2013. With compounding, the cumulative CPI growth from 2010 through
4 2013 is projected to be 7.2%. The forecasted increases in CPI are consistent
5 with the consensus view that while inflation is likely to remain moderately
6 low by historical standards, we can continue to expect some increases in the
7 overall level of prices over the next few years. In addition, the forecasted
8 increases in CPI in 2012 and 2013 indicate some deceleration in the rate of
9 inflation following the 3.1% increase in CPI in 2011. A sharp rise in
10 commodity prices contributed to the overall increase in CPI in 2011. The CPI
11 forecast assumes that any volatility in commodity prices will have less of an
12 impact on the overall rate of inflation in 2012 and 2013.

13 **Q. How does FPL's CPI forecast compare with the historical rate of**
14 **inflation?**

15 A. The forecast for 2012 and 2013 is below the long-term average rate of
16 inflation. The CPI has averaged a 2.4% annual increase in the last ten years
17 and a 2.9% annual increase since 1985. An inflation forecast below the long-
18 run average rate of inflation is to be expected given the relatively moderate
19 pace of the economic recovery. A moderately low rate of inflation is also
20 consistent with the assumption of relatively stable commodity prices.

21

1 **Q. How does FPL's CPI forecast compare with inflation projections**
2 **developed by other experts?**

3 A. FPL's CPI forecast is consistent with the inflation projections developed by
4 other experts, including the Philadelphia Reserve's survey of professional
5 forecasters and the National Association of Business Economists.

6 **Q. Is FPL's CPI forecast reasonable?**

7 A. Yes. FPL's forecast is consistent with the consensus view that inflation will
8 be relatively low by historical standards given the moderate pace of the
9 recovery and the assumption of generally stable commodity prices. It is also a
10 balanced view indicating that while the rate of inflation is likely to remain low
11 by historical standards, there will be some positive escalation in prices.

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

13 A. Yes.

1 MR. RUBIN: Thank you Mr. Chairman.

2 BY MR. RUBIN:

3 Q Are you also sponsoring any exhibits to your
4 direct testimony?

5 A Yes, I am.

6 Q And do those exhibits consist of Exhibits
7 RM-1 and RM-2, which are also shown on staff's exhibit
8 list as Exhibits 138 and 139?

9 A Yes.

10 Q Have you prepared a summary of your direct
11 testimony?

12 A Yes, I have.

13 Q Would you please provide that summary to the
14 Commission?

15 A Yes.

16 Good afternoon, Commissioners. I am
17 testifying in support of FPL's load forecast which
18 consists of forecasts for customers, sales, and monthly
19 peak demands. FPL's load forecast meets the criteria
20 the Commission has historically relied on in evaluating
21 load forecast. These criteria include a demonstration
22 of a balanced, reasonable, statistically supported, and
23 consistent forecast.

24 A balanced forecast is one that is not
25 unduly high or unduly low but rather one that

1 appropriately weighs both negative and positive
2 factors. FPL's load forecast does just that,
3 appropriately balancing both negative and positive
4 factors impacting sales, customers, and peak demands by
5 relying on assumptions from objective third-party
6 experts.

7 These third-party experts include recognized
8 industry leaders such as ISH Global Insight, one of the
9 leading economic forecasting firms in the country. FPL
10 relies on the Commission precedent of basing its load
11 forecast on the assumption of normal weather
12 conditions.

13 The use of normal weather eliminates the
14 need to speculate on future weather conditions, which
15 as we all know, can be very unpredictable. As a
16 result, the load forecasts approved by this Commission
17 have consistently relied on the assumption of normal
18 weather, and FPL's load forecast is consistent with
19 this precedent. Moreover FPL's method of calculating
20 normal weather using 20 years of data is the same
21 method reviewed and approved for other utilities in
22 Florida.

23 FPL's load forecast is reasonable given
24 historic trends and recent actuals. As the chart
25 beside me shows, the projected levels of weather

1 normalized sales are well within the range experienced
2 recently and reflect a pattern of modest but positive
3 increases in sales. In fact, on a percentage basis,
4 the forecasted increases in sales are the highest since
5 2006.

6 FPL's load forecast is statistically
7 supported. It relies on well-constructed econometric
8 models with a high degree of statistical significance.
9 Moreover, the econometric models developed by FPL have
10 proven to have a high degree of accuracy.

11 In addition to being balanced, reasonable,
12 and statistically supported, FPL's load forecast has
13 another important characteristic that this Commission
14 has considered in past proceedings, and that is
15 consistency.

16 FPL's load forecast is the company's
17 official load forecast for all purposes, including
18 resource planning, thus the load forecast FPL supports
19 in this case is the same one utilized in planning major
20 capital additions, including new generation. Its
21 consistent used forecasts such as the one supported by
22 FPL in this case is indicative of a solid and unbiased
23 set of assumptions and methodologies which can be
24 relied on for multiple purposes.

25 In summary, FPL's load forecast is

1 consistent, balanced, reasonable, and statistically
2 supported and should be approved for use in this
3 proceeding. This concludes my summary.

4 CHAIRMAN BRISE: Thank you.

5 MR. RUBIN: Thank you, Mr. Chairman. FPL
6 tenders Dr. Morley for cross-examination.

7 CHAIRMAN BRISE: All right. FIPUG,
8 Mr. Moyle.

9 MR. MOYLE: Thank you, Mr. Chairman.

10 CROSS-EXAMINATION

11 BY MR. MOYLE:

12 Q Good afternoon, Mrs. Morley.

13 A Good afternoon.

14 Q I was trying to keep track of questions that
15 were asked of Mr. Silagy that were punted, and I
16 thought he punted one to you with respect to how the
17 24 percent decrease calculation was calculated.

18 Do you have information with respect to the
19 notion about FPL's bills being 24 percent lower than
20 others?

21 A Yes. Mr. Silagy did initially punt that to
22 me. I think it was corrected later; Ms. Deaton is
23 really the witness on that.

24 Q Okay. Thank you.

25 Mr. Silagy also made a comment. You were in

1 here when he was giving his testimony, right?

2 A Yes.

3 Q Okay. He was presented with Exhibit No. 498,
4 which was offered by Mr. Saporito, and it had a
5 national average. And he noted that the run date of
6 11/3/2011 was stale, resulted in stale information.

7 Do you agree with that?

8 A I don't have --

9 MR. RUBIN: Let me just object. I don't know
10 that the witness has seen the exhibit. It should
11 be provided to her.

12 MR. MOYLE: Sure. I think it's in the
13 record. I have it as 498.

14 CHAIRMAN BRISE: I think Mr. Butler is on his
15 way to make that available.

16 BY MR. MOYLE:

17 Q I was referring to the third page that says,
18 "Table 5" and it has a run date at the top. Do you see
19 that?

20 A Yes.

21 Q Okay. And I guess my question was would you
22 agree with Mr. Silagy's characterization of this
23 information as stale?

24 A Yes. Generally speaking, I would agree with
25 that.

1 Q Okay.

2 A I would say that in terms of the information
3 on retail prices and monthly bills, that's probably an
4 area best addressed to Witness Deaton.

5 Q Okay. Let me take you to page 14 of your
6 prefiled direct testimony. Am I correct that the
7 information that FPL is relying on with respect to
8 population growth is more outdated or more stale than
9 the information that was found on Exhibit 498?

10 A No. I believe that exhibit had a year of
11 2010, and FPL's population forecast is from August
12 2011.

13 Q I'm sorry. Do you still have 498? Doesn't
14 it say, "Run Date 11/3/2011" on the third page?

15 A I'm sorry, my third page says, "Table 5A,
16 Residential Monthly Bill by Census Division and State
17 2010."

18 Q Okay. And underneath that, what does it say
19 with respect to run date?

20 A Oh, I see, "November 3rd, 2011." But the
21 data itself is from 2010.

22 Q All right. So with respect to your EDR data,
23 for the case you've used data that was run in August of
24 2011; is that right?

25 A It wasn't run; it was released in August of

1 2011.

2 **Q Okay. But that's not the most current EDR**
3 **data, is it?**

4 A No, it is not. As we discussed in my
5 deposition, EDR did come up with a new population
6 projection last month. We looked at that in order to
7 evaluate what impact it might have on our customer
8 forecast, and we determined it really would not have
9 much impact at all.

10 And the reason I say this is that our
11 customer forecast does use population as an input, but
12 there's not a one-to-one relationship between our
13 customers and Florida population. We have
14 four-and-a-half-million customers. There's 19 million
15 Floridians. In order to come up with our customer
16 forecast, we do two things: We look at the --

17 MR. MOYLE: I know it's late in the day and
18 that we've had discussions about yes, no. If I
19 need additional explanation, if I can, I'll
20 solicit it. But I think it might move it along,
21 Mr. Chairman, if we can kind of have yes, nos, and
22 then if I need additional information, I'll seek
23 it.

24 CHAIRMAN BRISE: That's fair.

25 THE WITNESS: As I said, no, it would not

1 have a significant impact on our customer
2 forecast.

3 BY MR. MOYLE:

4 **Q All right. But my question was, there's a**
5 **more recent data set of information from EDR? And I**
6 **think you said, yes, correct?**

7 A Yes.

8 **Q And I didn't ask you, you know, the follow-up**
9 **question, but you gave an answer, and that's okay. And**
10 **I want to just take one piece of that.**

11 **But the updated information that EDR came up**
12 **with showed that there is more growth than the August**
13 **2011 information, correct?**

14 MR. RUBIN: Let me just object, Chairman.
15 The witness answered the question and then was
16 trying to explain exactly what's being asked now
17 and how it does not affect the FPL forecast. And
18 Mr. Moyle asked her not to complete her answer, so
19 I object to the question now, unless she's going
20 to be given an opportunity to respond fully.

21 CHAIRMAN BRISE: Okay. Mr. Moyle.

22 MR. MOYLE: Okay. Well, her answer had about
23 five things in it, and I'm focusing on one thing,
24 as I understand it, which is the increase in
25 customer growth. That's what I want to ask her

1 about.

