

BEFORE THE  
FLORIDA PUBLIC SERVICE COMMISSION

In the Matter of

PETITION TO DETERMINE NEED FOR  
AN ELECTRICAL POWER PLANT IN  
MARTIN COUNTY BY FLORIDA POWER &  
LIGHT COMPANY

DOCKET NO. 020262-EI

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PETITION TO DETERMINE NEED FOR  
AN ELECTRICAL POWER PLANT IN  
MANATEE COUNTY BY FLORIDA POWER &  
LIGHT.

DOCKET NO. 020263-EI

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VOLUME 9

PAGES 1165 THROUGH 1262

PROCEEDINGS:

HEARING

BEFORE:

CHAIRMAN LILA A. JABER  
COMMISSIONER J. TERRY DEASON  
COMMISSIONER BRAULIO L. BAEZ  
COMMISSIONER MICHAEL A. PALECKI  
COMMISSIONER RUDOLPH "RUDY" BRADLEY

DATE:

Friday, October 4, 2002

TIME:

Commenced at 8:30 a.m.

PLACE:

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

REPORTED BY:

JANE FAUROT, RPR  
Official Commission Reporter

APPEARANCES:

(As heretofore noted.)

RECORDED & INDEXED

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FLORIDA PUBLIC SERVICE COMMISSION

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1  
2 (Transcript continues in sequence from  
3 Volume 8.)

4 ANDREW L. MAUREY

5 continues his testimony under oath from Volume 8:

6 CHAIRMAN JABER: We can get back on the record.

7 Mr. Litchfield, where we broke you were offering to  
8 have Mr. Maurey's deposition come into the record as an exhibit  
9 in lieu of some cross examination, and I asked you and Ms.  
10 Brown to talk about that.

11 MR. LITCHFIELD: Yes, we did, and I will let Ms.  
12 Brown speak for herself. I also checked with other counsel  
13 here today, and they have no objection to that. In fact, I  
14 have reviewed my cross, and I would have nothing further from  
15 Mr. Maurey today.

16 CHAIRMAN JABER: Thank you, Mr. Litchfield.

17 Ms. Brown.

18 MS. BROWN: I'm sorry, Madam Chairman. If Mr.  
19 Litchfield has nothing further, then I don't know why we would  
20 need to put the deposition in.

21 CHAIRMAN JABER: No, I think his offer is that he  
22 won't ask some of his questions if we go ahead and put the  
23 deposition into the record.

24 MS. BROWN: Madam Chairman, it would be our  
25 preference to just keep going here in order that -- Mr. Maurey

1 has his sea legs now, and I would like to have him have the  
2 opportunity to answer any questions that you have. That being  
3 said, we are not opposed to this if the Commission would prefer  
4 to have his deposition introduced in lieu of further cross  
5 examination as long as I might have the opportunity to do some  
6 redirect on what has already been asked.

7 CHAIRMAN JABER: Yes. Mr. Litchfield's offer is only  
8 as it relates to further cross examination by him. It has  
9 nothing to do with redirect or the Commissioners' opportunity  
10 to ask questions.

11 MS. BROWN: Then if that is acceptable to you all, it  
12 is acceptable to us.

13 CHAIRMAN JABER: Okay. Then Hearing Exhibit 41 will  
14 be identified for Andrew Maurey's deposition transcript, and  
15 would one of you please give me the date of the deposition.

16 MS. BROWN: September 20th, 2002.

17 CHAIRMAN JABER: Thank you.

18 (Exhibit 41 marked for identification.)

19 CHAIRMAN JABER: And, Commissioners, do you have any  
20 questions before redirect?

21 COMMISSIONER PALECKI: I have one question.

22 CHAIRMAN JABER: Commissioner Palecki.

23 COMMISSIONER PALECKI: Mr. Maurey, I have just one  
24 question, but within this question I want you to look at two  
25 scenarios. The first scenario, I want you to look at the

1 Florida Power and Light regulated utility on a stand-alone  
2 basis with the regulated utility's existing equity ratio, and  
3 the regulated utility seeks to enter into a purchased power  
4 contract with a reliable creditworthy supplier and is assured  
5 cost-recovery by this Commission.

6           The second scenario, we have a nonregulated FPL Group  
7 entity with the existing equity ratio of the parent company, it  
8 seeks to enter into a purchased power contract in another part  
9 of the country, not in Florida, with no assurance of  
10 cost-recovery by any regulatory agency.

11           And here are my questions. One, what in your opinion  
12 would be the reaction of the investment community in each  
13 scenario; and should FPL assess an equity penalty under either  
14 scenario?

15           THE WITNESS: As you may imagine, the view of the  
16 investment community would be different for these two entities  
17 because of the starting point at which the equity ratios begin  
18 with these two entities. With FPL on a stand-alone basis at a  
19 63 percent equity ratio, it has a stronger capitalization to  
20 recognize the implied impacts of off-balance sheet obligations.  
21 Another company with a 47 percent equity ratio would not be in  
22 a position to take on as much leverage, whether it is actual  
23 leverage in its own issuance of debt or implied leverage  
24 associated with off-balance sheet obligations.

25           So if you are assuming the same amount of purchased

1 power for both entities, it would have a more detrimental  
2 impact on the nonregulated entity with the lower equity ratio  
3 than it would on FPL as a stand-alone with a much stronger  
4 equity ratio.

5           The second point, and I was asked a question similar  
6 to this in this regard during my deposition about under what  
7 conditions would I find it reasonable to apply an equity ratio.  
8 And at my deposition and here today I find that a difficult  
9 task. I believe -- it is not my testimony that an equity  
10 penalty adjustment never be applied, that is not my testimony.  
11 My testimony is that in the facts and circumstances in this  
12 case it not be applied. There could conceivably be situations  
13 where it would be reasonable and appropriate to apply an equity  
14 penalty adjustment in the evaluation of capacity alternatives.

15           So, with just these two limited hypotheticals, the  
16 FPL stand-alone at 63, particularly if it is a stand-alone and  
17 it doesn't have any other pressures on its leverage from other  
18 elements of the holding company, I don't believe I would  
19 recommend an equity penalty adjustment be applied in that  
20 instance. With the nonregulated company at a 47 percent equity  
21 ratio, in a situation where you don't have assured  
22 cost-recovery of the capacity and fuel payments that may come  
23 under that contract, where you have less regulatory certainty  
24 associated with that contract, an equity penalty adjustment  
25 might be reasonable in that instance.

1 COMMISSIONER PALECKI: Thank you.

2 CHAIRMAN JABER: Commissioners, any other questions?  
3 Redirect.

4 REDIRECT EXAMINATION

5 BY MS. BROWN:

6 Q Mr. Maurey, at the beginning of your  
7 cross-examination you were asked a series of questions about an  
8 adjusted equity ratio and an actual equity ratio. Using your  
9 premise, would you please explain to the Commission the  
10 difference between those two as it applies to the use of an  
11 equity penalty in this case?

12 A Yes. It is an important distinction to make between  
13 an adjusted equity ratio and an actual equity ratio. No  
14 company raises money on an adjusted basis, they raise money on  
15 an actual basis. And after the fact an adjusted equity ratio  
16 is determined, the cost of an adjusted equity ratio is actually  
17 measured on what is the actual equity ratio that is equivalent.  
18 The two concepts are inextricably linked. You can hold one  
19 constant, but the other will move and vice versa.

20 So under the scenario that was presented earlier in  
21 my cross-examination, if you held the 55/45 constant on an  
22 adjusted basis through time and added debt and equity necessary  
23 to remain constant on an adjusted basis, then the actual  
24 debt-to-equity spread would have to change. Because of the  
25 fundamentals of the calculation, they can't both stay in sync



1 over time.

2 Under the scenario that I was presented with in my  
3 question, if you kept the 55/45 constant, the actual equity  
4 ratio would fall from 63 down to 59, and the debt would move up  
5 from 37 to 41. In and of itself that may not be a bad  
6 situation, but relative to what else is going on in the holding  
7 company, that might not be feasible.

8 If you are -- S&P looks at these matters on a  
9 consolidated basis. They will make certain measurements on  
10 certain segments of the business, but ultimately they will view  
11 how each of these segments adds up to the consolidated outcome.  
12 And therefore certain elements, they are all related, they all  
13 impact. So when you have higher cost equity used to fund a  
14 certain business segment, and more of the lower cost debt used  
15 to fund the other segment, that leverage is going to impact the  
16 other business segment. Even though it has a higher equity  
17 ratio, it is still impacted by the effect that that leverage  
18 has on the consolidated entity. The company is correct,  
19 leverage matters. But S&P and I believe that real leverage  
20 matters more than imputed leverage or implied leverage.

21 Q Do you remember the questions that Mr. Litchfield  
22 asked you about the stipulation and FPC's recent rate case --  
23 FPL's recent rate case settlement?

24 A Yes, I do.

25 Q Was that settlement based upon a negotiation between

1 the parties?

2 A That is my understanding.

3 Q To the best of your knowledge, did the Commission  
4 thoroughly investigate the equity penalty concept in FPL's  
5 recent rate case settlement?

6 A That was not an issue in the rate case.

7 Q Is FPL's earned return on equity measured using its  
8 actual equity balance, or its equity balance adjusted for  
9 purchased power?

10 A Its actual equity balance. And that is an important  
11 distinction. When the company comes before this Commission for  
12 cost-recovery on the self-build option, it will not be  
13 presenting this capacity addition based on capitalization  
14 raised on an adjusted level of 55/45. It is going to present  
15 this self-build option based on the capitalization costs  
16 associated with the actual ratios, whether they be 63/47,  
17 64/36, whatever they may be. The decision of the company to  
18 fund the plant on an adjusted basis is one thing.  
19 Cost-recovery is based on actual levels of equity and debt.

20 Q Mr. Litchfield asked you about the staff  
21 recommendation in Docket Number 990249, and I think that has  
22 been identified as an exhibit in this case.

23 A Yes, I have it with me.

24 Q Does the staff recommendation to the Commission have  
25 any binding finality to it?

1 A It doesn't carry the same weight as a Commission  
2 final order, no.

3 Q And for your testimony, did you rely on the staff  
4 recommendation or on the Commission's order in that docket?

5 A The Commission's order.

6 Q Now, there was discussion between you and Mr.  
7 Litchfield about Doctor Avera's testimony, and I don't remember  
8 the order number that you all talked about. It was the order  
9 -- I guess it was the FPC Hines 1 case where a series of  
10 compensating factors were listed that might affect a rating  
11 agency's view of off-balance sheet purchased power contracts.  
12 Do you remember that?

13 A I remember that line of questioning.

14 Q What are the compensating factors in this case that  
15 lead you to recommend to the Commission that an equity penalty  
16 is unnecessary?

17 A The very high equity ratio that the company is  
18 starting with at the beginning of this process; the  
19 understanding that existing purchased power contracts will be  
20 expiring over time; that the company plans to add at least an  
21 additional 2000 megawatts in the 2002/2003 time frame  
22 independent of this docket; that the concept of having to  
23 rebalance a company's capital structure as a result of this  
24 proceeding is not consistent with how the company, what the  
25 company does in practice with respect to nonregulated

1 investments, when the company issues considerable amounts of  
2 real debt and increasing its real debt leverage associated with  
3 those investments and that impact on the holding company and on  
4 the utility.

5 MS. BROWN: Thank you, Mr. Maurey.

6 Madam Chairman, that is all we have.

7 CHAIRMAN JABER: Thank you, Ms. Brown.

8 We have Exhibits 38, 39, and 41 are yours, Ms. Brown.

9 And without objection, Exhibits 38, 39, and 41 are admitted  
10 into the record. Exhibit 40, FPL.

11 MR. LITCHFIELD: We would move it into the record.

12 CHAIRMAN JABER: Without objection, Exhibit 40  
13 admitted into the record.

14 Thank you, Mr. Maurey.

15 (Exhibits 38 through 41 admitted into the record.)

16 MR. McGLOTHLIN: Chairman Jaber, before we go  
17 further, during the cross of Mr. Maurey there were several  
18 references to two orders. One was the Cypress case, one was  
19 the 1991 FPC docket. So that it is clear, we may see if those  
20 statements in full context and possibly argue them, would the  
21 Commission take official recognition of the orders.

22 CHAIRMAN JABER: I will, that is granted. But just  
23 for future knowledge, all of our orders there is no need, as I  
24 understand it, Ms. Brown, to seek and have approved official  
25 recognition of any PSC order. But for purposes of the record,

1 you requested and I will grant. You may need to get the order  
2 numbers and we will read them into the record.

3 The next witness is Kenneth Slater.

4 MR. McGLOTHLIN: PACE calls Mr. Slater. He has not  
5 been sworn.

6 CHAIRMAN JABER: Thank you. As Ms. Slater takes the  
7 stand, would you all please be thinking about the possibility  
8 of at least Mr. Avera and Mr. Yeager, and whether they need to  
9 come back on rebuttal or if there could be a settlement reached  
10 with respect to their testimony coming in without cross. Talk  
11 about that during the next break. I note that they only have  
12 an issue each to cover.

13 Mr. Slater, if you will raise your right hand.

14 (Witness sworn.)

15 CHAIRMAN JABER: Thank you, sir.

16 Mr. McGlothlin.

17 KENNETH JOHN SLATER

18 was called as a witness on behalf of PACE and, having been duly  
19 sworn, testified as follows:

20 DIRECT EXAMINATION

21 BY MR. McGLOTHLIN:

22 Q Please state your name and business address.

23 A My name is Kenneth John Slater. My business address  
24 3370 Habersham Road, Atlanta, Georgia.

25 Q How are you employed, sir?

1           A     I am the president of Slater Consulting, properly  
2 known as Slater Energy Consultants, Inc.

3           Q     Mr. Slater, on behalf of Florida PACE, did you  
4 prepare and submit prefiled testimony in this proceeding?

5           A     Yes, I did.

6           Q     Do you have that document before you?

7           A     Yes, I do.

8           Q     Do you have any changes, corrections, or additions to  
9 make at this time?

10          A     If I was to answer these questions today, then I  
11 would make one change.

12          Q     Please identify that.

13          A     On Page 5 of my testimony, on Line 3, I have already  
14 said that the wrong result may have been produced. I would  
15 change that today to that the wrong result has been produced.

16          Q     Is that your only change?

17          A     That is my only change.

18          Q     With that change, do you adopt the questions and  
19 answers as your testimony today?

20          A     Yes, I do.

21          Q     Did you prepare and attached exhibits to this  
22 prefiled testimony?

23          A     Yes. Exhibits 1, 2, and 3.

24                MR. McGLOTHLIN: I ask that KJS Exhibits 1, 2, and 3  
25 be identified at this point.

1 CHAIRMAN JABER: Composite Exhibit 42 identified for  
2 KJS-1 through KJS-3.

3 (Exhibit 42 marked for identification.)

4 MR. McGLOTHLIN: And I ask that the prefiled  
5 testimony as modified be inserted into the record at this  
6 point.

7 CHAIRMAN JABER: The prefiled direct testimony of  
8 Kenneth J. Slater shall be inserted into the record as though  
9 read.

