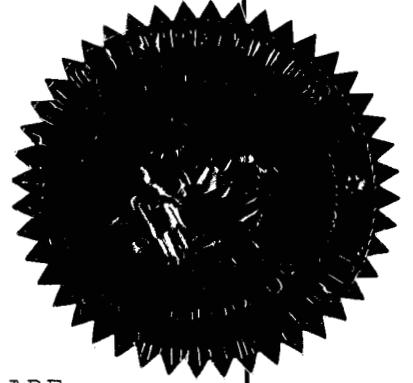


BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 060038-EI

In the Matter of:

PETITION FOR ISSUANCE OF A STORM
RECOVERY FINANCING ORDER, BY FLORIDA
POWER & LIGHT COMPANY.



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VOLUME 7
Pages 561 through 841

PROCEEDINGS: HEARING

BEFORE: CHAIRMAN LISA POLAK EDGAR
COMMISSIONER J. TERRY DEASON
COMMISSIONER ISILIO ARRIAGA
COMMISSIONER MATTHEW M. CARTER, II
COMMISSIONER KATRINA J. TEW

DATE: Thursday, April 20, 2006

TIME: Commenced at 1:48 p.m.
Concluded at 4:58 p.m.

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

REPORTED BY: LORI DEZELL
Registered Professional Reporter

APPEARANCES: (As heretofore noted.)

DOCUMENT NUMBER-DATE

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1
2 (Transcript follows in sequence from
3 Volume 6.)

4 CHAIRMAN EDGAR: Yes, sir. We're going to
5 take about five minutes to continue to look at some
6 scheduling options and then we'll get started.
7 Thank you.

8 (Break taken.)

9 CHAIRMAN EDGAR: Welcome back, and thank you
10 all. In the interest of trying to find some time,
11 we had to use some time.

12 So before we get started, we will continue to
13 try to make whatever adjustments we can, but right
14 now my intention is to go later tonight than I had
15 initially hoped we would have to. And so for
16 anybody who may have asked me prior to this about
17 what time, whatever time I've told you, you need to
18 disregard. Things have changed since then.

19 I'm thinking around 8:00, but we'll see how it
20 goes. If anybody starts to get too tired, we will
21 stop. But I'm thinking around 8:00 with some
22 breaks. And I apologize. It takes time away from
23 my family as well. So I apologize to everybody,
24 but I think we need to forge on. So that will be
25 our plan for today.

1 We will also plan to start at 9:00 again
2 tomorrow morning as we did today. Get a little
3 time. I do need to ask all of the parties, but I
4 will put primarily -- primary emphasis, excuse me,
5 with the intervenors simply because there are more
6 of you to try to work -- work together. I know
7 that you are, and I appreciate that, but continue,
8 please, to try to work together to ask focused and
9 effective questions so that we don't need to keep
10 coming back to some points.

11 Are there any other questions, comments,
12 preliminary discussion before we move back into the
13 cross?

14 MR. KISE: Madam Chairman, any thoughts about
15 if we need to go into alternate dates after
16 tomorrow?

17 CHAIRMAN EDGAR: I have many, many, many
18 thoughts on that actually. My preference, and I
19 expect the preference of everybody, would be to
20 look at Monday, but we've got numerous Commission
21 conflicts on Monday. So I am looking at Saturday
22 afternoon.

23 And there again, if that's the case, I
24 apologize. Again, time away from my family as well
25 as anybody else. If we need to, though, we will go

1 be invested, the monies in the fund would be invested in
2 FPL securities or FPL-related investments. Do you
3 recall that?

4 Yes, I do.

5 Q And I believe you told him that the investment
6 policy was not your bailiwick, so to speak, that that
7 wouldn't be a decision you would make, right?

8 A That is correct.

9 Q Do you know who in the company sets that
10 policy, who would provide that answer?

11 A At the risk of irritating my boss, it would be
12 Mr. Dewhurst.

13 Q I don't want to do that to you, either. Thank
14 you.

15 With respect to -- sticking on the subject of
16 investments a minute. You were also asked about what's
17 going to happen to all of this cash. I think we've
18 concluded from your testimony, there's going to be --
19 and hopefully won't be needed in the short-term, but
20 there will be a considerable amount of cash sitting in a
21 fund that -- that will need to be invested somewhere.
22 Is that fair to say?

23 A Yes, it is fair to say. If the full
24 650 million fund replenishment or reserve replenishment
25 is approved, then there would be 400 million in a storm

1 fund.

2 Q Right. But even if it weren't, even if it
3 were 200 million or 300 million, at least from where I'm
4 sitting, that's still a substantial amount of money,
5 whatever it is. I doubt it will be 50 or \$100. I mean,
6 it will still be fairly substantial?

7 A I agree with that. I was merely trying to
8 make sure you focused on that which reimburses us for
9 storm cost. That would be used to pay down debt and so
10 forth that we're carrying now.

11 Q Fair enough and understood. Thank you.

12 Now, is that -- whatever it's invested in,
13 non-FPL or however it's invested, where do the proceeds
14 from that investment go?

15 You take the 400 million and you're earning
16 some return on that, I'm assuming. Where does that
17 money go and is -- well, let me ask you that. Where
18 does that money go?

19 A That would be added back to the storm reserve.
20 The gross amount of the earnings would be added to
21 the -- to the storm reserve, and the monies would be
22 retained within the storm fund.

23 Q Okay. And the -- the -- those earnings, are
24 they -- the earnings on that money, is that at all the
25 subject -- and forgive me because I'm really not going

1 to go too far into this, but just so I understand. Does
2 that have anything to do, the tax on those earnings,
3 with Revenue Procedure 2005-262? Is there any safe
4 harbor for earnings in that fund or are those taxed?

5 A The earnings of the fund would be -- would be
6 taxable unless they're invested in muni-type securities.
7 So it would be subject to the normal tax laws. And --
8 but you would add the full amount of the earnings to the
9 reserve and the after-tax amount would be retained
10 within the fund.

11 Q Now, those earnings, whatever they may be, are
12 those accounted for anywhere in, for example, your
13 Exhibit KMD-1 where you layout the various -- what's
14 going to happen with the fund? In other words, the
15 company has taken a position that 650 is the appropriate
16 number. And for purposes of discussion, we'll assume
17 that it is. And we're going to get to it in a minute.
18 That's the two components that you talked about before,
19 the 400 and the 250.

20 But sticking that, it doesn't appear to me
21 anyway there's been any consideration given to earnings
22 that may accumulate in that fund in terms of reducing
23 the burden on the ratepayers.

24 A Well, the customers -- you are correct, No. 1.
25 Your observation is correct. You can look at it a

1 number of different ways. That what we're doing is
2 we're -- by adding that to the reserve and keeping it
3 within the fund, you're taking into account in some
4 small way the effects of inflation and what have you.

5 But the become line, and I think what's
6 important to me and I think to you as well, is that the
7 earnings on the fund would be retained for the customer
8 benefit in the -- in the reserve.

9 Q Okay. And then -- then none of that money --
10 none of those earnings would go outside of the fund? It
11 wouldn't be used for anything else other than for
12 purposes of that --

13 A That is true, both with respect to the gross
14 amount of the reserve side and the after-tax amount
15 within the fund.

16 Q Okay.

17 A They're self -- self-contained, sort of like
18 fund accounting in municipals, you know, in governmental
19 accounting.

20 Q Okay. Thank you.

21 Now, at the risk of really wandering off the
22 reservation here, I'm going to take a brief stab at the
23 tax issue. I know we've talked about this a lot. So I
24 only have a handful of questions. I want to make sure I
25 have it understood correctly. And even if I don't, I'll

1 stop anyway.

2 I believe you testified that storm reserve --
3 the amounts collected for the storm reserve are not
4 deductible for tax purposes, right?

5 When you collect money to go into the 650
6 fund -- not the recovery money. Let me separate that.
7 But that -- as that money is collected, that's not --
8 the only tax consequence is somebody owes taxes on that
9 money. When FPL receives the money from customers, not
10 from the bonds, but from the customers, it would be
11 taxable. Back in the history -- if it may help a little
12 bit -- and I'll just digress for a moment, I promise.

13 Back in the history when we had the
14 \$20.3 million charge, we debited the income statement as
15 an expense and credited the reserve. That expense was
16 not deductible. Therefore, taxable income, all other
17 things equal, would have been 20.3 million higher. And
18 so we had to pay taxes on that. That's why the monies
19 that were then put into the fund, part of the -- the
20 funded part of the reserve were after tax.

21 So the full 20.3 million was accounted for.
22 And the same is true here, only we're doing it in one
23 big piece. The expense side here really is the
24 amortization of the regulatory asset that we would
25 create pursuant to the financing order.

1 Q Okay. And I think in our example, or the
2 example we've been using, we split it up into
3 essentially two parts. When this money comes in from
4 the customer, 400 million is going to go to the bonds,
5 and 250 million, I believe you testified, is going to
6 pay taxes as that money comes in, right?

7 A That is correct, yes.

8 MR. ANDERSON: Madam Chair, may we be heard
9 for a moment? I believe at the prehearing --

10 CHAIRMAN EDGAR: I'm sorry, Mr. Anderson. Go
11 ahead.

12 MR. ANDERSON: Thank you. I believe the
13 prehearing memorandum in this case was very clear
14 that the parties are to try to avoid duplicative
15 cross-examination. We were over this territory for
16 about an hour this morning, and I question whether
17 this is in the best interest of the proceeding.

18 CHAIRMAN EDGAR: Mr. Anderson, you are correct
19 in your recollection of the prehearing order.

20 Mr. Kise?

21 MR. KISE: My recollection is the same. And
22 I'm not -- all I'm doing is trying for purposes
23 since we have had a lunch break is ask some
24 foundational questions before I jump right to the
25 question I really want to ask, which is the next

1 one. So with that, I'm not going to go over
2 everything we've gone over. I can assure you of
3 that.

4 CHAIRMAN EDGAR: Then let's go on to the next.

5 BY MR. KISE:

6 Q And that 250 million, that gets paid out. So
7 the higher the reserve, the more you collect for that
8 tax liability, right?

9 A The higher the reserve, the larger the
10 regulatory asset and when you split it pretax and tax
11 effect, yes.

12 Q Okay.

13 A Mathematical certainty.

14 Q Mathematical certainty. So then when you pay
15 this tax now, you only recover that later after the fund
16 is utilized to pay actual storm cost, right?

17 A Okay. We're not paying the tax now. We --
18 the bond part, the Commission will create the regulatory
19 asset. Let's use our 250/400. We'll create a
20 regulatory asset for 650 and it will create the reserve
21 of 650. So let's put the reserve aside. The regulatory
22 asset, sell the after-tax part of that, 400 to the SPE,
23 and that's what is financed through the bonds. It's a
24 nontaxable transaction.

25 When we collect the monies from the customers

1 through a -- I'll call it a surcharge, I'm not sure
2 quite what it should be called, but say a surcharge, the
3 monies coming in at that point are taxable. And we
4 would -- the monies that come in would be recorded as
5 revenues, that we would have an equal and offsetting
6 amortization of the regularly asset either at the SPE or
7 at Florida Power & Light Company.

8 And at the same time because there's no tax
9 deductible expense, the monies that came to the
10 customers for tax purposes dropped to the bottom line.
11 It has zero impact on net income for book purposes, but
12 it creates taxable income. We pay those taxes and we
13 draw down the deferred tax liability.

14 Q Right. So in our example, I think you said
15 earlier, and this is why I'm trying to make sure I'm
16 clear on it, the 250 that we're using in our example,
17 that gets paid now and there's a corresponding entry on
18 the books that gets cleared up later?

19 MR. ANDERSON: Chairman Edgar, may we be heard
20 again? We were promised a new question or a new
21 topic. This is not that.

22 MR. KISE: There's no way I can get through to
23 the next three or four questions and ask him about
24 it without at least being clear on this point. And
25 I don't think -- I don't know whether he was about

1 to answer me something different than I was saying,
2 but I'm not sure.

3 MR. ANDERSON: I'm interposing my objection
4 before the answer which is the legally correct
5 approach, Mr. Kise. Thank you.

6 CHAIRMAN EDGAR: Mr. Kise, you know as well as
7 I do, we do need to move it along and --

8 BY MR. KISE:

9 Q Do you remember my question?

10 CHAIRMAN EDGAR: Pose the question to the
11 witness again.

12 MR. KISE: Okay.

13 A I can answer --

14 Q Go ahead.

15 A -- the question assuming I don't -- my
16 attorney doesn't tell me not to. You keep referring to
17 you pay the taxes now. There are no taxes to pay now
18 because the bond is a nontaxable event.

19 Q On the 400?

20 A Even on the 400. It's a nontaxable event. I
21 have a deferred tax asset associated with the reserve.
22 I have a deferred tax liability associated with a
23 regulatory asset. There's a number of people that I
24 know would refer to it and it's a bunch of
25 accountingisms that reflect the flow of cash perhaps in

1 the future but not a flow of cash today.

2 Q Okay. So no cash -- as a result of the
3 collection of the 650 million that FPL is seeking in
4 this proceeding, you're saying that there will be no tax
5 remitted to the federal government at the time of
6 collection?

7 A I'm saying that there will be no tax remitted
8 to the government at the time of securitization, meaning
9 the bond transaction. As the monies are collected from
10 the customer, that will be used to carry the debt
11 service, to pay the debt service, that will be collected
12 on a pretax basis. FPL will retain the taxes that they
13 must pay and the after-tax amount will be remitted to
14 the SPE to cover the debt service.

15 Q Okay. And that's the -- and you've arrived at
16 the numbers, I think the numbers that we're using, the
17 400 and the 650, looking at your Exhibit KMD-2, by using
18 a rate of 38.575 percent, right?

19 A That is correct.

20 Q Okay. And if in the future the federal
21 government decides to take more money and that rate goes
22 up, then that number would change, right, if you say the
23 rate is 50 percent?

24 A I mean, the tax -- if the tax rate changes,
25 the tax is payable would -- would also change. The

1 Commission has dealt with this in the past. Fortunately
2 it was in a tax deduction -- or a tax reduction era and
3 it required that adjustments be made, refunds be made --

4 Q And the same --

5 A -- in the tax saver years. I'm sorry.

6 Q Right. And the same thing -- that's fine.

7 And the same thing is true, right? If it goes down, the
8 same is true, it just becomes less, right?

9 A Correct.

10 Q And that 38.575 percent, that consists of
11 federal income taxes. Anything else?

12 A State income taxes net of the federal benefit.

13 Q And how much of that 38.575 percent is federal
14 tax?

15 A Thirty-five.

16 Q Thirty-five percent?

17 A Percent.

18 Q And who actually pays -- I think you said
19 before that the special purpose entity doesn't pay the
20 tax, right?

21 A That is correct.

22 Q It gets passed through to -- to what entity,
23 the tax liability? Who ultimately pays that 35 percent?

24 A Okay. As I said in my summary, that Florida
25 Power -- that the SPE is treated as a division of

1 Florida Power & Light Company, and therefore Florida
2 Power & Light Company would be the company upon whom
3 taxes would be imposed.

4 Q And then Florida Power & Light Company in turn
5 doesn't write a check to the federal government, they
6 remit that to FPL Group, right?

7 A That is correct.

8 Q And then FPL Group ultimately writes the check
9 to the federal government, if any, right?

10 A That is correct.

11 Q Okay. And so if the tax rate, the effective
12 marginal tax rate for FPL Group is lower than
13 35 percent, then there should be an adjustment to
14 reflect that in this document, KMD-2, right?

15 A That is not correct.

16 Q Why not?

17 A That is not the policy of this Commission.
18 The Commission has always calculated the income taxes on
19 a stand-alone basis so that the customer is insulated
20 from either any tax issues on the nonregulated side. So
21 basically what it does is recalculate the taxes on
22 Florida Power & Light Company as if Florida Power &
23 Light Company were the ultimate taxpayer. That way the
24 customer derives no benefit and suffers no detriment
25 from any other activities.

1 Q Okay. And then what happens to that
2 differential? Let's say that you've collected on the
3 basis of 35 percent being your tax rate, it turns out
4 that FPL's marginal tax rate is more like 25 percent.
5 What happens to that 10 percent?

6 A I'm not sure. We're dealing here with the
7 marginal tax rate which is by statute 35 percent and you
8 used FPL's as 25 percent. I don't know how you get
9 there.

10 Q Well, FPL Group's -- the income taxes
11 reflected on FPL Group's financial statements were not
12 35 percent in 2005; is that right?

13 A That is correct.

14 Q It was more like 25 percent, right?

15 A That is correct. And the reason you're mixing
16 two concepts, first concept is we're talking here about
17 a marginal tax rate which is what we're talking about
18 here. When you're looking at the financial statements
19 of a company, you have what I will refer to as an
20 effective tax rate.

21 What that tax rate takes into account is any
22 tiering in the tax structure that might exist. Takes
23 into account, in the case of Florida Power & Light
24 Company, the amortization of investment tax credits, any
25 tax exempt income.

1 In the case of FPL Group, it would take into
2 account energy tax credits associated with the wind
3 energy that is produced by a nonregulated subsidiary as
4 part of the federal government's inducement to build
5 those wind farms as renewable energy. You take that
6 away, it doesn't make any sense to build them.

7 Q Okay. What I'm interested in, and I
8 appreciate all the accounting, but back to what
9 McWhirter said this morning, I'm interested in showing
10 me the money here. Where -- if you're collecting
11 35 percent for federal income taxes from the consumer,
12 and then that goes to Florida Power & Light and then
13 Florida Power & Light remits that 35 percent, whatever
14 that number is, to FPL Group, but then FPL Group only
15 winds up paying 25 percent to the federal government,
16 who keeps the other 10 percent? Where does that money
17 go? I'm assuming that the group keeps it.

18 A I would say that that would go, as I was
19 alluding to, if -- let me take a step back. I'm going
20 to repeat some ground and we'll keep doing it as long as
21 you ask the question.

22 MR. ANDERSON: Pardon me. Before Mr. Davis
23 answers, I'd like to indicate that this is far, far
24 beyond the scope of the direct testimony,
25 absolutely irrelevant to this proceeding. If we're

1 going to continue to go down these lines, I'm very
2 concerned with our time limit.

3 MR. KISE: I'm pretty concerned, too, because
4 I see 10 percent of the money going into you-all's
5 pocket and coming out of the people. That's what I
6 see. That's exactly what I see. So all I'm trying
7 to figure out is where this money is going, and I
8 think it's legitimate.

9 CHAIRMAN EDGAR: Mr. Kise, to me, please, to
10 the Chair, if you would direct your comments, I
11 would be most appreciative.

12 I am past my concern about the time clock
13 because we will -- we have moved everything around
14 and we will be here Saturday as long as we need to
15 be.

16 Secondly, I do think that you have gone beyond
17 the scope. And I also think that we're continuing
18 to go over things that really have already been
19 addressed, and there will be additional opportunity
20 in 200 pages of briefs. So I would ask you to move
21 along, Mr. Kise.

22 MR. KISE: Well, that's all I have. And I
23 just want to note my objection for the record so
24 when this goes up on appeal, it's there.

25 I want to tell you that in this document right

1 here, he's saying that there's 38.575 percent out
2 for income taxes, 35 percent of it, the witness has
3 already testified, is collected. Then that gets
4 remitted through some intracorporate, you know,
5 ingenuity into FPL Group and then FPL Group
6 according to their 10K only pays 25 percent as he's
7 just admitted.

8 CHAIRMAN EDGAR: Mr. Kise --

9 MR. KISE: All I want to know is where the
10 10 percent is.

11 CHAIRMAN EDGAR: Mr. Kise, are you making an
12 objection?

13 MR. KISE: My objection --

14 CHAIRMAN EDGAR: Are you testifying? Are you
15 getting ready to pose a question to the witness?
16 Because, quite frankly, I'm not sure.

17 MR. KISE: Okay. My objection is I think I
18 should be -- I'm entitled to find out where this
19 10 percent is going. And it seems rather obvious
20 that there's some discrepancy here. It is -- it's
21 in -- it's within the concept of this document,
22 KMD-2. And the only reason that FPL is jumping up
23 and down is because they don't want anybody to know
24 where that 10 percent is going. That's it.

25 MR. ANDERSON: Chairman Edgar, if we can help.

1 We have no problem with a brief explanation on that
2 point to satisfy counsel. But we do object to
3 further questions along this line on the grounds
4 it's not relevant to this proceeding.

5 We have no concern about our correct treatment
6 for taxation purposes of these funds. We'd like
7 the record to show that. We'd like a brief answer
8 from Mr. Davis to that effect. But we do object to
9 continuing down this line further.

10 MR. KISE: Can he answer the question then?

11 CHAIRMAN EDGAR: Mr. Kise, your objections, of
12 course, will be noted in the record. I will note
13 for the record that I haven't seen any jumping up
14 and down, at least not to my left.

15 MR. KISE: Euphemistically.

16 CHAIRMAN EDGAR: And I will ask the witness to
17 try to concisely answer the question for Mr. Kise.

18 THE WITNESS: Yes, ma'am.

19 The overall effective rate for Florida Power &
20 Light Company in 2005, remember this is a book
21 rate, is 35.3 percent. And the primary issue
22 that's in there versus the 35 is state income taxes
23 and amortization of investment tax credits.

24 If you go over to FPL Group, the overall
25 effective rate is 23.5 percent. Remember we're

1 talking effective rate, not the statutory or
2 marginal rate. The difference there are
3 production -- it's 10.8 percent of production tax
4 credits that are earned by FPL Energy.

5 Now, let's take a step back and talk about
6 what we're doing, the way we're accounting for it,
7 the way it's presented on my schedule and the
8 proper way to deal with it regulatorially is we set
9 Florida Power & Light Company up as a separate
10 company and we calculate its taxes as if Florida
11 Power & Light were paying those to the government.

12 The rest of FPL Group does it exactly the same
13 way. They calculate their taxes on a stand-alone
14 basis. The only difference is instead of FPL
15 remitting the money to the federal government and
16 the federal government turning around and giving it
17 back to FPL Energy for the production tax credits,
18 is we don't send the money two different places.

19 It goes up to Group and then Group would pay
20 FPL Energy for the production tax credits.
21 Production tax credits are a function of the energy
22 bill, they are not a function of any shenanigans or
23 anything else that goes on at FPL Group. I would
24 resent any such implication. And I guess that's
25 enough.

1 BY MR. KISE:

2 Q But the effective income rate for FPL Group is
3 23.5 percent, right?

4 A That is correct.

5 Q Okay. Last two questions. These numbers that
6 are on your schedules, KMD-1 and 2, I'll just stick with
7 those, you're not here to express an opinion on whether
8 the expenses themselves were reasonable or prudent.
9 You're simply putting down the numbers that have been
10 given to you as the total numbers, right? It's not a
11 trick question.

12 A I'm just trying to figure out -- Mr. Dewhurst
13 would be the one to sponsor. The only costs I can think
14 of that you're asking on KMD-1 would be the -- would be
15 the ongoing costs, and Mr. Dewhurst is sponsoring the
16 ongoing cost. He would also sponsor the bond cost.

17 Q I'm sorry, I misspoke. Just KMD-2, the costs
18 on lines 14 and 15, the storm recovery costs, 2004-2005?

19 A I would support those to the extent that my
20 testimony does. Ms. Williams is here to support other
21 costs and so forth.

22 Q Right. But that's not your -- you're just
23 putting the numbers down as they had been reported to
24 you. Ms. Williams told you what they were, some other
25 witness told you what they were, and you just put them

1 down here, right?

2 A No, I would not agree with that.

3 Q So you know that these costs are reasonable
4 and prudent? You were engaged in the decision-making
5 process --

6 MR. KISE: Strike all of that. It's
7 irrelevant. Thank you very much.

8 CHAIRMAN EDGAR: Are there questions from
9 Staff?

10 MS. GERVASI: Yes. Thank you.

11 CROSS-EXAMINATION

12 BY MS. GERVASI:

13 Q Mr. Davis, you made a couple of changes to
14 your prefiled testimony when you first took the stand
15 today, and one of those changes was on page 42 of your
16 testimony, where on line 14 you changed the word
17 "liability" to "asset," correct?

18 A That is correct.

19 Q Can you please turn to your prefiled Exhibit
20 No. KMD-9, which is in evidence as Exhibit 25. KMD-9.
21 And on pages 3 and 4 of 4 of that exhibit, can you tell
22 me how your change to page 42 of your testimony changes
23 those entries on that exhibit?

24 A It does not.

25 Q It does not?

1 A No. The -- if you look on lines 11 -- or
2 actually line 9 through 15 of page 42, we're talking
3 about in the event of a storm loss. And the reserve,
4 we're talking about what entries would be made to the
5 reserve, because the reserve is the one that has a
6 deferred asset tax associated with it.

7 When you draw down the reserve, you would also
8 draw down the associated deferred taxes. So that's all
9 I'm doing. I said liability instead of asset. I
10 probably should have left off asset and liability and
11 just said deferred taxes and I wouldn't have had the
12 problem.

13 Q On KMD-9, if you look at line 13 on page 3 of
14 4, where is the deferred income tax written off?

15 A It's not written off.

16 Q The deferred income tax asset, rather, where
17 is that written off?

18 A The deferred income tax asset, that would show
19 up. If I were to populate those lines with numbers -- I
20 think people are going to get tired of these numbers
21 pretty soon -- line 12, regulatory asset, that number
22 would be 650. The -- as it relates solely to the
23 reserve. That's all I'm going to talk about because
24 that's all you're talking about when you talk about the
25 deferred tax asset.

1 Q Where is it written off?

2 A Where is it written off?

3 Q Yes.

4 A The deferred tax asset, whenever the storm
5 reserve is utilized, the items charged to that reserve
6 as a general convention are assumed to be tax
7 deductible, and that would cause the reversal of that
8 tax.

9 Q Is there an entry anywhere on your exhibit
10 that shows that reversal?

11 A No, this only goes to the financing. It does
12 not include a storm event.

13 Q Okay. Thank you.

14 Would you agree that the intended effect of
15 the rate-making treatment for funded reserves is to
16 eliminate all balance sheet amounts related to the
17 reserve from the rate-making formula?

18 A I don't know what -- I don't know how to
19 answer that. I really don't. I mean, it's -- we're
20 following the rules that have been promulgated by this
21 Commission, which say on the one hand we eliminate
22 assets which have their own return, which is the fund,
23 and we eliminate that.

24 And elsewhere, the Commission adjustment that
25 has been made in the rate case is to eliminate the

1 600 -- in this case, we would be talking about a
2 650 million reserve. I don't know what else to tell
3 you.

4 Q Would you agree that a funded reserve has
5 three related components on the balance sheet, those
6 being a liability, which is the actual reserve itself
7 that's offset by the total of two assets, namely the
8 actual dollars in the fund and the debit deferred income
9 taxes; is that right?

10 A Yeah, I would say that's a fair
11 characterization, yes.

12 Q Would you agree on the balance sheet the sum
13 of the two assets is equal to the amount recorded as a
14 liability in the reserve?

15 A I did not follow you. I'm sorry.

16 Q Would you agree that on the balance sheet, the
17 sum of the two assets is equal to the amount recorded as
18 a liability in the reserve?

19 A Yes, that is true.

20 Q Would you agree that to totally eliminate the
21 effects of the funded reserve for rate-making purposes,
22 the reserve and the fund would have to be removed from
23 working capital and the debit deferred income taxes
24 would also have to be removed from the capital
25 structure?

1 A I would say that that has not been the
2 historical practice of the Commission. In this
3 particular case, you can certainly see because they're
4 large enough and they're isolated enough, you can see
5 the pieces when you go into all of the other items which
6 enter into differences in the -- a difference between
7 your tax balance sheet and your book balance sheet,
8 they're all over the board.

9 And as a result of that, the Commission has
10 historically treated the deferred taxes as essentially
11 an undifferentiated amount of zero cost capital, the
12 whole thing taken together. The mere fact you can carve
13 this one out doesn't mean it's the right thing to do.

14 Q And you don't see that that would create a
15 mismatch in any way?

16 A No, I don't.

17 Q Okay. Are the costs associated with FPL's
18 collection and remittance of franchise fees, are those
19 costs covered in rate base -- or in your base rates,
20 rather?

21 A Yes, they would be covered in our base rates.

22 Q Are the costs associated with FPL's collection
23 and remittance of local, municipal and state taxes also
24 covered in base rates?

25 A They would be covered in base rates. In each

1 case, there are two potential sources of mitigation, if
2 you will, or offset. In the first case, some of the
3 taxing arrangements allow for a discount if you pay it,
4 which is in some small way a manner of compensation.

5 Number two is that unlike the bond arrangement
6 that we're talking about here where the remittances are
7 daily, the remittances of franchise fees, muni taxes,
8 sales taxes and what have you are done on a monthly
9 basis. So we would have cash collections coming in
10 during the month and we would remit early by a date
11 certain in the succeeding month.

12 Q Does FPL forecast kilowatt hour sales in the
13 normal course of its operations?

14 A Yes.

15 Q Is the cost of updating these forecasts
16 recovered through current base rates?

17 A Yes.

18 Q Okay. I have only a couple of more questions.
19 Well, concerning the lost revenue issue, let
20 me ask you first: In the aftermath of a hurricane, is
21 it true that there's an increase in business activity,
22 for example, hotels and restaurants do more business?

23 A I -- I mean, that's a very, very general
24 question. In some cases, yes. In some cases, no. I
25 just -- I don't know how else to answer it.

1 Q Do you expect that there would be an increase
2 of that sort in business activity after a hurricane
3 which would serve to increase electric sales?

4 A I mean, if a particular hotel is open and they
5 rent more rooms, then I think that there would be more
6 electric sales to them. Whether that translates into an
7 overall company-wide increase in sales, I couldn't tell
8 you.

9 Q Okay. Thank you.

10 I want to refer you to a couple of FPL's
11 responses to Staff discovery that are included in
12 Exhibit No. 4, the first of which is on Bates stamped
13 pages 187 and 188. Do you happen to have a copy of
14 that?

15 A No, I do not. I mean, I have a stack of
16 those, but it's not what you're talking about.

17 Q We'll bring it to you.

18 A Okay.

19 Q And I'll note that this is not one of the
20 responses that the company stipulated to entering into
21 the record. But I want to direct your attention to
22 pages 187 and 188 of Exhibit 4.

23 A 187 and 188?

24 Q Yes, sir.

25 A Okay.

1 Q Do those pages appear to be a true and correct
2 copy of what they purport to be, that is, FPL's response
3 to Staff's third set of interrogatories, No. 139 with
4 Attachment 1?

5 A Yes, they do. And I would like to point out
6 one thing on Attachment 1. If you look on Bates stamp
7 188, just an issue there that since there's no budget
8 explanations provided with this, you will have the
9 appearance in the month of October of having overspent a
10 budget and in the month of November having underspent a
11 budget.

12 So I'm going to anticipate a question and
13 provide you with a budget variance explanation and the
14 primary driver between 500 and \$600,000 is the
15 misbudgeting by customer service of the payroll for that
16 particular period.

17 Our company is on a biweekly payroll. I, in
18 accounting, account for accrued payroll, meaning payroll
19 that has been earned but not paid. So there are certain
20 months where we have two payrolls, certain months where
21 we have three payrolls.

22 In this case, they assumed there would be
23 three payrolls in November, and, in fact there were
24 three payrolls in October, so --

25 Q Thank you.

1 On that exhibit, it looks like -- I'm looking
2 at Attachment 1, for the months of September, October,
3 November and December of 2005, that, of -- in three out
4 of four of those months, the normal costs exceeded the
5 budget.

6 A The normal costs exceeded the budget in
7 September, exceeded it in October, it was below in
8 November for the -- October-November being an offset,
9 and it was over in December, correct.

10 Q And is -- is that for the reason that you just
11 gave?

12 A No, that is -- the reason I just gave relates
13 only to the month of October and November.

14 Q And what about for the other months?

15 A The other months, I don't know off the top of
16 my head the full reasons. I just looked at that
17 particular one to understand why since it was so large.
18 But I know that they were -- I do know that they were
19 experiencing a lot of overtime, particularly in the
20 month of December dealing with -- dealing with issues.

21 Q Okay. Thank you.

22 If you will refer now to that same Composite
23 Exhibit 4 on Bates stamped pages 276 and 277.

24 A Okay. I'm there.

25 Q Do those pages appear to be a true and correct

1 copy of what they purport to be?

2 A Yes, ma'am.

3 Q And those are FPL's responses to Interrogatory
4 No. 240 from Staff's fifth set of interrogatories,
5 correct?

6 A Correct. It sets forth the contingency, if
7 you want to call it contingencies, that are reflected in
8 the storm -- in the 2005 storm accrual as of the end of
9 March. You can see that it's been reduced to
10 7.5 million.

11 Q Thank you.

12 If you will look on that Attachment 1, and for
13 each of those three storms, Hurricanes Katrina, Rita and
14 Wilma, that attachment shows that the largest remaining
15 estimates excluding the current contingencies are
16 associated with power systems, correct?

17 A That is correct.

18 Q Does FPL transfer all unused estimate balances
19 to power systems business unit estimates?

20 A I don't know that I would say we transfer
21 them. Certainly in '04, we -- we kept up with the
22 contingencies in one place. We tried to measure the
23 amount of uncertainty and we controlled it in one place.

24 Right now, I would look at this and say that
25 the power systems had the largest level of costs and

1 still has a level of uncertainty, which Ms. Williams
2 would be able to speak to, that would support the nature
3 of it. I know that the overall is down, I think, about
4 5 percent of the cost to be expended.

5 Q Do you know what portion of the 2005 total
6 storm contingency, the \$26 million-plus figure, was
7 moved to the estimates for power systems?

8 A I'm not sure that any amounts were moved,
9 per se. The overall contingency started out at about
10 44 million, and then was reduced over time to the 26.
11 And then our policies require that at the end of a
12 quarter, we do a comprehensive assessment trying to
13 determine or measure, gauge, whatever you want to call
14 it, the level of uncertainty that continues to exist in
15 our storm accruals the work -- I shouldn't use the word
16 accrual -- in the work that remains to be done. And
17 then if they are unnecessary, then they're required to
18 be brought down, which is what occurred in the month of
19 March.

20 But, you know, I'm not sure I would
21 characterize the transferring of -- you know, a transfer
22 of it as if it were an entitlement. It's really a
23 function of looking at it in relation to the measure of
24 uncertainty, because that's fundamentally what the
25 contingency is there for, is to measure the unknown.

1 MS. GERVASI: Okay. Thank you, sir. I have
2 no further questions.

3 CHAIRMAN EDGAR: Commissioners, any questions
4 at this time for this witness? No?

5 Okay. Mr. Anderson.

6 MR. ANDERSON: We're prepared for redirect.

7 REDIRECT EXAMINATION

8 BY MR. ANDERSON:

9 Q Mr. Davis, do you have your direct examination
10 in front of you?

11 A Yes, sir, I do.

12 Q Could you please turn to page 11 of your
13 direct testimony?

14 A I'm there.

15 Q Do you recall that Mr. Beck asked you some
16 questions about the definition of storm recovery costs
17 that appears on that page?

18 A Yes, sir, I do.

19 Q Do you remember how he had you read that first
20 sentence down to the word "storm recovery activity"?

21 A Yes, I do.

22 Q Then he referred you -- he asked, you have to
23 look at the definition of storm recovery activity,
24 right?

25 A Yes.

1 Q And then he referred you over to page 23,
2 right?

3 A That is correct.

4 Q Then he asked you some questions, if I
5 remember, about uncollectible accounts receivable,
6 vacation buyback, revenues not received. Do you
7 remember that?

8 A Yes.

9 Q And he was asking you whether those words
10 appeared in the definition of storm recovery activity.
11 Do you recall that?

12 A Yes, I do.

13 Q And you answered him that there -- those words
14 aren't in here, right?

15 A Correct. I answered that the -- specifically
16 those words were not there, but the definition of
17 incurred or to be incurred as a result of the storm
18 recovery activity certainly was contemplated in there.
19 It was not as narrow of a definition as he seemed to be
20 using.

21 Q Right. Now, turn back to page 11 and look at
22 that same paragraph that Mr. Beck had you read where he
23 stopped you after the first sentence, "defining storm
24 recovery costs." Could you please read for us the
25 second sentence defining storm recovery costs?

1 A Okay. It reads, "Such costs shall be net of
2 applicable insurance proceeds and where determined
3 appropriate by the Commission shall include all
4 adjustments for normal capital replacement and operating
5 costs, lost revenues or other potential offsetting
6 adjustments."

7 Q Turning to the topics of uncollectible
8 accounts receivable, vacation buyback, revenues not
9 recovered, in your opinion as an accountant, are those
10 within the definitions that you've just read for us?

11 A Yes, I believe they are, because they fall
12 certainly as an operating cost and they are themselves
13 incremental and arise only because of the storm
14 restoration activities undertaken by the company.

15 Q Mr. Beck also asked you some questions about
16 the 2004 storm order. Do you remember that?

17 A Yes, sir, I do.

18 Q In particular, I'd like to ask you to turn to
19 page 16 of the 2004 order. Do you have that in front of
20 you, please?

21 A Yes, sir, I do.

22 Q On the topic of base rate revenues, on
23 page 16, do you see any portion of the Commission's
24 order here that speaks to base rate revenues?

25 A Yes, the second full paragraph on the page.

1 Q Okay. Could you briefly read for us that
2 portion that discussed the Commission's treatment and
3 views on base rate revenues?

4 A Okay. Well, the Commission -- rather than
5 read the first couple of sentences -- but basically the
6 Commission recognized that you set rates contemplating
7 expenses in an expectation of realizing revenues. And
8 they acknowledged the fact that they were making such
9 adjustments, because at least on a theoretical level,
10 the base rates had been set contemplating them.

11 And then it went on to say, and I'm going to
12 read here, "However, this does not take into account the
13 fact that due to outages that resulted from these
14 storms, FPL does not realize the level of base rate
15 revenues expected to cover these normal O&M costs. Thus
16 while we agreed that lost revenues are not a cost, we
17 find that normal O&M costs that FPL charged to the
18 reserve which we removed from the storm reserve as set
19 forth above have not been recovered in base rates and
20 should be eligible for recovery in the storm fund
21 recovery mechanism."

22 And then it goes to say that they would do so
23 in the order, which is precisely what they did. And
24 that was what I attempted to do, albeit maybe not very
25 artfully, to indicate that while certain people have

1 characterized it as such, that this Commission granted
2 lost revenues, I would maintain they did not. They
3 merely recognized that the fundamental premise upon
4 which certain cost disallowances were made were faulty.

5 Q Let's turn a little further down, page 16.
6 Mr. Beck asked you some questions about bad debt
7 expense. Does a portion of page 16 speak to that?

8 A I see it.

9 Q Would you please relate to us that portion,
10 either reading or paraphrasing as you're comfortable?

11 A It's pretty short, so I'll read it. "Further,
12 we find there is a direct relationship between hurricane
13 activity and the amount of uncollectible or bad debt
14 expense incurred. We believe that bad debt expense is
15 not excludable from recoverable through the storm
16 reserve simply because it is not a cost of repairing
17 FPL's system and restoring service." And then it goes
18 on with some of the explanations.

19 MR. ANDERSON: We're fixing with exhibits.

20 I'll pass out another one real quick.

21 (Exhibit distributed.)

22 MR. ANDERSON: May we proceed, Madam Chairman?

23 CHAIRMAN EDGAR: Yes.

24 MR. ANDERSON: Thank you very much.

25 BY MR. ANDERSON:

1 Q Mr. Davis, Mr. Beck asked you some questions
2 about a \$21.7 million adjustment. Do you remember those
3 questions?

4 A Yes, I do.

5 Q Would you tell us what this exhibit is?

6 MR. ANDERSON: And I don't know what number
7 we're up to, but I'd like to mark it, please.

8 CHAIRMAN EDGAR: We'll go ahead and do that
9 now. And I'm showing that we would be at No. 148.

10 MR. ANDERSON: Thank you. If we could name
11 this Staff Recommendation, August 18, 2005.

12 (Exhibit 148 was marked for identification.)

13 BY MR. ANDERSON:

14 Q Mr. Davis, in relation to the \$21.7 million
15 adjustment which was credited, if I recall correctly, to
16 the storm reserve -- is that the right terminology?

17 A Yes, sir.

18 Q Would you tell us the significance of this
19 memorandum in relation to whether FPL has correctly
20 accounted for and sought recovery of those funds?

21 A Well, what this does is if you looked at the
22 original Staff recommendation on the 2004 order, it
23 characterized the 21.7 as CIAC. And, again, I have to
24 emphasize that we're dealing with the disposition side,
25 not with the input side. There was never a question as

1 to what it was because CIAC didn't exist as a cost
2 input. It was largely an accountingism based on how we
3 used to do it.

4 The ambiguities, the confusion that existed
5 about that caused Staff to, I think, defer the decision
6 on this particular issue for a subsequent agenda
7 conference. This memorandum, I think, is, I guess you
8 would call it, the Staff recommendation for it. And
9 it's the source of the -- or the basis upon which the
10 Commission voted to have the 21.7 million charged to
11 account 228.1.

12 And I would point out that on the third page
13 of that, it alludes to the telephone conversation
14 between all of the parties discussing this and -- that I
15 alluded to in my response to Mr. Beck's question.

16 Q Do you have any doubt that FPL has correctly
17 accounted for those funds?

18 A Absolutely not. We followed the Commission
19 order. It's pending. Since it's a deficit in the
20 reserve at the present time, it needs to be dealt with.
21 And this proceeding is the appropriate proceeding to do
22 so.

23 Q Directing your attention back to the 2004
24 order at page 21.

25 A Yes, sir.

1 Q At the bottom of 20 and the top of page 21, is
2 that the same determination of accounting treatment
3 discussed in the recommendation memorandum you just told
4 us about?

5 A Yes. This -- it is -- this table is the table
6 that appears there. The table that is in the exhibit
7 you've introduced is the table that appears in the
8 order.

9 Q And this is correct and consistent with what
10 FPL did?

11 A Yes.

12 MR. ANDERSON: Madam Chairman, we're walking
13 around a document that, I think, should be
14 Exhibit 149. Its title should be, please, Base
15 Revenue Variance, December 2005.

16 (Exhibit No. 149 was marked for
17 identification.)

