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

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 6

PAGES 681 THROUGH 827

PROCEEDINGS:	HEARING
BEFORE:	CHAIRMAN LILA A. JABER COMMISSIONER J. TERRY DEASON COMMISSIONER BRAULIO L. BAEZ COMMISSIONER MICHAEL A. PALECKI COMMISSIONER RUDOLPH "RUDY" BRADLEY
DATE:	Thursday, October 3, 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.)

I N D E X

WITNESSES

EXHIBITS

NUMBER:		ID.	ADMTD.
22			710
23	DRS-1 through DRS-3	711	748
24	AST-1 and AST-2	775	823
25	Agreement between Sedway Consulting and Steel Hector	823	823

P R O C E E D I N G S

(Transcript continues in sequence from Volume 5.)

WILLIAM E. AVERA

continues his testimony under oath from Volume 5:

COMMISSIONER BRADLEY: May I ask a follow-up to that?

COMMISSIONER DEASON: 13.25. I'm sorry?

THE WITNESS: 15. 13.15.

COMMISSIONER DEASON: 13.15.

THE WITNESS: Yes, sir.

COMMISSIONER DEASON: Do you know if 13.15 percent had been the cost of equity utilized in evaluating the self-build options versus the bids that were received, would the self-build option still be the most cost-effective?

THE WITNESS: I don't know that of my own personal knowledge. My belief is given the kind of divergence that has developed between the economics of the self-build options and the purchased options, it would surprise me if that change in the cost of equity would make that much effect to close that gap, but I can't say because I just don't have a sense of --

COMMISSIONER DEASON: But you do agree that the higher the return on equity the most costly the self-build option becomes in comparison to the purchase options?

THE WITNESS: It does, but there are two offsetting effects, Commissioner Deason. One effect is the revenue

requirements of having a higher return on equity increases the revenue requirements, but you also use the cost of capital to discount the revenue requirements to present value. So you would be increasing the discount rate somewhat. So that increase in the discount rate would serve to offset some of the higher revenue requirements associated with a higher equity return.

CHAIRMAN JABER: Commissioner Bradley had a followup.

COMMISSIONER BRADLEY: Yes. In terms of a revenue sharing agreement, what would the ROE be for the bidder versus Florida Power and Light?

THE WITNESS: Well, I think the bidder --

COMMISSIONER BRADLEY: Let me tell you what I'm getting at. I think I heard what you said. You said that -- I guess the self-build option, the average ROE would be 11.7?

THE WITNESS: Yes, Commissioner.

COMMISSIONER BRADLEY: Okay. Now, in terms of revenue sharing, because both would have to see this as a profitable venture, what would the ROE be for both of the respective parties?

THE WITNESS: Well, the ROE for a bidder is whatever they can earn. I mean, the Commission does not have oversight or I don't believe you would even be able to find out what the return on equity of the independent power producer would be. It would be whatever it is. What is left over after they pay

their cost and collect their revenue. Presumably, the independent power producer when they are deciding what to put on the table in terms of prices, they have done their economics and decided what their return on equity is. And they wouldn't put the bid on the table I suppose if the return on equity that they thought they were going to get was not acceptable, it didn't meet their needs.

Now, one thing that is important about this return on equity, if you ignore the equity premium so that the independent power producer doesn't have to bear the cost of the effect on the balance sheet, you are effectively allowing the independent power producer to get the benefit of that extra return. So you would allow the independent power producer essentially to win the bid at a higher rate of return on equity than would be the case if you recognized the equity penalty. That is why in some sense eliminating the equity penalty would represent a subsidy to independent power producers. It would give them an opportunity to earn a higher return than they would otherwise earn.

CHAIRMAN JABER: Let's break that down a little bit. Let me back up. Commissioner Bradley, I think the revenue sharing agreement that Mr. Avera is talking about in his testimony is the one we approved. I don't think you are referring to any agreement between you and the IP, is that correct?

THE WITNESS: That is correct. I am talking about the settlement in April and the previous settlement in 1999.

CHAIRMAN JABER: That's right. The approved ROE from this Commission of 11.7 which provides certainty to investors because you have been given the opportunity through the regulatory process to earn up to 11.7 percent ROE.

THE WITNESS: The company has the ability to earn higher rates of return if they can achieve that with better performance. That's my understanding of the revenue sharing.

CHAIRMAN JABER: That is correct. You bring that up, there is that opportunity to do better and share with the customers.

THE WITNESS: Yes, that is my understanding.

CHAIRMAN JABER: Now, in the IPP world, which is not -- under the current statutory framework there are risks that the IPPs have that there is no guarantee that they will earn on their cost and on their risk.

THE WITNESS: That is correct. They make a business decision and make their bet and they have to live with it.

CHAIRMAN JABER: But I want to keep coming back to as it relates to the bidders, Doctor Avera, your concerns are not just to the IPPs, are they? You would apply that equity penalty to a regulated IOU that enters into a purchased power agreement with you.

THE WITNESS: That is correct. I think the equity

penalty should be applied whenever the purchased power agreement has the effect of altering the effective capital structure. I think to the extent you had a bid that was like a turnkey bid where FPL would buy a plant, that doesn't have an equity penalty because it doesn't have a balance sheet effect. You would finance that with a mix of debt and equity. But any purchased power arrangement that has this balance effect should be reckoned with an equity penalty in my view.

CHAIRMAN JABER: And I really need to understand that clarification, so I appreciate it. You are not saying that the investors look at that off-balance sheet obligation as a higher concern because you might enter into a purchased power agreement with an IPP versus how they would look at it when you enter into a purchased power agreement with another regulated IOU?

THE WITNESS: That is correct. Now, as we discussed earlier, Chairman Jaber, the risk factor that might be applied to the payments to bring them to a debt equivalent would be affected by, you know, who the arrangement is and the nature of the arrangement. But whether there would be an effect or not, it doesn't matter if it is an IOU, an IPP, a co-op, a municipal, TVA. You know, when a utility locks themselves into these fixed payments there is some off-balance sheet effect.

CHAIRMAN JABER: Go ahead, Commissioner Bradley.

COMMISSIONER BRADLEY: I want to go back to the terms

of these purchased power contracts in terms of years. One of the problems that California had is that they did short-term contracts instead of long-term contracts. Are you telling me that short-term is the standard?

THE WITNESS: No, sir. I think as our discussions earlier today and with Commissioner Palecki, I think a diversification is good, and I think a time diversification is good also. To have a mixture of contracts that are expiring at different periods in time so the utility is not faced with a cliff where they have to replace a lot of power in a short period of time. So I think a mix of contracts is good, and I think it is a good thing that the RFP allowed this flexibility of different offers to come forward.

I think what we have learned from California is that you ought to give the utilities some flexibility in having contracts of different lengths, because my understanding of the California deal is they said, you know, you are going to buy power essentially on an hourly basis with very few exceptions. So the utility was faced in a position where when the market prices mushroomed, the prices that they paid went right up through the ceiling, and they were not able to protect their customers by having longer term arrangements.

COMMISSIONER BRADLEY: In terms of a short-term contract, and that means that if you entered into a short-term contract, say, of three years, that means that potentially you

could be putting out another RFP to be bid on by another IOU or an IPP to replace that power source if you all could not reach a mutual agreement in terms of terms and conditions of a new and extended contract?

THE WITNESS: Yes, Commissioner. I think that is one of the problems or opportunities that go with a short-term contract is that you are locking things in for a few years and at the end of that few years both sides have to look at their cards again and make a new commitment, or the IPP has to find a new customer.

COMMISSIONER BRADLEY: Or you have to find a new source of --

THE WITNESS: And at the same time if you still have the need, the utility has to find a new source of power.

COMMISSIONER BRADLEY: Okay.

COMMISSIONER DEASON: Back to my question. I think that I asked you about the higher ROE, and that you agreed that the higher the ROE used in the cost-effectiveness calculation that the higher the self-build option becomes in relation to the bid. Now, you qualified that by indicating that the higher ROE would be utilized in calculation of the discount rate.

THE WITNESS: Yes, sir.

COMMISSIONER DEASON: Did I summarize your answer correctly?

THE WITNESS: Yes, Commissioner Deason.

COMMISSIONER DEASON: Now, I have a further question about the discount rate effect of that. It appears to me, and correct me if I'm wrong, it appears to me that in the self-build option you have more of your revenue requirement front end loaded in the sense that you have a large capital expenditure that you make and you put it into rate base and you start earning a rate of return on that amount. And that through time as you depreciate that down, well, then the revenue requirements go down. In the later years you have a lower revenue requirement and it is those later years that you have the effect of the higher discount rate come into play. Versus a fixed payment arrangement with a bidder where -- I know that there may be some slight escalation amounts, but generally it is more of a fixed yearly payment arrangement. Would you agree with that?

THE WITNESS: I generally agree that the self-build option would have the declining rate base effect as you depreciate off, so in the outer years the discount rate has less money to effect. And that is why I generally believe that the higher cost of equity would result in a higher present value revenue requirements for the self-build option. I don't believe the discount rate change would offset that, I just think it would attenuate it. You know, kind of make it not as great as it might appear on the surface.

COMMISSIONER DEASON: And to make sure I'm clear, I

asked you the question whether the use of a 13.15 percent would make the self-build option not the most cost-effective, and you do not know the answer to that?

THE WITNESS: I do not know given the spread in economics, but let me make sure, Commissioner, that -- I think if you use the 13.15 in the self-build option you ought to use the 13.15 in the equity penalty calculation. I think it is very important that there be consistency in the way you are viewing the self-build option and the way you are viewing the purchased power option.

COMMISSIONER DEASON: But if you use it in the -- the equity penalty, of course, is a 40 percent factor applied to that, and then an equity portion to equalize that out, and that is a much lesser amount as opposed to the effect of 13.15 percent as 55 percent of one's capital structure. Would you agree with that?

THE WITNESS: It probably would be less, but I think a little bit like the discount rate, but I think probably more so. I think it would be a more significant adjustment, because remember in step four of the equity penalty you calculate the cost of the extra equity and that is based on the spread between your cost of equity and your cost of debt. So if you increase that spread, you are going to increase the equity penalty cost.

COMMISSIONER DEASON: Thank you.

CHAIRMAN JABER: Commissioner Palecki and then redirect.

COMMISSIONER PALECKI: If a bidder in this RFP process had submitted a bid that transferred equity to Florida Power and Light over a period of time, some sort of lease to own arrangement, under your theory the equity penalty would not then be applicable, correct?

THE WITNESS: I think the equity penalty could be applicable. I think you would have to take account of the equity effect and it would certainly be part of the calculation and it might make it a much smaller number.

COMMISSIONER PALECKI: But if there was a long-term payment stream of 25 years and at the end of the 25 years Florida Power and Light owned the entire plant, then you would have no equity penalty, would you?

THE WITNESS: No, I'm not sure you would have no equity penalty, Commissioner, because I think what investors would do is discount those fixed obligations out for the 25 years, and that would be an off-balance sheet liability and then they would look at the equity effect of getting the ownership of the plant and discount that back. And I think in part maybe apply some adjustment to it, as well. So, you would have some effect on the equity side of the balance sheet, some effect on the liability side, and I think the net effect would just depend on how the numbers worked out.

COMMISSIONER PALECKI: What if instead of after 25 years there was full ownership, it was a ramp where the actual amount of equity would be paid for and transferred over to Florida Power and Light on a smooth ramp?

THE WITNESS: And this is a new idea and I'm trying to get my head around it here, Commissioner. It would seem that the equity transfer that would occur at the end of 25 years would have to take account of the depreciated value of the plant and the fact that it is 25 years out from an investor's perspective. You would have to discount that back to some notion of present value in terms of determining how much today's equity equivalent it would be.

COMMISSIONER PALECKI: I think there has already been some testimony to this effect, and I don't remember the answer, maybe you could clear this up for me. Were the bidders to the RFP, the people who put forth proposals aware of the amount of the equity penalty at the time they made their proposals?

THE WITNESS: Commissioner Palecki, I don't know if they were aware of it. Certainly what FPL did was consistent, even the same 40 percent risk factor with what Florida Power Corporation used in their Hines 2 case in 1999 or 2001. So if the bidders kept track of what had happened at this Commission, I think they would have been aware of the equity penalty tradition and probably of the relative order of magnitude. Because the approach in the Hines case and the approach that

FPL used is essentially the same. The assumptions as to capital structure and capital costs are different, but the 40 percent risk factor is exactly the same.

COMMISSIONER PALECKI: Certainly that is something if you were one of the bidders you would want to know that, you know, on a definite basis before you made your proposal, would you not?

THE WITNESS: Well, Commissioner Palecki, I'm not sure you would have to know it because I think your proposal, you are looking at your cost and your required return on equity and you have to think about whether you can put the proposal on the table that would be attractive. And presumably your costs and your required returns are known to you.

I think if you knew that there was not going to be an equity penalty you might be a little more -- you could possibly bid higher to add to your cost of equity. So I think the considerations that would go into the bidder would depend in large part upon their own circumstances as to what their offer could be. Now, I think they would give some consideration to how that cost would be evaluated and really that is why I think that if this Commission says there will be no equity penalty, I think that would tend to suggest to bidders that they don't have to cut their bids as close because this financing cost that they impose upon the utility will be ignored.

And I think a rational bidder would pay a lot of

attention to what had happened here in this jurisdiction before in deciding what the game was and I would certainly expect them to look at recent need filings and how they were treated at this Commission.

COMMISSIONER PALECKI: And I think you testified that in the -- was it the QF proceedings on the standard offer contracts there was an equity penalty that was allowed?

THE WITNESS: Right. It was called an equity adjustment, and there was a 10 percent risk factor used because for QFs the risk factor is generally less because they don't have the degree of firmness that purchased power arrangements with non-QFs generally have.

COMMISSIONER PALECKI: So that would in your opinion justify 10 percent as opposed to 40 percent? That is a pretty substantial difference.

THE WITNESS: Well, that was the Commission's finding. FPL had originally suggested 20 percent, the Commission found 10 percent, that was the staff recommendation and the Commission accepted the staff's recommendation. So the 10 percent was a finding by the Commission as to the risk factor that applied to qualifying facility power on the FPL system.

COMMISSIONER PALECKI: Thank you.

CHAIRMAN JABER: Commissioner Bradley.

COMMISSIONER BRADLEY: Yes. And I know this would be

a hypothetical, but under a lease/purchase scenario, what is the useful life and the value of a power plant as an asset after 25 years?

THE WITNESS: Well, I think it depends on the power plant, the cost -- its fuel and its cost of fuel, its relative efficiency, and what the price of power in the market is. You know, there are power plants operating in this country that were built in the 1920s. There are power plants that were built in the 1960s that have been retired. So I think it depends on the particular circumstances of a power plant. I'm not an engineer, but my experience being around engineers is that if a power plant is properly maintained it will be in workable condition at the end of 25 years or more. Now the question is is it also economic.

COMMISSIONER BRADLEY: And under this same scenario after 25 years, then that means that you would then, if you went into such an arrangement or agreement, then that you would be -- you would put that plant into the rate base?

THE WITNESS: No, I believe -- are you speaking of the arrangement that Commissioner Palecki was talking about?

COMMISSIONER BRADLEY: Yes.

THE WITNESS: My understanding of that arrangement is that --

COMMISSIONER BRADLEY: Not for the purposes of construction, but for maybe maintenance and upkeep and other

things that are associated with maintaining an asset.

THE WITNESS: My understanding of the scenario he was talking about is that at the end of 20 years it will become a utility asset and would go into rate base. If it didn't go into rate base, then it would have no equity value to the utility unless it had an ability to earn something.

CHAIRMAN JABER: Redirect.

MR. LITCHFIELD: Thank you, Madam Chairman.

REDIRECT EXAMINATION

BY MR. LITCHFIELD:

Q Now, Doctor Avera, you indicated in your testimony in response to cross examination that you had, in fact, reviewed the supplemental RFP, correct?

A Yes, sir.

Q It's a rather lengthy document, would you agree?

A It is.

Q On the chance that perhaps you failed to recollect something, I would like to show you a copy of the need study for electrical power plant 2005/2006, Appendices E through J, Page 18 of Appendix F. I would ask that Mr. Guyton show you a copy.

MR. MOYLE: I am going to object to this, because I think his testimony related to the supplemental RFP. He is going to show him something that wasn't set forth in the supplemental RFP.

CHAIRMAN JABER: Mr. Litchfield, I have to tell you that preface to your question about whether there was a chance that he didn't recall something sounded like you were leading your witness. So why don't you tell me what the cross examination was that you are about to redirect on?

MR. LITCHFIELD: He was asked whether the equity penalty was disclosed in the supplemental RFP.

CHAIRMAN JABER: I asked that as I recall.

MR. LITCHFIELD: Yes. And we can show through Doctor Avera here right now or we can call another witness and show that, in fact, the supplemental request for proposals indicates --

CHAIRMAN JABER: So you are redirecting on the cross examination that related to whether the equity penalty was set forth in the supplemental RFP?

MR. LITCHFIELD: And more particularly --

CHAIRMAN JABER: Is that yes?

MR. LITCHFIELD: Yes to your question, and also I believe to Mr. Moyle's question in which he asked whether the bidders were aware of the way the equity penalty was going to be calculated. And I have another question in that respect, as well.

CHAIRMAN JABER: I will allow the first one. We will handle the second one as it comes up.

MR. LITCHFIELD: Thank you. We have just two copies,

so I think Mr. Guyton will probably just show counsel the page we are going to put in front of Doctor Avera. Of course, if counsel has brought their own copies of the supplemental RFP, which of course they have, they can refer to that, as well.

CHAIRMAN JABER: Let me be clear. Mr. Moyle, what I have allowed is questions related to my question of whether the inclusion of the equity penalty in the analysis was set forth in the supplemental RFP.