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I. INTRODUCTION AND QUALIFICATIONS

1 Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

2 A. My name is Kenneth J. Slater. My business address is 3370 Habersham Road, Atlanta,  
3 Georgia 30305.

4 Q. BY WHOM AND IN WHAT CAPACITY ARE YOU EMPLOYED?

5 A. I am President of Slater Consulting, which I founded in August 1990. The firm is a small  
6 engineering-economic and management consultancy with particular expertise in energy  
7 and public utility matters. The services that my firm offers to various participants in the  
8 utility business include analysis of the following: supply/demand options, reliability,  
9 operating situations and events, new technologies and industry developments, strategic  
10 decisions, public policy matters, and ratemaking issues.

11 Q. WHAT IS YOUR EDUCATIONAL BACKGROUND?

12 A. I obtained a Bachelor of Science degree in Pure Mathematics and Physics in 1960 and a  
13 Bachelor of Engineering degree in Electrical Engineering in 1962, both at the University  
14 of Sydney, Australia. I also received a Master of Applied Science degree in Management  
15 Sciences at the University of Waterloo in Ontario, Canada in 1974.

16 Q. PLEASE PROVIDE A BRIEF DESCRIPTION OF YOUR PROFESSIONAL  
17 EXPERIENCE.

18 A. I have over forty years of experience in the energy and utility industries in the United  
19 States, Canada and Australia. Prior to founding Slater Consulting, I was Senior Vice  
20 President and Chief Engineer at Energy Management Associates, Inc. (EMA) in Atlanta,  
21 where I worked from 1983 to 1990. At EMA, after initially contributing to the firm's  
22 utility software development functions, I became the head of its consulting practice,  
23



1 leading or making significant contributions to a number of consulting engagements related  
2 to valuation or analysis of power supplies and power supply contracts, supply/demand  
3 planning, damages assessments operating reserve requirements, replacement power cost  
4 calculations, utility merger valuations, operational integration of utility systems, power  
5 pooling, system reliability, ratemaking, power dispatching and gas supply studies. From  
6 1969 until 1983, I worked in the Canadian utility industry, initially at Ontario Hydro,  
7 where I headed the Production Development Section of the utility's Operating  
8 Department. There I developed computer models, including one which, for more than 20  
9 years, produced the daily generation schedules for the Ontario Hydro system, and another,  
10 the original PROMOD, which was used for coordination and optimization of production  
11 planning and resource management. Subsequently, I worked as Manager of Engineering  
12 at the Ontario Energy Board (the utility regulatory commission) and as Research Director  
13 for the Royal Commission on Electric Power Planning.

14 From 1976 to 1983, I ran my own firm, Slater Energy Consultants, Inc., in Toronto,  
15 Canada and consulted widely in Canada and the United States for utilities, governments,  
16 public enquiry commissions, utility customers and other consulting firms. It was during  
17 this time and my time at EMA that I was a major developer of PROMOD III®, (now  
18 renamed PROMOD IV™), a widely recognized electric utility planning and reliability  
19 model.

20 Prior to 1969, I was employed by the Electricity Commission of New South Wales, the  
21 largest electric utility in Australia, where I was responsible for the day-to-day operation of  
22 one of the six regions comprising that system. A copy of my resume is included as an  
23 exhibit to this testimony. See Exhibit No. \_\_\_\_\_ (KJS-1).

1 **Q. HAVE YOU TESTIFIED AS AN EXPERT WITNESS IN THE PAST?**

2 **A.** Yes. I have provided expert testimony in regulatory proceedings in California, Florida,  
3 Georgia, Idaho, Indiana, Iowa, Louisiana, New Mexico, New York, Nova Scotia, Ontario,  
4 Pennsylvania, Prince Edward Island, South Carolina, Virginia, Wisconsin and Texas, and  
5 at the Federal Energy Regulatory Commission. I have also appeared in Federal  
6 Bankruptcy Court and state courts in Florida, Nebraska, Texas and Virginia, and in civil  
7 arbitration proceedings in Louisiana, Nevada and Pennsylvania. I have also served on  
8 many occasions as an expert examiner for a Royal Commission in Ontario, which was  
9 inquiring into the electric power planning in the Province of Ontario. A list of my  
10 testimony since 1983 is attached as an exhibit. See Exhibit No. \_\_\_\_ (KJS-2).

11 **II. PURPOSE OF TESTIMONY**

12 **Q. FOR WHOM DO YOU APPEAR IN THIS PROCEEDING?**

13 **A.** I appear on behalf of the Florida Partnership for Affordable Competitive Energy (PACE).

14 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

15 **A.** I will assess the manner in which Florida Power & Light Company (FP&L) evaluated  
16 responses to its revised Request For Proposals. Specifically, I have been asked to opine as  
17 to whether FPL's evaluation was fair, unbiased, and evenhanded, such that the  
18 Commission and FPL's ratepayers could have confidence that FPL selected the most cost-  
19 effective choices available for ratepayers; or whether instead FPL has biased the selection  
20 process in favor of its self-build options. In the latter event, I was asked to assess the risk  
21 to ratepayers of denying one or both of FPL's petitions and requiring a fair and unbiased  
22 selection process.

1 FPL asserts that its proposed Martin-8 and Manatee-3 units should be deemed the most  
2 cost-effective choices. However, FPL bases that claim on analyses which produces  
3 differences in revenue requirements of only \$60 million between FPL's proposal and other  
4 alternatives. This is a very small margin; one that could be influenced by poor or biased  
5 assumptions or methodologies.

6 **Q. WHAT INFORMATION HAVE YOU REVIEWED IN CONNECTION WITH**  
7 **THE PREPARATION OF YOUR TESTIMONY?**

8 **A.** I have reviewed Commission Rule 25-22.082, Florida Administrative Code, FPL's prefiled  
9 testimony and the Peninsular Florida 2002 Ten Year site plans. In addition, earlier in the  
10 proceeding, at the time I was engaged by Reliant Energy, then a party to the proceeding, I  
11 had access (under arrangements of confidentiality) to a disk showing the manner in which  
12 FPL evaluated the responses that it received to the original August 2001 RFP. The disk  
13 was disseminated to parties at the time to facilitate their analysis of FPL's computational  
14 methodology during the extended or revised RFP. In addition to these items from this  
15 case that I have reviewed, I have also relied on my knowledge of the EGEAS program,  
16 and my knowledge of the operating characteristics and costs of combined cycle generating  
17 units.

18 **III. CONCLUSIONS**

19 **Q. HAVE YOU REACHED ANY CONCLUSIONS REGARDING THE MANNER IN**  
20 **WHICH FPL EVALUATED RESPONSES TO THE RFP?**

21 **A.** Yes. I have concluded that because of the assumptions and methodology that it  
22 employed, FPL skewed the comparison of alternatives in favor of its self-build options.  
23 As a result, in my opinion the Commission and ratepayers cannot place confidence in

1 FPL's assertion that it has chosen the most cost-effective alternatives. In fact, FPL's  
2 studies, which show Martin 8 and Manatee 3 to be the best alternative for 2005 resource  
3 additions, are so seriously flawed that the wrong result <sup>has</sup> ~~may have~~ been produced.

4 **Q. ON WHAT DO YOU BASE THIS CONCLUSION?**

5 **A.** I base this conclusion on several specific factors:

- 6 (i) the use of production cost forecasts produced from simplistic modeling in  
7 EGEAS,  
8 (ii) differences in modeling non-FPL bids and FPL's self-build options,  
9 (iii) the "equity penalty" applied to non-FPL bids,  
10 (iv) FPL's choice of "filler units" with which to compare contracts of limited  
11 duration with its self-build options,  
12 (v) the overly optimistic performance characteristics used for FPL's self-build  
13 proposals, for which the cost and performance estimates are non-binding,  
14 and  
15 (vi) the lower risks represented by the binding nature of the non-FPL bids.

16 **IV. DISCUSSION**

17 **Q. WHAT PROBLEMS HAVE YOU IDENTIFIED WITH FPL'S EGEAS**  
18 **MODELING?**

19 **A.** First, in evaluating the economics of combined cycle units, I have found that it is  
20 important to properly estimate the annual shutdown-startup cycling of a combined cycle  
21 unit, in order to ensure that there is a proper determination of expected maintenance costs  
22 which are heavily dependent on this operational aspect. However, EGEAS does not  
23 model the shutdown-startup cycling of generating units, and users are forced to perform

1 crude “off-line” estimates. Second, combined cycle units have much more significant  
2 variations in output and heat rate across the months of the year than other base load and  
3 intermediate units, because of the seasonal variation in ambient conditions. FPL did not  
4 attempt to include such variations in its EGEAS modeling. Because of the relatively  
5 “thin” margin in favor of its own self-build options, these simplistic modeling efforts could  
6 be significant.

7 **Q. WHAT DIFFERENCES IN MODELING DID FPL EMPLOY BETWEEN ITS**  
8 **SELF-BUILD OPTIONS AND THE PROPOSALS OF RFP RESPONDENTS?**

9 **A.** A difference which was most striking was the application of variable O&M. Bids based on  
10 combined cycle units, would have included, variable O&M charges based on variable  
11 maintenance expenses as well as consumables involved in operation. FPL included such  
12 bid charges in its modeling for non-FPL bids, but only included the very much smaller  
13 consumables charges for its own units, choosing to use “off-line” estimates of the much  
14 larger variable maintenance expense. This procedure introduces unnecessary variations  
15 into the comparison of alternatives.

16 **Q. WHAT IS THE EQUITY PENALTY FPL APPLIED TO NON-FPL BIDS?**

17 **A.** In its analysis of alternatives, FPL calculated an adjustment to the revenue requirements  
18 associated with power purchase contracts, based on its theory that rating agencies regard  
19 the capacity payments as the equivalent of debt obligations that would increase financial  
20 risk absent a rebalancing of the equity component of its capital structure. The impact of  
21 the adjustment is very significant; it adds up to in excess of \$200 million to the net present  
22 value of revenue requirements associated with competitive portfolios. In my testimony, I  
23 do not intend to debate the merits of the details of FPL’s calculations. My point instead

1 is that FPL has been extremely selective and self-serving in its recognition and  
2 quantification of this single risk factor.

3 **Q. PLEASE EXPLAIN.**

4 **A.** There are a multitude of risks associated with the construction and operation of a large  
5 power plant, of which financial risk is only one example. While FPL has proposed an  
6 equity adjustment that penalizes all power purchase options, FPL has ignored other  
7 significant risks, such as construction cost risk, operating cost and performance risk, and  
8 risk of obsolescence that a contract with one or more of the RFP respondents *would shift*  
9 *away* from FPL and its ratepayers. Even if, for the sake of argument only, one were to  
10 accept FPL's proposition that power purchase contracts increase financial risk in the eyes  
11 of rating agencies, (and assuming further that the PSC's job is to placate such entities), it  
12 would be unfair and biased to recognize and quantify that individual factor while ignoring  
13 other factors, including very significant ones, that if similarly recognized would favor non-  
14 FPL bids. One can observe that some electric utilities purposely maintain a level of  
15 diversity among owned and purchased resources. It would appear to me that, rather than  
16 focusing solely on the "equity adjustment," on one hand, which would be extremely one-  
17 sided and prejudicial, or attempting to identify and quantify the myriad of individual risks  
18 that attend the construction and operation of power plants, which would be exceedingly  
19 difficult, on the other, the Commission could more simply approach the risk issue in terms  
20 of the desirability of an overall balance to the mixture of resources with which FPL serves  
21 its ratepayers. In that regard, it is worth noting that FPL has a relatively small portion of  
22 resources in the form of power purchase contracts, and that small portion is scheduled to  
23 diminish significantly very soon. In any event, the comparison that FPL offers in support

1 of its petitions is grossly skewed by its proposed equity adjustments, and one need not  
2 delve into the calculations in order to reach that conclusion.

3 **Q. PLEASE ADDRESS THE MANNER IN WHICH FPL COMPARED ITS SELF-**  
4 **BUILD OPTIONS WITH CONTRACTS OF SHORTER DURATION.**

5 **A.** FPL assumed that an expiring contract would be replaced by a greenfield combined cycle  
6 plant that would be served by Florida Gas Transmission for gas delivery. There are at  
7 least two problems with its assumptions, both of which further skew FPL's analysis in  
8 favor of its self-build options. First, FPL itself states that the "greenfield" "filler" plant  
9 carries with it assumptions of higher construction costs and higher O&M expense than  
10 FPL's self-build "brownfield" options. FPL attributes the higher costs of the "greenfield  
11 fillers" to the respondents' bids, and this biases comparisons with the self-build options.  
12 Second, FPL's assumes that the "filler" will be served by the more expensive FGT only,  
13 further biasing comparisons with the self-build options.

14 **Q. WHY IS THE GREENFIELD ASSUMPTION PREJUDICIAL TO**  
15 **RESPONDENTS?**

16 **A.** The proper and logical assumption to be used in this comparison should be that, in the  
17 event the respondent's proposal is chosen, it will have the effect of deferring the FPL unit;  
18 and that the deferred FPL unit would be built at the end of the contract unless something  
19 more cost-effective materializes at that time. In short, the FPL self-build unit should be  
20 the "filler." In disregard of that logic, FPL assigns to the respondent a "greenfield"  
21 replacement, which assumes the replacement capacity would be provided by an entity  
22 other than FPL. Again, of necessity that would occur only if the outside entity improves

1 on the economics of FPL's own construction alternative. Accordingly, the "greenfield  
2 filler" assumption is as illogical as it is prejudicial.

3 **Q. PLEASE ADDRESS THE ASSUMPTION THAT THE FILLER WOULD BE**  
4 **SERVED BY FGT.**

5 **A.** The flaw in this assumption flows from the earlier discussion. In testimony, FPL says it  
6 had to assume the filler would be served by FGT because its location is unknown and  
7 Gulfstream has less reach. However, it appears that FPL used the availability of  
8 Gulfstream to its own sites as an advantage when evaluating its own proposals. Again, if  
9 the respondent's proposed unit is selected, it will defer the FPL unit, which becomes the  
10 "filler" unless something outside beats its economics during the deferral. Therefore, the  
11 "filler" should receive the benefit of the lower Gulfstream fuel transportation as well. In  
12 other words, FPL has inflated the construction costs and the fuel costs of the power  
13 purchase alternatives that have durations of less than 25 years.

14 **Q. PLEASE ELABORATE ON THE OVERLY OPTIMISTIC PERFORMANCE**  
15 **CHARACTERISTICS USED FOR FPL'S SELF-BUILD OPTIONS.**

16 **A.** FPL has used operating capacity and heat rate assumptions for its Martin 8 and Manatee 3  
17 units which appear to describe the units operating in "new and clean" condition. It is  
18 usual to recognize actual performance over the life of a unit by discounting the capacity by  
19 2% to 3% and raising the heat rate by about 2%. In addition, the one week per year  
20 maintenance coupled with an equivalent forced outage rate of 1% is a most aggressive  
21 availability assumption.

22 **Q. WHO WOULD BEAR THE RISK OF THESE OPTIMISTIC AND AGGRESSIVE**  
23 **ASSUMPTIONS?**



1    **A.**    The FPL ratepayers would bear these very significant risks, just as they would bear the  
2           risk of prudently incurred construction cost overruns, and of O&M costs which escalate  
3           due to actual operating conditions.

4    **Q.**    **WOULD NON-FPL BIDS HAVE THESE SAME RISKS?**

5    **A.**    The same risks exist for all generating units. However, when the services of a unit have  
6           been included in a binding bid in response to FPL's RFP, the bidder assumes these risks.