2 CHAIRMAN BRISE: Okay. So you can restate
3 your question.

4 MR. MOYLE: Okay.

5 BY MR. MOYLE:

6 **Q The new EDR information, did it have an**
7 **increase in customer growth?**

8 A No. They do not forecast customers.

9 **Q What do they forecast?**

10 A Population, Florida population.

11 **Q Did it have an increase in Florida**
12 **population?**

13 A Yes.

14 **Q Okay. And what was the increase in forecast?**

15 A They increased their population growth for
16 2012 from 6. -- pardon me -- .62 percent to
17 .92 percent. And, again, that's a forecast for a
18 Florida population, not FPL's customers.

19 **Q So roughly it goes up about a third of their**
20 **forecast from 6.2 to 9. -- I'm sorry .62 to .92?**

21 A Yes. The percentage goes up by that much.
22 Of course, the population base does not go up by that
23 much.

24 **Q And with respect to the population -- so if**
25 **they're saying, well, we have an increase of -- I'll**

1 call it a third with respect to the increase -- that
2 wouldn't mean that FPL is likely to have more customers
3 if the Florida population is projected to increase more
4 so than what was used in your original testimony,
5 correct?

6 A No, not necessarily. As I tried to
7 explain -- and I know it's late in the day, I'll try to
8 be quick with it -- we cannot look at a percentage
9 change in Florida population and just apply it to our
10 customer base. We have to consider the relationship
11 between population and our customer base.

12 And what EDR did in July, they revised their
13 population forecast, but they also revised their
14 estimates for the actual level of Florida population in
15 2012. So what we needed to do is look at, okay, how
16 has the relationship now changed between how many new
17 customers can we expect given a certain increment of
18 new Floridians. So there were two things that we had
19 to take into account, and those two things offset each
20 other.

21 Q And I'm not a modeling expert or anything,
22 but I understand that FPL has approximately half of
23 the -- half of the population of Florida is served by
24 FPL; you would agree with that, correct?

25 A Yes, roughly speaking.

1 Q Okay. So if EDR -- they're experts in
2 projecting things, right?

3 A Yes, I believe they're experts at projecting
4 Florida population.

5 Q Okay. So if they come and say, we're going
6 to have -- we're going to have more customers and the
7 projection was off by a third, to my way of thinking it
8 suggests -- maybe it's too simple -- but that if you're
9 serving half of the people currently in Florida and
10 they're saying we're going to have more people in
11 Florida, wouldn't you be expected to get approximately
12 half of those people that they're projecting are going
13 to be here?

14 MR. RUBIN: Objection, it's been asked and
15 answered directly.

16 CHAIRMAN BRISE: Okay. Mr. Moyle, if you --

17 MR. MOYLE: I may have missed -- I may have
18 missed the answer. I don't think it has been
19 answered with respect to why if EDR says you're
20 going to have 100 more people come in, why FPL,
21 which she just testified currently served half,
22 why those, you know, new 100 people -- why half of
23 them aren't projected to be FPL customers.

24 CHAIRMAN BRISE: All right. If you focus
25 your question, I think that you can ask the

1 question, if it's focused.

2 MR. MOYLE: Okay.

3 BY MR. MOYLE:

4 **Q Did you understand the question?**

5 CHAIRMAN BRISE: Restate it so that she
6 can --

7 BY MR. MOYLE:

8 **Q If EDR is projecting that 100 new customers**
9 **are going to come in, hypothetically speaking, why is**
10 **it that FPL, which serves half the population, wouldn't**
11 **be assumed to get a significant portion of those new**
12 **customers?**

13 A Because EDR is not forecasting customers;
14 they are forecasting population for the state as a
15 whole. And we do not -- we cannot simply take their
16 percentage growth. We have to take into account the
17 relationship between customers and population, as well
18 as their projected increases in population.

19 And I would say by doing that, we have had a
20 very accurate customer forecast. In fact, year to
21 date, we were right on the number of customers within
22 literally a couple of hundred, if that.

23 **Q Let me refer you to two pieces in your direct**
24 **testimony where you talk about load increase on**
25 **page 24, line 8. You're suggesting that the 2013, the**

1 **forecast of energy for load, you project an increase of**
2 **1.2; is that right?**

3 A No, I'm not suggesting; I'm just presenting
4 the calculation. And that's -- to be clear, that's the
5 impact that our adjustment for new and changed
6 wholesale contracts has on our forecast for sales. We
7 made an explicit adjustment for new and changed
8 wholesale contracts. And as a result of that
9 adjustment, that adjustment increases our forecast for
10 2013 of net energy for load by 1.2 percent.

11 **Q And that's to serve wholesale load largely?**

12 A Yes, that is wholesale load. That is the
13 impact of the adjustment for the wholesale load.

14 **Q Okay. And then on page 27, line 5, your**
15 **total net energy for load increases by 1.1 percent;**
16 **isn't that right?**

17 A Yes. That's a year-to-year change. That's
18 not the impact of any particular adjustment. That's
19 the year-to-year change.

20 **Q All right. But for the test year, you would**
21 **agree, would you not, that the change with respect to**
22 **what you were projecting for wholesale sales is 1.2 and**
23 **the net energy for load is 1.1 so that if you do the**
24 **math on those numbers, your net energy for load is**
25 **.1 percent?**

1 A No, that's not correct. Again, these two
2 figures are looking at different things. The figure on
3 27 is looking at the year-to-year change in our total
4 net energy for load. The figure on 24 is looking at
5 what impact a particular adjustment had just on the
6 year 2013.

7 In other words, if we didn't have that
8 adjustment at all, not looking at a year-to-year
9 change, but if we took away the adjustment altogether,
10 what would be the impact on net energy for load.

11 **Q Okay. You have testimony about the CPI**
12 **increase, in there on page 41 you talk a lot about the**
13 **CPI increase; is that right?**

14 A That's correct.

15 **Q Okay. And the increase has gone up**
16 **7.2 percent?**

17 A Yes. And just to be clear, that's not an
18 annual increase; that's the increase from 2010 through
19 2013, so it's really three years of inflation.

20 **Q Okay. And with respect to inflation, are you**
21 **aware or have knowledge whether the CILC credit has**
22 **likewise increased during this period of time?**

23 A I have no knowledge of the CILC credit. I
24 believe Witness Deaton addresses that.

25 **Q And is it your intent to provide rebuttal**

1 testimony at a subsequent point in time?

2 A Yes.

3 Q Okay. You spent a lot of your time talking
4 about weather normalization in your rebuttal, and I'll
5 just -- given the lateness of the hour, I'll defer that
6 until you come back. So thank you, that's all I have.

7 A You're welcome.

8 CHAIRMAN BRISE: Thank you very much.

9 South Florida Hospital Association,

10 Mr. Wiseman.

11 MR. WISEMAN: Thank you, Mr. Chairman.

12 CROSS-EXAMINATION

13 BY MR. WISEMAN:

14 Q Good afternoon, Dr. Morley. Nice to see you.

15 A Good afternoon. Thank you.

16 Q Dr. Morley, I think you were here while
17 Mr. Silagy was being questioned by the Commissioners,
18 weren't you?

19 A Yes, I was.

20 Q Well, I'm just wondering, I don't recall
21 whether it was in the context of talking about gas
22 supply forecasts or in the context of gas price
23 forecasts, but Mr. Silagy said by definition they are
24 wrong, they are forecasts.

25 I wonder, do you agree with that statement as

1 **a general proposition about forecasts?**

2 A You know what, I don't remember him saying
3 that or ever saying that.

4 **Q Well, the record will reflect what he said,**
5 **so let's just assume I'm correct. Would you agree with**
6 **that as a statement about forecast in general?**

7 A I would agree there's no guarantee that any
8 forecast is ever going to be 100 percent accurate.
9 That's why if you look at the criteria that the
10 Commission has historically used in approving load
11 forecasts, they have looked at things like is it
12 reasonable, is it balanced and so forth.

13 But, yes, I agree there's no 100 percent
14 guarantee that a forecast is ever going to be
15 completely accurate.

16 **Q Would you agree that forecasts are inherently**
17 **uncertain?**

18 A That's why they're called forecasts;
19 otherwise, they would be called actuals.

20 **Q Great. Now, tell me, if I'm correct, the**
21 **purpose of your testimony is to support FPL's load**
22 **forecasting process, including the underlying**
23 **methodologies and assumptions; is that right?**

24 A That's correct.

25 **Q All right. And the forecasts that you**

1 performed include forecasts of net energy for load,
2 retail delivered sales, peak demands, and customers; is
3 that correct?

4 A That's correct.

5 Q Okay. Can you refer to page 7, lines 11
6 through 13 of your testimony, please. Do you have
7 that?

8 A I have page 7. Could you repeat the line
9 numbers?

10 Q Sure. Eleven through 13. Do you have that?

11 A Yes, I do.

12 Q Okay. You note there that the Commission has
13 considered whether a load forecast appears reasonable
14 given historic trends; is that right?

15 A Yes. And I believe that's what the exhibit
16 behind me demonstrates.

17 Q Yes. And so is it your position that FPL's
18 load forecast in this case is consistent with
19 historical trends?

20 A I believe it's reasonable given historic
21 trends, yes.

22 Q Well, that wasn't my question. My question
23 is, is your forecast consistent with historic trends?

24 A I would say not necessarily, because if we
25 looked back in history before the recession and before

1 there was a lot of energy efficiencies, use per
2 customer was growing a lot faster than it has recently.

3 Q Okay.

4 A So it depends on what history period you're
5 talking about.

6 Q So your answer to my question is no, correct?

7 A No, we're not consistent with all periods of
8 history.

9 Q All right. Can you take a look now at
10 lines 13 through 15 on page 7?

11 A Yes.

12 Q Okay. And there you note that the Commission
13 has considered whether the utility has a record of
14 providing accurate, reliable forecasts, right?

15 A Correct.

16 Q Okay. And is it your position that FPL has
17 provided accurate, reliable forecasts to the Commission
18 in past base rate cases needs hearings and ten-year
19 site plans?

20 A Yes.

21 Q Okay. Let's go to page 8 of your testimony,
22 lines 18 through 22.

23 A Yes.

24 Q All right. Now, if I understand that
25 testimony, it's your position that the primary drivers

1 of future electricity needs are your forecasts, and
2 your forecasts are population growth, weather, the
3 economy, and changes in appliance stock and energy
4 efficiency standards; is that right?

