BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 120015-EI

In the Matter of:

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

VOLUME 30

Pages 4385 through 4577

PROCEEDINGS: HEARING

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

DATE: Thursday, August 30, 2012

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

REPORTED BY: MICHELLE SUBIA, RPR

APPEARANCES: (As heretofore noted.)

I N D E X

WITNESSES

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CERTIFICATE OF REPORTER 4577

P R O C E E D I N G S

(Transcript follows in sequence from Volume 29.)

Thereupon,

WILLIAM E. AVERA

was called as a witness, having been previously duly sworn, was examined and testified as follows:

* * *

CHAIRMAN BRISE: Commissioner Brown.

COMMISSIONER BROWN: Thank you. I just have three questions that are yes or no, not -- you don't need to go into as much detail as you just did. But thank you, again, for your testimony here today.

The appraisal for the Hendry/McDaniel site, was there an appraisal performed based on the agriculture use and not the proposed use?

THE WITNESS: I'm not aware -- no, I'm not aware of any specific appraisal absent the use.

COMMISSIONER BROWN: The intended use, not the --

THE WITNESS: The intended use.

COMMISSIONER BROWN: Not the agriculture use?

THE WITNESS: Right. And I say "specific" because there is the information for Hendry County overall, agricultural land that I'm aware of, but not -- I'm not aware of an appraisal for just the land.

COMMISSIONER BROWN: Okay. Exhibit 609 was based on a use value rather than a market value, the appraisal?

THE WITNESS: Yes.

COMMISSIONER BROWN: I was wondering if the seller or FPL performed an appraisal based on actual market value rather than use?

THE WITNESS: Not to my knowledge.

COMMISSIONER BROWN: Okay. And you know there's various types of appraisals that can evaluate the fair market value of a piece of land?

THE WITNESS: Yes.

COMMISSIONER BROWN: Okay. We talked a lot about the McDaniel site and not -- a great deal today you talked a lot about the Fort Drum site. I was wondering if this Commission goes ahead and puts both the primary and the alternate site in rate base and then Florida Power & Light decides not to -- just to go ahead with McDaniel but not Fort Drum, what plans do you have for that Fort Drum site?

THE WITNESS: My expectation is that we would use it in the not-too-distant future. And this is -- the gist of my testimony is that there's so many critical factors right now that what I couldn't tell you is exactly when. Now, if we were to not use the site, then it would be sold and the gain on that facility would accrue to the customers.

But our present plan is that it will be used, and likely as the third unit that we build after the first two at Hendry, Hendry County or McDaniel. But this will depend on analysis that we take to the Commission and say, you know, this is the best at this time. But that's our expectation at this point.

COMMISSIONER BROWN: Okay. And really what -- I'm sorry, it wasn't a yes or no question -- but I just wanted to make sure that during your resource planning meetings that various alternatives have been discussed regarding use of that Fort Drum site and what FPL would do if it just sits idle with it or if it plans to move forward.

THE WITNESS: I know that there's been a lot of discussion on that with respect to the McDaniel site. And up to now, not as much because we haven't gotten into the zoning process at the Fort Drum site.

When that begins and the level of difficulty with that arises, then we'll start making the decisions. Well, if we cannot get the zoning or land use, then what are the options? And if we don't get it, do we sell it then, which is the type of discussion that we've had with respect to McDaniel, we just haven't gotten to the Fort Drum yet.

COMMISSIONER BROWN: Okay. Thank you.

CHAIRMAN BRISE: Commissioner Graham.

COMMISSIONER GRAHAM: Thank you, Mr. Chairman.

Mr. Silva, I'm still a little confused on -- I heard you during your testimony for the past -- seems like three hours --

CHAIRMAN BRISE: That's about right.

COMMISSIONER GRAHAM: You keep referring back to your group. Now, are these -- is this a group of direct reports or do you -- I guess what I'm trying to understand is how do things come across your desk and leave your desk? Does senior management come to you and say we need something in North Florida and then you take it from there or how does the process get started?

THE WITNESS: I'll explain as briefly as I can.

COMMISSIONER GRAHAM: Thank you.