7    **Q.**    **WHAT CAN THE COMMISSION DO IN THIS PROCEEDING TO ASSURE**  
8           **THAT THE PROPOSALS ARE VIEWED ON EQUAL TERMS?**

9    **A.**    I believe that either FPL should commit to a binding proposal, including all cost and  
10          performance items or the Commission should take into account the almost certain  
11          probability that FPL's assumptions will not be realized.

12   **Q.**    **HOW SIGNIFICANT IS THIS ISSUE?**

13   **A.**    It is very significant. When the one-sided equity penalty is ignored, about a dozen of the  
14          plans combining both FPL and competitor resources are less costly than the all-FPL plan,  
15          while a further handful are within \$30 million NPV. See Exhibit to the Testimony of  
16          Steven R. Sim, Exhibit \_\_\_\_\_ (SRS-8). I believe that the lack of certainty associated with  
17          the non-binding nature of FPL's proposal is enough in and of itself to cast doubt on FPL's  
18          claim that its proposal is the most cost-effective.

19   **Q:**    **WHAT DO YOU CONCLUDE ABOUT FPL'S ANALYSIS OF ALTERNATIVES?**

20   **A**    In my opinion, the issues discussed above, that are derived from a review that was less  
21          than exhaustive, demonstrate that FPL has skewed the comparison in favor of its self-build  
22          units to the extent that the Commission, parties, and ratepayers cannot rely on its assertion  
23          that FPL has identified the most cost-effective alternatives for its ratepayers.

1 I also believe that the situation in which the Commission finds itself is a function of a  
2 process that allows a utility to control the outcome of an RFP process through self-serving  
3 assumptions and non-binding proposals. I recommend that the Commission deny FPL's  
4 petitions and take whatever measures are needed to ensure that the next procurement  
5 process is designed to ensure a fair and even-handed comparison of alternatives.

6 **V. IMPACT OF RESOURCE DELAY**

7 **Q: WOULD A DENIAL OF FPL'S PETITIONS ADVERSELY AFFECT**  
8 **RATEPAYERS?**

9 **A.** A consideration of potential benefits and potential harm that would be associated with  
10 spending the time necessary to "get it right" must take into account the likely impact on  
11 customers of a delay in the in-service date of the proposed capacity that would be  
12 attended by a complete or partial denial of FPL's petitions, on the one hand, and the  
13 adverse impact that would be occasioned by an increase in costs beyond those projected  
14 by FPL in the event its non-binding proposal is accepted, on the other. To assist in this  
15 consideration, I have performed an exercise that I believe examines these scenarios in a  
16 reasonable fashion. The analysis leads me to conclude that the time spent in ensuring that  
17 the most cost-effective alternatives are chosen would serve ratepayers' best interests.

18 **Q. PLEASE DESCRIBE YOUR ANALYSIS.**

19 **A.** It is possible to quantify the risk to ratepayers of the delay associated with rejection of  
20 FPL's petitions. The appropriate measure, I believe, would be the value of the "expected  
21 energy not served" because of the delay. I have developed the value that would be  
22 associated with a delay of one year of capacity equivalent to one of FPL's units and the  
23 value that would correspond to a delay of the entire 1900 MW proposed by FPL. I then

1 compared these values of “expected energy not served” to the impact on ratepayers of  
2 even a modest increment in costs beyond FPL’s non-binding representation of costs. The  
3 results of the analysis are shown in Exhibit No. \_\_\_\_\_ (KJS-3), which is attached to my  
4 testimony.

5 **Q. WHAT DATA BASE DID YOU USE FOR THIS DETERMINATION OF**  
6 **“EXPECTED UNSUPPLIED ENERGY?”**

7 **A.** I have prepared a data base consisting of all of the generation that would be available in  
8 peninsular Florida during the time frame involved, together with the total forecast  
9 peninsular Florida load during the same period.

10 **Q. WHY IS THIS IMPORTANT?**

11 **A.** From a reliability standpoint, Peninsula Florida is a single entity within which all of the  
12 resources can be used to serve the composite load. The actual ownership of generation or  
13 the existence or absence of contractual arrangements is of little importance in the  
14 determination of how much load can be served. My data base captures all of the  
15 generating resources that Peninsula Florida load could call on to maintain reliable service,  
16 including merchant peaking capacity that is not included in any utility’s calculation of its  
17 individual reserve margin and resources which exceed a utility’s target reserve margin..

18 **Q. WHAT VALUE DID YOU ATTRIBUTE TO THE INCREASE IN PENINSULA**  
19 **FLORIDA EXPECTED UNSUPPLIED ENERGY?**

20 **A.** I used a value which is generally recognized in the utility industry as an energy price which  
21 should not be exceeded. That value is \$1000 / MWh.

22 **Q. WHAT RISK HAVE YOU ASSOCIATED WITH THE ACCEPTANCE OF FPL’S**  
23 **PRESENTLY OFFERED SELF BUILD OPTIONS?**

1 A. I have combined three separate sums for each of FPL's self-build options, the impact on  
2 the operating costs of a 2% increase in heat rate, the impact on capacity value of a 2.5%  
3 drop in capacity and the impact of a 5 % increase in fixed costs.

4 **Q. PLEASE SUMMARIZE THE RESULTS OF YOUR ANALYSIS.**

5 A. I have calculated that if Martin 8 is delayed one year, the increase in value of expected  
6 unsupplied energy would be \$0, while the avoided risk would be \$94 million. If both  
7 Martin 8 and Manatee 3 are delayed one year, the increase in value of expected unsupplied  
8 energy would be \$3,000, while the avoided risk would be \$188 million.

9 **Q. DO YOU REGARD THE INCREMENT OF EXPECTED UNSERVED ENERGY**  
10 **TO BE SIGNIFICANT?**

11 A. No. To the contrary, at forecast load levels there is insignificant expected unsupplied  
12 energy.

13 **Q. WHAT DO YOU CONCLUDE FROM YOUR ANALYSIS?**

14 A. I conclude that the impact on ratepayers of a delay necessary to reach a decision  
15 uninfluenced by opportunities for biased and self-serving assumptions and/or infirm  
16 numbers is more than outweighed by the risk of even a modest, (or even expected),  
17 missing of targets by FPL.

18 **Q. PLEASE SUMMARIZE YOUR TESTIMONY.**

19 A. I have demonstrated that FPL has repeatedly biased the needs analysis towards its own  
20 self-build options. In the original Integrated Resource Plan (IRP) analysis and the  
21 subsequent RFP analysis, FPL consistently adopted assumptions that would favor the self-  
22 build options by:

23 (i) including an "equity penalty" for purchase power options,

- 1 (ii) using greenfield combined cycle units served by FGT as spacer units,  
2 (iii) using extremely optimistic cost and performance assumptions for is self-build  
3 options, and,  
4 (iv) through simplistic EGEAS modeling of start-up/shutdown costs and O&M  
5 costs.

6 Since FPL does not offer ratepayers a “binding bid” type guarantee on the construction of  
7 the new units, ratepayers could be asked to pay costs in excess of those presented by FPL  
8 in this docket. I have demonstrated that a delay in approving FPL’s plans for the self-  
9 build option will not harm ratepayers, and in fact will allow the Commission the  
10 opportunity to assess the process wherein utilities in the State of Florida, in their own self-  
11 interest, choose supply alternatives that may in fact not be the least-cost alternatives to  
12 ratepayers. Therefore, I am requesting on behalf of PACE, that the Commission deny  
13 FPL’s request at this time and take whatever measures are needed to ensure that the next  
14 procurement process is designed to ensure that alternatives are fairly assessed, resulting in  
15 the least-cost option for ratepayers.

16  
17 **Q. DOES THAT CONCLUDE YOUR TESTIMONY?**

18 **A.** Yes, it does.  
19

1 BY MR. MCGLOTHLIN:

2 Q Mr. Slater, will you summarize your testimony for the  
3 Commission?

4 A Yes. Madam Chairman, Commissioners, I have provided  
5 testimony to this Commission on five previous occasions, so I  
6 won't bother going into my credentials.

7 On behalf of Florida PACE, I have examined the manner  
8 in which FPL has evaluated the RFP responses against their own  
9 self-build options. I have concluded that due to the  
10 assumptions and methodologies FPL employed, FPL has skewed the  
11 analysis in favor of its own self-build options. Specifically,  
12 the system production costs for alternate expansion plans were  
13 obtained from FPL's EGEAS modeling which was crude and  
14 simplistic. This resulted in the 1,100-megawatt units proposed  
15 by FPL being treated too kindly relative to the smaller units  
16 behind RFP bids, and thus given an advantage over the RFP bids.

17 Actual operation or more detailed production modeling  
18 would not treat these large units so kindly because of the  
19 realities of unit commitment, unit starts and stops, and  
20 detailed economic dispatch which were absent from the FPL EGEAS  
21 modeling. FPL should have rerun the system production costs  
22 for the various alternative scenarios, they should have rerun  
23 those alternative scenarios with their detailed production  
24 model to obtain better production costs.

25 There were differences in the modeling of FPL's

1 self-build options compared to RFP bid alternatives. First,  
2 the variable O&M for FPL self-build options was unrealistically  
3 small at about 3.7 cents per megawatt hour compared with RFP  
4 bids for the same or similar technology of approximately \$2 per  
5 megawatt hour or more. The RFP bid variable O&M's corresponded  
6 more closely to industry practice and actual cost causality  
7 than do FPL's variable O&Ms. FPL's lower variable O&Ms for its  
8 own self-build options gave their options an advantage in their  
9 EGEAS dispatch.

10           Second, FPL applied an equity penalty to RFP bids,  
11 but made no adjustments for the various risks that would be  
12 shifted away from FPL and its ratepayers by contractual  
13 arrangements with successful bidders.

14           Thirdly, the filler units FPL used in its analysis to  
15 follow RFP bids of less than 25 years was always a greenfield  
16 unit using Florida Gas trunk gas (phonetic) even when Martin or  
17 Manatee would remain unbuilt in a particular scenario. This  
18 unnecessarily increased the apparent costs of scenarios  
19 including RFP bids of less than 25 years.

20           Fourth, FPL assumed overly optimistic performance for  
21 their 7FA technology in its self-build options. The heat rate  
22 looked too much like new and clean heat rates rather than  
23 actual in-service heat rates over the life of the units, and  
24 the 97 percent availability including just a one percent  
25 equivalent forced outage rate, which is just 86 hours per year,

1 I consider to be too optimistic.

2           These unrealistic assumptions to which FPL does not  
3 appear to be bound gave the FPL self-build options an advantage  
4 over the RFP bids. The RFP bidders included performance  
5 assumptions which were more realistic because the bidders would  
6 end up being bound by the performance assumptions that they  
7 bid. Because of the biases in the FPL analysis, this  
8 Commission and FPL ratepayers cannot rely on FPL having chosen  
9 the most cost-effective alternative. One or both of FPL's  
10 petitions should be denied so that the RFP process can be  
11 conducted in a manner which is more likely to be even-handed.

12           However, such a step would delay the coming into  
13 service of up to 1,900 megawatts of capacity. Therefore, I  
14 performed a reliability analysis for Peninsular Florida for the  
15 years 2005 and 2006 to assess the reliability impact of  
16 delaying one or both of Martin and Manatee for a year. In  
17 neither case was there anything but a miniscule impact on  
18 customers in terms of expected unsupplied energy. Even with  
19 the value of \$1,000 a megawatt hour, the expected unserved  
20 energy occasioned by the delays was a very, very tiny fraction  
21 of the harm which could be done to FPL customers by a failure  
22 to choose the most cost-effective alternatives for FPL's  
23 generation expansion in the 2005/2006 time frame.

24           Thank you.

25           MR. McGLOTHLIN: We tender the witness.



1 CHAIRMAN JABER: Thank you. No questions here?  
2 Mr. Moyle, go ahead.

3 MR. MOYLE: Just a couple of questions.

4 CROSS EXAMINATION

5 BY MR. MOYLE:

6 Q I was listening to your summary, and I had three  
7 things I wanted to ask you about, and I will take them in  
8 reverse order.

9 You said you performed a reliability analysis, is  
10 that right?

11 A Yes.

12 Q Do you have experience in doing those types of  
13 analysis?

14 A Oh, yes.

15 Q Have you done them before for other utilities around  
16 the country or other folks who provide power to customers?

17 MR. NIETO: Madam Chair, before he answers, we  
18 object. Mr. Moyle is asking the witness to, in essence,  
19 bolster his testimony when it wasn't in the nature of cross.  
20 It is, in essence, direct testimony.

21 CHAIRMAN JABER: Mr. Moyle, respond.

22 MR. MOYLE: I don't agree. I mean, I think the  
23 witness has stated some stuff. I'm asking him just a couple of  
24 questions and following up. I don't know the answers to the  
25 questions.

1 MR. NIETO: If I could add one point.

2 CHAIRMAN JABER: Excuse me.

3 MR. NIETO: I'm sorry.

4 CHAIRMAN JABER: I don't think he was bolstering the  
5 testimony just yet. But I would caution you, Mr. Moyle, you  
6 need to ask these questions in the form of cross examination.  
7 But I agree with you that the questions you have asked thus far  
8 have gone to whether he has experience. Cross-examination.

9 MR. MOYLE: That means, I think, that I can lead you.

10 BY MR. MOYLE:

11 Q Isn't it true that you have performed reliability  
12 analysis for other entities in the United States who provide  
13 power to customers?

14 A Yes, I have.

15 Q And isn't it true that these other entities have  
16 relied on your analysis to figure out how much capacity they  
17 would need for their customers?

18 MR. NIETO: Same objection.

19 CHAIRMAN JABER: There has been an objection. And  
20 your objection is?

21 MR. NIETO: I think at that point he is.

22 CHAIRMAN JABER: Your objection is what?

23 MR. NIETO: The same objection, that this is in the  
24 nature of supportive cross, it is not cross-examination to  
25 understand the bases of the witness' testimony.

1 CHAIRMAN JABER: Mr. Moyle, I think this is what we  
2 call in the business friendly cross-examination.

3 COMMISSIONER DEASON: Madam Chairman, if Mr. Moyle  
4 would just look at the 17-page resume, I would think he would  
5 have all his questions answered in this regard.

6 CHAIRMAN JABER: Yes. Let's move on, Mr. Moyle.

7 BY MR. MOYLE:

8 Q With respect to the benefits of entering into a  
9 purchased power agreement, you said that FPL did not consider  
10 any benefits for entering into a purchased power agreement, is  
11 that right?

12 A That's right.

13 Q Okay. Do you believe those should have been  
14 considered?

15 A Most certainly.

16 Q And why?

17 A Because if one is going to consider the disbenefits  
18 of entering into a purchased power agreement, one should also  
19 include the benefits. It would be even -- it would not be  
20 even-handed not to do so, if you will forgive the double  
21 negative.

22 Q And FPL did not do that in this case?

23 A No, they didn't do that.

24 MR. MOYLE: That's all I have.

25 CHAIRMAN JABER: FPL.

1 MR. NIETO: Before we begin, I would like to have my  
2 document identified. I'm not going to pose any questions, just  
3 move it into the record.