18 CHAIRMAN EDGAR: And we will mark this, thank
19 you, Mr. Anderson, Exhibit 149.

20 MR. ANDERSON: May we proceed?

21 CHAIRMAN EDGAR: Yes, sir.

22 MR. ANDERSON: Thank you.

23 BY MR. ANDERSON:

24 Q Now, Mr. Davis, Mr. Beck asked you some
25 questions about some other documents that looked a lot

1 like this, didn't he?

2 A Yes, they were for the months, I believe, of
3 September through November.

4 Q I think they may have been --

5 A May have been longer than that.

6 Q Yeah, June or July through November, right?

7 A Okay.

8 Q Okay. But he didn't show you the
9 December 2005 base revenue variance sheet, did he?

10 A No, sir.

11 Q Would you please explain to the Commission the
12 significance of this base revenue variance sheet for
13 December of 2005?

14 A Well, there's two levels of significance.
15 First and foremost is it shows that the hurricane -- the
16 effects of the hurricane was the \$51.8 million. And you
17 have the normal weather there, which was a beneficial or
18 a positive 19 million, but you have other usage of a
19 negative 27 million which could just as well be weather
20 or anything else. But it's the normal vulgarities of
21 modeling and what have you.

22 But I think the most important thing on the
23 page is to look at the total retail change from the
24 plan. And that's about one, two, three -- that's the
25 fourth line up from the bottom in the table. And what

1 that measures is how did the total retail revenues of
2 the company compare with the revenues that were planned
3 for the year.

4 And what that shows is that we were
5 41.5 million under. And I would hasten to add in the
6 sense of disclosure, that 51.8 of that is due to the
7 hurricane, but overall we were \$41.5 million under for
8 the year, underplanned for the year.

9 Q Mr. Beck also asked some questions about
10 computation of revenues not received and the like. Just
11 in a thumbnail, was he on the right track looking at
12 these type of sheets for the proper method overall for
13 deriving the amounts of money not achieved due to
14 hurricanes?

15 A No. I believe I alluded to the fact that I
16 would -- I would view, frankly, that computation as
17 being, I would say, a bit more precise than using
18 regression modeling which is used here. But I would
19 very quickly get myself into trouble if I went into much
20 more of a discussion on that and I would defer to
21 Dr. Green.

22 Q So Dr. Green would the person people should
23 ask for more details on that type of point?

24 A Right. He is responsible for the revenue
25 forecast, and I used information from him to analyze

1 revenues.

2 MR. ANDERSON: FPL has no further questions
3 for Mr. Davis.

4 CHAIRMAN EDGAR: Commissioner Arriaga for a
5 question?

6 COMMISSIONER ARRIAGA: Mr. Davis, clarify
7 something for me, please.

8 THE WITNESS: Yes, sir.

9 COMMISSIONER ARRIAGA: In your current
10 financing request, the financing order you
11 currently have in front of the Commission, are you
12 presenting an item called normal O&M costs
13 following the same train of thought of the 2004
14 order?

15 THE WITNESS: I guess the way I would answer
16 that is the -- the dollars which are reflected in
17 the 2005 storm costs reflect the actual restoration
18 cost so that we would have in there things that
19 Public Counsel would seek to remove such as regular
20 salaries and what have you.

21 We do not have in there things such as
22 backfill, catch-up, the -- I'm trying to think. My
23 mind went blank. But things like that which only
24 become relevant and lost revenues are not in there
25 either, because those are only relevant in the case

1 of the adoption of an incremental cost approach.

2 COMMISSIONER ARRIAGA: Thank you.

3 THE WITNESS: Yes, sir.

4 MR. ANDERSON: FPL would offer Exhibits 148
5 and 149.

6 MR. BECK: May we have recross,
7 Madam Chairman?

8 CHAIRMAN EDGAR: I'm sorry, Mr. Beck, again?

9 MR. BECK: May we have an opportunity for
10 recross-examination based on the scope of redirect?

11 CHAIRMAN EDGAR: Briefly?

12 MR. BECK: Sure, briefly.

13 CHAIRMAN EDGAR: Briefly.

14 We'll come back, Mr. Anderson.

15 RECROSS EXAMINATION

16 BY MR. BECK:

17 Q Mr. Davis, regarding the December 2005 base
18 revenue variance --

19 A Yes, sir.

20 Q -- there's an item for other usage with a
21 footnote 3?

22 A Yes.

23 Q What's -- what is other usage?

24 A As I -- as I've indicated, other usage are
25 basically the other use -- the other change or variance

1 from normal sales that have not been explained by the
2 weather component of the regression model by our
3 specific identification of hurricane issues, the price
4 elasticity component of the regression model and the
5 economic condition component.

6 So basically it falls into there, and
7 Dr. Green can talk more about what -- you know, the
8 model itself. But it's basically other usage variances
9 that we have not been able to explain.

10 I know that there are a number of us that
11 believe some or all of that relates to weather, that
12 we're not accurately capturing the effects of weather
13 on -- you know, on usage by customers.

14 Q Under the column variance vs. planned, there's
15 retail customer growth and 21,746. Does that mean you
16 had retail growth better than you projected for the
17 year?

18 A Yes, it would.

19 Q I take it the three columns on the left is the
20 variance versus your budget, and the three columns on
21 the right are the variance against the prior year?

22 A That is correct.

23 Q So if we looked at total retail change
24 compared to your prior year on revenues, it would show
25 that you had \$110 million more in revenue in 2005

1 compared to 2004; is that right?

2 A That is correct.

3 Q With respect to the \$21.7 million, the CIAC
4 matter you talked about, your proposal is to take that
5 into account at the end of July, 2006; is that right?

6 A That is correct.

7 Q And could you show me where in the 2004 order
8 it allows you to do that?

9 A The only place that I can point to is that the
10 Commission decided to have that charged to the storm
11 reserve. The objective of the financing arrangement is
12 to deal with the unrecovered storm costs. And the
13 unrecovered storm costs fall into either those which are
14 currently being recovered by a surcharge, the '05 costs,
15 any deficit balance that may be hung up in the storm
16 reserve, which is where the 21.7 million is. So
17 explicit, I can't. I can only look to the objective of
18 the financing.

19 MR. BECK: Madam Chair, that's all I have. I
20 would ask that when we had discussed the 2004 order
21 earlier, it was not marked as an exhibit for
22 identification and I would like to have it marked.

23 CHAIRMAN EDGAR: It was not marked.

24 Mr. Harris, do we need to enter a prior
25 Commission order in as evidence?

1 MR. HARRIS: No, ma'am. I believe you can
2 take notice, Commission notice of that. It
3 wouldn't hurt for this record to go ahead and mark
4 it and admit it, but I don't believe you have to.

5 CHAIRMAN EDGAR: All right. And, Mr. Beck, my
6 intention was that as a prior Commission order,
7 that we would be taking judicial notice. However,
8 if you have a desire to enter it in, we certainly
9 can do that.

10 MR. BECK: It's just a matter of convenience.
11 I realize that. I just figured it would be easier
12 since it was discussed in this case.

13 CHAIRMAN EDGAR: We'll go ahead and enter it
14 seeing no strong preference one way or the other.
15 And hang on, I've lost my exhibit list. Here it
16 is. Okay. So then to keep in order, we will list
17 that -- or excuse me, number it, as No. 150.

18 (Exhibit 150 marked for identification.)

19 CHAIRMAN EDGAR: And I don't have it right
20 here in front of me at the moment with all of my
21 piles of paper. Can you go ahead and give me the
22 number, the order number, Mr. Beck?

23 MR. BECK: Yes. It's order No. PSC-05-0937.

24 CHAIRMAN EDGAR: Thank you. Okay. So that
25 will be Exhibit 150. Okay. Mr. Beck, let's go

1 ahead and take up your exhibits, which then I have
2 as 146, 147 and 150?

3 MR. BECK: Yes, I would move them into
4 evidence.

5 CHAIRMAN EDGAR: Any objections?

6 MR. ANDERSON: Did you offer into evidence the
7 February 14 -- I'm sorry. Did counsel offer into
8 evidence the February 14, 2006 letter and portions
9 of the surveillance report?

10 MR. PERRY: It's my understanding that it
11 wasn't marked as an exhibit.

12 MR. ANDERSON: I didn't think it was either.
13 That was my question. No objection.

14 CHAIRMAN EDGAR: Okay. Seeing no objections,
15 we will please show Exhibits 146, 147 and 150
16 entered into the record as evidence.

17 (Exhibits 146, 147 and 150 admitted into the
18 record.)

19 CHAIRMAN EDGAR: And, Mr. Anderson, I'll come
20 back to you for 148 and 149.

21 MR. ANDERSON: Please.

22 CHAIRMAN EDGAR: Any objections?

23 Seeing none, please show Exhibits 148 and 149
24 entered into the record as evidence.

25 (Exhibits 148 and 149 admitted into the

1 record.)

2 CHAIRMAN EDGAR: And with that --

3 MS. GERVASI: Madam Chair, if I may, Staff
4 would like to move in Bates stamped pages 187
5 through 188 and 276 through 277, and that is from
6 Exhibit 4.

7 MR. ANDERSON: No objection.

8 CHAIRMAN EDGAR: Okay. Please show the Bates
9 stamped pages as described by Ms. Gervasi to be
10 entered into the record as evidence.

11 CHAIRMAN EDGAR: Anything else?

12 MS. GERVASI: Thank you.

13 CHAIRMAN EDGAR: And, Mr. Davis, you may be
14 excused for the time being.

15 MR. DAVIS: Thank you, ma'am.

16 CHAIRMAN EDGAR: Thank you.

17 Let's take, I'm going to say, approximately
18 seven minutes while we switch out and get ready for
19 the next witness. So just a very brief break and
20 we'll come back at 10 after.

21 (Break taken.)

22 CHAIRMAN EDGAR: Okay. We will go back on the
23 record.

24 Ms. Smith, your witness.

25 MS. SMITH: Madam Chairman, the parties and

1 Staff have agreed that they have no questions and
2 are willing to stipulate in the direct and rebuttal
3 testimony of Steven Harris. If the Commissioners
4 do not have questions of this witness, we would ask
5 that his testimony be stipulated into the record.

6 COMMISSIONER DEASON: I have lots of questions.
7 I'm just kidding.

8 CHAIRMAN EDGAR: Commissioners? I would like
9 to see a nod from the intervenors.

10 MS. SMITH: That's my understanding.

11 MR. TWOMEY: That's correct.

12 CHAIRMAN EDGAR: Okay. Then we will show
13 Mr. Harris' prefiled testimony stipulated into the
14 record.

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1 **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

2 **FLORIDA POWER & LIGHT COMPANY**

3 **DIRECT TESTIMONY OF STEVEN P. HARRIS**

4 **DOCKET NO. 06XXXX-EI**

5 **JANUARY 13, 2006**

6

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

8 A. My name is Steven P. Harris. My business address is ABSG Consulting, Inc.
9 (ABS Consulting), 1111 Broadway Street, Oakland, California 94607.

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

11 A. I am a Vice President with ABS Consulting, an affiliated company of EQECAT,
12 Inc. both of which are subsidiaries of the ABS Group of Companies, Inc.
13 Together these two companies are leading global providers of catastrophic risk
14 management services, including software and consulting, to major insurers,
15 reinsurers, corporations, governments and other financial institutions. In addition,
16 these companies develop and license catastrophic underwriting, pricing, risk
17 management and risk transfer models that are used extensively in the insurance
18 industry. The companies provide the financial, insurance and brokerage
19 communities with a science and technology-based source of independent
20 quantitative risk information. ABS Group acquired EQE International Inc. and
21 EQECAT, Inc. in January 2000.

22 **Q. Please describe your educational background and business experience.**

23 A. I hold Bachelors and Masters degrees in engineering from the University of
24 California at Berkeley. I am a licensed civil engineer in the State of California.

1 Over the past 22 years, I have conducted and supervised independent risk and
2 financial studies for public utilities, insurance companies and other entities, both
3 regulated and unregulated. My areas of expertise include natural hazard risk
4 analysis, operational risk analysis, risk profiling and financial analysis, insurance
5 loss analysis, loss prevention and control, business continuity planning and risk
6 transfer.

7
8 A significant portion of my consulting experience has involved the performance
9 of multi-hazard risk studies, including earthquake, ice storm and windstorm
10 perils, for electric, water and telephone utility companies, as well as insurance
11 companies.

12
13 I have performed or supervised windstorm (tropical storm or hurricane) loss and
14 solvency analyses for utilities including Florida Power & Light Company (FPL or
15 the Company). Additionally, I have performed loss analyses for earthquake
16 hazard for utilities including the Los Angeles Department of Water and Power,
17 the California-Oregon Transmission Project, Big Rivers Electric and Anchorage
18 Municipal Light and Power.

19
20 For energy companies that have assets in a wide array of geographic locations, I
21 have performed or supervised multi-peril analyses for all natural hazards,
22 including earthquakes, windstorms and ice storms.

23

1 **Q. Are you sponsoring an exhibit in this case?**

2 A. Yes. It is comprised of the following documents, which are attached to my direct
3 testimony:

4 Document No. SPH-1 – Storm Loss Analysis

5 Document No. SPH-2 – Solvency Analysis of Reserve Funding Alternatives

6 Document No. SPH-3 – Comparison of FPL T&D Damage from SSI-4 Storms at
7 Landfalls with FPL Primary Recommendation; Initial and 5-year Reserve Balance
8 Levels

9

10

PURPOSE AND SUMMARY

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

12 A. The purpose of my testimony is to present the results of ABS Consulting's
13 independent analyses of risk of uninsured loss to FPL's Transmission and
14 Distribution (T&D) system.

15 **Q. Please briefly describe the studies performed for the Company.**

16 A. ABS Consulting performed two studies relative to the Reserve: The Storm Loss
17 Analysis (the Loss Analysis), and The Solvency Analysis of Reserve Funding
18 Alternatives (the Solvency Analysis of Funding Alternatives). The Loss Analysis
19 is a probabilistic storm analysis that uses proprietary software to develop an
20 estimate of the expected annual amount of uninsured windstorm losses to which
21 FPL's T&D system is exposed. The Loss Analysis is the same as was filed in
22 Docket No. 050045-EI. The Solvency Analysis of Funding Alternatives is a
23 dynamic financial simulation analysis that evaluates the performance of the

1 Reserve in terms of the expected balance of the Reserve and the likelihood of
2 insolvency, or deficit balances, over a 5 and 10-year period, given the potential
3 uninsured losses determined from the Loss Analysis. The Solvency Analysis of
4 Funding Alternatives is different from the Solvency Analysis filed in Docket No.
5 050045-EI due to the different funding alternatives being evaluated in this
6 proceeding.

7 **Q. Please summarize the results of your analyses.**

8 A. The Loss Analysis concluded that the total expected annual uninsured cost to
9 FPL's T&D system from all windstorms is estimated to be \$73.7 million. The
10 Solvency Analysis demonstrated that FPL's recommended financing mechanism
11 of issuing bonds to provide a beginning Reserve balance of \$650 million and an
12 expected jurisdictional annual loss of \$73.4 million, would result in an expected
13 Reserve balance of \$351 million at the end of five years. The probability of the
14 Reserve having a deficit balance – or being insolvent - would be 17% in any year
15 of the five-year time interval of the simulation.

16

17

LOSS ANALYSIS

18 **Q. Is the Loss Analysis you are sponsoring the same Loss Analysis that you**
19 **sponsored in Docket No. 050045-EI?**

20 A. Yes, with minor editorial revisions and corrections. The cost data utilized in
21 preparing the Loss Analysis are current through the 2004 storm season.

22

23

1 Q. **Please summarize the Loss Analysis.**

2 A. The Loss Analysis determined the expected magnitude of windstorm losses to
3 FPL's T&D system over periods of one, three and five years. Windstorm losses
4 include costs associated with service restoration and repair of FPL's T&D system
5 as a result of hurricanes, tropical storms and winter storms, including both capital
6 and operations and maintenance (O&M) costs. Also included in the annual
7 expected loss are estimates of the costs of pre-positioning of personnel and
8 equipment (staging) in anticipation of storms that ultimately do not make landfall
9 within FPL's service territory, windstorm insurance policy deductibles
10 attributable to non-T&D assets, potential retrospective assessments associated
11 with FPL's insurance of its nuclear facilities and losses in excess of insurance
12 from FPL nuclear accidents.

13 Q. **Please describe the computer software used to perform the Loss Analysis.**

14 A. USWINDTM is a probabilistic model designed to estimate damage and losses due
15 to the occurrence of hurricanes. EQECAT proprietary computer software
16 USWINDTM is one of only four models evaluated and determined acceptable by
17 the Florida Commission on Hurricane Loss Projection Methodology (FCHLPM)
18 for projecting hurricane loss costs.

19

20 Probabilistic Annual Damage & Loss is computed using the results of over
21 100,000 random variable storms. Annual damage and loss estimates are
22 developed for each individual site and aggregated to overall portfolio damage and
23 loss amounts. USWIND'sTM climatological models are based on the National

1 Oceanic and Atmospheric Administration's (NOAA) National Weather Service
2 (NWS) Technical Reports.

3

4 The version of USWINDTM currently reviewed by the FCHLPM utilizes the
5 FCHLPM's Official Storm Set of November 1, 2003, which includes hurricanes
6 affecting Florida during the period 1900 through 2002.

7 **Q. Does USWINDTM take into account storm frequency and severity?**

8 A. Yes. The analysis is based on storm frequency and severity distributions
9 developed from the entire 103-year historical record. Year-to-year variability in
10 storm frequency and severity distributions has not been included.

11 **Q. Do the storm frequency assumptions include the possibility of having
12 multiple hurricane landfalls within Florida in any given year?**

13 A. Yes. The current version of USWINDTM does include the possibility of having
14 multiple hurricane landfalls within Florida in any given year, including the impact
15 of such landfalls on aggregate losses, consistent with the 2004 and 2005 hurricane
16 seasons.

17 **Q. Did the Loss Analysis take into account the frequency of storms during the
18 2004 and 2005 storm seasons?**

19 A. No. The storm database used by USWINDTM is a combination of historical and
20 random variable storms. NOAA/NWS must update the data set before historical
21 data becomes a part of the storm database used by USWINDTM. The version of
22 USWINDTM utilizing the updated data set must, then, be evaluated and approved
23 by the FCHLPM. Information from the 2003 through 2005 hurricane seasons is

1 likely to be incorporated into future versions of USWIND™, consistent with
2 scientific opinion and subject to review by the FCHLPM and its Professional
3 Team.

4 **Q. Do you expect the frequency of storms during 2004 and 2005 will**
5 **significantly impact the frequency estimate?**

6 A. No. There could be a slight increase in the frequency estimate as a result of
7 including data points reflecting the 2004 and 2005 storm seasons in the storm
8 database. Given the size of the storm database, however, the increase is not likely
9 to be large. It is important in this respect to emphasize that the Loss Analysis is
10 based on the lengthy 103-year history, which includes periods of high and low
11 storm activity. Thus, it may not necessarily be indicative of actual experience
12 over the next five years if, in fact, Florida is experiencing a period of high storm
13 activity.

14 **Q. Did the 2004 storm season have any effect on the Loss Analysis?**

15 A. Yes. While the frequency and severity of the 2004 storm season has not yet been
16 incorporated into the USWIND™ model, FPL's costs of storm restoration from
17 the 2004 storm season were incorporated into the Loss Analysis. The 2004 storm
18 restoration costs provided additional data points on the losses associated with
19 specific levels of damage.

20 **Q. Are the costs of the 2005 storm season reflected in the Loss Analysis?**

21 A. No. The data points input into the Loss Analysis completed in March 2005,
22 which is attached to my testimony and incorporated herein, do not include loss

1 cost experience from the 2005 storm season because the final loss costs were not
2 available at the time these analyses were performed.

3 **Q. What were the results of the Loss Analysis?**

4 A. The total expected annual uninsured cost to FPL's system from all windstorms is
5 estimated to be \$73.7 million assuming average frequency of storms based on the
6 103-year history. In addition, FPL's Reserve obligations could arise from such
7 occurrences as nuclear obligations resulting from mutual insurance obligation
8 retrospective assessments or property losses in excess of insurance coverage, but
9 these potential obligations were not factored into the Solvency Analysis of
10 Funding Alternatives.

11 **Q. Did the Loss Analysis include a projection for future inflation or future
12 system growth?**

13 A. No. The Loss Analysis conservatively assumes no future system asset growth or
14 escalation of values for inflation. The Loss Analysis is designed as a snapshot of
15 FPL's current assets as of 2004. The expected annual loss estimate reflects that
16 FPL had a significant increase in asset value at risk since the prior Loss Analysis
17 performed in 2000. FPL estimates that, for the period 2000 to 2004, there was
18 approximately a 15% increase in the replacement value of the Company's
19 transmission and distribution assets. There has been no fundamental change in
20 the potential hazards to FPL's system during this same time period. As discussed
21 below, escalation of values for inflation and customer growth are incorporated
22 into the Solvency Analysis to more accurately reflect their impact on the financial
23 performance of the Reserve over time.

1 **Q. What does this expected annual loss estimate represent?**

2 A. The \$73.7 million expected annual loss estimate represents the average annual
3 cost associated with damage to transmission and distribution assets, insurance
4 deductibles for damage to other assets, and service restoration activities resulting
5 from windstorms over a long period of time.

6 **Q. Is the Loss Analysis performed for FPL the same analysis performed for
7 insurance companies to price an insurance premium?**

8 A. Yes. The natural hazards loss modeling and analysis would be similar for an
9 insurance company, electric utility, or other entity. The expected annual loss is
10 also known as the "Pure Premium," which when insurance is available is the
11 insurance premium level needed to pay just the expected losses. Insurance
12 companies add their expenses and profit margin to the Pure Premium to develop
13 the premium charged to customers.

14 **Q. Should the expected annual loss of \$73.7 million be reduced to remove capital
15 costs?**

16 A. If an insurance approach is followed, no. If capital costs are not charged to the
17 Reserve, then theoretically, the answer is yes. However, capital costs tend to be a
18 small portion of the total storm restoration cost and can vary widely from storm to
19 storm. For example, the capital portion of the cost for the most frequent, but
20 lowest intensity storms, generally have the smallest portion of capital cost. The
21 least frequent, high intensity storms, have a greater portion of capital costs.

22

1 While the effect of this capital cost offset is to reduce the estimate of the expected
2 annual damage, the amount of this reduction is unknown. There are also
3 unknown impacts whose effects would be to increase the expected annual
4 damage. For example, as addressed below, if the next 5 to 10 years are a period
5 of increased storm activity the actual storm losses may be significantly greater
6 than the \$73.7 million estimated annual damage, which is based on the long-term
7 historical average storm experience. Also, as addressed by Mr. Dewhurst, there is
8 a possibility of reductions in windstorm insurance coverage for non-T&D assets.
9 While the impact of these future changes in insurance is unknown, they could
10 mean increased exposure of the Reserve to insurance deductibles.

11 **Q. If the Atlantic Basin is experiencing a period of increased frequency and**
12 **intensity in storms, would FPL's expected annual loss over the next five years**
13 **be greater?**

14 **A.** Likely, yes. There is a growing body of evidence suggesting that the North
15 Atlantic Oscillation (NAO) and the El Niño or Southern Oscillation (ENSO) are
16 important climate variables in modulating hurricane return periods. As discussed
17 above, the damage estimated in the current ABS Consulting study assumes the
18 average hurricane activity over the century. If you accept the opinion that
19 changes in the ENSO and NAO variables indicate that we have entered a more
20 active period for hurricane formation, then FPL may expect to experience higher
21 than average damage to T&D over the next several years.

22

23

1 Q. Are you suggesting that the annual expected loss to FPL's system is higher
2 than \$73.7 million?

3 A. No, the \$73.7 million expected annual loss is based on the long-term experience
4 and data. However, historically, there have been periods of higher and lower
5 hurricane activity. If we are experiencing a more active period for hurricane
6 formation, the ABS Consulting damage estimates could understate the actual risk
7 in the near term.

8

9 **SOLVENCY ANALYSIS OF RESERVE FUNDING ALTERNATIVES**

10 Q. Is the Solvency Analysis you are sponsoring the same Solvency Analysis you
11 sponsored in Docket No. 050045-EI?

12 A. No. While the modeling technique used is the same, the analysis inputs and
13 results are different. For purposes of the Solvency Analysis, the primary
14 difference between the inputs and, therefore, the results in this analysis and the
15 one performed in Docket No. 050045-EI is that the issuance of bonds would
16 enable FPL to fund the Reserve at a reasonable level immediately. On the other
17 hand, an annual accrual, such as that requested in Docket No. 050045-EI, would
18 attempt to build the Reserve over time. The beginning balance of the Reserve
19 substantially impacts the solvency of the Reserve over time.

20 Q. Please summarize the Solvency Analysis of Reserve Funding Alternatives.

21 A. ABS Consulting performed a dynamic financial simulation analysis of the impact
22 of the estimated windstorm losses on the FPL Reserve for specified contributions
23 to the Reserve. This Solvency Analysis of Reserve Funding Alternatives

1 performed 10,000 simulations of windstorm losses within the FPL service
2 territory, each covering a ten-year period, to determine the effect of the charges
3 for loss on the Reserve. Monte Carlo simulations were used to generate loss
4 samples consistent with the jurisdictional portion of the expected \$73.7 million
5 annual Loss Analysis results. The analysis provides the expected balance of the
6 Reserve in each year of the simulation accounting for the specified initial balance,
7 any accruals to the Reserve, investment income, expenses, and losses using a
8 financial model.

9 **Q. What is a Monte Carlo analysis?**

10 A. Monte Carlo analysis is a technique used to model multiple storm seasons and
11 simulate variable storm losses consistent with the results of the Loss Analysis.
12 Because storm seasons and losses are highly variable, 10,000 ten-year simulations
13 are performed to estimate the performance of the Reserve with various accrual
14 levels.

15 **Q. Are the results of the Loss Analysis incorporated in the Solvency Analysis of
16 Reserve Funding Alternatives?**

17 A. Yes. Both the likelihoods and jurisdictionalized amounts of uninsured annual
18 losses determined in the Loss Analysis are used to simulate losses in each of the
19 ten years in the Solvency Analysis of Reserve Funding Alternatives in order to
20 determine the likelihood of Fund insolvency.

21

22

1 **Q. Why did the Solvency Analysis of Reserve Funding Alternatives include only**
2 **the jurisdictional portion of the expected annual loss?**

3 A. As described in Dr. Morley's testimony, the Storm Reserve will be available only
4 to retail customers. Therefore, Dr. Morley jurisdictionalized the expected annual
5 cost of future storm losses based on a functional analysis of expected costs.
6 Based on Dr. Morley's calculation, the retail share of annual expected future
7 storm costs is estimated at \$73.4 million.

8 **Q. Did the 2004 storm season affect the Solvency Analysis of Reserve Funding**
9 **Alternatives?**

10 A. Yes. The costs of FPL storm restoration activities from the 2004 storm season are
11 reflected in the Storm Loss Analysis and are included in the expected annual
12 losses. These results are inputs to the Solvency Analysis of Reserve Funding
13 Alternatives. Each year of the ten-year Storm Solvency analyses uses these
14 projected losses to simulate the cost of annual storm restoration from the Reserve.
15 These costs reflect past FPL storm restoration experience including the experience
16 from the 2004 season. The costs of the 2005 storm season have not yet been
17 reflected in the Loss Analysis.

18 **Q. What is the purpose of the Solvency Analysis of Reserve Funding**
19 **Alternatives?**

20 A. A solvency analysis provides a tool for management and policymakers to
21 determine the performance of the Reserve and to test whether certain financing
22 mechanisms meet their objectives. The Solvency Analysis of Reserve Funding

1 Alternatives demonstrates the performance of the Reserve given the financing
2 mechanisms proposed by FPL.

3 **Q. How does the Solvency Analysis work?**

4 A. The ABS Consulting Solvency Analysis is a cash balance analysis starting with
5 some initial balance in the Reserve. Any fund contributions and interest on the
6 account balance at the end of the year is calculated and added to the account.
7 Annual storm damage is simulated consistent with the Storm Loss Analysis for
8 each of the ten years. The storms are randomly simulated, but over a long period
9 of time, they are consistent with a jurisdictionalized average of \$73.4 million in
10 2004 damage to FPL's system.

11 **Q. Did your Solvency Analysis consider alternative funding scenarios?**

12 A. Yes. The Solvency Analysis of Reserve Funding Alternatives considered two
13 different funding scenarios, which are outlined below and described in more detail
14 in the testimony of FPL Witness Dewhurst.

15 **Q. Were there assumptions included in the Solvency Analysis of Reserve
16 Funding Alternatives that were constant for the two funding scenarios?**

17 A. Yes. Investment earnings were assumed to grow at a rate of 3.43%, and negative
18 Reserve balances were assumed to be financed with an unlimited line of credit
19 costing 4.21% before tax. Also, the analysis included certain assumptions
20 regarding loss exposures. For each year of the 10 year simulation, the average
21 system damage is increased by 4% (approximately 2% to account for customer
22 growth and approximately 2% to escalate for asset values due to inflation).

23

1 **Q. Please briefly describe the primary and alternative scenarios you analyzed.**

2 A. First, I considered a scenario in which FPL's Reserve was funded to a beginning
3 balance of \$650 million. For purposes of my analysis, I assume no additional
4 annual contribution to the Reserve other than fund earnings. As discussed in the
5 testimony of FPL Witness Dewhurst, this scenario is FPL's primary
6 recommendation.

7
8 I then considered a scenario in which FPL collected \$650 million through a
9 surcharge over a period of three years. For purposes of my analysis, the assumed
10 starting balance of the Reserve under this scenario was zero. As Mr. Dewhurst
11 discusses in his testimony, this is FPL's alternative recommendation.

12 **Q. Please summarize the results of the Solvency Analysis of Reserve Funding**
13 **Alternatives.**

14 A. The Reserve performance can be viewed in terms of the expected balance of the
15 Reserve and the likelihood of insolvency occurring in any year of a five-year
16 period. Based on the simulated loss distributions, there is some likelihood of the
17 Reserve becoming insolvent for each of the two funding proposals analyzed.

18 **Q. What were the results of the analysis of the funding scenario in which the**
19 **issuance of bonds funded FPL's Reserve to a beginning balance of \$650**
20 **million? (FPL's primary recommendation)**

21 A. The Solvency Analysis of Reserve Funding Alternatives demonstrated that FPL's
22 proposed recommendation of issuing bonds to fund to a beginning Reserve
23 balance of \$650 million resulted in an expected Reserve balance at the end of five

1 years of \$351 million and negative \$(110) million at the end of ten years. The
2 probability of insolvency of the Reserve would be 17% in any one year over the
3 five-year simulation time horizons. There is a 6% chance that the Reserve fund
4 balance could be greater than \$750 million at the end of five years.

5 **Q. Please summarize the results of the funding scenario in which FPL would**
6 **collect \$650 million through a three-year surcharge to replenish the Reserve**
7 **(FPL's alternative recommendation).**

8 A. The Solvency Analysis of Reserve Funding Alternatives demonstrated that, with a
9 beginning Reserve balance of zero and the collection of \$650 million in a
10 surcharge to replenish FPL's Reserve over a period of three years, the result
11 would be an expected Reserve Balance of \$301 million at the end of five years
12 and negative \$(153) million at the end of ten years. The probability of insolvency
13 of the Reserve would be 18% in any one year over the five-year simulation time
14 horizon. The likelihood of the Reserve Balance being greater than \$750 million
15 at the end of five years is 0%.

16 **Q. Please compare the results of the analyses of the primary and alternative**
17 **recommendations.**

18 A. Both proposals provide the same level of funding (\$650 million), while using
19 different funding mechanisms and timing. The primary recommendation of
20 issuing bonds provides a \$650 million Reserve balance in the first year. The
21 alternative recommendation of collecting a surcharge provides the same level of
22 funding spread out over three years. Therefore, in year one of the primary
23 recommendation, the Reserve receives a \$650 million infusion of funds. With the

1 alternative recommendation, the Reserve is provided \$208 million through a
2 surcharge, approximately one-third of the \$650 million. As a result, the primary
3 recommendation would have a lower probability of Reserve insolvency than the
4 alternative recommendation during the initial three years due to its higher Reserve
5 balances.

6 **Q. Did you make a recommendation as to which scenario FPL should select?**

7 A. No. My role is not to recommend the methodology for funding the Reserve. My
8 role is to present probabilities to FPL regarding Reserve solvency based on
9 various levels of funding. There are large uncertainties associated with the
10 hurricane hazard and the specific storm outcomes have large variances. There
11 could be hurricane seasons with no loss at all and hurricane seasons with
12 hundreds of millions or even more than a billion dollars in losses. The Solvency
13 Analysis presents information about the likelihood of insolvency that can be used
14 to make decisions about the Reserve.

15 **Q. Is a Reserve balance of \$650 million adequate to cover uninsured storm**
16 **losses from most but not all storm seasons as suggested by Mr. Dewhurst?**

17 A. Yes. Document No. SPH-3 shows the frequency-weighted average T&D damage
18 from single storms that are rated category 4 on the Saffir-Simpson Intensity (SSI)
19 Scale that could make landfall within 10 nautical miles of the specified mile post
20 in FPL's service territory. Document No. SPH-3 is similar to Figure 6-2 in
21 Document No. SPH-1, which is attached to my direct testimony. Single SSI-4
22 landfalls near Miami, milepost 1480, have a mean (average) T&D damage of

1 approximately \$1,100 million. Single SSI-4 landfalls near West Palm Beach,
2 milepost 1550, have an average T&D damage in excess of \$400 million.

3

4 The primary recommendation has an initial balance of \$650 million in the first
5 year and an expected Reserve balance of about \$350 million at five years. The
6 comparison in Document No. SPH-3 of the SSI-4 Landfall T&D damage with
7 Reserve balances between \$350 million and \$650 million shows that the funding
8 level proposed by FPL would be adequate to cover most but not all single SSI-4
9 storm T&D damage at the mileposts shown over a five-year period. When more
10 than one storm impacts FPL's service territory in a single storm season, the \$350
11 million and \$650 million Reserve balances would provide proportionally less
12 protection than for the single event damage shown in Document No. SPH-3.

13

14 At five years, the \$350 million expected Reserve balance would cover only a
15 portion of SSI-4 T&D damage in Miami-Dade, Broward and Palm Beach
16 Counties, which have the highest asset concentrations in FPL's service area. A
17 \$350 million Reserve balance would be adequate to fund most but not all single
18 SSI-4 storm landfalls.

19 **Q. Do you feel FPL's decision to fund the Reserve to a beginning balance of**
20 **\$650 million is reasonable?**

21 **A.** Based on the current value of FPL's T&D assets, a Reserve balance of \$650
22 million would be adequate to cover uninsured losses for several storm seasons if

1 FPL experiences \$73.4 million in annual retail storm losses. However, based on
2 long-term historical data, there is about a 17% probability (or greater than 1 in 6)
3 that Storm Losses could deplete the Reserve in any of the first five years and FPL
4 would need to return to the Commission to seek a special assessment. Of course,
5 if Florida is facing extremely active hurricane seasons for the next several years,
6 the probability is much higher.

7

8

CONCLUSION

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

10 **A. Yes.**

1 **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

2 **FLORIDA POWER & LIGHT COMPANY**

3 **REBUTTAL TESTIMONY OF STEVEN P. HARRIS**

4 **DOCKET NO. 060038-EI**

5 **APRIL 10, 2006**

6

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

8 A. My name is Steven P. Harris, my business address is 475 14th Street, Suite 550,
9 Oakland, California 94612. This is a new business address as my office has relocated
10 since my direct testimony was filed.

11 **Q. Did you previously submit direct testimony in this proceeding?**

12 A. Yes.

13 **Q. What is the purpose of your rebuttal testimony?**

14 A. I will respond to portions of the testimony submitted on behalf of the Florida Office
15 of Public Counsel (OPC) and AARP by Stephen A. Stewart, which address the level
16 of the Storm Damage Reserve to be approved in this proceeding.

17 **Q. Are you sponsoring any exhibits?**

18 A. Yes. I am sponsoring an Exhibit, which is comprised of the following documents that
19 are attached to my rebuttal testimony: Document No. SPH-4, NOAA (the National
20 Oceanic and Atmospheric Administration) Attributes Recent Increase in Hurricane
21 Activity to Naturally Occurring Multi-Decadal Climate Variability, dated November
22 29, 2005; Document No. SPH-5, Reserve Solvency Analysis Results Given \$147.1
23 Million Expected Annual Damage; and Document No. SPH-6, Protection Afforded
24 by \$200 Million Initial Reserve Balance Against Frequency Weighted Transmission

1 & Distribution Damage from Single Saffir-Simpson Hurricane Intensity Scale
2 Category 3 (SSI-3) Storm Landfalls.

3 **Q. Mr. Stewart states that his “analysis indicates that a Storm Damage Reserve**
4 **Level of \$150 million to \$200 million is large enough to withstand the damage**
5 **from most but not all storm seasons over the last 16 years.” Do you agree?**

6 A. No. If the annual expected damage to Florida Power & Light Company’s (“FPL’s”)
7 system is equal to the \$147.1 million average calculated by Mr. Stewart , then Mr.
8 Stewart’s recommended Storm Damage Reserve Level would be expected to fund
9 losses to FPL’s system for perhaps one “season” but not “seasons” as he asserts.
10 However, it appears he has used just nominal dollars for the storm damage
11 experienced by FPL, which would not reflect future increases in customer growth or
12 inflation. Customer growth, in particular, has been substantial. Indeed, over the
13 period reviewed by Mr. Stewart, FPL has added approximately 1.2 million customers.
14 By failing to appropriately account for future increases in the value of FPL’s system
15 due to customer growth and inflation, Mr. Stewart’s \$147.1 million 16-year historical
16 average provides an understated estimate of the projected damage.

17 **Q. Why do you think Mr. Stewart’s average annual storm damage calculation is**
18 **roughly twice the expected annual damage of \$73.7 million calculated by ABS**
19 **Consulting?**

20 A. Mr. Stewart uses a 16-year historical record to produce his calculation, whereas ABS
21 Consulting used the long-term 103 year historical hurricane record as the basis for
22 simulation of thousands of synthetic hurricane events and of the long-term estimated
23 annual damage of \$73.7 million presented in SPH-1, which is attached to my direct
24 testimony.

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Mr. Stewart's average annual storm damage calculation is of interest in that the period of historical data he selected roughly coincides with what is believed by many meteorological experts to be the beginning of a more active period of hurricane formation. Document No. SPH-4, which is attached to my rebuttal testimony, is titled NOAA Attributes Recent Increase in Hurricane Activity to Naturally Occurring Multi-Decadal Climate Variability, dated November 29, 2005. This document addresses the current period of heightened activity that NOAA asserts "has been unfolding in the Atlantic since 1995, and is expected to continue for the next decade or perhaps longer."

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11 **Q. Assuming Mr. Stewart's average annual storm damage calculation is correct,**
12 **how would FPL's Reserve be expected to perform given the funding**
13 **recommendations proposed by AARP/OPC and FPL respectively?**

14 A. Based on Mr. Stewart's average annual storm damage calculation of \$147.1 million
15 and a recommended initial balance of \$200 million, the Reserve would be solvent for
16 only one year and would be negative in year two. This is shown on Document No.
17 SPH-5, page 1 of 2. As Document No. SPH-5, page 2 of 2, shows, a \$650 million
18 initial balance would be expected to provide some protection from hurricanes for a
19 few years. However, by year five the Reserve would be negative.

20 **Q. What conclusion do you have with respect to the performance of FPL's Storm**
21 **Reserve given Mr. Stewart's average annual storm damage calculation?**

22 A. OPC and AARP's proposed initial Reserve balance of \$200 million would only be
23 adequate to provide protection from storms in the first year. After that, FPL would
24 need to return to the Commission to recover negative balances in the Reserve.

1 Clearly, if we are in a period of more active hurricane formation with damage near or
2 above the \$147.1 million annual estimated by Mr. Stewart, FPL's recommendation of
3 a \$650 million initial balance would be inadequate to cover this scale of increased
4 damage.

5 **Q. Using instead the long-term expected annual damage calculated by ABS**
6 **Consulting, how would the Reserve be expected to perform with the initial**
7 **balance suggested by Mr. Stewart?**

8 A. Assuming the lower \$73.7 million expected annual damage presented in SPH-1,
9 attached to my direct testimony, the Reserve would be depleted after approximately 3
10 years given a \$200 million beginning balance.

11 **Q. Assuming the \$200 million initial Reserve balance recommended by Mr.**
12 **Stewart, would the Reserve be able to cover a single strike from even a Category**
13 **3 storm?**

14 A. Not necessarily. As Document No. SPH-6 demonstrates, an initial balance of \$200
15 million would be expected to protect against some SSI-3 storms in the first year. The
16 zero (\$0) expected balance at the end of three years would not protect against any
17 storms.

18
19 It is important to recognize that in many years FPL experiences multiple storm
20 strikes. The losses for multiple strikes would obviously be greater than the losses for
21 the single strikes depicted in Document No. SPH-6, in which case the Reserve would
22 be depleted sooner.

23 **Q. Based on your analyses, would Mr. Stewart's recommended \$200 million initial**
24 **reserve balance protect against "most but not all storm seasons" as he asserts?**

1 A. No. Assuming the annual damage calculated by Mr. Stewart, the initial Reserve
2 balance he recommends would not protect against more than one storm season. Even
3 assuming the lower long-term expected annual damage calculated by ABS
4 Consulting, the Reserve balance would be zero (\$0) at the end of three years.

5 **Q. Does this conclude your rebuttal testimony?**

6 A. Yes.

1 CHAIRMAN EDGAR: Mr. Keating, does that do it?

2 MR. KEATING: Yes.

3 CHAIRMAN EDGAR: Mr. Litchfield, your witness.

4 MR. LITCHFIELD: Thank you, Chairman Edgar.

5 The next FPL witness is Wayne Olson of Credit
6 Suisse appearing on behalf of Florida Power & Light
7 Company. And I will confirm that the witness
8 indeed was here yesterday and was sworn in.