MR. MOYLE: And I am perfectly fine with that. I think the document speaks for itself on Page 18. There is one sentence in there. But what I do object to is him being shown something out of a need study that was filed in July of this year, okay, from a time frame that was not in the supplemental RFP, and the bidders had the supplemental RFP, they didn't have the need study. So I don't think it's appropriate.

MR. LITCHFIELD: Madam Chairman, this is, in fact --

CHAIRMAN JABER: You know, I can really only hear one of you at a time, so I need you to just wait. Let me understand your objection. Are you saying that the document the witness is about to see is not the supplemental RFP?

MR. MOYLE: Yes, ma'am.

CHAIRMAN JABER: Mr. Litchfield, my question controlled whether the equity penalty was clearly delineated in the supplemental RFP, so if in redirect you are trying to establish that it was --

MR. LITCHFIELD: Yes, and also in response to a question from Mr. Moyle as to whether bidders were on notice that an equity penalty would be applied.

CHAIRMAN JABER: Well, I would like for you to handle the first question. We will address the second question later.

MR. MOYLE: Ma'am.

CHAIRMAN JABER: Mr. Litchfield, are you confused about what I want?

MR. LITCHFIELD: No, I'm not. I thought we were waiting for Mr. Moyle again.

CHAIRMAN JABER: Go ahead.

MR. MOYLE: I think this might clarify it. The need study is a big, big document. The supplemental RFP is not that big of a document. We have been working off of the supplemental RFP. Apparently what is going to be shown to the witness is the supplemental RFP, which is a portion of the need study. So if that is all that is being shown, I'm fine. But to the extent that we are showing other documents in the need study, that's where my objection lies.

CHAIRMAN JABER: Take an opportunity, Mr. Moyle, and look at this document.

MR. MOYLE: It has been represented to me that he is just going to be shown the supplemental. I'm perfectly fine with Mr. Guyton's representation.

CHAIRMAN JABER: Go ahead, Mr. Guyton.

BY MR. LITCHFIELD:

Q I will refer you, Doctor Avera, to Subsection 2 on Page 18 of the supplemental RFP.

A Yes, I see that.

Q And would you focus on the second paragraph of Section 2?

A Yes.

Q And would you read for me the sentence beginning with "Therefore, the evaluation," on the third line of that paragraph?

A Correct, Mr. Litchfield, this does refresh my recollection. "Therefore, the evaluation will examine each proposal's impact on the entire FPL system, including the estimated impact on FPL's cost of capital associated with entering into a purchased power agreement."

MR. LITCHFIELD: Thank you. Now, Madam Chairman, I have a second document which I would like to show the witness and ask him if he recognizes it as an equity penalty computation.

CHAIRMAN JABER: And what is that document you are about to show him?

MR. LITCHFIELD: The document that I am about to show him is a volume containing Appendices F through O from the need study filed in the initial -- as a result of the initial RFP. A document that the bidders all had before we went to the

supplemental RFP.

CHAIRMAN JABER: And that goes to what question again, Mr. Litchfield?

MR. LITCHFIELD: Mr. Moyle's or perhaps Mr. McGlothlin's, I don't recall whose. I think it was Mr. Moyle's question as to whether bidders were on notice that an equity penalty computation would be used in the supplemental RFP.

CHAIRMAN JABER: I think also Commissioner Palecki asked that question, so I will allow it.

MR. LITCHFIELD: I believe that is true.

BY MR. LITCHFIELD:

Q All right. Mr. Guyton has handed you a document, Doctor Avera, and I would like for you to turn to Appendix N. Page 1.

A Yes.

Q And can you tell me whether this represents an equity penalty calculation?

A It does, and it does refresh my recollection. I have seen this in the course of my preparation. It is an equity penalty calculation using the same assumptions that FPL used and that I am supporting in my testimony.

MR. LITCHFIELD: Madam Chairman, I would like to mark this for identification, and I would like to move this into the record. Just this one page from the initial need.

CHAIRMAN JABER: Hang on, Mr. Litchfield, I have questions about the same document.

MR. LITCHFIELD: Sure.

CHAIRMAN JABER: Mr. Avera, I need you to tell me exactly what that is you are looking at.

THE WITNESS: It is Appendix N, and it is titled equity penalty calculation.

CHAIRMAN JABER: And that is from a general document -- that is part of what document?

THE WITNESS: It is part of the need study for electrical power plant, 2005/2006.

CHAIRMAN JABER: Is it fair to say that that is from the initial RFP process?

THE WITNESS: That is my understanding.

CHAIRMAN JABER: So that to date has not been filed in this case, is that correct?

THE WITNESS: I don't know about its status as to being filed. I do know now I remember having seen this early in my engagement in this matter.

CHAIRMAN JABER: The page you were just directed to look at, is there something identical or comparable to it in the need study that has been filed in this case?

THE WITNESS: I believe there is.

CHAIRMAN JABER: Can you point me to that?

MR. LITCHFIELD: Madam Chairman, if Doctor Avera

doesn't have it at his chair, which is likely, we can supply him with that.

CHAIRMAN JABER: Mr. Litchfield, here is what I would really like to do, if there is a way for you to handle this redirect looking at the need study that is part of this case, I think that is a more efficient way of handling this.

MR. LITCHFIELD: Yes. The need study was filed in this case, but I think why I need this particular page from the original need study is to support the proposition that bidders who now seem to through cross examination be suggesting that they were surprised by the fact that the company was going to compute an equity penalty or by the assumptions that were employed by the company can't really do that given that in the initial RFP and the need study the computations were outlined in some detail.

CHAIRMAN JABER: Here is the problem with that. They have not been given an opportunity to file rebuttal or do discovery on that document which was not made part of this case. So I'm looking to not open doors creating chaos, but I am giving you an opportunity to conduct your redirect using a document that has been filed in this case.

MR. LITCHFIELD: I will try to do so, Madam Chairman.

(Pause).

Madam Chairman, I will withdraw my request to move this particular sheet into the record. I believe that it has

been acknowledged in testimony and I think that probably is adequate for our purposes. And if we need to go further we can do that through another witness.

CHAIRMAN JABER: Thank you, Mr. Litchfield. Did you have you any other redirect?

MR. LITCHFIELD: I do have a couple of additional redirect.

BY MR. LITCHFIELD:

Q Doctor Avera, do you recall Mr. Moyle questioning you regarding the excerpts from Moody's Credit Week in your testimony?

A I think that was Standard & Poor's Credit Week, Mr. Litchfield.

Q I'm sorry, you are absolutely right. Do you recall that line of questioning?

A Yes.

Q And do you recall that he pointed out to you that the latest date in those articles was 1993?

A Yes.

Q Am I right that you indicated that those were provided principally to describe the S&P methodology for imputing debt?

A That is correct, because it was originally developed in the early '90s, and those are the reports in which S&P kind of laid out its approach to quantifying the off-balance sheet

liability.

Q To your knowledge has S&P changed its methodology since 1993?

A No, it has not. It has continued to use similar methodology up until today.

Q Mr. Harris asked you a question regarding your experience in other jurisdictions, and I think specifically he asked you whether you were aware of other orders from other state commissions reflecting or incorporating an equity adjustment. Do you recall that?

A Yes, sir.

Q And I believe you indicated that in your experience the situation was such that the analysis was comparing competing outside proposals versus an analysis that compares self-builds to outside proposals, is that right?

A That is correct. That has been my experience in other states where the commission had a proceeding to look at purchased power alternatives.

Q My question is given that difference, do you have any understanding or rationale as to why those orders might not have reflected an equity penalty adjustment?

A Well, if you are comparing alternatives that essentially have the same effect on the balance sheet, there is no reason to adjust for that effect in order to compare the alternatives one to another.

Q Now, you were asked by Mr. McGlothlin with respect to the excerpt from the S&P communication regarding the risk factor, were you not?

A Yes, sir.

Q Is that the type of communication that S&P would provide in the ordinary course of its business to your understanding?

A Yes, it does. S&P generally advises investors or the companies their rating as to their preliminary thoughts about relevant parameters.

Q Including risk factors?

A Yes.

Q Now, you were also asked by Mr. McGlothlin regarding the materials that were furnished to S&P for purposes of its review. Do you recall that question?

A That is correct.

Q And I think you indicated that you were aware that materials other than or in addition to the supplemental RFP or the RFP were provided, but you weren't sure what materials, correct?

A That is correct. I remember talking to people on Mr. Dewhurst's staff about what was provided, and I know the materials went beyond the RFP. I believe the need study might have been included, but as to the specifics, I just can't recall exactly what they were. But I know there were more

materials.

Q Irrespective of what may have been provided in addition to the terms of the RFP, would S&P have had materials on Florida in general and on FPL specifically?

A Yes. As I indicated later in my cross, S&P has a continuous following of not only FPL, but other Florida jurisdictional utilities. And my experience with rating agencies is that they divide themselves into teams that specialize in particular utilities and particular parts of the country, and they continually keep themselves up-to-date.

It was my experience when I was on the Texas commission staff that usually a couple of days after the commission would render a particularly significant order, I might get a call from somebody at S&P, or Moody's, or one of the other rating agencies just to get a little background as to what this decision might mean and what its implications were for utilities in the state.

So I think the value that S&P brings to investors is that they have this continuous monitoring of what goes on with utilities and with commissions, so that when they issue a publication, especially one that, you know, in response to some big event, they can do so with the benefit of the background of being familiar with what has happened and what the history and context is leading up to that event.

MR. LITCHFIELD: Thank you. Those are all the

questions I have for redirect.

CHAIRMAN JABER: Thank you. Thank you, Mr. Avera. I have Exhibit 22.

MR. LITCHFIELD: Yes, I would ask that that be entered into the record.

CHAIRMAN JABER: Without objection, Exhibit 22 is admitted into the record.

(Exhibit 22 admitted into the record.)

CHAIRMAN JABER: The next witness is Donald Stillwagon. Commissioners, while that witness comes to the stand, please feel free to take a short break.

MR. MOYLE: Can counsel take that, as well?

CHAIRMAN JABER: Short. Ten minutes.

(Recess.)

CHAIRMAN JABER: We are going to get back on the record. And, FPL, your next witness is Mr. Stillwagon?

MR. BUTLER: That's right, Mr. Stillwagon. I understand he has previously been sworn. Let me just explain that I have left during the break for each of the Commissioners and staff and the other parties a copy of a Page E-22 from the need study appendices. It is just a map of sort of the basic FPL transmission system that I think may be helpful for following along with Mr. Stillwagon's testimony.

Thereupon,

DONALD R. STILLWAGON

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

DIRECT EXAMINATION

BY MR. BUTLER:

Q Mr. Stillwagon, would you please state your name and address for the record?

A My name is Donald R. Stillwagon. My address is 610 Crystal Springs Road, Murphy, North Carolina.

Q Have you been engaged to testify on behalf of FPL in this proceeding?

A Yes, I have.

Q And do you have before you direct testimony consisting of 13 pages of prepared testimony and Documents DRS-1 to DRS-3?

A Yes, I do.

Q Were the testimony and exhibits prepared under your direction, supervision, or control?

A Yes, they were.

MR. BUTLER: I would ask that the next exhibit number be assigned to Mr. Stillwagon's documents. I think that would be 23.

CHAIRMAN JABER: Hearing Exhibit 23 is identified for DRS-1 through DRS-3.

(Exhibit 23 marked for identification.)

BY MR. BUTLER:

Q Have you prepared an errata sheet to your prefiled direct testimony and the portions of the need study that you are sponsoring?

A Yes, sir, I have.

Q And, I'm sorry, I forgot to ask you, are you sponsoring portions of the need study?

A Yes, I am.

Q Would you please identify those?

A I co-sponsor Section M of the need study and I also sponsor portions of Section 3 of the need study dealing with transmission integration.

Q Thank you. As revised by the errata sheet, do you adopt this prefiled direct testimony as your testimony in this proceeding?

A Yes, I do.

MR. BUTLER: I would ask that Mr. Stillwagon's prefiled direct testimony be inserted into the record as though read.

CHAIRMAN JABER: The prefiled direct testimony of Donald R. Stillwagon shall be inserted into the record as through read.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

DIRECT TESTIMONY OF DONALD R. STILLWAGON

DOCKET NOS. 020262-EI, 020263-EI

JULY 16, 2002

Q. Please state your name and address.

A. My name is Donald R. Stillwagon, and my address is 6425 8th Avenue North, St. Petersburg, FL 33710.

Q. Please state your occupation.

A. I am an independent consultant on matters relating to transmission systems. I have been engaged to work for Florida Power & Light Company (FPL) on transmission integration requirements as they relate to FPL's Supplemental Request For Proposals (Supplemental RFP).

Q. Please state your experience.

A. I graduated from the University of Florida with a Bachelor of Science Degree in Electrical Engineering in 1968. I subsequently earned a Master's degree in Business Administration from the Florida Institute of Technology in 1978. I am a registered Professional Engineer in the State of Florida, and a member of the Institute of Electrical and Electronic Engineers, Inc. (IEEE).

My work experience includes 33 years at Florida Power Corporation (FPC) from which I retired January 1, 2002. While at FPC, I spent the first 9 years of my career in Transmission Line Design where I was responsible for project work involving the routing and engineering design of transmission lines, preparation of cost estimates, work orders, and project cost budgeting. I was responsible for planning of the FPC Bulk Transmission System (230 kV and above) for the period of 1978 through 1994. In this position, I was responsible for loadflow and transient stability studies, development of solution alternatives, evaluating the costs and benefits of alternatives and the recommendation of an expansion plan and budget requirements to FPC management.

In December 1994 I became the Manager of Transmission and Distribution (T&D) Planning for FPC, a position I held for five years. As Manager of T&D Planning, I led the team that was responsible for the planning and capital budgeting for the entire FPC transmission system, including distribution substations. As Manager, I was also responsible for coordinating the planning of the FPC transmission system with other utilities and within the Florida Reliability Coordinating Council (FRCC). The final two years of my career at FPC were spent on a special assignment to the FPC Regional Transmission Organization Team that led the FPC involvement in the GridFlorida and other Regional Transmission Organization efforts at the Florida level and at the Federal Energy Regulatory Commission (FERC).

I have testified before the Florida Public Service Commission (Commission) in several Transmission Need Hearings, and represented the FRCC before the Commission in several proceedings in various capacities. I served as Chair of the FRCC Available Transfer Capability Working Group (ATCWG) from its inception in 1995 through late 2001.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to describe the overall evaluation process and the results of transmission integration studies for the various capacity plans from the FPL Supplemental RFP process as requested by the FPL Resource Assessment and Planning (RAP) staff. I will additionally review the detailed results of the integration studies as they pertain specifically to the All FPL plan.

Q. Are you sponsoring an exhibit in this case?

A. Yes. It consists of the following documents:

Document DRS-1, Integration Direct Costs Summary

Document DRS-2, Integration Cash Flow - Supplemental RFP

Document DRS-3, Integration Facilities and Cost for All FPL plan.

Q. Are you sponsoring any part of the Need Study for this proceeding?

A. Yes, I sponsor the portions of Section III addressing transmission integration and co-sponsor Appendix M of the Need Study.

I. Integration Study Process.

Q. Please describe FPL's transmission integration evaluation process and you involvement in it.

A. The evaluation process consisted of three steps.

The first step was to perform loadflow screening studies to identify new facilities and facility upgrades that would be needed to integrate the capacity resources in each plan into the transmission system as a network resource for FPL. In consultation with FPL transmission personnel, I developed the methodology that was used to perform these loadflow screening studies. I then led and directed FPL transmission planning engineers, who performed the loadflow screening studies. Throughout this first step, I met with FPL transmission planning engineers, reviewed and approved the results of their loadflow screening studies, and prepared a scenario-by-scenario list of new facilities and facility upgrades required to integrate the capacity resources in each plan into the transmission system as a network resource for FPL.

Once a list of new facilities and facility upgrades required to integrate was identified, I directed the second step of the evaluation process, which consisted of developing cost estimates for the new and upgraded transmission facilities. The cost estimates were prepared by FPL substation and transmission engineers under my direction. During this step I held a meeting

and participated in the discussion at which the scenario study results and cost estimates were discussed and reviewed for reasonableness and compared for consistency.

The final step in the process involved compiling (i) a total transmission integration cost for each plan and (ii) an estimated monthly cash flow of the costs for the transmission projects. Again, this work was performed by FPL transmission personnel under my direction. After I reviewed the transmission integration cost information and satisfied myself as to its accuracy and completeness, I transmitted the information to the FPL RAP business unit for inclusion in the Supplemental RFP evaluation. Document DRS-1 contains a listing of the 28 plans and their associated transmission integration costs. Document DRS-2 contains two separate cash flows for each plan, the first for the facilities being placed into service in 2005, and the second for the facilities being placed into service in 2006.

Q. Please describe the loadflow analyses performed.

A. For each of the 28 plans, loadflow studies were performed to assess necessary transmission system upgrades. These studies were considered screening type studies since they were not as comprehensive as studies that are normally performed for a request for specific transmission service. However, the screening type studies are sufficient to provide a reasonable estimate of the facilities that may become overloaded as a result of the plan options and the

incremental transmission facilities that may be necessary to mitigate such overload(s).

Each of the 2005 and 2007 loadflow cases for the 28 plans was subjected to a contingency screening of all transmission elements, and the FPL system was monitored for violations of North American Electric Reliability Council (NERC), FRCC and FPL standards. In accordance with standard study procedures for interconnection and integration, the analysis did not include monitoring the systems of any other transmission providers. Any violations found were resolved by the least expensive option, whether by acceptable remedial action, facility upgrades, or by new facilities. All proposed solutions were inserted into the appropriate loadflow case and tested with another full contingency screen in order to verify the completeness of the solution.

The loadflow cases used for the studies were based upon the FRCC 2002 loadflow cases, which are available and updated on an annual basis by the FRCC.