4 CHAIRMAN JABER: And I'm having trouble hearing you,  
5 you need to speak into the mike.

6 MR. NIETO: I'm sorry, I will move the microphone  
7 closer. These are PACE's Responses to FPL's Request for  
8 Admissions 1 through 7 and 13 through 15. In the interest of  
9 time, I'm not going to pose any questions on them. I will just  
10 have them identified and move them into the record at the end  
11 of the cross.

12 CHAIRMAN JABER: Is there an objection to doing that?

13 MR. MOYLE: No objection from CPV.

14 CHAIRMAN JABER: PACE's Responses to FPL's First  
15 Request for Admissions Numbers 1 through 15 are identified as  
16 Hearing Exhibit 43. And, Mr. McGlothlin, you had no objection?

17 MR. MCGLOTHLIN: I have no objection.

18 CHAIRMAN JABER: Without objection, Exhibit 43  
19 admitted into the record.

20 (Exhibit 43 marked for identification and admitted  
21 into the record.)

22 CROSS EXAMINATION

23 BY MR. NIETO:

24 Q Good afternoon, Mr. Slater. Gabriel Nieto on behalf  
25 of FPL.

1           Mr. Slater, you would agree that rating agencies do,  
2 in fact, view purchased power contracts as off-balance sheet  
3 obligations similar to debt, correct?

4           A     I understand that they view purchased power and have  
5 viewed purchased power obligations as being debt. The  
6 off-balance sheet description is something that I think is  
7 rather new. We have been told about this through the  
8 newspapers and news reports about people like Enron. But  
9 utilities have had their purchased power agreements looked at  
10 for quite a number of years now, and some of these agreements  
11 have been treated as contributing to debt.

12          Q     And it is also true, Mr. Slater, that purchased power  
13 obligations transfer financial risk from selling IPP to the  
14 purchasing utility, and therefore some adjustment is due?

15           MR. McGLOTHLIN: I object. Well, let me hear the  
16 question again.

17           MR. NIETO: Sure, I will state it one more time.

18 BY MR. NIETO:

19          Q     It is also true, Mr. Slater, that purchased power  
20 obligations transfer financial risk from the selling IPP to the  
21 purchasing utility, and therefore some adjustment is due,  
22 correct?

23          A     Well, saying that an IPP will use the fact that it  
24 has a contract with a utility as a means of raising debt, then  
25 obviously there is some transfer of risk, you know, that is a

1 fact.

2 Q And some adjustment is due for that transfer of risk,  
3 correct?

4 A I believe that that fact should be viewed when the  
5 debt/equity ratio of the utility is being examined, yes.

6 Q And based on that rating agencies will take purchased  
7 power obligations into account when undertaking an analysis of  
8 a utility's capital structure, correct?

9 A That is exactly what I just said.

10 Q And all other things being equal, unless a utility  
11 that enters into a purchased power agreement does something to  
12 offset this effect, its credit ratings will ultimately be  
13 effected, correct?

14 A I think sometimes the purchased power contract itself  
15 can have offsetting features for the utility. But, if nothing  
16 else is done, like there is no alternative, like we are not  
17 comparing their capital structure under this circumstance to  
18 their capital structure under another circumstance, just simply  
19 the addition of a purchased power contract with no other  
20 changes will have some attribution of additional debt.

21 Q I believe we covered this in your deposition, but you  
22 have seen the equity penalty applied in an on-going proceeding  
23 involving Wisconsin Electric Power in an evaluation of  
24 purchased power options, is that correct?

25 A I have seen it argued, I don't know whether it is

1 going to be applied yet. There is no decision and there won't  
2 be for sometime.

3 CHAIRMAN JABER: Mr. Slater, yes or no, and then you  
4 get to elaborate.

5 THE WITNESS: But he said the word applied. The  
6 equity penalty is not applied until some order is issued, I  
7 think. It is^ -- it was argued by the company, and they wished  
8 to apply it in their evaluation of bids. But whether the  
9 Commission is going to agree with them has not been decided.

10 CHAIRMAN JABER: Okay.

11 THE WITNESS: I was only objecting to the word  
12 applied in that sense.

13 CHAIRMAN JABER: I understand.

14 BY MR. NIETO:

15 Q Mr. Slater, I noticed in the biographical information  
16 attached to your prefiled testimony that you were a  
17 vice-president at Energy Management Associates from 1983 to  
18 1990, is that correct?

19 A I was a vice president, senior vice-president,  
20 president, and chief engineer.

21 Q Do you consider Energy Management Associates, or EMA,  
22 to be a reputable firm, or did you at that time?

23 A EMA was a well thought of firm.

24 Q And in your opinion was EMA a firm of professionals  
25 whose opinions could be relied upon?

1           A     Well, I don't know whether everybody wanted to rely  
2 on the opinions of everyone who worked there. I am about to  
3 challenge the opinions of people who work there at a FERC  
4 hearing that I am -- a FERC case that I am involved in.

5           Q     Well, let me ask it another way. EMA would have held  
6 its personnel out as experts in their respective fields,  
7 correct?

8           A     At times they would do that.

9           Q     Did part of EMA's business include making  
10 presentations to utility groups such as the Edison Electric  
11 Institute?

12          A     I can't remember presentations. I wasn't involved in  
13 presentations before the Edison Electric Institute. I made  
14 presentations in other places, but I can't remember the Edison  
15 Electric Institute.

16          Q     Okay. My question related more to the firm. Did  
17 personnel at the firm typically make such presentations?

18          A     Well, as I say, I can't remember a presentation  
19 before the Edison Electric Institute. I can remember  
20 presentations in many other places, but that one, you know, I  
21 can't remember.

22          Q     In making those kind of presentations, it would have  
23 been EMA's practice to provide the best available information  
24 to its audience, wouldn't it?

25          A     That is difficult to answer. A number of people at



1 Energy Management Associates made presentations. They made  
2 these presentations as themselves. I'm sure their work  
3 affiliation was known, but I don't know that the whole company  
4 had to agree on the presentation that was made before that  
5 presentation was made. It was a personal presentation. I made  
6 a number of presentations while I was there and, you know, from  
7 my point of view they were personal.

8 Q I'm sorry, I couldn't hear the last word you said.

9 A Personal.

10 Q Personal. When you made those personal  
11 presentations, you would have tried to present the best  
12 information you could have to your audience, correct?

13 A Of course.

14 Q At the time you left EMA, did it provide financial  
15 consulting services to utilities?

16 A Yes, and also services of rather elaborate financial  
17 software to assist those utilities.

18 Q In your opinion was EMA's financial consulting  
19 practice well regarded in the industry at the time you left in  
20 1990?

21 MR. MCGLOTHLIN: Can I ask for clarification as to  
22 whether this question relates to Mr. Slater's involvement in  
23 EMA or some other aspect of --

24 MR. NIETO: No, I'm actually asking about EMA's  
25 financial consulting practice specifically, and what his view

1 of that was. So it relates to the firm.

2 THE WITNESS: Are you talking about -- I will have to  
3 ask you a question, when you say financial consulting practice.  
4 There was a consulting practice, a utility consulting practice  
5 at EMA that I ran. There was also a section at EMA that  
6 produced very detailed financial software for utilities that I  
7 did not run. So you would have to clarify which area you are  
8 talking about.

9 BY MR. NIETO:

10 Q Let me ask a couple of questions that may clarify  
11 that. When you were at EMA, did Glenn McIsaac work with you?

12 A Oh, yes, he worked for me. And he published an  
13 article, I do believe, in probably Public Utilities Fortnightly  
14 concerning the equity penalty, if I remember rightly. Did you  
15 find that one?

16 Q It is actually Electrical World, but, yes.

17 A It was which?

18 Q Electrical World.

19 CHAIRMAN JABER: Mr. Slater, you need to wait for the  
20 question.

21 THE WITNESS: Okay.

22 MR. NIETO: I would like to mark for identification  
23 an article published in Electrical World entitled, "What is the  
24 real cost of buying IPP power," which discusses a presentation  
25 by Mr. McIsaac to the Edison Institute in 1989.

1 CHAIRMAN JABER: Would you say this was the 1989  
2 issue, October 1989?

3 MR. NIETO: This is the October 1989 issue of  
4 Electrical World, correct.

5 CHAIRMAN JABER: Okay. Hearing Exhibit 44 the  
6 October '89 issue of Electrical World.

7 (Exhibit 44 marked for identification.)

8 BY MR. NIETO:

9 Q Mr. Slater, do you see the portion of the article  
10 entitled under the heading, "Without Equity," in the far right  
11 column of the article?

12 A Far right column.

13 Q About one-third of the way down.

14 A Yep.

15 Q Skipping to the second paragraph in that section  
16 which begins reliance on IPPs, could you read that paragraph  
17 for us?

18 A "Reliance on IPPs to meet future capacity needs is  
19 essentially equivalent to a utility using 100 percent debt  
20 financing to build a utility-owned power plant, he contended.  
21 In both cases, market risks are borne by the utility without  
22 any supporting equity investment. As a result, the utility  
23 must either increase the proportion of equity financing  
24 supporting its remaining investments or face an increase in the  
25 cost of equity capital. In either case, the effect is to

1 increase the utility's overall weighted average cost of  
2 capital."

3 Q Now, Mr. Slater, that statement that you just read  
4 and the various other quotes in here reflect statements made by  
5 Mr. McIsaac to the Edison Electric Institute, correct?

6 A That is what it says on the left-hand side there in  
7 the second paragraph.

8 Q Would you agree that the quote that you just read is  
9 a reasonable description of the effect of imputed debt from  
10 contractual power commitments?

11 A I would agree that it is Mr. Glenn McIsaac's view of  
12 all of this. I don't think it is totally reasonable, but then,  
13 again, this was his statement and this statement was made in  
14 1989 when we were all just getting into this business of the  
15 reflection of purchased power in financial structure or imputed  
16 financial structure.

17 Q Let me ask you to continue down that same column to  
18 the next section entitled, "Equivalent Leverage." If you  
19 count, I guess it would be nine lines from the bottom. There  
20 is a quote that begins increases in the utility's cost of  
21 capital. Do you see that?

22 A Yes.

23 Q Could you read that quote for us up until where it  
24 says, "He said"?

25 A Well, "Increases in the utility's cost of capital

1 that are expected to result from commitments to IP generation  
2 should be included in cost comparisons of IPP and utility-owned  
3 generation," he said.

4 CHAIRMAN JABER: Mr. Slater, I apologize where was  
5 that?

6 THE WITNESS: That is in the third column on the  
7 first page, about an inch from the bottom it begins.

8 MR. NIETO: If you count nine lines from the bottom  
9 of that column.

10 THE WITNESS: Three-quarters of an inch from the  
11 bottom.

12 CHAIRMAN JABER: Go ahead.

13 THE WITNESS: That was what he asked me to read up to  
14 that point.

15 BY MR. NIETO:

16 Q And that was, again, Mr. McIsaac's public position on  
17 behalf of EMA?

18 A That what Mr. McIsaac's public position, period. I  
19 did not insist that people who worked for me in the consulting  
20 practice only expressed my ideas in public. There was a  
21 diversity of ideas within our consulting group, and that was  
22 fine, that was healthy.

23 Q And, again, that diversity of ideas would be relied  
24 upon by your clients, correct?

25 A What do you mean by that?

1 Q The ideas and opinions by professionals at EMA would  
2 be relied upon by its clients, is that correct?

3 A The clients could consult with the various members of  
4 our consulting practice to obtain their ideas. Energy  
5 Management Associates did not guarantee the ideas of all of its  
6 individual employees, it was up to the client as to whether  
7 they were getting the advice that they wanted.

8 Q You weren't in the business of providing bad or  
9 erroneous advice to your clients, were you?

10 A Of course not.

11 Q Let me ask you to turn the page. There is a section  
12 entitled, "How is it done," which has four bullet points that  
13 are a methodology for calculating the cost of imputed debt. I  
14 won't ask you to read that out loud, but if you could read that  
15 to yourself and familiarize yourself with it.

16 A I hardly got a word of that. I'm sorry.

17 Q I'm sorry. If you could turn the page, there is a  
18 section entitled, "How is it done." Do you see that at the  
19 top?

20 A Yes.

21 Q There are four bullet points there that are  
22 essentially a recommended methodology for taking into account  
23 the effects of purchased power contracts. And I would ask you  
24 to read that over to yourself and familiarize yourself with it.

25 A Okay. The four bullet points you are interested in?

1 Q Yes. Let me know when you are ready.

2 A Yes.

3 Q Mr. Slater, is it not true that the approach taken by  
4 FPL in this case is more conservative than the approach  
5 suggested in the article in the sense that FPL employs a risk  
6 factor so that only a percentage of the debt equivalent is used  
7 in the calculation, whereas the article indicates that 100  
8 percent of the debt equivalent of the purchased power  
9 obligation should be used, correct?

10 A I think there may well be a reason for that. The  
11 approach used by FPL is not the same as the approach here. I  
12 think what Mr. McIsaac was doing here was talking about  
13 projects that would have been financed on, if you read in the  
14 first column, okay, the column on Page 1, last paragraph, "IPPs  
15 are generally financed with up to 90 percent debt capital, he  
16 explained."

17 Now, these were the days of PURPA contracts, which  
18 are not the same as the purchased power agreements we are  
19 looking at today. There was a compulsion about this, and the  
20 debt levels were higher when these PURPA type deals were being  
21 financed. So we are not talking about quite the same thing  
22 here, nor the same environment, and we are talking about a  
23 person's view expressed at a conference or a meeting. You are  
24 not talking about my view either then or now.

25 Q Mr. Slater, could you please answer my question as to

1 whether or not the methodology in this article is more  
2 conservative than that used by FPL in that it advocates  
3 utilizing 100 percent of debt equivalent, whereas FPL has  
4 employed a risk factor where only a percentage of the debt  
5 equivalent is used?

6 A That is true. But I am telling you that the  
7 contracts they are talking about are different things. So, you  
8 know, talking about whether one is more conservative than  
9 another doesn't mean a whole lot when you are talking about  
10 different types of contracts.

11 Q Mr. Slater, at the time that you wrote your direct  
12 testimony and through the time of your most recent deposition,  
13 you have not performed any alternative economic analyses of the  
14 various power supply options to determine which is the most  
15 cost-effective alternative, correct?

16 A No. All I had done in that time was to view the  
17 EGEAS data with the aid of an EGEAS manual, and the output from  
18 the EGEAS, from a couple of EGEAS runs that FPL produced on a  
19 disk on a CD to me. And also to examine the late-filed exhibit  
20 of Doctor Sim concerning the alternative of delaying Martin for  
21 one year.

22 Q And also during that time frame, Mr. Slater, from the  
23 time you wrote your testimony up until your most recent  
24 deposition, you had not conducted any sensitivity analyses to  
25 determine how the various modeling issues that you discuss in



1 your testimony would affect FPL's economic analysis, correct?

2 A No. And as I told you then, there had not been time  
3 and there wouldn't be time between our last deposition and  
4 today.

5 Q Let me direct you to Page 8 of your prefiled  
6 testimony where you discuss the filler units and FPL's  
7 modeling.

8 A What was that?

9 Q Let me direct to you Page 8 of your prefiled  
10 testimony.

11 A To Page 8?

12 Q Yes. You have a discussion there regarding the  
13 filler units used in FPL's modeling?

14 A Yes.

15 Q My question is, at the time you wrote your testimony,  
16 from that time until the time of your latest deposition, you  
17 also have not performed any sensitivity analyses to determine  
18 how using a different filler unit would affect FPL's economic  
19 analysis, is that correct?