5 A Yes.

6 Q All right. Now, each of those drivers are
7 inputs to your forecasting model; is that correct?

8 A Yes.

9 Q Okay. So your model is not solving for those
10 drivers; am I right?

11 A That's correct.

12 Q All right. Now, is it correct that for
13 estimates of change in the appliance stock and
14 efficiency standard, FPL relied upon estimates
15 performed by a consulting firm named ITRON?

16 A That's correct.

17 Q And ITRON performed an engineering analysis;
18 is that right?

19 A That's correct.

20 Q Now, if I understand what you did, is you
21 used an independent variable in your model based upon
22 ITRON's estimates and the use of that -- I'm sorry --
23 the use of that independent variable impacted your net
24 usage per customer in your forecast by your model; is
25 that correct?

1 A Yes. It was one of the independent variables
2 in the model.

3 Q Okay. So you would agree then the
4 **reliability of your model is reflective of the**
5 **reliability of the inputs?**

6 A Yes.

7 Q Now, you're not an engineer, right?

8 A No, I'm not.

9 Q So you're not here -- you're not the proper
10 **witness to testify about the technical aspects of**
11 **ITRON's analysis, correct?**

12 A I think it depends on what the question is.
13 I am familiar with their -- what they gave us, yes.

14 Q But you haven't gone back and personally
15 **assessed the reliability of their evaluation, correct?**

16 A No, I have not. However, the --

17 Q Thank you. I think the question was
18 **answered.**

19 And by the way, the ITRON analysis, that's
20 **not one of -- that's not an exhibit in this case,**
21 **correct?**

22 A No, it's not an exhibit in this case. I'm
23 sure it was provided in discovery.

24 Q All right. Now, another of the primary
25 **drivers of electric needs that you referenced is**

1 population growth, right?

2 A Correct.

3 Q And I think, as you discussed with Mr. Moyle,
4 for population growth you depend upon the projections
5 of the Office of Economic and Demographic Research of
6 the State Legislature, right?

7 A Correct.

8 Q Now, you would agree that FPL serves some
9 extremely densely populated counties such as Dade and
10 Broward, right?

11 A Yes, we serve those counties.

12 Q Okay. And there are other counties in the
13 state that clearly are not densely populated at all;
14 would that be right?

15 A That's correct.

16 Q Now, is it fair to assume that population
17 growth in Dade and Broward Counties may differ, for
18 example, from population growth than a rural area?

19 A Dade and Broward County differ in population
20 growth from each other. Dade actually has a much
21 higher population growth recently or, I should say,
22 growth in customers than Broward has.

23 Q Well, my question is -- let me try it another
24 way. So in order to understand population growth, you
25 would need to look at individual counties, I think

1 that's what you just said, correct? In other words,
2 the population growth in one county is going to be
3 different than the population growth in another county,
4 right?

5 A Yes.

6 Q Okay. Now, turn to page 28 of your
7 testimony, if you would, and if you can refer to
8 lines 9 through 11.

9 A I'm there.

10 Q Okay. You say there that -- you're
11 discussing that effect of variables on your forecast of
12 net energy for load, correct?

13 A I'm sorry, could you repeat the question?

14 Q Yeah. You're discussing there variable that
15 have an impact on your forecast of net energy for load,
16 right?

17 A Yes.

18 Q Okay. And you state there that the
19 methodology you used for forecasting net energy for
20 load is fundamentally the same as the one you used in
21 the last rate case, right?

22 A Yes.

23 Q Okay. Go to -- if you would now turn to
24 page 29, line 16 through 19. And you said there that
25 FPL's forecast of net energy for load is consistent

1 with historical patterns and relies upon methodologies
2 which have been proven to be accurate.

3 Is that a fair characterization of that
4 testimony?

5 A Yes.

6 Q Okay. Dr. Morley, would you agree that in
7 regression analysis, residual is the difference between
8 the observed value of the dependent value -- of the
9 dependent variable and the predicted value?

10 A Yes.

11 Q Okay. And would you agree that in regression
12 analysis, residuals are not a good thing?

13 A There are always residuals in regression
14 analysis.

15 Q But the greater they are, the less
16 reliability there would be to the regression, correct?

17 A Yes, I would agree that the objective is to
18 minimize the residuals.

19 Q All right.

20 MR. WISEMAN: If we could now have marked for
21 identification the next exhibit in order.

22 CHAIRMAN BRISE: 502.

23 (Exhibit No. 502 was marked for
24 identification.)

25 MR. WISEMAN: This is a PowerPoint

1 presentation titled "Proposed Short-Term and
2 Long-Term Load Forecast."

3 CHAIRMAN BRISE: Thank you.

4 BY MR. WISEMAN:

5 Q Dr. Morley, is the document that's been
6 marked for identification as Exhibit No. 502, was that
7 document prepared by you?

8 A Yes.

9 Q All right. Can you turn to -- it's page 11
10 of the document, it's Bates page 001452. Do you have
11 that?

12 A I do.

13 Q Okay. Now, am I correct that this page
14 indicates that you're using a new sales model in this
15 case; is that right?

16 A Yes, it's a new proposed model.

17 Q All right. And from the graph, it appears to
18 me that the residuals under your old sales model ran
19 from about 1.25 percent positive to a negative of just
20 about 3 percent. And under your new model you have --
21 you still have residuals, but they're running now from
22 a positive 0.7 percent to about a negative 2 percent.

23 Would that be correct?

24 A Yes.

25 Q Now, can you turn to page -- and I'll refer

1 to the Bates pages numbers, I think that's easiest --
2 page 1459.

3 All right. Now, if I understand this page,
4 what you're saying is that in FPL's old model, 1.1
5 percent of the forecast of retail delivered sales was
6 unexplained; whereas, in your new model, you believe
7 that only 0.4 percent of the forecast of retail
8 delivered sales is unexplained.

9 Is that a correct interpretation?

10 A Yes.

11 Q Okay. Now, would you agree that one of the
12 factors that you believe explains the drop in the
13 forecast of retail delivered sales is a reduction due
14 to energy efficiency?

15 A No, I don't necessarily agree with that
16 because the energy efficiency variable was also in the
17 old model. I think the new model reflects the
18 collective changes we made, including getting a new
19 variable for the economy and so forth.

20 Q Right. But it's in both models you had --
21 you're explaining the drop in retail sales, to some
22 extent, based upon a factor that takes energy
23 efficiency into account; isn't that right?

24 A That's correct.

25 Q Okay. And that reduction to retail sales

1 that you're forecasting based upon energy efficiency is
2 based upon the ITRON study; is that right?

3 A That's correct.

4 Q All right. Now, can you turn to page 1465,
5 please. Now, would you agree that this page shows that
6 FPL over-forecasted the 2011 summer peak in its
7 ten-year site plans in all but one year from 2002
8 forward?

9 A Yes, I would agree with that. Although, the
10 errors have gotten much smaller since the 2009 ten-year
11 site plan.

12 Q And, Dr. Morley, would you agree that your
13 forecasts in 2006 through 2008 were off in a range of
14 about 15 percent?

15 A I don't have a calculator in front of me.

16 Q Well, let's look at -- just look at the
17 numbers. You have a forecast in 2006 that looks like
18 maybe 20 -- not quite 25,000; whereas, in 2011, actual
19 was around 22,000. So it's a difference of about
20 2500 megawatts, right?

21 A I'll agree with that, subject to check.

22 Q All right. And in 2007, you had a forecast
23 of, it looks like, about 24,500 megawatts compared to
24 about 22,000 actual, right?

25 A Correct.

1 Q Okay. So in each of those years, actually,
2 the forecast was probably off by more in the range of
3 20 percent, wasn't it?

4 Actually, I take that back. I think the
5 15 percent number I gave you before was accurate. Can
6 you accept that subject to check?

7 A Yes.

8 Q Okay. Good.

9 Let's turn to page 1466. Is it correct that
10 this page indicates that since 1980 -- since 1998,
11 excuse me, your forecasts of the summer -- 2011 summer
12 peak on a weather normalized basis in FPL's ten-year
13 site plans were off by as much as 17 percent?

14 A Yes. And, again, those errors get larger as
15 we go further back in time, because we were forecasting
16 something that was more in the distant future.

17 Q All right. Can you turn to the next
18 page 1467, please. This chart indicates that under
19 your 2011 ten-year site plan model, the biggest decline
20 in your summer peak forecast was due to energy
21 efficiency. Is that a correct interpretation of this
22 page?

23 A Yes.

24 Q Okay. And, again, that energy efficiency
25 factor is based on the ITRON analysis, right?

1 A Yes.

2 Q Okay. Let's turn to page 1468. Would you
3 agree that under your new model you attribute less of a
4 change in the summer peak to energy efficiency, but you
5 still have a reduction of 530 megawatts that's not
6 explained, correct?

7 A Yes, that's correct.

8 Q So you have a change in the summer peak of
9 743 megawatts from 2005. And if I'm correctly
10 interpreting this, about 70 percent of that change is
11 unexplained; is that right?

12 A That's correct. And, again, this is a
13 change, not a year-to-year or a forecast for a
14 particular year versus the predicted; it's over a span
15 of six different years.

16 Q Okay. And you're still relying upon change
17 in energy efficiency based upon the ITRON model, right?

18 A That's correct.

19 Q Okay. Can you turn to the next page 14689.
20 Would it be correct that you're dropping your forecast
21 for the summer peak for 2001 about 1,000 megawatts
22 below the 2011 ten-year site plan?

23 A Our forecast for which year?

24 Q 2021.

25 A That's correct.

1 Q Okay. Now, would it be correct that in the
2 needs proceedings for the Canaveral, Rivera, and Port
3 Everglades projects, you relied upon the old model that
4 you used in your ten-year site plans?

5 A No, it would not necessarily be the 2011
6 shown here.

7 Q Well, let's turn to page 1472, if we could.
8 First of all, let's look at the last column, "Mandated
9 Energy Efficiency." The figures in that column, again,
10 are based upon the ITRON analysis, right?

11 A They are based on the ITRON analysis taken
12 into account with our overall model. So it's not just
13 a function of ITRON; it's a function of our model and
14 the other variables in the model.

15 Q All right. Now, turn to the next page 1473.
16 And if I'm correct, this shows that your current
17 forecast for the summer peak for 2018 is about
18 4,200 megawatts below the forecast you used to justify
19 the Canaveral and Rivera projects; is that right?