THE WITNESS: My group is called Resource Assessment and Planning. And we take the forecast produced by Dr. Morley, we look at inputs from the people that are operating current plant, current generating plants, as to how much capacity those plants are expected to have in the future because they become older and the capacity may decline and so forth.

So then we make a determination given the rise in load and given the possible decline in the generation of existing units, when is it that we will have sufficient need to call for a new unit, or for that matter for -- we also take into consideration increases in demand site management. So you have growing load offset by some growth in DSM, and then you have declining power plant generation. At some point, we recognize we need generation at this point in time.

In the case of Port Everglades, modernization was 2016. We share that with a number of departments in the company. And that's our job.

So we are not asked by management to look at that, that's routinely what we do.

So we then engage power generation, engineering and construction, project development, real-estate, finance and accounting. It's an ad hoc group that we put together.

And we manage through a process that typically lasts four to five months where we start looking -- they start developing alternatives. And those alternatives could be different types of technology at different sites. We look for the transmission group as part of that because transmission could be a major cost component. And so gradually the alternatives get put together.

In the past we look at existing sites as well as greenfield sites, and we analyze the cost effectiveness of those to meet that need from a perspective of cumulative present value revenue requirement. But we also vet all of the assumptions, the capital costs of the technologies, the operating characteristics like heat rate and how those translate into an effect on the customer.

We go through, as this team is together, two or three rounds of finalizing the assumptions, updating everything. And then we ourselves will write a recommendation, again, trying to figure out the most innovative and cost effective way to serve the load, and we take that to management. And then the process in essence begins over again with additional questions from them because they want to drive us to, again, even more efficiency.

And it's only after that round is over that there's a decision that says Port Everglades is the best alternative to proceed and you should go ahead and purchase these sites because that will put us in a good position to serve the customer in the next round and the subsequent round.

COMMISSIONER GRAHAM: Now, the dialogue back and forth with management, is that you that creates that dialogue or how does that happen?

THE WITNESS: I would say that I initiate it. And then after that, I lose control.

COMMISSIONER GRAHAM: All right. That's it. Thank you.

CHAIRMAN BRISE: Commissioner Edgar.

COMMISSIONER EDGAR: Thank you, Mr. Chairman. Very briefly.

Mr. Silva, how many counties does FPL operate in in Florida, for your service territory?

THE WITNESS: You mean where we have a generating plant or where we serve?

COMMISSIONER EDGAR: Where you serve?

THE WITNESS: Oh, gosh, I don't think that I could tell you how many.

COMMISSIONER EDGAR: And I was asking because I couldn't remember either.

THE WITNESS: I know that the service area is about half of the state.

COMMISSIONER EDGAR: And do you know when the last time was that a geographical area was added to your service territory?

THE WITNESS: No, I don't. I know that we have recently or are about to add a large wholesale sale, the rest of Lee County load, and we are, of course, in discussions to acquire some service territory. But, no, I don't remember when.

COMMISSIONER EDGAR: Okay. That's fine. Thank you.

CHAIRMAN BRISE: Redirect.

MR. GUYTON: I promise I won't take as long as cross. I will try to keep this short.

REDIRECT EXAMINATION

BY MR. GUYTON:

Q Mr. Silva, you were asked by counsel for the Office of Public Counsel about your late-filed Deposition Exhibit 4, which is part of the package that's been identified as Exhibit 599.

A Yes.

Q And you were specifically asked about the page in there that referred to agricultural market values for Hendry County.

Do you recall that?

A Yes.

Q Okay. Is FPL's intended use for the Hendry County site or the McDaniel site agricultural?

A No, it's not for -- it's for power plant generation.

Q Would it be appropriate to compare the value and use of a power plant site with agricultural value?

A Not on --

MR. MOYLE: I'm going to object to the form of the question. I think it's overbroad, vague, and ambiguous.

For what purposes? For land assessment purposes would be one. I mean, it's unclear just kind of what -- without knowing for what end point.

CHAIRMAN BRISE: Okay. Mr. Guyton, if you could specify.

MR. GUYTON: Okay.

BY MR. GUYTON:

Q To your knowledge, is there a difference in land value in Hendry County for power plant site versus agricultural use?

A In my mind there is. The value for a power plant site includes a number of characteristics that are not reflected or needed for agricultural use.