20 A No, I have not performed any sensitivity analyses.

21 Q Let me direct you to the next page of your testimony  
22 where you discuss the heat rate and operating capacity of the  
23 FPL units, do you see that?

24 A What line are you referring to?

25 Q On Page 9 of your testimony, starting at Line 14, you

1 have a discussion regarding the heat rate and operating  
2 capacity of the units.

3 A Yes.

4 Q And my question is simply this: You have not  
5 undertaken any analysis to determine how FPL's proposed units  
6 would compare to FPL's operating history, correct?

7 A How FPL's proposed units would what?

8 Q Let me restate that. You have not undertaken any  
9 analysis that would indicate to you how the heat rate and  
10 operating capacity of FPL's proposed units would compare to  
11 FPL's operating history with regard to similar units, have you?

12 A Similar units using the advanced models of the 7FA  
13 that they are contemplating here have only been in service  
14 since June, I think, was the testimony we heard today, and Mr.  
15 Yeager couldn't very well give us very much --

16 MR. NIETO: Mr. Slater, if you could answer my  
17 question yes or no and then give whatever distinction you want.

18 CHAIRMAN JABER: Hang on a second.

19 Finish what your thought was, but then I want you to  
20 conclude with a yes or no.

21 A (Continuing) Well, the answer would be no, because  
22 it was not a question that could be answered, because there  
23 wasn't any history to look at. Mr. Yeager didn't volunteer any  
24 to us today.

25 Q Mr. Slater, let me direct you to Page 12 of your

1 testimony where you discuss the database that you used in your  
2 calculation of expected unsupplied energy, do you see that?

3 A Yes.

4 Q The database that you used included merchant power  
5 plant capacity that is not contractually committed to any  
6 specific utility, correct?

7 A Correct.

8 Q And absent a firm capacity contract, that type of  
9 uncommitted capacity is not something a utility can rely on for  
10 its reserve margin, isn't that right?

11 A An individual utility can't rely on its for its own  
12 reserve margin, no, that is correct. But Peninsular Florida  
13 has possession of the capacity and it could be used.

14 Q So your answer is no, it can't be used for reserve  
15 margin?

16 A I already said that.

17 Q The database that you used also included the capacity  
18 of Florida utilities to the extent they had over 20 percent  
19 reserve margin, is that right?

20 A Yes, it did.

21 Q And similarly, absent a firm capacity contract  
22 another utility could not rely on that capacity for its reserve  
23 margin, correct?

24 A No, it can't. But Peninsular Florida can rely on the  
25 presence of that capacity for its overall reliability.

1 MR. NIETO: Nothing further. Thank you, Mr. Slater.

2 CHAIRMAN JABER: Thank you. Staff.

3 MS. BROWN: No questions.

4 CHAIRMAN JABER: Commissioners?

5 Redirect, Mr. McGlothlin?

6 MR. MCGLOTHLIN: Yes.

7 REDIRECT EXAMINATION

8 BY MR. MCGLOTHLIN:

9 Q So that the record is clear, Mr. Slater, with respect  
10 to what has been marked as 44, is this opinion yours or someone  
11 else's?

12 A It is Mr. Glenn McIsaac's opinion.

13 Q I refer you to Page 1 of what has been marked as 44.  
14 Under the middle column, the first paragraph under the table  
15 captioned utility cost of capital, would you read the second  
16 sentence under the paragraph that begins, "financial  
17 advantage," it begins with the words, "the impact of"?

18 A It says, "The impact of a moderate program of  
19 reliance on outside suppliers is unlikely to be significant."

20 Q You have heard Mr. Silva describe the current level  
21 of purchased power and the predicted trends of diminishing  
22 levels over time, have you not?

23 A Well, it was in his testimony and there was a table  
24 in there that I did look at, yes.

25 Q And based upon the description of the current and

1 projected levels of purchased power, do you have an opinion as  
2 to whether this observation could be attributed to Mr. McIsaac  
3 is operative here?

4 A Well, it could be. I don't exactly know thirteen  
5 years later what Glenn meant by moderate, but one could put  
6 one's own opinion on that.

7 Q Counsel for FPL asked you if you had prepared  
8 alternative analyses to the EGEAS runs. Was it necessary, for  
9 your purpose, to perform alternative analyses in order to get a  
10 handle on the adequacy of the evaluations that FPL performed?

11 A No, it wasn't. It was only necessary for me to  
12 understand what the simple modeling in EGEAS would do to the  
13 resources compared with what would happen in actual practice.

14 Q In your answer to him you said that you had viewed  
15 the EGEAS runs performed by FPL with the help of the  
16 instruction manual, is that right?

17 A Well, I viewed the data with the help of the  
18 instruction manual, and I also reviewed the run outputs, which  
19 really didn't need the manual to understand.

20 Q And you also gained some insight as to whether the  
21 bids that were evaluated were either far from or close to the  
22 values of FPL's own self-build option, is that correct?

23 A Yes, I had Doctor Sim's exhibits to look at in that  
24 regard, and they laid out how much of the difference was equity  
25 penalty and how much was due to production costs, et cetera.

1 Q With respect to the difference, excluding equity  
2 penalty, how would you describe some of the bids, vis-a-vis  
3 FPL's self-build option?

4 A Awfully close.

5 Q As you examined the data and the results of the runs,  
6 what could you discern about the adequacy of the model that was  
7 used for the purpose?

8 MR. NIETO: I would like to object, this is outside  
9 the scope of cross.

10 MR. McGLOTHLIN: It certainly is not. He was asked  
11 whether he prepared alternative analyses. He answered that he  
12 reviewed these runs. I'm asking, my follow-up question to the  
13 one, which was, "Did you need to do that? And if you didn't  
14 need to do that, why?"

15 CHAIRMAN JABER: I will allow it.

16 THE WITNESS: I would consider the EGEAS modeling  
17 done by FPL to be extremely poor production modeling, if one  
18 wanted a good idea of the production costs.

19 BY MR. McGLOTHLIN:

20 Q Let me ask you to clarify. When you make that  
21 statement, are you referring to the adequacy of the EGEAS  
22 model, or to the use made of it, or both?

23 A Both.

24 Q Please explain.

25 A The EGEAS model itself doesn't have a lot of the

1 attributes that you would need to properly appreciate the  
2 impact on production costs of the size of a unit, or its  
3 minimum shutdown time, or its start-up costs, all of those  
4 things are absent from the EGEAS model itself. But added to  
5 that, we had the single segment modeling that was done by FPL  
6 in this. In other words, it would consider the whole capacity  
7 of a unit to be one segment to be loaded all at once under the  
8 load curve without any considerations of, into leaving that  
9 unit with some other units with similar heat rates so that you  
10 would approximate economic dispatch. There was none of that  
11 done in the modeling. It was just which unit is marginally  
12 cheaper than the other, that is just loaded all at once, then  
13 load the next one, load the next one. It was very simplistic  
14 modeling.

15 Q Do you know whether the EGEAS model that FPL employed  
16 was capable of something other than single segment modeling?

17 A Yes, it is. And, in fact, the data that was entered  
18 into the model for all of FPL's existing units had various  
19 capacity segments to represent each unit, that information was  
20 there in the model even so.

21 Q How does this differ from what happens in the real  
22 world as the operator operates the system?

23 A Well, the operator operates the system taking into  
24 account all of the operating constraints of the units,  
25 including the impact of how big these units are and how

1 relatively inflexible they can become when they have long  
2 start-up times, et cetera. That is what is done on the system  
3 as it is operated. They take account of all of those things  
4 which can have an impact on production costs.

5           The idea of a good production model is to capture  
6 those practical constraints that are encountered in every day  
7 dispatch of the system, to capture them and put them into the  
8 model. There was no attempt to do that with FPL's modeling,  
9 even though they do have a model that could do a far better job  
10 than EGEAS does.

11           Q     Which model is that?

12           A     Well, they have the POWERSYM model, which my  
13 recollection says was a model developed by Tennessee Valley  
14 Authority back quite some years, and it was a public domain  
15 model. It was also picked up by a company and marketed,  
16 remarketed with some additions as POWERSYM Plus, if my  
17 recollection serves me correctly.

18           Q     What could you determine about EGEAS's ability to  
19 incorporate a unit commitment logic in this modeling of the FPL  
20 system?

21           MR. NIETO: And If I can object again for two  
22 reasons. First of all, counsel is leading the witness; and,  
23 second of all, this is definitely going way beyond anything  
24 that was covered in cross. All I asked was whether he produced  
25 any model analyses himself, and now we are going into a



1 detailed discussion of FPL's modeling, and I did not ask one  
2 single question about that.

3 MR. McGLOTHLIN: All in response to the answer he  
4 gave to whether he performed any alternative analyses and why  
5 that is not necessary for his purpose.

6 CHAIRMAN JABER: Mr. McGlothlin, I think at this  
7 point now you are overreaching. So if you have anything else  
8 related to cross examination, that would be great.

9 MR. McGLOTHLIN: All right. I have one follow-up  
10 question to an answer he gave, if I may.

11 BY MR. McGLOTHLIN:

12 Q You indicated that the bids were quite close, you  
13 heard Doctor Sim refer to one example where the differences  
14 absent or excluding equity adjustment or equity penalty was in  
15 the order of \$2 million, do you recall that statement?

16 MR. ELIAS: If I can raise an objection at this  
17 point. He is rebutting Doctor Sim's testimony.

18 MR. McGLOTHLIN: I am illustrating the point about  
19 how narrow they were and whether the use of a different model  
20 would have been called for under the circumstances.

21 CHAIRMAN JABER: I understand what you are trying to  
22 do, but which question on cross-examination are you redirecting  
23 your witness on?

24 MR. McGLOTHLIN: Well, it is an additional question  
25 relating to the question whether he prepared alternative

1 analyses. His answer was no, and then he said it was not  
2 necessary because I had access to this and formed an opinion on  
3 this information.

4 CHAIRMAN JABER: But you are still not answering my  
5 question. How is it your question is a follow-up to the  
6 cross-examination question?

7 MR. McGLOTHLIN: It is a follow-up to his response  
8 that the bids were very narrow, that the bids were close and it  
9 is intended to show how close and why additional detailed  
10 modeling was called for.

11 CHAIRMAN JABER: And your question is what?

12 MR. McGLOTHLIN: As a means of illustrating that, I  
13 posed a question to him of did he recall one example  
14 acknowledged by FPL where the difference in the bids was only  
15 \$2 million.

16 CHAIRMAN JABER: Let me tell you what, Mr.  
17 McGlothlin, if you ask that question and get a response, know  
18 that I will give Doctor Sim the flexibility on rebuttal to  
19 address it, as well. So I will put the ball right back here.

20 MR. McGLOTHLIN: That is fine.

21 CHAIRMAN JABER: Go ahead and ask the question.

22 BY MR. McGLOTHLIN:

23 Q Do you recall that example from yesterday's  
24 testimony?

25 A Yes. I think it is right there on this easel here.

1 the \$83 million one has an equity penalty of \$81 million, so  
2 the rest of it is only good for \$2 million.

3 Q Do you recall approximately how much system net fuel  
4 costs would be in one of the years -- well, let's take 2005 or  
5 thereabouts?

6 A Something like a couple of billion dollars.

7 MR. NIETO: And, again, at this point we are getting  
8 into a recap of all of FPL's testimony, it seems like. We are  
9 getting farther and farther astray from what I asked in cross.

10 CHAIRMAN JABER: I tend to agree. Move on.

11 BY MR. McGLOTHLIN:

12 Q Mr. Slater, you responded in -- you answered in  
13 response to one question that some of the information in your  
14 database could not be used in a reserve margin of a particular  
15 utility. Why then did you include it in your analysis?

16 A Because my analysis was simply was there sufficient  
17 capacity in Peninsular Florida, even if you delayed Martin and  
18 Manatee for a year to supply the needs of all of the people in  
19 Peninsular Florida with a high level of reliability, and the  
20 answer was yes. That was the purpose of doing the analysis.  
21 It had nothing to do with who owned what. It was was there  
22 sufficient capacity to satisfy the needs of the people.

23 Q You were asked by counsel for FPL whether you had  
24 performed any sensitivity analyses of the information given to  
25 you. Do you know whether FPL, whose analysis it was, performed

1 any sensitivity analyses?

2 A I saw no sensitivity analyses presented concerning  
3 the comparison of RFP bids to their own self-build options.  
4 And these sensitivities would have included things like a  
5 different load growth, different fuel cost assumptions, you  
6 know, assumptions on fuel costs, different financing  
7 assumptions, different discount rates as a result of the  
8 financing assumptions. There was nothing like that. There was  
9 one set of conditions modeled.

10 MR. McGLOTHLIN: Those are all the questions I have.

11 CHAIRMAN JABER: Thank you, Mr. McGlothlin.

12 The exhibits we have for Mr. Slater -- thank you, Mr.  
13 Slater... I have Exhibit 42.

14 MR. McGLOTHLIN: Yes, I move 42.

15 CHAIRMAN JABER: Without objection, Exhibit 42  
16 admitted into the record.

17 (Exhibit 42 admitted into the record.)

18 Exhibit 44, FPL.

19 MR. NIETO: We would move 44.

20 MR. McGLOTHLIN: I will object to 44 because it may  
21 be an impeachment of Mr. McIsaac, but it is not an impeachment  
22 of Mr. Slater, it is not his opinion.

23 MR. NIETO: And if I can respond. I believe that  
24 this document falls under the self-authentication provision of  
25 90.902(6) which applies to all printed materials which purport

1 to be newspapers or periodicals, and that rule indicates that  
2 no extrinsic evidence of authenticity is required. It is a  
3 self-authenticating document.

4 CHAIRMAN JABER: I am so sorry. I'm having a lot of  
5 trouble hearing you. You need to speak right into the  
6 microphone and slow it down for me.

7 MR. NIETO: Sure. Section 90.902(6) in the evidence  
8 code, which is the authentication rule, states that extrinsic  
9 evidence of authenticity is not required for, and I will quote,  
10 "Printed materials which purport to be newspapers or  
11 periodicals." So to begin with, this is a self-authenticating  
12 document. Beyond that Mr. Slater indicated that the person  
13 whose statements are quoted here was a member of his firm and  
14 held himself out as an expert on financial matters. However  
15 not his opinions, I believe that is sufficient to get it into  
16 evidence.

17 CHAIRMAN JABER: But is that a statute that comes  
18 into play when someone challenges the authenticity of a  
19 document, or the relevance of the document coming into  
20 evidence?

21 MR. NIETO: Well, I thought its evidence is clear.  
22 It's an article on equity penalty by somebody who the witness  
23 has identified was a partner of his and an authority on the  
24 issue. And beyond that, it is offered to corroborate existing  
25 testimony, so I don't see that it's a hearsay issue, as well.

1 CHAIRMAN JABER: I'm not going to allow it. Exhibit  
2 44 will not be admitted into the record. We are on rebuttal,  
3 and I would ask the parties --

4 MR. GUYTON: I was going to address that.

5 CHAIRMAN JABER: Address what, my ruling?

6 MR. GUYTON: No, I'm sorry, rebuttal.

7 CHAIRMAN JABER: On rebuttal I had asked you all to  
8 consider whether there could possibly be a stipulation, Mr.  
9 Guyton.