Q. Please describe the reasons for using the FRCC 2002 loadflow cases.

A. The FRCC 2002 loadflow cases have a significant advantage over the 2001 loadflow cases, because they contain many new planned facilities required as a result of newly confirmed transmission service requests and retail load

requirements. Though not officially deemed final by the FRCC until June 18, 2002, by the time the 2002 loadflow cases were used for this analysis they were undergoing final review and had already been reviewed by the FRCC Transmission Working Group several times as well as by all transmission providers in the FRCC through a formal review process. Finally, the 2002 FRCC loadflow cases contain a full year's worth of transmission service additions, all the facilities planned by all transmission providers during the previous year, and the data from another full year of load growth information. Using the 2002 FRCC loadflow cases assures that the results for this analysis are based on the most current loadflow cases available.

Q. Why did FPL's loadflow analysis use 2005 and 2007 study years?

A. Summer 2005 was used because that is the first year that the candidate 2005 capacity resources would be available, and summer 2007 was chosen to study the system one year after all of the proposed capacity resources for each of the plans was in service to assure the transmission integration was adequate.

Q. Do you have a general observation regarding the results of the analysis?

A. Yes. Generally, the results of the loadflow analysis indicated that a limited amount of capability exists to transfer power from the west coast to the east coast load centers of Florida. Therefore, as larger amounts of additional capacity resources are concentrated in the west coast of Florida in proportion to the east coast of Florida, incremental transmission facilities become

necessary. As this situation is exacerbated, the incremental transmission facilities required to accommodate the transfer of power from the west coast to east coast load centers become more extensive.

Q. Once the need for incremental transmission facilities was determined for each plan, how were the costs of such incremental transmission facilities estimated?

A. Based on the need for incremental transmission facilities identified in each plan, a budget estimate for the facilities necessary for integration was developed in a consistent manner for each plan. These were what I consider budget grade estimates, which were based on sound engineering judgment, readily available data and existing estimates, and records of facility limitations and equipment ratings. The estimates did not involve any field inspections, or the type of detailed analysis that would be performed in response to a specific request for interconnection or transmission service, but they are adequate for their intended purpose. That is, they provide all the necessary information to make effective comparisons of the relative transmission integration costs associated with the plans. The estimated costs of the facilities for each plan were summed, and the total estimated plan integration cost determined. The estimates provided were in 2002 dollars.

II. Integration Study Overall Results

Q. Please summarize the cost estimates associated with integration for the 28 capacity plans.

A. Generally, the 28 capacity plans can be clustered into three broad groups. The least costly group of plans, which ranged in direct construction cost from $4.4 million to $25.6 million, consisted of plans designated as All Outside, All FPL, 2(b), 3, 3(a), 3(b), 5(a), 5(b), 7(a), 7(b), 8(a), 8(b), and 10. This first set can be described by several distinctive characteristics. First, in these plans the majority of the capacity resources that are placed into service in 2005 are located in the vicinity of the central east coast of Florida. Also, these plans either are somewhat more balanced in quantity of east coast versus west coast capacity resources or are predominantly on the east coast.

The second group of plans ranged from $32.5 to $57 million in direct construction cost, and consisted of plans designated as 1, 1(a), 1(c), 2, 2(a), 4, 4(a), 5, 6(a), 6(b), 6(c), 9(a) and 9(b). In this group of plans, the substantial majority of the capacity resources that are placed into service in 2005 are located in the vicinity of the west coast of Florida. It appears that placing an emphasis on capacity resources located in the west coast results in higher amounts of west-to-east power transfers, and in larger overloads in the west-to-east transmission facilities. These facilities cover great distances, and thus the required upgrades tend to be more costly.

Finally, the last group of plans, designated as 1(b) and 4(b), ranged from $90.2 to $106.5 million in direct construction cost. These plans have all capacity resources located in the west coast vicinity, which results in high amounts of west-to-east power transfers, consequently significantly overloading the west coast to east coast transmission facilities. As I discussed in the previous paragraph, these facilities are very long; thus, the upgrades are relatively expensive. Compounding this situation are the large overloads identified with this last group of plans that require a rebuild of these west-to-east transmission facilities.

III. All FPL plan

Q. Please describe the transmission system interconnection requirements for the proposed Martin Unit 8 and Manatee Unit 3 projects, referred to as the All FPL plan.

A. Document DRS-3 identifies the integration facilities for the All FPL plan and tabulates the total direct transmission integration cost for the plan. Two new transmission lines are required on the east coast, and five transmission lines must be upgraded to higher ampacity, four on the west coast, and one on the east coast. The new transmission lines are (a) between the Martin system substation and the Indiantown substation, and (b) between the Indiantown substation and the Bridge substation. The new transmission facilities

constitute 93%, $20.6 million of $22.1 million, of the All FPL transmission integration cost. These two new transmission lines will become part of the overall transmission system and thus needed to serve the FPL load. The system upgrades of existing circuits are responsible for the $1.5 million balance of the All FPL transmission integration cost.

Just as with the other plans, the transmission facilities are required for the total plan and cannot be separated for each resource. The construction of the new transmission lines and the upgrades are necessitated due to thermal overloading of existing transmission lines for single contingency outages.

Q. Would you please explain why the construction of two new transmission lines is necessary?

A. With respect to the two new transmission lines that must be constructed, the Martin-Indiantown #2 230 kV transmission line is necessary because several contingency outages result in overloads on the Warfield-Indiantown, Florida Steel-Indiantown and Florida Steel-Martin 230 kV lines. Since upgrades of these lines are not an effective alternative, a third 230 kV transmission line from Martin-Indiantown is necessary. Regarding the necessity for the second 230 kV transmission line from Indiantown-Bridge, this line is required due to the resulting thermal overloading of the existing Indiantown-Bridge 230 kV line for the contingency outages of the Indiantown-Pratt&Whitney, Pratt&Whitney-Ranch, Midway-Jaguar and Turnpike-Jaguar 230 kV lines.

The screening study determined that the thermal overloads experienced on the existing Indiantown-Bridge 230 kV line exceeds any remaining upgrade capability.

Q. Please address the necessity for the upgrades of existing transmission lines.

A. With respect to the upgrades identified as necessary in the screening study, the upgrade of the Ranch-Homeland 230 kV line is required due to resulting overloads on this line for the contingency outage of either the Corbett-Conservation 500 kV or Conservation 500/230 kV autotransformer. The screening study indicates that the Ranch-Homeland 230 kV line can be upgraded such that the resulting overload is mitigated.

Similarly, the Charlotte-Ft. Myers # 2 230 kV line was found to experience overloads for the contingency outage of the Charlotte-Calusa, the other Charlotte-Ft. Myers or the Charlotte-North Cape 230 kV transmission lines that could be mitigated by an upgrade of the line. Also, the Charlotte-Calusa 230 kV transmission line sustained overloads that could be mitigated by an upgrade of the line for the same contingency outages as discussed for the Charlotte-Ft. Myers#2 230 kV line.

Regarding the necessity to upgrade the Manatee-Johnson and Manatee-Ringling #3 230 kV lines, the contingency outage of either of these lines

results in the other being overloaded. Additionally, the contingency outage of the Manatee-Parish or Parish-Ringling 230 kV transmission lines result in overloads of a lesser magnitude on one or both of the Manatee-Johnson and Manatee-Ringling 230 kV lines.

Q. Please summarize your testimony.

A. My testimony provides a description of the Transmission Integration Study process that led to the development of the FPL transmission facility requirements and costs for integrating each of the 28 plans of the FPL Supplemental RFP into network resources for the FPL network load. The range of costs varies from a low of $4.4 million for the All Outside plan which contained candidate resources mainly in the south central and east side of Florida, to a high of $106 million for Plan 4(b) which contained candidate resources primarily on the west coast of Florida.

Finally, I provide more detail about the transmission integration requirements for the plan that was selected as a result of the Supplemental RFP process. This specific plan requires two new transmission lines to be constructed on the east coast, and upgrades of five existing lines, one on the east coast, and four on the west coast. The great majority of the total direct transmission integration cost of this plan is for the two new transmission lines.

Q. Does this conclude your testimony?

A. Yes.

Errata Sheet
Direct Testimony of Donald R. Stillwagon
Docket Nos. 020262-EI and 020263-EI

Page, Line	Correction
1, line 8	Change "6425 8th Avenue North," to "610 Crystal Springs Road,"
1, line 9	Change "St. Petersburg, FL 33710." to "Murphy, NC 28906."
6, line 5	Insert "bulk" before "transmission"
10, line 13	Change "interconnection" to "integration"

BY MR. BUTLER:

Q Would you please summarize your testimony?

A Yes, thank you. Good afternoon, Chairman Jaber and Commissioners. I appreciate the opportunity to be here to testify on the transmission evaluation process that we used to determine of the transmission facilities required and the attendant costs for integrating capacity resources into the transmission grid.

The FPL resource assessment and planning department, or RAP, provided me with 28 capacity resource plans to evaluate. The transmission evaluation process was done on an identical basis for all 28 plans.

Basically, the transmission evaluation process consisted of three steps. The first step was to perform loadflow screening studies to determine the transmission facilities required for the integration of each capacity plan. The second step was to obtain and review cost estimates of those transmission facilities, and transmission facilities include both rebuild of existing or upgrading of existing facilities and construction of new facilities. The last step of the process was to assemble a summary of the transmission facility requirements for each plan, and the attendant cost estimates for those plans and transmit them to RAP for their inclusion in the overall RFP evaluation process.

The load flow analysis used in the latest FRCC, that

is the Florida Reliability Coordinating Council, or the FRCC's loadflow cases which contain the latest and best available transmission plans. The loadflow cases were then modeled and evaluated for each of the 28 plans with the 2005 electric system with the 2005 capacity resources modeled in those loadflows, and in the 2007 electric system with both the 2005 and 2006 capacity resources modeled.

The evaluation was performed in an identical manner for all the plans. The evaluation involves studying outages of all major 115 kV and above transmission lines and evaluating solutions for each transmission loading problem found on the FPL system. In general, the solution, as I mentioned, involved either new facilities or upgrades of existing transmission facilities.

Cost estimates of the transmission facilities were then developed for each plan and reviewed for reasonableness and consistency. All the cost estimates were developed and direct construction costs in 2002 dollars. Finally, the summaries and the cost estimates were transmitted to RAP for their inclusion in the overall evaluation process.

The cost estimates developed for transmission facilities required for integration of the individual plans ranged from 4.4 to $106.5 million, and exhibit or Document DRS-1 lists those as a tabulation. Three groupings of the plans by transmission integration costs were identified.

Basically, 13 plans felt in a group below $25.6 million. A second group of 13 plans ranged from 32.5 to $57 million, and there were two plans in the final group, one of 90.2 million and one of $106.5 million.

One of the major factors contributing to the groupings for the differences in the cost estimates is the amount or level of transmission facilities required to support power flows from the west coast to the east coast of Florida. This factor is influenced by the location of the capacity resources, the timing of those capacity resources, and the amount of balance between the amount of capacity resources connected on the west coast of Florida and the east coast of Florida for an individual plan.

Finally, my testimony describes the transmission facilities required for the All-FPL plan, the Martin and Manatee plans. This plan requires two new transmission lines on the east coast of Florida and the upgrading of five transmission lines, four on the west coast of Florida and one on the east coast of Florida. The estimated cost of those integration facilities for the All-FPL plan is 22.1 million and direct construction cost in 2002 dollars.

That summarizes that testimony. Thank you.

CHAIRMAN JABER: Thank you, sir.

MR. BUTLER: I tender him for cross-examination.

CHAIRMAN JABER: Mr. Moyle.

MR. MOYLE: Thanks.

CROSS EXAMINATION

BY MR. MOYLE:

Q You are from North Carolina, is that right?

A Yes.

Q So I guess you used to be from St. Petersburg?

A That is correct.

Q Well, we're sorry to lose you, but appreciate you coming down for this proceeding.

A Thank you.

Q I have some questions about the transmission, and let me start by asking you when FPL made its cost assumptions for the interconnection costs of the FPL units, what assumptions did it make about existing generator interconnection service requests?

A I didn't deal with the interconnection cost portion of the analysis. That was done by a separate process. I dealt with the integration of all the capacity resource plans into the transmission grid.

Q Who dealt with the interconnection aspects of it?

A The entity would have had to have dealt with the transmission owner that they were interconnecting with, so it would be the FPL transmission planning department. Those estimates were developed through the process of asking for a generator interconnection.

Q Okay. My understanding of generation interconnection and whatnot is that there is a queueing process that folks make application and wait in line and then FPL does studies and determines the cost on the system. Is that generally your understanding?

A I understand that there is a queueing process. There is a separate queuing process, I believe, for each transmission provider.

Q Do you know what the queuing process is with respect to projects that were represented by bids submitted in this RFP?

A No, I do not.

Q So you don't know whether FPL treated its plants the same way it treated plants from IPPs that were proposing projects in this RFP?

A I'm not aware of the transmission integration process that is currently being employed. I know that it follows the FERC guidelines, which basically require everybody to be treated equal, and I think that is certainly being done. But I'm not familiar with the queues or anything else. I did not need to do that for my integration study.

Q If FPL did not treat itself in the same fashion as it treated other outside bids with respect to queuing and assumptions, would you consider that to be fair?

A I would consider it to be in violation of what FERC

requires utilities to do.

Q Do you know if FPL has completed an interconnection feasibility study for Manatee 3?

A I'm really not sure. I don't know.

MR. BUTLER: I am going to object to this line of questions. It is going to interconnection costs for the outside projects, something that Mr. Stillwagon has already said he, you know, doesn't testify to and isn't familiar with. I just don't think that it is an appropriate line of questioning for him.

CHAIRMAN JABER: So is your objection that it is outside the scope of his direct?

MR. BUTLER: Yes.

CHAIRMAN JABER: Mr. Moyle, can you respond by showing me where it is in his direct testimony?

MR. MOYLE: Well, I understood this witness to be the transmission witness. On Page 3 he talks about the transmission integration studies and goes on and talks about the costs. His exhibits have the cost and whatnot, and it is my understanding that how people are treated with respect to queuing is an important part of that process. And it's just my understanding. I mean, if there is four projects in line and you are the fourth project, and you assume that all of them get built, then the fourth project is likely to have some additional costs. If everyone is treated the same, that's

fine. But to the extent that if FPL looks at IPPs and says, well, when we are doing an IPP evaluation every project in the queue will be treated one way and if we are doing our own evaluation we will only look at entities that have signed contracts, that's what I'm trying to get at. But it may not be that this witness has that information.

CHAIRMAN JABER: I will allow the questions. I would note for the record that the question goes generally to Pages 4 through 11, so I will allow the questions. Mr. Moyle, continue.

BY MR. MOYLE:

Q Maybe I can short circuit this. You heard my description with respect to why I was posing these questions. Do you have any information related to the description that I gave to the Chairman?

A No, I do not. I believe that as far as I am aware all of these projects were in some kind of a queue, they may or may not have had their studies completed. I think that is a separate issue from the integration cost. There is a reason for the separation. I'm the transmission integration witness, I did the study to do the integration evaluation.

Q Let me ask you with respect to the grouping of the plans, I was looking at your exhibit just to make sure I understand. Exhibit DRS-1, Page 1 of 1.

A Yes, sir.

Q If I am reading that correctly, it shows a grouping of plants similar to -- you have I think heard and seen testimony about these groupings, correct?

A Yes.

Q Did you do the transmission integration in these groups or did you look at each plant separately?

A I did the integration study by groups, which is the only correct way to do the study.

Q Okay. Could you have a situation potentially where a couple of these folks in the group, let's say, for example, under 1A you see Manatee P5 and P42. Could you have a situation where Manatee in P5 have no transmission costs, but then when you add P42 the transmission costs all of a sudden goes up significantly and is a big number?

A It is possible that you have different facility requirements in 2005 for the capacity resources being incorporated in 2005 and those being incorporated in 2006. What you have to do from a planning basis is evaluate the costs of the transmission integration in 2005 and 2006 when you have capacity resources being installed in different years. So I believe the answer to your question is yes, but I need to explain the reason for that is you are studying the two years, the capacity resources being installed in those years.

Q Okay. Have you read the supplemental RFP?

A I have read portions of it.

Q Do you know if the bidders were informed that their transmission integration costs would be calculated in this manner, that they would be combined and grouped in the way that you have grouped them in your Exhibit DRS-1?

A I think when the entities were bidding they probably did not have any indication of how they might be grouped, because unless they were bidding for the entire capacity in the RFP, if they were bidding a portion of that they would have to assume, I guess, that they would be grouped by someone and that there would be an integration study.

Q Okay. Now, I think I understood you to say you didn't break out the costs separately for each facility, correct?

A That is not possible to do.

Q Did you try to break out the costs separately for the FPL facilities?

A No, I did not.

Q And why not?

A Because as I said, it isn't possible to do that. The only proper way when you have got a group of capacity resources, or a group of requests, or a group of capacity resources like this being installed in one year, the only way to properly integrate them into the grid is to consider them as a group and determine where the end state for that group is. If you do them in any kind of -- I guess one could think of a

building block approach and try to do them one at a time. Each one of those is going to effect the grid and going to effect the other plan that you develop. So what is going to happen is the requirements for each block will depend upon who comes first, and you will get a different answer depending on which one you put first. So the only way to end up at the right end state or group of capacity resources is to put them all into the study and determine what the transmission system integration requirements are as a group.

Q So is it your testimony that you could not have broken out the transmission costs of the FPL Manatee unit and the FPL Martin unit?

A Yes, that is true.

Q That is your testimony?

A That is true.

Q You are aware that we have two separate cases here today, correct?

A I beg your pardon?

Q Are you aware that we have two separate cases that are being heard today, Docket Number 020262 and Docket Number 020263?

A I'm not really aware of the -- to be quite honest, I have focused on my portion of this. I wasn't aware that there were two dockets.

MR. MOYLE: I have no further questions.