9 THE WITNESS: Yes, I was.

10 WAYNE OLSON

11 was called as a witness on behalf of FPL, and having
12 been duly sworn, testifies as follows:

13 DIRECT EXAMINATION

14 BY MR. LITCHFIELD:

15 Q Would you please state your full name and
16 business address for the record, Mr. Olson?

17 A Wayne Olson. I work for Credit Suisse at
18 11 Madison Avenue in New York City.

19 Q And by whom are you employed and in what
20 capacity?

21 A Credit Suisse. I'm a manager director in the
22 asset bank finance group.

23 Q Have you prepared and caused to be filed
24 46 pages of prefiled direct testimony in this
25 proceeding?

1 A Yes, I have.

2 Q Do you have any changes or revisions to that
3 prefiled direct testimony?

4 A No.

5 Q If I were to ask you the same questions
6 reflected in that testimony, would your answers today be
7 the same?

8 A Yes.

9 MR. LITCHFIELD: Madam Chairman, I would ask
10 that Mr. Olson's prefiled direct testimony be
11 inserted into the record as though read.

12 CHAIRMAN EDGAR: Please show that the prefiled
13 testimony will be inserted into the record as
14 though read.

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I. INTRODUCTION

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

2 A. My name is Wayne Olson. My business address is Eleven Madison Avenue,
3 New York, New York 10010.

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

5 A. I am currently a Managing Director in the Asset Backed Capital Markets group
6 at Credit Suisse First Boston LLC (Credit Suisse). (As of January 16, 2006, the
7 legal name of my employer will change to Credit Suisse Securities (USA)
8 LLC.)

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

10 A. I am responsible for origination and structuring activities for Credit Suisse in
11 securitizations for clients outside the financial services sector, including electric
12 utilities.

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

14 A. I received an A.B. degree in 1970 from Harvard College and an M.B.A. degree
15 in 1978 from U.C.L.A. From 1978 to 1982 I was enrolled in a graduate
16 program in business economics at U.C.L.A., completing all the requirements for
17 a Ph.D. degree other than the dissertation. Since 1982 (except during the period
18 from 1998-1999) I have been employed by several securities firms in their
19 asset-backed, residential mortgage-backed, and commercial mortgage-backed
20 securities businesses, primarily in a banking capacity but also (during the
21 1980's) in trading and research capacities. From 1982-1992 I was employed at
22 The First Boston Corporation, a predecessor firm to Credit Suisse. From 1992-
23 1997 I was employed at Lehman Brothers; from 1997-1998 at Greenwich

1 Capital Markets; from 1999-2000 at Prudential Securities; and since March
2 2000 I have been employed at Credit Suisse. During the period from 1998-1999
3 I was the chief financial officer of Fortress Investment Corp., a real estate
4 investment trust.

5 **Q. Are you sponsoring an exhibit in this case?**

6 **A.** Yes. I am sponsoring an exhibit consisting of the following documents which
7 are attached to my direct testimony:

- 8
- 9 • Document No. WO-1: Diagram of Proposed Securitization Transaction
 - 10 • Document No. WO-2: Pro-Forma Bond Structure
 - 11 • Document No. WO-3: Bond Cash Flows
 - 12 • Document No. WO-4: Rate Reduction Bond Transactions to-Date
 - 13 • Document No. WO-5: Form of Indenture
 - 14 • Document No. WO-6: Form of Sale Agreement
 - 15 • Document No. WO-7: Form of Servicing Agreement
 - 16 • Document No. WO-8: Form of Administration Agreement
 - 17 • Document No. WO-9: Form of LLC Agreement
 - 18 • Document No. WO-10: Form of Master Definitions
 - 19 • Document No. WO-11: Summary of Financing Documents

20

21 The documents set forth above are subject to change, based primarily on the
22 Commission's actions and rating agency requirements.

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

2 A. My testimony will: (1) provide an overview of the securitization process; (2)
3 describe the structure of FPL's proposed storm-recovery bond offering; (3)
4 explain how the structuring and pricing of the storm-recovery bonds are
5 designed to reasonably be expected to significantly mitigate rate impacts to
6 customers as compared with alternative methods of financing or recovering
7 storm-recovery costs and storm-recovery reserve; (4) explain the role of certain
8 transactions parties, such as the servicer and the trustee; (5) explain certain of
9 the upfront bond issuance costs; (6) discuss the primary rating agency criteria
10 for the storm-recovery bonds to obtain triple-A ratings; (7) describe the
11 proposed pre-issuance process; and (8) provide a debt service schedule for the
12 bonds based on current market conditions and a levelized Storm Charge
13 (defined herein).

14 **Q. Briefly describe the role of Credit Suisse in the proposed transaction.**

15 A. Credit Suisse was retained by Florida Power & Light Company (FPL) to be its
16 financial advisor for the proposed issuance of storm-recovery bonds. Credit
17 Suisse, as financial advisor, has agreed to assist FPL in procuring a financing
18 order to permit securitization, developing the storm-recovery bond structure,
19 and obtaining triple-A ratings for the bonds. The services to be provided by
20 Credit Suisse as financial advisor are described in more detail in subsection
21 III.F. of this testimony. Credit Suisse's role as financial advisor does not
22 include any role as an underwriter in the transaction, but Credit Suisse is not
23 precluded from participating in the underwritings as a bookrunner or as a
24 member of the underwriting syndicate. Services provided under those roles, if
25 any, would be provided pursuant to a separate agreement.

1 **II. OVERVIEW OF THE SECURITIZATION PROCESS**

2 **Q. What is securitization?**

3 A. Securitization is a financing technique in which certain assets—typically
4 financial assets such as loans, leases, or receivables—are legally isolated within
5 a special purpose entity (SPE) and investors purchase securities that represent
6 either debt, equity, or “pass-through” interests in the entity. These securities are
7 referred to as Asset Backed Securities (ABS). Securitization has become
8 widely accepted as an efficient way for companies to finance operations that
9 generate a high volume of fairly homogeneous receivables and for fixed-income
10 investors to pick-and-choose their preferred risk positions and diversify among
11 them. The essential characteristic of bonds issued in securitized transactions is
12 that they are issued by a special purpose entity whose only material asset is a
13 specific revenue stream (here, the Storm Bond Repayment Charges (defined
14 herein)), whose only material liabilities are the asset backed securities and
15 whose primary activities are carried out through a servicing agreement with the
16 sponsor (here, FPL). They are non-recourse to and bankruptcy-remote from any
17 operating company. The bonds are typically self-amortizing through regular
18 payments of principal over time, and there is a broad and diverse pool of
19 underlying receivables from obligors (here, FPL’s customers). Payments on the
20 assets by the underlying obligors provide the cash from which interest and
21 principal on the securities are paid over time.

22 **Q. Please elaborate on the relationship between the SPE and the sponsor**
23 **company in securitizations.**

24 A. Although there are variations, it is common for the issuing entity to be set up
25 by, and 100% owned by, an operating company which sells financial assets to
26 the entity in exchange for the cash proceeds of the sale of the ABS and for a

1 “residual interest” in the entity’s assets. Such an operating company may be
2 referred to as the “sponsor” of the transaction. As is more fully discussed
3 below, FPL is the sponsor of the proposed securitization.

4
5 Generally, the issuing entity enters into contractual arrangements under which
6 the sponsor continues to provide such activities as billing and collecting from
7 the underlying obligors, pursuing remedies against defaulting obligors, and
8 preparing reports for investors. In the proposed transaction, FPL will perform
9 these activities under terms of a servicing agreement and administration
10 agreement, forms, which set out in substantial detail the terms and conditions of
11 the proposed agreement, are attached as Document No. WO-7 and Document
12 No. WO-8, respectively. In a well-structured securitization, great care is taken
13 to preserve the integrity of the issuer as an entity separate from the sponsor and
14 the isolation of the assets from the sponsor and any of its creditors, even in the
15 event of the bankruptcy of the sponsor. Even though FPL will be collecting
16 cash from underlying obligors on behalf of SPE, separate books, records, and
17 accounts will need to be maintained to reflect that this cash is the property of
18 SPE.

19 **Q. Who is a typical investor in securitizations?**

20 A. The most frequent investors in securitizations are banks, pension funds,
21 insurance companies, and money managers (*i.e.*, institutional fixed-income
22 specialists). Securitizations tend to be large, in the range of \$100 million to \$4
23 billion.

1 **Q. How has the Asset Backed Securities market evolved?**

2 A. The ABS market began in 1985 as an outgrowth of the residential mortgage-
3 backed securities (RMBS) market, which by that time had become well
4 established. ABS has evolved through the adaptation of RMBS technology to
5 other types of consumer and commercial credits. From a little over \$1 billion of
6 issuance in 1985, the ABS market has grown at a compound rate of about 40% a
7 year to a new-issue volume of approximately \$860 billion of term securities in
8 2004. In addition, there is about \$880 billion in outstanding Asset-Backed
9 Commercial Paper, representing approximately one-half of the U.S. commercial
10 paper market. Asset classes financed through ABS (in addition to rate reduction
11 bonds) include consumer credits such as home equity loans, automobile
12 receivables, student loans and credit card balances and commercial credits such
13 as equipment leases, trade receivables, franchise fees and royalties.

14 **Q. How do Asset Backed Securities compare with corporate bonds?**

15 A. ABS and corporate bonds may be compared along the following dimensions:
16 credit fundamentals, other investment characteristics, legal environment and the
17 market for new issues and secondary trading.

18 **Q. How do they compare as to credit fundamentals?**

19 A. The sole source of repayment of ABS is an identified and isolated collateral
20 package, together with any credit enhancement instruments that may be
21 included. They are typically non-recourse to any operating company. As a
22 result, ABS tend to be less subject to event risk associated with the financial
23 performance of any particular company or individual; investors focus more on
24 event risks related to groups of obligors or sectors of the economy. Any
25 exposure of an ABS to company-specific event risk is typically related to a

1 guarantor or other credit enhancement provider. Credit migration (i.e., change
2 in rating) is less common in ABS than in corporate bonds, and a large
3 percentage of the downgrades of ABS are related to the downgrades of credit
4 enhancement providers as opposed to collateral performance. Performance
5 obligations of ABS issuers are carried out through contractual arrangements
6 with third parties such as a servicer (to bill and collect on the issuer's assets)
7 and a manager (for entity-level governance and reporting). A breach of a
8 performance obligation typically causes a default under the related contract, not
9 the ABS itself, and may result in the replacement of the defaulting service
10 provider. The process for selecting and paying fees to replacement parties and
11 any limitations on such fees are typically specified in ABS securitization
12 documents.

13 **Q. How do they compare as to other investment characteristics?**

14 A. Unlike corporate bonds, ABS tend to pay interest and principal monthly or
15 quarterly, although a semi-annual payment cycle (which is the norm in
16 corporate bonds) is occasionally seen in ABS as well. Many ABS are
17 amortizing securities, that is, principal is retired in a series of payments over
18 time rather than on a single "bullet" maturity date, which is a more common
19 feature of corporate bonds. Investors trade such securities based upon the
20 average life of the security rather than the maturity date. Most ABS have
21 considerable uncertainty around the exact pattern of principal repayment that
22 will occur, reflecting uncertainty about the repayment characteristics and credit
23 performance of the underlying assets.

24
25 Self amortization is viewed by fixed-income portfolio managers as somewhat
26 less desirable than single-payment or "bullet" maturities (which are typical of

1 corporate and government bonds) because investors in self-amortizing bonds
2 bear risk related to their ability to reinvest the principal as it amortizes. For
3 example, an investor purchasing a five-year, \$1,000 note at 6% interest with a
4 bullet maturity can expect to receive 6% interest on the \$1,000 for five full
5 years. In contrast, an investor purchasing a self-amortizing \$1,000 note at 6%
6 interest can expect to receive 6% interest but only on the balance remaining
7 after each payment. If the bond amortized ratably over the five-year period, the
8 investor would expect to receive 6% on \$1,000, but in effect only for the 2.75-
9 year average life of the bond. Furthermore, the investor's total return over the
10 five-year maturity is heavily dependent on the reinvestment opportunities that
11 will exist at the various payment dates along the way.

12 **Q. How do they compare in terms of the legal environment?**

13 A. Structurally, ABS generally require a true sale and non-consolidation opinion,
14 indicating that the assets have been transferred to the issuer in such a way as to
15 make them inaccessible to the sponsor or its creditors, even in the event of the
16 bankruptcy of the sponsor. The federal income tax treatment of ABS tends to
17 be a more complex question than for corporate bonds so that tax counsel often
18 need to rely on specific guidance in the tax law or from the Internal Revenue
19 Service (as is the case with rate reduction bonds). The Securities and Exchange
20 Commission (SEC) has developed specific rules applicable to ABS as distinct
21 from corporate bonds.

22 **Q. How do the markets compare as to new issues and secondary trading?**

23 A. ABS and corporate bonds are fairly similar in these respects. Most large
24 institutional fixed-income investors maintain portfolios of both ABS and
25 corporate bonds, although individual portfolio managers or credit analysts will
26 often specialize in one area or the other. The same is true of the major broker-

1 dealers in the two product lines. The syndicate process for distribution of new
2 issues is very similar for both products.

3 **Q. Can you describe the price discovery process for new issue distribution?**

4 A. New issues of ABS and corporate bonds are typically distributed through a
5 syndicate of underwriters, of which one or a small number will be designated as
6 "bookrunner." A bookrunner manages the flow of orders into the syndicate and
7 the final allocation of bonds against the orders. The marketing process typically
8 involves an initial stimulation of interest through the distribution of term sheets
9 and preliminary prospectus supplements (red herrings) and through "road show"
10 presentations. Road shows have historically involved live presentations to
11 investors in various cities, but most such presentations are now accomplished
12 electronically through the Bloomberg information network or through one of
13 several internet services that specialize in hosting these types of presentations.
14 These electronic slideshows are typically recorded so that investors can view
15 them on their own time, and often presented through a live conference call with
16 a Q&A session as well.

17

18 Once the initial marketing is underway, an official announcement is sent by
19 salespeople for each of the syndicate members to their customers, to whom the
20 salespeople also send the term sheet and red herring. This distribution is
21 generally done by e-mail, so that each salesperson can instantaneously send the
22 documents to all of his or her customers. In this manner, a bond issue can be
23 shown to hundreds of institutional investors in a short period of time. The
24 salespeople will typically be given internal memoranda known as "sales points"
25 which provide a synopsis of the key elements of the offering, not for

1 distribution to customers but for their reference in discussing the offering with
2 customers by phone.

3
4 With the announcement or soon after, the issuer and the bookrunner(s) will
5 agree on general pricing indications which salespeople are permitted to present
6 to customers for feedback. As the syndicate and issuer receive and evaluate
7 information on market interest, they will refine the pricing indications that are
8 presented to the market, which in their various stages are known as “whisper
9 talk,” “price thoughts” and “price guidance.” Such pricing indications are
10 generally expressed as a range of spread differentials to a benchmark, which
11 will typically be a specific Treasury issue or a specific point on the swap curve.
12 When the issuer and syndicate have received sufficient indications of interest
13 responding to these pricing ideas, they will “launch” the deal with official price
14 talk, meaning that investors who have placed indications of interest in the book
15 are asked to state whether they wish to place firm orders at the price talk. Given
16 the volume of orders for each tranche, the issuer and bookrunner(s) will decide
17 whether to fill the orders and if so, which orders to fill, or alternatively, to revise
18 the price talk and ask for re-confirmation. When this process is complete and
19 orders are confirmed, a conference call will be scheduled at a specific time to
20 “price” the transaction, meaning to establish the exact value of the benchmark
21 that will be used for each tranche and to confirm spreads, yields, coupons, par
22 amounts, maturities and average lives.

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III. TRANSACTION STRUCTURE

A. OVERVIEW OF TRANSACTION

Q. Please describe the structure of the proposed securitization transaction.

A. A diagram of the structure of the proposed securitization transaction is provided in Document No. WO-1. The proposed transaction will involve the creation by FPL of SPE, a new, wholly-owned special purpose entity which will be a Delaware limited liability company. SPE will serve as the issuer. FPL, pursuant to authorization granted it by the Commission in a financing order, will create and sell certain bondable storm-recovery property to SPE (including the right to impose, collect and receive Storm Bond Repayment Charges and to true-up the rates per kWh applicable to such charges, and the rights and interests under the financing order related thereto). SPE will finance its purchase of the storm-recovery property by selling storm-recovery bonds. The bondable storm-recovery bonds will be amortized by the Storm Bond Repayment Charges collected by SPE. The transaction will be structured to achieve the highest rating from each of the three major bond rating agencies. The criteria of these agencies are discussed in Section IV below.

Q. What is the reason for using SPE rather than issuing the storm-recovery bonds directly from FPL?

A. The credit ratings of operating companies, like FPL, are affected by factors related to their historical and ongoing business. Securitization allows a specific stream of revenue to be isolated in a manner that insulates investors from credit risks of the sponsor, so that securities issued by a special purpose entity can achieve credit ratings higher than the debt of the sponsor. In the case of securitizations under Section 366.8260, Florida Statutes (Section 366.8260), the

1 statutory provisions creating the storm-recovery property and the true-up
2 mechanism are designed to permit the storm-recovery bonds to be issued with
3 triple-A ratings. As obligations solely of SPE, the storm-recovery bonds will be
4 non-recourse to FPL, as a result of which credit analysts may view the assets
5 and liabilities of SPE as conceptually separable from those of FPL, even though
6 they will likely be consolidated under generally accepted accounting principles.

7 **Q. What characteristics of SPE are essential to ensure the highest possible**
8 **credit rating?**

9 A. SPE will be formed for the limited purpose of acquiring the bondable storm-
10 recovery property, issuing the storm-recovery bonds, and performing other
11 activities related thereto. SPE should not be permitted to engage in any other
12 activities and should have no assets other than the bondable storm-recovery
13 property and related assets to support its obligations under the storm-recovery
14 bonds. Obligations relating to the storm-recovery bonds should be SPE's only
15 significant liabilities. These restrictions on the activities of SPE and other
16 restrictions on the ability of FPL to take action on SPE's behalf are structured to
17 maximize SPE's bankruptcy remoteness so that it should be unaffected by a
18 bankruptcy of FPL. As long as the storm-recovery bonds remain outstanding,
19 SPE should be managed by a board of managers including at least one
20 independent manager with generally no ownership of, or organizational
21 affiliation with, FPL. FPL as sole member of the LLC would appoint the board
22 of managers and there is generally no fixed term for such an appointment. SPE
23 should not be permitted to amend the provisions of its organizational documents
24 that ensure bankruptcy remoteness without the consent of the independent
25 manager. Similarly, SPE should not be permitted to institute bankruptcy or
26 insolvency proceedings or to consent to the institution of bankruptcy or

1 insolvent proceedings against it, or to consolidate or merge without the
2 consent of the independent manager. These and other restrictions are set forth
3 in more detail in the LLC agreement, a form, which sets out in substantial detail
4 the terms and conditions of the proposed agreement, is attached as Document
5 No. WO-9. Other bankruptcy remoteness restrictions that the rating agencies
6 may require should also be included in SPE's organizational documents.

7
8 SPE should be established with a sufficient level of capital from FPL. The level
9 used in other rate reduction bond transactions and recommended for this
10 transaction is 0.5% of the principal amount of the bonds to be issued. This level
11 of capital contribution is generally necessary to achieve triple-A ratings and to
12 facilitate receipt of an opinion to the effect that the storm-recovery bonds will
13 be treated as debt of FPL and that the sale of bondable storm-recovery property
14 to the issuer will not be treated as a taxable event, in reliance upon Rev. Proc.
15 2005-62, issued by the Internal Revenue Service. The capital subaccount which
16 holds the equity contribution is discussed further in subsection III. D. of this
17 testimony.

18 **Q. Describe the transaction between FPL and SPE.**

19 A. Concurrent with the issuance of the storm-recovery bonds, FPL will transfer to
20 SPE certain of FPL's rights under the financing order, including the right to
21 impose, collect, and receive Storm Bond Repayment Charges approved in the
22 financing order. This transfer will be structured so as to qualify as a true sale.

23 **Q. How will the principal be amortized in the securitization?**

24 A. Storm Bond Repayment Charges will provide SPE a steady stream of revenue
25 more suitable for amortization of principal over time than for payment in full at

1 maturity. Self-amortization is necessary because it reflects the underlying
2 obligations.

3

4 Self-amortization complicates the marketing of bonds. Not all investors are
5 looking for investments with the same average life. Some investors may prefer
6 three-year notes while others are looking for investments with a five- or ten-
7 year life. To permit self-amortization while permitting investors to focus on
8 bonds with the particular lives they prefer, bonds are typically split among
9 several tranches (*i.e.* time-tranched), each with a different expected maturity. In
10 this case, under market conditions as of November 30, 2005, we would
11 recommend tranches with initial principal amounts, first scheduled principal
12 payment dates, expected maturities, legal final maturities and average lives as
13 shown in Document No. WO-2. On any given payment date, interest is paid on
14 all of the bond tranches, but principal is paid to amortize only the tranche that is
15 “next in line” to be retired. Thus, for example, in Document No. WO-2, the
16 Tranche A-1 notes have an expected principal repayment window from 2/1/07
17 to 2/1/10 and an average life of 2.0 years (from 8/1/06), the Tranche A-2 notes
18 have an expected principal repayment window from 2/1/10 to 2/1/13 and an
19 average life of 5.0 years, and so on. This time-tranching enables both shorter-
20 term investors (such as banks) and longer-term investors (such as pension
21 funds) to participate in the same securitization transaction, each in the maturity
22 range that is most suitable for its investment objectives.

23 **Q. Will a trustee be engaged in this securitization?**

24 A. Yes. Securitizations typically involve one or more trustees who act on behalf of
25 investors. The assets of the SPE are typically pledged to the trustee, who
26 perfects a first-priority security interest in them. In the event the sponsor or

1 servicer defaults on its servicing obligations, the trustee is empowered to
2 contract with another party to perform those obligations. Additional duties of
3 the trustee in this securitization, are discussed in subsection F. below.

4
5 **B. STORM-RECOVERY BONDS**

6 **Q. Are storm-recovery bonds a recognized form of securitization?**

7 A. Storm-recovery bonds are a type of rate reduction bonds, which are a well-
8 recognized form of securitization. Most rate reduction bonds to date have been
9 issued for the purpose of stranded cost recovery, and because of their close
10 association with the transition to competitive generation markets, bonds issued
11 for that purpose are commonly known as transition bonds. From the
12 perspective of a bondholder, however, the type of cost being recovered from the
13 proceeds of issuance is largely irrelevant, and so there is no material difference
14 in credit or structure between one type of rate reduction bond and another.
15 Document No. WO-4 is a list of prior rate reduction bond transactions. During
16 the last seven years, there have been at least 34 issuances of rate reduction
17 bonds in 10 states for a total of more than \$36 billion. All of these rate
18 reduction bonds were explicitly authorized by statute and regulatory action,
19 which enabled that creation of a clear, irrevocable property right in the bondable
20 storm-recovery property (with all the constitutional and contractual protections
21 of property rights), true sale of the property to an SPE, and perfection of a first-
22 priority security interest in the property by a trustee.

23 **Q. Are rate reduction bonds generally regarded as safe investments?**

24 A. Yes. The integrity of the rate reduction bond structure has been demonstrated
25 by the fact that all three rating agencies maintained their triple-A ratings on rate

1 reduction bonds sponsored by Pacific Gas & Electric Company in California in
2 spite of challenges to the underlying legislation, highly volatile electricity
3 markets, and the eventual bankruptcy of the sponsor.

4 **Q. How are rate reduction bonds priced?**

5 A. The exact interest rate is a function of the market conditions at the time the
6 bonds are sold and is influenced not only by general market conditions but by
7 such factors as the number and quality of competitive bond offerings coming to
8 market at the same time. The process by which this rate is determined is
9 described in detail in my discussion of the new-issue distribution process in
10 Section II, above.

11 **Q. How did you estimate the interest rates for the bonds to be sold in this**
12 **transaction?**

13 A. Yields on ABS have tended to track the swap curve¹ more closely than the
14 Treasury curve in recent years. As a result, pricing in relation to the swap curve
15 (e.g. X basis points above a point on the swap curve that corresponds to the
16 average life of the bonds) has been the convention for the ABS market for about
17 five years. Credit Suisse's ABS trading desk quotes current markets for rate
18 reduction bonds in these terms. (Although corporate bond yields are quoted as a
19 spread to a benchmark Treasury, it is increasingly common for participants in
20 that market to compare these yields to the swap curve, colloquially referred to
21 as "LIBOR".) The interest rate for each of the bonds in the structure in
22 Document No. WO-2 was estimated by adding the Credit Suisse-quoted rate

¹ The swap curve is the schedule by maturity of the fixed rates that money center banks are willing to exchange for LIBOR in interest rate swaps of the related maturities. "LIBOR" is an acronym for "London Interbank Offered Rate," which is the rate of interest at which banks borrow money from other banks in the London Interbank market. LIBOR is a widely used benchmark for short-term interest rates. LIBOR is a floating rate and the fixed rate into which it can be converted in a liquid market through interest rate swaps of a given maturity is known as the "swap rate" for that maturity.

1 reduction bond spread for the related average life to the swap rate at the
2 corresponding point on the swap curve as of close of business November 30,
3 2005. These estimates relate to then-current market conditions and I have made
4 no estimate for any other possible market conditions. It should be noted that the
5 current rate reduction bond market is characterized by swap rates and credit
6 spreads that are relatively low by historical standards.

7 **Q. How will the storm-recovery bonds be structured in this transaction?**

8 A. The storm-recovery bonds will be issued in multiple tranches (or classes), with
9 average lives that range from two to ten years (approximately). The scheduled
10 maturity of the bonds will match the intended recovery period at twelve years
11 from the date of issuance, although the legal final maturity will be fourteen
12 years. Document No. WO-2 shows a list of the tranches which Credit Suisse
13 would recommend under market conditions as of November 30, 2005, by first
14 scheduled principal payment date, scheduled maturity, legal final maturity,
15 initial principal amount, average life and estimated coupon for these storm-
16 recovery bond structures.

17

18 As shown in Document No. WO-2, the indicative structure has four tranches of
19 bonds with average lives of 2.0, 5.0, 7.0 and 10.0 years, respectively. The bond
20 yield is 5.06%, the all-in cost of funds is 5.19% and the estimated Storm Charge
21 is \$1.3787 per megawatt hour.

22 **Q. Are these characteristics subject to revision?**

23 A. Yes, all of these characteristics are subject to change in response to market
24 conditions. Additionally, if market interest rates rise to such an extent that the
25 Storm Charge average retail cents per kWh charge would exceed the 2004

1 Storm Restoration Surcharge now in effect, the aggregate amount of the storm-
2 recovery bonds could be reduced to an amount whereby the initial average retail
3 cents per kWh Storm Charge would not exceed the average retail cents per kWh
4 2004 Storm Restoration Surcharge currently in effect as discussed in Mr.
5 Dewhurst's testimony.

6 **Q. Why do you recommend a twelve-year recovery period?**

7 A. There are conventional average lives for new-issue rate-reduction bond
8 tranches, to which investors have been the most receptive, those being 5, 7 and
9 10 years. There is typically a shorter average life tranche as well, which may
10 have either a 2- or 3-year average life.

11
12 A longer recovery period, such as fifteen years, would result in a tranche with
13 an average life in the 12-14 year range. There have been rate reduction bond
14 tranches with average lives in this range, but they have a more limited following
15 in the investor community, so they tend to trade at higher yields than the shorter
16 tranches. A shorter recovery period, such as ten years, would result in a tranche
17 with an average life in an unconventional "betwixt and between" area in the 7.5-
18 9.5 year range. While certainly salable, such a tranche may attract interest from
19 fewer investors than one in the 5-, 7- or 10-year area.

20 **Q. Why does the legal maturity exceed the scheduled maturity?**

21 A. The legal maturity of each tranche is two years later than its scheduled maturity,
22 and Storm Charges may be imposed during this time if for any reason the
23 related tranche is not retired on schedule. Because of the inherent volatility of
24 electric utility revenues, it is necessary to have a period after the scheduled
25 maturity during which Storm Charges can be collected to make up any shortfall.

1 Although two years may not be necessary to collect any shortfall, for meeting
2 all the rating agencies' triple-A stress tests, two years is recommended.

3 **Q. How was the time-tranching determined?**

4 A. FPL instructed Credit Suisse to develop a storm-recovery bond structure based
5 on FPL's sales forecasts for the period from August 1, 2006 to the scheduled
6 maturity. The structure provides for level average retail rates per kilowatt hour
7 over the period. The level rate in each case will produce revenues (based on the
8 sales forecast) which will have two components: a storm bond repayment
9 charge, sufficient to retire the storm-recovery bonds with interest over the
10 indicated timeframe (Storm Bond Repayment Charge), and a storm bond tax
11 charge, sufficient to pay the related taxes at an assumed rate of 38.575% (Storm
12 Bond Tax Charge, together with the Storm Bond Repayment Charge,
13 collectively, Storm Charges). The bonds in the structure can be characterized as
14 "conventional" rate reduction bonds in that they pay current interest to all
15 tranches and pay some principal amortization on each payment date.

16

17 The proposed bond structure has overall amortization schedules and time-
18 tranching that reflect level average retail rates, the retail sales forecasts that
19 were provided, and our efforts to balance the competing goals of minimizing the
20 amortization window of each tranche (to make the tranche more desirable for
21 investors), maximizing the tranche size (to promote liquidity in the secondary
22 market), and targeting average lives that are most broadly sought after in the
23 current market. Each of the bond structures is designed to be reasonably
24 expected to result in lower overall costs or would avoid or significantly mitigate
25 rate impacts to customers as compared with alternative methods of financing or

1 recovering storm-recovery costs and storm-recovery reserve consistent with the
2 given recovery period and load forecast.

3 **Q. Will the storm-recovery bonds pay fixed rates or floating rates?**

4 A. Most rate reduction bonds have been fixed-rate bonds. Fixed rates are
5 necessary to permit the likely costs and benefits to be evaluated in advance and
6 to maintain roughly level storm bond recovery rates (subject to variances in
7 actual sales from forecast). It is possible, however, to issue (or effectively
8 issue) floating-rate notes if the floating interest rate is then converted to a fixed
9 rate through use of an interest rate swap. This can occur either by (i) execution
10 of an interest rate swap between SPE and a highly-rated swap counterparty or
11 (ii) execution of a interest rate swap agreement between an investor (who
12 seeking the floating rate payment) and a swap counterparty. The method
13 described in clause (ii) would not result in any additional risk to FPL customers,
14 as the agreement runs between the investor and the swap counterparty and is
15 arranged outside of the transaction (with no obligations related to the interest
16 rate swap affecting SPE). Three rate reduction bond transactions have included
17 floating-rate tranches using interest-rate swaps within the transaction, as noted
18 on Document No. WO-4. Under such a swap, for each interest payment on a
19 floating-rate tranche, SPE would be required to pay a fixed rate to the swap
20 counterparty, and the swap counterparty, in turn, would pay the storm-recovery
21 bond's floating rate to SPE, which would then use those revenues to pay
22 floating rates to the bondholders. The role of the swap in the overall
23 securitization transaction is depicted in Document No. WO-1.

24 **Q. Does the interest rate swap within the transaction create added risks for**
25 **customers?**

1 A. Yes, in three ways: counterparty default, termination payments and delays in
2 scheduled redemption of the floating rate tranche.

3 **Q. How is the risk of counterparty default addressed?**

4 A. In any transaction in which triple-A rated securities are issued, each of the
5 rating agencies imposes minimum ratings requirements on any swap
6 counterparty. While the details differ by rating agency, these minimums are
7 generally "AA-" or equivalent long-term ratings and/or "A-1/P-1/F-1" short-
8 term ratings. If a swap counterparty falls below its minimum ratings
9 requirements at any time, it is required (at its own expense) either to replace
10 itself or post collateral (or a guaranty or letter of credit) to secure its obligations.

11 **Q. What are termination payments?**

12 A. If a swap terminates for any reason, regardless of which party was affected by
13 the event that caused the termination, a termination payment is owed to the
14 extent that one party's position is "in the money," meaning that other
15 counterparties would pay for the right to step into that party's shoes. Generally
16 speaking, if interest rates have risen since the interest rate swap was entered
17 into, the floating rate payor will owe a termination payment to the fixed rate
18 payor, and similarly, if interest rates have fallen, the fixed rate payor will owe a
19 termination payment to the floating rate payor. It is likely that any such
20 termination payments would be offset by finding another counterparty willing to
21 pay cash for the right to enter into the interest rate swap at the original fixed
22 rate, but it is not a certainty.

1 **Q. Why are customers at risk if there are delays in the scheduled redemption**
2 **of the floating rate tranche?**

3 A. An interest rate swap typically requires payment of interest on a principal
4 amount specified in the swap instrument. While there is a scheduled
5 amortization for each tranche of bonds, the actual amortization of any tranche of
6 storm-recovery bonds is dependent on the flow of revenues, which are affected
7 by weather and other variables. There is a risk that the amortization will not
8 occur on schedule and, thus, that the principal balance may be higher than was
9 scheduled. If this occurs, the floating-rate payment from the swap party may
10 not be adequate to satisfy SPE's actual payment obligation. This risk arises
11 only if there are undercollections, which would result from sales that are
12 significantly below forecast over an extended period, well beyond normal sales
13 forecast variances. The capital and reserve subaccounts provide some buffer
14 against undercollection.

15

16 While it is rare for rate reduction bonds to fall behind their scheduled
17 amortization,² it nonetheless is a risk that has to be recognized. Because SPE
18 will have no assets other than the right to collect Storm Bond Repayment
19 Charges, this added risk must be borne by either the swap counterparty through
20 a "balance guaranteed swap" (in which case the swap counterparty will charge
21 extra), or by customers (who would have to pay the differential between the
22 floating rate and the fixed (swap) rate on the excess balance).

² I am aware of only two issuers of rate reduction bonds that have failed to make every principal payment as scheduled, both in a state which experienced unusually mild weather in the year immediately following the issuance of the bonds, and in which there was no provision for interim true-ups. These failures to pay scheduled principal resulted in additional interest cost to customers at a fixed rate of interest, because no floating rate notes were involved in these cases.

1

C. CREDIT ENHANCEMENT

2

Q. Is any form of credit enhancement necessary to achieve triple-A ratings for storm-recovery bonds?

3

4

A. Yes. It is a given in the electric utility industry that the actual stream of utility revenues varies with weather and other factors. The primary forms of credit enhancement necessary to convert this potentially volatile revenue stream into a stream that supports triple-A ratings are provided by Section 366.8260 (in the form of the required true-up and the state pledge), the SPE structure, and the waterfall (as discussed in subsection E. below), with the capital and reserve subaccounts designed to smooth out variability in collections.

5

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11

Q. What other kind of credit enhancement could be used to reduce the cost of the storm-recovery bonds?

12

13

A. Various types of additional credit enhancement (such as insurance, financial guaranty, and letters of credit) may be used in some securitizations to raise the rating or reduce interest costs. Given the credit enhancement already provided by Section 366.8260 and the proposed transaction structure, however, I am not aware of any form of additional credit enhancement that could be expected to reduce the cost of funds of the storm-recovery bonds by more than the fees that would be charged for the enhancement.

14

15

16

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19

1 series of storm-recovery bonds is issued under another indenture, an additional
2 capital contribution will be made to a similar capital subaccount established
3 under the new indenture. As noted previously, this level of capital contribution
4 is generally necessary to achieve triple-A ratings and to facilitate receipt of an
5 opinion of counsel to the effect that the storm-recovery bonds will be treated as
6 debt of FPL and that the sale of storm-recovery property to SPE will not be
7 treated as a taxable event, in accordance with the recently issued Revenue
8 Procedure.

9
10 The capital subaccount can be used to make interest and principal payments (or
11 to pay other operating costs) if Storm Bond Repayment Charges are inadequate.
12 Any withdrawals from the capital subaccount to pay interest or principal due to
13 bondholders will be repaid through future remittances of Storm Bond
14 Repayment Charges.

15
16 Since the capital subaccount represents the ownership interest of FPL in SPE, to
17 the extent minimum required balances are maintained and scheduled interest,
18 principal, and other amounts are paid on a timely basis, FPL is entitled to the
19 investment income earned by this subaccount during the term of the bonds.
20 Upon payment in full of any series of the bonds, the amount held in the capital
21 subaccount in excess of the required capital level may be released to the SPE
22 and ultimately returned to FPL.

23 **Q. Please describe the reserve subaccount.**

24 **A.** The reserve subaccount will receive deposits of any amounts remaining after
25 payments of interest, scheduled principal, expenses of the issuer, and required

1 deposits into the capital subaccount. Amounts on deposit in the reserve
2 subaccount may be drawn to pay interest, principal, and certain expenses if
3 necessary. Any balance in the reserve subaccount after making all required
4 payments will be applied to reduce future Storm Bond Repayment Charges.
5 Because this subaccount is funded by Storm Bond Repayment Charges, any
6 amounts in the reserve subaccount at the time the bonds have been paid off will
7 be paid by SPE to FPL. Application of these funds is discussed further in the
8 testimony of Mr. Davis.

9 **Q. How will the amounts in these subaccounts be invested?**

10 A. Amounts on deposit in each of the subaccounts will be invested by the trustee in
11 “eligible investments.” As defined in the indenture (which definition is
12 included in Master Definitions, a form, which sets out in substantial detail the
13 terms and conditions of the proposed agreement, is attached as Document No.
14 WO-10 to the petition), eligible investments will typically include U.S.
15 Government securities, certain bank deposits, banker’s acceptances, and
16 security repurchase obligations from institutions with long-term ratings of at
17 least “Aa3/AA/AA” (from Moody’s, Standard and Poor’s, and Fitch,
18 respectively), or short-term ratings of at least “P-1/A-1+/F-1+”, respectively,
19 the commercial paper of similarly-rated commercial or financial entities, and
20 investments in “Aaa/AAA/AAA”-rated money market funds.

21 **Q. How will earnings in each of the subaccounts be allocated?**

22 A. Earnings in each of the subaccounts will be allocated as follows:

23

24 *General Subaccount:* Earnings will be applied to make payments in the order
25 defined by the payment waterfall as discussed below. To the extent not required

1 to make payments of bond interest or principal, to replenish drawings on the
2 capital subaccount at its required level or to fund issuer expenses, the earnings
3 will be transferred to the reserve subaccount and used to reduce future Storm
4 Bond Repayment Charges.

5
6 *Capital Subaccount:* To the extent not required to make payments of bond
7 interest or principal, replenish drawings from the capital subaccount, or fund
8 issuer expenses, the earnings will be remitted to FPL.

9
10 *Reserve Subaccount:* To the extent not required to make payments of bond
11 interest or principal or to build or replenish drawings on the capital subaccount,
12 the earnings will be reflected in the calculation of required true-up adjustments
13 and thus effectively will be paid to customers through reduced Storm Bond
14 Repayment Charges.

15

16 E. PAYMENT WATERFALL

17 Q. What is a “payment waterfall”?

18 A. Securitization transactions have only a single source of revenue to meet all of
19 the issuer’s obligations. To provide investors and the rating agencies adequate
20 confidence that funds will in fact be applied to pay interest and principal, it is
21 necessary to specify an order in which available funds will be applied on each
22 payment date. This order is often referred to as a “payment waterfall.” The
23 payment waterfall is further described in the indenture.

- 1 **Q. Please explain the payment waterfall for amounts in the general**
2 **subaccount.**
- 3 A. On each payment date (so long as no event of default has occurred), the trustee
4 will allocate or pay all amounts on deposit in the general subaccount of the
5 collection account in the following priority:
- 6 1. payment of the trustee's fees, expenses and any outstanding indemnity
7 amounts relating to that series, the total amount of which will be fixed as
8 specified in the indenture;³
- 9 2. payment of a pro rata portion of the administration fee, which will be a
10 fixed amount specified in the administration agreement between SPE
11 and FPL, and a pro rata portion of the fees of SPE's independent
12 manager, which will be in an amount specified in an agreement between
13 SPE and SPE's independent manager;⁴
- 14 3. payment of the servicing fee, which will be a fixed amount specified in
15 the servicing agreement for that series, plus any unpaid servicing fees
16 from prior payment dates;⁵

³ Trustee payments are senior in the waterfall to ensure that, even if collections of storm bond repayment charges were to be lower than forecast, sufficient funds would be available to pay the trustee for the provision of its services and thus ensure the ongoing protection of bondholder interests. While it is necessary to provide for recovery of all indemnity amounts owed to the trustee, the rating agencies insist that only a specified portion (usually set at a specified dollar amount) have priority over principal and interest payments. As a result, the waterfall provides for payment of indemnities in priority 1 of the waterfall (up to a specified maximum), with any remaining indemnity amounts relegated to priority 8.

⁴ Like priority 1 these fees are also senior to principal and interest because their payment is necessary to ensure continued operation and bankruptcy remoteness even in stressed scenarios.

⁵ The rationale for the senior position of servicer fees in the waterfall, again, is to ensure payment of this amount even if collections are lower than anticipated, thereby ensuring ongoing provision of these necessary services.

- 1 4. payment of all of SPE's other ordinary periodic operating expenses
2 relating to that series (or the pro rata portion of such operating costs, if
3 not directly attributable to the series), such as accounting and audit fees,
4 rating agency fees, legal fees and certain reimbursable costs of the
5 servicer under the applicable servicing agreement;⁶
- 6 5. payment of the interest then due on the storm-recovery bonds (and pro
7 rata among bonds if there is deficiency), and payment of amounts, if
8 any, specified in the prospectus supplement that are payable in respect of
9 interest to the swap counterparty under any interest rate swap
10 agreement;⁷
- 11 6. payment of the (i) principal then required to be paid on the storm-
12 recovery bonds at final maturity or upon redemption or acceleration, (ii)
13 payment of the principal then scheduled to be paid on that series of
14 storm-recovery bonds (and pro rata among bonds if there is deficiency)
15 and (iii) any swap termination payments that result from (a) SPE failure
16 to pay within applicable grace period as a result of insufficient collection
17 of Storm Bond Repayment Charges, (b) breach of the swap agreement
18 by SPE or the trustee where the swap counterparty is not the defaulting
19 party or the solely affected party, (c) SPE bankruptcy (under the related
20 interest rate swap agreement), (d) SPE merger without assumption
21 (under the related interest rate swap agreement), (e) failure or
22 termination of the security interest under the indenture, or (f)

⁶ Like priorities 1, 2 and 3 these fees are also senior to principal and interest because their payment is necessary to ensure continued operation and bankruptcy remoteness even in stressed scenarios.