10 MR. GUYTON: I can make an offer. I haven't had the  
11 opportunity to consult with all the parties. We can offer to  
12 stipulate the rebuttal of three of our witnesses into the  
13 record if they can go in without cross. We will waive the  
14 summary of their oral presentation. That would be Doctor  
15 Avera, Mr. Yeager, and Doctor Sim. In light of the redirect,  
16 the extensive redirect we just had, we think we need to call  
17 Mr. Taylor.

18 CHAIRMAN JABER: Okay. There has been an offer to  
19 stipulate into the record the prefiled testimony, prefiled  
20 rebuttal testimony of Mr. Avera, Mr. Yeager, and Doctor Sim.  
21 Is there any objection to doing so, and I don't mind taking a  
22 short break to let you all talk about that.

23 MR. McGLOTHLIN: I would appreciate that.

24 CHAIRMAN JABER: A break?

25 MR. McGLOTHLIN: A short one.

1 CHAIRMAN JABER: Five minutes.

2 MR. MOYLE: I can tell you, and I appreciate it is  
3 late on a Friday and I really don't want to be here, but Mr.  
4 Sim has 30-something pages of rebuttal to my witness Mr.  
5 Finnerty. And I don't think it is appropriate for me to let  
6 all of that come in without an opportunity to cross him.

7 I will state I don't have anything for Mr. Avera, and  
8 I have like one or two questions for Mr. Yeager, if that --

9 CHAIRMAN JABER: So that is no as to all three?

10 MR. MOYLE: Well, there is a fourth. I do have some  
11 questions for Mr. Taylor. I don't have anything for Avera, I  
12 have just a couple for Yeager.

13 CHAIRMAN JABER: Okay. Let's not waste time talking  
14 about it, then. If there is no stipulation, there is no  
15 stipulation.

16 Call Mr. Avera to the stand, please.

17 MR. MOYLE: I have nothing for Mr. Avera, if that  
18 makes a difference.

19 MR. LITCHFIELD: Madam Chairman, I had understood  
20 that there possibly could be a stipulation with respect to  
21 Doctor Avera.

22 COMMISSIONER DEASON: Is there a stipulation as a  
23 result to Doctor Avera?

24 MR. MOYLE: I have no questions for him, so I don't  
25 have a problem.

1 MR. McGLOTHLIN: I am willing to stipulate as to  
2 Doctor Avera.

3 MR. PERRY: Same.

4 COMMISSIONER DEASON: Mr. Twomey?

5 MR. TWOMEY: That is fine.

6 COMMISSIONER DEASON: Staff?

7 MR. HARRIS: We have no objection.

8 COMMISSIONER DEASON: Then we do have a stipulation  
9 for one witness.

10 Let's go ahead then and have the testimony, rebuttal  
11 testimony of Doctor Avera admitted into the record. We will do  
12 that without objection. And are there exhibits to be  
13 identified for his rebuttal testimony? I believe there are no  
14 exhibits attached to the rebuttal.

15 MR. GUYTON: Let me check, but I think you're right,  
16 Commissioner Deason.

17 COMMISSIONER DEASON: My copy has no exhibits. If  
18 you later find that there are exhibits, we will identify them  
19 and allow you to move them in at a later time before we  
20 adjourn.

21 MR. GUYTON: Thank you.

22

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1                   **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

2                   **FLORIDA POWER & LIGHT COMPANY**

3                   **REBUTTAL TESTIMONY OF WILLIAM E. AVERA**

4                   **DOCKET NOS. 020262-EI, 020263-EI**

5                   **SEPTEMBER 11, 2002**

6

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

8           A.     William E. Avera, 3907 Red River, Austin, Texas, 78751.

9

10          **Q.     Are you the same William E. Avera who previously filed direct testimony**  
11               **in this case?**

12          A.     Yes, I am.

13

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

15          A.     My purpose here is to respond to the testimony submitted by Andrew L.  
16               Maurey on behalf of the staff of the Florida Public Service Commission  
17               (FPSC or the Commission) and by Kenneth J. Slater on behalf of The Florida  
18               Partnership for Affordable Competitive Energy. Both argue that Florida  
19               Power & Light Company (FPL or the Company) should ignore the equity  
20               penalty in evaluating the most cost-effective alternative for new power  
21               supplied.

22

23

1       **Q.     Does either witness disagree with how the equity penalty was calculated?**

2       A.     No. Both witnesses contend that no consideration should be given to the cost  
3           of off-balance sheet obligations associated with long-term purchased power  
4           contracts. Neither takes issue with the reality of the off-balance sheet  
5           obligation or with the way that the resulting costs were quantified by FPL. In  
6           fact, Mr. Maurey explicitly accepts FPL's financial assumptions, which  
7           include the equity and debt costs as well as the target capital structure used to  
8           calculate the equity penalty.

9  
10      **Q.     What fundamental flaw underlies Mr. Maurey's recommendation to**  
11           **ignore the equity penalty?**

12      A.     Mr. Maurey's testimony contains a great deal of discussion regarding utility  
13           bond ratings and the role of rating agencies in general. Mr. Maurey also  
14           opines on the impact of purchased power and other factors on bond ratings for  
15           FPL and other utilities. He also embarks on a wide-ranging discussion of  
16           FPL's capital structure policies and the wisdom of FPL's current debt/equity  
17           ratio. Putting aside any disagreements I might have with Mr. Maurey's  
18           opinions on all of these issues, the fundamental flaw is that his discussion is  
19           unrelated to the specific question at hand. Namely, do purchased power  
20           contracts impose a cost on the utility by effectively increasing debt leverage  
21           and, if so, should the incremental costs associated with this increased leverage  
22           be accounted for in FPL's economic evaluation of power supply alternatives?

23

1 Indeed, the evidence presented in Mr. Maurey's testimony and on his exhibits  
2 confirms that investors regard a portion of capacity payments under purchased  
3 power contracts as debt in assessing the utility's financial position. Since the  
4 addition of off-balance sheet obligations increases the cost to FPL, then this  
5 cost must be considered to make a rational comparison between self-built  
6 generation and purchased power. Mr. Maurey does not focus on the simple  
7 question of whether purchased power contracts increase the effective cost of  
8 financing the utility, all else being equal. Rather, he claims that FPL has  
9 "exaggerated" the risks of purchased power and that the Company is not  
10 "compelled" to make the equity penalty adjustment.

11  
12 **Q. Is it necessary to explore the various risk factors impacting FPL's**  
13 **generation and purchased power as well as the wisdom of the Company's**  
14 **capital structure policies to evaluate the equity penalty?**

15 A. No. To derive the equity penalty FPL has merely followed the same  
16 methodology used by the investment community to evaluate the financial  
17 impacts of purchased power commitments. It is only logical that FPL's  
18 evaluation of potential purchased power options incorporate the costs  
19 associated with the incremental debt leverage that results from such contracts.  
20 It is sound economic and financial principles, not FPL's current financial  
21 position, that compels the FPSC to include the equity penalty in evaluating the  
22 alternative power supply options in this case.

23

1       **Q. Did Mr. Maurey take issue with the methodology or financial**  
2       **assumptions that FPL used to calculate the equity penalty?**

3       A. No. Mr. Maurey had no quarrel with the methodology used to calculate the  
4       equity penalty, and after reviewing FPL's financial assumptions, including the  
5       capital structure and component costs of debt and equity, Mr. Maurey  
6       specifically concluded that *these assumptions are reasonable for purposes of*  
7       *this proceeding* (p. 29).

8  
9       **Q. Did Mr. Maurey disagree with your testimony that the investment**  
10       **community considers the financial impacts of purchased power?**

11       A. No. Mr. Maurey specifically acknowledged (*e.g.*, p. 24) that reliance on  
12       purchased power contracts is incorporated in the evaluation of a utility's  
13       financial position. Indeed, his Exhibit ALM-1 details rating agency  
14       adjustments made to account for purchased power contracts.

15  
16       **Q. Do you believe a detailed review of FPL's financial policies or risk factors**  
17       **is necessary or appropriate to evaluate the reasonableness of the equity**  
18       **penalty adjustment?**

19       A. No. Clearly, a detailed evaluation of a utility's financial policies, including  
20       capital structure and other risk factors, is a time consuming and highly  
21       contentious process. Such an ambitious undertaking is simply not required or  
22       justified by the issues that are properly the subject of this case. Indeed, Mr.  
23       Maurey granted that the assumptions used by FPL to calculate the equity

1 penalty were reasonable. As noted in my direct testimony, the equity ratio  
2 used to calculate the equity penalty is also consistent with the adjusted capital  
3 structure recognized by the Commission in approving the revenue sharing  
4 agreements included in Orders PSC-02-0501-AS-EI and PSC-99-0519-AS-EI.  
5 These orders provide that, for surveillance reporting purposes, FPL's equity  
6 ratio will be monitored on the basis of an "adjusted equity ratio" as  
7 established by the Standard & Poor's methodology. The adjusted equity ratio  
8 used by the Commission for surveillance reporting purposes is consistent with  
9 the target capital structure employed in the economic analysis of the  
10 Supplemental RFP, including the equity penalty calculations. Just as  
11 importantly, whatever Mr. Maurey's views on FPL's financial policies might  
12 be, they do not change the fact that (other things being equal) new purchased  
13 power contracts imply an increase in the utility's financial costs solely  
14 attributable to such contracts and totally unrelated to the utility's self-build  
15 options.

16  
17 **Q. Does Mr. Maurey's discussion of past cases at the FPSC (pp. 6-9) support**  
18 **his contention that the equity penalty should be disregarded in this**  
19 **proceeding?**

20 **A.** No. Mr. Maurey's review of prior FPSC decisions confirms what I concluded  
21 in my direct testimony; namely, that the FPSC has previously recognized that  
22 it is reasonable to consider the financial impact that purchased power  
23 contracts have on the utility when evaluating supply alternatives. Indeed,

1 while Mr. Maurey quotes extensively from the findings of the hearing officer  
2 in Docket No. 910759-EI, he failed to note that the FPSC concluded in Order  
3 No. 25805 that:

4  
5 Credit rating agencies recognize that, without compensating  
6 factors, increased reliance on purchased power obligations may  
7 lower coverage ratios. A utility can compensate for the  
8 financial consequences of increased purchased power  
9 obligations by increasing its equity ratio (reducing its debt  
10 leverage), increasing its earnings, or petitioning for modified  
11 regulatory treatment that allows the utility an opportunity to  
12 earn a return on this capacity.

13  
14 Mr. Maurey also attempts to distinguish between past proceedings and the  
15 current case based on the relative magnitude of the equity penalty adjustment,  
16 and arguing that it *was not subject to careful financial analysis* (p. 10). While  
17 I cannot comment on Mr. Maurey's suggestion that the FPSC based its earlier  
18 decisions on less than "careful" analyses; the more salient point is that the  
19 equity penalty concept has already been debated, understood, and  
20 incorporated by the Commission in the evaluation of power supply  
21 alternatives (*e.g.*, Order No. PSC-01-0029-FOF-EI (January 5, 2001)). The  
22 relative magnitude of the equity penalty, which obviously fluctuates case-by-  
23 case and contract-by-contract, has no bearing on the conceptual validity of the

1 adjustment, which the FPSC has previously recognized and adopted.

2

3 **Q. Do you agree with Mr. Maurey's observation that the purpose of adjusted**  
4 **financial ratios published by bond rating agencies is not to advise state**  
5 **regulators (p. 12)?**

6 A. Yes. The focus of bond rating agencies such as Standard & Poor's (S&P),  
7 naturally enough, is to endeavor to provide investors with the best information  
8 possible regarding the financial integrity of the companies under their review.  
9 To this end, S&P has repeatedly noted that contractual payments under long-  
10 term purchased power contracts imply greater financial leverage and reduce a  
11 utility's financial flexibility. Because of the significant impact associated with  
12 these commitments, S&P incorporates the debt equivalent portion of  
13 purchased power contracts in its assessment of a utility's credit strength and  
14 reports adjusted ratios that investors consider in assessing their required rates  
15 of return.

16

17 The fact that S&P is clearly not in the business of advising state regulators  
18 says nothing about the real impact that purchased power has on investors'  
19 evaluation of a utility's financial strength or the need to account for this in  
20 analyzing alternative power supply options, as FPL has done. In the course of  
21 their deliberations, regulators routinely consider and rely on information  
22 published by the investment community, including bond ratings, growth  
23 projections, and other financial analyses. An example is the excerpt from the

1 FPSC Order No. 25805 I quoted earlier. Obviously, the fact that investment  
2 advisory services do not make recommendations to regulators or actively seek  
3 to sway the outcome of administrative proceedings does not prevent the FPSC  
4 from acknowledging and/or utilizing information and methodologies from  
5 sources such as S&P. Mr. Maurey's allegation that FPL has used S&P's  
6 methodology *for a purpose it was never intended* (p. 4) could not be further  
7 from the truth. As the quote from Order No. PSC-1713-TRG-EG on page 8 of  
8 his testimony makes abundantly clear, the FPSC has already weighed in on  
9 this very issue by recognizing S&P's approach to measuring the effect that  
10 purchased power has on a utility's financial leverage.

11  
12 **Q. Are investors' views regarding the quality of regulation in Florida (p. 15-**  
13 **16) relevant in determining whether an equity penalty adjustment is**  
14 **warranted?**

15 A. No. I acknowledge that investors regard the FPSC as having been generally  
16 evenhanded in the regulation of electric utilities in Florida. Also, I do not take  
17 issue with Mr. Maurey's description of certain of the mechanisms under  
18 which FPL recoups its purchased power costs from ratepayers. While Mr.  
19 Maurey's discussion may be informative, however, it has no bearing  
20 whatsoever on the reasonableness of FPL's proposed equity penalty. As  
21 discussed at length in my direct testimony, the equity penalty is required to  
22 recognize the financial leverage, and associated costs, that occur when a  
23 utility enters into a contractual agreement for purchased power. This financial



1 obligation, in the form of off-balance sheet liabilities and reduced financial  
2 flexibility, arises irrespective of whether regulation in Florida is deemed  
3 "supportive." Indeed, Mr. Maurey's exhibits show that the rating agencies  
4 make this adjustment irrespective of the particular state jurisdiction.  
5 Regulatory quality undoubtedly affects the absolute level of risk faced by  
6 FPL's investors, but it does not change the relative impact that adding  
7 additional purchased power contracts has on the Company's debt leverage.  
8 The equity penalty adjustment incorporated by FPL is a logical and accepted  
9 means to reflect the economic cost of this leverage in a balanced comparison  
10 of purchased power with self-build options.

11  
12 **Q. Please address Mr. Maurey's argument that FPL's corporate credit**  
13 **rating is unlikely to be downgraded as a result of entering into new**  
14 **contracts for purchased power.**

15 A. Because investors recognize the additional financial leverage that  
16 accompanies obligations under purchased power contracts, it has been  
17 necessary for FPL to maintain a relatively greater proportion of equity capital  
18 in order to support its credit standing. FPL's financial policies have explicitly  
19 recognized the leverage implicit in existing purchased power contracts in  
20 order to avoid a deterioration in the Company's financial integrity. As a  
21 result, it would come as no surprise that some increment of additional  
22 purchased power obligations might be accommodated without immediate  
23 negative actions on the part of the bond rating agencies. However, every

1 additional purchased power obligation increases the Company's leverage. It  
2 cannot reasonably be maintained that it is only the last contract before a  
3 downgrade that adversely affected the Company's financial integrity. Indeed,  
4 it is entirely conceivable that investors' required rates of return could still rise,  
5 even without a downgrade.