Q You were asked about Exhibit 613 and specifically page 3565 of that exhibit.

A Is there another description for that?

Q It's been identified as -- it's staff POD 50, Exhibit 3, it's one of the confidential documents.

A I have it. What page did you say?

Q 3565.

A Yes, I'm there.

Q All right. And the stamp that's in the upper right-hand corner of that page --

A The stamp says, "Draft"?

Q Yes.

And is that an accurate depiction of this entire document, this presentation that you were asked about?

A Yes.

Q Commissioner Balbis asked you about any analyses that had been performed and submitted before the Commission in this case showing the reasonableness of the cost.

Do you recall that question?

A Yes.

Q Are those types of analyses contained in any of the exhibits that you've been asked to review today?

A Yes.

Q And which of the exhibits that you've been asked to review today are -- or do include such analyses?

A Well, at least in my view, the --

MR. MOYLE: Mr. Chairman, I just -- I know we had this conversation earlier and I got overruled but, you know, just for the record, I want to object to this question where now he's saying, okay, here is all the specifics relative to building the record on these two sites. Thank you.

CHAIRMAN BRISE: Thank you.

You may pose your question again.

MR. GUYTON: It would require me to lead, but it will move us a little bit farther along if I can refer to two specific exhibits to ask the --

BY MR. GUYTON:

Q Mr. Silva, do Exhibits 610 and 613 contain such economic analyses?

A Yes. Exhibit 610 -- 610 contains an evaluation of the various alternatives for obtaining water, indicating that the alternative chosen or selected by FPL, which is to obtain the additional water parcels, would save between 60 and $80 million compared to the alternatives.

Q Are there similar analyses in 613?

A Yes.

Q Okay.

A Those are included as well.

Q Okay.

A There's site valuation overviews.

Q Thank you, Mr. Silva.

In response to a question by Mr. Moyle, you noted that the zoning in McDaniel was not an added cost to FPL. Would you explain that answer?

A The purchase price of $40 million includes, as indicated in the appraisal that was made -- it includes the zoning and land use modification that would be the responsibility of the seller. It also includes, from the perspective of land mineral rights where there's an interest obtaining a waiver from the holder of those mineral rights so they will no longer have the right to come into the property. And, although it's not the -- necessarily the selected alternative, that it would have adequate water on the site itself.

So those three items that are referred to as extraordinary assumptions in the appraisal are all included in the purchase price that FPL committed to pay for that property.

Q Earlier this morning you gave a rule of thumb about transmission costs. Do you recall that rule of thumb?

A Yes, I do.

Q What was that rule of thumb?

A It was a multiple of what it is. It's $1 million per mile as a rule of thumb, not 100 million.

Q Thank you, sir.

You were asked about the use of acreage on the McDaniel site that might be available for solar. Do you recall that line of inquiry?

A Yes.

Q What function, if any, other than use for solar, might that property have?

A The property is setting aside or planning to set aside 927 acres that would provide sufficient panther habitat units to make up for what is required for building three combined cycle units.

So the valuation is -- we need like 1,670 panther habitat units. And the latest price for purchasing credits is $950 per panther habitat unit, so it's quite a valuable asset to have sufficient land to mitigate that within the property itself. So that's 927 acres.

The solar is intended to use up to 1,500 acres. And most of the balance is either for the three combined cycle units or some wetland mitigation that would be required and would be required of almost any site.

MR. GUYTON: That is all the redirect that we have for Mr. Silva. I won't ask him to be excused just yet.

CHAIRMAN BRISE: Thank you. Let's work through our exhibits.

FPL.

MR. GUYTON: We move Exhibit 410.

CHAIRMAN BRISE: Okay. 410, seeing no objections, we'll move 410 into the record.

(Exhibit No. 410 received in evidence.)

CHAIRMAN BRISE: Staff.

MR. HARRIS: Staff would move Exhibits 122, 599, 600, 601, and 602.

CHAIRMAN BRISE: Okay. Any objections?

MR. MOYLE: FIPUG objects on the grounds stated earlier. And I think we can just reference back to the argument and discussion we had in the ruling which overruled me on those documents.

CHAIRMAN BRISE: Sure.