⁷ It is customary in the asset-backed and rate reduction bond markets that interest be due immediately after expenses, since rating agencies typically require confidence in the issuer's ability to make timely payments of interest even in stressed scenarios.

- 1 termination of the interest rate swap agreement due to (i) a tax event, (ii)
2 illegality, (iii) a tax event upon merger, (iv) acceleration of the rate
3 reduction bonds (after an event of default) or (v) a change in applicable
4 laws that makes the interest rate swap agreement unenforceable.⁸
- 5 7. payment of any amounts payable to any other credit enhancement
6 providers with respect to the storm-recovery bonds;⁹
- 7 8. payment of any of SPE's remaining unpaid operating expenses and any
8 remaining amounts owed pursuant to the basic documents, including all
9 remaining indemnity amounts owed to the trustee;¹⁰
- 10 9. replenishment of any amounts drawn from the capital subaccount;¹¹
- 11 10. payment of any swap termination payments (other than those described
12 in clause 6 above), will be payable only after the bonds have been paid
13 in full;¹²

⁸ It is customary for principal to be paid immediately following interest. Swap termination payments, which follow principal payments in the normal course, should not be subordinated to principal in the event of an acceleration. Such subordination would be inconsistent with the objective of presenting SPE as a triple-A credit risk, in order to minimize the fixed rate quoted on any interest rate swaps.

⁹ Although none are anticipated, this is another customary waterfall priority.

¹⁰ Operating expenses contemplated here are exceptional or unanticipated items. They are placed at this point in the waterfall so that rating agencies have comfort that the items that are prior to interest and principal payments can be reasonably anticipated.

¹¹ Since the capital subaccount is a credit enhancement to the transaction, this account is usually replenished near the bottom of the waterfall. Any shortfall in the required balance will be reflected in the next succeeding true-up calculation.

¹² Termination payments by SPE which are triggered by counterparty default are placed in a junior position.

1 11. release to SPE of an amount equal to investment earnings on amounts in
2 the capital subaccount, so long as no event of default has occurred and is
3 continuing;¹³ and

4 12. allocation of the remainder, if any, to the reserve subaccount.

5 **Q. What will happen if the funds in the general subaccount are insufficient to**
6 **make these payments?**

7 A. If, on any payment date, funds on deposit in the general subaccount are
8 insufficient to make the payments or transfers contemplated by priorities 1
9 through 10, amounts on deposit in the capital and reserve subaccounts will be
10 drawn to make the payments as follows:

- 11 1. from the reserve subaccount for shortfalls in payments contemplated by
12 priorities 1 through 10; and
13 2. from the capital subaccount for shortfalls in payments contemplated by
14 priorities 1 through 8.

15

16 **F. ROLES OF TRANSACTION PARTIES**

17 **Q. What services has Credit Suisse, in its role as financial advisor, provided**
18 **with respect to FPL's petition for a financing order?**

19 A. Credit Suisse, in its role as financial advisor, (1) has assisted FPL in evaluating
20 the relative merits of alternative securitization structures; (2) has prepared
21 financial models to assess various structural alternatives, Storm Bond

¹³ Again, since the capital subaccount is for credit enhancement purposes, such "sweeps" typically occur only after all other required payments have been made.

1 Repayment Charges, and the economic impact thereof; (3) has analyzed the
2 structure in the context of legal and market requirements; (4) has assisted in
3 drafting documents filed in connection with the financing order petition; and (5)
4 is providing this expert testimony during the financing order application
5 process.

6 **Q. What services will Credit Suisse provide following the issuance of a**
7 **financing order?**

8 A. Credit Suisse, in its role as the financial advisor, will assist FPL in (1) finalizing
9 a transaction structure that is consistent with the order; (2) reviewing and
10 revising transaction documentation; and (3) managing all aspects of the rating
11 agency process, including (a) on-site due diligence, (b) development of a cash
12 flow model designed to calculate Storm Charges and storm-recovery bond
13 payments, (c) preparation of "stress test" cash flow analyses, (d) review of
14 business issues related to legal opinions, and (e) coordination and resolution of
15 all rating agency issues, including required credit enhancement levels to achieve
16 triple-A ratings. If the bonds are to be sold via a negotiated underwriting, all of
17 these activities will be taken over by the lead underwriter when that party is
18 selected.

19 **Q. What is the role of the lead underwriter?**

20 A. In addition to the services listed above, the lead underwriter, as head of the
21 underwriting syndicate, will perform a number of services in connection with
22 the issuance of the storm-recovery bonds, including (1) preparation of
23 marketing materials; (2) arrangement of marketing efforts, including investor
24 conference calls, electronic and physical roadshows, and other marketing
25 activities; (3) evaluation of market conditions with respect to a fixed or floating-
26 rate offering; (4) coordination of pre-marketing efforts; (5) coordination of price

1 talk with the underwriting syndicate; (6) coordination of prospectus distribution;
2 (7) transaction pricing; (8) assistance with the issuance advice letter; and (9)
3 distribution of bonds and transaction proceeds at closing. The lead underwriter
4 for this transaction has not been selected.

5 **Q. What is the role of the underwriting syndicate?**

6 A. The underwriting syndicate will purchase and market the bonds. Given the size
7 of the transaction, a properly structured underwriting syndicate is essential to
8 ensure the most advantageous pricing. The syndicate should be large enough to
9 ensure broad distribution yet small enough to provide proper financial incentive
10 to its members. The size of the proposed securitization transaction would likely
11 involve two to three co-managers. Each syndicate member should be active in
12 the rate reduction bond market.

13 **Q. What is the role of the servicer?**

14 A. FPL will be the initial servicer pursuant to an agreement with SPE. As servicer,
15 FPL will have day-to-day responsibility for calculating, billing, and collecting
16 the Storm Bond Repayment Charges and remitting the collections to the trustee
17 for deposit into the collection account. From time to time, the servicer will
18 prepare reports detailing the results of such activities. The servicer will prepare,
19 file, and process the periodic Storm Bond Repayment Charge true-up
20 adjustments required by Section 366.8260 and the financing order. The duties,
21 rights, and obligations of the servicer are more fully described in the servicing
22 agreement, a form, which sets out in substantial detail the terms and conditions
23 of the proposed agreement, is attached as Document No. WO-7.

1 **Q. How will the servicer be compensated?**

2 A. The servicer will be paid a servicing fee from the Storm Bond Repayment
3 Charges on each semi-annual payment date. As long as FPL is the servicer, the
4 servicing fee will be an annualized amount equal to 0.05% of the initial
5 principal amount of the storm-recovery bonds. This is the amount most
6 commonly specified for the servicing fee in rate reduction bond transactions. It
7 is important for this fee to be adequate compensation for the services provided,
8 in order to create a bona fide arm's-length relationship between FPL and SPE
9 and thereby preserve the integrity of the bankruptcy-remote structure of SPE.

10

11 A higher servicing fee likely will have to be paid if it is ever necessary to
12 replace FPL as servicer. Therefore, the draft financing order authorizes
13 successor servicer fees as high as 0.6% without additional Commission
14 approval but would permit fees higher than 0.6% only with Commission
15 approval. The higher servicing fees for successor servicers is required to assure
16 the rating agencies that a successor servicer can be obtained should one be
17 required. Rating agencies expect that a successor servicer would require a
18 substantially higher fee than FPL, because it would not have systems and
19 monthly billing processes already in place. The servicing fee to be paid to FPL
20 is consistent with the servicing fee in numerous rate reduction bond
21 transactions. Credit Suisse has researched the servicing fees in all rate
22 reduction bonds from January 2001 to September 2005, which constitute 20
23 issues involving 16 utilities in California, Connecticut, Massachusetts,
24 Michigan, New Hampshire, New Jersey, Pennsylvania and Texas. In most
25 cases, servicing fees paid to the sponsoring utility are either 0.05%, 0.09%,

1 0.1%, or 0.125% of the initial principal amount of the notes. In five cases, the
2 utility receives 0.25% of the outstanding principal amount of notes.

3 **Q. What are the eligibility criteria for a third-party successor servicer and**
4 **how will such a successor servicer be compensated?**

5 A. Selection of a third-party successor servicer will be made by the trustee, either
6 at its own discretion or as it may be directed by holders of a majority of the
7 outstanding principal balance of the bonds, subject to rating agency approval,
8 following the occurrence of a servicer termination event under the servicing
9 agreement. (FPL may not resign voluntarily.) Typically, trustees and rating
10 agencies are primarily concerned with performance-related criteria, and
11 secondarily with financial strength. A third-party successor servicer must be
12 able to perform the calculation, billing, collection, filing, and other duties that
13 the servicer is required to provide under the servicing agreement, must enter
14 into a servicing agreement substantially similar to the servicing agreement with
15 the servicer being replaced, at fees not to exceed a specified maximum, and
16 must agree not to resign. Appointment of a successor servicer (including a
17 servicer that is an alternate energy supplier in the event of a fundamental
18 regulatory change in Florida) must also not cause the rating agencies to reduce
19 or withdraw the current ratings of any tranche of storm-recovery bonds for
20 which the replacement would act as servicer. In all rate reduction bond
21 transactions from January 2001 to September 2005, the maximum successor
22 servicer fees are set at 1.25% to 1.5% of the outstanding principal amount,
23 except with respect to Texas issuers, where they are set at 0.6% of the initial
24 principal amount.

1 **Q. What is the role of the trustee?**

2 A. The trustee performs duties as a fiduciary of the bondholders. The trustee
3 receives and processes Storm Bond Repayment Charges from the servicer,
4 calculates the amounts due to bondholders on each payment date, allocates
5 collections in accordance with the payment waterfall for the transaction, invests
6 amounts on deposit in each subaccount in eligible investments, and provides
7 periodic reports that detail account activity and balances to various parties. The
8 duties, rights, and obligations of the trustee are more fully described in the
9 indenture. The trustee is selected by the sponsor based on experience,
10 qualifications and fee structure.

11

12 **G. CERTAIN UPFRONT BOND ISSUANCE COSTS**

13 **Q. Please describe and provide an estimate of the upfront bond issuance costs**
14 **for underwriting fees.**

15 A. Credit Suisse has estimated the underwriting as a percentage of the face amount
16 of the storm-recovery bonds to be 0.50% for the indicative structure. To arrive
17 at this estimate, Credit Suisse applied the weighted average underwriting fees
18 taken from its database of publicly-available underwriting fee information on all
19 rate reduction bond transactions. Underwriting fees are charged on a tranche-
20 by-tranche basis and typically vary with the average life of the tranche (higher
21 for longer tranches and lower for shorter ones). The weighted average disclosed
22 fees across all rate reduction bonds range from approximately 0.25% on 1-year
23 average-life tranches to 0.625% on 13-year average-life tranches. Credit Suisse
24 applied these weighted average fees to the tranches set forth in Document No.
25 WO-2 to obtain its estimates.

1 **Q. Please describe and provide an estimate of the upfront bond issuance costs**
2 **for original issue discount.**

3 A. Original issue discount (OID) is the difference between the total par amount of
4 the securities issued and the actual price paid by investors. For planning
5 purposes, it is assumed that the bonds will be issued without OID. However, as
6 a practical matter, it is likely that some level of OID will be needed to provide
7 yields that match the exact market conditions at issuance. In fact, a certain
8 amount of OID is typical of rate reduction bonds and ABS generally. The
9 amount of OID is generally less than 0.5% and well within the range that is
10 classified as *de minimis* by the IRS (meaning small enough that the investor
11 does not have to set up an accrual schedule for inclusion of the discount into
12 income). For example, the initial prices to the public of the 2005 transition
13 bond offering by Public Service Electric & Gas were 99.98600%, 99.98049%,
14 99.96503% and 99.95365 respectively, on the four tranches of bonds. These
15 types of discounts arise because (a) the swap curve is typically quoted to four
16 decimal places while bond coupons are typically stated to two decimal places
17 and (b) many initial offerings settle without accrued interest on a mid-month
18 date, which results in an “odd first period.” Under these circumstances, pricing
19 at exactly 100% is not possible. Investors tend to prefer a lower coupon with a
20 discount over a higher coupon with a premium, so the convention is to round
21 the coupon down at pricing to produce a slight discount. Assuming that there
22 will be no early redemption of the bonds, the yield to investors and the cost of
23 funds to the issuer are not affected by these adjustments.

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IV. RATING AGENCY PROCESS

A. RATING AGENCY CRITERIA

Q. What are the principal criteria for achieving triple-A ratings for the storm-recovery bonds?

A. The transaction will be structured to achieve the highest rating by each of the three major rating agencies: “Aaa” by Moody’s, “AAA” by Standard and Poor’s, and “AAA” by Fitch. To achieve these ratings, the transaction must exhibit certain characteristics:

1. There must be a “true sale” transfer of the storm-recovery property from FPL to SPE with a first-priority perfected security interest in the transferred bondable storm-recovery property granted in favor of the trustee.
2. SPE must be structured to ensure that it will be bankruptcy-remote from FPL.
3. The financing order authorizing the issuance of the storm-recovery bonds must recognize the irrevocability of the financing order; authorizing the imposition, and collection, and adjustment from time to time, of a non-bypassable Storm Charge; and approve a satisfactory true-up mechanism to adjust Storm Charges. The true-up mechanism must be mandatory and provide for adjustment at least once every six months, and as frequently as quarterly if requested by the rating agencies.
4. The statute authorizing the financing order must contain a “state pledge” to the effect that no action will be taken or permitted by the State or the Commission that would impair the value of the storm-recovery property

- 1 or impair or diminish the rights to impose, collect or adjust Storm Bond
2 Repayment Charges.
- 3 5. The transaction should include credit enhancement in the form of the
4 capital and reserve subaccounts. It is expected that the capital
5 subaccount will be required to be funded in an amount equal to 0.5% of
6 the initial principal amount of the storm-recovery bonds, which is not
7 only consistent with prior rate reduction bonds but also consistent with
8 the requirements for favorable federal tax treatment.
- 9 6. The expected final maturity of the bonds should be sufficiently shorter
10 than the legal final maturity to ensure sufficient funds will be collected
11 to pay the interest and principal regardless of the economic, weather, or
12 other conditions that exist prior to the maturity date of the bonds.
- 13 7. There should be cross-collateralization among rate classes allowing
14 collection shortfalls to be allocated among all classes through the true-up
15 mechanism.
- 16 8. The rating agencies will need to be satisfied that the servicer is qualified
17 to perform its billing, collection, and related responsibilities and that it is
18 of sufficient financial substance and stability that it can be expected to
19 perform such services for the life of the bonds. The rating agencies will
20 also require that a qualified successor servicer can and will be appointed
21 following certain servicer defaults.
- 22 9. The rating agencies will want assurance that the servicing fee will be
23 adequate to obtain a replacement servicer in the unlikely event that
24 transfer of servicing is required.

- 1 10. All of these requirements are properly provided for in the proposed
2 structure of the transaction and draft financing order.

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B. RATING AGENCY CASH FLOW ANALYSIS

5

**Q. What is the process for and what will be the focus of the rating agency cash
6 flow analysis?**

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A. In order to receive a triple-A rating from each of the three major rating
8 agencies, FPL and SPE will need to demonstrate that the proposed transaction
9 satisfies each rating agency's cash flows analysis required for a triple-A credit
10 rating. This is accomplished by delivery to each rating agency of a "base case"
11 sales forecast and bond structure (which reflects the Storm Charges), the
12 proposed replacement servicer fee, historical delinquency and charge-off data,
13 historical data and discussion of FPL's sales forecasting and historical and
14 projected data regarding FPL's customer base. The rating agencies will review
15 this information and the "base case", and develop appropriate assumptions for
16 multiple stress scenarios (typically two to three initially per rating agency, with
17 additional scenarios provided upon review of initial results). Each stress
18 scenario will contain multiple assumptions and is designed to assist the rating
19 agency in evaluating the ability of the transaction cash flows to withstand the
20 impact of negative events without experiencing an event of default. To
21 encompass the various risks that could potentially affect the cash flows, the
22 rating agencies have developed methodologies which apply variance
23 percentages to cash collections. Risk factors which have been identified include
24 economic recession, demographic shifts, extreme weather conditions, increased

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1 use of self-generated energy sources, loss of significant industrial customers,
2 and errors in forecasting.

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4 While each rating agency has its own methodology for developing these stress
5 scenarios and related assumptions, and such stress scenarios and related
6 assumptions may differ depending on the terms of a particular transaction, there
7 are a number of items which have been of common focus. These items include,
8 but are not limited to:

- 9 1. Forecast Variance. Stress assumptions typically include either setting a
10 number that represents a variance from an forecast well in excess of the
11 sponsor's 10 year historical experience or by applying a multiplier to the
12 sponsor's highest historical forecast variance over the last 10 years.
13 This variance is then applied year over year, either cumulatively or with
14 periodic increases. Stress assumptions may also include oscillating the
15 forecast variance from undercollection to overcollection from year to
16 year.
- 17 2. Net Write-offs. Stress assumptions typically include either setting a
18 number that represents a write-off amount well in excess of the
19 sponsor's 10 year historical experience or by applying a multiplier to the
20 sponsor's highest historical forecast over the last 10 years.
- 21 3. Delinquencies. Stress assumptions typically include delaying or
22 "stretching out" expected collections by as much as two months.
- 23 4. Replacement Servicer Fee. This assumption is based on a servicer
24 default and the appointment of a replacement servicer who is entitled to
25 a increased servicer fee under the terms of the transaction. The stress

1 involves setting the servicing fee as if the replacement servicer were in
2 place through the remaining term of the transaction.

3 **Q. How will the rating agencies respond to a customer's ability to avoid**
4 **paying the Storm Charge by disconnecting from FPL?**

5 **A.** When rating other rate reduction bonds, the rating agencies have raised
6 concerns where customers are permitted to avoid or by-pass the imposed Storm
7 Charge by self-generation and disconnection from or discontinuance of the
8 services of the utility. In the case of transition bonds, most states have limited
9 the customer's ability to do this as part of the enabling deregulation legislation,
10 but some, such as Illinois, Michigan and Pennsylvania, have not. In such cases,
11 the rating agencies will include assumed levels of self-generation as part of the
12 stress tests described above. The rating agencies will review the practical
13 limitations on FPL's customers to avoid or by-pass the Storm Charge through
14 self-generation. We would expect rating agencies to conclude that any
15 incidence of self-generation is likely to be small, given current and reasonably
16 anticipated technology, and the stress tests will show that the true-up
17 mechanism and cross collateralization to other customers will compensate for
18 such incidence.

V. PRE-ISSUANCE PROCESS

1 Q. How will FPL facilitate Staff's review of the structuring, marketing and
2 pricing of bonds to ensure compliance with the financing order?

3 A. At least thirty days prior to the proposed date for the launch of the sale of a
4 series of bonds, FPL will submit to the Commission's staff (Staff) revised forms
5 of the financing documents, together with any registration statement and term
6 sheet to be used in connection with the offering of the storm-recovery bonds
7 and forms of any legal opinions to be issued in connection with the transaction
8 if requested by Staff. Such documents and opinions shall be subject to such
9 additions, deletions, and modifications as may be necessary to reflect the
10 pricing, structure, and similar terms of the issuance of the storm-recovery bonds
11 and such other final terms as may be reasonably be left to negotiation prior to
12 the issuance, including such final terms as may reasonably be required by the
13 rating agencies.

14
15 At least five business days prior to the proposed launch date, FPL will submit to
16 Staff (i) a draft issuance advice letter, reflecting the preliminary bond
17 structuring information for the proposed issuance, including expected and final
18 maturities, over-collateralization levels, any other credit enhancements; and
19 reflecting revised estimates of the upfront bond issuance costs proposed to be
20 financed from proceeds of the bonds and estimates of debt service and other
21 ongoing costs (including, the taxes recoverable through the Storm Bond Tax
22 Charge) for the first collection period and (ii) a draft of the initial true-up letter,
23 which will include the projected initial Storm Bond Repayment Charges and
24 Storm Bond Tax Charges for each customer class resulting from the preliminary
25 bond structuring information and the application of the formula approved in the

1 financing order, as well as the draft tariff sheets implementing the storm
2 charges.

3

4 If Staff determines based on review of the preliminary bond structuring
5 information that the launch of the sale of the bonds would not be in compliance
6 with the financing order, then by 5:00 p.m. on the business day that is two
7 business days prior to the proposed launch date specified in the filing
8 accompanying the preliminary bond structuring information, Staff will provide
9 FPL actual notice in writing and set forth the reasons for such disapproval, in
10 which case FPL will be permitted to revise the proposed launch date, if
11 necessary, and/or to file amended preliminary bond structuring information.

VI. CONCLUSION

1 **Q. Please summarize your testimony.**

2 A. My testimony has provided an overview of asset backed securities and the
3 details of the key characteristics of, and the rationale for, the structure of the
4 proposed securitization transaction. Based on current market conditions, I
5 recommend that the storm-recovery bonds be issued in four tranches, which are
6 designed to maximize investor demand, with average lives that range from two
7 to ten years. I also discussed the credit enhancement necessary to support
8 triple-A ratings or reduce interest costs.

9
10 I described the collection account and the various subaccounts that will be
11 created for the disbursement of storm bond repayment charges collected from
12 customers. I described the payment waterfall for the collection account. I also
13 described the roles of the financial advisor, lead underwriters, the underwriting
14 syndicate, the servicer, and the trustee in the proposed transaction, and provided
15 estimates of upfront bond issuance costs associated with underwriting fees and
16 original issue discount.

17
18 Finally, my testimony demonstrated that the proposed securitization transaction
19 has been carefully designed to benefit customers by achieving the highest
20 possible rating from each of the major rating agencies, discussing the key
21 requirements to achieve this.

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

23 A. Yes.

1 BY MR. LITCHFIELD:

2 Q Mr. Olson, you are also sponsoring several
3 exhibits in this proceeding in connection with your
4 direct examination; is that right?

5 A That's right.

6 Q And document numbers WO-1 through 4 consisting
7 of one page each are attached to your direct testimony
8 or bound with your direct testimony. Do you see that?

9 A Yes, that's right.

10 MR. LITCHFIELD: And, Madam Chairman, those
11 four exhibits have been prenumbered as hearing
12 Exhibits 29 through 32 respectively and have
13 already been admitted in the record.

14 CHAIRMAN EDGAR: Thank you.

15 BY MR. LITCHFIELD:

16 Q Mr. Olson, you have a separate bound volume of
17 exhibits with you. Do you have that?

18 A Yes.

19 Q And in that volume are Exhibits WO-5 through
20 WO-11, correct?

21 A Yes.

22 Q And those are prenumbered and labeled as
23 reflected in Staff's Exhibit No. -- was it 3?

24 UNIDENTIFIED SPEAKER: No. 4.

25 MR. LITCHFIELD: No. 4, thank you.

1 As numbers -- pardon me? It is 3. I was
2 right. Those have been prenumbered as hearing
3 Exhibits 33 through 39 respectively and have been
4 entered into the record.

5 BY MR. LITCHFIELD:

6 Q Mr. Olson, have you prepared a summary of your
7 direct examination?

8 A Yes.

9 Q Would you please provide that at this time?

10 A Certainly.

11 Good afternoon, Commissioners. My direct
12 testimony addresses issues relating to the debt capital
13 markets. Storm recovery bonds will be a logical
14 extension of an investment product that's generically
15 known as rated reduction bonds. There are variety of
16 names for specific applications of this product, such as
17 transition bonds or energy recovery bonds, but these
18 distinctions relate to the use of proceeds such as for
19 stranded cost recovery or rate stabilization. The use
20 of proceeds is not a significant distinction from the
21 investor's point of view.

22 Since the introduction of the product in 1997,
23 the capital markets have purchased 34 issues of rate
24 reduction bonds totalling over \$36 billion from 23
25 utilities in ten states. In the process, rate reduction

1 bonds have matured into a very familiar and highly
2 regarded asset class among institutional fixed income
3 investors and new issues have become very well bid for.
4 Last year alone, the market brought six deals totalling
5 \$5-and-a-half billion from five states.

6 Rate reduction bonds are sold based on three
7 fundamental premises. First, there is an irrevocable
8 tariff on substantially all the retail customers of a
9 utility.

10 Second, the tariff will be adjusted
11 periodically to satisfy the actual collections that are
12 required to service the debt.

13 And finally, the bondholders have a number of
14 legal protections which give them a secure claim on the
15 tariff and the true-up mechanism out of the reach of
16 the utility and its general creditors.

17 Transaction documentation has become fairly
18 standardized, forms of all of the operative financing
19 documents for FPL securitization are attached as
20 exhibits in the volume that we just spoke about. They
21 reflect utility securitization precedence which include
22 provisions prohibiting amendments without the
23 notification and consent of the Florida Commission.

24 Rate reduction bonds are bought and sold in a
25 sector of the capital markets known as asset-backed

1 security. Most asset-backed securities are AAA rated.
2 This is achieved through the legal isolation of
3 certainly assets in a special purpose entity that is
4 separate and distinct from the operating company that
5 sponsors the deal.

6 The special purpose entity issues liabilities
7 that are payable solely from the identified assets.
8 This is an exact description of rate reduction bonds.
9 And so they are solidly within the comfort zone of
10 asset-backed investors.

11 The asset-backed securities market is large
12 and liquid. It's about double the size of the market
13 for investment grade corporate bonds, such as FPL's
14 first mortgage bonds and very similar to that
15 marketplace. A negotiated underwriting for selling a
16 new issue of asset-backed securities to the market
17 involves a price discovery process very similar to that
18 for a new issue of corporate debt undertaken by a
19 syndicate of underwriters, which is led by one or more
20 book runners, who work collectively for a predetermined
21 fee.

22 This selling process is like a controlled
23 auction. The book runners will build the order book by
24 accumulating indications of interest from various
25 potential bidders at various prices throughout the

1 marketing period. If the initial range of price thought
2 shown to investors during this period generates too many
3 indications of interest or too few relative to the
4 quality of bonds that are to be sold, the price ranges
5 are revised up or down accordingly.

6 Pricing means determining the interest rate to
7 be paid on the bonds in terms of the differential or the
8 spread, as we call it, of the bond yield over a widely
9 followed market benchmark. As explained in my direct
10 testimony, the benchmark generally used for rate
11 reduction bonds is the interest rate swap market. The
12 actual interest rate payable on the bonds is not fixed
13 until the very last moment.

14 The objective of pricing is to determine the
15 market clearing level for each tranche, that is to say,
16 the spread over the benchmark that will fill just enough
17 orders to leave no excess demand or supply at the end of
18 the day.

19 When the book runners and issuer believe they
20 have identified the market clearing levels for each
21 tranche of debt, the deal will be launched at those
22 spreads to the benchmarks, which means investors are
23 asked to firm up their orders, a pricing call is
24 scheduled at which each tranche of debt, the spread is
25 confirmed, the exact benchmark rate is observed and

1 agreed by all parties, the sum of the spread and the
2 benchmark determine the actual interest rate on the
3 bonds and the accepted orders are confirmed.

4 We would expect the first issuance of storm
5 recovery bonds by Florida Power & Light to find an
6 enthusiastic reception from a broad and liquid market
7 that will be well prepared to understand and appreciate
8 the credit. This concludes my summary.

9 MR. LITCHFIELD: Thank you, Mr. Olson.

10 Madam Chairman, Mr. Olson is available for
11 cross-examination.

12 CHAIRMAN EDGAR: Thank you.

13 Ms. Christensen?

14 MS. CHRISTENSEN: Thank you, Madam Chair.

15 CROSS-EXAMINATION

16 BY MS. CHRISTENSEN:

17 Q Good afternoon, Mr. Olson. Would you agree
18 that the interest rates on which the prices set for the
19 bonds is a function of the market conditions at the time
20 the bonds are sold?

21 A Yes, I would.

22 Q And to achieve the lowest interest rate, you
23 would need to consider the general market conditions
24 including number and quality of competitive bond
25 offerings coming out at the same time?

1 A Yes.

2 Q And would you also agree that FPL should want
3 to get the lowest overall cost based on the market
4 conditions?

5 A Subject to any other considerations, it may be
6 important, yes.

7 Q And would you also agree and isn't it also
8 correct that it's only reasonable that FPL should want
9 to get the lowest overall cost based on market
10 conditions?

11 A Lowest overall cost is one consideration.
12 It's probably the most important one.

13 Q Regarding swaps, as you mentioned in your
14 testimony, the current rate reduction bond market is
15 characterized by swap rates and credit spreads that are
16 relatively low by historical standards, correct?

17 A Yes.

18 Q And so you would agree that a major factor in
19 determining whether to use a swap rate will be if the --
20 will be if the swap rate will result in the lowest cost
21 based on market conditions, correct?

22 A Yes.

23 Q And would you also agree that the swap rate
24 should only be used if it can be shown that the swap
25 rates will benefit customers, i.e., results in the

1 lowest cost?

2 A I'm sorry, let me ask a clarification. Do you
3 mean the use of interest rate swaps as a benchmark for
4 pricing or do you mean actually swapping bonds into
5 Florida?

6 Q Actually swapping bonds in Florida.

7 A Yes.

8 Q And regarding the fixed versus floating rates,
9 in your testimony you describe the two different types
10 of floating interest rate transactions. The first one
11 you describe is one where the interest rate swap is
12 between the SPE and a highly rated swap counterparty, or
13 the other version of that would be where an interest
14 rate swap agreement between -- an interest rate swap
15 agreement between an investor seeking a floating rate
16 payment and a counterparty; is that correct?

17 A That's correct.

18 Q And you indicated in your testimony that the
19 second type of swap agreement has no impact on the
20 Florida ratepayer?

21 A That's correct.

22 Q Now, would you agree that the floating rates
23 should only be used in the first type of the swap
24 arrangement between the SPE and a swap counterparty only
25 if that can be shown that it will benefit the customers

1 by resulting in lower overall costs?

2 A I would agree with that.

3 Q Regarding your role -- Credit Suisse's role in
4 this transaction, would it be correct to characterize
5 your role as an advisor to FPL as the utility?

6 A Yes.

7 Q And Credit Suisse has no independent
8 obligations to the ratepayers; is that correct?

9 A That's correct.

10 Q In looking at your testimony at page 33,
11 line 8, I believe you state there -- let me let you get
12 there.

13 A Okay.

14 Q It starts off with the sentence at line 8 with
15 a statement that Credit Suisse in its role as the
16 financial advisor will assist FPL in certain, I guess,
17 aspects of the financial transaction, would be a correct
18 way of putting that; is that correct?

19 A Yes, it is.

20 Q Okay. And you would agree that nowhere in
21 that list do you indicate as the representative of
22 Credit Suisse that you have an independent obligation to
23 the ratepayers of FPL, correct?

24 A That's correct.

25 Q Has Credit Suisse removed itself from

1 consideration as a potential underwriter in this
2 transaction?

3 A No. Our understanding is we're neither
4 prejudiced nor benefited by our participation as
5 financial advisor.

6 Q And given your response to that question,
7 would you be looking to become the lead underwriter in
8 this transaction?

9 A We would like to compete for that role, yes.

10 Q Now, I want to refer to your testimony
11 regarding the preissuance process that was described in
12 your testimony at page 44.

13 A Yes.

14 Q And you discuss FPL's proposed preissuance
15 review process at that portion of your testimony,
16 correct?

17 A Yes, I do.

18 Q Okay. And in that portion you describe that
19 there would be a 30-day prereview process and a five-day
20 prereview process, am I correct?

21 A Yes.

22 Q Okay. But you acknowledge that there will be
23 quite a few items that will not be settled, such as
24 pricing, structure, other similar final terms that may
25 be reasonably left to negotiations prior to the issuance

1 of the bond including those that may be required by the
2 rating agencies; is that correct?

3 A Yes. Well, let me expand on that. The 30-day
4 and the five-day are deadlines for the production by FPL
5 of certain items. In the financing order as drafted, at
6 least five days prior to the proposed launch, FPL has to
7 submit a significant amount of information about the
8 proposed pricing of the bonds.

9 And as drafted, there is -- the deadline is, I
10 believe, five o'clock, two business days prior to the
11 proposed launch, that the Commission or Staff could
12 delay the transaction or prevent it from pricing. I've
13 heard testimony from Mr. Dewhurst that that particular
14 time frame of 48 hours or whatever is subject to
15 negotiation.

16 Q But is it correct based on your testimony that
17 you prefiled and has been admitted into the record, that
18 there are certain issues that will not be finalized
19 until the day the transaction and the bonds are actually
20 issued, including pricing and structure and other
21 similar items?

22 A It's primarily pricing, yes.

23 Q Okay. And under the scenario of a prereview
24 process as suggested by FPL in this proceeding, there is
25 no ratepayer, per se, representative at the table during

1 the negotiations for the final terms when the bonds are
2 being issued, correct?

3 A That is correct.

4 MS. CHRISTENSEN: I have no further questions.

5 CHAIRMAN EDGAR: Thank you.

6 From the intervenors, are there others that
7 would -- no. Mr. Kise?

8 MR. KISE: No questions. Thank you.

9 CHAIRMAN EDGAR: I'm sorry?

10 MR. KISE: No questions.

11 CHAIRMAN EDGAR: Mr. Twomey?

12 MR. TWOMEY: No.

13 CHAIRMAN EDGAR: No questions?

14 FRS?

15 MR. LaVIA: I have no questions.

16 CHAIRMAN EDGAR: No questions, okay.

17 Questions from Staff?

18 MR. KEATING: Yes, Madam Chair, just a few
19 questions.

20 CROSS-EXAMINATION

21 BY MR. KEATING:

22 Q Mr. Olson, Ms. Christensen discussed with you
23 to some extent the possibility that Credit Suisse could
24 become an underwriter in this transaction. At some
25 point in the future, if your firm did become an

1 underwriter in this transaction, whose interest would
2 you be representing at that point?

3 A In an underwriting, we would represent our own
4 interest.

5 Q Would you represent the interests of the
6 issuer at all?

7 A Let me be careful about that, because the
8 relationship between an underwriter and an issuer is
9 governed by an underwriting agreement. In some
10 respects, we work for the interests of the issuer.
11 However, we're not a representative or agent of the
12 issuer.

13 Q And the issuer in this case is the Special
14 Purpose Entity?

15 A Yes.

16 Q In 2005, do you recall that on, I believe,
17 three separate -- or would you agree that on three
18 separate occasions your firm worked as both a financial
19 advisor to a utility sponsoring a securitization
20 transaction and then later assumed the role of
21 underwriter for issuance of the bonds?

22 A That's substantially correct, but let me
23 clarify. With respect -- there were three transactions.
24 In the case of CenterPoint Energy in Texas, that's an
25 exact description.

1 In the case of West Penn Power, our engagement
2 letter encompassed both the financial advisory and the
3 underwriting assignment -- or I should say placement.
4 It was a private placement.

5 And in the case of Public Service Electric &
6 Gas, we were designated -- similarly designated as
7 advisor and lead run -- book runner at the same time.

8 Q Referring to your work on the CenterPoint
9 Energy transaction, that took place in 2005 you said?

10 A Yes, it did.

11 Q In Texas?

12 A Yes.

13 Q Okay. And that transaction, just to be clear,
14 you worked as a financial advisor to CenterPoint Energy
15 at the initial stage of the proceeding, but later in the
16 process you stepped down to become the book running
17 manager for the bond issuance?

18 A We became one of three book running managers
19 in that field.

20 Q Do you recall what your fee was for your work
21 as financial advisor for CenterPoint Energy?

22 A It was approximately \$480,000 including
23 out-of-pocket expenses.

24 Q And in this docket, Credit Suisse's fee or
25 estimated fee for its role as financial advisor to FPL

1 is estimated to be approximately 600,000; is that
2 correct?

3 A Yes, plus some expenses.

4 Q In terms of a percentage of the initial
5 principal amount for the bond issuance, is -- is Credit
6 Suisse's estimated fee for this transaction higher than
7 it was in Texas?

8 A It's not a number we would normally think
9 relevant, but yes, it is.

10 Q Now, in the CenterPoint transaction in 2005,
11 do you recall what Credit Suisse's fee was for its work
12 as the book -- or one of the book running managers for
13 the transaction?

14 A I'm sorry, in CenterPoint?

15 Q Yes.

16 A The underwriting fees we earned were roughly
17 \$1.9 million.

18 Q Okay. And I believe that -- let's see.
19 Approximately four times as much as the fee that you
20 received as the financial advisor in the transaction,
21 the 480,000 you mentioned earlier?

22 A Yes.

23 Q If Credit Suisse were to move into a role as
24 an underwriter for this transaction, is it possible it
25 could command an underwriting fee comparable with or

1 greater than the fee it received for its role in the
2 CenterPoint transaction?

3 A It's possible. I think unlikely.

4 Q You think it's unlikely that the fee -- if
5 the --

6 A I'm sorry, the amount of bonds to be issued is
7 roughly half of the amount of the CenterPoint
8 transaction. So I find it hard to figure out how we
9 could make more in underwriting fees than we did in
10 CenterPoint.

11 Q As an underwriter, will you have a fiduciary
12 responsibility to FPL ratepayers?

13 A No, sir.

14 Q And I believe you indicated earlier that you
15 would be representing your own interest as an
16 underwriter?

17 A That's correct.

18 Q And underwriters are in business to make
19 money, I assume?

20 A We like to think so.

21 Q For bonds of similar credit risk, would you
22 agree it is easier to sell bonds with a higher interest
23 rate?

24 A Yes.

25 Q I'm sorry?

1 A Yes, it is.

2 Q I believe you've indicated, and if not, please
3 correct me, that the purpose of pricing is to determine
4 the market clearing rate; is that correct?

5 A Yes.

6 Q If 99 percent of the bond issue is sold at one
7 rate, and to sell the last 10 percent the rate has to be
8 higher, say, even a tenth of a percent, would the entire
9 issue rate be increased to clear the market?

10 A Generally not. In that situation, we would
11 probably underwrite the remaining 10 percent. That's
12 what we call the clean-up amount.

13 And let me explain for a second. The issue is
14 that if you price the deal at a -- at a price that
15 doesn't clear the market and it's too expensive, in
16 other words, the interest rate is too low, the people --
17 the investors who actually own bonds at the end of the
18 day own bonds as we call it through the market. They're
19 sitting there with bonds that did not clear the market.

20 On the other hand, with a 10 percent overhang
21 or something like that, you wouldn't be so concerned
22 about it and you would go ahead and underwrite those
23 bonds.

24 Q Who would make the decision of whether the
25 entire issue rate would be increased to clear the

1 market?

2 A It's generally a conversation between the
3 underwriters and the issuer.

4 MR. KEATING: Thank you, Mr. Olson. That's
5 all the questions I have.

6 CHAIRMAN EDGAR: Commissioner Arriaga?

7 COMMISSIONER ARRIAGA: Mr. Olson, during the
8 opening statements and some of the testimony that I
9 have heard in the last almost two days, I think I
10 heard correctly that the company would prefer a
11 limited participation on the part of the
12 Commission. If the Commission decided a more
13 direct participation, how does that affect, if at
14 all, the issuance?

15 THE WITNESS: Well, let me say this: There
16 are degrees -- there are, as I said, ten states so
17 far that have issued these types of bonds and
18 different states have different approaches. I
19 would say that the more active is the involvement
20 of Staff. To some degree, I think it's welcomed.

21 Where it becomes awkward or more expensive in
22 my view is when there is actually a coequal
23 decision-making process instituted, whereby every
24 decision is signed off on by two parties.

25 COMMISSIONER ARRIAGA: Don't you think that it

1 gives the bond more strength in the market to be
2 fully backed by a Commission?

3 THE WITNESS: I'm sorry, Commissioner, backed
4 in what sense?

5 COMMISSIONER ARRIAGA: Well, participated
6 by -- fully participated by the Commission. Not
7 only the Staff, I mean the Commission.

8 THE WITNESS: Yes, I understand. As -- as I
9 said either in my direct or my rebuttal, what's
10 difficult about adding value to these bonds is that
11 the protections to investors are so tight and the
12 credit is so good. And furthermore, the markets
13 are so liquid that -- that, you know, there's
14 tremendous demand for these bonds. And there's a
15 very large number of investors that really get that
16 story.

17 You know, let me just step back a second.
18 When you understand that there is essentially a
19 dedicated tariff on every customer in FPL's
20 territory, and you have the right to adjust that
21 tariff to whatever it needs to be to be able to pay
22 the bonds, you pretty quickly realize that there's
23 very little that can go wrong to make these bonds
24 fail to pay as agreed.

25 And that's the content -- and we're in a

1 capital market situation where credit spreads are
2 very tight and bonds are very well bid for. In
3 that context, as I'm saying, it's very difficult to
4 add value by such things as direct Commission
5 participation in the marketing process.

6 CHAIRMAN EDGAR: Commissioner Arriaga?

7 COMMISSIONER ARRIAGA: I'm trying to figure
8 out, and please help me out, if we decide to -- if
9 it is proposed by staff to the Commission and we
10 decide to participate on a more proactive basis, if
11 this would in any way endanger or reduce value.

12 THE WITNESS: No. I think there are two
13 schools of thought or various schools of thought of
14 how to design the process of regulatory oversight
15 of the marketing process. And in some states, it's
16 more of a due diligence observation. And in some
17 states, it's a more active participation. I think
18 neither one of them is going to prevent the bonds
19 from being well distributed.

20 COMMISSIONER ARRIAGA: Would it affect the
21 interest rate on the bond?

22 THE WITNESS: Oh, I don't think so.

23 COMMISSIONER ARRIAGA: Another question,
24 please. I'm trying to phrase it -- that's okay for
25 now. Thank you.

1 THE WITNESS: Okay.

2 CHAIRMAN EDGAR: Mr. Litchfield?

3 MR. LITCHFIELD: Thank you. Just a couple of
4 questions on redirect.

5 REDIRECT EXAMINATION

6 BY MR. LITCHFIELD:

7 Q Mr. Olson, questions from both Ms. Christensen
8 from the Office of Public Counsel and Mr. Keating on
9 behalf of Staff went to the subject of underwriting this
10 deal should securitization be approved by this
11 Commission as a mechanism to recover storm cost. Do you
12 recall those questions?

13 A Yes.

14 Q Can you describe for me the process by which
15 the company intends to select an underwriter?

16 A My understanding is that there would be
17 solicitation of services sent to a number of firms that
18 have experience in rate reduction bonds, and there are
19 quite a few, asking for proposals as to what they would
20 charge and what services they would perform.