6  
7 In any event, neither FPL nor I have ever claimed that it is necessary to  
8 incorporate the equity penalty in order to avoid a downgrade in FPL's existing  
9 bond ratings. Rather, as I made clear in my direct testimony, in order to  
10 conduct a meaningful economic evaluation of power supply alternatives, it is  
11 necessary to recognize quantifiable differences between individual proposals.  
12 The incremental costs that are associated with additional financial leverage  
13 arising from purchased power contracts are one such difference that has been  
14 recognized by the investment community and the FPSC. Similarly, Mr.  
15 Maurey also described the impact of purchased power on the utility's financial  
16 position as an *incremental risk* (p. 24). Failing to incorporate the associated  
17 costs will result in a distorted comparison that would effectively subsidize  
18 developers of projects being compared to FPL's self-build options. Clearly,  
19 given the current financial condition in which many of the independent power  
20 producers find themselves, they would be most anxious for the FPSC to  
21 approve such a subsidy. That aside, while one additional purchased power  
22 contract may not necessarily lead to an immediate downgrade of the  
23 Company's debt, this is only because FPL has maintained (and the

1 Commission has recognized) financial policies that reflect the realities of  
2 purchased power contracts. There is simply no basis to ignore those financial  
3 realities and costs in evaluating the options available to meet FPL's current  
4 needs, irrespective of whether the additional imputed debt actually results in a  
5 downgrading of FPL by the bond rating agencies.

6  
7 **Q. Does any subsequent decline in FPL's existing purchased power**  
8 **commitments negate the need to consider the equity penalty in this case?**

9 A. No. FPL's off-balance sheet obligations for purchased power may decline at  
10 some point in the future, but this does not alter the fact that, all other things  
11 equal, additional purchased power contracts impose incremental financial  
12 costs not associated with FPL's self-build options. The debt equivalent  
13 associated with purchased power alternatives submitted in response to the  
14 Supplemental RFP imply financial costs that would be ignored if Mr.  
15 Maurey's recommendation were to be adopted. The subsequent reduction in  
16 commitments under existing purchased power contracts may ultimately lead  
17 to a change in FPL's actual capital structure going forward; however, the  
18 impact of those reductions would occur irrespective of whether FPL builds or  
19 buys in this instance. Therefore, the analysis of the impact of purchased  
20 power in FPL's Supplemental RFP is properly done on an incremental basis.

21  
22 **Q. Please comment on the relevance of the regression analysis described on**  
23 **pages 20-21 of Mr. Maurey's testimony.**

1       A.     As a former teacher of business statistics, I have a natural urge to critique the  
2             study on technical grounds. But to do so would be an unnecessary diversion  
3             because the study simply does not address the salient issue of whether the cost  
4             of off-balance sheet obligations should be recognized in making a rational  
5             choice between utility-built plants and purchased power contracts. Setting  
6             aside a number of serious methodological flaws and shortcomings that  
7             compromise the statistical results, including the very limited sample size (7  
8             holding companies) and the staleness of the data (FPL's bond rating is no  
9             longer AA-), this exercise and the conclusions Mr. Maurey draws from it say  
10            nothing about the validity of the equity penalty adjustment.

11

12           As noted earlier, the additional leverage and financing costs associated with  
13           purchased power arise irrespective of bond ratings or changes in credit  
14           standing. These financial obligations, in the form of off-balance sheet  
15           liabilities, have been recognized by the investment community and the FPSC.  
16           Even ignoring the flaws in the analysis presented by Mr. Maurey, the degree  
17           of statistical association between purchased power and bond ratings has no  
18           bearing on the additional costs of financial leverage that accompany  
19           incremental purchased power contracts and the off-balance sheet obligations  
20           they represent. Indeed, the only significance of the regression analysis for this  
21           case is that the utility-specific equity ratio used in the study was adjusted for  
22           these obligations – confirming that Mr. Maurey regards these adjustments for  
23           purchased power contracts as an objective benchmark for their financial

1 impact.

2

3 **Q. Does the comparison described on pages 24-25 of Mr. Maurey's**  
4 **testimony accurately portray the impact of purchased power on utility**  
5 **financial policies?**

6 A. No. Mr. Maurey attempts to correlate the equity ratios presented in Exhibit  
7 ALM-1 with fuel mix data shown on Exhibit ALM-5, arguing that 10 of the  
8 companies actually have a greater reliance on purchased power than FPL  
9 while maintaining lower debt ratios. Based on this observation, he concludes  
10 that FPL already has a sufficient equity cushion to compensate for purchased  
11 power risks. However, Mr. Maurey's analysis ignores the purchased power  
12 commitments that give rise to the financial obligations considered by FPL's  
13 equity penalty adjustment.

14

15 As noted on Exhibit ALM-5, Mr. Maurey obtained his data regarding fuel mix  
16 from The Value Line Investment Survey (Value Line). While Value Line  
17 regularly reports statistics concerning the relative share of the utility's total  
18 energy requirements met by purchased power, the investment advisory service  
19 makes no distinction between the many alternative forms of power purchases.  
20 Apart from long-term contracts, utilities also obtain power through short-term  
21 agreements, purchases on the wholesale spot market, arrangements for  
22 seasonal exchanges, economy energy purchases, as well as other sources. As  
23 S&P has clearly recognized, the implications for a utility's financial leverage

1 vary significantly depending on the nature of the power purchase agreement  
2 and the degree of firmness associated with any underlying payment  
3 obligations. Obviously, while power purchased on the wholesale spot markets  
4 would be reflected in a utility's resource mix, it has no fixed payment  
5 requirements and, therefore, no debt characteristics. As a result, it would not  
6 give rise to the off-balance sheet liabilities that FPL must account for in  
7 determining its financial policies.

8  
9 In addition, there are other significant differences between FPL and the  
10 utilities referenced by Mr. Maurey that illustrate the fallacy of his overly  
11 simplistic comparison. As Mr. Maurey noted, for example, NSTAR and  
12 DQE, Inc. have both sold all of their generating assets. The fact that these  
13 firms no longer participate in the power generation segment of the electric  
14 utility industry implies a different set of operating risks than that faced by an  
15 integrated utility such as FPL. Thus, while there may be logical reasons for  
16 the distinctions in financial policies observed by Mr. Maurey, they are  
17 unrelated to the debt equivalent portion of firm purchased power contracts that  
18 is the basis for FPL's equity penalty adjustment.

19  
20 **Q. Is there a more meaningful comparison that illustrates the flaw in Mr.**  
21 **Maurey's logic?**

22 A. Yes. In order to capture the financial impacts of power purchase contracts,  
23 such as those at issue in this case, a more meaningful benchmark is with the

1 off-balance sheet liability for each utility, as calculated by S&P. While FPL's  
2 capital structure is more conservative than those of the firms singled out by  
3 Mr. Maurey, a review of his Exhibit ALM-1 reveals that the Company's off-  
4 balance sheet liabilities attributable to purchased power contracts also far  
5 exceed those attributable to these other utilities. Indeed, the \$1.2 billion in  
6 off-balance sheet debt equivalents reported by Mr. Maurey for FPL is the  
7 highest of all 43 companies contained on Exhibit ALM-1 and exceeds the  
8 average for Mr. Maurey's 10-company group by over 3 times. While this  
9 comparison does not account for other factors influencing a utility's choice of  
10 capital structure (e.g., exposure to nuclear generation or service area  
11 characteristics), it is consistent with FPL's decision to incorporate the equity  
12 penalty in its economic evaluations of power supply options.

13  
14 **Q. Do you believe the Wall Street Journal article referenced in your direct**  
15 **testimony (p. 14, ln. 3-7) is "off point" in this case, as Mr. Maurey alleges**  
16 **(pp. 25-26)?**

17 **A.** No. There is little debate that recent events in the power industry, including  
18 the debacle in California and the collapse of Enron have focused investors'  
19 attention sharply on the finances of all industry participants, including  
20 integrated electric utilities such as FPL. As S&P observed in an April 15,  
21 2002 publication entitled "Credit Policy Update: Factoring Off-Balance-Sheet  
22 Financing Into the Ratings Process":  
23

1 Standard & Poor's long-standing practice has been to factor  
2 off-balance-sheet financings into the assessment of a  
3 company's financial profile and creditworthiness, and it has  
4 specific criteria dealing with various types of these activities.

5 Recently, such financings, their disclosure, and their  
6 impact on an issuer's credit quality have attracted wider interest  
7 and have become the subject of intense scrutiny by Congress,  
8 the SEC, the FASB, and the press.

9  
10 Mr. Maurey is correct that investors concerns are heightened for firms in the  
11 energy merchant industry. Indeed, this is consistent with the testimony of Mr.  
12 Moray Dewhurst, who discusses the current state of the merchant generation  
13 market and explains the importance of financial viability as a non-price factor  
14 in evaluating power supply alternatives.

15  
16 **Q. Has FPL based the equity penalty on a presumption that purchasing**  
17 **power is risky and building new capacity is not, as Mr. Maurey suggests**  
18 **(p. 27)?**

19 A. No. I am not aware of a single statement in my testimony, or in the testimony  
20 of FPL's other witnesses that would support Mr. Maurey's allegation. Clearly,  
21 adding capacity – whether in the form of self-build capacity additions or  
22 through purchased power contracts – implies a degree of risk to the utility.  
23 The equity penalty does not suppose that the self-build option is risk-free;



1           rather, its only purpose is to capture the incremental costs associated with the  
2           financial realities of purchased power so that meaningful economic  
3           comparisons can be made between supply alternatives. Similarly, Mr.  
4           Maurey's assertion that FPL *has completely ignored other factors* (p. 20) in its  
5           economic comparison of the self-build versus buy options is also incorrect.  
6           FPL used the same 55% incremental equity ratio in analyzing its self-build  
7           options that it used to evaluate the purchase power options, including the  
8           equity penalty calculation. In addition, risks associated with obtaining  
9           capacity and operating and maintaining the utility system are incorporated into  
10          the discount rate, which is based upon the Company's weighted average cost  
11          of capital, used by FPL in its economic comparisons. While there are a  
12          panoply of considerations that impact investors' required rate of return and, in  
13          turn, the discount rate – including risks related to procuring power supplies –  
14          this provides no basis for ignoring the incremental costs that additional  
15          purchased power contracts impose on the utility. Indeed, the fact that the  
16          investment community has focused its attention on understanding and  
17          quantifying the financial risks inherent with purchased power commitments  
18          only serves to emphasize the importance of incorporating the equity penalty in  
19          FPL's economic analyses.

20  
21          **Q. Is there an alternative to the equity penalty approach that can be used to**  
22          **make an "apples to apples" comparison of the cost of utility-built**  
23          **generation and long-term power purchase contracts?**

1           A.     Yes. An alternative would be to calculate the revenue requirements of the  
2           utility-built option based on a capital structure with the same incremental cost  
3           impact on the utility as adding off-balance sheet financing from a long-term  
4           power purchase. Properly done, this approach would have results identical to  
5           the equity penalty calculation in allowing a comparison of costs net of  
6           financing. This form of comparison is often used in the unregulated world.  
7           For example, I am a part owner of a print shop in Austin. We usually have the  
8           option of leasing or buying major equipment like printing presses. If we lease  
9           the equipment, banks consider the off-balance sheet obligation in determining  
10          how much our business can borrow given our level of equity. In comparing  
11          the cost of a lease with the purchase alternative, we usually assume that the  
12          purchase would be financed mostly with debt so that the effect on our  
13          borrowing capacity is the same. We could just as validly assume an equity  
14          penalty associated with the lease. This adjustment is necessary so that the  
15          financing decision and the investment decision are considered separately.  
16          When the print shop enters a lease commitment for equipment, it is investing  
17          in new capacity and increasing its leverage. The financing change (more  
18          leverage) and investment (new equipment) are considered by comparing the  
19          same investment decision (purchase equipment) with a similar financing  
20          effect (mostly debt financing). If FPL enters a long-term firm commitment  
21          for generation, that also represents an investment in new capacity and a  
22          financial impact through increased leverage. The equity penalty essentially  
23          reverses out the financial impact so that the pure investment decision can be

1 compared.

2

3 **Q. Why not adjust for the financing effect by adjusting the discount rates**  
4 **used to compare the self-build and long-term contract options?**

5 A. In the regulatory arena, the common practice is to evaluate investments using  
6 the utility's target capital structure, as FPL has done here. This approach is  
7 well established because it ties into regulatory policies for determining fair  
8 rates of return. Moreover, an objective benchmark for estimating the equity  
9 penalty is available from bond rating agencies that have developed  
10 adjustments independent of regulatory proceedings. As discussed earlier, the  
11 FPSC has adopted the equity penalty approach in the past, and the  
12 methodology used to calculate the equity penalty in this case is completely  
13 consistent with that precedent.

14

15 **Q. Is it always necessary to make an equity penalty adjustment when**  
16 **comparing firm power alternatives?**

17 A. No. It is only necessary when the alternatives being considered differ  
18 materially in their impact on effective financial leverage and the financing  
19 costs that result. If, for example, all of the alternatives involve the same  
20 degree of off-balance sheet obligations, the equity penalty adjustment is not  
21 necessary to make an "apples to apples" comparison. Hence, it does not  
22 surprise me that FPL affiliate companies might report no experience with the  
23 equity penalty concept, as Mr. Maurey notes (p. 12). This certainly might be

1 expected if those companies are participating in markets where the load  
2 serving entity has divested all of its generation and therefore must take power  
3 exclusively from outside proposals.

4 If, on the other hand, as is the case here, entering a purchased power contract  
5 is being compared to a self-build option financed at the utility's target capital  
6 structure, then the extra financial costs associated with the incremental off-  
7 balance sheet obligations must be considered to make a fair and rational  
8 comparison. To do otherwise would have the effect of artificially lowering  
9 the true cost of the purchase alternatives. The FPSC practice of equilibrating  
10 the financial impact of alternatives is a sound regulatory policy that should be  
11 used by all jurisdictions making similar comparisons between utility-built  
12 plants and purchase power commitment options with material off-balance  
13 sheet obligations inherent in their structure.

14

15 **Q. Why does Mr. Slater reject the equity penalty concept?**

16 A. He claims that there is no reason to recognize only the financial risk of long-  
17 term purchase power contracts to the exclusion of other risks associated with  
18 FPL's self-build options (p. 7). He also suggests that FPL has a small and  
19 decreasing reliance on purchased power (p. 8).

20

21 **Q. Does the equity penalty imply that only one of a "multitude of risks" is  
22 being considered, as claimed by Mr. Slater?**

23 A. No. The equity penalty is not designed to consider the impact of some future

1 potential risk; rather, its purpose is to capture the known cost of increased  
2 financial leverage due to off-balance sheet obligations. If this cost were  
3 ignored, the result would be an inaccurate comparison of utility-built  
4 generation with other options.