MR. MOYLE: And on one of the documents, I think it's the excerpt from the ten-year site plan, it's the document --

CHAIRMAN BRISE: Which exhibit number?

MR. MOYLE: I think it's -- I think it was marked as 600.

MR. HARRIS: 600.

MR. MOYLE: 600. It's the projection of generation. But the -- I mean, it's a part of it. I think we've had a number of parts of it. Just for optional completeness, I think it would be either appropriate to introduce the whole ten-year site plan or if we're able to take official notice of it, take official notice of the entire ten-year site plan so we have the whole document to work with as compared to piecemeal pages.

CHAIRMAN BRISE: Okay. Mr. Guyton.

MR. GUYTON: We would be happy for the Commission to take official recognition of the document if there's no objection of the parties.

CHAIRMAN BRISE: All right. Any objections to taking official recognition of the ten-year site plan?

MR. SAPORITO: I have no objection so long as FPL counsel provides me a copy of that document.

MR. REHWINKEL: Mr. Chairman, I don't have any problem with it going into the record. I'm just not sure that official recognition -- I would hate for there to be a cited precedent for official recognition of a document like this a year from now in another hearing. So I'm fine with it going in the record, I just don't like that as a basis for it.

CHAIRMAN BRISE: Understood.

MR. GUYTON: I understand that. I was just simply trying to reduce the reduction of rain forest.

MR. HARRIS: Mr. Chairman, I think staff could relatively easily get copies of the ten-year site plan and have them made. We're going to be here for a long time tonight, and I think that

that would be sufficient time for us to get them. I can work on that and get them out to the parties.

So if you want to, we could either -- I don't think it would be appropriate to replace 600 since that was actually a deposition exhibit. But if it's the will of the Commission, we could mark it as another exhibit, I'll go ahead and make it and hand it out. It shouldn't take that long.

CHAIRMAN BRISE: Okay. So we will deal with 600 as is. And if we need to deal with the ten-year site plan --

MR. HARRIS: I think that would be -- Mr. Moyle, I think that would be the easiest thing to do.

MR. MOYLE: Yeah, I think that that would be fine. Thank you. And thank you, staff.

MR. HARRIS: So staff would request an additional exhibit, which would be the complete ten-year site plan.

CHAIRMAN BRISE: Okay. So exhibits 599 through 602 will be moved into the record.

(Exhibit Nos. 122 and 599 through 602 received in evidence.)

MR. HARRIS: And then if we could assign a new exhibit to whatever is the end, which would be 617, we would move that as the complete ten-year site plan.

COMMISSIONER BROWN: Okay.

(Exhibit No. 617 was marked for identification.)

MR. GUYTON: I'm sorry, I missed your exhibit numbers, Mr. Chair.

CHAIRMAN BRISE: Sure. 599 to 602, which would be staff's original exhibits.

MR. GUYTON: No objection.

CHAIRMAN BRISE: Okay. Those will be moved into the record.

OPC.

MR. REHWINKLE: Yes, Mr. Chairman. And I want to commend Mr. Harris on what he did with that deposition, he did a great job, and that was a well-done effort to get the record right.

The public counsel would move 603, 604, 606, 608 through 614. In other words, we're not moving 605 or 607.

CHAIRMAN BRISE: Okay. Is there -- are there any objections?

MR. GUYTON: If I could have just a moment.

CHAIRMAN BRISE: Sure.

MR. GUYTON: We have no objections.

CHAIRMAN BRISE: Okay. So we will move 603, 604, 606, 608 through 614 into the record.

(Exhibit Nos. 603, 604, 606, 608 through 614 received in evidence.)

CHAIRMAN BRISE: Okay. 615 and 616 were not allowed and so therefore should we vacate those?

MR. HARRIS: They have been marked and identified, so I would say we would just show that they're not moved into the record as opposed to reassigning the numbers, so I would leave them aside.

CHAIRMAN BRISE: Perfect. So we would not move those into the record.

And 617 would be --

MR. HARRIS: The 2012 ten-year site plan complete.

CHAIRMAN BRISE: Okay. The 2012 ten-year site plan, any objections to that?

(No response.)