21 Q So to the extent that you would participate in
22 that competitive solicitation, you would have one of how
23 many potential participants in responding to that
24 competitive solicitation?

25 A At least half a dozen, maybe a dozen.

1 Q Now, Mr. Keating asked you to identify the fee
2 that you were provided in connection with your financial
3 advisor's role in Texas relative to the CenterPoint
4 transaction.

5 A Yes.

6 Q Then he asked you to identify the fee under
7 which you are working as FPL's financial advisor in this
8 case. Do you recall that question?

9 A Yes, I do.

10 Q Can you explain, perhaps give us some
11 parameters or bases for the difference between those two
12 fees?

13 A Sure. And the reason I said that the
14 percentage of bond amount is not normally a number that
15 I would look at is it's primarily a work fee. We're
16 providing financial advisory services and the bid that
17 we made for the jobs really was based on our estimation
18 of how hard it would be to accomplish the work.

19 In the case of CenterPoint, CenterPoint was a
20 repeat issuer in a state which had already experienced,
21 I believe, four transition bonds. So both the utility
22 and the Commission and the intervenors had all -- if I
23 may use the term -- been through the drill before. A
24 lot of the documents were just markups of the prior deal
25 and that sort of thing. There was a fair amount of

1 testimony to be prepared and things of that nature.
2 And, of course, we had to build the bond model and do
3 the rating agency work.

4 But it was a substantial amount of work but
5 less work than has proved to be the case in the Florida
6 Power & Light situation, because this is the first time
7 for both the utility and all of the other interested
8 parties.

9 MR. LITCHFIELD: Thank you. That's all I
10 have, Madam Chairman.

11 CHAIRMAN EDGAR: Commissioner Arriaga for a
12 question.

13 COMMISSIONER ARRIAGA: I decided to make my
14 question anyway, Madam Chairman. Thank you.

15 In the event your -- assume you're the advisor
16 to FPL and the Commission decides to have a more
17 permanent or more direct participation in the
18 process, more than just Staff, Commission also,
19 would you recommend to your client to introduce
20 some kind of language regarding SEC liability on
21 the part of the Commission?

22 THE WITNESS: I'm sorry, introduce language in
23 the financing order?

24 COMMISSIONER ARRIAGA: Yes, regarding our
25 potential liability in front of the Securities

1 Exchange Commission because of our participation in
2 the process.

3 THE WITNESS: I'd really have to ask a lawyer
4 or you'd have to seek legal advice on that type of
5 question.

6 COMMISSIONER ARRIAGA: Okay. Thank you.

7 CHAIRMAN EDGAR: Okay. Mr. Olson, you are
8 excused for today.

9 Mr. Litchfield, your witness?

10 MR. LITCHFIELD: I'll yield the chair here to
11 Mr. Anderson. I believe FPL's next witness is
12 Mr. Leo Green.

13 DIRECT EXAMINATION

14 BY MR. ANDERSON:

15 Q Good afternoon, Dr. Green.

16 A Good afternoon.

17 MR. ANDERSON: I would like to indicate that
18 the parties agreed that Dr. Green would provide
19 both his direct and rebuttal testimony at this
20 time.

21 CHAIRMAN EDGAR: Thank you.

22 BY MR. ANDERSON:

23 Q Dr. Green, would you please state your name
24 and businesses address.

25 A Yes. My name is Leonardo Green. And my

1 address is 9250 West Flagler, Miami, Florida, 33174.

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

3 A I'm employed by Florida Power & Light Company
4 as a load forecast manager.

5 Q Have you had an opportunity to be sworn as a
6 witness in this proceeding?

7 A No, I haven't been sworn in yet.

8 MR. ANDERSON: May the witness please be
9 sworn?

10 CHAIRMAN EDGAR: Yes. Dr. Green, if you will
11 please stand.

12 LEONARDO E. GREEN, Ph.D.

13 was called as a witness on behalf of FPL, and having
14 been duly sworn, testifies as follows:

15 DIRECT EXAMINATION

16 BY MR. ANDERSON:

17 Q Dr. Green, have you prepared and caused to be
18 filed 15 pages of prefiled direct testimony in this
19 proceeding?

20 A Yes, I have.

21 Q Do you have any changes or revisions to your
22 prefiled direct testimony and exhibits?

23 A I have one minor revision in my exhibit on
24 page LEG-11, page 1 of 1. In the footnote, it says,
25 "Average NEL per customer is based on actual customer

1 use in the four weeks prior to Hurricane Dennis." That
2 should read, "Average NEL per customer is based on
3 actual customer use in the week prior to Hurricane
4 Dennis."

5 Q With that change, if I asked you the same
6 questions contained in your direct prefiled testimony
7 would your answers be the same?

8 A Yes, they would.

9 MR. ANDERSON: I'd ask that the prefiled
10 direct testimony of Dr. Green be inserted in the
11 record as though read.

12 CHAIRMAN EDGAR: Prefiled testimony will be
13 entered into the record as though read.

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1 **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

2 **FLORIDA POWER & LIGHT COMPANY**

3 **TESTIMONY OF LEONARDO E. GREEN**

4 **DOCKET NO. XXXXXX-EI**

5 **JANUARY 13, 2006**

6

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

8 A. My name is Leonardo E. Green, and my business address is 9250 West Flagler
9 Street, Miami, Florida 33174.

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

11 A. I am employed by Florida Power & Light Company (“FPL” or the “Company”) as
12 the Manager of Load Forecasting within the Resource Assessment & Planning
13 Business Unit.

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

15 A. I am responsible for the development of FPL’s peak demand, energy, economic,
16 and customer forecasts.

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

18 A. I received a Doctor of Philosophy Degree in Economics from the University of
19 Missouri-Columbia in 1983. Prior to joining FPL, I worked for Seminole Electric
20 Cooperative as the Load Forecasting Supervisor in the Rates and Corporate
21 Planning Department. I joined FPL in April of 1986, as a Senior Forecasting
22 Analyst in the Research, Economics and Forecasting Department. My
23 responsibilities included preparation, review, and presentation of the economic,

1 customer, and load forecasts for FPL. In August of 1986 I was promoted to
2 Supervisor of Economics and Forecasting within the Research, Economics and
3 Forecasting Department. In July of 1991, I became Manager of Load Forecasting
4 within the Resource Assessment and Planning Business Unit. I am responsible
5 for coordinating the entire economic and load forecasting effort at FPL.

6

7 In addition, I have held several Assistant Professorships of Economics and
8 Statistics as well as research and teaching positions with the University of
9 Missouri, Florida International University, and the University of South Florida.

10 **Q. Are you sponsoring an exhibit in this case?**

11 A. Yes. I am sponsoring an exhibit consisting of fourteen documents Nos. LEG-1
12 through LEG-14, which is attached to my direct testimony.

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

14 A. My testimony addresses FPL's energy sales forecast which is used in this docket
15 to develop bond amortization schedules and the recovery mechanism. I will
16 explain how this forecast was developed and why it is a reasonable forecast.
17 Additionally, I will address the methodology used to calculate the energy sales
18 not achieved due to the hurricanes in 2005, as well as the estimated megawatt-
19 hour (MWH) levels not realized. I will also discuss the impact of the current high
20 fuel prices on the load forecast. These effects include changes in customer usage
21 resulting from the projected increase in price of electricity. Also, economic
22 factors such as inflation, interest rates, mortgage rates and migration to Florida,

1 are affected by the high price of fuel which has a direct impact on the load
2 forecast.

3

4

FPL'S LOAD FORECASTING PROCESS AND RESULTS

5

Q. Please describe FPL's forecasting process.

6

A. FPL relies on econometrics as the primary tool for projecting future levels of
7 customer growth, energy sales, and peak demand. An econometric model is a
8 numerical representation, obtained through statistical estimation techniques, of the
9 degree of relationship between a dependent variable, e.g., the level of energy
10 sales, and the independent (explanatory) variables, which I describe in the
11 following paragraph. A change in any of the independent variables will result in a
12 corresponding change in the dependent variable. On a historical basis,
13 econometric models have proven to be highly effective in explaining changes in
14 the level of customer or load growth. These models have consistently been used
15 by FPL for various planning purposes and the modeling results have been
16 reviewed and accepted by this Commission in past regulatory proceedings.

17

18

Predicting the level of the dependent variable in future years requires assumptions
19 regarding the levels of the explanatory variables. Explanatory variables include
20 assumptions on the future number of customers, projected economic conditions,
21 weather, and the price of electricity, each of which is obtained from various
22 sources. For example, the future number of customers is based on population
23 projections produced by the University of Florida's Bureau of Economic and

1 Business Research (BEBR). The projected economic conditions are secured from
2 reputable economic forecasting firms such as Global Insight (formerly known as
3 DRI-WEFA). The weather factors are obtained from the National Oceanographic
4 and Atmospheric Administration (NOAA). The price of electricity reflects the
5 Commission-approved base rates and adjustment clauses. FPL performs
6 substantial analysis to ensure that the assumptions regarding the explanatory
7 variables are reasonable. This ensures that the forecast of customers, energy
8 sales, and peak demand are both realistic and rational.

10 FPL'S CUSTOMER FORECAST

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

12 A. The growth in customers in FPL's service territory is the primary driver of the
13 growth in the level of energy sales. In order to project the growth in the number
14 of customers, FPL relies on population projections produced by BEBR. Once a
15 year, BEBR updates its population projections for the state of Florida on a county-
16 by-county basis. FPL's customer growth forecast is based on BEBR's population
17 projections released in April of 2005, which incorporates the impact of the 2004
18 hurricanes on future customer growth. It does not include the potential effects of
19 the 2005 hurricane season.

20
21 Relying on this assumption, FPL is projecting an annual increase of 94,842 new
22 customers in 2006, 84,831 new customers in 2007, and 84,823 new customers in
23 2008. The remaining years between 2009 and 2019 are shown on Document No.

1 LEG-1. The projected growth of 94,842 new customers for 2006, while slightly
2 higher than the average of the last 5 years of 94,709 new customers per year,
3 suggests continued strong customer growth in the near future. The remaining
4 years of the projection horizon is a continuation of the cyclical nature in FPL
5 customer growth (Document No. LEG-2) and is in accordance with the population
6 projections from BEBR.

7 **Q. In addition to population changes, what other factors are considered in**
8 **projecting FPL's customer growth?**

9 A. Factors such as affordability index, job opportunities and international conflicts
10 are also important determinants of growth in FPL's service territory. Florida is
11 experiencing a period of extraordinary growth in population and this expansion is
12 fueling a boom in construction of new homes to house this population. This
13 expanded demand for housing is responsible for the recent growth in FPL's
14 customers, but at the same time could avert future customer growth of a similar
15 magnitude, all other factors being the same. This increased demand, coupled with
16 low mortgage rates, has driven up the price of housing in Florida raising
17 drastically the cost of living affordability index for Florida. This increase in the
18 affordability index, and rising mortgage rates driven by higher inflation as a result
19 of higher fuel prices, is limiting to a certain extent to the potential growth in
20 customers. Furthermore, the high fuel prices have tapered somewhat the outlook
21 on the national and Florida economies which explains why the projected customer
22 growth is slightly below the recent past years.

23

1 **Q. Is FPL's customer growth forecast reasonable?**

2 A. Yes. The forecast incorporates the most recent projections made by the
3 University of Florida and accounts for the impact of the higher fuel prices on the
4 national and local economies as well as the rising cost of living in Florida.

5

6

FPL'S ENERGY SALES FORECAST

7 **Q. Please describe the process FPL used to forecast energy sales.**

8 A. The forecast of energy sales consists of three steps. First, total Net Energy for
9 Load (NEL), which is energy generated net of plant use, is projected. A more
10 reliable econometric forecasting model is obtained for NEL, instead of billed
11 energy sales, since the explanatory variables can be better matched to usage. This
12 is so because the NEL data does not have to be attuned to account for billing cycle
13 adjustments, which might distort the real time match between the production and
14 consumption of electricity.

15

16 Next, a line loss factor and a billing cycle adjustment are applied to the NEL to
17 arrive at total use of electricity by the customer. Finally, revenue class models are
18 developed to distribute the forecast of total end-use sales of electricity to the
19 different revenue classes (residential, commercial, industrial, etc.).

20

21 To project energy sales by revenue class, separate models for the residential,
22 commercial, and industrial revenue classes are developed. These revenue class
23 models are developed to obtain an objective allocation of the total energy sales

1 among FPL's different revenue classes. The sum of the sales for all revenue
2 classes will result in total energy sales. The energy sales for each revenue class is
3 then adjusted to reflect the total energy sales derived from the NEL model.

4 **Q. What are the primary inputs to determine the growth in energy sales?**

5 A. The growth in energy sales comes from the overall growth in the number of new
6 customers as shown on Document No. LEG-1 and per capita use of electricity by
7 all customers, shown on Document No. LEG-3. The product of per capita use and
8 the number of customers yields the NEL for a given period as shown in Document
9 No. LEG-4. The per capita use of electricity and the increased number of new
10 customers are both linked directly to the performance of the local and national
11 economy. When the economy is booming, the use of electricity increases in all
12 sectors: residential, commercial, industrial, etc. A strong economy creates new
13 jobs that attract new customers. Under these conditions, new households develop,
14 including those of retirees from other states. However, the reverse also holds true.
15 If the economy is performing poorly, customers with reduced incomes are more
16 apprehensive as to expenditures and tend to restrict their consumption of goods
17 and services. Electricity demand and sales slacken when incomes fall. Job
18 contractions reduce the number of new customers coming to Florida seeking
19 employment opportunities, and new household formations are postponed. FPL
20 relies on the outlook for the state and national economy produced by Global
21 Insight and the population growth forecast developed by BEBR.

22

23

1 **Q. What is the state of Florida's current economic outlook?**

2 A. Florida's economy has continued to grow at a strong pace, and although the 2004
3 and 2005 hurricanes are a setback, the economy's resilience and robustness are
4 expected to absorb these shocks confidently. Florida has been outperforming the
5 national economy as shown in Documents Nos. LEG-5 and LEG-6, and this
6 pattern is projected to continue in the forecast horizon. In terms of job creation,
7 Florida is growing at a rate of 3.4% compared to the nation that is showing a 1.6%
8 growth rate, i.e., a 104.1% faster growth rate. Eleven percent of all new jobs
9 created in the U.S. are in Florida. The state is also outperforming the rest of the
10 nation in terms of other major macroeconomic indicators such as growth in Real
11 Disposable Personal Income. Florida's strong population growth will result in
12 increased demand for various services and new homes; as a result, these two
13 sectors are leading the growth for Florida's economy.

14

15 Florida's economy is not insulated from the effects of higher fuel price and its
16 impact on inflation, interest rates and economic expansion. The projected growth
17 in Florida is dampened in the early years of the forecast horizon due to higher fuel
18 prices. Global Insight is predicting that, once the aftermath of the hurricanes that
19 affected the gulf area in 2005 is over and the refinery and production capacity is
20 restored, the fuel price shocks on the economy will be lessened and Florida's
21 economy will return to a growth pattern consistent with the long term trend.

22

23

1 **Q. What is the nation's current economic outlook?**

2 A. Global Insight projects that the U.S economy is expected to grow at an annual rate
3 of 3.5% in 2005, 3.1% in 2006, and 3.2% in 2007, down from 4.4% in 2004.
4 After 2007, the Gross Domestic Product (GDP) is expected to grow at the long
5 term average of approximately 3% annually (Document No. LEG-7).
6 Construction activity at the national level has been very strong, similar to that of
7 Florida's experience, but is expected to slow down in 2006 and 2007, primarily
8 due to mortgage rates increasing. There are two principal risks to this outlook at
9 the national level, one is the possibility of higher interest rates stemming from
10 trade deficits and inflationary pressures, and the other is sustained high oil prices.
11 These risk factors could further slow down the growth in the national economy.
12 Global Insight is predicting some moderation in the price of oil starting in 2006.

13 **Q. Would there be an impact on your energy sales forecast if there is a change
14 in the current state and national economic conditions?**

15 A. Yes, there would be. Every forecast involves a degree of uncertainty. As I
16 previously stated in my testimony, Florida's economy should outperform the
17 nation in the near future. However, the macroeconomic variables such as interest
18 rates, inflation indices and the price of oil will all influence the output of the
19 Florida economy. Should there be a significant departure from the most likely
20 scenario for the state and national economies as forecasted by Global Insight, a
21 corresponding impact on the growth in customers and the level of energy sales
22 will occur.

23

1 **Q. What were the basic economic assumptions included in the forecast?**

2 A. The energy sales forecast was produced in October of 2005 shortly after
3 Hurricane Wilma impacted most of FPL's service territory. Global Insight's
4 outlook incorporates this incidence in its most recent projection for Florida and
5 the nation. The economy of Florida was forecasted again to be one of the fastest
6 growing in the nation between 2006 and 2019, driven primarily by high growth in
7 job creation resulting from high tech and health services industries moving to
8 Florida, and a vibrant construction industry remaining close to its already record
9 levels. This forecast also reflects that, as a consequence of the hurricanes in 2004
10 and 2005, there will be substantial reconstruction activity and infusion of
11 insurance funds into the local economy. Furthermore, the reconstruction activity
12 fuels the manufacturing sector to service this reconstruction with construction
13 material, furniture and transportation equipment. Florida's housing starts in 2004
14 were up by 16% over 2003, and in 2005 they are at approximately 18% above
15 2004. Global Insight's updated forecast indicates a continuation of optimistic
16 economic conditions for Florida.

17 **Q. How does FPL account for the higher fuel prices in the load forecast?**

18 A. The higher fuel prices are accounted for in two ways, in the higher price of
19 electricity and in the higher levels of inflation that result as a consequence of the
20 high fuel prices. The higher inflation factors have a dampening effect on the
21 economy. Higher inflation feeds itself through the rest of the economy impacting
22 negatively the overall outlook on the economy. It is equivalent to saying lower

1 consumer disposable income, higher interest and mortgage rates, higher consumer
2 and commercial borrowing costs, etc., which depresses the load forecast.

3

4 The fuel prices are a major driver in the price of electricity. The fuel portion in
5 the residential electrical bill in 2006 will be approximately 54% of the price FPL
6 customers pay for electricity. The approved fuel adjustment approved for 2006
7 has increase a 1,000 kilowatt-hour residential bill by 19%. As a reference point,
8 the overall real price of electricity shows an increase for 2006 of 20.5%, as shown
9 on Document No. LEG-8. The load forecast assumes that the price of electricity
10 will reflect these changes in the fuel portion.

11 **Q. How much have fuel prices risen?**

12 A. The price of residual oil – what FPL burns in it power plants to generate
13 electricity- has increased 507%, from \$8.76 per barrel in 1999 to an average of
14 \$53.18. Natural gas prices have increased 744%, from \$1.69 per million BTUs to
15 \$14.26. Natural gas prices have risen 35% just since September, when the price
16 was \$10.55. Crude oil, from which residual oil is refined, has climbed from
17 \$12.34 per barrel in 1999 to \$66.44 in September – a 438% increase.

18 **Q. What is FPL's energy sales forecast?**

19 A. In 2006, FPL's energy use per customer is projected to be 1% above 2005, with
20 an increase of 1.4% in 2007, and 2.2% in 2008, as shown in Document No. LEG-
21 3. The longer term compound annual average growth in use per customer is
22 projected to be 1% annually after 2007. Customer growth is projected to grow at
23 2.2% for 2006, 1.9% for 2007 and 2008 and then average 1.6% for the next ten

1 years. Combining the energy use per customer and the growth in customers
2 yields a growth in energy sales estimated at 3.3% in 2006, 3.4% in 2007, and
3 4.1% in 2008, and then average 2.5% for the next ten years, as shown in
4 Document No. LEG-4.

5 **Q. What is the impact of the higher price of electricity on the projected level of**
6 **energy sales?**

7 A. FPL performed an analysis to determine the reduction in consumption due to the
8 higher price of electricity. To accomplish this, a NEL forecast was generated
9 using a price forecast that included prior estimates of fuel costs. This price
10 forecast was also used in the forecast developed for the recent Rate Case
11 Proceedings. All other assumptions remain the same as the aforementioned NEL
12 forecast. The results are shown on Document No. LEG-9. In 2006, there is a
13 difference of 2.3 million MWH, a 2.0% lower value; in 2007 the difference
14 between both forecasts is 3.1 million MWH, or 2.5% lower projected value; and
15 in 2008, the difference is 3.0 million MWH, or 2.3% lower predicted NEL. The
16 simulated values for these three years reflect a significant drop in the projected
17 level of energy sales in response to the higher prices of electricity based on the
18 current outlook for the price of fuels.

19 **Q. Is FPL's forecast of energy sales reasonable?**

20 A. Yes. A forecast is considered reasonable if good judgment is used in estimating
21 (availing oneself of the appropriate and most credible assumptions on hand) and
22 testing the model and if the results or outputs make sense when compared to prior
23 similar situations. FPL followed this approach in preparing the forecast.

1 The models employed by FPL have good descriptive statistics with high degrees
2 of statistical significance. FPL is confident that the relationship that exists
3 between the level of energy sales and the economy, weather, customers, price of
4 electricity, and other variables has been properly assessed and numerically
5 quantified.

6
7 Furthermore, FPL was thorough and comprehensive in securing the best data
8 available to assess the impact of the 2005 hurricanes and their aftermath, the
9 higher fuel prices and the most recent customer growth outlook. FPL relied on
10 several sources of data and utilized the most respected firms in the industry.

11
12 **FPL'S ENERGY SALES NOT ACHIEVED DUE TO 2005 HURRICANES**

13 **Q. Please explain the methodology employed for estimating the impact on**
14 **energy sales due to the hurricanes in 2005.**

15 A. The starting point for estimating energy sales not achieved due to hurricanes
16 consists of two parts. First, obtain the number of customers without electrical
17 service on a daily basis; and second, estimate what the usage would have been on
18 a per customer basis absent the storms on those specific days. Once these two
19 components are obtained, the total energy not achieved would be equivalent to the
20 product of the number of customers without electricity and their estimated usage,
21 tallied on a daily basis. The number of customers without electricity is computed
22 on a daily basis by FPL's Power Systems Business Unit. The methodology
23 employed to estimate the usage that would have occurred absent a hurricane is

1 obtained by averaging the prior 4 weeks to the hurricane's incidence. That is, the
2 average of the prior four Mondays will provide an estimate for Mondays in the
3 hurricane period being estimated. The average of the prior four Tuesdays will
4 provide an estimate for Tuesdays, and so on for everyday in the week. It is
5 important to segment load on a daily basis because of an observed difference in
6 consumption patterns within a given week.

7
8 In the case of Hurricane Wilma, the estimated customer usage was not obtained
9 from the averages of the prior four weeks. Temperature and relative humidity
10 immediately after the Hurricane Wilma were not similar to these weather factors
11 in the immediate prior four weeks, hence the use per customer in the months of
12 March and April of 2005 were selected as being more representative of what the
13 use per customer would have been absent Hurricane Wilma. Once again, the
14 daily differentiation in consumption was preserved in estimating the use per
15 customer.

16 **Q. Please provide an estimate of FPL's energy sales not achieved due to the**
17 **hurricanes of 2005.**

18 A. In 2005, FPL's service territory suffered the effects of four hurricanes, Dennis,
19 Katrina, Rita and Wilma. The estimated total energy sales not achieved
20 attributable to the four storms is 1,566,341 MWH and it is broken down by each
21 storm on Document No. LEG-10. Document No. LEG-11-14 provides an estimate
22 of the energy sales not achieved on a daily basis for each storm. Hurricane

1 Wilma by far had the greatest impact of any storm of the year followed at a
2 distance by Hurricane Katrina.

3 **Q. Please summarize your testimony.**

4 A. My testimony addresses FPL's energy sales forecast and the estimated energy
5 sales not achieved due to the 2005 hurricane season. I have explained how these
6 forecasts are developed and why they are reasonable forecasts. I also laid out the
7 methodology employed in estimated energy sales not achieved caused by the
8 storms of 2005. In summary, my testimony shows that FPL is projecting energy
9 sales to increase by 3.3% in 2006, 3.4% in 2007 and 4.1% in 2008. Over the
10 long-term, 2009 to 2019, the annual average growth rate in sales is estimated to be
11 about 2.5%. These forecasts incorporate the projected higher price of electricity
12 resulting from the higher price of fuels.

13

14 My testimony also addresses the energy sales not achieved resulting from the
15 2005 hurricane season. The estimated energy sales not achieved due to the 2005
16 hurricane season results in a total energy not achieved of 1.6 Million MWH.

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

18 A. Yes.

1 BY MR. ANDERSON:

2 Q You are also sponsoring Exhibits LEG-1 through
3 LEG-14; is that right?

4 A That's correct.

5 MR. ANDERSON: These have been premarked in
6 the Staff Exhibit list as Exhibits 40 to 53. I
7 believe they're already in evidence.

8 BY MR. ANDERSON:

9 Q Dr. Green, do you have a summary of your
10 direct testimony?

11 A Yes, I do.

12 Q Please provide a summary of your testimony to
13 the Commission.

14 A Good afternoon, Commissioners. My testimony
15 addresses FPL's sales forecast which is using this
16 docket to develop bond amortization schedules and the
17 recovery mechanism. To develop these forecasts, FPL
18 relies on economic metrics. It is a tested methodology.
19 And we avail ourselves of the most appropriate and most
20 credible assumptions at hand. And we do compare our
21 results with prior similar simulations.

22 The growth in customers in FPL service
23 territory is the primary driver in the growth of the
24 level of sales. FPL is projecting for 2006 a growth of
25 approximately 95,000 new customers and then about 85,000

1 customers in 2007 and 2008. Over the long horizon,
2 we're projecting that this customer growth rate should
3 average approximately 75,000 customers per year.

4 My testimony also addresses the sales
5 forecast. And in my testimony, I show that FPL is
6 projecting sales to increase at the rate of 3.3 percent
7 in 2006, 3.4 percent in 2007 and 4.1 percent in 2008.
8 Over the long term, let's say from 2009 to 2019, the
9 average growth rate in sales is estimated to be about
10 2.5 percent per year.

11 My testimony also addresses the energy sales
12 not achieved resulting from the 2005 hurricane season.
13 The estimated energy sales not achieved due to the 2005
14 hurricane season results in a total energy not achieved
15 of approximately 1.6 million megawatt hours. That
16 concludes my summary.

17 Q Dr. Green, did you also prepare five pages of
18 prefiled rebuttal testimony in this proceeding?

19 A Yes, I did.

20 Q Do you have any changes or revisions to your
21 prefiled rebuttal testimony?

22 A No revisions.

23 Q You also have an Exhibit LEG-15, page 1 of 1;
24 is that right?

25 A That's correct.

1 Q That, I believe, has been marked as Staff
2 Exhibit, I want to say, 108. Do you have a summary,
3 please, of your rebuttal testimony?

4 A Yes, I do.

5 MR. ANDERSON: Before we do that, may
6 Dr. Green's rebuttal testimony please be reflected
7 in the record as if read.

8 CHAIRMAN EDGAR: The prefiled rebuttal
9 testimony will be entered into the record as though
10 read.

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1 **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

2 **FLORIDA POWER & LIGHT COMPANY**

3 **REBUTTAL TESTIMONY OF LEONARDO E. GREEN**

4 **DOCKET NO. 060038-EI**

5 **APRIL 10, 2006**

6

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

8 A. My name is Leonardo E. Green. My business address is Florida Power &
9 Light Company, 9250 West Flagler Street, Miami, Florida 33174.

10 **Q. Did you previously submit direct testimony in this proceeding?**

11 A. Yes.

12 **Q. Are you sponsoring an exhibit?**

13 A. Yes. I am sponsoring an exhibit consisting of one document, LEG-15,
14 which is attached to my rebuttal testimony.

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

16 A. The purpose of my rebuttal testimony is to refute claims made in the direct
17 testimonies of Office of Public Counsel (OPC) witness, Hugh Larkin Jr. that
18 FPL 2005 actual energy sales were actually higher than forecast during the
19 months of the 2005 storms. I will also address his assertion that the 2005
20 actual energy sales were lower than the 2005 forecasted energy sales due to
21 mild weather conditions in months without storms. I will also explain that
22 the concept of billing cycles and unbilled energy sales, which account for
23 the mismatch between usage of electricity and when the customer is billed
24 for this consumption, was not taken in consideration by Mr. Larkin.

1 **Q. Please summarize the first issue you will address in Mr. Larkin's**
2 **testimony.**

3 A. Mr. Larkin makes the observation on page 23, lines 2 through 5, that sales
4 were above forecast by 1.4 billion kWh during the four months of hurricane
5 activity (July - October 2005), implying that FPL had abnormal level of
6 sales regardless of the hurricanes.

7 **Q. What is incorrect in Mr. Larkin conclusion that actual sales exceeded**
8 **forecasted sales during the months of the hurricanes?**

9 A. Two things are incorrect. First, Mr. Larkin uses an incorrect method in
10 calculating MWh sales not realized. As I demonstrated in my direct
11 testimony, the correct method to calculate MWh sales not realized is to rely
12 primarily on reported numbers of customers without service by day. In
13 contrast, Mr. Larkin ignores the reported number of customers out of
14 service, and he assumes that any variance between actual and budget is
15 solely explained by the effect of hurricanes in any given month.

16

17 Second, Mr. Larkin uses data from the wrong time periods in making his
18 estimate. It is incorrect to match the months in which the hurricanes
19 occurred with the corresponding billed sales for the same months if the
20 intent is to conclude that actual sales exceed forecasted sales regardless of
21 the hurricanes. The billed sales for the months of July through October of
22 2005 would include sales from June and not include some sales from
23 October. Hurricane Wilma, which caused most of the loss energy sales,
24 occurred in late October with customers out well into November. These

1 sales, which would account for the impact caused by Hurricane Wilma,
2 would not show up as billed sales until November and December.

3 **Q. Is there a time lag between when electricity is consumed by FPL's**
4 **customers and when these customers are billed?**

5 A. Yes. FPL does not read all customer meters and issue a bill for the amount
6 of electricity consumed during the month on the last day of that month. The
7 month is divided into billing days and a certain percentage of the total
8 customer base is read on each billing day in the month. Electricity usage
9 bills are issued after the meters are read. Customers will consume
10 electricity in a given month and then have their meter read. Once this meter
11 is read and a bill issued then it becomes billed sales. For all practical
12 purposes, approximately half a month lag exists between when the
13 electricity is consumed and when it is billed.

14 **Q. In any given month is there a certain amount of electricity consumed**
15 **and not billed?**

16 A. Yes. These sales are known as unbilled sales for the current month but will
17 become billed sales in the following month. In any given month a certain
18 amount of customers will consume electricity and not receive a bill until the
19 following month because of where they fall on the billing cycle. In that
20 case, these customers are unbilled customers for that month. The sum of
21 these customers' consumption of electricity would fall under the category of
22 unbilled sales.

23 **Q. Is Mr. Larkin referring to consumed electricity, billed sales or unbilled**
24 **sales?**

1 A. Mr. Larkin is referring to billed sales in his exhibits. As I mentioned
2 before, billed sales will distort the real time match between when electricity
3 is consumed and when it is billed. Billed sales is made of electricity
4 consumed this month and billed this month, but it also includes electricity
5 consumed as long as one month ago that was not billed last month and it
6 excludes some electricity consumed this month but not yet billed.

7 **Q. What would be the appropriate months to consider in measuring the**
8 **impact on sales due to the 2005 hurricane season?**

9 A. July through December of 2005. In addition, billed sales in July would
10 need to be adjusted downward to account for the unbilled sales coming
11 from June that is part of the overage for the month of July. The result is
12 that actual sales for that period are below forecast by more than 1 million
13 kWh which renders Mr. Larkin conclusion incorrect.

14 **Q. Please summarize Mr. Larkin's contention that that any variance**
15 **between actual and budgeted sales is solely explained by the effect of**
16 **weather in any given month.**

17 A. Mr. Larkin states, on page 22, lines 23 and 24 and on page 23, lines 1 and 2:
18 "Thus, even though the Company's sales were less than estimated for 2005,
19 it appears that the sales declines were not caused by hurricane related
20 outages during 2005, but were related to other weather issues, i.e., colder or
21 warmer than normal weather during non-hurricane months". Mr. Larkin
22 suggests that FPL 2005 actual sales were below forecasted sales because the
23 non-hurricane months' weather was mild and given that hurricane months
24 showed sales above forecast that the hurricane's impact was not decisive on
25 the level of sales for the entire year.

1 **Q. What are FPL's assumptions regarding weather used to develop the**
2 **energy sales forecast?**

3 A. FPL assumes normal weather in projecting energy sales. For example, it is
4 known that Florida will experience a cold winter once every four or five
5 years. However, for reliability purposes FPL plans for the eventuality that
6 there will be a cold winter every year because it is not possible to predict
7 when that cold winter is going to occur. Consequently, in any given year
8 that there is not a cold winter, FPL will be below forecast in energy sales
9 for those months. Typically, the summer months will compensate for this
10 underperformance in the winter months. That is the basis for using normal
11 weather which accepts that any given month will be off but most likely over
12 the year the month to month weather variability will tend to compensate
13 each other to a certain extent with the year end total being closer to normal
14 than any given month's outcome on the average. FPL will experience
15 energy sales forecast variances on a monthly basis that are substantially
16 larger percentage-wise than the year end forecast variance.

17 **Q. What is your conclusion regarding the impact of the 2005 hurricanes**
18 **on FPL's energy sales?**

19 A. As I explained in my direct testimony the net energy for load not realized as
20 a result of the 2005 storms is 1,566,341 MWh. Mr. Larkin's conclusion that
21 actual sales were above projected sales is incorrect, for the reasons
22 explained above in my rebuttal testimony.

23 **Q. Does this conclude your rebuttal testimony?**

24 A. Yes.

1 BY MR. ANDERSON:

2 Q Please provide your summary of your rebuttal
3 testimony.

4 A Yes. My rebuttal testimony points to errors
5 in OPC's witness Mr. Larkin's testimony concerning total
6 energy sales not achieved. Mr. Larkin's testimony is
7 not based upon the best available information for
8 computing energy sales not achieved.

9 Furthermore, Mr. Larkin failed to recognize
10 the lag that exists between billing that occurs and when
11 the electricity is sold. Therefore, we conclude that
12 Mr. Larkin made a mistake in the way he developed his
13 energy not sales -- energy not sold. That concludes my
14 summary.

15 MR. ANDERSON: Dr. Green is available for
16 cross-examination.

17 CHAIRMAN EDGAR: Thank you.

18 CROSS-EXAMINATION

19 BY MR. PERRY:

20 Q Good afternoon, Dr. Green. My name is
21 Tim Perry. I represent the Florida Industrial Power
22 Users Group and I have a few questions for you.

23 A Good afternoon.

24 Q If you look by your right hand, I've left an
25 exhibit there for you to look at that we'll be referring

1 to during my cross-examination of you. And that is
2 hearing Exhibit No. 139, which is FPL's responses to
3 FIPUG's first request for admissions No. 1 through 3?

4 A Right.

5 Q Are you the person responsible for preparing
6 these responses?

7 A Yes.

8 Q And you did all three?

9 A No, I did the third one.

10 Q You did the third one, you didn't do one and
11 two?

12 A No.

13 Q Can you tell me who did, please?

14 A I'm not sure. I think Ms. Rosemary Morley did
15 the calculation.

16 Q Are you familiar with these, though?

17 A Yes, I am.

18 Q Okay. Would you agree with me, looking at
19 request No. 2, that there is a difference between the
20 actual sales reported in the fuel docket and the
21 estimated sales reported in the fuel docket of 713 --
22 713,450,821 kilowatt hours?

23 A Yes. For the period that you have identified
24 here, between July and November 2005, that is the
25 approximately correct number, yes.

1 Q And are these actual sales as far as what
2 customers consumed?

3 A No, they are not. Let me clarify what happens
4 here. Let's assume that today is the end of the month,
5 okay? FPL cannot go and read 4.4 million customers in
6 one day. So we'll start reading meters tomorrow.

7 So whatever was consumed in this month, the
8 month of April, will show up as billed sales in the
9 following month. We do that. We create what's called
10 billing days. So across the month, we'll have
11 approximately 22 billing days where we read all of the
12 customer meters.

13 So what happens is that if a bill is received
14 this month, okay, it could correspond to electricity
15 that was consumed last month or it could consist of
16 electricity that's consumed this month or it could
17 consist of electricity that will appear next month.

18 So with regard to the hurricanes, the mistake
19 that is made here is that you're considering July
20 through November as the period of influence of the
21 hurricanes, and I consider that incorrect. Because in
22 the month of November, we had 11 days when we were still
23 restoring customers. And those bills that were read in
24 November would show up as billed sales in the month of
25 December.

1 So the correct period to use in your analysis
2 should have included the month of December, and it
3 should not have included some of the sales that you have
4 in here for the month of July.

5 Q Did you consult with anyone about the sales
6 data that is reported in the A schedules?

7 A I am familiar with the data that's provided in
8 the A schedules.

9 Q Okay. Do you know whether or not the fuel
10 data that's reported there and the other data such as
11 the purchased power and the generated power, does that
12 also have a lag as well?

13 A No. The data that you use from the
14 A schedules corresponded to billed sales, okay? Billed
15 sales has a lag adjustment in there. Generation does
16 not have a lag. And I think purchase power and things
17 does not have a lag. What does have a lag is the
18 difference between when electricity is consumed and when
19 it is billed.

20 Q Would you agree with me that the sales data
21 that's reported on the sales schedule includes data from
22 all customers including those that were experiencing
23 outages as a result of the hurricanes?

24 A Yes.

25 Q And as I understand it, you and Dr. Morley

1 performed a calculation together where you came up with
2 a number of approximately \$51 million of lost revenues
3 as a result of customer outages; is that correct?

4 A That's correct.

5 Q And for what months did those -- that
6 \$51 million relate to?

7 A The 51 million corresponds to the -- my
8 testimony identified the dates when electricity was not
9 consumed. However, this refers to net energy per load.
10 That is how much electricity the plant generates. The
11 next step is to adopt line loss factor and the remaining
12 quantity corresponds to the amount of electricity that
13 was not consumed.

14 Q Are you aware whether or not line loss factor
15 is already built into the actual kilowatt hours sales
16 data that's reported in the A schedules?

17 A Yes, it's built into it.

18 Q Okay. And basically what you're saying is you
19 would have earned \$51.8 million more; is that correct?

20 A That's correct, over the period that goes
21 through December.

22 Q Did you perform any calculation of whether or
23 not the customers that didn't lose power as a result of
24 the hurricanes consumed more power during those time
25 periods?

1 A No, I did not. But my first impression is
2 that they consumed less.

3 Q Let me ask you to refer to your Exhibit No.
4 LEG-15.

5 A Yes, sir.

6 Q Would you agree with me if you added up the
7 difference column for the month July through October and
8 then subtracted the months November and December, that
9 you would have a positive number left over?

10 A That's correct.

11 MR. PERRY: Okay. I have no further
12 questions.

13 CHAIRMAN EDGAR: Mr. Beck?

14 MR. BECK: Thank you, Madam Chairman.

15 CROSS-EXAMINATION

16 BY MR. BECK:

17 Q Dr. Green, could you turn to Exhibit LEG-14
18 attached to your direct testimony?

19 A Yes, sir.

20 Q Hurricane Wilma hit Florida Power & Light's
21 territory on or about October 24th, right?

22 A That's correct.

23 Q And then by November 11th, as I take it from
24 your exhibit, was the last day you had any lost revenue
25 or lost --

1 A That's correct.

2 Q The largest number was on the day Wilma hit on
3 October 24th; is that right?

4 A That's correct.

5 Q It's 197,119 megawatt hours?

6 A That's correct.

7 Q By November 1st, that amount was about
8 one quarter of the amount that it was on October 24th;
9 is that right?

10 A It's not. And let me make some -- an
11 observation here for you. The billed sales for the
12 month of November ends on the 28th of the month. It's
13 not a calendar month. It ends on the 28th of the month.
14 So the sales that correspond to the month of November
15 starts on the 29th of October and it goes through the
16 11th of November. And these are the sales that would
17 show up as billed sales in December. And that amount --
18 that amount is approximately 400,000 megawatt hours that
19 should be considered in the month of December which is
20 not being considered by Witness Larkin in his
21 calculation.

22 Q And that's compared to how much that's in
23 October?

24 A In October, it would be about 850.

25 Q So the October amount is about twice the

1 amount that would be in the very beginning of November?

2 A That's correct.

3 MR. BECK: That's all I have. Thank you.

4 CHAIRMAN EDGAR: Okay. No questions of FRF,
5 No questions of the attorney general, no
6 questions -- okay. Questions from Staff?

7 MR. KEATING: No questions.

8 CHAIRMAN EDGAR: Commissioners? No questions?

9 MR. ANDERSON: No redirect.

10 CHAIRMAN EDGAR: No redirect.

11 Thank you very much, Dr. Green. You may be
12 excused. Thank you.

13 THE WITNESS: Thank you.

14 CHAIRMAN EDGAR: Ms. Smith, when you're ready,
15 you can call your next witness.

16 MS. SMITH: FPL calls Dr. Rosemary Morley.
17 Dr. Morley, you're not sworn in, are you?

18 THE WITNESS: No, I'm not.

19 CHAIRMAN EDGAR: We'll do that now. If you'll
20 stand, raise your right hand.

21 ROSEMARY MORLEY, Ph.D.

22 was called as a witness on behalf of FPL, and having
23 been duly sworn, testifies as follows:

24 DIRECT EXAMINATION

25 BY MS. SMITH:

1 Q Would you please state your full name and
2 business address?

3 A Rosemary Morley, 9250 West Flagler.

4 CHAIRMAN EDGAR: And I need you to make sure
5 the microphone is on or pull it towards you because
6 we couldn't hear you.

7 THE WITNESS: Rosemary Morley.

8 CHAIRMAN EDGAR: It's still not working.

9 THE WITNESS: Rosemary Morley.

10 CHAIRMAN EDGAR: There we go. Thank you.

11 THE WITNESS: 9250 West Flagler, Miami,
12 Florida.

13 BY MS. SMITH:

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

15 A By Florida Power & Light as the rate
16 development manager.

17 Q Have you prepared and caused to be filed
18 27 pages of prefiled direct testimony in this
19 proceeding?

20 A I have.

21 Q Do you have any changes or revisions to your
22 prefiled direct testimony?

23 A No, I do not.

24 Q If I asked you the same questions contained in
25 your direct prefiled testimony today, would your answers

1 be the same?