20 A Yes. It's lower than the forecast in the
21 2008 ten-year site plan.

22 Q Okay. Dr. Morley, is your new model anymore
23 reliable than your old model?

24 A Yes, I believe it is. And I think that's
25 demonstrated by the fact that the residuals are

1 smaller.

2 Q All right. Let's talk a little bit about
3 your new model. And we can put this document aside.

4 Would you agree that FPL's net energy for
5 load forecasts are not calculated on a customer group
6 or rate schedule basis?

7 A That's correct.

8 Q And would you agree that FPL's econometric
9 models are not developed by rate class?

10 A That's correct.

11 Q And would you agree the changes in population
12 growth, the economy, and efficiency standards are not
13 available by rate class?

14 A That's correct.

15 Q And, Dr. Morley, isn't it correct that it's
16 your position that weather normalized sales by rate
17 class can't be computed before actuals are known?

18 A Yes.

19 Q Okay. Dr. Morley, you also don't forecast
20 new service accounts by rate class, right?

21 A That's correct. We forecast them in the
22 aggregate and split between residential and
23 nonresidential.

24 Q And you don't maintain data for inactive
25 accounts by rate schedule, right?

1 A As we discussed in my deposition, there is a
2 default rate schedule for each inactive account.

3 **Q Well, you don't -- and you don't maintain**
4 **inactive accounts by rate schedule, correct?**

5 A There is a default rate for each inactive
6 account, so I think that would be a rate -- one could
7 interpret that as a rate schedule for each inactive
8 account.

9 MR. WISEMAN: Could I have -- I would like to
10 have marked for identification an interrogatory
11 response, the response to SFHHA's second set of
12 Interrogatories No. 177. I think this would be
13 Number 503.

14 CHAIRMAN BRISE: That's correct.

15 Are there any objections to this document?

16 MR. RUBIN: No objections.

17 (Exhibit No. 503 was marked for
18 identification.)

19 BY MR. WISEMAN:

20 **Q Mr. Morley, this interrogatory was directed**
21 **to you, along with Ms. Deaton and Mr. Ender, and it**
22 **asks you to provide the average number of inactive**
23 **account by rate schedule for each class of the years**
24 **2005 through 2011.**

25 **Can you read the answer out loud, please.**

1 A >Data for inactive accounts are not available
2 by rate schedule."

3 **Q Thank you.**

4 A We also answered a later interrogatory --

5 MR. WISEMAN: I believe the question has been
6 answered, Mr. Chair.

7 MR. RUBIN: Mr. Chairman, I think she should
8 be allowed to complete her answer. She was cut
9 off in the middle of her answer by Mr. Wiseman.

10 MR. WISEMAN: Your Honor, there's an
11 opportunity for redirect. If they want to ask her
12 a question, then they are obviously free to do so.

13 CHAIRMAN BRISE: I concur.

14 MR. WISEMAN: If I could have also now
15 another document marked for identification.

16 BY MR. WISEMAN:

17 **Q Let me ask you a preliminary question.**

18 **Dr. Morley. You are cosponsoring MFR F-5, correct?**

19 A Yes.

20 **Q Okay.**

21 MR. WISEMAN: I think this would be
22 Number 504.

23 CHAIRMAN BRISE: Any objection to this
24 document?

25 MR. RUBIN: No objection.

1 (Exhibit No. 504 was marked for
2 identification.)

3 BY MR. WISEMAN:

4 Q Dr. Morley, based upon this diagram, it
5 appears to me that the forecasts that you developed or
6 used as inputs to a model that's called the
7 "Consolidated Financial Model"; is that right?

8 A Yes.

9 Q And is it your understanding that based on
10 the various inputs shown in the diagram, the
11 consolidated financial model produces balance sheet and
12 income statement detailed at a level necessary for the
13 development of the cost of service study that allocates
14 costs on a customer class basis?

15 A Yes. Generally that's my knowledge. I'm not
16 that familiar with that process.

17 Q Okay. Now, the consolidated financial model
18 is a proprietary model that was developed by a
19 third-party software vendor named Utilities
20 International, Inc.; is that correct?

21 A I don't know.

22 Q Okay. Your testimony does not address the
23 consolidated financial model?

24 A No.

25 MR. RUBIN: Mr. Chairman, I think that

1 Mr. Barrett would be the appropriate witness to
2 answer those questions.

3 MR. WISEMAN: That's fine. I can defer some
4 questions to him.

5 CHAIRMAN BRISE: Sure.

6 BY MR. WISEMAN:

7 **Q Now, your forecasts of peak demand,**
8 **Dr. Morley, those are inputs to the consolidated**
9 **financial model, correct?**

10 A Yes.

11 **Q All right.**

12 MR. WISEMAN: If I could have marked for
13 identification another exhibit. This would be
14 505. It's two pages from the -- actually, I think
15 it's the entirety -- but it's two pages from
16 MFR E-18.

17 CHAIRMAN BRISE: Any objection to this
18 document?

19 MR. RUBIN: No objection.

20 CHAIRMAN BRISE: Okay. Other than the size
21 of the print?

22 MR. WISEMAN: I object to that as well more
23 than you do, trust me.

24 (Exhibit No. 505 was marked for
25 identification.)

1 BY MR. WISEMAN:

2 Q Dr. Morley, you're the sponsor of MFR E-18,
3 correct?

4 A Correct.

5 Q Now, can you turn to page 1. And looking at
6 this very small print, would you agree that in 2008 the
7 highest monthly peak on FPL's system occurred in the
8 month of August?

9 A Yes.

10 Q And would you agree that in 2008 the peaks in
11 the months of May, June, July, August, and September
12 were higher than the monthly peaks in any other months
13 for that year?

14 A Yes.

15 Q Now, would you look at the data for 2009 and
16 would you agree that the highest monthly peak on FPL's
17 system occurred in June of that year?

18 A Yes.

19 Q And would you agree that the monthly peaks in
20 the months of June through October are higher than the
21 monthly peaks in any other months of 2009?

22 A I'm sorry, could you give me the --

23 Q Sure. June through October.

24 A Yes.

25 Q All right. Now let's look at 2010. And am I

1 correct that the highest monthly peak in 2010 actually
2 occurred in January of that year?

3 A That's correct.

4 Q And would you agree that the January 2010
5 peak was the result of an extraordinary period of
6 sustained cold weather experienced in January 2010?

7 A Yes, I would.

8 Q And, in fact, isn't it true that the
9 January 2010 peak occurred on the third coldest day on
10 record --

11 A That's correct.

12 Q -- in EPL's service territory dating on
13 records going back to 1948?

14 A That's correct.

15 Q Now, would you agree in 2010, with the
16 exception of January, the highest monthly peaks were in
17 July, August, and September?

18 A That's correct.

19 Q All right. Now, let's turn to page 2 of the
20 document, if we could.

21 Would you agree looking at the monthly peaks
22 in 2011 that those reflect more normal weather patterns
23 than were experienced in 2010?

24 A I would agree that it did not reflect a
25 period of extreme cold weather, yes.

1 Q Okay. And would you agree that the monthly
2 peaks in the months of June, July, and August were
3 higher than the monthly peaks in any other months in
4 2011?

5 A Yes.

6 Q And am I correct that your forecast for 2012
7 was that the highest monthly peak would occur in the
8 month of August?

9 A That's correct.

10 Q And am I also correct that for 2013 you're
11 forecasting that the highest monthly peak would occur
12 in August of that year?

13 A That's correct.

14 Q Dr. Morley, would you agree with the
15 characterization that FPL is considered a summer
16 peaking utility?

17 A I would agree that that's typically the case,
18 or actually our highest peak on record though is the
19 January 2010 peak.

20 Q Would you describe what the term "summer
21 peaking utility" means?

22 A It would refer to a utility peaking during
23 the summer period, typically June through August.

24 MR. WISEMAN: Now, if we could have marked as
25 the next exhibit, I believe it would be 506. This

1 is FPL's response to SFHHA Interrogatory No. 109.

2 CHAIRMAN BRISE: Any objections to this
3 document?

4 MR. RUBIN: No objection, Mr. Chairman.

5 CHAIRMAN BRISE: Okay.

6 (Exhibit No. 506 was marked for
7 identification.)

8 BY MR. WISEMAN:

9 **Q Dr. Morley, was this interrogatory response**
10 **prepared by you or under your supervision?**

11 A I actually believe it was not, because it
12 shows information by rate class. I may have
13 cosponsored it, but I believe there will be another
14 primary witness on it.

15 **Q All right. Well, let's talk about -- we can**
16 **still talk about some of the data in here that relates**
17 **to summer peak.**

18 **Could you turn to page 3 of 3 of Attachment**
19 **No. 1 to the response. And just to make sure we're on**
20 **the same page, the top says, "2010 Winter and Summer**
21 **Peak Analysis."**

22 **Do you have that?**

23 A I do.

24 **Q Okay. Would you agree that looking over at**
25 **the right-hand column that this document shows the**

1 **contribution of the various rate classes to the summer**
2 **peak of 2010, correct?**

3 A I agree that that's what it shows. I don't
4 believe this was a document that I created. I believe
5 that Witness Ender is the appropriate witness to ask
6 about contribution by rate class.

7 Q **All right. So are you saying that you could**
8 **not testify to the accuracy of the information in the**
9 **last -- the column farthest to the right that says,**
10 **"Contribution to Summer Peak"?**

11 A That's correct.

12 Q **But Mr. Ender will be able to testify about**
13 **that?**

14 A Yes, he will.

15 Q **All right. You just made your cross**
16 **examination shorter and Mr. Ender's longer.**

17 Just one question that doesn't relate to that
18 document specifically, but would you agree that your
19 forecasts of the 2000 summer peak were used to derive
20 your sales forecasts and net energy load forecasts that
21 are inputs to the consolidated financial model?

22 A Did you say, "forecast of the 2000 summer
23 peak"?

24 Q **2013 summer peak.**

25 A Yes, I believe what that schematic you showed

1 me earlier shows.

2 **Q Okay.**

3 MR. WISEMAN: If we could have marked now
4 another document. This would be No. 507.

5 CHAIRMAN BRISE: Any objection to this
6 document?

7 MR. RUBIN: No, sir, no objection.

8 CHAIRMAN BRISE: Okay.

9 (Exhibit No. 507 was marked for
10 identification.)