CHAIRMAN JABER: Thank you, Mr. Moyle. Mr. McGlothlin.

CROSS EXAMINATION

BY MR. McGLOTHLIN:

Q Mr. Stillwagon, in your transmission studies you used loadflows for the years 2005 and 2007, is that right?

A That is correct.

Q For each of those two loadflow cases at how many load levels did you exercise the loadflow analysis?

A I looked at the system peak load level.

Q Was that a one hour peak?

A No, sir, it wasn't. It is the summer FRCC loadflow cases which are representative of the summer peak, which I think as everyone knows occurs many years -- many hours during each day and many days during each year in Florida.

Q But to represent that summer peak you used a single load level?

A Which is consistent with the modeling of the FRCC. Summer peak is a single loadflow.

Q What resources did you have in service for the loadflow case?

A The resources and the facilities that were in service in the loadflow cases are those that are provided in the FRCC cases, which according to NERC and FRCC standards is all facilities available. So it is basically all the known

facilities are available as all the FRCC utilities model them. And, of course, let me clarify that not all generators may be running every utility and every entity. And the FRCC dispatches its facilities even in that peak summer case on an economic basis. So there may be a few small peakers that are not running.

Q So it is whatever resources would have been running at the time of summer peak?

A I believe that is correct, yes.

Q This may be implicit in your last answer, but let me clarify. With respect to those resources that were included, did you try any different loadings of the resources themselves?

A Let me ask you to restate the question. I'm not sure I heard all of it.

Q With respect to each individual resource that was included, did you specify only one loading on that resource or did you try alternatives?

A Some of the resources may have been adjusted in the loadflow to allow for the particular capacity resources being installed. In other words, as I installed in each power flow model the capacity resources being integrated into the grid, there would have to be some generation adjustments. But that would only be to the FPL generation, it would be within a very small range because generally the capacity resources being integrated were about the same amount of megawatts, and it

would only have been the FPL system.

Q You have heard the discussion earlier, I assume, about the impact on the transmission system of the addition of Manatee and/or Martin in different time periods?

A Yes, I believe I have heard certainly portions of it. I may not have heard it all.

Q I'm going to describe the scenario as for shorthand Manatee in, Martin out for the purpose of the question. What impact does the Manatee in and Martin out situation have on the transmission system in 2005?

A That wasn't a scenario that was evaluated in the integration study, but we have a scenario that is pretty close to that. The scenario labelled two, which is actually down toward the bottom of Table DRS-1, has Manatee in P5. There were several combinations, I think, with Manatee, but no combination with just Manatee alone. But if you take a look at scenario or plan designation two, which is about six rows up on Table DRS-1, you will see that the effect of installing Manatee in P5 in 2005 followed by Martin in 2006 is a total transmission integration cost of about $42,350,000. That is in direct integration costs, that doesn't include AFUDC and escalation.

Q And I assume this 42,350,000 represents some specific facilities or facility upgrades?

A Yes, it does.

Q Can you identify those for me?

A We can in the Appendix M. Appendix M has a listing of all the facilities in each of the portfolios. Each of the plans, actually. And that would be Page M21.

Q Would you identify the specific facilities that would be built?

A Do you want me to read the listing off this page?

Q Well, hang on a second. We're trying to get a copy to follow along. And where would the corresponding portfolio appear for the Martin and Manatee simultaneous scenario?

A That would be the All-FPL scenario, and Appendix M is located on Page M25.

Q The facilities listed on the two pages you identified are not the same. Why would they be different?

A Because the impact of integrating the capacity resources in a different manner is different. When you integrate Manatee plus P5 in portfolio two or plan two as it was called, you have a different impact on the transmission system. If you look at the All-FPL plan on Page M25, we are integrating both the Martin and the Manatee units in 2005 and the impact on the transmission system is different. The integration requirements are different. It goes to the description I gave before, I think, in my summary and also that is located in my testimony. It is the amount of balance between the east and west coasts of Florida as you add capacity

resources to the system. There are a lot of other variables, but that is what we are seeing here as the effect of the balance between east and west, and we are bringing into play the requirement to upgrade some of the east to west facilities as well as some others.

Q Do I understand correctly that Martin has the impact or the effect of balancing the impact that Manatee would have on the west coast?

A I think you have the basic concept correct. I think that one of the factors is the location and the amount of megawatts being installed, and in this particular scenario, the All-FPL scenario, there is a loading distinction that doesn't require some of the facility upgrades. In other words, some of the facilities aren't under contingency conditions loaded as heavily.

Q If Manatee were added in one year and Martin added in a subsequent year, would Martin continue to have that impact?

A It would not in the initial year, of course. What I did in my integration study is I developed a plan, determined the facilities, the most economic facilities required to integrate those capacity resources into the grid according to NERC criteria. So in that initial year you have to build the facilities or you are in violation of the NERC criteria. To try to answer your question, when you get to the state where in 2006 you would add the Martin unit at that point, the system

should be in equilibrium. We should be okay with respect to the plan that was developed and checked in 2007. In other words, what I'm trying to say is I did an analysis for the All-FPL plan in 2005, but I also checked in 2007 to make sure that the plan was still good. We did that with every one of the portfolios, even in this one where things came into service in one particular year. I had to check and make sure that at least in 2006 and 2007 the integration plan was still adequate.

Q Did you examine and can you describe specifically what problems occur if Manatee is added on the west coast and Martin is not added simultaneously?

A Yes, I believe I can. At a high level what we have is a plan that doesn't meet NERC criteria, and what we would find then is that you have effected basically the reliability of this transmission system. We have under first contingency condition facilities that are going to be overloaded unless we adjust the system operating point, which basically means redispatch. However, I think one of the things to focus on is that I was developing an integration plan on an exactly equivalent basis for each one of these groupings of capacity resources. If we make a decision in any one of those capacity resource plans to not build a transmission facility, what we are doing is basically saying we are not going to integrate the full amount of those capacity resources. So it makes some of that generation unavailable for serving load.

Q How much would Manatee be limited in that situation?

A I don't know, and I don't know if it would be Manatee. I think I can make the statement on the basis of reviewing -- as these questions were developing, reviewing the portfolios that I looked at and looking at the balance between east and west. I think the amount of capacity that might become unavailable to the system and it might not all be just Manatee, it may be some other generators being adjusted, is going to be in the order of several hundreds of megawatts, potentially several hundred megawatts, which I think needs to be understood in the context of reserve margin, also.

Q Do you know how often it would be unavailable and for what period of time?

A No, you don't.

Q Looking more closely at M21, Mr. Stillwagon.

A Yes, sir.

Q Let me ask you with respect to several of the upgrades identified on the right-hand side, can you tell me, for instance, with respect to the Orange River/Corbett 230 kV upgrade whether that relates to the addition of Manatee or something else?

A I can only tell you that it relates to the -- the projects required here, the upgrades and the new circuits are grouped by year. So the way to read a portfolio or the plan integration facility requirements that I developed is to look

at what is grouped by year. And what we can say or what I can say with certainty is that these upgrades that I have identified for summer 2005 are the ones required for Manatee plus the FPC system sale of 50 megawatts. So I can't tell you which one. The study didn't term which is assigned to any particular block or anything. That can't be done. But in the group those two facilities together, those two capacity resources require those transmission additions.

Q Is it safe to say or can you determine from your studies that the 50-megawatt sale would contribute to the need for the facilities that are identified here?

A It may have. I don't know if I took the 50 megawatts out and redid the study if I would still need the same facilities. The 50 megawatts doesn't sound like much, but sometimes the effect -- loadflows are not linear. The only way to know is to run the model. I know that for the combination of Manatee plus the 50 megawatts, we need these facilities.

Q Based on your answers Mr. Stillwagon, do I understand correctly that you have not prepared a study that looks at Manatee, only Manatee being only -- let me start that one again. A study that assumes that only Manatee 3 has been added in 2005?

A That is correct, and I have not done that. I think the really closest parallel we have got is this one in portfolio two which has just the extra 50 megawatts. That is

the closest thing.

Q And the facilities that you have identified here are all intended to deal with this problem of transporting power from west to east that you describe in your prefiled testimony?

A Yes, but let me clarify. If you look at the -- I believe you are speaking to 2005.

Q I am.

A Okay. With respect to 2005, the answer is yes, but what we have to be careful is, and I don't want to confuse anyone, if you look at a map, if you look at one of the FRCC maps and look at these substation names, the transmission line circuits here are labelled by the substation designations that they go from and to. Some of these are in a north/south arrangement on the west coast. For instance, the ones obviously connecting to Manatee are near Manatee plant. They leave from Manatee plant and basically go south, but they are essentially supporting that west to east flow because the west to east flow that I have described has to essentially get down to about Fort Myers before it can go east in any significant amount. The major facilities connecting the west to the east in Florida in the southern half are basically from Fort Myers to the east.

Q And just to confirm my understanding of things, if one were to install Martin 8 and not Manatee, would that entail some relief on this west to east loading situation that you

described?

A In other words, the question is if we installed -- if we reversed the order of the generators?

Q Yes.

A I don't think I have a portfolio that is anything like that. I do have some portfolios that were given to me that have Martin and other generators or RFP respondents in combination and we would have to wade through some of those to take a look at perhaps trying to find one with the smallest amount. I think what you will find although in almost every one of these is that you are going to have resources required. There is probably going to be a difference in the impact to the west to east facilities, but what we would have to do is take a look at for that particular scenario that has Martin combined with some other RFP respondent.

Q Let me have you focus on number three, which is the fifth line from the bottom which shows Martin and P32 in 2005 and Manatee in 2006?

A Okay.

Q Compared to the other cases that we were looking at, would that indicate to you that there are fewer problems accommodating that combination than with the earlier scenario?

A Well, a couple of observations can be made. You have got a slightly different listing of facilities, of course. You might even say significantly different. We haven't picked up

the west to east circuits if you noticed, we don't see the Orange River/Corbett, or Fort Myers/La Belle, La Belle/Montura.

Q Which page is that?

A I was just referring back and forth between -- I think the comparison that you are asking me is basically the comparison of M21, which is plan two or portfolio two as I have labelled it on that sheet. With portfolio three or plan three which is Page M22. I'm sorry, I didn't give you the sheet reference, did I, when we jumped from the table over to the sheet. I apologize.

Q We have that in front of us now. Would you continue your answer?

A As I was saying, we don't have the west to east facilities in play in this particular portfolio, but we do have upgrades on the east coast. I think one of the distinctions is we see that the circuits that are required, the new circuits that are required on the east coast, the Martin/Indiantown and Indiantown/Bridge are required, of course, in 2005 because we are putting a resource on the east coast instead of on the west coast. But note that we have got several other facilities there. I would point out that the total cost of this portfolio from an integration perspective was $22,100,000, and that is in direct costs, of course.

Q Yes. That is the same total as the plan All-FPL, is that a coincidence or does that just happen to produce the same

upgrades?

A It is basically a coincidence. I think if you look at the sheets you will see that there are different facilities. We have some of the same facilities, but there are some differences.

MR. McGLOTHLIN: Those are all my questions. Thank you.

MR. PERRY: I don't have any questions, Madam Chairman.

CHAIRMAN JABER: Staff.

MS. BROWN: No questions.

CHAIRMAN JABER: Commissioners. We have one exhibit, FPL Exhibit 23, DRS-1 through DRS-3. Without objection, Exhibit 23 is admitted into the record.

Thank you, Mr. Stillwagon, you are excused.

(Exhibit 23 admitted into the record.)

CHAIRMAN JABER: Our next witness is Alan S. Taylor.

MR. HILL: Madam Chairman, I understand he upstairs. It will take us just a moment to get him. If you would prefer to break briefly, we can, or we can just hustle and get him. It is your pleasure.

CHAIRMAN JABER: Is Mr. Yupp in the room?

MR. HILL: Yes, he is.

CHAIRMAN JABER: Is there a real objection to taking him next?

MR. MOYLE: I would indicate I understand that Mr. Yupp may be convenienced as well as counsel may be convenienced by Mr. Yupp going first. And I may have a similar situation tomorrow, so CPV surely has no objection to Mr. Yupp going out of order.

CHAIRMAN JABER: I'm just looking at the number of issues that each one covers. It seems like we may be able to finish Mr. Yupp tonight. Do you all agree?

MR. McGLOTHLIN: Yes.

CHAIRMAN JABER: All right. Well, if it is okay with everyone then let's go ahead and take up Gerard Yupp.

Thereupon,

GERARD YUPP

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

DIRECT EXAMINATION

BY MR. HILL:

Q Mr. Yupp, have you been sworn?

A Yes, I have.

Q Could you please state your name and professional address?

A My name is Gerard Yupp. My business address is 11770 U.S. Highway 1, North Palm Beach, Florida 33408.

Q By whom are you employed and in what capacity?

A I am employed by Florida Power and Light Company as manager of regulated wholesale power trading.

Q And did you have occasion to prefile direct testimony in this docket consisting of nine typewritten pages?

A Yes, I did.

Q And do you have an errata sheet to that testimony?

A No, I do not.

Q If I were to ask you the questions contained in your prefiled testimony, would your answers be the same?

A Yes, they would.

MR. HILL: We would ask that the prefiled direct testimony of the witness be inserted into the record as read.

CHAIRMAN JABER: The prefiled direct testimony of Gerard Yupp shall be inserted into the record as though read.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

DIRECT TESTIMONY OF GERARD YUPP

DOCKET NOS. 020262-EI, 020263-EI

JULY 16, 2002

Q. Please state your name and address.

A. My name is Gerard Yupp. My business address is 11770 U. S. Highway One, North Palm Beach, Florida, 33408.

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

A. I am employed by Florida Power & Light Company (FPL) as Manager of Regulated Wholesale Power Trading in the Energy Marketing and Trading Division.

Q. Please summarize your educational background and professional experience.

A. I graduated from Drexel University with a Bachelor of Science Degree in Electrical Engineering in 1989. I joined the Protection and Control Department of FPL in 1989 as a Field Engineer and worked in the area of relay engineering. While employed by FPL, I earned a Masters of Business Administration degree from Florida Atlantic University in 1994. In May of 1995, I joined Cytec Industries as a plant electrical engineer where I worked until October of 1996. At that time, I rejoined FPL as a real-time power trader in the Energy Marketing

and Trading Division. I moved from real-time trading to short-term power trading and assumed my current position in February of 1999.

Q. Please describe your duties and responsibilities in that position as they relate to this docket.

A. I am responsible for supervising the daily operations of wholesale power trading as well as developing longer term power and fuel strategies. Daily operations include: fuel allocation and fuel burn management for FPL's oil and/or natural gas burning plants, coordination of plant outages with wholesale power needs, real-time power trading, short term power trading, transmission procurement and scheduling. Longer term initiatives include conducting monthly fuel planning and evaluating opportunities within the wholesale power markets based on forward market conditions, FPL's outage schedule, fuel prices and transmission availability.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to present and explain: (1) the transportation alternatives to supply the proposed Martin Unit 8 and Manatee Unit 3 projects with fuel; (2) the reasons why Manatee Unit 3 does not need to be designed with the capability to utilize low sulfur light oil; (3) the availability of gas supply to the proposed Martin Unit 8 and Manatee Unit 3 projects; (4) the long-term fossil fuel price forecast used in the evaluation of the proposals received under the Supplemental Request for Proposal (Supplemental RFP) process; and (5) the

long-term firm natural gas transportation cost assumptions used by FPL in its Supplemental RFP evaluation for FPL project options and outside proposals that did not provide a guaranteed natural gas transportation cost.

Q. Are you sponsoring any portion of the Need Study document or appendices for this proceeding?

A. Yes. I sponsor Section V.B.2. and Appendix H of the Need Study (FPL's Fuel Cost and Availability Forecast) plus any portion of the Need Study discussing long-term natural gas supply alternatives and firm natural gas transportation costs.

Q. How will fuel be supplied for the Martin Unit 8 project?

A. The Martin Unit 8 project is capable of burning both natural gas and low sulfur light oil. Two natural gas pipeline laterals, both tied to the Florida Gas Transmission System (FGT) interstate pipeline, currently serve the Martin site. One of these laterals serves as both a residual fuel oil and natural gas pipeline for the existing Martin Units 1 and 2. This dual service pipeline (south) lateral is not utilized for natural gas transport to the existing Martin Units 3 and 4, nor would it be used for the new Unit 8, due to potential fuel contamination issues caused by oil residue in the pipeline. The other existing natural gas pipeline (north) lateral is not adequate to supply the entire natural gas demand, during peak periods, of Martin Units 3, 4 and 8. Therefore, an additional lateral or additional compression will be required to ensure sufficient supply of natural gas to the Martin site.

Potential natural gas suppliers with permitted mainlines running adjacent to FPL's property, such as Gulfstream Natural Gas Systems (Gulfstream) and FGT, would independently undertake the necessary permitting and construction activities for any new lateral. Alternatively, FGT would independently undertake the necessary permitting and construction activities to add compression on the existing north lateral pipeline to the Martin site.

Low sulfur light oil would be trucked to the site and stored in both the existing two million gallon tank and a new two million gallon tank that would be built as part of the project. The four million gallons of storage represents about three days of light oil burn at continuous full-capacity operation of Martin Unit 8.

While no final determination has been made regarding which pipeline(s) may be constructed, or whether compression will be added to supply natural gas for the Martin Unit 8 project, or which firms may truck low sulfur light oil to the site, I am confident that there will be adequate resources available to transport both fuels to Martin Unit 8. There are multiple potential pipeline alternatives for natural gas and several trucking firms available to move low sulfur light oil as needed.

Q. How will fuel be supplied for the Manatee Unit 3 project?

A. The proposed Manatee Unit 3 project will burn natural gas. FPL has executed an interruptible transportation agreement with Gulfstream to deliver natural gas

for the existing Manatee Units 1 and 2 through a recently installed lateral from the Gulfstream mainline. This new lateral from the Gulfstream mainline is sufficient in size to deliver natural gas to Manatee Units 1, 2 and 3 during peak periods.