5

6 **Q. Is the need for the equity penalty adjustment a function of the amount**  
7 **and trend of FPL's purchased power?**

8 A. No. As discussed earlier relative to Mr. Maurey, the equity penalty is related  
9 not to existing purchased power agreements per se, but to the increased  
10 financial leverage and resulting cost associated with incremental off-balance  
11 sheet obligations. Without the equity penalty, the incremental cost of the  
12 additional off-balance sheet liability associated with new purchased power  
13 contracts would be ignored, undermining the objective of making an accurate  
14 economic comparison of alternatives, and effectively subsidizing the  
15 proposals of independent power producers. As to the expiration of existing  
16 purchased power obligations, any resulting changes in the capital structure of  
17 FPL would occur irrespective of whether FPL builds or buys in this instance.  
18 Therefore, the analysis of the impact of purchased power in FPL's  
19 Supplemental RFP is properly focused on this particular buy or build decision.

20

21 **Q. Does this conclude your rebuttal testimony in this case?**

22 A. Yes, it does.

1 MR. GUYTON: May we have a brief minute to organize  
2 our presentation here?

3 COMMISSIONER DEASON: Yes, you may. We will just  
4 stay in place, and when you are ready to proceed let the chair  
5 know.

6 MR. GUYTON: Thank you.

7 (Off the record.)

8 MR. BUTLER: Commissioner Deason, Mr. Yeager would  
9 will be next and we are ready to go with him whenever you want  
10 us to proceed.

11 COMMISSIONER DEASON: Very well, you may call your  
12 witness.

13 MR. BUTLER: Mr. Yeager has previously been sworn.

14 WILLIAM L. YEAGER

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

17 DIRECT EXAMINATION

18 BY MR. BUTLER:

19 Q Would you state your name and address for the record?

20 A Yes. My name is William Yeager, it is 700 Universe  
21 Boulevard, Juno Beach, Florida.

22 Q And have you previously testified in this docket?

23 A Yes, I have.

24 Q Do you have before you prefiled rebuttal testimony  
25 consisting of six pages?

1 A Yes, I do.

2 Q Was the testimony prepared under your direction,  
3 supervision, or control?

4 A Yes, it was.

5 Q Do you adopt this as your prefiled rebuttal testimony  
6 in this proceeding?

7 A Yes, I do.

8 MR. BUTLER: I would ask that Mr. Yeager's prefiled  
9 rebuttal testimony be inserted into the record as though read.

10 COMMISSIONER DEASON: Without objection, it shall be  
11 so inserted.

12 MR. BUTLER: And he has no exhibits to it, so there  
13 is no need to identify a document with an exhibit number.

14 COMMISSIONER DEASON: Very well.  
15  
16  
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23  
24  
25

1                   **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

2                   **FLORIDA POWER & LIGHT COMPANY**

3                   **REBUTTAL TESTIMONY OF WILLIAM L. YEAGER**

4                   **DOCKET NO. 020262-EI, 020263-EI**

5                   **SEPTEMBER 11, 2002**

6

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

8   A.     My name is William L. Yeager. My business address is Florida Power &  
9           Light Company, Power Generation Division, 700 Universe Boulevard, Juno  
10          Beach, Florida, 33408-0420.

11

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

13 A.     I am employed by Florida Power & Light Company ("FPL" or the  
14          "Company") as General Manager of Florida Projects.

15

16 **Q.     Have you previously filed testimony in this docket?**

17 A.     Yes, I have.

18

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

20 A.     The purpose of my testimony is to comment on the assertions on page 9, lines  
21          16-23 of PACE witness Kenneth Slater's testimony that the assumed heat  
22          rates for Manatee Unit 3 and Martin Unit 8 are overly optimistic because they  
23          appear to describe the units operating in "new and clean" condition and that



1 the projected availability for both units is aggressive because it assumes a  
2 maintenance duration of one week per year and a 1% equivalent forced outage  
3 rate (EFOR).

4  
5 **Q. Is Mr. Slater correct in concluding that FPL used “heat rate assumptions**  
6 **for its Martin 8 and Manatee 3 units which appear to describe the units**  
7 **operating in ‘new and clean’ condition”?**

8 A. No, he is not. The heat rate assumed for those units is not based on “new  
9 and clean” conditions but rather reflects realistic projections of unit  
10 performance based upon FPL experience as a “world-class” operator of  
11 combined cycle facilities. The 6850 Btu/kWh base heat rate, 8770 Btu/kWh  
12 incremental heat rate for duct firing, and 5600 Btu/kWh peak firing  
13 incremental heat rate that were assumed for the proposed Martin Unit 8 and  
14 Manatee Unit 3 options are all expected average heat rates between overhauls.  
15 Each of these heat rates takes into account FPL’s extensive experience and  
16 world class knowledge base in combined cycle technology and projects  
17 efficiency changes in the unit’s performance following commercial  
18 acceptance by FPL.

19  
20 **Q. What basis has FPL used for projecting the efficiency changes of Martin**  
21 **Unit 8 and Manatee Unit 3 over time?**

22 A. Power plant owners with limited operating experience to draw upon usually  
23 rely on the original equipment manufacturer’s (OEM’s) guaranteed

1 performance when projecting the operating characteristics of a facility. Since  
2 most OEMs put commercial margins on their guarantees, projections of  
3 facility performance in these instances will inherently be conservative unless  
4 the operators have poor maintenance programs.

5

6 FPL, on the other hand, has extensive experience with the design, operation  
7 and maintenance of combined cycle power plants. Many of our personnel  
8 have been intimately involved in the evolution of the GE 7FA DLN II  
9 combustion turbine (CT) technology, from the first four Model 7221 CTs to  
10 be sold by GE, with their 2,350° F firing temperatures, to the eighteen 3<sup>rd</sup>  
11 generation Model 7241 CTs, with their 2,420° F firing temperatures, that now  
12 round out our fleet. FPL personnel also have extensive experience with the  
13 design, operation, and maintenance of heat recovery steam generators, steam  
14 turbine generators, condensers, main cycle pumps, etc. This world class  
15 knowledge base in combined cycle technology affords us the opportunity to  
16 predict unit performance using our own historical operating data.

17

18 **Q. Is Mr. Slater correct is stating that the projected unit availability is**  
19 **aggressive?**

20 A. When compared to the industry as a whole, these numbers may be aggressive,  
21 but FPL's fleet availability numbers have always surpassed the industry norm.  
22 For FPL, the projected average EFOR and average maintenance outage  
23 duration over 30 years of operation are reasonably achievable.

1           At the heart of our Martin Units 3 and 4 are the first four GE 7FA CTs to enter  
2           commercial operation. As with any new cutting edge technology, growing  
3           pains were inevitable for a combined cycle unit based on these first-generation  
4           7FA CTs. Even so, from January 1, 1996 to August 31, 2002, Martin Units 3  
5           and 4 averaged a commendable 1.7% EFOR, with an average planned outage  
6           duration of 9.1 days per year.

7  
8           Over the years, we have continued to retrofit these units with design  
9           enhancements from the 3<sup>rd</sup> generation 7FA CTs that are proposed for Martin  
10          Unit 8 and Manatee Unit 3. Since these retrofit jobs have accounted for many  
11          of the historical planned outage days at Martin Units 3 and 4, going forward  
12          FPL expects that the planned outage factor associated with non-routine CT  
13          maintenance would be lower for the proposed units than historically  
14          experienced with Martin Units 3 and 4.

15  
16          The duration of routine maintenance outages for the proposed units should  
17          also be better than the historical average of Martin Units 3 and 4 due to design  
18          evolution in the 3<sup>rd</sup> generation 7 FA CT and the maturation of FPL's  
19          combined cycle outage processes. For example, refinements in the  
20          compressor wash system have reduced a typical maintenance outage by 18  
21          hours (0.75 days) over that possible with Martin Units 3 and 4. Also, the  
22          maturation of FPL's own outage processes has led to efficiency improvements  
23          with dramatic step-change reductions in outage duration. As an example of

1           one of these improvements, FPL is now able to perform a combustor  
2           inspection, which occurs approximately every 1-2 years, in about 4 days less  
3           than in the past. Since the CT water wash enhancements and combustor  
4           outage process improvements alone equate to an average annual reduction of  
5           3 days per year (assuming a combustor outage every 1.5 years) as compared to  
6           the annual average historical Martin 3 and 4 outage duration of 9.1 days, it is  
7           reasonable to project that the maintenance outage duration for Martin Unit 8  
8           and Manatee Unit 3 will average 1 week per year.

9  
10           With the recent incorporation of 3<sup>rd</sup> generation CT technology into the  
11           existing Martin 3 and 4 machines, the already commendable reliability of  
12           these units has improved. Also, with eight years of operating experience, our  
13           personnel are more than ever attuned to the nuances of operating these units.  
14           These factors, in addition to many others, have contributed to outstanding  
15           annual forced outage rates for Martin Units 3 and 4 in recent years. For 2000  
16           and 2001, the EFOR for these units averaged 0.14%, a substantial  
17           improvement over the 6-yr average of 1.7% described above. These recent  
18           performance improvements should be indicative of the performance of Martin  
19           Unit 8 and Manatee Unit 3. Accordingly, our view going forward is that  
20           EFOR targets of 1% are reasonable and achievable for the proposed units.

1 **Q. What role does FPL's practice of collecting real-time data from its**  
2 **combined cycle units play in bolstering the validity of FPL's projected**  
3 **base heat rate and unit availability?**

4 A. As I mentioned in my pre-filed direct testimony, FPL operates an award-  
5 winning Fleet Performance and Diagnostic Center (FPDC) in Juno Beach,  
6 Florida. The proposed Martin Unit 8 and Manatee Unit 3 will be connected to  
7 the FPDC, allowing for real-time centralized monitoring of key unit operating  
8 parameters. Live video links between the FPDC and plant control rooms will  
9 allow for immediate discussion, prevention, and resolution of problems.

10

11 With this capability, and our extensive lessons-learned knowledge base, we  
12 are able to maximize the time that our units are capable of operating at peak  
13 efficiency. Identifying a problem in its incipient stage affords us the  
14 opportunity to perform proactive maintenance before the situation progresses  
15 to a partial or full forced outage, which will help us to achieve our projected  
16 1% forced outage rate for the proposed Martin Unit 8 and Manatee Unit 3.

17

18 **Q. Does that conclude your rebuttal testimony?**

19 A. Yes it does.

1 BY MR. BUTLER:

2 Q Would you please summarize your testimony.

3 A Yes. It has been suggested in testimony filed with  
4 the Commission that FPL was optimistic in its development of  
5 the unit heat rates and aggressive in the projected unit  
6 availability for both Manatee Units 3 and Martin Unit 8. As I  
7 have outlined in the summary and my direct testimony, FPL draws  
8 from its experience as a world class constructor and operator  
9 of power plants, which includes experience spanning more than  
10 25 years with combined cycle plants.

11 The heat rate assumed for the two units 1229 not  
12 based on new and clean conditions as speculated by Mr. Slater's  
13 testimony. The heat rate 1229s presented by FPL are expected  
14 average heat rates between overhauls. The projected unit  
15 availability may appear to be aggressive when compared to the  
16 industry as a whole, but one must consider FPL's extensive  
17 history and track record as a whole -- track record in the  
18 operation and maintenance of combined cycle plants. I have  
19 presented both maintenance outage durations and E4 date from  
20 our Martin Units 3 and 4 combined cycle plants which  
21 demonstrate our maintenance outage durations and E4 targets are  
22 not only reasonable, but achievable.

23 In conclusion, FPL's heat rate 1229 not new or clean,  
24 nor 1229 the projected unit availability aggressive as has been  
25 suggested by Mr. Slater in his testimony.

1 Q Does that complete your summary?

2 A Yes, sir.

3 MR. BUTLER: I tender Mr. Yeager for  
4 cross-examination.

5 COMMISSIONER DEASON: Very well. Mr. Moyle.

6 MR. MOYLE: I just have one or two quick questions,  
7 if I could approach?

8 COMMISSIONER DEASON: Yes.

9 When you return, can you identify what you just  
10 handed to the witness.

11 MR. MOYLE: Yes. I have handed him what has been  
12 previously marked and accepted into evidence as 1992 business  
13 plan of PGB, and I have referred the witness to a particular  
14 page.

15 CROSS EXAMINATION

16 BY MR. MOYLE:

17 Q Could you please identify for the record the page  
18 that I have referred you to?

19 A It 1229 Page 8.

20 Q Okay. Read for me, if you would, the note at the top  
21 that 1229 highlighted?

22 A Working capital cost and percent new capacity where  
23 PGBU is low bidder were deleted as performance measures.

24 Q Who 1229 PGBU?

25 A PGBU is Power Generation Business Unit, which was

1 what the power generation division was called at this time  
2 frame.

3 Q Am I reading this note correctly to indicate that you  
4 did not use performance data when PGU 1229 the low bidder?

5 A I don't honestly know what the note means. I'm  
6 trying to sort it out here.

7 CHAIRMAN JABER: As you are reviewing that, Mr.  
8 Yeager, let me just tell folks that the doors automatically  
9 lock at 6:00 p.m. So as you are leaving and putting things in  
10 your car, make sure someone else 1229 holding the door for you,  
11 because you will not be able to get back into the building  
12 after 6:00. And depending on who you are, that may not be a  
13 bad thing. We need witnesses.

14 A (Continuing) I'm not sure what this note 1229 about.

15 Q So you can't testify to it one way or the other 1229,  
16 is that right?

17 A Right.

18 MR. MOYLE: I have nothing further.

19 CHAIRMAN JABER: Mr. McGlothlin.

20 CROSS EXAMINATION

21 BY MR. MCGLOTHLIN:

22 Q Mr. Yeager, at Page 4 of your rebuttal testimony,  
23 beginning at Line 2, to paraphrase you say that with any new  
24 cutting edge technology growing pains are inevitable 1229. Is  
25 that a fair statement?



1 A Yes.

2 Q 1229 the peak firing mode a new offering by GE?

3 A Yes, it is a relatively new offering.

4 Q And was the recent Sanford repowering FPL's first  
5 experience with a four-on-one?

6 A Their recent Sanford -- right, that 1229 true.

7 MR. McGLOTHLIN: No further questions.

8 MR. PERRY: None.

9 CHAIRMAN JABER: Staff.

10 MS. BROWN: No questions.

11 CHAIRMAN JABER: Commissioners? Thank you, sir. And  
12 there were no exhibits.

13 (Transcript follows in sequence in Volume 10.)

14

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25

1 STATE OF FLORIDA     )  
2                             :     CERTIFICATE OF REPORTER  
3 COUNTY OF LEON        )

4  
5       I, JANE FAUROT, RPR, Chief, Office of Hearing Reporter  
6 Services, FPSC Division of Commission Clerk and Administrative  
7 Services, do hereby certify that the foregoing proceeding was  
8 heard at the time and place herein stated.

9       IT IS FURTHER CERTIFIED that I stenographically  
10 reported the said proceedings; that the same has been  
11 transcribed under my direct supervision; and that this  
12 transcript constitutes a true transcription of my notes of said  
13 proceedings.

14       I FURTHER CERTIFY that I am not a relative, employee,  
15 attorney or counsel of any of the parties, nor am I a relative  
16 or employee of any of the parties' attorney or counsel  
17 connected with the action, nor am I financially interested in  
18 the action.

19       DATED THIS 7TH DAY OF OCTOBER, 2002.

20


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23

24

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