11 BY MR. WISEMAN:

12 **Q Dr. Morley, was this interrogatory response**
13 **prepared by you or under your supervision?**

14 A Yes.

15 **Q Now, the interrogatory asks FPL to provide**
16 **data for each year from 2000 to the present concerning**
17 **FPL's forecast of future levels of customer growth and**
18 **net energy for load and peak demands.**

19 **Would you agree that the one page that's been**
20 **attached here contains the forecasts of net energy for**
21 **load?**

22 A Yes.

23 **Q First of all, these data are in gigawatt**
24 **hours, right?**

25 A I'm sorry, would you repeat that?

1 Q The data on this page, these are in gigawatt
2 hours, right?

3 A That's correct.

4 Q Okay. So if we look at 2005 and we look at
5 the forecast for 2013, would I be correct that FPL was
6 forecasting the net energy for load in 2013 would be
7 138,448 gigawatt hours?

8 A Yes. That was prior to the recession, prior
9 to compact fluorescent bulbs.

10 Q Okay.

11 A Prior new air-condition standards, yes.

12 MR. WISEMAN: Mr. Chair, she answered the
13 question.

14 CHAIRMAN BRISE: Okay.

15 BY MR. WISEMAN:

16 Q Ms. Morley, then look at 2006. In 2006 you
17 forecast that net energy for load would be 140,877
18 gigawatt hours, right?

19 A That's correct.

20 Q Now, would you look over at the forecast that
21 you made in 2012 for 2013, and that forecast, I
22 believe, is 112,201. Do you see that?

23 A I'm, sorry could you repeat that?

24 Q If I've lined this up correctly -- and maybe
25 I didn't, let's see -- I'm sorry, I misspoke. No, I

1 was correct, I believe, that in 2012 your forecast for
2 2013 is that the net energy for load will be 112,201
3 gigawatt hours; is that right?

4 A That's correct.

5 Q Okay. Will you accept, subject to check,
6 that your 2012 forecast of net energy for load for 2013
7 is over 20 percent lower than the forecast of net
8 energy for load for 2013 that you made in 2007 and
9 2008?

10 A Yes, we have a much better idea now about the
11 load in 2013 than we did back in the mid 2000s.

12 Q Okay. Now, your peak forecasts are used in
13 FPL's ten-year site plans also; is that correct?

14 A That's correct.

15 MR. WISEMAN: If we could mark for
16 identification as Exhibit No. 508. These are
17 excerpts from FPL's 2012 ten-year site plan.

18 CHAIRMAN BRISE: Any objections to these
19 documents?

20 MR. RUBIN: I haven't seen them yet.

21 CHAIRMAN BRISE: Okay.

22 MR. RUBIN: Thank you. This appears to be
23 excerpts from the ten-year site plan. No
24 objection.

25 (Exhibit No. 508 was marked for

1 identification.)

2 CHAIRMAN BRISE: All right.

3 MR. WISEMAN: Thank you, Mr. Chairman.

4 BY MR. WISEMAN:

5 Q Dr. Morley, could you turn to -- it's page 12
6 of the ten-year site plan, it's Bates page 984, it has
7 Table ES2 on it.

8 A I'm there.

9 Q You have it. Okay. Now, this page contains
10 FPL's forecast of its winter and summer reserve margins
11 from 2012 through 2021, correct?

12 A That's correct.

13 Q And those reserve margins are based on your
14 forecasts of peak demand; would that be correct?

15 A Yes, as well as other inputs like how much
16 generation we have.

17 Q Sure. And if you could turn to page 39 of
18 the ten-year site plan, which is Bates page 1012. If
19 you look down in the last paragraph, the beginning of
20 the last paragraph, it indicates there that there is an
21 inherent uncertainty in load forecasting.

22 I take from your statement when I first
23 started cross-examining you, that you agree with that
24 statement, correct?

25 A Yes.

1 Q Does it also indicate in this paragraph that
2 FPL utilizes a 20 percent reserve margin in order to
3 maintain reliable electric service given the inherent
4 uncertainty of load forecasting?

5 A Yes. That's designed in part to address the
6 load uncertainty, as well as other uncertainties.

7 Q Turn to be page 55 of the ten-year site plan.
8 And if you look down in the last paragraph, is it
9 correct that FPL maintains a 20 percent reserve margin
10 also to protect against the effect of extreme weather
11 on both summer and winter peaks?

12 A I'm having to read it because I'm not
13 familiar with this page of the ten-year site plan, so
14 if you could give me a moment.

15 Q Sure.

16 A Yes, it says there's a dual planning criteria
17 of the 20 percent reserve margin and the maximum
18 loss-of-load probability.

19 Q Okay. Now, can you go back to page 12 on the
20 ten-year site plan, which is Bates page 984. It's the
21 one that has the Table ES2.

22 A I'm there.

23 Q Would you agree looking at the summer peak --
24 I'm sorry, summer reserve margin rather -- that in the
25 next few years, FPL easily satisfies the summer

1 **reserve -- I'm sorry, the 20 percent reserve margin,**
2 **but it starts to get close to it around 2018?**

3 A I'm not sure about the caveat that it easily
4 meets it. I would say it is above the 20 percent and
5 then it gets much closer by about 2020.

6 Q **All right. Well, can you look now at the**
7 **next -- the column to the left of it, it has the winter**
8 **reserve margins.**

9 **Would you agree that at no time between now**
10 **and 2021 is there any point where FPL gets close to the**
11 **20 percentage reserve margin during the winter?**

12 A That's correct.

13 Q **All right. Now, if you look at the -- just**
14 **turn the page to pages -- we can look at them**
15 **together -- 16, 17, and 18 from the ten-year site plan.**
16 **If you look at each of those pages, there are**
17 **references only to summer capacity, not winter**
18 **capacity, right?**

19 A I would have to read it again. I'm not
20 familiar with these pages in the ten-year site plan.

21 Q **Take your time, sorry.**

22 A Yes, I would agree that these particular
23 pages only reference the summer peak.

24 Q **And isn't that because FPL has absolutely no**
25 **problem of having sufficient capacity in terms of**

1 **servicing its winter peak?**

2 A No, I couldn't say that. Number one, I'm not
3 that familiar with these pages in the ten-year site
4 plan or with generation planning, so I don't know why
5 these particular pages reference the summer peak only.

6 **Q Dr. Morley, isn't it a fact that FPL's been**
7 **adding new generation capacity to meet its summer**
8 **reserve margin?**

9 A No, I can't testify to that. That may be a
10 question better directed at Witness Silva.

11 MR. WISEMAN: If I could have marked for
12 identification as Exhibit No. 509, this is
13 Dr. Morley's testimony in Docket Nos. 080245-EI
14 and 080246-EI, which concerned FPL's petitions to
15 determine need for the Cape Canaveral Plant and
16 the conversion of the Rivera Plant.

17 CHAIRMAN BRISE: Any objection to this
18 document?

19 MR. RUBIN: I haven't had a chance to review
20 it. It appears to be the testimony that has been
21 presented.

22 I would just, I guess, sort of make an
23 objection on the basis of the order that the
24 prehearing officer indicated that we would not be
25 litigating or re-litigating or asking questions

1 about matters previously determined, such as need
2 determinations, and I'm just not sure where
3 counsel is going with this.

4 MR. WISEMAN: I have absolutely no intent to
5 be re-litigate the needs questions, but I think --
6 the needs determinations -- but I think it is fair
7 to see what the witness said in one proceeding
8 versus what she is saying in another proceeding.

9 CHAIRMAN BRISE: I think that's fair.

10 (Exhibit No. 509 was marked for
11 identification.)

12 BY MR. WISEMAN:

13 Q Dr. Morley, first of all, does this appear to
14 be the testimony you provided in the needs proceedings
15 for the Canaveral project and for the conversion of the
16 Rivera Plant?

17 A Yes.

18 Q All right. Can you turn to page 8 of the
19 testimony. First of all, do you see the -- on line 6
20 there's a title that says, "Summer Peak Demand
21 Forecast." Do you see that?

22 A That's correct.

23 Q Okay. Then at line 8, you were asked the
24 question "Is FPL's need for power driven by the demand
25 forecast, the energy forecast, or both?" Can you read

1 **the first two sentence of your answer out loud, please?**

2 A "FPL's need for power, i.e., the amount of
3 resources needed, is driven by peak demand forecast
4 because FPL's needs are currently determined by the
5 summer reserve margin criteria."

6 And I believe that was based on information
7 that was provided to me.

8 Q I'm sorry, I asked you if you could read the
9 first two sentences, please.

10 A Yes.

11 Q You read the first sentence. Can you read
12 the second sentence?

13 A Okay. "While FPL uses both a reserve margin
14 and a loss-of-load probability criteria, the reserve
15 margin criteria driven by peak load forecast has
16 established the magnitude of the resources need for
17 many years."

18 Q All right. Now, can you turn to page 17 of
19 that document, please. Starting at line -- well, the
20 answer you provide at line 6 through 10, is it a fair
21 characterization of that testimony that you're saying
22 the Commission should rely upon FPL's models because of
23 the high degree of statistical significance? Is that
24 an accurate paraphrasing of that testimony?

25 A Yes, that's one of the reasons.

1 Q Okay. And that's the same argument that
2 you're making in support of your forecast here, right?

3 A That's one of the arguments, yes.

4 MR. WISEMAN: Thank you. I have no further
5 questions.

6 CHAIRMAN BRISE: Thank you very much,
7 Mr. Wiseman.

8 FEA.

9 LT. COL. FIKE: Mr. Chairman, I have no
10 further questions.

11 CHAIRMAN BRISE: Algenol.

12 MR. HA: We have no questions of this
13 witness.

14 CHAIRMAN BRISE: Okay. Who is next; the
15 Office of Public Counsel?

16 MS. CHRISTENSEN: We have no questions.

17 CHAIRMAN BRISE: Okay. FRF.

18 MR. WRIGHT: Very briefly, Mr. Chairman. I'm
19 going to ask that an exhibit be distributed.

20 CHAIRMAN BRISE: Sure.

21 MR. WRIGHT: Mr. Chairman, Ms. Farley and
22 Mr. Mowrey have kindly distributed an exhibit that
23 I would like marked for identification, I think
24 it's --

25 CHAIRMAN BRISE: 510.

1 MR. WRIGHT: 510. Thank you.

2 CHAIRMAN BRISE: Any objections on this?

3 MR. WRIGHT: Just to be clear, Mr. Chairman,
4 I have discussed this with Mr. Litchfield, this
5 consists of FPL's responses to the Retail
6 Federation's Interrogatory Nos. 1 through 10.
7 Witness Dr. Morley sponsored the responses to
8 Interrogatories 2 through 10. Witness Deaton
9 sponsored the response to Interrogatory No. 1.