Natural gas for Manatee Unit 3 will be delivered via this new lateral or from another natural gas supplier that would independently undertake the necessary permitting and construction activities. FPL does not presently intend to provide the capability for Manatee Unit 3 to burn low sulfur light oil.

Q. Why is the proposed Manatee Unit 3 project designed without the capability to utilize low sulfur light oil?

A. FPL does not believe that a backup fuel supply is needed for the Manatee Unit 3 project at this time, because natural gas transportation alternatives will be available for the Manatee site. The Manatee site is connected to the Gulfstream mainline. In addition, with the completion of Phase I of the Gulfstream system in June of 2002, Gulfstream will have two interconnections with FGT. One interconnection is in Hardee County, with a design capacity of 300,000 MMBtu/day, and the other interconnection, expected to be complete by August of 2002, is in Osceola County, with a design capacity of 200,000 MMBtu/day. Under normal conditions, these two interconnections will flow natural gas from Gulfstream into FGT. However, under unusual situations, if Gulfstream is unable to serve the State of Florida, the flow from these two interconnections

can be reversed, and natural gas can flow from FGT into Gulfstream to the Manatee Site. With the Hardee County interconnect only 29 miles from the Manatee plant, FPL will have the capability to receive natural gas from FGT, from either the Hardee County or Osceola County interconnects, should Gulfstream be unable to receive natural gas from its source into Florida. Therefore, the Manatee site will have the ability to receive natural gas from two interstate pipeline systems.

In the event of an interruption of natural gas supply on both the Gulfstream and FGT pipeline systems coming into Florida, Manatee Unit 3 would be removed from service until supply was restored from either system. However, it is very unlikely that both pipeline systems would be out of service at the same time.

Q. In your opinion, is it reasonable for FPL to rely principally upon natural gas to fuel the Martin Unit 8 and Manatee Unit 3 projects?

A. Yes. The arrangements FPL proposes for delivering natural gas to the Martin Unit 8 and Manatee Unit 3 projects, as discussed above, will provide adequate, reliable, and redundant capability.

Additionally, FPL has had many years of experience with procuring and burning natural gas in its power plants and has found the supply of natural gas to be reliable and adequate to meet the needs of FPL. Currently, there are significant quantities of proven natural gas reserves in the United States, as

well as supply from U.S. production, Canadian imports and Liquified Natural Gas (LNG) imports, to sufficiently meet the growing natural gas demand of the United States. According to recent data from the Department of Energy (DOE-EIA), there is adequate supply and projected natural gas reserves available in the United States to meet the natural gas demand for at least the next 25 years.

Also, it is my understanding, that the majority of proposals that were submitted to FPL in response to the Supplemental RFP would have natural gas as their principal or sole fuel source, indicating that FPL is not alone in its assessment of the availability of reliable and economic sources of natural gas supply.

Q. What fuel forecast was used in the evaluation of the FPL construction options and outside proposals received in response to the Supplemental RFP process?

A. On a monthly basis, FPL updates its thirty year monthly long-term fossil fuel price forecast for oil, natural gas, coal, and petroleum coke, as well as the long-term availability of natural gas to Florida. Consistent with this practice, the May, 2002, update of the FPL long-term fossil fuel price and natural gas availability forecast was used to evaluate the proposals received under the Supplemental RFP process. The May, 2002 fuel price forecast is provided in Appendix H of the Need Study document.

Q. What are the long-term firm natural gas transportation costs assumed by FPL in its Supplemental RFP evaluation for FPL construction options and outside proposals that did not provide a guaranteed natural gas transportation cost?

A. FPL assumed that the long-term FTS-2 demand charge on FGT is about $0.76/MMBTU. This assumption is based on FPL's current experience with the Phase III, IV, and V expansions of the FGT system and FPL's understanding, based on discussions with FGT, of future expansions on the FGT system. FPL assumed that the long-term firm demand charge on Gulfstream would be $0.60/MMBTU. This assumption is based an understanding in the industry of the current proposed firm demand charge on the Gulfstream pipeline system.

Q. Does FPL believe that there would be a continuing difference in FGT's and Gulfsteam's firm natural gas transportation costs as discussed above?

A. Yes, FPL has assumed that this difference in FGT's and Gulfstream's firm natural gas transportation costs will continue through the planning horizon.

Q. Were the long-term natural gas transportation assumptions discussed above provided to Dr. Sim and Mr. Taylor for their analyses in evaluating the FPL projects and the projects received from the Supplemental RFP bidders?

A. Yes, these assumptions were provided to Dr. Sim, who then provided them to Mr. Taylor. They were used for both the FPL and Sedway Consulting

evaluations.

Q. **Are the assumptions on the firm natural gas transportation costs identified above reasonable?**

A. Yes, these assumptions are reasonable. They are based on FPL's extensive experience in the procurement and transportation of natural gas to our existing units and the best information available in the industry.

Q Does this conclude your testimony?

A. Yes, it does.

BY MR. HILL:

Q And did you also have occasion to prefile exhibits in this docket?

A No. Well, I sponsor Section 5B2 and Appendix H of the need study.

Q And are those portions of the need study that you sponsor true and correct to the best of your knowledge and belief?

A Yes, they are.

MR. HILL: I would tender the witness for cross examination.

CHAIRMAN JABER: Thank you. Mr. Moyle.

MR. HILL: Oh, I'm sorry, he needs his summary.

CHAIRMAN JABER: For nine pages now. You need to remember you have nine pages of testimony.

THE WITNESS: I will go very fast.

MR. HILL: A brief summary, Mr. Yupp.

CHAIRMAN JABER: Even shorter than that.

THE WITNESS: Good evening, Madam Chairman and Commissioners. My direct testimony in these dockets addresses three main areas, the fuel price forecast that was used in the supplemental RFP evaluation, the types of fuel that are planned for the proposed Manatee 3 and Martin Unit 8 projects, and also the availability of fuel as well as the supply alternatives to each proposed site.

First, on a monthly basis FPL updates its 30-year long-term fuel price forecasts for oil, natural gas, coal and petroleum coke as well as the long-term availability of natural gas to Florida. Consistent with this practice, the May 2002 forecast was used to evaluate FPL's self-build options, as well as outside proposals received under the supplemental RFP, but did not include guaranteed fuel commodity and/or transportation costs. As stated in Section 5B2 of the need study, which I sponsor, FPL's fuel price forecast methodology is consistent with the methodology used by leading industry consultants such the Pyra Energy Group, (phonetic), Cambridge Energy Research Associates, and many other consultants.

The proposed Martin Unit 8 project is planned to have natural gas as the primary fuel source and low sulfur light oil as the backup fuel source. Potential natural gas suppliers, such as Florida Gas Transmission, and suppliers with permitted mainlines running adjacent to Martin, such as Gulfstream Natural Gas Systems offer FPL alternatives for natural gas supply to Martin. Low sulfur light oil will be used as a backup fuel then stored in an existing 2 million-gallon tank as well as an additional 2-million gallon tank will be constructed as part of the Martin Unit 8 project.

Manatee Unit Number 3 is proposed to burn only natural gas, and unlike Martin, Manatee is not designed with light oil backup because natural gas transportation

alternatives available for Manatee can provide the necessary redundancy for fuel supply. FPL currently has an interruptible transportation agreement with Gulfstream to deliver natural gas to the existing Manatee Units 1 and 2 who were recently installed lateral from the Gulfstream mainline.

The Gulfstream mainline has two interconnections with the FGT mainline. The normal flow will be from -- I'm sorry, the normal flow on this will be -- natural gas will flow from Gulfstream to FGT, however during abnormal conditions if Gulfstream is unable to serve Florida, the flows can be reversed and Manatee can be supplied from FGT through Gulfstream to the plant. Therefore, Manatee will have the ability to receive natural gas from two interstate pipelines. This configuration provides the necessary backup to ensure the reliable delivery of natural gas to Manatee.

The reliability and availability of natural gas is supported by three main points. First, that FPL has had many years of experience with procuring and burning natural gas in its power plants and has found the supply of natural gas to be reliable and adequate to meet the current and long-term needs of FPL and its customers.

The second point, there are significant quantities of proven natural gas reserves in the United States as well as supply from US production, Canadian imports, and L&G imports to sufficiently meet the growing natural gas demand of the United

States. And, in fact, according to recent data from the Department of Energy there is adequate supply and projected natural gas reserves available in the United States to meet natural gas demand for at least the next 25 years.

And the final point is that it is my understanding that a majority of the proposals submitted in the supplemental RFP would have natural gas as their principle or sole fuel source, which indicates that FPL is not alone in its assessment of the availability of reliable and economic sources of natural gas supply. Therefore, FPL believes it is reasonable to rely principally on natural gas to fuel the proposed Manatee and Martin capacity additions. The alternative for fuel supply and transmission to the proposed Manatee Unit 3 and Martin Unit 8 provide fuel diversity and will provide adequate, reliable, and redundant capability. And that concludes my summary.

MR. HILL: We tender the witness for cross examination.

CHAIRMAN JABER: Mr. Moyle.

MR. MOYLE: Thank you.

CROSS EXAMINATION

BY MR. MOYLE:

Q Mr. Yupp, you have been in the room for the last couple of days, have you not?

A I have been in the room today.

Q Okay. There was some discussion about an exhibit

that was not admitted into evidence, but has been talked about, and without waiving any objection to that, are you familiar with this document which represented a higher system fuel cost of $55 million?

A No, I'm not.

Q As part of your duties and responsibilities, are you involved in projecting fuel costs?

A That function is done within my group at FPL, yes.

Q But you don't have any information about a $55 million increase cost if you did only the Manatee plant and not the Martin conversion?

MR. HILL: I object to the question without showing the witness the document. I think it is unfair to ask him a question without showing him the source.

CHAIRMAN JABER: Mr. Moyle, do you want to pursue that question or are you interested in --

MR. MOYLE: I will move on. I think he said he didn't have much information. I will withdraw the question.

BY MR. MOYLE:

Q I read in your testimony that you are responsible or have responsibility for short-term power trading, is that right?

A Yes.

Q And what is short-term power trading?

A Generally my group focuses on the short-term up to

make two to three months out, but really hourly. We trade 24 hours a day, next day, next week, maybe up to a couple of months out is our primary focus.

Q I think the preceding witness, Mr. Avera, was asked by Commissioner Bradley about short-term, and I think he indicated short-term may be three years. Is that consistent with your view, a short-term deal may be three years or less?

A There can be a lot of interpretations of that, but, yes, three years could be short-term.

Q Have you been asked by anybody to give your opinion as to whether there might be 15 megawatts available in the market in the year 2005 to purchase on a short-term one year basis?

MR. HILL: Objection, it's outside the direct testimony.

MR. MOYLE: I saw on Page 2 here that he is in charge or he has responsibility for short-term power trading. On Page 2, Line 10.

CHAIRMAN JABER: And your question?

MR. MOYLE: I asked him if he had been asked by anybody with respect to whether there was 15 megawatts of power in the market in 2005.

CHAIRMAN JABER: I will allow the question.

THE WITNESS: Have I been asked by anybody? No, I have not. 2005 would really be out of the range that I would

be dealing in. Again, most of what we are doing is focussing on the short-term needs for FPL. 2005 is significantly out in the future, so, generally that would not be something we would look at.

BY MR. MOYLE:

Q Right now as we sit here is the market in your view liquid, the wholesale market?

A To a certain extent. It's hard to define liquidity, and I don't know what you mean by liquid, in your opinion what liquid is. Do we trade substantial volumes of power on an hourly and daily basis, yes, we do.

Q And when you say substantial volumes, what would that be?

A Typically on any given day, and these are rough estimates, we may buy 2,000 to 3,000 megawatt hours, sell 2,000 to 3,000 megawatt hours. It is fairly substantial. Those aren't always the numbers, but we are consistently doing trading on an hourly basis. So, yes, from that standpoint the market is fairly liquid.

Q You don't have any reason to believe that that wouldn't be the case in 2005, do you?

A It would be hard to make a projection out that far. Florida, as most people know, is a little transmission limited getting into the state, and so at times it is a little difficult to procure power from outside of the state which

limits the number of people that are in the market to a certain extent, although that has increased over the last year. 2005, I just think it is too far out that I could even make a rational guess on whether the market will be the same or not.

Q Okay. Your fuel costs that you have testimony about with respect to how the plants are going to be supplied --

A Yes.

Q -- are there firm contracts in place for the commodity or the transportation for either the Manatee or the Martin facility?

A At the current time there are not firm contracts in place. However, we will be securing firm contracts for fuel supply and transportation as we stated in the need study document. We are just currently in negotiations right now to try to get the best deal that we can or bring the best value that we can to our customers.

Q And you haven't decided who is even going to supply the fuel to you, correct?

A Gulfstream was used in the evaluations and obviously they would be a strong candidate, but there are numerous alternatives. But Gulfstream was used for evaluation purposes.

Q Okay. So then the answer to my question, and you have heard the practice here about yes and no, the answer to my question is that FPL has not decided on a supplier for gas, correct?

A The answer would be no.

Q Now, I had some questions with respect to the fuel cost estimates and the forecasts. Were you involved in that process?

A I am not directly involved in creating the fuel forecast, that is done within my group or within the division that I work in by another individual. I sponsor the fuel forecast and have reviewed it for reasonableness.

Q Do you know what assumptions, if any, were taken into account given the current political situation in the Middle East?

A At the time that this fuel forecast was created, which was May of 2002, I'm not sure that that political situation has progressed to the extent that we are at now. I don't know if that specifically was taken into account. Obviously in the fuel forecast many assumptions are taken into account from political situations to supply demand balances to the economy, so it may or may not have. Some form of it would have been.

Q So you believe some form of it --

A I'm speaking from a general standpoint that the political or political happenings or arena are taken into account in the fuel forecast.

Q But specifically, and I guess the record should be clear I'm talking about the situation with Iraq. You don't

know whether that has or has not been taken into account?

A I do not know that for a fact.

Q Mr. Silva said in his testimony that portfolios that do not include firm fuel transportation are inherently more risky in terms of reliability. Do you agree with that proposition?

MR. HILL: Could we have a cite to the testimony?

MR. MOYLE: Page 43, Line 15, "Other portfolios that do not include firm fuel transportation arrangements are inherently more risky in terms of reliability."

BY MR. MOYLE:

Q Do you agree with that statement?

A Yes, I do agree with that statement.

Q And I think I have already asked you and established that you don't have any contracts in place, correct?

A At this time, no, we do not.

MR. MOYLE: I have no further questions.

CHAIRMAN JABER: Thank you, Mr. Moyle.

Mr. McGlothlin.

CROSS EXAMINATION

BY MR. McGLOTHLIN:

Q Mr. Yupp, I believe you said in response to a question from Mr. Moyle that there are something like 2,000 megawatt hours available on a short-term basis on any given day, did I hear that correctly?

A Actually what I said is we may just from an approximate standpoint, Florida Power and Light may trade anywhere from 2,000 to 3,000 megawatts hours a day, maybe both purchase and sell on any given day.

Q If the question were in terms of what is available to purchase on any given day, would your answer be different?

A Yes, it would. What is available and we would have to clarify I am speaking in megawatt hours based on a daily basis. If the question is what is available on an hourly basis in megawatts, yes, my answer would be different.

Q What is that answer?

A There is a wide range of possibilities there. It could be anywhere from zero megawatts to 1,000 megawatts. It really depends on weather conditions in the state, outside of the state, the availability of transmission into the state, there are so many factors that effect how much power is available, unit outages, that it is just difficult to pin it down.

Q You are speaking of transactions on an hourly or daily basis, though, is that correct?

A Yes, I am.

MR. McGLOTHLIN: Thank you. No further questions.

MR. PERRY: I have no questions.

CHAIRMAN JABER: Staff.

MS. BROWN: Just a few.

CROSS EXAMINATION

BY MS. BROWN:

Q Mr. Yupp, on Page 3, Lines 14 and 15 of your testimony you state that FGT currently serves Martin 1 and 2, is that correct?

A Yes, that is correct.

Q Is FGT going to serve Martin 3, 4, and 8?

A FGT does -- actually FGT currently also serves Martin Units 3 and 4, and as pointed out in the testimony there, the lateral that serves those units is not sufficient in size to carry Martin 3, 4, and 8, so there will be other provisions made.

Q Mr. Moyle asked you whether you had signed contracts for transportation and supply, and I assume he meant for both plants, proposed projects, and you answered that you do not. Can you give the Commission an estimate of when you will have signed contracts?

A It is hard to give an estimate. I think that the bottom line is FPL will enter into firm contracts for both supply and transportation when the time is appropriate, and to clarify that I think the appropriate time is when we feel that we have negotiated the best deal, the best value that we can for our customers. It could be soon. Probably sooner than later is the best answer, but when we feel that we have exhausted all possibilities and, again, negotiated the best

value that we can, then we will enter into those agreements. But it is clear that we will enter into firm agreements.

Q Will you assert to the Commission today that you will provide the Commission copies of the signed contracts as soon as you have them?

A That I don't know. I would assume that can be done.

Q Thank you. On Page 4 and 5 of your testimony you state that FPL has an agreement with Gulfstream to deliver natural gas for the existing Manatee 1 and 2 plants through the installed lateral that you were talking about earlier?

A Yes.

Q And later on on Lines 6 and 7 on Page 5 you state that the natural gas transportation for Manatee 3 will be delivered via this new lateral or from another natural gas supplier. Who is the other potential gas supplier?

A For the Manatee facility, FGT has a lateral that runs approximately within 14 miles, I believe, of the plant. So FGT could be a potential supplier for Manatee.

Q All right. Do you know whether the majority of the bidders in their responses to FPL's request for proposals asked that FPL use its own fuel forecasts in evaluating their bids?