CHAIRMAN BRISE: Okay. Seeing none, 617 is moved into the record.

(Exhibit No. 617 received in evidence.)

CHAIRMAN BRISE: Okay. Mr. Guyton.

MR. GUYTON: Now I would ask you -- and thank you for the prompt, Mr. Chair -- I would ask Mr. Silva, if he could be excused.

CHAIRMAN BRISE: All right, Mr. Silva, you may be excused. Safe travels to you.

THE WITNESS: Thank you, Mr. Chairman. Thank you, Commissioners.

CHAIRMAN BRISE: Thank you. You can stick around with us until about midnight if you would like.

MR. MOYLE: Mr. Chairman, just a bit of a procedural issue. But I want to understand it and I think it's appropriate to have the conversation on the record. And I know we're coming up on our break.

But with respect to the confidential documents, I mean, there's been testimony on them and things like that, I'm not sure I understand what the plan is with respect to being able to have these to brief them, if we need to brief them, and would appreciate having an understanding. You know, I have notes on the ones I made and things like that.

CHAIRMAN BRISE: Sure.

MR. MOYLE: So how -- what's the plans for handling those?

CHAIRMAN BRISE: Sure. It is my understanding that the ones that were used, the parties have the ability to take those. And you can use those for your briefs and so forth. The ones that were not used will be taken back. And the Commissioners' own will be returned as well.

MR. MOYLE: Okay. Thank you.

CHAIRMAN BRISE: Okay.

MR. GUYTON: And also understanding that their use in brief is to be treated as confidential as well.

CHAIRMAN BRISE: Confidential, yeah.

MR. SAPORITO: Mr. Chairman, just so the record is perfectly clear, I have not retained any confidential documents from FPL in this proceeding.

CHAIRMAN BRISE: Understood.

MR. LAVIA: One follow-up question, Mr. Chairman. Is there a duty to return these at the close of the hearing or to destroy them?

MR. YOUNG: I think at the prehearing conference, it was discussed that the parties will return it back to the source.

MR. LITCHFIELD: I believe that's set out in the confidentiality agreement. And, yes, you would return them to us.

MR. REHWINKEL: I've asked for a copy of that, Mr. Litchfield, and I haven't gotten it yet. I signed it, but I want a -- I need a copy.

MR. LITCHFIELD: A copy of the confidentiality agreement?

MR. REHWINKEL: Confidentiality agreement, yes, sir.

MR. LITCHFIELD: Okay. We'll get that to you at the break.

MR. REHWINKLE: Mr. Chairman, it probably would be appropriate to collect all of this before we proceed in the hearing, "this" meaning these confidential documents. These are the witnesses', and I think the Commissioners' --

CHAIRMAN BRISE: Right.

MR. REHWINKEL: -- and the staff's need to be collected and returned before we lose track of these documents.

CHAIRMAN BRISE: Right. So that would be appropriate if we can collect these documents as we are moving into the break.

MR. YOUNG: Yes.

MR. LITCHFIELD: And could we get an indication as to which counsel intends to keep a set through briefing? That would be helpful to us for record-keeping purposes.

CHAIRMAN BRISE: Sure.

All right. We're going to take a 15-minute break. We'll start at 3:15, because it's going to be a long haul.

(Whereupon, a recess was taken.)

CHAIRMAN BRISE: Good afternoon. All right. We're going to resume at this time, reconvene.

FPL.

MR. GUYTON: Florida Power & Light calls Dr. Avera back to the stand. I believe he's previously been sworn.

CHAIRMAN BRISE: Yes, he has.

Thereupon,

WILLIAM E. AVERA

was called as a witness, having been previously duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. GUYTON:

Q Dr. Avera, would you please state your name and business address.

A William E. Avera, 39078 Red River, Austin, TX 78751.

Q And have you prepared and caused to be filed

96 pages of rebuttal testimony in this proceeding?

A Yes.

Q And do you have any changes or corrections to your prefiled rebuttal testimony?

A I have one small correction.

Q Uh-huh.

A On Exhibit 33. And that exhibit is entitled "Endnotes to Direct Testimony." It should read: "Rebuttal Testimony."

Q Okay. If I were to ask you the same questions today as are contained in your prefiled rebuttal testimony, would your answers be the same?