10 As a matter of convenience for all concerned,
11 I did confer with Mr. Litchfield and can represent
12 that FPL has no objection to the whole exhibit
13 coming in as it is. That saves us having to come
14 back and ask Ms. Deaton to authenticate her
15 response to No. 1.

16 CHAIRMAN BRISE: Okay. Any objection?

17 MR. RUBIN: No objection.

18 (Exhibit No. 510 was marked for
19 identification.)

20 CHAIRMAN BRISE: Thank you.

21 MR. WRIGHT: Thank you.

22 CROSS-EXAMINATION

23 BY MR. WRIGHT:

24 Q Good afternoon, Dr. Morley.

25 A Good afternoon.

1 **Q** This is going to surprise you. Could you
2 just leaf through this and confirm that these are your
3 true and correct answers to Interrogatories Nos. 2
4 through 10?

5 A Yes, I believe they are.

6 **Q** Thank you.

7 These are your answers to these
8 interrogatories, correct? I'm sorry, that was the
9 question you answered, I apologize.

10 MR. WRIGHT: That was all I had,
11 Mr. Chairman. I just wanted these authenticated
12 for admission. Thanks.

13 CHAIRMAN BRISE: Thank you very much,
14 Mr. Wright.

15 Mr. Garner?

16 MR. GARNER: I have no questions of this
17 witness.

18 CHAIRMAN BRISE: All right. Thank you.

19 Mr. Saporito.

20 MR. SAPORITO: Thank you, Mr. Chairman.

21 CROSS-EXAMINATION

22 BY MR. SAPORITO:

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

24 A Good afternoon.

25 **Q** Dr. Morley, your testimony -- your prefiled

1 testimony at page 5, lines 9 and 10, you state in part
2 there that by 2013 a cumulative increase of almost
3 105,000 customers since 2010 is projected.

4 Do you recall that? Do you see that there?

5 A Yes, I do.

6 Q Do you have an opinion about the amount of
7 revenues FPL will likely receive from sales of an
8 addition of 105,000 customers?

9 A No, I don't.

10 Q Do you recall your prefiled testimony at
11 page 6, lines 5 and 10 in which you stated in part
12 there that FPL relies on industry expert IHH (sic)
13 Global Insight as a source for its inflation forecast
14 and this forecast calls for a 1.9 percent increase in
15 the Consumer Price Index in 2012 and a 2 percent
16 increase in 2013, and that these forecast that
17 increases are consistent with the consensus view that
18 inflation is likely to remain low, we can expect some
19 increases in the overall level of prices over the next
20 few years? Is that accurate?

21 A Yes.

22 Q And are you aware that the United States
23 Federal Reserve is the US government agency charged
24 with the responsibility for overseeing our country's
25 economy and that they adjust interest rates higher when

1 they believe that inflation is expected to rise?

2 A I think more correctly they're responsible
3 for monetary policy.

4 Q And they do monetary policy -- they engage
5 monetary policy through an exercise of adjusting
6 interest rates higher or lower to regulate the economy;
7 is that not true?

8 A Yes, they set targets for some specific
9 interest rates.

10 Q Yes, they set targets. But they actually
11 cause a movement in interest rates, either higher or
12 lower, to regulate the economy, true?

13 A Yes, they attempt to influence the economy
14 through various things like setting targets for the
15 federal funds rate. I don't think they control
16 interest rates per se.

17 Q Well, isn't it so that they have a bond
18 program, Operation Twist, for example, and other means
19 to regulate interest rates or control interest rates to
20 make them go up or down?

21 A Yes, they attempt to influence interest
22 rates.

23 Q And to the extent that the US Federal Reserve
24 has committed to keeping interest rates to near zero
25 through the end of 2014, is it your opinion that the

1 **United States Federal Reserve does not expect inflation**
2 **to rise through the end of 2014?**

3 A No, I don't think they expect it to rise. In
4 fact, neither do we. Our inflation forecast for this
5 year is lower than last year's rate. Last year the CPI
6 increased by 3.1 percent. Our forecast this year is
7 for a lower rate of inflation, only a 1.9 percent rate
8 of inflation.

9 **Q And lower inflation means lower prices for**
10 **commodities like steel and copper; is that not so?**

11 MR. RUBIN: I object. This is way outside
12 the scope of this witness's testimony.

13 CHAIRMAN BRISE: I concur.

14 MR. SAPORITO: I'll withdraw that.

15 BY MR. SAPORITO:

16 **Q Dr. Morley, at page 24 of your prefiled**
17 **testimony, on lines 16 through 20, you were testifying**
18 **about -- and I'm paraphrasing here -- about load**
19 **forecasts in connection with the load from plug-in**
20 **electric vehicles in 2011, and it was estimated at**
21 **about 6 gigawatt hours and that by 2013 the load from**
22 **plug-in vehicles is projected to increase to almost 38**
23 **gigawatts or about a 500 percent increase; is that**
24 **correct?**

25 A That's correct.

1 Q And your prefiled testimony at page 24, lines
2 22 to 23, and continuing on lines 1 through 8 on the
3 next page, page 25, that's related to load estimates
4 from plug-in electric vehicles on a projected basis; is
5 that correct?

6 A Yes.

7 Q And FPL's Customer Service Business Unit made
8 those projections based on a review of multiple
9 forecasts from meeting experts and discussions with
10 knowledgeable professionals in the automotive industry;
11 is that correct?

12 A That's correct.

13 Q And FPL's share of the US market for plug-in
14 electric vehicles was then estimated based on the share
15 of US hybrid electric vehicles with excluding plug-in
16 electric vehicles that is currently located in FPL's
17 service area; is that correct?

18 A That's correct.

19 Q So why the exclusion of plug-in electric
20 vehicles if the entire processes of these projections
21 which FPL's customer service business you made was
22 based on plug-in electric vehicles?

23 A Yes. The idea is that there is very few
24 plug-in electric vehicles out there in 2011, very few.
25 So what they looked at was a likely market for people

1 who might want to buy in a plug-in electric would be
2 people who have bought, let's say, another type of
3 non-plug-in hybrid.

4 And in looking at that, we got a higher
5 forecast for -- and a more appropriate forecast for the
6 forecast for plug-in electric vehicles. If we had just
7 looked at the percent now, we would have a very -- as
8 the numbers on page 24 indicate, we would have a very
9 low forecast for plug-in electric vehicles.

10 **Q And just for my clarification then, your**
11 **testimony is that instead of accepting the projections**
12 **made by FPL's Customer Service Business that dealt**
13 **strictly with plug-in electric vehicles, that your**
14 **forecasts are somehow more accurate because they**
15 **excluded plug-in electric vehicles and just relied on**
16 **hybrids?**

17 A I apologize if that was the impression. Our
18 forecasts for plug-in electric vehicles in total were
19 from customer service. In this area of the testimony,
20 I was trying to explain how they came up with that
21 forecast.

22 So customer service did our forecast for
23 plug-in electric vehicles. And in order to get a proxy
24 for like the market penetration rate for plug-in
25 electric vehicles, they looked at how many people in

1 Florida have, let's say, non-plug-in versus the US as a
2 whole.

3 **Q Okay. Did FPL's Customer Service Business**
4 **Unit in their projection, did they consider the many,**
5 **many, many public accessible plug-in stations that have**
6 **been built throughout the state of Florida?**

7 A I know that they have information on that. I
8 know they provided -- it was in a survey recently they
9 provided the Commission, so I know that they do monitor
10 that, yes.

11 **Q Well, was that part of this forecast in your**
12 **testimony?**

13 A I am sure that that is part of the
14 information that customer service has, yes.

15 **Q Okay.**

16 MR. SAPORITO: That's all I have,
17 Mr. Chairman.

18 CHAIRMAN BRISE: Thank you, Mr. Saporito.

19 Mr. Hendricks.

20 MR. HENDRICKS: No questions.

21 CHAIRMAN BRISE: Thank you.

22 Staff.

23 MR. HARRIS: Yes, sir. Thank you.

24 We are going to be distributing some excerpts
25 of previously-identified documents. These are the

1 staff's composite exhibit. We don't need them
2 marked for identification, but I thought it might
3 aid everyone instead of having to page through the
4 entire staff composite exhibit.

5 CHAIRMAN BRISE: Thank you.

6 MR. HARRIS: So as a heads up.

7 And as I said, I will represent that these
8 came out of the staff composite exhibit and are
9 printouts.

10 CHAIRMAN BRISE: Okay. Thank you. I suppose
11 there are no objections to this.

12 MR. RUBIN: There are no objections to this.

13 CHAIRMAN BRISE: You may proceed, Mr. Harris.

14 MR. HARRIS: Thank you. I'm waiting for
15 Dr. Morley.

16 CROSS-EXAMINATION

17 BY MR. HARRIS:

18 Q Good afternoon, Dr. Morley.

19 A Good afternoon.

20 Q The first area I would like to cover with you
21 is with regards to Issue 19, which is, I believe, the
22 100,000 new service accounts. And I think you have
23 testified that you were here when Mr. Silagy testified
24 earlier; is that correct?

25 A That's correct.

1 **Q** Okay. And I believe he may have given a
2 **definition of new service accounts, but I wanted to ask**
3 **if you had a definition of the term "new service**
4 **account"?**

5 A Sure. A new service account is when we
6 install a meter and provide electric service.
7 Typically it would be like on a new premise.

8 **Q** Okay. And do you know what methodology and
9 **inputs FPL uses to forecast new service accounts?**

10 A Yes. We have come up with a separate
11 forecast for residential NSAs, for commercial NSAs, and
12 for NSAs in the downtown Miami area. The forecast for
13 residential NSAs is an econometric model based on
14 housing forecasts from Global Insight.