A Let me make sure I understand the question. You are asking do I know how many bidders asked that FPL use its fuel forecast, meaning FPL's fuel forecast to evaluate their bids?

Q Yes.

A I do not know the answer to that question, no.

MS. BROWN: All right. That's all I have. Thank you.

CHAIRMAN JABER: Commissioners. Redirect.

MR. HILL: No. Thank you, Chairman Jaber.

CHAIRMAN JABER: Thank you.

MR. HILL: And may the witness be excused from the proceedings?

CHAIRMAN JABER: Yes.

MR. HILL: Thank you.

CHAIRMAN JABER: Let me ask the parties, Mr. Dewhurst or Mr. Taylor, where do we have a better chance of finishing before 6:00, which witness?

MR. MOYLE: My vote would be Mr. Taylor.

CHAIRMAN JABER: Okay. Alan S. Taylor. Just to give you notice, also we have to take Mr. Maurey up tomorrow sometime. Just to let everyone know.

Thereupon,

ALAN S. TAYLOR

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

DIRECT EXAMINATION

BY MR. NIETO:

Q Mr. Taylor, could you please state your name and

business address for the record?

A My name is Alan S. Taylor, Sedway Consulting, 5511 Northfork Court, Boulder, Colorado 80301.

Q You have previously been sworn, correct?

A Yes, I have.

Q By whom are you employed and in what capacity?

A I am employed by Sedway Consulting and I am the president of the firm.

Q Were you retained on behalf of FPL in this proceeding?

A Yes, I am.

Q Mr. Taylor, have you prefiled direct testimony consisting of 20 pages and Exhibits AST-1 and AST-2?

A Yes, it is one single exhibit with Documents AST-1 and AST-2.

Q Did you prepare that testimony and exhibits?

A Excuse me?

Q Did you prepare that testimony and exhibits?

A Yes, I did.

Q And have you prefiled an errata sheet to your exhibits?

A Yes, I have.

Q As corrected by the errata sheet, is the information in your testimony and exhibits true and correct?

A Yes, it is.

Q And if I were to ask you the same questions that are in your prefiled testimony today, would the answers be the same?

A Yes, they would.

MR. NIETO: Madam Chair, I ask that Mr. Taylor's testimony be inserted into the record as read.

CHAIRMAN JABER: The prefiled testimony of Alan S. Taylor shall be inserted into the record as though read.

MR. NIETO: And I would also ask that the next exhibit number, which I believe is 24, be assigned to his AST-1 and AST-2.

CHAIRMAN JABER: Hearing Exhibit 24 is identified as AST-1 and AST-2 with the errata sheet?

MR. NIETO: With the errata sheet, yes.

(Exhibit 24 marked for identification.)

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

DIRECT TESTIMONY OF ALAN S. TAYLOR

DOCKET NOS. 020262-EI, 020263-EI

JULY 16, 2002

Q. Please state your name and business address.

A. My name is Alan S. Taylor, and my business address is 5511 Northfork Court, Boulder, Colorado, 80301.

Q. By whom are you employed and what position do you hold?

A. I am president of Sedway Consulting, Inc.

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

A. I perform consulting engagements in which I assist utilities, regulators, and customers with the challenges that they may face in today's dynamic electricity marketplace. My area of specialization is in the economic and financial analysis of power supply options.

Q. Please describe your education and professional experience.

A. I received a Bachelor of Science Degree in Energy Engineering from the Massachusetts Institute of Technology and a Masters Degree in Business

Administration from the Haas School of Business at the University of California, Berkeley, where I specialized in finance and graduated valedictorian.

I have worked in the utility planning and operations area for 17 years, predominantly as a consultant specializing in integrated resource planning, competitive bidding analysis, utility industry restructuring, market price forecasting, and asset valuation. I have testified before state commissions in proceedings involving resource solicitations, environmental surcharges, and fuel adjustment clauses.

I began my career at Baltimore Gas & Electric Company, where I performed efficiency and environmental compliance testing on the utility system's power plants. I subsequently worked for five years as a senior consultant at Energy Management Associates (EMA, now New Energy Associates), training and assisting over two dozen utilities in their use of EMA's operational and strategic planning models, PROMOD III and PROSCREEN II. During my graduate studies, I was employed by Pacific Gas & Electric Company (PG&E), where I analyzed the utility's proposed demand-side management (DSM) incentive ratemaking mechanism, and by Lawrence Berkeley Laboratory (LBL) where I evaluated utility regulatory policies surrounding the development of brownfield generation sites.

Subsequently, I worked at PHB Hagler Bailly (and its predecessor firms) for ten years, serving as a vice president in the firm's Global Economic Business Services practice and as a senior member of the Wholesale Energy Markets practice of PA Consulting Group when that firm acquired PHB Hagler Bailly in 2000. In 2001, I founded Sedway Consulting, Inc. and have continued to specialize in economic analyses associated with electricity wholesale markets.

Q. What is the purpose of your testimony?

A. I was retained to assist Florida Power & Light (FPL) in conducting its solicitation for competitive power supplies. The purpose of my testimony is to describe my role as an independent evaluator and present my findings. I reviewed FPL's solicitation process and performed a parallel and independent economic evaluation of the proposals and self-build options that were available to FPL. I will discuss the process and tools that I used to conduct that parallel economic evaluation. Based on the results of my independent evaluation, I concluded that the Martin/Manatee FPL portfolio described in the Need Study is the least-cost portfolio that meets FPL's resource needs.

Q. Are you sponsoring an exhibit in this case?

A. Yes. It consists of the following documents:

Document AST-1, Resume of Alan S. Taylor

Document AST-2, Sedway Consulting's Independent Evaluation Report.

Q. Please describe the role you performed as an independent evaluator in FPL's solicitation.

A. I reviewed FPL's Supplemental Request for Proposals (Supplemental RFP) and the utility's 2002 Ten-Year Site Plan. Prior to the receipt of proposals, I requested that FPL run its detailed economic evaluation tool – the Electric Generation Expansion and Analysis System (EGEAS) model, originally developed by Electric Power Research Institute – and provide results that I could use to calibrate Sedway Consulting's bid evaluation model. Once FPL received the proposals and clarified ambiguous or confusing issues with the bidders, I was sent the economic/pricing information from each proposal. The information was provided to me by bid number, thereby masking the identities of the bidders and the locations of their projects. FPL conferred with me on a number of issues relating to proposal disqualification decisions, interpretation of bid information, clarification requests, and economic evaluation assumptions. As the evaluation progressed, FPL and I discussed appropriate modeling assumptions in both evaluation tools (which I discuss later in my testimony). Using Sedway Consulting's Response Surface Model (RSM), I developed rankings of all of the proposals. Also, with the RSM results, I developed portfolios of low-cost resources and assessed the overall costs of such portfolios. I reviewed FPL's EGEAS runs to confirm consistency of assumptions and reasonableness of results, and I documented the entire process in an independent evaluation report (Document AST-2).

Q. Turning first to the process of the solicitation, do you believe that the Supplemental RFP was an adequate document for soliciting proposals?

A. Yes. As one who has developed dozens of such utility resource RFPs, I believe that FPL's Supplemental RFP struck a good balance between being sufficiently detailed without being overly burdensome on the respondent. I think that the number and quality of the proposals that FPL received is a testament to the Supplemental RFP's adequacy.

Q. Do you believe that FPL's evaluation process was conducted fairly?

A. Yes. I believe that the outside proposals and FPL self-build options were evaluated on an equal footing, with consistent assumptions and analytic approaches applied to all relevant resource options at each stage of the evaluation.

Q. Please describe Sedway Consulting's RSM model and its use in FPL's solicitation.

A. The RSM is a spreadsheet model that I have used in solicitations around the country. It is a relatively straightforward tool that allows one to independently assess the cost impacts of different generating or purchase resources for a utility's supply portfolio. Most of the evaluation analytics in the RSM involve calculations that are based entirely on my input of proposal costs and characteristics. A small part of the model examines system production cost impacts and needs to be calibrated to simulate a specific

utility's system. In the case of the FPL solicitation, prior to the opening of the bids, I requested that FPL execute a specific set of runs with its detailed evaluation model, EGEAS. With the results of these runs, I was able to calibrate the RSM to approximate the production cost results that EGEAS would produce in a subsequent evaluation of any proposals or self-build options that FPL might receive. Thus, I would not have to rely on FPL's modeling of a proposal; instead, I would be able to insert my own inputs into my own model and independently evaluate the economic impact of any particular bid. In short, the RSM provides an independent assessment to help ensure against the inadvertent introduction of significant mistakes that could cause the evaluation team to reach the wrong conclusions.

Q. How is the RSM an independent analytical tool if it is based on initial EGEAS results?

A. As I noted above, most of the calculations performed by the RSM are not based on EGEAS results in any way. There are two main categories of costs that are evaluated in a resource solicitation: fixed costs and variable costs. The costs in the first category – the fixed costs of a proposal – are calculated entirely separately in the RSM, with no reliance on the EGEAS model for these calculations. The second category – variable costs – has two parts: (1) the calculation of a resource's variable dispatch rates and, (2) the impact that a resource with such variable rates is likely to have on FPL's total system production costs. As with the fixed costs, a proposal's variable dispatch rates

are calculated entirely separately in the RSM, with no basis or reliance on the EGEAS model. It is only in the final subcategory – the impact that a resource is likely to have on system production costs – that the RSM has any reliance on calibrated results from EGEAS.

Q. Please elaborate on that area of calculations where the RSM is affected by the EGEAS calibration runs.

A. This is the area of system production costs. These costs represent the total fuel, variable operation and maintenance (O&M), and purchased power costs that FPL incurs in serving its customers' loads. Given FPL's load forecast, the existing FPL supply portfolio (i.e., all current generating facilities and purchase power contracts), and many specific assumptions about future resources and fuel costs, EGEAS simulates the dispatch of FPL's system and forecasts total production costs for each year of the study period. At the outset of the solicitation project, the RSM was populated with annual system production cost results that were created by the EGEAS calibration runs.

Q. What did the RSM do with this production cost information?

A. Once incorporated into the RSM, the production cost information allowed the RSM to answer the question: How much money (in annual total production costs) is FPL likely to save if it acquires a proposed resource, relative to a reference resource? The use of a reference resource simply allowed a consistent point of comparison for evaluating all bids and self-build options. I

used a reference resource with a high variable dispatch rate of $100/MWh. In fact, I could have picked any variable dispatch rate for the reference resource and obtained the same relative ranking of bids out of the RSM. The cost of the reference resource has no impact on the relative results – it is merely a consistent reference point.

Q. Can you provide a numerical example that shows how the RSM works?

A. Certainly. Assume that a utility has a one-year resource need of 1,750 MW and must select one of the two following proposals:

	Bid A	Bid B
Capacity:	1,750 MW	1,750 MW
Capacity Price:	$9.00/kW-month	$5.50/kW-month
Energy Price:	$20/MWh	$50/MWh

For both proposals, the RSM has already calculated the fixed costs (and represented them in the capacity price) and the variable costs (and represented them in the energy price). Bid A is more expensive in terms of fixed costs, but Bid B is more expensive on an energy cost basis. The RSM calculates the final piece of the economic analysis – the different impacts on system production costs – to determine which bid is less expensive in a total sense for the utility system as a whole.

Assume that the RSM has been calibrated and populated with the following production cost information:

For a 1,750 MW proxy resource, the utility's one-year total system production costs are:

- $2.500 billion for a $100/MWh energy price reference resource
- $2.479 billion for a $50/MWh energy price resource (Bid B)
- $2.416 billion for a $20/MWh energy price resource (Bid A)

Thus, the energy savings (relative to the selection of a $100/MWh reference resource) are $84 million for Bid A with its $20/MWh energy price and $21 million for Bid B with its $50/MWh energy price. In its bid ranking process, the RSM converts all production cost savings into a $/kW-month equivalent value so that the savings can be deducted from the capacity price to yield a final net cost (in $/kW-month) for each bid. Converting the energy savings in this numerical example into $/kW-month equivalent values yields the following:

$84 million / (1,750 MW * 12 months) = $4.00/kW-month

$21 million / (1,750 MW * 12 months) = $1.00/kW-month

The RSM calculates the net cost of both bids by subtracting the energy cost savings from the fixed costs:

	Bid A	Bid B
Capacity Price:	$9.00/kW-month	$5.50/kW-month
Energy Cost Savings:	$4.00/kW-month	$1.00/kW-month
Net Cost:	**$5.00/kW-month**	**$4.50/kW-month**

Bid B is less expensive. This can be confirmed through a total cost analysis as well:

Bid A will require total capacity payments of $189 million (= 1,750 MW x $9.00/kW-month x 12 months), and Bid B will require $115.5 million (= 1,750 MW x $5.50/kW-month x 12 months). Thus, Bid A has fixed costs that are $73.5 million more than Bid B.

Bid A will provide $63 million more in energy cost savings (= $84 million - $21 million); however, this is not enough to warrant paying $73.5 million more in fixed costs. Therefore, Bid B is the less expensive alternative.

Note that the RSM is described in more detail in the independent evaluation report that is attached to my testimony, Document AST-2.

Q. **With that understanding of the RSM process, what did you do to calibrate the RSM to EGEAS?**

A. I reviewed the production cost information that FPL provided at the start of the project and confirmed that the production costs were, for the most part, exhibiting smooth, correct trends (i.e., they were increasing where they should be increasing and declining where they should be declining). Having verified that the RSM production cost values were "smooth," I was confident that inputting variable cost parameters into the model for similar proposals would yield similar production cost results. Although the RSM is not a detailed model and could not simulate FPL's production costs with EGEAS' accuracy, in the end, the independent RSM evaluation results tracked the EGEAS results quite well.

Q. Once the RSM was calibrated, what was the next step?

A. I reviewed pricing information from all of the proposals that FPL received. Specifically, I received the following information for input into the RSM: contract capacity, capacity pricing, commencement and expiration dates, heat rates, fuel costs, firm gas transportation pipeline service (if applicable), variable operations and maintenance (O&M) and/or energy charges, and start-up costs.

Q. How was the firm gas transportation pipeline service determined?

A. All proposals involving natural-gas-fired projects were assumed to require

firm gas transportation from either the Florida Gas Transmission (FGT) pipeline, the new Gulfstream pipeline, or a bidder-specified supply. Bidders indicated in their proposals which pipeline they expected to tap for firm gas supplies.

Q. What other significant proposal assumptions or modeling issues did you discuss with the FPL evaluation team during the course of the evaluation?

A. There were a number of minor points, but the major ones were addressed in discussions pertaining to the following five areas:

1. Future resource costs that would be incurred at the end of short-term transactions
2. Firm gas transportation issues
3. Equity penalty
4. Residual value of resource lives beyond 2030
5. Transmission integration costs

Q. What do you mean by "future resource costs"?

A. There are several issues here that concern the evaluation of proposals of varying size or duration. Focusing first on the issue of varying duration, FPL received proposals for contract terms of anywhere from 3 to 25 years. In order for one to compare the value of a short-term option with that of a long-term option, one must make some assumptions about the future costs of new

resources. In other words, to compare a 3-year contract with a 25-year contract of the same capacity, one needs to assess the likely costs of acquiring or developing new capacity in years 4 through 25. The costs of acquiring or developing that new capacity are what I refer to as "future resource costs". If one believes that very low-cost options may be available in 4 years, the economic advantage may tilt toward the 3-year contract. Alternatively, if one believes that future resource costs may be high for years 4 through 25, the 25-year contract may appear more attractive. Of course, the fundamental comparison is directly dependent on the proposed prices inherent in both transactions. But to put both proposals on common footing, one needs to "fill in" behind the 3-year contract with some estimate of future resource costs or market prices that will be available to the buyer in those interim years. Thus, in both EGEAS and the RSM, future resource costs were characterized by a "filler" unit.

Q. What assumptions were used in the RSM for the filler unit?

A. The RSM used FPL's generic estimates of a greenfield combined-cycle facility similar to the 1,107 MW Manatee project that was selected in this evaluation. The filler had the same heat rates, variable O&M costs, annual incremental capital requirements and start-up costs. Its construction and fixed O&M costs were higher to account for the greenfield nature of the facility. Also, its firm gas transportation costs were based on the FGT tariff because of the fact that FGT can be accessed by new resources throughout the state. The

Gulfstream pipeline, on the other hand, supplies a limited geographical area. Given that the location of future filler resources could not be known, FGT supply was assumed. In total, the filler assumptions resulted in a combined-cycle facility that was rather low-cost – lower than most of the combined-cycle bids that FPL received. Of the 13 combined-cycle facilities that were offered by outside bidders, the filler resource was less expensive than nine of them. Thus, short-term proposals were afforded a favorable assumption with regard to the replacement capacity that FPL would acquire or develop upon the expiration of the proposed contract.

Also, it is important to note that a sensitivity analysis was performed by Sedway Consulting and is described in the independent evaluation report in Document AST-2. This analysis examined the effect of even lower filler costs (through a reduction in construction and other fixed costs and the accessing of Gulfstream firm gas supply) on the costs of the top-ranked portfolios. The All-FPL portfolio was still the least-cost portfolio by $125 million.

Q. In the RSM, was every short-term proposal replaced with a 1,107 MW combined-cycle filler resource?

A. No. The RSM sized the replacement capacity for each short-term proposal to equal the size of the expiring contact. All costs were scaled accordingly. Thus, small proposals were replaced with a small filler resource that had all of the economy-of-scale benefits of a large 1,107 MW generating plant.

Q. Is this MW-for-MW replacement assumption in the RSM reflective of what would actually happen on FPL's system?

A. No. FPL likely would be unable to exactly match additions MW for MW in the year needed, and smaller additions used to more closely match a specific year's need probably would be more expensive and/or less efficient that the scaled-down version of a large 1,107 MW facility. Therefore, the process followed by the RSM may slightly understate the total study period costs for short-term proposals.