2 A Yes, they would.

3 MS. SMITH: Madam Chairman, I would ask that
4 Dr. Morley's prefiled direct testimony be inserted
5 into the record as though read.

6 CHAIRMAN EDGAR: The prefiled testimony will
7 be entered into the record as though read.

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1 **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

2 **FLORIDA POWER & LIGHT COMPANY**

3 **DIRECT TESTIMONY OF ROSEMARY MORLEY**

4 **DOCKET NO. _____**

5 **JANUARY 13, 2006**

6

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

8 A. My name is Rosemary Morley. My business address is 9250 West Flagler
9 Street, Miami, Florida, 33174.

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

11 A. I am employed by Florida Power & Light Company (FPL or Company) as the
12 Rate Development Manager in the Rates & Tariffs department.

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

14 A. I am responsible for developing electric rates at both the retail and wholesale
15 levels. At the retail level, I am responsible for developing the appropriate rate
16 design for all electric rates and charges. I am also responsible for proposing
17 and administering the tariff language needed to implement those rates and
18 charges.

19 **Q. Please describe your educational background and professional
20 experience.**

21 A. I hold a bachelor's degree in economics from the University of Maryland and
22 a master's degree in economics from Northwestern University. I received a
23 doctorate in business administration from Nova Southeastern University.

1 Since joining FPL in 1983 I have held a variety of positions in the forecasting,
2 planning, and regulatory areas. I joined the Rates and Tariff Department in
3 1987 as a Senior Cost of Service Analyst and was subsequently promoted to
4 Supervisor of Cost of Service. I have held the position of Rate Development
5 Manager since 1996.

6 **Q. Are you sponsoring an exhibit in this case?**

7 **A. Yes. I am sponsoring an exhibit consisting of twelve documents which are**
8 attached to my direct testimony. They are as follows:

- 9 • Document No. RM-1, Jurisdictional Separation of Estimated 2005
10 Storm Costs
- 11 • Document No. RM-2, Jurisdictional Separation of Expected Future
12 Storm Costs
- 13 • Document No. RM-3, Allocation of 2004 Storm Costs by Rate Class
- 14 • Document No. RM-4, Allocation of Estimated 2005 Storm Costs by
15 Rate Class
- 16 • Document No. RM-5, Allocation of Expected Future Storm Costs by
17 Rate Class
- 18 • Document No. RM-6, Allocation of the Storm Charge by Rate Class
- 19 • Document No. RM-7, Proposed Storm Charge by Rate Class
- 20 • Document No. RM-8, Estimated Storm Surcharge Using Traditional
21 Recovery Method
- 22 • Document No. RM-9, Comparison between Proposed Storm Charge
23 and Traditional Storm Surcharge by Rate Class

- 1 • Document No. RM-10, Sample Bill Calculations
- 2 • Document No. RM-11, Proposed Tariff Sheets
- 3 • Document No. RM-12, 2005 Storm Season Revenue Calculation

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

5 A. The purpose of my testimony is to support the calculation of FPL's proposed
6 Storm Charge. The proposed Storm Charge is independent of and incremental
7 to FPL's retail base rates. The proposed Storm Charge is an energy charge by
8 rate class that under Section 366.8260, Florida Statutes, would be required to
9 be paid by all customers receiving transmission or distribution service from
10 FPL or its successors or assignees under Commission-approved rate schedules
11 or under special contracts. The Storm Charge consists of two distinct
12 components:

- 13 ➤ Storm Bond Repayment Charge – a component which covers the cost
14 associated with repayment of principal and interest on storm recovery
15 bonds and ongoing costs, including (but not limited to), servicing fees,
16 trustee fees, administrative fees and rating agency fees. These ongoing
17 costs are further discussed in Mr. Dewhurst's testimony.
- 18 ➤ Storm Bond Tax Charge – a component which covers the income taxes
19 associated with the collection of the Storm Bond Repayment Charge.

20

21 As discussed in FPL Witness Dewhurst's testimony, FPL selected the
22 proposed Storm Charge as the recommended method of recovering storm
23 costs and replenishing the Reserve after considering other alternatives. A

1 criterion in this selection process was the estimated rate impact on retail
2 customers. FPL's recommended method mitigates rate impacts in several
3 ways. First, the proposed Storm Charge does not result in any significant
4 change in the electric bills of the major classes of retail customers. Indeed,
5 most customers will see a small decrease in their bills. Second, adopting
6 FPL's proposed Storm Charge would avoid a significant and immediate
7 increase to customer bills that would otherwise result from the more
8 traditional surcharge recovery method. In fact, initial rates under the more
9 traditional storm surcharge method on average would be more than four times
10 the level of the proposed Storm Charge. Third, over the long run the proposed
11 Storm Charge can be expected to result in less volatile charges than would be
12 the case under the more traditional recovery method. Perhaps most
13 significantly, adopting FPL's proposed Storm Charge will give customers the
14 benefit of a funded Reserve during the peak of the 2006 storm season. The
15 same cannot be said for traditional methods of recovery, which in the past
16 have required extended periods of abnormally low storm activity to build the
17 Reserve to a level comparable to what would be accomplished in one instance
18 through the proposed financing.

19 **Q. What is the scope of your testimony?**

20 A. My testimony is principally devoted to outlining the steps followed in
21 calculating the proposed Storm Charge by rate class, beginning with the
22 separation of storm costs between the retail and wholesale jurisdictions and
23 culminating with the determination of tariff charges by rate class. While the

1 final Storm Charges by rate class will not be calculated until after the final
2 terms of an issuance of storm-recovery bonds have been established, my
3 testimony outlines the methodology that will be used in developing the
4 proposed Storm Charge. Barring significant changes in the terms of an
5 issuance of storm-recovery bonds, the results presented in my testimony,
6 including the proposed Storm Charges, should closely approximate the final
7 figures.

8

9 My testimony addresses the following subject areas:

- 10 • The separation of storm costs between the retail and wholesale
11 jurisdictions;
- 12 • The allocation of the storm costs among the various rate classes;
- 13 • The calculation of the proposed Storm Charge and its components, the
14 Storm Bond Repayment Charge and the Storm Bond Tax Charge, by rate
15 class;
- 16 • The true-up methodology for adjusting the components of the Storm
17 Charge by rate class;
- 18 • The impact of the Storm Charge on retail customers and how this impact
19 compares with the more traditional recovery method; and
- 20 • The tariff revisions needed to implement the Storm Charge.

1 SEPARATION OF COSTS BETWEEN JURISDICTIONS

2 **Q. Does the calculation of the Storm Charge require a separation of costs**
3 **between the retail and wholesale jurisdictions?**

4 A. Yes. Section 366.8260, Florida Statutes, provides for recovery of the retail
5 portion of storm costs through the issuance of storm-recovery bonds. In this
6 case, FPL seeks to use the proceeds from the proposed storm recovery
7 financing to recover the following storm costs from its retail customers: 1) the
8 jurisdictional portion of unrecovered costs from the 2004 storm season as of
9 July 31, 2006, 2) the jurisdictional portion of 2005 storm restoration costs
10 resulting from Hurricanes Dennis, Katrina, Rita, and Wilma, and 3) the
11 replenishment of the Reserve up to a proposed level. Therefore, the
12 calculation of the Storm Charge requires a separation of these costs.

13 **Q. Was the separation of 2004 storm restoration costs between the retail and**
14 **wholesale jurisdictions previously addressed?**

15 A. Yes. The 2004 storm season depleted the Company's Reserve. The
16 jurisdictional separation of the resulting Reserve deficiency was addressed in
17 Docket 041291-EI. In that docket, the Commission approved the recovery of
18 \$442 million in adjusted jurisdictional 2004 storm costs through the current
19 Storm Restoration Surcharge. Based on the currently approved Storm
20 Restoration Surcharge, FPL Witness Davis estimates that there will be \$213.3
21 million in unrecovered jurisdictional 2004 storm costs as of July 31, 2006.

1 **Q. Have you separated the 2005 storm restoration costs resulting from**
2 **Hurricanes Dennis, Katrina, Rita and Wilma between the retail and**
3 **wholesale jurisdictions?**

4 A. Yes. I separated the 2005 storm restoration costs resulting from Hurricanes
5 Dennis, Katrina, Rita and Wilma between the retail and wholesale
6 jurisdictions based on an analysis of the costs incurred. The system-wide
7 2005 storm costs from those four storms are estimated to be \$816 million
8 based on the estimates provided in Ms. Williams's testimony and including
9 the adjustments proposed by Mr. Davis. Document No. RM-1 shows the
10 breakdown of the 2005 storm costs by functional area. The jurisdictional
11 separation factor associated with each functional area is also provided. Based
12 on a weighted composite of each of these factors, the jurisdictional separation
13 factor associated with the 2005 storm season is 99.921%. Consequently, the
14 jurisdictional storm costs associated with the 2005 storm season is estimated
15 as \$815.4 million.

16 **Q. Was the replenishment of the storm fund separated between the retail**
17 **and wholesale jurisdictions?**

18 A. The \$650 million Reserve balance is intended as the appropriate jurisdictional
19 amount and, therefore, no separation factor was applied. Because \$650
20 million represents the proposed jurisdictional reserve amount, the solvency
21 analysis performed by Mr. Harris assumes that only the jurisdictional portion
22 of future storm costs will be charged against that reserve level.

1 **Q. How were the jurisdictional factors you just described incorporated into**
2 **the development of the Storm Charge?**

3 A. The jurisdictional factors just described were used as inputs in determining the
4 storm costs FPL seeks to finance through the issuance of storm recovery
5 bonds. As shown in Mr. Dewhurst's testimony, the costs to be financed
6 include the 2004 jurisdictionalized unrecovered storm recovery costs, the
7 2005 jurisdictionalized unrecovered storm recovery costs, and the proposed
8 jurisdictionalized Reserve amount of \$650 million.

9 **Q. Does FPL also need to jurisdictionalize the expected costs from future**
10 **storms to analyze the impact of the Storm Charge?**

11 A. Yes. As previously mentioned, Mr. Harris performed a solvency analysis of
12 the performance of the Reserve over time. One input needed for this analysis
13 was the retail share of expected annual storm losses.

14 **Q. Have you separated the expected cost of future storms between the retail**
15 **and wholesale jurisdictions?**

16 A. Yes. The expected annual cost of future storm losses as determined by Mr.
17 Harris has been jurisdictionalized based on a functional analysis of costs. The
18 expected annual cost of future storm losses calculated by Mr. Harris is
19 composed of a number of distinct elements, including windstorm damage to
20 transmission and distribution assets, insurance deductibles for damage to other
21 assets, and storm staging costs. As shown in Document No. RM-2, each of
22 these elements was assigned to a functional area based on the nature of the
23 cost. A weighted jurisdictional separation factor was then calculated based on

1 the individual separation factors associated with each functional area. Based
2 on this methodology, the retail share of annual expected future storm costs
3 was estimated at \$73.4 million.

4

5

ALLOCATION BY RATE CLASS

6 **Q. How does FPL propose to allocate the costs recoverable under the Storm**
7 **Charge to the rate classes?**

8 A. FPL proposes to allocate the costs recoverable under the Storm Charge
9 consistent with the manner in which equivalent costs were treated in the cost
10 of service study filed in Docket Nos. 050045-EI and 050188-EI (“the last filed
11 cost of service study”). To the extent that the Storm Charge recovers costs
12 associated with Distribution Plant in Service, i.e., the distribution function,
13 these costs should be allocated consistent with the treatment of distribution
14 costs in the last filed cost of service study. Likewise, to the extent that the
15 Storm Charge recovers costs associated with Transmission Plant in Service,
16 i.e., the transmission function, these costs should be allocated consistent with
17 the allocation of transmission costs in the last filed cost of service study, and
18 so forth. Thus, the allocation of costs recoverable under the Storm Charge
19 requires a functional analysis of costs.

20 **Q. How was this functional analysis performed?**

21 A. Because each vintage of storm costs contributes to the total costs recoverable
22 under the Storm Charge, a functional analysis was performed on 2004 storm
23 costs, 2005 storm costs and future storm costs, respectively. In each case,

1 costs were categorized by function (e.g., distribution, transmission,
2 production, and general) and then allocated by rate class based on the
3 methodology used for each function in the last filed cost of service study.

4 **Q. How were the 2004 storm costs allocated by rate class?**

5 A. In Docket 041291-EI the Commission approved a functional breakdown of the
6 2004 storm costs based on the categorization of costs by FPL business unit
7 (i.e., Power Systems - Distribution, Power Systems - Transmission and
8 Other). This previously-approved cost functionalization was used as the
9 starting point in allocating 2004 storm costs by rate class. The method of
10 allocating each function was then determined based on the last filed cost of
11 service study. The load data used in developing the allocation factors was also
12 based on the last filed cost of service study which utilized projected 2006 test
13 year data. Document No. RM-3 shows the resulting allocation factors by rate
14 class for the 2004 storm costs.

15 **Q. How were the 2005 storm costs resulting from Hurricanes Dennis,
16 Katrina, Rita and Wilma allocated by rate class?**

17 A. Consistent with the approach used in Docket No. 041291-EI, the 2005 storm
18 costs resulting from Hurricanes Dennis, Katrina, Rita and Wilma were first
19 identified by FPL business unit and then assigned to an appropriate cost
20 function. Each functional category of estimated 2005 storm costs was then
21 allocated based on the allocation of equivalent costs in the last filed cost of
22 service study. As was the case with 2004 storm costs, the load data
23 supporting these allocation factors was based on 2006 test year data.

1 Document No. RM-4 provides the supporting documentation for this
2 allocation.

3 **Q. How was the expected cost of future storms allocated by rate class?**

4 A. As previously discussed, the expected annual cost of future storm losses
5 calculated by FPL Witness Harris was categorized by cost function. Based on
6 this functional breakdown, the appropriate allocation method was determined
7 consistent with the last filed cost of service study and using the same 2006 test
8 year load data described earlier. The resulting allocation factors by rate class
9 are presented in Document No. RM-5.

10 **Q. How were allocation factors associated with the 2004 storm costs, 2005**
11 **storm costs and future storm costs used in allocating the costs recoverable**
12 **under the Storm Charge?**

13 A. Composite allocation factors were developed based on how each vintage of
14 storm costs contributes to the total costs recoverable under the Storm Charge.
15 Weights were assigned to the 2004 storm costs, 2005 storm costs and future
16 storm costs based on the amount financed through storm bonds.

17 **Q. Have you calculated the allocation factors for costs recoverable under the**
18 **Storm Charge using these weights?**

19 A. Yes. Document No. RM-6, page 1 of 2 provides the weights that should be
20 assigned to the 2004 storm season, the 2005 storm season and future storm
21 seasons, respectively, in allocating the Storm Charge costs. The resulting
22 allocation factors are provided in Document No. RM-6, page 2 of 2.

1 THE CALCULATION OF THE STORM CHARGE

2 **Q. Having described the allocation factors for costs recoverable under the**
3 **Storm Charge please discuss the actual calculation of charges by rate**
4 **class.**

5 A. The allocation factors described above were applied to the Storm Charge
6 revenue requirements presented in Mr. Davis's testimony. Separate
7 calculations were performed for the Storm Bond Repayment Charge and
8 Storm Bond Tax Charge.

9 **Q. Please describe the calculation of the Storm Bond Repayment Charge by**
10 **rate class.**

11 A. A four-step process was used to develop the Storm Bond Repayment Charge
12 by rate class. First, the allocation factors by rate class were applied to the year
13 one Storm Bond Repayment Charge revenue requirements presented in
14 Document No. KMD-1, which is attached to Mr. Davis' testimony. Second,
15 the allocated Storm Bond Repayment Charge costs in year one were divided
16 by each rate class's 2006 test year sales. Third, an adjustment was made for
17 the difference between the 2006 test year retail sales and the forecasted
18 August 2006-July 2007 retail sales to reflect the fact that the Storm Bond
19 Repayment Charge will not be implemented until the bond issuance date.
20 With this adjustment the proposed charges are aligned with the sales forecast
21 sponsored by FPL Witness Green. Fourth, an adjustment was made to reflect
22 the percent of billed revenues which will not be collected due to write-offs.

1 The resulting Storm Bond Repayment Charges by rate class are presented in
2 Document No. RM-7, page 1 of 3.

3 **Q. Is an adjustment for write-offs typically made in computing other base**
4 **and clause charges?**

5 A. No. The cost of write-offs is normally recovered as a base rate expense.
6 However, in this case, it is important that a specific adjustment for write-offs
7 be made. As discussed in FPL Witness Olson's testimony, the right to
8 impose, collect and adjust the Storm Bond Repayment Charge will be sold to
9 the Special Purpose Entity (SPE), and such right, including the payment
10 stream from the Storm Bond Repayment Charge, will be pledged by the SPE
11 to the payment of the storm recovery bonds. Therefore, the Storm Bond
12 Repayment Charge should reflect the actual revenues likely to be collected,
13 taking into account expected write-offs.

14 **Q. How was the Storm Bond Tax Charge by rate class determined?**

15 A. A similar process was used to develop each rate class's Storm Bond Tax
16 Charge. The allocation factors by rate class were applied to the year one
17 Storm Bond Tax Charge revenue requirements presented in Document No.
18 KMD-1, which is attached to Mr. Davis' testimony. The resulting costs by
19 rate class were then divided by each rate class's 2006 test year sales. An
20 adjustment was then made for the difference between the 2006 test year retail
21 sales and the forecasted August 2006-July 2007 retail sales to reflect the fact
22 that the proposed charges will not be implemented until the bond issuance
23 date. Because the Storm Bond Tax Charge, like the Storm Bond Repayment

1 Charge, is a non-bypassable charge, an adjustment was also made to reflect
2 the percent of billed revenues which will not be collected due to write-offs.
3 The resulting Storm Bond Tax Charges by rate class are presented in
4 Document No. RM-7, page 2 of 3.

5 **Q. How was the total Storm Charge by rate class determined?**

6 A. The Storm Charge is simply the sum of each rate class's Storm Bond
7 Repayment Charge and Storm Bond Tax Charge. Document No. RM-7, page
8 3 of 3 summarizes this calculation by rate class.

9 **Q. Will each rate class's Storm Charge remain fixed over time?**

10 A. No. Each rate class's Storm Charge will be subject to periodic adjustments to
11 the Storm Bond Repayment Charges and Storm Bond Tax Charges.

12 **Q. How will the periodic adjustments to the Storm Bond Repayment
13 Charges and the Storm Bond Tax Charges be determined?**

14 A. A formula-based true-up process will be used to make periodic adjustments to
15 the component charges of the Storm Charge. As described in Mr. Davis's
16 testimony, in any given period, differences between the estimated and actual
17 amounts of Storm Bond Repayment collections and costs will result in an
18 adjustment to the Storm Bond Repayment Charge.

19 **Q. Can you describe how this formula-based true-up process will work?**

20 A. Yes. Every six months a new estimated average retail Storm Bond Repayment
21 Charge will be calculated using the Storm Charge True-Up Mechanism Form
22 Mr. Davis presents in Document No. KMD-8. This new estimated average
23 retail Storm Bond Repayment Charge will take into account the total Storm

1 Bond Repayment costs for the forecasted period, prior period adjustments, and
 2 the forecasted kWh sales of all retail rate classes. This figure will be
 3 compared with the average retail Storm Bond Repayment Charge currently in
 4 place based on actual revenue and load data. To the extent that the new
 5 estimated average retail Storm Bond Repayment Charge and current average
 6 retail Storm Bond Repayment Charge differ, proportional adjustments will be
 7 made to each rate class's individual charges. The specific formula is as
 8 follows:

$$\begin{aligned}
 & \text{Storm Bond Repayment Charge for Rate Class } i, \text{ in period } j = \\
 & \text{(Est. Average Retail Storm Bond Repayment Charge in period } j / \\
 & \text{Average Retail Storm Bond Repayment Charge in period } j - 1) \\
 & * \text{ Storm Bond Repayment Charge for Rate Class } i, \text{ in period } j-1
 \end{aligned}$$

15 **Q. How will the true-up process work in terms of the Storm Bond Tax**
 16 **Charge?**

17 A. As part of the true-up process, a new average retail Storm Bond Tax Charge
 18 will also be calculated. To the extent that the new estimated average retail
 19 Storm Bond Tax Charge and current average retail Storm Bond Tax Charge
 20 differ, proportional adjustments will be made to each rate class's individual
 21 charges.

22 **Q. Would the same formula-based mechanism be used in the event of an**
 23 **under-recovery of storm-bond financing costs?**

1 A. Yes.

2 **Q. What is the expected trend in the Storm Charge over time?**

3 A. While it is impossible to know the results of the true-up process in advance,
4 the storm bonds have been structured to produce stable charges over time. The
5 projected revenue requirements under the Storm Charge vary inversely with
6 expected load growth. Consequently, each rate class's Storm Charge should
7 be relatively constant over time barring unexpected load and cost variations.

8

9 **COMPARISON OF STORM CHARGE TO TRADITIONAL RECOVERY**

10 **Q. What is the traditional method of recovering storm costs and replenishing**
11 **the Reserve with which FPL's primary recommendation is being**
12 **compared?**

13 A. As discussed in Mr. Dewhurst's testimony, an alternative and more traditional
14 method of recovering storm costs and replenishing the Reserve would be a
15 series of storm surcharges to recover the deficit balance in the Reserve and
16 replenish the Reserve to a proposed level. More specifically, the traditional
17 method of storm recovery addressed in this filing is a series of three storm
18 surcharges: the current Storm Restoration Surcharge for 2004 storm costs, a
19 storm surcharge for the deficit balance resulting from the 2005 storm season
20 and a storm surcharge to collect \$650 million to help replenish the Reserve
21 over a three-year period.

22 **Q. Have you calculated the storm surcharges that would result from this**
23 **traditional recovery method?**

1 A. Yes. Using the revenue requirements shown in Document No. KMD-1 of Mr.
2 Davis' testimony and the same allocation methods discussed earlier in my
3 testimony, I calculated the costs by rate class and resulting surcharges for the
4 recovery of 2005 storm costs. The details on this calculation are presented in
5 Document No. RM-8, pages 1 of 3. A similar process was used to develop a
6 surcharge for the replenishment of the Reserve based on the revenue
7 requirements presented in Document No. KMD-1 of Mr. Davis' testimony.
8 The resulting surcharges for Reserve replenishment by rate class are provided
9 in Document No. RM-8, page 2 of 3. Lastly, the storm surcharges for the
10 2005 season and for replenishment are combined with the current 2004 Storm
11 Restoration Surcharge. Document No. RM-8, page 3 of 3 shows the
12 cumulative storm surcharges by rate class.

13 **Q. Would these traditional storm surcharges be revised annually as part of**
14 **an intermediate true-up process?**

15 A. No. In Order No. PSC-05-0937-FOF-EI the Commission rejected the use of
16 an intermediate or annual true-up process for the current Storm Restoration
17 Surcharge. Per the approved tariff, the Company will discontinue billing the
18 current Storm Restoration Surcharge once the 2004 storm deficiency is
19 recovered. A similar process could be used for the surcharges associated with
20 the 2005 storm season and the Reserve replenishment whereby each charge
21 terminates once the approved level of costs has been recovered. In addition,
22 as proposed in Mr. Davis' testimony, differences between the actual and
23 estimated storm recovery costs would be charged to the Reserve.

1 **Q. How would the eventual recovery of the 2004 storm deficiency alter these**
2 **cumulative surcharges by rate class?**

3 A. The recovery of the 2004 storm deficiency would result in the termination of
4 the current Storm Restoration Surcharge. The cumulative storm surcharges
5 after the recovery of the 2004 storm deficiency are also shown on Document
6 No. RM-8, page 3 of 3.

7 **Q. How does the estimated rate impact under the alternative traditional**
8 **recovery mechanism compare with the proposed Storm Charge?**

9 A. The proposed Storm Charge significantly mitigates rate impacts to customers
10 as compared to the traditional storm surcharges. As Document No. RM-9,
11 page 1 of 3 shows, the initial traditional storm surcharges on average would be
12 more than four times the level of the proposed Storm Charge. Moreover, as
13 shown in Document No. RM-9, page 2 of 3, even after the termination of the
14 current Storm Restoration Surcharge, the traditional storm surcharges on
15 average would be more than three times as high as the proposed Storm
16 Charge.

17 **Q. Are the higher charges under the traditional storm surcharges offset by**
18 **some customer benefit not provided under the proposed Storm Charge?**

19 A. No, quite the contrary. Under the proposed Storm Charge customers receive
20 the benefit of a funded Reserve immediately. Thus, the Reserve would be
21 fully funded up to its proposed level near the peak of the 2006 storm season.
22 By contrast, under the traditional storm surcharges, there is little likelihood

1 that the Reserve would ever reach the \$650 million level given the average
2 expected annual storm costs discussed by Mr. Harris.

3 **Q. Is there any other way that the proposed Storm Charge significantly**
4 **mitigates rate impacts to customers relative to the traditional recovery**
5 **mechanism?**

6 A. Yes. The proposed Storm Charge significantly mitigates rate impacts to
7 customers relative to the traditional recovery mechanism by reducing rate
8 volatility.

9 **Q. Is reducing rate volatility a Commission-recognized method of mitigating**
10 **rate impacts?**

11 A. Yes. In numerous dockets, the Commission has used rate stability as one of
12 the criteria in assessing the rate impacts of proposed electric charges (Docket
13 No. 980002-EG, Order No. PSC-98-0403-FOF-EG; Docket No. 900001-EI,
14 ORDER No. 23906; Docket No. 010001-EI, Order No. PSC-01-1665-PAA-
15 EI). More specifically, the Commission has previously recognized that
16 avoiding or reducing the need for a special assessment in the case of a major
17 storm should be a component of a storm recovery policy (Docket No. 930405-
18 EI, Order No. PSC-95-0264-FOF-EI).

19 **Q. How does the rate volatility under the more traditional recovery**
20 **mechanism compare with that under the proposed Storm Charge?**

21 A. The more traditional recovery mechanism is likely to result in greater rate
22 volatility than would the proposed Storm Charge. As shown in Document No.
23 RM-9 page 3 of 3, the traditional recovery method results in a significant and

1 immediate rate increase and remains higher than the proposed Storm Charge
2 for three years. By contrast, the proposed Storm Charge is structured to
3 produce a levelized average retail rate of approximately .138 cents/kWh.
4 Thus, the proposed Storm Charge is likely to provide customers with far more
5 rate stability than would be the case under the traditional storm recovery
6 method. Moreover, a severe hurricane event in the future would further
7 exacerbate the rate volatility of the traditional storm recovery method relative
8 to the proposed Storm Charge.

9 **Q. Please explain.**

10 A. As discussed in Mr. Dewhurst's testimony, the lower the Reserve balance, the
11 more likely that storm losses will exceed the funds available in the Reserve
12 and therefore the greater the reliance on special assessments. Mr. Harris's
13 testimony shows that the Reserve balance under the proposed Storm Charge
14 consistently exceeds the Reserve level under the more traditional recovery
15 method. Therefore, special assessments would be needed sooner and in larger
16 amounts under the traditional surcharge approach.

17

18

TYPICAL BILL CALCULATIONS

19 **Q. Have you calculated the impact the Storm Charge would have on a**
20 **typical residential bill?**

21 A. Yes. As shown, in Document No. RM-10, page 1 of 6, the typical residential
22 1,000 kWh bill is currently \$108.61. This bill reflects the currently approved
23 Storm Restoration Surcharge of .165 cents/kWh for residential customers.

1 (Effective January 2006 the charge was reduced from .168 cents/kWh to .165
2 cents/kWh to reflect the removal of the gross receipts tax embedded in the
3 charge. The full gross receipts tax is now shown as a separate line item on the
4 customer's bill.) With the implementation of the proposed Storm Charge and
5 simultaneous termination of the current Storm Restoration Surcharge, the
6 typical 1,000 kWh bill would decrease by 0.1% or 8 cents per month. This
7 comparatively small impact is a result of the decrease in the proposed Storm
8 Charge relative to the current Storm Restoration Surcharge and the fact that
9 the Storm Charge accounts for less than 2% of a typical 1,000 kWh bill.

10 **Q. Have you calculated the impact the Storm Charge would have on the**
11 **typical bills of commercial customers?**

12 A. Yes. As shown, in Document No. RM-10, page 2 of 6, a small (50 kW)
13 commercial customer currently pays \$1,733.13 per month, including \$21.50
14 for the current Storm Restoration Surcharge. With the implementation of the
15 proposed Storm Charge and simultaneous termination of the current Storm
16 Restoration Surcharge, the small commercial customer's bill would decrease
17 by 0.24% or \$4.14 per month. Again, this total bill decrease is the result of a
18 decrease in the proposed Storm Charge relative to the current surcharge
19 combined with the relatively small portion of the bill accounted for by the
20 Storm Charge.

21 **Q. Have you calculated the impact the Storm Charge would have on the**
22 **typical bills of industrial customers?**

1 A. Yes. As shown in Document No. RM-10, page 3 of 6, a very large (10,000
2 kW) industrial customer currently pays \$428,061.89 per month, including
3 \$700.80 for the current Storm Restoration Surcharge. With the
4 implementation of the proposed Storm Charge and simultaneous termination
5 of the current Storm Restoration Surcharge, the industrial customer's bill
6 would increase by less than 0.1% or \$359.38 per month. This extremely small
7 increase reflects an increase in the proposed Storm Charge relative to the
8 current surcharge combined with the extremely small percentage of the
9 electric bill attributable to the Storm Charge. On average, for very large
10 industrial customers, the proposed Storm Charge represents only about 0.2%
11 of their total electric bill.

12 **Q. How do the bill impacts you have discussed compare with the more**
13 **traditional method of financing storm recovering costs?**

14 A. Relative to the proposed Storm Charges the more traditional storm surcharges
15 would result in significantly higher typical bills. Document No. RM-10, pages
16 1 thru 3, show the typical bills for residential, commercial and industrial
17 customers based on the traditional storm surcharge approach. Residential
18 customers would pay 5% more under the traditional storm surcharge approach
19 while the bills of commercial and large industrial customers would be 3.6%
20 and 0.7% higher respectively. Moreover, under the proposed Storm Charge
21 customers would have the benefit of a funded Reserve near the peak of the
22 2006 storm season. The same cannot be said of the traditional storm
23 surcharge approach.

1 Q. **How would the eventual termination of the current 2004 Storm**
2 **Restoration Surcharge affect these bill comparisons?**

3 A. Even with the eventual termination of the current 2004 Storm Restoration
4 Surcharge customers would still pay more under the traditional storm recovery
5 method. Document No. RM-10, pages 4 thru 6 shows the bill comparisons.

6

7

TARIFF SHEETS

8 Q. **Have you developed the proposed tariff sheets needed to implement the**
9 **Storm Charge?**

10 A. Yes. Proposed tariff sheet numbers 8.040 and 8.041, which are provided in
11 Document No. RM-11, have been developed to implement the Storm Charge.

12 Q. **Does the proposed tariff language indicate that the Storm Charge is a**
13 **non-bypassable charge?**

14 A. Yes. The following language is included to indicate the non-bypassable nature
15 of the charge:

16 The Storm Bond Repayment Charge and the Storm Bond Tax Charge,
17 which together comprise the Storm Charge, shall be paid by all
18 customers receiving transmission or distribution service from the
19 Company or its successors or assignees under Commission-approved
20 rate schedules or under special contracts, even if the customer elects to
21 purchase electricity from alternative electric suppliers following a
22 fundamental change in regulation of public utilities in this state.

1 **Q. Are there any tariff provisions specific to the Storm Bond Repayment**
2 **Charge?**

3 A. Yes. The following language is included on tariff sheet 8.041 indicating the
4 ownership of the charge:

5 As approved by the Commission, a Special Purpose Entity (SPE) has
6 been created and is the owner of all rights to the Storm Bond
7 Repayment Charge. The Company shall act as the SPE's collection
8 agent or servicer for the Storm Bond Repayment Charge.

9 **Q. What effective date is FPL requesting for the Storm Charge?**

10 A. FPL proposes to implement the Storm Charge and its components, the Storm
11 Bond Repayment Charge and the Storm Bond Tax Charge, on the first meter
12 reading day after the issuance of the storm recovery bonds. As discussed in
13 Mr. Dewhurst's testimony, the Company recommends an issuance date no
14 later than August 1, 2006. The charges will remain in effect until the Storm
15 Bonds have been paid in full or legally discharged and the other financing
16 costs, including the tax liabilities associated with such charges, have been paid
17 in full or fully recovered.

18 **Q. Will the electric bills of customers explicitly reflect that a portion of the**
19 **charges represent the Storm Charge approved by the Commission?**

20 A. Yes. A statement to that effect will be made on the bill. In addition, all
21 electric bills will state that the SPE is the owner of all rights to the Storm
22 Bond Repayment Charge and that the Company is acting as a collection agent
23 or servicer for the SPE. The customer's applicable Storm Bond Repayment

1 Charge and Storm Bond Tax Charge will be included in the total non-fuel
2 energy charge shown on the electric bill.

3 **Q. Is the Company requesting Commission-approval for the tariff sheets**
4 **attached in Document No. RM-11?**

5 A. Not at this time. As I mentioned previously, the final Storm Charges will not
6 be calculated until after the final terms of an issuance of storm-recovery bonds
7 have been established. Once the final Storm Charges are calculated, the tariff
8 sheets shown in Document No. RM-11 will be revised and submitted for
9 administrative approval.

10 **Q. Thereafter, would the Storm Charge tariff sheets be revised periodically?**

11 A. Yes. The formula-based true-up mechanism described earlier would result in
12 revisions to the charges listed on tariff sheet number 8.040. FPL would seek
13 administrative approval of any revisions to these tariffs sheets resulting from
14 the formula-based true-up mechanism.

15 **Q. Would implementing the proposed Storm Charge require any other tariff**
16 **revisions?**

17 A. Yes. FPL proposes to terminate the current Storm Restoration Surcharge
18 concurrent with the effective date of the Storm Charge.

19 **Q. What tariff revisions would be required if the Commission approves the**
20 **Company's alternative recommendation instead of the proposed Storm**
21 **Charge?**

22 A. If the Commission approves the Company's alternative recommendation,
23 tariff revisions would be required to reflect storm surcharges to recover the

1 deficit balance in the Reserve and replenish the Reserve to a proposed level.
2 Specifically, the Company would propose continuing the current Storm
3 Restoration Surcharge for the 2004 storm costs while adding two new
4 surcharges for the 2005 storm costs and the Reserve replenishment
5 respectively. If the Commission approves the Company's alternative
6 recommendation, FPL would file revised tariff sheets for administrative
7 approval prior to a proposed June 15, 2006 implementation date.

8 **Q. As addressed by Mr. Dewhurst, part of the Company's primary**
9 **recommendation is that the Commission approve a surcharge to begin**
10 **recovery of 2005 storm costs in the event of a delay in the issuance of**
11 **storm recovery bonds. If needed, what tariff revisions would be required**
12 **to implement this surcharge?**

13 **A.** A new tariff would be proposed and submitted for administrative approval.
14 The new surcharge would essentially be the same as the traditional surcharge
15 for 2005 storm costs previously discussed. The surcharge would be
16 discontinued when the storm recovery bonds are issued. As addressed by Mr.
17 Dewhurst, any amounts recovered under the surcharge beginning August 15
18 would reduce the amount of the bond issuance and would be reflected in the
19 proposed Storm Charge.

20

21

REVENUE CALCULATION

22 **Q. Have you performed any revenue calculations using Dr. Green's estimate**
23 **of net energy for load not achieved due to the 2005 Hurricanes?**

1 A. Yes. I have adjusted Dr. Green's estimate of net energy for load not achieved
2 due to the 2005 Hurricanes for line losses to obtain an estimate of megawatt-
3 hour sales not achieved. By applying the average system base cents/kWh to
4 this figure an estimate of base revenues not achieved due to the 2005
5 Hurricanes was obtained. Document No. RM-12 presents this calculation.

6

7

CONCLUSION

8 **Q. Please summarize your testimony.**

9 A. I have provided support for the separation of storm costs by jurisdiction, for
10 the allocation of these costs by rate class, and for the calculation of the Storm
11 Charge and its components by rate class. I have also discussed how the
12 typical bill impact from the Storm Charge compares with the traditional
13 method of recovering such costs from customers and demonstrated that the
14 proposed Storm Charge significantly mitigates rates impacts relative to the
15 traditional recovery method. Lastly, I have outlined the tariff revisions
16 needed to implement the Storm Charge.

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

18 A. Yes.

1 BY MS. SMITH:

2 Q And, Dr. Morley, are you also sponsoring
3 Exhibits RM-1 through RM-12 to your direct testimony?

4 A Yes, I am.

5 MS. SMITH: And these have been prenumbered
6 numbers 54 through 65 and were entered into the
7 record yesterday.

8 BY MS. SMITH:

9 Q Dr. Morley, could you please provide a summary
10 of your testimony to the Commission?

11 A Yes, I will.

12 Good afternoon, Commissioners. You have
13 already heard testimony from the company regarding the
14 amount of storm costs and the appropriate level of the
15 reserve. Now in my testimony I address another element
16 of FPL's filing, namely the resulting charges by rate
17 class.

18 Commissioners, this filing is unique in that
19 we're presenting two sets of charges by rate class for
20 your consideration. One set of charges, the proposed
21 storm charges, reflects the company's primary
22 recommendation that storm costs be recovered through
23 securitization.

24 The other set of charges represents our
25 alternative proposal that storm charges be recovered

1 through the surcharge method. Both sets of charges
2 incorporate the same amount of storm costs and the same
3 proposed reserve level. However, the resulting charges
4 by rate class are quite different, as are the expected
5 rate impacts to our customers.

6 The proposed storm charges under our primary
7 recommendation are by design intended to result in
8 stable rates now and in the future. One important
9 consideration in this regard is the immediate impact the
10 proposed storm charges will have on our customers' bills
11 relative to what they're paying today.

12 Under our primary recommendation, most
13 customers would see no increase in their electric bills.
14 Indeed the vast majority of customers, in excess of
15 99 percent, would see some decrease in their electric
16 bills.

17 By contrast, initial rates under the surcharge
18 method would on average be more than four times the
19 level of the proposed storm charge.

20 As a result, residential customers would see
21 an immediate increase of almost 5 percent in their
22 electric bills under the alternative surcharge method
23 versus a small decrease in their electric bills under
24 the proposed storm charges.

25 Over the long run, the proposed storm charges

1 are also expected to be less volatile than the
2 alternative storm surcharges. The immediate increase in
3 rates under the surcharge approach should be followed by
4 a corresponding drop in rates at the end of their
5 three-year recovery period.

6 By contract, the proposed storm charges under
7 securitization are by design intended to be stable over
8 a 12-year period. Nevertheless, under securitization
9 the reserve is funded up to its intended level
10 immediately versus a build up over years under the
11 surcharge approach.

12 In summary, approving FPL's proposed storm
13 charges would avoid an immediate and significant bill
14 increase for all our customers relative to the surcharge
15 method of recovery. The proposed storm charges also
16 support rate stability while providing for an immediate
17 funding of the reserve.

18 For these reasons, we believe that
19 securitization will, on balance, significantly mitigate
20 rate impacts to our customers relative to the surcharge
21 method of recovery. This concludes my summary.

22 MS. SMITH: The witness is available for
23 cross-examination.

24 CHAIRMAN EDGAR: Thank you.

25 Mr. Perry?

1 MR. PERRY: I do have some questions.

2 CROSS-EXAMINATION

3 BY MR. PERRY:

4 Q Good afternoon, Dr. Morley. I'm Tim Perry. I
5 represent the Florida Industrial Power Users Group and
6 we're a group of industrial customers. I do have a few
7 questions for you today.

8 The cost allocation that you made in this case
9 is based on the cost of service study in the last filed
10 rate case in Docket 050045; is that correct?

11 A Yes, it is.

12 Q And you used the same methodology, whether
13 it's the same cost allocation methodology, whether it's
14 your concern -- the company's primary or alternate
15 recommendation; is that correct?

16 A Yes. In terms of the primary recommendation,
17 of course, we follow the securitization statute, which
18 specifies that in the cases where the company's last
19 rate case was resolved by settlement, the company's cost
20 of service for securitization should be based on the
21 cost of service study filed by that company in that rate
22 case. And that's what we've done.

23 However, because we believe our cost of
24 service methodology in the 2005 case is appropriate, we
25 also use it for the recovery of costs under the

1 surcharge approach.

2 Q And what was the cost of service methodology
3 that you used? Is there a way that you refer to it? Is
4 it the 12 CP and 25 percent?

5 A No, we did not use the 12 CP and 25 percent.
6 Basically in the 2005 case, we used the same cost of
7 service methodology that was approved by the -- for the
8 company in the 830465 case, which was the last cost of
9 service study actually approved by the Commission.

10 We used the same methodology in the 2005 case
11 as we did in the prior case with one exception and one
12 exception alone. And that has to do with the treatment
13 of the St. Lucie 2 unit. In the last filed cost of
14 service study, we used the 12 CP and 113th methodology
15 for all our production units.

16 In the '83 case, we -- the approved cost of
17 service allocated the majority of costs for that plant
18 on an energy basis, not on demand. So that is the only
19 difference between the cost of service study filed in
20 the 2005 case and that approved by the Commission in the
21 830465 case.

22 Q You were the witness in the storm case last
23 year, Docket 041291; isn't that correct?

24 A Yes, it is.

25 Q And does the methodology you're using, the

1 cost allocation methodology in this case differ from the
2 one you used last year?

3 A Yes, it does.

4 Q Can you just explain in general how it
5 differs?

6 A It differs because in that case I proposed
7 that the cost of storm cost be allocated by rate class
8 based on the way the storm accrual was allocated in a
9 base rate case. In other words, the way we allocate the
10 accrual to the storm reserve.

11 Since that -- we no longer have an accrual to
12 the storm reserve and based on the guidance in the
13 securitization statute on how we allocate costs, my
14 methodology for allocating costs here is different than
15 what I proposed in the 2004 case.