15 The forecast for commercial NSAs is based on
16 our customer forecast. And the forecast for NSAs in
17 the downtown Miami area is based on historical analysis
18 of NSAs in that area.

19 **Q** Thank you.

20 **Do you know what the historical range of new**
21 **service accounts has been for Florida Power & Light?**

22 A I think I can get that.

23 Yes, our highest annual NSA numbers were --
24 back in 2006, it was around 133,000. Our lowest was
25 last year, and it was just over 24,000.

1 Q Was that 24,000?

2 A 24,000, correct.

3 Q Thank you. And for this rate proceeding, do
4 you know what the first month and year of FPL's new
5 service account and forecast is?

6 A I'm not sure I know what you mean "first
7 month and year."

8 Q I'm trying to get a sense of if you know when
9 the forecast for this rate case begins for the new
10 service accounts? Is it a test year? Does it start in
11 January?

12 A It's based on monthly -- a monthly forecast,
13 yes, if that's your question. And its forecast -- I
14 guess it would be -- it begins January 2012.

15 Q Okay. Thank you.

16 And if we take it that it begins in January
17 of 2012, have you compared Florida Power & Light's
18 actual new service accounts from that time period,
19 January 2012, to date with regard to the new service
20 account forecast versus the actuals.

21 A Yes.

22 Q Okay. And what is your -- have you analyzed
23 the results of that comparison?

24 A Yes. We're, I think, within about 1,000 or
25 so, so far this year. Given the increase in building

1 permits we're seeing, I think that we will be right on
2 track for 2012.

3 Q Okay. You said you're right around 1,000.
4 Would that be 1,000 over or under, if you know?

5 A It would be over.

6 Q Okay. All right. Thank you.

7 I would like to move on to another area, and
8 this would be Issue 10. And I've handed out a copy of
9 FPL's response to -- it's Exhibit 50, it's titled --
10 and it's FPL's response to staff's 13th set of
11 Interrogatories Nos. 413 through 418. And specifically
12 we would like to ask you about Interrogatory No. 415.

13 A Yes, I have it.

14 Q Okay. And am I correct that in this
15 interrogatory staff asks how FPL's time period for
16 determining normal weather has changed during the past
17 15 years?

18 A That's correct.

19 Q Okay. And prior to 2008, do you know what
20 number of years FPL used for determining normal weather
21 for purposes of its net energy for load in sales
22 forecasts?

23 A We used a -- it was a rolling figure based on
24 all of our data going back to 1948. So the actual
25 number of years would, you know, change with that.

1 Q Okay. It would be --

2 A But we always use our full data going back to
3 that 1948.

4 Q Okay. So it would be however many years
5 consisting of 1948 to whatever year you were using
6 the --

7 A That's correct.

8 Q Okay. And then I believe I'm correct that in
9 2008 FPL changed the method of producing the energy
10 sales forecasts from that rolling average of the
11 variable number of years to a 20-year weather date; is
12 that correct?

13 A Yes. And we did that in part to be
14 consistent with what other Florida utilities were
15 doing.

16 Q Okay. I believe in the interrogatory, FPL
17 states that FPL changed its method of determining
18 normal weather in order to reflect a more contemporary
19 time period while still maintaining a multi-decade
20 approach which would provide a sufficient number of
21 years to smooth out weather anomalies.

22 Do you agree?

23 A That's correct.

24 Q Okay. Why did FPL determine that a more
25 contemporary time period was needed?

1 A Because, again, we wanted to keep a
2 multi-decade approach to doing normal weather. If we
3 have too few of points, then one or two years are given
4 undue weight, particularly if those are
5 nonrepresentative years.

6 So we wanted to get away from doing -- using
7 data that went back to the 1940s. We wanted to use a
8 more contemporary time period, but we wanted to keep a
9 multi-decade approach. And we also wanted to be
10 consistent with what was becoming the standard in
11 Florida, which was using 20 years to define normal
12 weather.

13 **Q Dr. Morley, for purposes of FPL's load**
14 **forecast, do you know what FPL believes would be a**
15 **minimum number of years necessary to smooth out any**
16 **weather anomalies?**

17 A I believe that 20 years is the appropriate
18 number of years.

19 **Q Okay. And what's the basis for that answer?**

20 A Because it's consistent with the multi-decade
21 period used in Florida and because, based on my
22 testimony in my rebuttal, it shows it's a fairly smooth
23 definition of normal weather as opposed to a very
24 erratic definition if one would use a shorter period,
25 let's say, ten years.

1 Q Okay. Thank you.

2 I would like to stay with Issue 10 but move
3 to a different area of questions. And, Dr. Morley,
4 based on FPL's official monthly customer -- I'm
5 sorry -- commercial customer forecast, which is number
6 of customers -- and FPL's actual number of commercial
7 customers -- this is data that FPL has provided in this
8 docket -- would you accept, subject to check, that
9 FPL's forecast of commercial customers for each month
10 from August of 2011 through June of 2012, was higher
11 than FPL's actual number of commercial customers?

12 A That's correct.

13 Q Okay. Would you also accept, subject to
14 check, that the difference between FPL's forecasted and
15 actual number of commercial customers grew steadily
16 during this period from approximately 563 customers in
17 August of 2011 to approximately 5,815 customers in June
18 of 2012?

19 A Yes, I would accept that. I would like to
20 say that that's not representative of our overall
21 forecasting area for total customers, because as I said
22 previously, in total our forecast is right on.

23 Q Thank you.

24 And looking at this approximately 11 months
25 of increasing divergence between the forecasted and

1 actual number of customers, do you believe that this
2 pattern of increasing divergence is likely to continue
3 throughout the remainder of 2012 and into 2013?

4 A Yes, it's possible. But, again, I don't
5 think it's reflective of our total customer forecast.

6 Q Okay. Now, I would like to shift gears a
7 little bit with the same type of questions but
8 regarding residential customer forecast. And the
9 question would be based on FPL's official monthly
10 residential customer forecast and FPL's actual
11 residential customers' data, which FPL has provided in
12 this docket.

13 Would you accept, subject to check, that
14 FPL's forecast of residential customers has been lower
15 than the actual number of residential customers during
16 the period December of 2011 through June of 2012?

17 A Yes, I believe that's correct. And, again,
18 there's some offset there between commercial and
19 residential customers.

20 Q I understand that.

21 Dr. Morley, are you aware of any pattern that
22 may be evident in the differencing of FPL's monthly
23 forecast of residential customers and FPL's actual
24 residential customers from August of 2011 through June
25 of 2012?

1 A No, I'm not sure.

2 Q Specifically, when I looked at the response,
3 I believe I see that the second, third, and fourth
4 months are over-forecasted -- no, I'm sorry -- I
5 believe that this is on the MFR schedule, MFR No. F-7,
6 Attachment 8 of 13, and it's page 6 of 6.

7 MR. MOYLE: Fifty or 54?

8 MR. HARRIS: Pardon? It's neither 50 nor 54.

9 This would be a single sheet that should be
10 identified at the top as "Florida Power & Light
11 Company and Subsidiaries, Docket No. 120015-EI,
12 MRF F-7, Attachment 8, Attachment No. 8 of 13."

13 MR. MOYLE: Thank you.

14 MR. HARRIS: And then this is page 6 of 6.

15 BY MR. HARRIS:

16 Q And when I look at this table, I believe what
17 it suggests to me is that there is an under-forecast of
18 total customers, residential customers, that seems to
19 grow larger throughout 2011 and in 2012.

20 Would you agree with that?

21 A Yes. And, again, it's been offset on the
22 commercial side so that overall, our customer forecast
23 has been very accurate.

24 Q Okay. Can you identify or explain the reason
25 or reasons for the divergence between the forecasted

1 **and actual residential numbers from August of 2011**
2 **through June of 2012?**

3 A No, I can't. I don't think that the
4 percentage error is that great. And as I said before,
5 I think the total customer forecast has been very
6 accurate.

7 Q Okay. And one last question. Looking at
8 that MFR No. F-7, Attachment 8 of 13, page 6 of 6,
9 would you agree that the pattern of increasing
10 under-forecast is likely to continue for the remainder
11 of 2012 and into 2013?

12 A No, I don't think I could say that at this
13 point.

14 Q Okay. Why not?

15 A Because I think, you know, overall we have
16 had a very good forecast for total customers. And I
17 think even with residential, these percentage errors is
18 relatively low.

19 Q That's fine. Thank you. You've answered all
20 of our questions.

21 MR. HARRIS: We have nothing further.

22 CHAIRMAN BRISE: Thank you very much.

23 Commissioners. Commissioner Balbis.

24 COMMISSIONER BALBIS: Thank you,

25 Mr. Chairman, I have two quick questions. You

1 mentioned in your testimony the Economic
2 Development Rider and Existing Facility
3 Development Riders and an expected increase in
4 participation. I'm curious, since both of those
5 programs were modified in July of last year and we
6 have basically a year's worth of data, what has
7 the participation been and what was the increase
8 after they were modified?

9 THE WITNESS: That's probably a question best
10 addressed to Witness Deaton. My understanding is
11 that we do have some customers on the rate though.

12 COMMISSIONER BALBIS: Okay. And then my last
13 question, do you use in the model input -- and you
14 may have covered this in your testimony -- but
15 county beeper numbers, building permit
16 applications, comp plans, any other information,
17 either in the input of the model or at least to
18 validate the output of the model?

19 THE WITNESS: I think you mentioned a couple
20 of things in there. You mentioned building
21 permits?

22 COMMISSIONER BALBIS: Yes.

23 THE WITNESS: We do look at building permits
24 relative to NSAs. In fact, that's one thing we're
25 looking at very closely this year because the

1 number of building permits in our service
2 territory is actually up 50 percent from last
3 year, and we're looking at that as a good measure
4 of validation in a safe forecast. So, yes, we do
5 look at building permits.