Q. Did EGEAS follow the same process as was employed in the RSM?

A. Technically, no, although the final result is similar. EGEAS looks at the FPL system more comprehensively. EGEAS maintains FPL's 20% reserve margin by selecting proposals (during the 2005 and 2006 time frame) and full-scale filler resources (in the later years) to supplement FPL's existing fleet of resources. The EGEAS process is described more fully in Dr. Steven Sim's testimony. It is important to note, however, that both the RSM and EGEAS used the same assumptions for the costs and operating characteristics of the 1,107 MW filler resource.

Q. The second item on your list of discussion issues involved firm gas transportation. What was discussed and decided there?

A. I have already mentioned the designation of some resources as having lower firm gas transportation costs because of their access to the Gulfstream

pipeline. In addition, after seeking guidance from FPL's Energy Marketing and Trading Group, the evaluation team decided to assume that there would be no firm gas transportation charges for duct-fired capacity associated with a combined-cycle proposal.

Q. Item #3 on your list was the equity penalty. What is that and how was it applied to the evaluation process?

A. An equity penalty is a cost associated with contracting for power from an outside party. Rating agencies view some portion of a utility's capacity payment obligations to a power provider as the equivalent of debt on the utility's balance sheet. If a utility does not rebalance its capital structure with additional equity, this debt equivalent can negatively impact a utility's financial ratios, influencing rating agencies to downgrade their opinion of the utility's creditworthiness and increasing the utility's cost of borrowing. Consequently, an adjustment acknowledging this incremental cost of capital must be made to all capacity purchase options in order to put them on an equal footing with internal build or turnkey options. Thus, an equity penalty was calculated for each top-ranked proposal to represent the additional cost to FPL and its customers of rebalancing its capital structure were it to contract for the power associated with each proposal. This value was summed for all outside proposals in each portfolio, and added to the portfolio's total cost.

Q. Have you seen this equity penalty concept incorporated in other solicitations?

A. Yes, both inside and outside of Florida. Also, I believe that recent events in the electricity markets have only underscored the importance of energy companies maintaining strong balance sheets. Rating agencies have become quite severe in their evaluation of energy companies' financial ratios. Thus, it was appropriate for the bid evaluation team to incorporate into its analyses the estimated financial impact and imputed debt associated with the signing of purchase power agreements.

Q. Please describe the issue of residual value.

A. The residual value concept is associated with any resource that continues to have costs or value beyond the end of the study period (i.e., beyond 2030). None of the outside power purchase proposals extended beyond the end of the study. However, the FPL self-build options are likely to continue to operate beyond the 25-year time frame that formed the basis of the revenue requirements calculation for these resources. Thus, the costs of the self-build options were premised on FPL's customers paying for the capital costs over 25 years; but the customers will continue to enjoy the benefits of the power for operating lives that are likely to be 35 years or more. Given that, I calculated the present value of the net benefits of an additional 10 years of capacity from the FPL self-build options. I used a conservative estimate of the value of the capacity (i.e., an estimate of the market price that may be

associated with capacity in that time frame) and assumed that FPL customers would continue to pay fixed O&M costs and incremental capital costs (with the latter at reduced levels) to keep the facilities running. The net benefit of the capacity was calculated as the facilities' capacity value minus the costs.

Q. Did FPL's analysis include a residual value calculation?

A. No. Therefore, I believe that the FPL analysis understated the value of the FPL options by $34 million to $76 million. This is one of the primary reasons that the cost differences (between the All-FPL portfolio and the competing portfolios) depicted in Sedway Consulting's results are generally greater than those depicted in FPL's results.

Q. How were transmission integration costs factored into the evaluation?

A. In the final consideration of portfolios, various portfolios were analyzed to determine what transmission integration investments might be necessary to accommodate the development and receipt of power injections from specific points of delivery. This determination requires significant effort and transmission system modeling. Thus, the FPL evaluation team opted to send only 28 portfolios for analysis. The results showed that transmission integration costs may add from $5 million to $132 million (present value of revenue requirements) to the cost of a portfolio, depending on the specific geographic configuration of the resources in each portfolio.

Q. What were the final results of the evaluation?

A. The top portfolio included two FPL projects – the conversion of two CTs (and the addition of two more) at FPL's Martin generating facility to a 4-on-1 combined-cycle facility and a similar complete 4-on-1 combined-cycle facility at FPL's Manatee generating station. Both projects will be essentially the same type of facility, providing 1,107 MW each of summer capacity. Because the Martin expansion project will be converting two existing CTs that currently provide 318 MW of capacity, the net additional capacity from that project will be 789 MW. Thus, this portfolio of FPL self-build options will provide a total of 1,896 MW of summer capacity, meeting the FPL's minimum requirement of 1,722 MW. This portfolio was found to be at least $135 million less expensive than the next best portfolio without both FPL units. A complete list of the top-ranked portfolios is provided in the independent evaluation report (Document AST-2).

Q. What do you conclude about FPL's solicitation?

A. I conclude that the All-FPL portfolio is the least-cost portfolio and concur with FPL's decision to move forward with Martin Unit 8 and Manatee Unit 3. The solicitation process yielded the best results for FPL's customers while treating developers fairly. The FPL Supplemental RFP was sufficiently detailed to provide necessary information to bidders. The economic evaluation methodology and assumptions were appropriate and unbiased, and the independent evaluation procedures provided a cross-check of FPL's bid

representation in EGEAS and confirmed FPL's EGEAS results. Finally, I conclude that the All-FPL portfolio of the Martin and Manatee projects is the most cost-effective portfolio by at least $135 million.

Q. Does this conclude your testimony?

A. Yes.

BY MR. NIETO:

Q Could you please summarize your testimony?

A Certainly. Madam Chairman, Commissioners, I am the independent evaluator in this case, a role that I have played in many solicitations around the country. I would like to discuss a little bit about my background and experience in these types of endeavors and then move to discuss the details of my role in this particular solicitation, the tools that I used to perform the evaluation and the conclusions that I reached.

I have been working in the utility area since 1980. During the '80s I worked on behalf of a software vendor and worked specifically with utility planning models. I assisted and trained over two dozen utilities or their personnel in their generation planning departments on the use of these kinds of tools. In the last ten years I have focused more on strategic and management type consulting, but specializing in the area of competitive bidding solicitations. I have looked at literally hundreds of bids involving everything from gas-fired facilities to coal-fired facilities, wind farms, tire burning facilities, quite a wide variety of things. And I have been involved in solicitations that have looked at self-build resources, also unregulated affiliates that might be bidding in contracts for power supplies, or solicitations that involve entirely outside proposals.

I have been involved in all four phases of the solicitation process. There is the development of the RFP document itself to solicit the proposals, the next phase is the evaluation phase looking at the responses to the proposals, and I have performed the economic evaluation, and another phase is the risk assessment, and yet another stage for those proposals that advance to a short list there is the negotiation process. I have worked on behalf of investor-owned utilities, utility cooperatives, public utility commissions, as well as IPPs. In all cases my emphasis has always been on trying to find the best resource or portfolio of resources for the customers.

Turning to my role here in the FPL solicitation, I was retained to perform a parallel economic evaluation. I determined from my economic evaluation that the All-FPL plan including Manatee 3 and Martin 8 is the least cost plan. I used my own model, the response surface model, the RSM.

It is a spreadsheet model and is fairly simple and straightforward, and I think provides two major benefits to a solicitation process. One, it allows for cross checking of the results out of the more detailed models. These models that are used in these types of evaluations often involve quite a few inputs and enough complexity that it is helpful to have a second check for the results.

A second benefit I think to having something like this response surface model is it is a spreadsheet program that

allows a degree of transparency in the process. Whether it is Commission staff or intervenors who have signed the necessary nondisclosure agreements, this is a spreadsheet that people can look at and see how the costs were calculated, how the fixed costs and variable costs of the various proposals and self-build options were examined and developed, and can understand the analysis and become assured that the evaluation was performed rigorously and appropriately.

In the solicitation I was given free reign to conduct the evaluation, my independent evaluation as I saw fit, and I was also given free reign to challenge FPL's analysis and offer suggestions or areas where they might improve. In conclusion, I determined in my review of the overall solicitation that their RFP document was sufficient and it certainly garnered quite a few proposals in the process. I think that their overall evaluation process was fair and unbiased. It treated all of the proposals and self-build options under a consistent set of assumptions and using consistent analytical approaches. I think that the results were sound and they were corroborated by my independent evaluation, and my results have indicated that the best portfolio of outside resources would be about $423 million more expensive than the all-FPL plan including Martin 8 and Manatee 3. With the next best combination portfolio, that which would include either Martin 8 or Manatee 3 and combinations of outside proposals, I found that the next

best plan was approximately $135 million more expensive. So I concur with FPL's decision to move ahead with the Martin 8 and Manatee 3 plan. That concludes my summary.

MR. NIETO: Thank you, Mr. Taylor. We tender Mr. Taylor for cross.

CHAIRMAN JABER: Mr. Moyle.

CROSS EXAMINATION

BY MR. MOYLE:

Q Mr. Taylor, I was just going to follow up on a few things you said in your opening statement. You said you reviewed the RFP document, correct?

A Yes.

Q Was that both the original and the supplemental RFP?

A That is correct.

Q Did you believe that the supplemental RFP after some of the changes that were made made the document more fair to bidders than the original RFP?

A Yes, I think it was a better RFP from the standpoint that there were various issues that were relaxed from the original RFP.

Q Were you asked for your suggestions as to ways to improve their RFP document?

A No, I actually reviewed the RFPs after they had been issued.

Q So your expert opinion was not sought prior to the

issuance of the RFP, either the supplemental or the initial, correct?

A That is correct.

Q Now, I thought I heard you say that you thought the RFP was fair and unbiased, and let me just ask you one thing. You have been in the room for the last couple of days, I think. I have seen your face back there.

A In and out of the room.

Q There has been a lot of discussion about the equity penalty, and I think counsel for FPL directed the attention of one of their witnesses to the line in the supplemental RFP that deals with the equity penalty. And I will just quote on Page 18. Actually because it starts with therefore, I should probably quote both sentences. It says, "The economic evaluation will seek to identify the firm capacity and energy proposals which result in the lowest electric rates for the FPL system. Therefore, the evaluation will examine each proposal's impact on the entire FPL system, including the estimated impact of FPL's cost of capital associated with entering into a purchased power agreement." Do you believe that that sentence puts bidders on notice as to how the equity penalty is going to be applied to them?

A I believe that it put bidders on notice that there would be consideration of the impacts of purchased power agreements on FPL's cost of capital.

Q But I guess my question was how it would be applied. You wouldn't read that sentence to indicate it describes how the equity penalty will be imposed or applied to bids, do you?

A It is not a full methodology obviously embodied in one sentence. I think given that the supplemental RFP was soliciting proposals broadly but quite a few from those bidders who had already been involved in the initial RFP, I would presume that there had been some foreknowledge on the part of those dozen and a half bidders that had bid the first time around, that there was an equity penalty issue that had been described in the need docket there.

CHAIRMAN JABER: So the answer is no?

THE WITNESS: No.

BY MR. MOYLE:

Q Are you aware that my client, CPV Gulfcoast, did not bid in the first RFP?

A No, because I did not know the identities of the bidders in either solicitation.

Q The RSM model, that is your model, correct?

A Yes, it is.

Q And if I heard your summary, you use it for cross checking other models, and you also have a spreadsheet program that you believe is transparent and whatnot. If I today represented a utility and I came to you and I said, Mr. Taylor, we are getting ready to have an RFP, and I want you to do the

evaluation with your RSM model and tell us what the best deal is, could you do that?

A I would not recommend using the RSM itself as the only model. It is really a secondary model that is best used for cross checking. It is meant to supplement the more detailed models that are generally used in generation planning or resource acquisition departments. So I would recommend against using the model itself as the sole basis for examining the economics of power supply proposals.

Q So that would be a no, correct?

A Correct.

Q I guess given the answer to that question that you couldn't use that -- or you wouldn't recommend using it exclusively and independently to evaluate bids, then it really doesn't follow logically, does it, that the RSM model can be used as an independent evaluation of the bids, does it?

A No, I do not agree with your conclusion. The RSM is calibrated at the outset of the process with results from a more detailed model. So it is independent in the sense that the production cost characteristics in the model are anchored before any bids are opened, so it assures a process where any sort of problems or mistakes that might get introduced during the solicitation process are not replicated in a model that has already been anchored and calibrated and synchronized at the beginning of the process.

Q Okay. And I guess given that response, then primarily your model was used for cross checking, was it not, in this case?

A Cross checking and transparency of process. As I say, this was a model -- it was offered in discovery in this proceeding so intervenors who signed the necessary nondisclosure agreements were free to review the results and see entirely how the economics of the evaluation were performed.

Q Let's talk for a minute about this 20 percent number and the 15 megawatts, you have heard some discussion about that, have you not?

A Yes, I have.

Q In your expert opinion, did you have concerns that FPL was moving forward and putting these two plants together to get the 1,722 number as compared to just going ahead and seeking bids for the Manatee unit?

A No, with an important caveat. I saw my role in this solicitation, in both solicitations, the initial and the supplemental, to play the role of to some extent a devil's advocate where wherever I found there was an issue that I thought anybody from the outside looking in, and certainly from my standpoint as an independent looking in might want to challenge, I asked the question.

There was back in the initial solicitation a point

where the FPL self-build facilities had a revision in their overall capacity. I had actually been emphasizing to the FPL evaluation team that they should make sure that their characteristics for the self-build facilities were based on average operating conditions that their production and generation division could support. And when they went back to PGD, the production generation division, and emphasized that there was actually a revision to the heat rates and a reduction in the capacity of the resources. They became in a sense a little bit less valuable than they had been at the outset of the process.

When that capacity was reduced, we ended up with these combined cycles that were 1,107 megawatts each. And that 1,107 fell short of the 1,122 requirement in the initial solicitation thereby requiring the Martin resource to what had originally been seen as a 2006 start date moved back to 2005. I turned to them and I said we have got a 15 megawatt difference here, is that really something that you are going to hold to. And they said, yes, in the fairness issue as far as the solicitation, and I concur with this, if you have published in your RFP that you are going to seek an exact number of megawatts, to change the rules just to make the configuration better fit the self-build options I think would have left the process open to tremendous challenge. So I was playing devil's advocate to just ask the question and see what their response

would be, and they held to it and said we want the least cost plan based on the capacity requirements that have been specified in the RFP, 1,122 megawatts in 2005 and an additional 600 megawatts in 2006.

CHAIRMAN JABER: Mr. Taylor, were your instructions to evaluate and look for the least cost plan or it was to look for the most cost-effective alternative?

THE WITNESS: It was to look for the least cost plan, and I tend to use those terms as far as least cost and most cost-effective synonymously. I know in Mr. Silva's cross examination yesterday he drew a distinction as far as the risk factors that also need to be considered, and I absolutely support that concept that the best resources for the customers are not necessarily the absolute lowest cost. But I use the terms least cost and cost-effectively somewhat the same.

BY MR. MOYLE:

Q This conversation that you recall having with respect to the 15 megawatts, when did you have that conversation?

A That probably would have been somewhere back in the November 2001 time frame, perhaps early December.

Q Okay. So that was way before the supplemental RFP was issued, correct?

A That is correct.

Q So to the extent that the concerns you raised about the fairness and whatnot, that the bidders wouldn't be on

notice, surely that could have been addressed and corrected in the supplemental RFP, correct?

A I'm not sure what you mean by addressed and corrected.

Q Well, I thought I understood you to say that you thought it made sense because there was only a 15 megawatt shortfall to make an adjustment and you were told, no, we said 20 was what we are going to do, we put that number in the RFP, it would be not fair to the birders. And I guess I asked you when you had that conversation and you said November, but the supplemental RFP wasn't issued until April. So you would agree that to the extent the fairness to the bidders was of concern, that could have been addressed in the supplemental RFP, the change could have been noted?

A I'm not sure what change you are referring to.

Q If they changed and said we are going to go at 19.92 rather than 20 percent and only do the Manatee unit in 2005, that could have been noted in the supplemental RFP, could it not?

A Yes, that could have been noted, although I think that that would have insinuated that this process was being engineered to exactly fit the self-build resources, and I don't know that I would have stood behind that decision.

Q Now, in response to a question I asked you, I think you talked about conversations you had with PGD. And if I

heard you correctly you said that you encouraged them to be more realistic in some of their numbers and their assumptions and they were and the capacity was reduced. Do you recall that answer to the question I asked you?

A No. First of all, I never spoke with PGD. I did not speak with any of the bidders. These were simply issues that I raised to the FPL bid evaluation team themselves. They were the ones who communicated specifically with bidders or with PGD. And I simply wanted to make sure that as bidders were being required to stand behind their capacity values and heat rate values that these heat rate and capacity values that had provided for the FPL self-build resources were of a comparable and consistent nature.

I thought it was essential to have an apples-to-apples kind of comparison here. So what was represented to me is after the FPL bid evaluation team communicated with PGD, they learned that the initial values, and we are talking about values back in October of 2001, represented basically brand new operating conditions and that those weren't the appropriate numbers to use for examining the resources over time. So that is when the revision occurred.

Q Okay. Just so the record is clear, PGD is the internal FPL self-build -- or the group that put together the numbers for the internal FPL self-build, correct?

A That is correct, yes.

Q So is it your testimony that you raised a concern about the numbers that PGD was using in terms of the ability to meet what was set forth in the numbers?

A No, I did not raise the concern. I simply said be sure that this is an apples-to-apples comparison and that PGD is prepared to stand behind these numbers as representing average operating conditions rather than something that was brand new. So in looking at the numbers themselves, I didn't have any concerns. The heat rates were fine. There were proposals that had lower heat rates, but I just wanted to make sure that this was an apples-to-apples comparison.