16 Q Okay. I'm going to pass out an exhibit for
17 you to look at.

18 MR. PERRY: Madam Chairman, I'm going to ask
19 that this be marked as well. I believe it's
20 Exhibit 151.

21 CHAIRMAN EDGAR: Yes, No. 151. Title,
22 Mr. Perry?

23 MR. PERRY: The title will be "Response to
24 Staff's Fourth Set of Interrogatories, No. 35,
25 Docket No. 041291." I should say FPL's response,

1 to be more accurate.

2 CHAIRMAN EDGAR: Okay. So noted.

3 (Exhibit 151 marked for identification.)

4 BY MR. PERRY:

5 Q If you turn to the second page of the exhibit
6 that I've handed to you, it's titled Attachment 1, Page
7 1 and 2. Is this the allocation that you used in the
8 last case?

9 A When you say used in the last case --

10 Q Go ahead.

11 A -- could you clarify what case?

12 Q Docket No. 041291.

13 A No, this is not what I proposed in that case.
14 This is the methodology that was approved in that case.

15 Q Okay. Thank you.

16 Let me have you turn to Exhibit RM-3, please,
17 Dr. Morley. Do you have that exhibit in front of you?

18 A Yes.

19 Q Okay. And do you also have the Exhibit 151 I
20 just had passed around?

21 A Yes.

22 Q Can you look at page 2 of 2, please.

23 A Yes.

24 Q And my question refers to the column -- it's
25 the third column titled Distribution Costs.

1 A Yes.

2 Q If you look at the CILC-1T, or C-I-L-C 1T,
3 there's zero distribution cost allocated to that
4 particular rate class in Exhibit 151. But if you go to
5 the Exhibit RM-3, there are costs allocated to that
6 class; is that correct?

7 A Yes. And I would like to explain why. I
8 assume that's your next question.

9 Q Please.

10 A We functionalize cost based on business unit.
11 In other words, we identified what belongs to
12 distribution, transmission, production and so forth.
13 The same as this interrogatory in the 2004 storm cost
14 asked us to. That is the same.

15 What is different here and what we have done
16 appropriately in this case, is in this case we were
17 allocating distribution costs the way a distribution
18 plant as a whole is allocated. So in the case of
19 transmission voltage customers, there is a portion of
20 distribution costs required to serve transmission
21 customers. And that is meters. That is the only cost
22 allocated to transmission voltage customers in the
23 current proceeding.

24 In this interrogatory from the 2004 case, the
25 Staff interrogatory asked us to allocate all

1 distribution costs on what's called GNCP, which stands
2 for group noncoincident peak. That is the allocation
3 factor that is used to allocate distribution substations
4 and primary lines but not the allocation factor used to
5 allocate all the other elements of distribution plant
6 including secondary lines, service drops, transformers
7 or meters. So that is why you see the difference here.

8 In this proceeding, we're appropriately
9 allocating distribution cost the way we would in a rate
10 case. And to the extent that there is a small piece of
11 distribution cost required to serve transmission
12 customers, which there is, the metering, that's
13 allocated to those customers. But no other distribution
14 costs are allocated to transmission voltage customers.

15 Q Is that change a function in the change of
16 using the differing cost of service studies in the two
17 cases?

18 A No, it is not, because we have never used the
19 group noncoincident peak to allocate all our
20 distribution plants. We have only used it to allocate
21 the cost of distribution substations and primary lines.

22 Q Do the CILC-1T customers, do they take service
23 in the whole class entirely at transmission level?

24 A Yes, they do.

25 MR. PERRY: I don't have any further

1 questions.

2 CHAIRMAN EDGAR: Mr. McGlothlin?

3 MR. McGLOTHLIN: No questions.

4 CHAIRMAN EDGAR: Mr. Kise?

5 MR. KISE: No questions.

6 CHAIRMAN EDGAR: No, no, no?

7 Okay. Staff?

8 MS. GERVASI: No questions.

9 CHAIRMAN EDGAR: Commissioners, questions?

10 Ms. Smith?

11 MS. SMITH: No redirect.

12 CHAIRMAN EDGAR: Thank you. Mr. Perry?

13 MR. PERRY: I'd move 151.

14 MS. SMITH: No objection.

15 (Exhibit 151 admitted into the record.)

16 MR. PERRY: I have just a housekeeping matter.

17 I wanted to ask about Exhibit 139, and I wanted to

18 make sure that that was moved into the record.

19 CHAIRMAN EDGAR: I believe that it was, but

20 just to make sure, we can certainly address that

21 again. Glad to do so.

22 Ms. Smith, excuse me, are you all right if we

23 move Exhibit 139 into the record again?

24 MS. SMITH: Certainly.

25 CHAIRMAN EDGAR: Okay.

1 MR. PERRY: Thank you very much.
2 (Exhibit 139 was admitted into the record.)
3 CHAIRMAN EDGAR: Thank you, Mr. Perry.
4 And, Ms. Smith, you said no redirect. We've
5 done the exhibit, and so the witness is excused.
6 Thank you very much.

7 Mr. McGlothlin, your witness.

8 MR. MCGLOTHLIN: OPC calls James Byerley. I
9 believe Mr. Byerley had not arrived when you
10 administered the oath, Madam Chairman.

11 CHAIRMAN EDGAR: All right. Mr. Byerley we'll
12 go ahead and swear you in at this time. I was
13 going to ask you to get comfortable, but first I'm
14 going to ask you to stand again. If you'll raise
15 your right hand.

16 JAMES BYERLEY

17 was called as a witness on behalf of OPC, and having
18 been duly sworn, testifies as follows:

19 DIRECT EXAMINATION

20 BY MR. MCGLOTHLIN:

21 Q Mr. Byerley, please state your full name and
22 business address.

23 A My name is James Byerley. My business address
24 is 400 Professional Park Drive, Nashville, Tennessee --
25 I'm sorry, let me correct that. Goodlettsville,

1 Tennessee. No one knows where Goodlettsville is, and
2 I'm accustomed to saying Nashville.

3 Q Mr. Byerley, do you have before you the
4 prefiled testimony you prepared on behalf of OPC and
5 that was submitted in this proceeding?

6 A Yes, sir.

7 Q Do you have any corrections or changes to make
8 to your prefiled testimony at this point?

9 MR. MCGLOTHLIN: And before he answers,
10 Commissioners, he will refer to some rewording and
11 editing. We have revised pages to hand out. So it
12 isn't necessary that you take down word for word.
13 We're going to give you the revised sheets as he
14 makes the changes.

15 BY MR. MCGLOTHLIN:

16 Q Mr. Byerley, go ahead with your first change.

17 A Okay. If you'll refer to page 7, line 2, that
18 sentence should end with the word "connections." And
19 after that follows the sentence, "RUS bulletin
20 1724e-200, section 15.4.1, wood structures, and
21 1724e-204, section 5.2.5, single steel pole and H frame
22 structures."

23 After the sentence "during my tenure at TVA"
24 add the sentence, "In fact, the drawings for FPL's old
25 Conservation-Corbett tower design specified the use of

1 lock nuts on cross brace bolts at one time. Failure to
2 use lock nuts may not be unusual, but it's certainly not
3 a universal practice."

4 Refer to page 26, I have done some rerouting
5 starting with line 12. That should now read, "The table
6 on page 10 of the forensics team preliminary report for
7 Hurricane Wilma shows that 6,929 polls failed during
8 Wilma. The graph in the lower right corner of that page
9 shows that 45 percent, or 3,116, of the failed poles
10 were creosote."

11 Dropping down to line 21, I want to change
12 that number there to \$2,436,100.

13 On the next page on line 2, I would like to
14 change that number to \$9,744,400.

15 On page -- line 8, I'd like to change that
16 number to 8,575,072.

17 And on line 9, I would like to change that
18 number to 18,319,872.

19 I'd refer you to page 31, beginning on
20 line 16, I'd like to change the numbers 7,400 to 6,925.
21 I'd like to change the number 888 to 831.

22 And line 18, I would like to change that
23 number to 1,412,700.

24 And line 19, I'd like to change that number to
25 \$5,650,800.

1 And line 21, I would like to change the first
2 number from 5.3 -- excuse me, to \$4,972,704, and the
3 last number on that line to \$10,623,504. That's all the
4 changes that I have.

5 Q With those changes, Mr. Byerley, do you
6 adopted the prefiled testimony that was submitted and
7 modified by you today as your testimony in this
8 proceeding?

9 A Yes, sir, I do.

10 MR. MCGLOTHLIN: I request that the prefiled
11 testimony be inserted in the record at this point.

12 CHAIRMAN EDGAR: The prefiled testimony will
13 be entered into the record with the changes
14 identified by the witness.

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1 BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

2 DOCKET NO. 060038-EI

3 DIRECT TESTIMONY OF JAMES S. BYERLEY

4 ON BEHALF OF THE CITIZENS OF FLORIDA

5

6 I. INTRODUCTION7 **Q. PLEASE STATE YOUR NAME, POSITION, AND BUSINESS ADDRESS.**8 A. My name is James S. Byerley. I am a Principal Engineer with R.W. Beck, Inc. My
9 address is 400 Professional Park Drive, Goodlettsville, TN 37072.

10

11 **Q. WHAT ARE YOUR RESPONSIBILITIES IN YOUR CURRENT POSITION?**12 A. My responsibilities include assisting clients by preparing specifications and documents
13 for engineering, design, procurement, construction and project management of substation
14 projects from 46 kV through 500 kV. I perform system evaluations for various financial
15 and utility clients. I investigate equipment failures and other system problems, and
16 provide analysis, recommendations and expert testimony as requested.

17

18 **Q. WHAT EXPERIENCE DO YOU HAVE IN ELECTRIC POWER SYSTEMS?**19 A. I was employed by the Tennessee Valley Authority (TVA) from 1959 until 1994. I held
20 various engineering and management positions in Transmission Planning, Substation and
21 Transmission Line Engineering, Transmission Operations and Maintenance,
22 Transmission Construction, and Project Management. When I retired from TVA in
23 December, 1994, I was Manager of Transmission Engineering and Construction (TE&C).
24 In that position, I was responsible for all additions and modifications to TVA's
25 transmission lines, plant switchyards, substations, and power telecommunications. The

1 responsibilities included siting, routing, public meetings and hearings, negotiations with
2 land owners, surveying, engineering, procurement, construction, contracting,
3 transportation, and heavy equipment. I managed approximately 250 engineering and
4 support employees, 350 full time construction employees, and 350 contract employees,
5 and oversaw a capital improvement program with a budget of approximately \$120
6 million per year.

7
8 As Manager of TE&C, I was second in command of TVA's Emergency Control Center
9 (ECC) during periods of major system disturbances. My responsibility was to dispatch
10 personnel, equipment, and material during several major tornado events, the blizzard of
11 1993 (which took out service to over one-fourth of TVA's customers) and the ice storm
12 of 1994 (which darkened over half of TVA's customers). This function also included
13 procuring outside utility and contractor crews, arranging for transportation, meals, and
14 accommodations for in-house and outside crews, renting heavy equipment, and procuring
15 and transporting additional material as needed.

16
17 I have performed several technical evaluations of electric power systems for different
18 clients for various purposes. When the state of Ceara, Brazil privatized the state owned
19 power system, COELCE, one other engineer and I performed an evaluation for Chase
20 Securities. Chase was to provide the financing of up to \$800 million (US\$) for a
21 prospective purchaser. The evaluation included a limited on-site review of the facilities,
22 a data room review of capital and operation budgets and expenses and O&M records, and
23 interviews with approximately ten management employees covering the utility policies
24 and practices. I was one of four R.W. Beck engineers who performed a similar
25 evaluation of the International Transmission Company assets for CIBC World Markets

1 before these assets were acquired by KKR. I performed a distributions system
2 assessment for the City of Winter Park, Florida before the City purchased the system
3 from Progress Energy Florida. This assessment consisted of an on-site review of the
4 facilities and uncovered numerous deficiencies in maintenance and vegetation
5 management.

6
7 **II. SUMMARY OF TESTIMONY**

8 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?**

9 A. The Florida Office of Public Counsel has retained R. W. Beck, Inc. to review and
10 evaluate the adequacy of Florida Power & Light Company's pre-storm inspection and
11 maintenance practices, as they bear on the extent of system damages sustained in the
12 2005 Hurricane Wilma. The purpose of this testimony is to present the results of my
13 evaluation.

14
15 **Q. PLEASE SUMMARIZE YOUR TESTIMONY.**

16 A. It is my observation that the extent of the damages caused by Hurricane Wilma to FPL's
17 transmission and distribution facilities was exacerbated by prior inadequate inspection and
18 maintenance practices. Specifically, the failures of the Corbett-Conservation 500 kV line
19 and the Alva-Corbett 230 kV line appear to be the result of maintenance practices and
20 construction management that were inadequate, especially in light of the fact that FPL
21 knew as early as 1998 of loose and missing brace bolts on the Corbett-Conservation
22 towers. Similarly, I believe the failure of many deteriorated wood distribution poles during
23 Wilma must be attributed to inadequate inspection policies and practices, vegetation
24 management, and record keeping. In my testimony, I will provide the basis for these
25 conclusions.

1 **Q. WHAT DOCUMENTS AND OTHER SOURCES OF INFORMATION HAVE**
2 **YOU EXAMINED OR USED IN PREPARING YOUR TESTIMONY?**

3 A. I have examined the testimony and exhibits submitted by Florida Power & Light
4 Company in this case that are pertinent to my participation, FPL's answers to
5 interrogatories and responses to document requests, and Standards, Manuals, and Guides
6 published by the Institute of Electrical and Electronic Engineers (IEEE), American
7 Society of Civil Engineers (ASCE), and Rural Utilities Service (RUS). I reviewed the
8 annual Distribution Reliability Reports filed by FPL with the Commission, as well as a
9 document prepared by the Florida PSC Staff dated July 2005 and titled "Preliminary
10 Review of Vegetation Management, Lightning Protection and Pole Inspection at Florida
11 Power & Light Company", herein referred to as "FPSC Staff Review", which drew from
12 FPL's Distribution Reliability Reports. I also used a FPL document dated November
13 2005 titled "Hardening Distribution's Infrastructure-Plan to Mitigate Damage caused by
14 Tropical Storms and Hurricanes," herein referred to as "Hardening Plan"

15
16 **Q. HAVE YOU VISITED ANY OF FPL'S FACILITIES?**

17 A. I visited a small portion of the FPL system located in Palm Beach County during the
18 period of March 13-15, 2006. I was accompanied by Richard Jones, an experienced
19 lineman under contract to R.W. Beck, and Earl Poucher, staff member of the Office of
20 Public Counsel. We did not have a pre-determined route or area to examine, but we
21 limited our observations to Palm Beach County in the interest of time. The purpose of our
22 trip was to evaluate the condition of a very limited sample of various FPL facilities. We
23 limited our visit to areas in which we could view the facilities from public rights-of-way.
24 I recorded my observations and impressions of the field visit and the pole storage yard in
25 documents that I have attached as Exhibits __ and __ (JB-1, 3). I also took photographs

1 of some of the facilities we saw. I took photos when we encountered inadequate,
2 deteriorated, or suspect facilities. I have since reviewed the photographs; they depict
3 very accurately what we saw at the time. I will refer to the record of my visit and to the
4 photographs later in my testimony. The photographs are contained on a disc that I have
5 attached as Exhibit ___(JB-2); (OPC has also provided several copies of the printed
6 photographs for the use of the Commission Clerk.) During the trip, we did pre-arrange
7 to meet John McEvoy of FPL on March 15, 2006, at the FPL pole retention yard in West
8 Palm Beach to examine a number of failed poles.

9
10 III. OBSERVATIONS CONCERNING THE CONSERVATION-CORBETT 500 kV
11 LINE FAILURE

12
13 **Q. PLEASE EXPLAIN YOUR EVALUATION OF THE FAILURE OF THE**
14 **CONSERVATION-CORBETT 500 kV TRANSMISSION LINE.**

15 A. The maximum wind speed of Wilma in Palm Beach County is given, in data provided to
16 OPC by FPL in discovery, as 86 mph (Bates 102887). This is well below the “old” (that
17 is to say, applicable to facilities built prior to 2002) National Electrical Safety Code
18 (IEEE Standard C 2) design requirement of 100 mph for extreme wind (Rule 250.C).
19 Also, there are a number of similar lines in the vicinity that did not suffer wind damage.
20 This leads me to believe that equipment failure, not wind speed, is the root cause of the
21 damage suffered by this line. Further, I conclude that the equipment failed because of
22 FPL’s inadequate inspection and maintenance practices.

23
24 **Q. SPECIFICALLY, WHAT ASPECT OF THE EQUIPMENT CAUSED THE**
25 **TOWERS TO FAIL?**

1 A. Loose or missing cross-brace bolts weakened the structural integrity of numerous towers,
2 to the extent that wind speeds that ordinarily would not have caused the towers to fail did
3 so in their weakened condition. The one exception was the tower that failed because of a
4 badly constructed foundation.

5

6 **Q. FPL'S WITNESS DR. RICHARD BROWN TESTIFIES THAT THE CAUSE OF**
7 **THE FAILURE WAS AN INADEQUATE INSTALLATION GUIDELINE,**
8 **PURSUANT TO WHICH FPL MANUALLY TIGHTENED THE BOLTS OF THE**
9 **CROSS BRACES. DO YOU AGREE?**

10 A. I agree that the installation guidelines, which incidentally were developed within FPL,
11 called for manual tightening. I disagree that the installation guidelines caused the failure,
12 because FPL learned that the bolts were loosening and even falling out several years prior
13 to the 2005 storm season, but did not take adequate measures to remedy the situation.

14

15 **Q. DR. BROWN CALLS THE MANUAL TIGHTENING A STANDARD INDUSTRY**
16 **PRACTICE. DO YOU AGREE? IF SO, DOES THIS ELIMINATE THE**
17 **POSSIBILITY THAT FPL MANAGEMENT IS RESPONSIBLE FOR THE**
18 **COLLAPSE OF THE TOWERS?**

19 A. The KEMA report (pg 7) states that the cross-brace bolts were installed snug-tight and
20 describes this as a standard industry practice. I agree that snug-tight connections are in
21 accordance with ASCE Manual 72, Design of Steel Transmission Pole Structures, and also
22 that use of locknuts is not required by Manual 72. I agree that both the type of connection
23 called for (that is to say, a bolt and nut) and manual tightening of the connection are
24 standard practices that are used in the industry. If Dr. Brown is asserting that failure to
25 apply locknuts to bolted utility structure connections is a standard industry practice, I

1 would disagree with that. It should be noted that the Rural Utilities Service (RUS)
2 requires the use of locknuts on bolted connections. RUS Bulletin 1724e-200, Section
3 15.4.1 (wood structures) and 1724E-204, Section 5.2.5 (single steel pole and H-Frame
4 structures). During my tenure at TVA, locknuts were required on bolted tower
5 connections. In fact, the drawings for FPL's "old" Conservation-Corbett tower design
6 specified use of lock nuts on cross-brace bolts at one time (Bates 010583; 1972 drawing).
7 Failure to use locknuts may not be unusual, but it is certainly is not a universal practice.

8
9 Still, I agree with KEMA that FPL was not imprudent at the outset, when the decision to
10 use manual tightening alone was first made. I disagree strongly, however, with the
11 balance of KEMA's analysis.

12
13 **Q. PLEASE ELABORATE.**

14 A. The KEMA report acknowledges that in 1998 FPL discovered some 31 towers on the
15 Conservation-Corbett transmission line that had loose or missing bolts. Here is the
16 KEMA Report's (pgs. 43) account of what happened that time:

17 "The exact actions to rectify the loose and missing bolts in 1998 is not known, but
18 action was taken to fix this. Since manual tightening was used, it appears that some of the
19 tightened cross-brace bolts subsequently became loose again."

20
21 Elsewhere, the KEMA report (pg. 44) states that "There is no record that is was known
22 before the 2005 storms that bolts were loose or missing."

23
24 **Q. DO YOU HAVE ANY COMMENTS ON THIS PORTION OF THE KEMA REPORT?**

1 A. Yes. First of all, the acknowledgment that FPL is unsure of the steps it took to address the
2 loose bolt problem is revealing. This can only be the case if FPL failed to properly
3 document and record the action it took in 1998 to deal with the serious problem of loose
4 bolts on numerous towers of the 500 kV transmission line. This observation is reinforced
5 by the statement that there was no “record that it was known before the 2005 storms that
6 bolts were loose or missing.”. In its answer to OPC’s Interrogatory No. 126, FPL clarified
7 this statement to confirm that FPL discovered the problem of loose bolts prior to 2005, but
8 FPL did not record the 1998 inspection in FPL’s asset management system used for
9 scheduling and tracking inspections. A copy of FPL’s answer to OPC’s Interrogatory No.
10 126 is attached as my Exhibit No. ___ (JB-4).

11 The acknowledgment in FPL’s answer to this interrogatory is highly significant. The
12 possibility of inadequate cross-bracing in a transmission structure is not a trivial matter. It
13 reduces the structural integrity of the tower. The crews should have recognized the
14 significance of this glaring problem immediately. The missing cross-brace bolts should
15 have been recorded, reported, and remedied promptly. Further, the line should have been
16 completely inspected frequently until the problem was satisfactorily corrected. To me, the
17 fact that the 1998 inspection results involving 31 of the 500 kV transmission line towers
18 were not entered in FPL’s asset management system is inexplicable, particularly in view of
19 the fact that FPL’s asset management system contains the information on which FPL bases
20 inspection decisions and plans.

21
22 The additional statement in the KEMA Report to the effect that in 1998 manual tightening
23 was used to address the issue is also revealing. In light of the earlier statement that the
24 exact steps are unknown, it is difficult to understand how KEMA can state that anything in
25 particular was done. The question is particularly appropriate in light of a statement by

1 FPL structural engineer Jerry Wong, whose name appears on many documents related to
2 the Conservation-Corbett line over time, that “Many missing bolts were replaced (in 1998).
3 However there is no evidence that the loosened bolts were re-tightened during the retrofit
4 construction.” This statement was made in a memorandum designed to serve as a “post-
5 mortem” in-house analysis by FPL’s structural engineer of the failure of the Conservation-
6 Corbett transmission line during Hurricane Wilma. See memorandum of Jerry Wong,
7 dated November 14,2005, which is attached to my testimony as Exhibit ____ (JB-5). (I
8 am informed that OPC has redacted the portions of this document asserted by FPL to be
9 confidential.) During the deposition of FPL witness Richard Brown, OPC asked Dr.
10 Brown to explain the assertion in the KEMA report that the bolts were retightened
11 manually. I have been informed by Counsel for OPC that during his deposition Dr. Brown
12 said the statement in the KEMA Report was based on an FPL employee’s recollection.
13 With respect to the apparent discrepancy with the informal recollection and Dr. Wong’s
14 memorandum, Dr. Brown said he regarded Dr. Wong’s statement as related to the absence
15 of documentation of the manual tightening, as opposed to a conclusion that no manual
16 tightening occurred. That KEMA is relying upon an employee’s “recollection” again
17 shows the deficiency in FPL’s maintenance records. However, the more important point is
18 that, even if we accept KEMA’s conclusion that the bolts were retightened manually in
19 1998, FPL’s response to the problem in 1998 was inadequate under the circumstances.

20
21 **Q. AT PAGE 42 OF IT’S REPORT, KEMA DESCRIBES FPL’S EFFORT TO SOLVE**
22 **THE PROBLEM OF EXCESSIVE VIBRATION ON THE CONSERVATION-**
23 **CORBETT LINE IN 1998. DOES THE FACT THAT FPL WORKED ON THE**
24 **VIBRATION PROBLEM IN 1998 MEAN THAT FPL DID ALL THAT WAS**

1 **NECESSARY TO DEAL WITH LOOSE AND MISSING CROSS-BRACE BOLTS**
2 **AT THE TIME?**

3 A. No.

4

5 **Q. WHY NOT?**

6 A. A document provided to OPC by FPL during discovery demonstrates that in 1998 FPL
7 personnel determined that insulator damage was caused by Aeolian vibration but observed
8 that “Loosening of structure fasteners is an independent problem” (Bates 103020). In the
9 same document the author added, “Loose nuts and missing bolts can be a serious problem
10 under wind load” (Bates 103040). I am attaching a copy of this document, entitled “1998
11 Analytical Techniques, 500 kV Structure Fastener Problem,” to my testimony as Exhibit
12 ___(JB-6). While it bears a “confidential” marker, I am informed that Counsel for OPC
13 discussed this document with Counsel for FPL, and that FPL no longer claims
14 confidentiality. Because, as FPL personnel recognized at the time, the loose bolts would
15 pose a serious risk in high wind situations, and because FPL could not have known at the
16 time whether its remedy for the vibrations would be effective, FPL should have addressed
17 the cross-brace bolt situation separately and effectively. In fact, FPL documents obtained
18 during discovery indicate this view was shared within FPL at the time.

19

20 **Q. PLEASE EXPLAIN.**

21 A. Loose and missing bolts were documented in an inspection report dated March 18, 1998
22 (Exhibit __ (JB-7) ;Bates 103010 -103012), and the report identified 31 structures as
23 having loose or missing bolts. In an FPL staff report dated November 25, 1998
24 (Exhibit __ (JB- 8) ; Bates 103016) the following recommendations were made:

25

1. It is recommended that all structures be checked for loose hardware.

1 2. If a nut is frozen, leave it alone.

2 3. If the nut has backed off ½ nut width, replace it and peen the threads.

3 4. If the crew finds that nuts are not frozen on the brace bolts, then we need to
4 consider peening all brace bolts.

5
6 **Q. IS PEENING THE THREADS OF CROSS-BRACE BOLTS AN EFFECTIVE WAY**
7 **OF PREVENTING THE BOLTS FROM BECOMING LOOSE?**

8 Yes. I consider that peening bolt threads, which involves damaging threads with a hammer
9 or other tool, is not the most desirable method of securing nuts, because the nuts cannot
10 then be removed without destroying the bolt. However, it is an effective method,
11 particularly when the crews are on the towers and locknuts are not readily available. If
12 FPL had peened the threads on all bolts when the problem was discovered and addressed in
13 1998, or at any time between 1998 and the 2005 storm season, this measure would have
14 effectively prevented the bolts from loosening. The KEMA report accepts FPL's position
15 that in 1998 FPL addressed the loose bolt problem by manually retightening them. My
16 point is that even if this is true, the actions taken then and later were inadequate to deal
17 with the situation, as it was known to FPL at the time.

18
19 **Q. DID FPL EVER PEEN THE THREADS OF THE CROSS BRACE BOLTS?**

20 **A.** No. An FPL internal report dated December 14, 2005 (Exhibit ___(JB- 9) :Bates 103044)
21 identified 22 structures with loose and missing bolts. The report shows that 14 of them
22 were the same structures that were identified in the 1998 inspection. Clearly, the crews did
23 not follow the recommendation in the November 1998 FPL staff report to peen the cross-
24 brace bolt threads.

25

1 **Q. HAS FPL ADDRESSED A COMPREHENSIVE APPROACH TO THE LOOSE**
2 **BOLT PROBLEM SINCE HURRICANE WILMA?**

3 A. Yes. In the more recent, post-Wilma document that I mentioned earlier, Dr. Wong made
4 several similar recommendations. They appear at Bates nos. 001223 and 001224. Among
5 them are the following:

- 6 1. All bolts will be re-tightened or replaced in the normal inspection program.
- 7 2. Locking devices should be used to prevent bolts from loosening.
- 8 3. The vibration issue must be addressed.

9

10 Also, FPL has stated that it is now in the process of peening the threads of all of the bolts.
11 (FPL's answer to OPC Interrogatory no. 125, attached as Exhibit __ (JB-10).

12

13 **Q. AT PAGE 44, THE KEMA REPORT OBSERVES THAT FPL MAINTAINED AN**
14 **INSPECTION CYCLE OF 10% OF TOWERS EVERY 4 YEARS, AND SUGGESTS**
15 **THAT THE LOOSE BOLTS ESCAPED FPL'S ATTENTION AFTER 1998**
16 **BECAUSE THE TOWERS SELECTED FOR INSPECTION DURING THE**
17 **ESTABLISHED CYCLE DID NOT REVEAL THE PROBLEM. DO YOU ACCEPT**
18 **THIS RATIONALE AS ADEQUATE TO DEMONSTRATE PRUDENCE ON**
19 **FPL'S PART?**

20 A. No.

21

22 **Q. ON WHAT DO YOU BASE YOUR ANSWER?**

23 A. Once the severe and widespread problem of loose and missing cross-brace bolts was
24 discovered in 1998, prudence required FPL to monitor the Conservation-Corbett situation
25 closely—far more closely than the “auditing” type of inspection that “business as usual”

1 would have called for. The fact that FPL failed to note the loose bolt problem in its asset
2 management system, the records upon which it bases its inspections, likely explains why
3 FPL did not inspect all of the towers more frequently. In fact, the KEMA report does note
4 that "Possibly this frequency was insufficient on this particular line to observe and rectify
5 bolt problems." (pg 44). This suggests to me that KEMA and I may be close in our
6 positions on this point.

7

8 **Q. THE KEMA REPORT ALSO MENTIONS ISSUES WITH TOWER**
9 **FOUNDATIONS AND CONDUCTORS. DO YOU BELIEVE THEY PLAYED A**
10 **PART IN THE FAILURE OF THE CONSERVATION-CORBETT TOWERS?**

11 A. I observed the remains of the failed foundation on March 14, 2006 and agree that faulty
12 construction was the probable cause. Since the construction inspection process apparently
13 failed in this case, it raises the question as to the integrity of the remaining foundations in
14 the line. On page 42, KEMA states, the "At this stage, there is no reason to assume that
15 more foundations in the transmission line are not reliable." I do not agree with this
16 statement. If there are other questionable foundations remaining, they may fail in the next
17 storm. The cost of replacing these structures and foundations is so great that it is prudent to
18 investigate other foundations that were installed and inspected by the same crews at the
19 same time as the failed foundation.

20

21 I do not believe the one conductor failure alone caused the towers to come down. Normally
22 structures are designed to withstand failure of one conductor, among other failure cases.
23 However, if adjacent structures did not have their cross-bracing intact due to missing bolts,
24 the failed conductor certainly could contribute to cascading damage.

25

1 I believe that, except for the one foundation failure, the primary cause of both initial tower
2 failures and the ensuing cascade failures was missing and loose cross-brace bolts.

3 **Q. PLEASE SUMMARIZE YOUR POSITION REGARDING FPL'S**
4 **RESPONSIBILITY FOR THE DAMAGE TO THE CONSERVATION-CORBETT**
5 **LINE, AND THE REASONS FOR YOUR POSITION.**

6 A. FPL was aware of a widespread problem of loose and missing cross-brace bolts as early as
7 1998. Also in 1998, FPL was aware that this problem could pose a serious risk of failure in
8 high wind situations. FPL failed to take adequate measures to rectify the loose bolts
9 problem in 1998 and the following years. FPL failed to properly record the problem in its
10 asset management system. Perhaps because of the resulting inadequate records, FPL failed
11 to establish an inspection program adequate to monitor and correct the problem after 1998.
12 Had FPL peened all of the bolt threads, as internal documents suggested at the time, or had
13 FPL placed fasteners on all of the cross brace bolts, as its structural engineer recommended
14 after 30 towers collapsed, in my view the towers would not have fallen during Hurricane
15 Wilma. Further, putting the missed 1998 opportunity aside, proper record-keeping and
16 inspections of sufficient frequency and scope would have disclosed the continuing nature
17 of the situation which in turn should have led FPL to take corrective measures prior to
18 Wilma. It is my opinion that the damages to this line were caused by equipment failure and
19 not by wind overload during Wilma. In my opinion the root cause of the equipment failure
20 was poor and inadequate maintenance practices, failure to follow staff recommendations,
21 poor oversight of construction practices, and inadequate inspection records and reporting. I
22 believe that this line should have withstood Wilma, as did several other similar 500 kV
23 lines in the same area. I do not believe that FPL is entitled to recover any of the restoration
24 cost of this line from customers.

25

1 IV. OBSERVATIONS CONCERNING THE ALVA-CORBETT 230 kV LINE

2 **Q. PLEASE EXPLAIN YOUR EVALUATION OF THE FAILURE OF THIS LINE.**

3 A. The KEMA report states (pg 41) that the Alva-Corbett 230 kV line failure was likely
4 caused by the impact of the Conservation-Corbett 500 kV line collapsing on top of it. This
5 could be a logical explanation. The wind speed was below the NESC requirement as
6 mentioned above, so I would not attribute failure to wind overload. Neither the KEMA
7 report nor FPL documents attribute the failure to wind.

8
9 An FPL report (Bates 001195) states that the 500 kV line came down between Structures
10 A96V3 and A96V2, and neither of these structures required replacement. Four structures
11 were damaged in various locations in a 10-mile section to the west of the impact.
12 Apparently there were no cascade failures.

13
14 On March 14, 2006, I observed a portion of this line in the vicinity of the impact. I noted
15 that the poles had a pretty severe tilt to the east. At first I suspected that this was due to the
16 combination of high winds and the collapse of the 500 kV line. However, photos in the
17 report mentioned above show the presence of prop poles at Structures A95V7 (Bates
18 001196) and A92V5 (Bates 001198), indicating that the line may have been in some
19 distress before Wilma struck. In an answer to one of OPC's interrogatories, FPL
20 acknowledged that the Alva-Corbett towers were leaning in 2004. The leaning structures
21 also indicate potential foundation failure in a future storm.

22
23 I viewed the remains of several structures in this line. I found one deteriorated pole that had
24 been removed and left lying on the ground (Exhibit __ (JB-2, photo 51). I also found one

1 deteriorated pole stub still in the ground. The pole had clearly broken in the deteriorated
2 portion (Exhibit _(JB-2), photo 54).

3
4 I noted that a good portion of the wood H-frame line is currently being replaced with
5 single-pole concrete structures. It also appears that the conductor is being reused, so there
6 was apparently little conductor damage.

7
8 **Q. WHAT CONCLUSIONS HAVE YOU REACHED REGARDING FAILURE OF**
9 **THIS LINE?**

10 A. I conclude that the impact of the 500 kV line sent a dynamic shock through the conductors
11 that did not affect the immediately adjacent, sound Alva-Corbett structures, but destroyed
12 deteriorated structures some distance away. I believe that FPL made an economic decision
13 to replace a deteriorated line rather than repair it. My conclusions are based on the
14 following facts:

- 15 1. The two structures adjacent to the impact did not fail.
- 16 2. Structures some distance away from the impact did fail.
- 17 3. All original structures that I viewed appeared to be leaning badly and have the
18 potential for foundation failure.
- 19 4. I found evidence of two deteriorated poles in a small portion of line.
- 20 5. The conductor was not damaged.
- 21 6. A significant portion of the line is being replaced.

22
23 It is my opinion that the failure of the Alva-Corbett 230 kV line was initiated by collapse of
24 the Conservation-Corbett 500 kV line (the causes of which are addressed above). I also

1 believe that damages to this line were probably exacerbated by the existence of some
2 deteriorated structures in the line.

3
4
5 **V. OBSERVATIONS CONCERNING OTHER TRANSMISSION LINE FAILURES**

6 **Q. WHAT OBSERVATIONS HAVE YOU MADE CONCERNING OTHER**
7 **TRANSMISSION LINE FAILURES?**

8 A. The KEMA report addresses the failure of a number of 69 kV structures in three lines in
9 west Palm Beach County (KEMA pgs. 40, 41). KEMA attributes these line failures to
10 foundation failures and possibly some cascading. The report notes that the lines are
11 primarily constructed on unguyed wood poles. The report also notes that two of the lines
12 had failures during hurricanes in 2004. After that, portions of the lines were relocated and
13 some wood poles were replaced with concrete poles. The replaced and relocated poles
14 apparently performed well during Wilma. Since FPL had earlier recognized the
15 unfavorable location of these lines and had experienced earlier storm failures, I believe it
16 would have been prudent for the company to have taken some action before Wilma to
17 mitigate future damage.

18
19 **VI. OBSERVATIONS CONCERNING FPL'S DISTRIBUTION SYSTEM**

20 **Q. WHAT OBSERVATIONS HAVE YOU MADE CONCERNING FPL'S**
21 **DISTRIBUTION POLE INSPECTION AND MAINTENANCE PROGRAMS?**

22 A. The KEMA report (pgs 31-36) states that FPL currently has three separate pole inspection
23 processes. They are the Osmose inspection and maintenance program, the Thermovision
24 program, and the other pole "touchpoints" (KEMA's term) afforded by daily activities. For
25 the reasons that follow, I regard only the Osmose program as a true, effective pole

1 inspection plan. I will address each component in turn, beginning with the Osmose
2 program.

3
4 **Q. PLEASE CONTINUE.**

5 A. First, I believe the history of FPL's pole inspection activities sheds light on the current
6 situation. Two documents that OPC received from FPL during discovery provide insight
7 as to the genesis of the current Osmose program. The document entitled "Reliability 2000
8 Deployment Plan," attached as Exhibit __ (JB-11), indicates that FPL initiated a
9 distribution wood pole inspection program in the early 1980's, then discontinued it in 1991
10 to reduce costs (Bates 004454). This document also describes a 1998 pole study conducted
11 by FPL which showed that 26% of its creosote pole population was defective (Bates
12 004458). A second document titled "Program Evaluation Matrix" _ (Bates 004449), which
13 actually predates the Reliability 2000 Deployment Plan, appears to be a recommendation
14 prepared by FPL personnel at the time that reintroduction of a pole inspection and
15 maintenance program was being considered. This document shows that
16
17 FPL personnel associated with the project originally recommended that FPL implement a
18 system-wide pole inspection and maintenance program designed to inspect all of FPL's
19 1,300,000 poles over a period of 4,7, or 10 years. I am attaching the document to my
20 testimony as Exhibit ___ (JB-12). However, when FPL implemented its program in 1999
21 with Osmose as the contractor, the scope of the program was limited to a relatively small
22 number of inspections in two distinct geographical areas.

23
24 **Q. WHAT IS YOUR ASSESSMENT OF THE OSMOSE PROGRAM?**

1 A. I am familiar with the inspection and treatment programs of Osmose and other similar
2 contractors. In my experience, they employ capable professional inspectors with adequate
3 training, equipment, and material to inspect and treat utility poles. An Osmose inspection
4 consists of excavating 18-24" below ground level, sounding the poles, and drilling and
5 taking core samples with which to measure shell thickness where indicated,. I have no
6 reason to believe that these are not complete and adequate inspections. In 2004, Osmose
7 inspected approximately 5600 FPL poles, about 0.4% of the FPL inventory. According to
8 KEMA (pg. 34), during inspections from 1998-2004, Osmose identified about 5.63% of the
9 poles inspected as being defective. About half the defective poles could be strengthened
10 with bracing and the other half required replacement. A concentrated inspection of creosote
11 poles only in 2005 identified the defective rate to be 15% for FPL poles and 24% for Non-
12 FPL poles.

13

14 **Q. PLEASE TURN TO THE INSPECTIONS ASSOCIATED WITH THE**
15 **THERMOVISION PROGRAM.**

16 A. The FPSC Staff Review states that FPL initiated the Thermovision program in 1998 to
17 identify conductors and other electrical equipment in a pre-fail mode. In 2003, FPL added
18 visual wood pole inspections as a part of the program. The Thermovision program consists
19 of four equipment vans and four two-man crews trained to identify potential equipment
20 hot-spots prior to failure. The Thermovision program uses infrared cameras to locate "hot
21 spots" in electrical equipment such as arrestors, transformers, fuses, splices, etc. The
22 equipment cannot be used to make any assessment of the condition of wood, concrete, or
23 steel poles. Also, this inspection apparently addresses only feeder poles and not the laterals.
24 The KEMA report states that the ratio of feeder poles to lateral poles is about 35/65%

1 (KEMA pg. 58). This indicates that over 700,000 FPL poles are not included in the
2 Thermovision inspections.

3
4 Based on FPL's answers to OPC Interrogatories 116-120, it appears that the Thermovision
5 operators are well qualified to operate their infrared equipment. However, the responses to
6 those Interrogatories indicate that the operators are not trained inspectors; nor are they
7 given any training or equipment which would allow them to perform adequate pole
8 inspections.

9
10 **Q. DID YOU TAKE ANY STEPS TO EVALUATE THE EFFICACY OF THE VISUAL**
11 **INSPECTIONS PERFORMED BY THERMOVISION OPERATORS?**

12 **A.** Yes. In an effort to determine what the operators were finding, I made a random audit of
13 the inspection results for 2004 and 2005 (Bates 001225 & 001227). The results of my audit
14 are given in Exhibit __ (JB- 13). I reviewed a total of 26 feeder reports from 8 areas. If I
15 assume, consistent with KEMA's analysis, that there are 113 poles per feeder (KEMA, pg.
16 32), then my audit covered about 2938 poles. The reports listed a total of 551
17 abnormalities, of which 8 were deteriorated poles. (From their pictures, I observed what
18 appeared to be 4 deteriorated poles that were not reported.) In other words, the
19 Thermovision cameramen determined, with visual inspections, that 0.27% of the poles they
20 inspected were deteriorated. With their detailed routine of sounding, excavating, and
21 boring, Osmose inspectors find deteriorated poles at a rate 20 times greater than that of the
22 Thermovision crews.

23
24 This difference does not surprise me. KEMA acknowledges that a visual inspection, such
25 as those performed by Thermovision crews, can detect only "obvious" damage. (pg 32).

1 Many times, deterioration begins below ground level or inside a pole having a shell that
2 appears to be intact. That is why the Osmose protocol includes such steps as excavating,
3 sounding, and boring.

4
5 Even if one takes into account the difference in geographical areas, this difference in
6 inspection results leads me to believe that Thermovision inspections, while very good for
7 their original intended purposes, are totally inadequate for pole inspections. In fact, they
8 may provide a false sense of security by failing to identify possibly 95% of the deteriorated
9 poles in the feeders.

10
11 **Q. PLEASE ASSESS THE THIRD CATEGORY OF INSPECTIONS IDENTIFIED**
12 **IN THE KEMA REPORT.**

13 A. The third type of inspection is identified as “touchpoints” afforded by daily activities. The
14 KEMA report (pg.35) states that daily pole activities totaled about 200,000 in 2004. The
15 report then discusses the concept of touchpoints as pole inspections. In regard to the
16 touchpoints, I agree that a competent lineman will perform a hazard assessment before he
17 climbs any pole. However, a hazard assessment will only determine that the pole is safe for
18 him to climb. This is not the same as a pole inspection. Most linemen will climb a pole,
19 even if it shows some signs of deterioration, if he believes that he can safely perform his
20 work. In the case where the work is performed from a bucket truck, which is quite common
21 today, the pole hazard assessment may be abbreviated.