6 COMMISSIONER BALBIS: Okay. Thank you.
7 That's all I had.

8 CHAIRMAN BRISE: Redirect.

9 MR. RUBIN: Thank you, Mr. Chairman, just a
10 few.

11 REDIRECT EXAMINATION

12 BY MR. RUBIN:

13 **Q Dr. Morley, you were asked a number of**
14 **questions at the beginning of your cross about ITRON.**
15 **Can you just explain who ITRON is or what kind of**
16 **company they are?**

17 A Yes. ITRON is one of the leading consultants
18 on energy efficiency matters. We rely on them for
19 engineering estimates of the impact of different
20 programs, the new air-condition standards, new
21 standards for lighting and so forth. They provide
22 that.

23 However, we take that into account in the
24 model so that the overall impact on use per customer is
25 actually a combination of the coefficients in the model

1 and the input from ITRON.

2 Q Thank you.

3 And is ITRON a company that you consider to
4 be a reliable source regularly relied upon by experts
5 in your field?

6 A Yes, it is.

7 Q Could you please turn to what was marked as
8 Exhibit 503, please.

9 A You might have to give me a description.

10 Q Okay. It's interrogatory -- it's SFHHA's
11 second set of interrogatories, Interrogatory No. 177.

12 A Yes.

13 Q Okay. You were asked some questions by
14 Mr. Wiseman, and I believe you were in the middle of an
15 answer when you were interrupted. Could you please
16 complete your answer.

17 You were asked a question about data for
18 inactive accounts. Could you go ahead and complete
19 your explanation for us?

20 A Yes. And the question was do we maintain
21 data by rate class on inactive accounts? And we do not
22 in the sense that -- in order to have a rate class in a
23 sense you have to have a customer electing what rate
24 they want to be on. We do have a default rate for each
25 inactive account.

1 And I was merely mentioning that in the
2 interest of full information -- not to belabor the
3 point -- but we don't have a rate class for each
4 inactive account where someone has actually elected to
5 be on a rate because there's no customer there. But
6 there is a default rate.

7 **Q So because it's an inactive account, there's**
8 **not a customer of record that falls within one of those**
9 **classes?**

10 A That's correct.

11 **Q Okay. Let me also ask you to take a look at**
12 **Exhibit No. 507, which was SFHHA's first set of**
13 **Interrogatories No. 114.**

14 A Yes.

15 **Q Mr. Wiseman asked you some questions about**
16 **the chart that's attached, Attachment No. 1. Could you**
17 **flip to that, please?**

18 A Yes.

19 **Q All right. And just so we're all clear, the**
20 **numbers that Mr. Wiseman was pointing out to you for**
21 **2013 projections, the first column that's listed**
22 **"2005," does that mean that that was a projection or**
23 **forecast that was made in 2005?**

24 A Or actually in 2004, quite likely, because it
25 went into the 2005 ten-year site plan.

1 Q Okay. So that means you were looking nine --
2 or the company was looking nine years out and putting
3 together its best forecast for nine years out on what
4 the -- at that time at least -- what the forecast was,
5 correct?

6 A Right, nine years out, not foreseeing
7 necessarily the Great Recession, which no one saw, or
8 compact fluorescent bulbs, or new air-conditioner
9 standards and so forth.

10 Q Okay. Great.

11 And I want to take you through the numbers,
12 because Mr. Wiseman asked you about a couple of
13 columns, and then he went to the last column. I'm not
14 going to take too long to do this, but in that same
15 progression when we look at 2006, the number was
16 140,000; 2007 the number was 141,000; and then 2008
17 140,000, correct?

18 A Correct.

19 Q And then we see essentially falling off a
20 cliff, it looks like, in 2009. Can you explain what
21 that was?

22 A Yes. We had a step change in the forecast in
23 the 2009 ten-year site plan, and we significantly
24 reduced our growth productions. And we had to do that
25 because that's what was happening.

1 And since then, we have made some
2 adjustments. But if you look at the history, we did
3 make a very big step change in the 2009 ten-year site
4 plan, and that was the right thing to do.

5 **Q And was that based upon the change in the**
6 **economy, the economic times?**

7 A It was based on that. It was based on the
8 fact that we were seeing record low population, and the
9 fact that we were seeing new energy efficiency
10 standards that were not taken into account in these
11 earlier forecasts.

12 **Q Okay. Thank you.**

13 **One last thing. You've been asked a lot of**
14 **questions about individual components of your forecast,**
15 **different parts of your forecast, breakdowns of your**
16 **forecast.**

17 **Can you explain to the Commission the level**
18 **of accuracy of your current forecast?**

19 A Yes. In terms -- as I've said, the customer
20 forecasts already were within literally 100 or so. In
21 terms of net energy for load where since having done
22 the forecast in September of last year, I believe we
23 were within 0.5 percent of weather normalized actuals.

24 **Q Thank you, Dr. Morley. No other questions.**

25 **CHAIRMAN BRISE: Thank you very much. Let's**

1 deal with our exhibits.

2 MR. RUBIN: Yes, Mr. Chairman. FPL would ask
3 that Exhibits 138 and 139 be entered into the
4 record in this case. Those were the two exhibits
5 attached to Mr. Morley's testimony.

6 CHAIRMAN BRISE: Okay. Any objections?

7 (No response.)

8 CHAIRMAN BRISE: Okay. Seeing none, those
9 exhibits will be entered into the record.

10 (Exhibit Nos. 138 and 139 received in
11 evidence.)

12 CHAIRMAN BRISE: South Florida Hospital
13 Association.

14 MR. WISEMAN: Mr. Chair, SFHHA would move the
15 admission of Exhibits 502 through 509 with the
16 exception of 506, which the witness was unfamiliar
17 with and we agreed to defer that to Mr. Ender.

18 CHAIRMAN BRISE: Okay. So 502 through 509.

19 MR. WISEMAN: It would be 502, 503, 504, 505,
20 then 507 through 509.

21 CHAIRMAN BRISE: Okay. Any objections?

22 MR. RUBIN: No objections from FPL.

23 CHAIRMAN BRISE: Okay. Seeing none, let
24 those be entered into the record.

25 (Exhibit Nos. 502, 503, 504, 505, 507, 508

1 and 509 received in evidence.)

2 CHAIRMAN BRISE: And 506 essentially has been
3 withdrawn at this time to be brought back at a
4 later time.

5 Mr. Wiseman.

6 MS. HELTON: I think you can just leave it
7 marked as 506.

8 I think Mr. Wiseman is going --

9 CHAIRMAN BRISE: Right. We'll deal with that
10 at a later time.

11 MS. HELTON: Yes. And just enter it when
12 he's been able to ask the questions. That way the
13 record might be a little bit clearer.

14 CHAIRMAN BRISE: Sure.

15 And Mr. Wright.

16 MR. WRIGHT: I move 510, Mr. Chairman.

17 CHAIRMAN BRISE: All right. Any objections?

18 MR. RUBIN: No objection.

19 CHAIRMAN BRISE: All right. Okay. Seeing no
20 objections, then we'll move into the record
21 Exhibit 510.

22 (Exhibit No. 510 received in evidence.)

23 CHAIRMAN BRISE: Okay. It is 5:55. We said
24 we would be done by 6:00 p.m. this evening, so we
25 have a bonus of about five minutes.

1 Are there any other things that we need to
2 take care of today?

3 MR. YOUNG: No, sir. But staff would like to
4 meet with the parties before they depart.

5 MR. BUTLER: I do have one thing I would like
6 to raise while we're all together. First of all,
7 may Dr. Morley be excused with respect to her
8 direct testimony?

9 CHAIRMAN BRISE: Yes, she may be excused with
10 respect to her direct testimony.

11 MR. BUTLER: Thank you.

12 The other thing that I wanted to raise with
13 you, Mr. Chairman, is that we are seeing the
14 evolution of a tropical storm that may very well
15 be affecting FPL's service territory in the sort
16 of late weekend/early part of next week, it's
17 looking like.

18 That is of concern, of course, to the entire
19 company's personnel, but in particular to our sort
20 of operational witnesses who have direct
21 responsibilities for aspects of the company that
22 are impacted by the storm.

23 We have Ms. Kennedy -- or actually,
24 Ms. Santos, Ms. Kennedy, Mr. Hardy, Mr. Miranda,
25 will be coming up. They're in the schedule here

1 after Mr. Barrett, and Ms. Ousdahl. We need to
2 get them done by, I would say, the end of Thursday
3 at this point, if we sort of still see the same
4 evolution of the concern over the storm over the
5 next few days.

6 We had agreed to have Mr. Pollock, you know,
7 present his testimony after Ms. Santos. And we
8 certainly want to keep to that commitment. But
9 just we need to somehow work out a way that does
10 not delay having our operational witnesses on and
11 off in time for them to go take their
12 responsibilities with respect to the potential
13 storm impacting the system.

14 CHAIRMAN BRISE: Understood. I think that
15 those are some of the things that the parties can
16 begin to talk about. I will take a look at the
17 schedule between this evening and tomorrow and
18 we'll address that issue probably tomorrow
19 afternoon or so.

20 MR. BUTLER: Thank you.

21 CHAIRMAN BRISE: Okay. With respect to
22 planning for tomorrow, we will not be getting out
23 of here at 6:00 p.m. tomorrow, we will be moving
24 on. I suppose the earliest that we'll get out of
25 here tomorrow evening is eight o'clock, but be

1 prepared to go until ten o'clock tomorrow evening,
2 okay.

3 Any other issues?

4 Mr. Rehwinkle.

5 MR. REHWINKEL: Yes, Mr. Chairman. Just I
6 alerted staff to this earlier. I represented, I
7 think -- losing track of the days -- yesterday,
8 that we would file a response to the motion for
9 approval today. We believe it will be no later
10 than tomorrow morning sometime. I just wanted to
11 clarify.

12 CHAIRMAN BRISE: Thank you. No problem.

13 If there are no other issues that need to be
14 dealt with this evening, we'll recess and see you
15 tomorrow morning.

16 (Whereupon, proceed continued in Volume 7.)

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CERTIFICATE OF REPORTER

STATE OF FLORIDA)
COUNTY OF LEON)

I, MICHELLE SUBIA, Registered Professional Reporter, certify that the foregoing proceedings were taken before me at the time and place therein designated; that my shorthand notes were thereafter translated under my supervision; and the foregoing pages, numbered 575 through 730, are a true and correct record of the aforesaid 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 24th day of August, 2012.

Michelle Subia

MICHELLE SUBIA
NOTARY PUBLIC
COMMISSION #DD987077
EXPIRES JUNE 7, 2014