Q You talked about the FPL evaluation team, who was on the FPL evaluation team?

A The primary person in charge of the team was Doctor Sim.

Q Do you know anybody else that was on it?

A There was also Ms. Daisy Iglesias.

Q Anybody else?

A Steve and Daisy, Doctor Sim and Ms. Iglesias were the two primary individuals. There were additional staff who also helped out with the process. I believe Ms. Sharon Fisher and Mr. Richard Brown.

Q Were you on that team?

A No.

Q How often were you in contact with members of the

team?

A It varied over the course of the solicitation. During the period immediately following the receipt of the proposals and the evaluation of those proposals, I would say I was in touch with the team on a daily basis usually by either e-mail and/or by phone.

Q All right. Now, with respect to the bids, wouldn't you agree that the bids represent the best information as to what it is that folks are proposing to do in response to FPL's supplemental RFP?

A The best information? Yes, I suppose.

Q And isn't it true that you never ever reviewed the bids that were submitted to the supplemental RFP?

A During the evaluation process that is true.

Q Let me ask you about your scope of work, and I have a document that represents an agreement that you have. I don't want to introduce it into the record because it has compensation figures and out of respect I don't want to do that, but I do want to publish a portion of this document that relates to the scope of work, so that is how I'm going to handle that if I could approach.

CHAIRMAN JABER: Mr. Moyle, just be real clear what it is you do not want the witness to refer to.

MR. MOYLE: It is a rather lengthy document, but I'm just going to have him read into the record what his scope of

work was. Basically what his duties and responsibilities were.
BY MR. MOYLE:
Q First of all, who is this agreement with?
A This is with the firm of Steel, Hector and Davis.
Q Okay. And on the second page there is some bold language there right above the signatures of Mr. Guyton and below your signature. Would you please read that for the record?
A Authorization for Sedway Consulting, Incorporated to assist Steel, Hector and Davis, LLP, in the evaluation of responses to Florida Power and Light Company's August 13th, 2001 power supply RFP.
Q And you did assist Steel, Hector in this evaluation, correct?
A That is correct.
Q Please read for the record, and it will take just a minute, but Attachment A is your scope of work. Could you please read that into the record?
A Sedway Consulting proposes to provide advice and feedback regarding FPL's RFP, develop a response surface model, RSM, to facilitate the economic evaluation of responses to FPL's RFP, review the economic portions of all proposals for conventional power supplies, develop questions for bidders to clarify their proposals, if necessary. These questions will be forwarded to Steel, Hector and Davis, LLP and FPL. Unless

otherwise instructed, Sedway Consulting will have no direct communications with any bidders. Communicate with FPL to understand electric transmission and/or fuel supply interconnection costs or limitations associated with each proposal. Develop a ranking of proposals or sets of proposals that identifies the best proposals from an economic perspective. And the last task, document this ranking in an executive briefing memorandum that describes Sedway Consulting's process and rationale behind the proposal ranking.

Q Okay. The word independent or independence doesn't appear anywhere in this scope of work, does it?

A No.

MR. MOYLE: Thank you. I have no further questions.

CHAIRMAN JABER: Mr. McGlothlin.

CROSS EXAMINATION

BY MR. McGLOTHLIN:

Q Mr. Taylor, you said in response to a question from Mr. Moyle that you didn't know who the bidders were, is that correct?

A During the evaluation process that is correct. I actually did review the proposals this week and confirmed that all the information in the proposals is exactly what was represented in my RSM analysis.

Q When you were reviewing the information, were you able to tell which information was from bidders and which was

from FPL?

A During the evaluation process?

Q Yes.

A Yes, the FPL information had actually been included in the supplemental RFP itself.

Q At Page 4, Line 12, you said that FPL conferred with me regarding several things that includes proposal of disqualification decisions, and with respect to that subject, did they ask your opinion on that or did they simply inform you who was disqualified?

A In the initial RFP there were discussions about appropriate bases for proposal disqualification. In the supplemental solicitation, since I did not know the identity of the bidders in either solicitation, but certainly in the supplemental there were issues that they were proceeding with on disqualification grounds that I agreed with, but I was not involved with the decision and I was basically notified of which proposals would not be continuing for economic evaluation.

Q At Page 6, Line 6, after describing the methodology, you state, "Thus, I would not have to rely on FPL's modeling of a proposal. Instead I would be able to insert my own inputs into my own model and independently evaluate the economic impacts of any particular bid. You are referring to your use of the RSM for that purpose?

A That is correct.

Q In your testimony you describe how you obtained some EGEAS data points from FPL to include in your RSM model, is that correct?

A That is correct.

Q And if I understand correctly, at your request FPL used something of a proxy resource or resources of different sizes, plugged that into EGEAS and gave you the impact on production costs assuming different prices, is that correct?

A Yes, basically.

Q And you populated those data points in your spreadsheet model for use in approximating production costs when you evaluated one of the bid proposals, correct?

A Correct.

Q So that if you had a resource or a proposal that was of the same size that was modeled but at a different price you would extrapolate from the data points supplied by FPL to approximate the impact on production costs?

A That is correct.

Q So would you agree that when you approximated the production costs associated with a particular bid you were using a methodology that was derived from EGEAS runs supplied to you by FPL?

A With that small factor of the production cost. Most of the costs of the proposals was embodied in the fixed cost of

a proposal which involved things like capacity, and fixed O&M pricing, fuel transportation, and so forth. Those costs were calculated entirely independently in the RSM. Also, the variable dispatch price of a resource, which is a critical component of determining what its fuel savings may be when it gets represented in the FPL system, was also entirely independently calculated in the RSM with no reliance whatsoever on EGEAS. So out of three categories of costs, two of the largest ones were really handled entirely independently and the third one was based on this response surface that came from information from EGEAS that was obtained before the bids were opened.

Q And the calculation of the capacity cost component is simply taking the bidder's price and multiplying that by the amount of megawatts offered, is it not?

A With fuel transportation costs and start-up costs and other things that were included in the evaluation.

Q So with respect to the production cost component, you did rely on the data points that were supplied to you from EGEAS runs provided by FPL?

A Correct.

Q And with respect to the number of starts to be assumed, that number was also provided to you by FPL, was it not?

A Yes.

Q And the transmission integration costs, were those supplied to you by FPL?

A Yes, from their consultant.

Q At Page 11, beginning at Line 9, you make this statement, "Although the RSM is not a detailed model and could not simulate FPL's production costs with EGEAS accuracy, in the end the independent RSM evaluation results track the EGEAS results quite well." And so the objective with which you were successful was to attempt to track the EGEAS results that FPL's EGEAS model would have calculated?

A No, I would not say that was the objective at all. The objective was for me to perform an independent evaluation. What I am meaning by that statement in my testimony is that FPL's costs lined up with mine, so there was no concern that there had been by the end of the process any significant errors introduced or anything. That I was really retained as an independent evaluator to make sure it did not happen.

Q With respect to the equity penalty, it is true, is it not, that you did not examine any other aspect of FPL's risk profile such as a balance sheet in assessing whether and how ratings agencies would review its risk?

A I'm not sure I fully understand you question. If you could repeat that.

Q Yes. You have some discussion of the equity penalty and your approval of the concept, but isn't it true that rating

agencies evaluate far more than this imputed debt subject when assessing the risk profile of a utility for purposes of ratings?

A That is correct.

Q And you did not look to any other aspect of FPL's risk profile to assess how rating agencies might view FPL in a purchased power situation?

A No. The important issue here, I was not retained to examine any of the risk issues in the solicitation, but just to examine the economic issues of the self-build versus outside proposals and come up with the best plan. I do think that the equity penalty concept itself is something that can be specifically quantified and therefore deserves to be in the economic analysis. That doesn't mean that there aren't other issues on the risk side of the picture both for and against self-build and for and against outside proposals that do need to be considered, but I was not retained to look at those issues.

MR. McGLOTHLIN: That's all I have.

MR. PERRY: I have no questions.

MR. HARRIS: We just have a few questions.

CROSS EXAMINATION

BY MR. HARRIS:

Q Would it be safe to say, Mr. Taylor, that you have worked on at least a dozens solicitations similar to this one?

A Yes.

Q And to maintain your knowledge base and your professional standing, do you keep track of other solicitations?

A Yes, although there is not a great deal of information one can obtain from those solicitations unless you are directly involved, but I am aware of them occasionally.

Q Do you read the requests for proposals or the terms of the solicitations?

A Occasionally, yes.

Q Considering all the solicitations that you have personally worked on or that you have become aware of in the course of your professional duties, would it be correct to say that the MidAmerican solicitation in the upper midwest is the only solicitation outside of Florida that you have knowledge of where the equity penalty concept was actually considered by a state commission?

A Yes, that is true.

Q And it's true that the MidAmerican solicitation was considered by Illinois, Iowa, and South Dakota, is that correct?

A Right. All three state commissions reviewed the results of that solicitation, which did include the imposition of an equity penalty.

Q Isn't it true that none of those state commission

orders made any reference to the equity penalty concept?

A That is true. My recollection of the results of that solicitation were that the equity penalty was not a significant factor in that case. In fact, it wasn't actually even a solicitation that involved a self-build facility. It involved an affiliate transaction and that affiliate contract was also -- it had an equity penalty applied to it, as well. So it was an issue where an equity penalty was applied consistently across anything that would impact the buying utility's balance sheet. But it was not a significant factor, so therefore it was of no surprise not to see it explicitly referenced in the commission orders.

Q Was it mentioned in the orders?

A I don't believe it was.

Q How do you have knowledge of it being an issue in those state commission dockets, then?

A Because I reviewed the economic analysis, the calculation of the equity penalty and the ranking of the various proposals and know that it was not a significant factor.

Q The equity penalty adjustment as Florida Power and Light is proposing it be being applied in this proceeding, was it designed by -- to the best of your knowledge, was it designed by Standard & Poor's or was it designed by Florida Power and Light?

A The imputed debt part of the calculation as far as how much debt might be assumed with various purchased power agreements is something that Standard & Poor's has published information on. The calculation of the technical equity penalty as an equity versus debt cost difference is something that I have seen other utilities use both here in this state and outside of the state. And in reviewing the formulaic approach that was applied in this case, I can say that it is consistent with what I have seen done in other states and here in Florida.

Q So your answer would be that it was or was not designed by Standard and Poor's as being applied here?

A Half of it was designed.

Q And would it be fair to say that you have worked on a number of solicitations that have involved purchased power contracts?

A Yes.

Q And would you agree that from the viewpoint of a credit rating agency there are positive aspects to a purchased power contract that would decrease the risk to the purchasing utility?

A That I'm not sure of. I guess I would say that there is a possibility if a utility were in a very financially stressed situation, the financial community may have greater faith in their obtaining their power supplies from an outside

power provider than trying to build the facility themselves, particularly if they did not have a very good track record. So I suppose in a distressed utility situation I could imagine where a purchase contract may actually be viewed by the rating agencies more favorably. But outside of that kind of extreme circumstance, I can't think of a situation where this element as far as the application of an equity penalty would not be the case.

MR. HARRIS: That is all the questions I have. Thank you.

CHAIRMAN JABER: Commissioners. Redirect.

MR. NIETO: Just a couple of questions.

REDIRECT EXAMINATION

BY MR. NIETO:

Q Mr. Taylor, could I direct your attention to the letter that Mr. Moyle handed you?

A Yes.

Q Would you turn to the very last page of that? Could you explain to me what this last page is, which is a separate letter from the first 7 pages?

A Yes. This basically represents simply an expansion of the scope.

Q Could you read for us Paragraph 1 out of the three numbered paragraphs?

A "This letter serves to confirm our verbal agreement

to expand the scope --"

Q I'm sorry, Paragraph 1 where the paragraphs are actually numbered.

A I'm sorry.

Q After the first unnumbered paragraph there is a series of numbered paragraphs or bullet points. Could you read the first of those?

A About developing testimony?

Q Yes.

A "To develop testimony and exhibits explaining the independent evaluation process and results from Sedway Consulting's activities in the FPL solicitation project for filing an FPL needs study docket."

Q Mr. Moyle had asked you some questions regarding the earlier letter and the fact the word independent is not in it. In your mind was your role independent of FPL?

A Absolutely. Certainly in all verbal discussions from the very beginning it was my understanding and what was represented to me was that my evaluation had to be entirely independent. And I was given full reign to perform my own evaluation, decide to include or exclude whatever parameters I thought were most important in the evaluation, and to challenge anything that I saw in FPL's analysis that I did not feel was appropriate.

Q Mr. Moyle asked you a couple of questions regarding

whether you had reviewed the bids, and I believe your answer was that you had not reviewed the bids during the evaluation process. Have you had occasion to review the bids since then?

A Yes. During the evaluation process the evaluation was performed on a masked basis where the identities of the bidders were kept from me to make sure that if I had any sort of bias for or against various bidders because of experiences in other solicitations, that that would not in any way color my interpretation of the bid information.

I, for the record, do not have biases. However, FPL felt best in providing the information on an entirely blind or masked basis. However at the beginning of this week, I took the opportunity to review the proposals, they were made available to me, and confirmed that all of the information that had been provided by FPL indeed corroborated with what was in the original proposals. I wanted to make sure that there was challenge to the economic evaluation that I performed as not having been in some way corroborated with the actual proposals.

MR. NIETO: Thank you. That's all I have.

CHAIRMAN JABER: Exhibit 24, without objection will -- what, Mr. Moyle?

MR. MOYLE: No, I was thinking maybe -- I said I was going to publish that. I have taken about five copies and scratched out the price terms, and there were two letters that were referenced here, it may be clearer for the record if I go

ahead and introduce this letter.

CHAIRMAN JABER: I didn't have a copy of the letter. Confer with counsel and see if you all can reach a stipulation. My problem with it is this, Mr. Moyle, I wasn't looking at the letter while you all were asking questions about it, it wasn't passed out. Confer with counsel. This may be quickly resolved by stipulation and I will be all right with it.

(Off the record.)

MR. NIETO: Madam Chair, we agree and have no objection.

CHAIRMAN JABER: Mr. Moyle, give me a short title and that will be Hearing Exhibit 25.

MR. MOYLE: I think it will be a composite exhibit that consists of a -- let's just call it agreement with subsequent modification between Sedway Consulting and Steel, Hector.

CHAIRMAN JABER: Thank you. It is Hearing Exhibit 25.

(Exhibit 25 marked for identification.)

CHAIRMAN JABER: All right. And without objection Exhibits 24 and 25 are admitted into the record.

(Exhibits 24 and 25 admitted into the record.)

CHAIRMAN JABER: Mr. Moyle, I am going to wait for you to sit down. I want to talk about witnesses for tomorrow and what we expect. Mr. Taylor, you may be excused.

THE WITNESS: Thank you.

CHAIRMAN JABER: Mr. Moyle, you have identified two witnesses, Sam Waters and Daisy Iglesias as adverse witnesses. I am assuming there has been a subpoena issued?

MR. MOYLE: There has for Mr. Waters. Ms. Iglesias is in the room and counsel has made her available.

CHAIRMAN JABER: Excellent. So both of those people will be here tomorrow. I want all witnesses left on the list here tomorrow.

MR. MOYLE: Mr. Waters has been under subpoena. I told him earlier in the week that I was not releasing him from the subpoena. I wanted to see how things progressed and whether I would need him. I don't need him. I'm not going to calling him, so I left it with him that if he didn't hear back from me he was excused. In effect, reserving my right to call him if something developed today where I needed him.

CHAIRMAN JABER: But let me be clear for the record, you will not be calling Mr. Waters as a witness?

MR. MOYLE: That is correct.

MR. GUYTON: May I inquire as to Ms. Iglesias? I have been trying to find out all week as to whether he intended to call her or not.

MR. MOYLE: I don't know. I need to talk with my client. And my client will be here, Mr. Finnerty, he has a 4:00 o'clock plane, I believe, tomorrow afternoon. So

hopefully we can accommodate him.

CHAIRMAN JABER: All right. So as of this point, Mr. Guyton, Ms. Iglesias will be expected to be here tomorrow and you all can continue to talk about it.

MR. GUYTON: Any notice that we can be given we would appreciate.

CHAIRMAN JABER: Sure. Mr. Moyle, I think that is a reasonable request, but at the same time she is listed as an adverse witness, so I will expect her to be here tomorrow until I hear otherwise.

MR. GUYTON: I understand. And as we have indicated to Mr. Moyle from the start, we may object to calling her, but we have not forced that issue because it has been unclear to us whether or not she would actually be called, Madam Chairman.

MR. MOYLE: That's right. And also she was going to be here anyway, so just for the record it is not as I understand an imposition. She was planning on being here anyway and counsel agreed to make her available. We worked it out, so I don't have her under subpoena.

MR. GUYTON: That is the part that -- I have not agreed to make her available. I have said that she would be in Tallahassee. I have consistently told Mr. Moyle that I reserve the right to object.

MR. MOYLE: He is correct.

CHAIRMAN JABER: Well, let me tell both of you

something. The prehearing officer signed an order that indicates that both of those people are listed as adverse witnesses. That puts both you on notice on what the game plan is. Mr. Moyle, out of professional courtesy, figure out if you need that witness or not and let FPL know. But, Mr. Guyton, whether you made her available at Mr. Moyle's request or she was going to be here doesn't matter. This order indicates she was to be called as an adverse witness, so I will expect her here tomorrow. We are going to conclude for this evening. We will pick up at 8:30 tomorrow morning.

(The hearing adjourned at 6:15 p.m.)

(Transcript continues in sequence with Volume 7.)

STATE OF FLORIDA)

: CERTIFICATE OF REPORTER

COUNTY OF LEON)

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

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

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

DATED THIS 4TH DAY OF OCTOBER, 2002, 2001.

JANE FAUROT, RPR
Chief, Office of Hearing Reporter Services
FPSC Division of Commission Clerk and
Administrative Services
(850) 413-6732