22
23 Further, there is a maxim of management that states that what gets measured gets done. The
24 corollary is that what gets measured and not recorded might as well not have been
25 measured. I found no evidence of any orderly record system showing which poles were

1 visited, when visits occurred, or what anomalies were discovered. I also found no evidence
2 to assume that two poles are touched in every visit nor that the visits are completely
3 random. It is my opinion that many of the touchpoints could not truly be classified as pole
4 inspections.

5
6 KEMA (pg.35) states that FPL “touches” 280,000 poles per year based on 69,000
7 Thermovision inspections, 12,000 Osmose inspections, and 200,000 touchpoints. From this
8 number, KEMA lists a series of assumptions and performs mathematical calculations to
9 conclude that between 80% and 90% of all lateral poles will be inspected over a 15-year
10 period. While the calculations are elegant, KEMA acknowledges the uncertainty of their
11 assumptions. I believe that their assumptions are so uncertain that their conclusions are
12 suspect. I believe that only the Osmose inspections, which in 2004 numbered
13 approximately 5600, and a fraction of the touchpoints may actually be considered as valid
14 pole inspections, and of those the “touchpoints” do not yield any records of location and
15 condition of the poles. In my opinion, prior to the 2005 storms FPL did not have a planned
16 pole inspection program which adequately covered all their wood poles.

17
18 **Q. DO YOU CONSIDER FPL’S PRE-WILMA INSPECTION CYCLE TO HAVE**
19 **BEEN ADEQUATE?**

20 A. Putting aside my criticism of the manner in which KEMA treats all of the three programs
21 as somehow equivalent, even though only the smallest, in my view, constitutes a valid
22 inspection program: Using KEMA’s best assumptions (with which I do not agree), FPL
23 was performing pole inspections on a cycle somewhat greater than 15 years. If their
24 calculations are extended past 15 years, there would be some percentage of poles that,
25 theoretically, would never be inspected.

1

2 Four of the respondents in the KEMA survey (pg. 95) perform inspections on a 10 year
3 cycle. One respondent performs inspections on a 12 year cycle.

4

5 The Rural Utilities Service (RUS), a division of the U. S. Department of Agriculture,
6 produces bulletins and manuals that govern the operation of America's rural electric
7 cooperatives. The cooperatives, taken as a whole, have the largest number of distribution
8 poles of any entity in the country. The RUS instructions have been developed and tested
9 over many years and been shown to be effective in providing reliable electric service.

10

11 RUS Bulletin 1730B-121 addresses pole inspection and maintenance. At pages 6 and 7, the
12 bulletin contains the following statements:

13

- The purpose of a planned inspection program is to reveal and remove danger
14 poles and to identify poles which are in early stages of decay so that corrective
15 action can be taken.

16

- The greatest economic benefit from regular inspection is in locating the
17 decaying/serviceable group. Treatment of poles in this group can extend pole life,
18 thereby *avoiding the cost of emergency replacement* (my italics).

19

20 At page 5, the bulletin identifies the entire state of Florida in Decay Zone 5 and
21 recommends that all poles be inspected on an 8 year interval. It should be noted that
22 investor owned utilities, including FPL, are not under the jurisdiction of RUS. An excerpt
23 of this bulletin is attached as my Exhibit __ (JB-14).

24

1 FPL is under jurisdiction of the NESC. Rule 214.A.2 states that lines shall be inspected at
2 such intervals as experience has shown to be necessary. Based on FPL's 1998 pole
3 inspection, the five respondents to the KEMA survey, and the RUS recommendations, it is
4 my opinion that the pre-2005 storm FPL pole inspection cycle was not adequate.

5
6 **Q. WHAT OBSERVATIONS HAVE YOU MADE CONCERNING THE CAUSE OF**
7 **DISTRIBUTION POLE FAILURES DURING HURRICANE WILMA?**

8 A. The KEMA report (pg. 16, 17) states that all FPL distribution poles are sized for Grade B
9 construction, except for a few areas that were reduced to Grade C between 1993 and 2004.
10 However, the KEMA report states that most Grade C poles were stronger than required,
11 often meeting Grade B, and most were too young to have begun deterioration. The report
12 further states (pg.77) that Grade C construction was not responsible as a contributing factor
13 in the failures.

14
15 The wind velocity that the poles are designed to withstand, according to FPL's Distribution
16 Engineering Reference Manual (DERM), is 118.6 mph for Grade B and 96.9 for Grade C.
17 It has been stated that the maximum wind speed during Wilma was 92 mph in Collier and
18 Lee counties, diminishing as the storm moved eastward (Bates 102887). In light of this,
19 there should have been very few failures of poles which were properly installed and in
20 good condition due solely to wind pressure.

21
22 During our inspection trip to areas of FPL's service area, we noted a number of leaning
23 poles, mostly in feeder circuits. We surmised that the poles may have been set at too
24 shallow a depth, because the birthmarks were located 8-10' above the ground line, rather
25 than at or slightly above the eye level height that I would expect, based on my experience.

1 It is possible that some of the CCA poles may have experienced foundation failure and
2 started a cascade failure which took down adjacent poles.

3
4 In an attempt to determine the cause of the many distribution pole failures, we visited the
5 pole retention yard in West Palm Beach on March 15, 2006. My observations are recorded
6 in Exhibits __(JB-1) and ____(JB-3) . In our time there, we observed 188 CCA poles and 215
7 creosote poles for a total of 403 failed poles. Because the poles generally were in disarray,
8 we were able to view only a small portion of the failed poles. Except for the outermost
9 poles, we could view only a small portion of each individual pole. None of the CCA poles
10 showed signs of deterioration, which is to be expected. I concur with KEMA's observation
11 that CCA poles tend to be brittle, and I suspect many CCA poles were damaged by trees.

12
13 In viewing the creosote poles, we noted 46 poles that showed clear signs of serious
14 deterioration. This leads me to believe that deterioration was the cause of at least 20-25%
15 of the creosote pole failures we were able to observe in the yard.

16
17 An FPL Forensics team evaluated a sample of poles that failed during Wilma. The FPL
18 team determined that 43% of the FPL creosote pole failures were caused by deterioration.
19 Since the FPL team had better access to a much larger sample than we did and were better
20 able to perform testing on the poles, I would expect their conclusions as to the extent of
21 deterioration to be more accurate than ours. I am attaching an excerpt from the forensic
22 team's preliminary report as Exhibit ____(JB-15). I have been informed that FPL has
23 withdrawn its assertion of confidentiality with respect to this excerpt, which is page 11 of
24 the document.

25

1 An undated report titled "Hardening of the Infrastructure: A Five Point Plan" (Bates
2 102783, attached as Exhibit ___(JB-16)) states that 46% of the non-tree related creosote
3 pole failures during Wilma were due to deterioration. It is my opinion based on this report
4 that approximately 46% of the failures could have been prevented if FPL is not entitled to
5 recover the cost of restoration of 46% of the failed creosote poles. Further, because
6 failing poles take good conductors with them, FPL is not entitled to recover the cost of
7 restoring the conductors associated with the deteriorated poles.

8
9 **Q, CAN YOU ESTIMATE THE COST ASSOCIATED WITH THE REPLACEMENT OR**
10 **DETERIORATED PLES AND ASSOCIATED CONDUCTOR?**

11 A. The table on page 10 of the Forensics Team Preliminary Report for Hurricane Wilma shows
12 that 6925 FPL poles failed during Wilma. The graph in the lower right corner of that page
13 shows that 45%, or 3116, of the failed poles were creosote. Earlier, I accepted and employed
14 FPL's determination that 46% of the creosote pole failures were due to deterioration.
15 Applying the 46% factor to the total number of failed creosote poles yields a total of 1433
16 creosote poles that failed during Wilma due to deterioration. FPL states Exhibit ___(JB-11),
17 (Bates 004466) that the average cost of pole replacement during normal maintenance in 2005
18 is estimated to be \$1700 each. Therefore, had the poles been replaced during routine
19 maintenance, the cost would be \$2,436,100. However, units costs during storm recovery are
20 much high than normal, due to extensive use of multiple contractors and outside utility crews,
21 their travel and accommodation expenses, extensive use of premium-time labor, expedited
22 material and equipment deliveries, etc. I am not able to determine FPL's increase in unit cost
23 precisely from the available data; however, in my experience, the items identified above
24 increase the unit cost by a factor of at least four, and I believe that to be a deliberately
25 conservative number. Based on this factor, the deteriorated pole replacement cost is

1 \$9,744,400. In response to OPC Interrogatories 8 and 9, FPL provided distribution repair
2 costs for the 20004 storm season. The response shows \$9.4 million for poles (Acct. 364) and
3 \$8.3 million for conductor (Acct. 365). The ratio of conductor cost to pole cost is 0.88, and I
4 believe this is a reasonable value to use to calculate the Wilma distribution conductor
5 restoration cost. Using this ratio, the cost of replacing conductor that was torn down by
6 deteriorated poles is \$8,575,072. I estimate the total cost of Wilma-related repair that FPL is
7 not entitled to recover as a result of inadequate pole inspections and maintenance to be
8 \$18,319,872.

9
10 **Q. WHAT BEARING DID YOUR SITE VISIT HAVE ON YOUR CONCLUSIONS?**

11 A. Let me preface my answer with some comments regarding the photographs that I have
12 attached as my Exhibit__(JB-2). I acknowledge that I visited only a tiny sample of FPL's
13 service area. Further, I took pictures only of the examples of deteriorating or problematic
14 situations that I encountered, chiefly to help- me remember everything that I saw that I
15 regarded as pertinent after I returned from my trip. I do not claim that the pictures are
16 representative of all of FPL's facilities in its service area. That being said, I think it is
17 noteworthy that I encountered this number of situations in what amounted to a two day
18 windshield tour of the area. To that limited extent, my impressions, as recorded in Exhibits
19 ____(JB-1, 2, 3), do tend to reinforce my comments regarding what I describe as inadequate
20 maintenance activities.

21
22 **Q. WHAT IS YOUR OPINION OF KEMA'S STATEMENT THAT "DISTRIBUTION**
23 **POLE PERFORMANCE DURING WILMA IS KNOW TO BE ACCEPTABLE"**
24 **BASED ON THE COMPARISON OF POLE FAILURE RATES DURING WILMA**

1 **WITH FAILURE RATES DURING EARLIER HURRICANES (KEMA PGS. 4 &**
2 **57)?**

3 A. The KEMA report states that the pole failure rate for Wilma was comparable with earlier
4 hurricanes when adjusted for storm intensity. This statement appears to be valid, as far as it
5 goes. Where the KEMA report falls short, however, is in failing to recognize that past
6 failure rates themselves were the result of a long period of insufficient pole inspection and
7 maintenance practices. To KEMA's observation that the poles performed "as expected," I
8 would add, "as expected in light of a history of nonexistent and later inadequate pole
9 inspection practices." Based on the fact that FPL did no pole inspections from 1991 to
10 1999, and that its pole inspection procedures after 1999 were inadequate, it is not surprising
11 to me that pole performance during hurricanes has not improved over the past 14 years. It is
12 surprising to me that FPL or KEMA would find the continuing lack of improvement in
13 failure rate to be acceptable.

14

15 **Q. PLEASE SUMMARIZE YOUR TESTIMONY ON FPL'S PRE-2005 STORM**
16 **SEASON WOOD POLE INSPECTION AND MAINTENANCE PROGRAMS, AND**
17 **THE EFFECT THEY HAD ON THE EXTENT OF DAMAGE SUSTAINED**
18 **DURING HURRICANE WILMA.**

19 A. Of FPL's three pole inspection programs, only one—the Osmose program—constitutes a
20 detailed and effective inspection program. FPL initiated it in a small way in 1999, and has
21 since reduced the scope of the program. In a recent year Osmose performed approximately
22 5600 inspections, covering less than 1% of FPL's pole inventory. Thermovision cameras
23 can do nothing to detect deterioration in wood poles. The visual inspections performed by
24 Thermovision operators are capable of detecting only obvious signs of deterioration, as the
25 KEMA report acknowledges. In many instances, evidence of deterioration is not

1 obvious—which explains why the Osmose program involves excavating below ground
2 level, sounding the pole, and measuring borings with a shell gauge. It is revealing, rather
3 than surprising, that the percentage of deteriorated poles detected by Osmose is 20 times
4 greater than the percentage observed by Thermovision operators. The Thermovision visual
5 inspections are not even applicable to laterals, which comprise 65% of FPL’s pole
6 population.

7
8 The “touchpoints” described by KEMA do not constitute an effective inspection program.
9 As KEMA acknowledges, a workman generates a report only if he sees a condition that
10 would be hazardous to his task, and even that document is not maintained in a data base
11 that would enable FPL to keep track of pole location, condition, etc. Further, because the
12 workmen are not required to document each assessment, there is no ability to verify the
13 extent or adequacy of each assessment. In my view, past inspection practices have been,
14 with the exception of the limited Osmose program, insufficient to identify and replace
15 deteriorated poles, with the result that many of the poles that fell during Wilma did so—
16 not because of high winds—but because of their deteriorated condition.

17
18 VII. OBSERVATIONS CONCERNING VEGETATION MANAGEMENT

19
20 **Q. WHAT OBSERVATIONS HAVE YOU MADE CONCERNING VEGETATION**
21 **MANAGEMENT PRACTICES AT FPL?**

22
23 A. I reviewed the FPSC Staff Report and the FPL Annual Distribution Reliability Reports
24 that provided the basis for the report. These reports show steadily increasing vegetation-
25 related outages from 1999 through 2003, but they dropped in 2004. They also show
26 steadily worsening CAIDI and SAIFI indices from 1999 through 2003, but they improved
27 a small amount in 2004. In response to OPC’s Interrogatory 121, FPL stated that its
28 reliability indices exclude major storm events. On the basis of this statement, I am led to

1 believe that the drop in vegetation-related outages in 2004 was quite likely due to
2 excluding the 2004 hurricane outages from the results. Based on these decreasing
3 distribution reliability results, I concur that the conclusions and concerns expressed in the
4 FPSC Staff Report are well founded. FPL's vegetation management program may not be
5 adequate.

6
7 I also reviewed the FPL "Hardening Plan". (Exhibit ___(JB-17)This plan addresses the
8 history of damages to the distribution system during tropical storms and hurricanes and
9 plans to mitigate these damages in future storms. This plan apparently was developed, for
10 the most part, before Wilma, because the bulk of the data covers problems occurring up
11 through and during Katrina. On pages 26-28, the report contains data on the cost and
12 benefits of reducing the line clearing cycle for three alternative scenarios. The report
13 appears to conclude that it is not cost effective (in terms of costs incurred by FPL before
14 and after storms) to improve the vegetation management program by increasing the
15 frequency of trimming using any of the scenarios. This part of the report, coupled with
16 the fact that that FPL did not, prior to 2005, significantly increase its vegetation
17 management budget, leads me to infer that FPL decided that it is more economical, in
18 terms of costs incurred by FPL, to restore the system damaged by vegetation after
19 hurricanes than to perform the preventive maintenance required to mitigate storm damage
20 effectively.

21
22 I also reviewed a preliminary draft of the forensics team report on Hurricane Wilma. The
23 data on page 9 indicates that 1742 failed poles were analyzed and 24 % of the failures
24 were due to trees. Exhibit __ (JB-18) I believe it is fair to use this relationship as
25 representative of the poles that failed during Wilma. Further, on page 11 of the Hardening

1 Plan, it states that, during Katrina, 62% of the conductor damage caused by trees was on
2 the laterals and 69% of the lateral tree-related damage was preventable. In response to
3 Interrogatory 231, FPL defined preventable damage as "Standard trimming would have
4 eliminated tree contact with distribution equipment." Based on the Katrina data, I believe
5 that it is reasonable to assume that at least half the pole failures due to trees during Wilma
6 were preventable. On this basis, I contend that inadequate vegetation management is
7 responsible for 12% of the total poles failures. Since FPL has apparently concluded that it
8 is more cost effective, for its purposes, to replace tree-damaged poles than to prevent the
9 damage, I believe that FPL is not entitled to recover their preventable costs. I also believe
10 that they are not entitled to recover the repair costs of the conductors associated with
11 these poles.

12
13 **Q. CAN YOU ESTIMATE THE COST OF REPLACING THE POLES DAMAGED**
14 **BY TREES THAT WAS PREVENTABLE AND THE COST TO REPLACE THE**
15 **CONDUCTOR ASSOCIATED WITH THE FAILED POLES?**

16 A. Using the base of 6925 failed FPL poles established earlier, I estimate that 12% or 831
17 poles suffered tree damage that was preventable. Using the normal replacement cost of
18 \$1700 each, the replacement cost would have been \$1,412,700. Multiplying that by a
19 factor of 4, I estimate that FPL spent \$5,650,800 replacing them during storm recovery.
20 Using the conductor to pole ratio of 0.88 established earlier, I estimate that the conductor
21 recovery cost to be \$4,972,704. The total cost of recovery from preventable tree damage
22 is \$10,623,504.

23
24 **Q. DOES THIS COMPLETE YOUR PREFILED TESTIMONY?**

25 A. Yes, it does.

1 BY MR. McGLOTHLIN:

2 Q Mr. Byerley, did you also prepare the exhibits
3 accompanying your testimony that were marked JSB-1
4 through 18?

5 A Yes, sir.

6 MR. McGLOTHLIN: May I have a number assigned
7 to the composite exhibit?

8 MS. GERVASI: Madam Chairman, those exhibits,
9 the prefiled exhibits, have already been identified
10 and I believe moved into the record as Exhibit Nos.
11 66 through -- how many did we have -- 83.

12 CHAIRMAN EDGAR: Thank you, Ms. Gervasi.

13 MR. McGLOTHLIN: Thank you, Counsel.

14 BY MR. McGLOTHLIN:

15 Q Have you prepared a summary of your testimony,
16 Mr. Byerley?

17 A Yes, I have.

18 Q Please present your summary.

19 A I'm a principal engineer with R.W. Beck.
20 Prior to joining Beck, I spent 35 years with the
21 Tennessee Valley Authority in various engineering and
22 management positions. In my last position with TVA, I
23 was manager of transmission engineering and
24 construction. In that position I was also second in
25 command for TVA's response to major system disturbances.

1 OPC engaged R.W. Beck to perform an evaluation
2 of FPL's pre-Wilma maintenance and inspection of
3 practices. I headed up that evaluation. I will
4 summarize my conclusions in three areas. The failure of
5 3,500 kV transmission towers, FPL's pole inspection
6 program and FPL's vegetation management.

7 FPL's witness, Dr. Brown, blames the failure
8 of the 30 Conservation-Corbett towers to withstand Wilma
9 on insufficient installation guideline. I disagree.
10 FPL was aware of a widespread problem of loose and
11 missing cross brace bolts as early as 1998. Also in
12 1998, FPL was aware that this problem could pose a
13 serious risk of failure in high wind situations.

14 FPL could not have known that the measures it
15 took to address conductor vibration at that time would
16 remedy the loose bolt situation. FPL failed to take
17 adequate measures to rectify the loose bolt problem in
18 1998 and in the following years. Had FPL secured all
19 the nuts on all the cross brace bolts, in my view the
20 towers would not have fallen during Hurricane Wilma.

21 FPL also failed to properly record the problem
22 in its asset management system. Given the serious
23 threat to the tower's structural integrity, I find this
24 omission inexplicable.

25 Finally, FPL failed to establish an inspection

1 program adequate to monitor and correct the problem
2 after 1998. It is my opinion that the damages to this
3 line were caused by poor and inadequate maintenance
4 practices, failure to follow Staff recommendations and
5 inadequate inspection records and reporting.

6 I believe this -- that this line should have
7 withstood Wilma as did several other similar 500 kV
8 lines in the same area. I do not believe FPL is
9 entitled to recover any of the restoration cost of this
10 line from customers.

11 Turning to the pole inspection program.
12 Documents obtained during discovery indicate that FPL
13 began a pole inspection program in the early 1980s, but
14 discontinued in 1991 to reduce costs. FPL initiated its
15 Osmose program of inspections in 1999. It is a
16 comprehensive inspection, maintenance and treatment
17 program but is very small in scope for FPL.

18 In 2004, Osmose inspected less than 1 percent
19 of FPL's wood pole population. Thermovision cameras can
20 do nothing to detect deterioration in wood poles. The
21 visual inspections performed by the thermovision
22 operators are capable of detecting only obvious signs of
23 deterioration, as the KEMA report acknowledges. In many
24 instances evidence of deterioration is not obvious. The
25 thermovision visual inspections are not even applicable

1 to the laterals which comprise 65 percent of FPL's pole
2 population.

3 The hazard assessments by FPL employees do not
4 amount to a valid and effective inspection program. One
5 maxim of management says that which gets measured gets
6 done. Based on my experience, I would add a corollary.
7 What gets measured but not recorded might as well not
8 have been measured.

9 An FPL workman generates a hazard assessment
10 alert only if the employee sees a condition that would
11 be hazardous to his task. And even that document is not
12 maintained in a database that would enable FPL to keep
13 track of pole location, condition or other relevant
14 information.

15 In my view, past inspection practices have
16 been, with the exception of the limited Osmose program,
17 insufficient to identify and replace deteriorating poles
18 with the result that many of those poles fell during
19 Wilma, not because of high winds but because of their
20 deteriorated condition. Based on information I gained
21 in discovery, I estimate the repair cost of
22 deteriorating poles and conductors that fell with those
23 poles to be \$18,320,000.

24 Based on a review of past distribution
25 reliability reports, past vegetation control budgets and

1 examples of FPL's analyses of cost effectiveness of
2 vegetation control programs, it appears to me that FPL's
3 approach is -- is that it is more economical from FPL's
4 perspective to restore the system damaged by vegetation
5 after hurricanes than to perform the preventative
6 maintenance required to mitigate storm damage
7 effectively. Again, I used data from FPL to estimate
8 the damage by trees that could have been prevented by
9 effective vegetation control. The estimate is
10 10,624,000. That concludes my summary.

11 MR. McGLOTHLIN: Chairman Edgar, before I
12 tender the witness for cross-examination, you'll
13 recall that yesterday Dr. Brown in his testimony
14 alluded to very recently obtained information and
15 modified some of his conclusions from the stand.
16 That information was not in prefiled testimony. It
17 wasn't available to us in discovery. And so it was
18 unavailable for Mr. Byerley's review. I ask
19 your -- to give the witness some latitude to
20 comment briefly on two of those -- those two new
21 developments before he's cross-examined.

22 MR. BUTLER: I would object or at least
23 certainly ask that the same be afforded to us with
24 respect to the revisions Mr. Byerley just made to
25 his testimony.

1 MR. McGLOTHLIN: You want to cross-examine or
2 to revise your testimony?

3 MR. BUTLER: No, we would like -- if
4 Mr. Byerley is going to be allowed to add to his
5 direct testimony based on something said yesterday
6 in cross-examination by Dr. Brown, I would
7 certainly expect at a minimum that we be allowed to
8 have one or more of our witness -- rebuttal
9 witnesses to address similarly at the end of their
10 summary anything that we may choose to address
11 about the additional testimony that Mr. Byerley has
12 added by his amendments to his testimony today.

13 MR. McGLOTHLIN: I don't object to that.

14 CHAIRMAN EDGAR: Mr. Harris?

15 MR. HARRIS: I heard Mr. McGlothlin say he
16 didn't object. Given that, I would -- I don't see
17 a problem with it.

18 CHAIRMAN EDGAR: I'm going to allow, and
19 primarily because I'm hoping that this will help us
20 move along.

21 Mr. McGlothlin?

22 BY MR. McGLOTHLIN:

23 Q Mr. Byerley, yesterday Dr. Brown said that he
24 had learned recently that -- from FPL employees that one
25 bolt among those that were discovered among fallen

1 towers had a lock nut on it. If that is true, does that
2 indicate to you that lock nuts are not effective in
3 preventing tower failure?

4 A No, sir, not at all. It wasn't clear -- I
5 haven't seen what Dr. Brown had. I only heard a minute
6 or two of his testimony. But I don't think that's the
7 case at all. If -- if the -- if the bolt was intact and
8 the tower collapsed, then my suggestion is that it
9 probably collapsed in a cascading failure. It didn't
10 collapse because of a missing cross bolt.

11 The other alternative is if the bolt were
12 sheared, and that is, you had the bolt in one hand and
13 the nut still attached to the threads in the other end,
14 my assumption would be again or my speculation again
15 would be that it failed during cascading. I don't
16 believe that the hurricane winds would have taken the
17 tower down by themselves and the sheering of the bolt,
18 if that's, in fact, what occurred --

19 MR. BUTLER: Excuse me, I have to object.

20 It's pretty clear Mr. Byerley doesn't know what
21 Dr. Brown actually testified to yesterday and he's
22 sort of hunting and fishing for something to say
23 about a general topic that he has been advised by
24 his counsel on. I don't consider that to be
25 appropriate under these circumstances.

1 CHAIRMAN EDGAR: Mr. McGlothlin, I'm going to
2 ask you to ask, as you said, just a few questions,
3 and please phrase them in a way that they can be
4 answered with short answers.

5 MR. MCGLOTHLIN: Okay.

6 BY MR. MCGLOTHLIN:

7 Q Mr. Byerley, on what basis do you say that a
8 hurricane would not cause a tower with a lock nut to
9 fail but a cascading event would?

10 A There's not enough force in the hurricane
11 winds to cause a tower to fail based on what we've seen.
12 There's tremendous amount of energy in a cascade. When
13 the tower collapses, there's a tremendous amount of
14 energy in the system that has to be dissipated. And it
15 will be dissipated in the adjacent towers through the
16 conductor until -- until the energy is dissipated.

17 Q The other question I have is this: Yesterday
18 Dr. Brown said he had learned recently that FPL
19 conducted more inspections after 1998 than had formed
20 the basis for his conclusion at the time he prepared his
21 testimony. And that he now believes it's unlikely that
22 bolts were loose at the end of 2003. He also said he
23 could not explain the presence of bolts following
24 Hurricane Wilma. How do you respond to that testimony?

25 A As I said, I don't think the hurricane winds

1 were strong enough to do that. The -- I think the
2 underlying problem has not yet been identified. In
3 1998, FPL had two options when they discovered these
4 bolts. They could either secure them in some method,
5 either pinning or lock nuts, or they could examine every
6 tower on an annual basis. In April and May, they should
7 do a 100 percent inspection on every tower until they
8 could be certain the problem was taken care of.

9 Q And what about the situation would have called
10 for such a -- an extensive solution?

11 MR. BUTLER: I'm sorry, this is not -- this is
12 not commenting on Dr. Brown's testimony about what
13 he concluded from the fact that there were more
14 inspections than he was aware of. Mr. Byerley is
15 now talking about what he would like to see as far
16 as apparently even more inspections beyond that.

17 MR. MCGLOTHLIN: And there's a reason why his
18 suggestion -- never mind. To move it along, I'm
19 not going to argue the point. Mr. Byerley is
20 available for cross-examination.

21 CHAIRMAN EDGAR: Thank you. And before we go
22 into the cross, as this is the first witness
23 tendered by the intervenors, I will remind all of
24 us of the discussion at the prehearing conference
25 and my request at the beginning of this hearing to

1 make an effort to limit friendly cross.

2 And with that, which of the intervenors would
3 like to go first? Are there interveners with cross
4 for this witness?

5 MR. KISE: No questions. The Saturday has got
6 me concerned. I don't have many questions.

7 CHAIRMAN EDGAR: No cross?

8 No questions from Staff?

9 MR. SHREVE: No questions.

10 CHAIRMAN EDGAR: Thank you.

11 Commissioners and --

12 MR. BUTLER: I do have questions. Thank you,
13 Madam Chairman.

14 **CROSS-EXAMINATION**

15 BY MR. BUTLER:

16 Q Good afternoon, Mr. Byerley.

17 A Good afternoon.

18 Q I'm John Butler representing Florida Power &
19 Light Company. And you and I had spoke at your
20 deposition. I have some questions for you this
21 afternoon. Let me start with the materials that you --
22 or the amendments you've made to your testimony today.
23 Just a couple of things I wanted to clear up with that.

24 The changes that you made to pages 26 and 27
25 are consistent with the narrative in the Late-Filed

1 Exhibit 5 to your deposition; is that correct?

2 A Yes, sir.

3 Q Okay. And then the changes that you made on
4 page 31 are sort of applying that same logic to where it
5 would impact the calculation with respect to
6 vegetation-related outages?

7 A Yes, sir.

8 Q Okay. Now, on your change to page 7, one of
9 the things you did is refer to a -- an RUS -- an
10 additional RUS bulletin; is that right?

11 A Yes.

12 Q Do you have a copy of that bulletin with you?

13 A No, sir, I do not.

14 Q Are you able to recite from memory its terms?
15 I'm sorry, I only have a copy of it because I was given
16 one by Mr. McGlothlin, I believe.

17 MR. MCGLOTHLIN: We have one, I believe, in
18 our small office. If there's a small break at some
19 point, I'll be glad to arrange for the witness to
20 have that.

21 MR. BUTLER: Okay. That will be fine.

22 BY MR. BUTLER:

23 Q Later in your revised page 7, you have added a
24 sentence, in fact, the drawings for FPL's old
25 Conservation-Corbett tower design specified use of lock

1 nuts on cross brace bolts at one time, and you have a
2 Bates number and the 1972 drawing. Do you see that?

3 A Yes, sir.

4 Q Would you agree that the Conservation-Corbett
5 tower design drawings changed subsequently so that they
6 no longer specified the use of lock nuts?

7 A No, sir, I would not agree to that. I have no
8 evidence of that.

9 Q You haven't looked at any of the later tower
10 design drawings?

11 A What I was given was a package that was -- was
12 entitled the construction specifications for that line.
13 That line had a lot of new towers and it had some old
14 towers. I'm taken to believe since these drawings were
15 included in that package, that this was an old tower
16 that was put in that line.

17 Q And you don't have -- who gave you that
18 package?

19 A OPC.

20 Q Okay.

21 A I think it was obtained in discovery.

22 Q Okay. But you haven't seen any --

23 A It has a Bates number on it.

24 Q You haven't seen any updated drawings for the
25 tower design in question?

1 A I've seen updated drawings for other towers.

2 Q I'm talking about for the same original tower
3 design specifications but just updated drawings for that
4 style of tower.

5 A No, sir. What I've seen is what FPL provided.

6 Q Okay. Mr. Byerley, according to your
7 testimony, you were employed by TVA from 1959 to 1994,
8 correct?

9 A That's correct.

10 Q Have you ever been employed by any other
11 electric utility?

12 A No, sir.

13 Q Does TVA have any electric distribution
14 facilities?

15 A No, sir.

16 Q When you were at TVA, did you have any
17 experience with emergency preparedness for the risk of
18 hurricanes?

19 A For the risk of hurricanes or emergencies?

20 Q No, for the risk of hurricanes.

21 A No, sir.

22 Q Have you ever been responsible for managing
23 the maintenance of an electric utility distribution
24 system?

25 A A distribution?

1 Q That's right.

2 A No, sir.

3 Q You wouldn't have experience running a pole
4 inspection program for a distribution system, would you?

5 A Not for a distribution system.

6 Q And similarly you wouldn't have experience
7 with running a vegetation management system for -- or a
8 program for a distribution system?

9 A That's correct.

10 Q Do you have any academic training in the field
11 of reliability engineering?

12 A No, sir.

13 Q Prior to this proceeding, have you ever
14 testified on the subject of electric utility
15 distribution or transmission reliability issues?

16 A Have I ever testified?

17 Q That's right.

18 A No, sir.

19 Q In preparing your testimony that was filed in
20 this proceeding, did you review any orders of this
21 Commission concerning standards for disallowing costs as
22 imprudent?

23 A No, sir.

24 Q Did you review any orders of any other
25 commission on that subject?

1 A No, sir.

2 Q I'd like you to turn to page 4 of your
3 testimony. And you talk in here about a windshield
4 survey that you did of transmission and distribution
5 facilities in Palm Beach County. Do you see the
6 reference to that?

7 A Yes, sir, beginning on line 17?

8 Q Yes.

9 Are you aware that a portion of Palm Beach
10 County is served by the City of Lake Worth municipal
11 utility?

12 A I've worked for the City of Lake Worth. I
13 know exactly where their system is.

14 Q That was going to be my question.

15 Did you take any steps to ensure that your
16 windshield survey did not include Lake Worth facilities?

17 A Yes, sir, we did.

18 Q Do you know what percentage of Palm Beach
19 County you visited?

20 A No, sir.

21 Q Do you know how many miles of facilities you
22 visited?

23 A No, sir.

24 Q In your -- I'm sorry, you were accompanied
25 during the windshield survey by Richard Jones; is that

1 correct?

2 A That's correct.

3 Q And Mr. Jones is a -- or at least was, I guess
4 he's retired now, a lineman; is that correct?

5 A That's correct.

6 Q Do you know if Mr. Jones has any experience as
7 a lineman in Florida?

8 A I don't know the answer to that.

9 Q Did you personally choose Mr. Jones as the
10 person to accompany you on the windshield survey?

11 A My supervisor chose Mr. Jones.

12 Q Do you know why he was chosen?

13 A Because he was the lineman that Beck has under
14 contract.

15 Q Would you agree that the windshield survey was
16 a visual inspection of FPL's facilities?

17 A Yes.

18 Q Now, you observed and photographed various
19 deteriorated distribution poles during your windshield
20 survey, correct?

21 A That's correct.

22 Q In fact, the photographs you consider
23 representative of what you saw are included in -- as
24 part of your Exhibit JSB-2, correct?

25 MR. McGLOTHLIN: I'm going to object to the

1 characterization of the testimony. I think
2 Mr. Byerley made it clear in his testimony that he
3 did not contend that the pictures are
4 representative of FPL's system. Simply that he was
5 taking pictures to refresh his memory when he got
6 to the office.

7 MR. BUTLER: My question was actually whether
8 he considered them representative of what he saw.

9 MR. MCGLOTHLIN: He saw far more than the
10 pictures depict.

11 CHAIRMAN EDGAR: Mr. McGlothlin, I'm going to
12 ask the witness to answer the question.

13 BY MR. BUTLER:

14 Q I'm looking on page 27 of your -- first of
15 all, let me ask you, in spite of your attorney's
16 objection: Would you agree that the photographs in
17 JSB-2 are intended to be representative of the type of
18 deteriorated conditions that you saw during your
19 windshield survey?

20 A They were taken basically -- and let me point
21 out, nothing in my testimony came from that tour or from
22 those pictures. That was to give me a sense of what --
23 what was happening and also to refresh my memory as I
24 prepared my testimony.

25 Q Right. "Chiefly to help me remember

1 everything that I saw that I regarded as pertinent after
2 I returned from my trip," right?

3 A I believe.

4 Q I just read from page 27 of your testimony.

5 A Okay. That's correct.

6 Q Okay. Do you have any reason to believe that
7 the deteriorated poles that are shown in Exhibit JSB-2
8 were not in place at the time of Hurricane Wilma?

9 A They could have been.

10 Q Did you see any that looked to you like they
11 had been installed -- the deteriorated poles I'm talking
12 about, looked to you like that FPL had gone in and
13 installed a deteriorated pole between the time that
14 Hurricane Wilma hit and the time you did your windshield
15 survey?

16 A No, I didn't.

17 Q Your testimony also discusses a visit to FPL's
18 pole retention yard. Do you know approximately how many
19 poles are in that pole retention yard?

20 A I personally don't know. Mr. McEvoy
21 accompanied us on that tour and I believe he told me
22 there were 6 to 8,000 poles.

23 Q From your -- I'm sorry, from your deposition,
24 I recall that you said that you spent about
25 three-and-a-half hours one morning looking at broken

1 poles in the pole retention yard; is that about right?

2 A That's correct.

3 Q And you said at your deposition that you
4 looked at a total of 403 broken poles out of the total
5 pole population?

6 A Yes.

7 Q Which I think you calculated represented
8 something on the order of 5 to 7 percent of the total
9 broken poles?

10 A That's correct.

11 Q And I believe your testimony also at your
12 deposition was the 5 to 7 percent of the pole population
13 that you selected for your inspection was based on
14 accessibility to the poles; is that right?

15 A That's correct.

16 Q A lot of them were not conveniently accessible
17 and you looked at the ones that were?

18 A 75 percent of them were not accessible at all.
19 And some of the poles were just sawed up pieces and
20 they -- they tell you nothing. So yes.

21 Q Okay. You didn't make any attempt to pick a
22 statistically valid random sample of the poles in the
23 pole retention yard, did you?

24 A No, sir.

25 Q And you don't know the history of which broken

1 poles were and weren't selected out of FPL's total
2 population of poles to end up in the pole retention
3 yard, do you?

4 A I'm sorry, could you ask that again?

5 Q Yeah, I'm sorry. That was kind of confusing.

6 Are you aware that not all of the broken poles
7 from FPL's system post-hurricane ended up in the pole
8 retention yard?

9 A I can't answer that. I do know that there
10 were a lot of third-party poles that went down. I do
11 not know what was put in the yard.

12 Q Okay. Do you know where the broken poles you
13 did inspect had been installed before they broke?

14 A No, sir.

15 Q You have no way of knowing from looking at the
16 poles in the pole retention yard whether particular
17 poles showing signs of deterioration were hit by debris
18 or trees that would have broken them even if they had
19 not been deteriorated, do you?

20 A No, sir.

21 Q On page 5 of your testimony, a little further
22 down than where we were talking, you have a wind speed
23 number for what's said to be the maximum wind speed of
24 Wilma in Palm Beach County as 86 miles an hour. Do you
25 see that?

1 A Yes, sir.

2 Q Now, in your deposition you acknowledged that
3 you didn't know whether this was an estimated or actual
4 wind speed, correct?

5 A That's correct.

6 Q Okay. I think you also agreed that if this
7 figure were an estimate, it would be more appropriate to
8 use the actual measured wind speed?

9 A Yes.

10 Q Okay. Your testimony asserts on page 9 that
11 FPL's maintenance records should reflect the details of
12 how bolts on the Conservation-Corbett line were
13 reinstalled or retightened in 1998, and I asked you at
14 your deposition whether TVA's records would document
15 that sort of detail about installing nuts and bolts.
16 You said you didn't recall, but would check.

17 Would you agree that Late-Filed Exhibit 3 to
18 your deposition states that this information about TVA's
19 practices was not available to you?

20 A Yes.

21 Q On page 16 of your testimony, I'd like you to
22 look at lines 12 around 13. This is talking about the
23 Alva-Corbett transmission line. You state your belief
24 that FPL made an economic decision to replace the
25 deteriorated Alva-Corbett line rather than repairing it.

1 Do you see that?

2 A Yes.

3 Q Would you agree that if this economic decision
4 resulted in lower overall cost to maintain the line, it
5 would be a prudent business decision?

6 A Yes, it would.

7 Q At the bottom of page 16, top of page 17, you
8 say that, "I also believe that damages to this line --
9 again referring to Alva-Corbett -- were probably
10 exacerbated by the existence of some deteriorated
11 structures in the line."

12 A Yes.

13 Q I think you acknowledged at your deposition
14 that you did not know for sure whether damage to the
15 Alva-Corbett line was actually exacerbated by any
16 deteriorated structures; is that right?

17 A That's right. I only saw evidence of two
18 deteriorated poles.

19 Q Okay.

20 A But I only looked at a quarter mile section or
21 so.

22 Q Okay. Now I want to ask you about those two
23 poles that you just referenced. Those are depicted in
24 photos 51 and 54 in your -- was it JSB-2? Is that
25 right?

1 A That's correct.

2 Q Let me ask you first about photo 51. That
3 shows a deteriorated pole lying on the ground, correct?

4 A Yes, it does.

5 Q Okay. How do you know that this pole was part
6 of the Alva-Corbett line at the time of Hurricane Wilma?

7 A I have no way of knowing that. It was just in
8 a pile of poles where they were tearing the line down,
9 tearing the old line down. I assumed that they wouldn't
10 have drug in an old pole from somewhere else.

11 Q How about not dragging out an old pole after
12 it was no longer used?

13 A (No audible response.)

14 Q Now, photo 54 shows a pole stub, right?

15 A Yes, sir.

16 Q A little piece still sticking up out of the
17 ground?

18 Are you aware that Ms. Jaindl has testified in
19 rebuttal that this pole stub was abandoned in place
20 after Hurricane Francis in 2004?

21 A Yes, I'm aware of that.

22 Q Do you have any reason to disagree with her
23 testimony on this point?

24 A No, sir, I have no different knowledge. I
25 don't understand why you would leave a pole stub

1 sticking out of the ground when you've got all of those
2 crews around there working, but I can't disagree with
3 her.

4 CHAIRMAN EDGAR: Mr. Butler, I'm going to
5 break in for a moment. And I apologize. But for a
6 variety of reasons, we need to take a break around
7 5:00, and I see that we are getting awfully close.
8 So we will come back at 5:15 p.m.

9 MR. BUTLER: Thank you.

10 CHAIRMAN EDGAR: Thank you.

11 (Break taken.)

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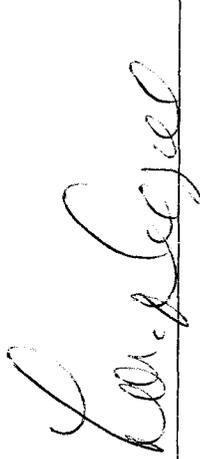
CERTIFICATE OF REPORTER

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3
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5 STATE OF FLORIDA)
6 COUNTY OF LEON)
7

8 I, LORI DEZELL, RPR, CCR, certify that I was
9 authorized to and did stenographically report the
10 proceedings herein, and that the transcript is a true
11 and complete record of my stenographic notes.

12 I further certify that I am not a relative,
13 employee, attorney or counsel of any of the parties, nor
14 am I a relative or employee of any of the parties'
15 attorney or counsel connected with the action, nor am I
16 financiall interested in the action.

17 WITNESS my hand and official seal this 21st
18 day of April, 2006.

19
20
21 

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