A Yes.

MR. GUYTON: Mr. Chairman, we ask that Dr. Avera's rebuttal testimony be inserted into the record as though read.

CHAIRMAN BRISE: Okay. At this time, we will insert Dr. Avera's rebuttal testimony into the record as though read, seeing no objections.

(Whereupon, prefiled testimony inserted.)

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

REBUTTAL TESTIMONY OF WILLIAM E. AVERA

DOCKET NO. 120015-EI

I. INTRODUCTION

Q. Please state your name and business address.

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

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

A. Yes, I did.

Q. What is the purpose of your rebuttal testimony in this case?

A. My rebuttal testimony responds to the testimony of J. Randall Woolridge, Daniel J. Lawton, and Kevin W. O'Donnell submitted on behalf of the Office of Public Counsel ("OPC"), Michael P. Gorman, on behalf of Federal Executive Agencies, and Richard A. Baudino, on behalf of South Florida Hospital and Healthcare Association concerning the appropriate fair rate of return on equity ("ROE") and capital structure for Florida Power & Light Company ("FPL" or "the Company"), and Steve W. Chriss on behalf of the Florida Retail Federation concerning FPL's equity performance incentive. Collectively, I refer to these intervenor witnesses in my rebuttal testimony as "Opposing Witnesses."

Q. How is your rebuttal testimony organized?

A. The testimony of the Opposing Witnesses obscure reality by ignoring obvious facts and diverting attention to the weeds of academic finance and speculative regulatory policy. My rebuttal testimony begins by presenting the five simple facts that demonstrate how the crippling of FPL's financial strength proposed by the Opposing Witnesses would harm customers. I then rebut all of the misconceptions, flawed reasoning, data distortions, and arithmetic mistakes of the Opposing Witnesses in subsequent sections of my testimony.

Q. Are you sponsoring any exhibits in this case?

A. Yes. I am sponsoring Exhibits WEA-19 through WEA-33, which are attached to my rebuttal testimony.

- WEA-19, Expected Earnings Approach
- WEA-20, Allowed ROE
- WEA-21, Revised DCF Analysis – Woolridge Historical Growth
- WEA-22, Revised DCF Analysis – Woolridge Projected EPS Growth
- WEA-23, Revised DCF Analysis – Gorman Constant Growth
- WEA-24, Revised DCF Analysis – Baudino Constant Growth
- WEA-25, br+sv Growth Rate – Average Return
- WEA-26, Gorman Annual Growth Outlook – Revised
- WEA-27, Revised DCF Analysis – Gorman Multi-Stage
- WEA-28, Revised CAPM – Current Bond Yields
- WEA-29, Revised CAPM – Projected Bond Yields
- WEA-30, Corrected Baudino CAPM
- WEA-31, Corrected Gorman Risk Premium
- WEA-32, Flotation Cost Adjustment
- WEA-33, Endnotes to Rebuttal Testimony of William E. Avera

II. SUMMARY OF CONCLUSIONS

Q. What are your principal conclusions regarding the financial testimony you are rebutting?

A. My rebuttal will show that the recommendations of the Opposing Witnesses ignore economic reality. Their extreme recommendations would deviate sharply from a history of supportive regulatory policy by the Florida Public Service Commission ("FPSC" or "the Commission") and shake the confidence of the investment community in FPL. The radical reduction in FPL's financial strength that is implied by the recommendations of Opposing Witnesses would make capital less available and more expensive for FPL. FPL's traditional financial strength, supported by the FPSC, has protected FPL's customers through hurricanes and financial crises. FPL's customers pay lower bills and have more secure electric service due to FPL's financial strength.

The Opposing Witnesses' ROE recommendations fall far below what FPL is currently authorized to earn by the FPSC. They also advocate imposing a regulatory capital structure that will not permit FPL to preserve its financial integrity. To support such a dramatic reduction in FPL's financial strength, the Opposing Witnesses offer only speculations and conjectures as to how investors and bond rating agencies might react to such an abrupt change in FPL's financial profile. They ignore evidence of recent historical experience, and base this radical departure from FPSC regulatory philosophy on arcane academic theory and distorted interpretations of financial data. The Opposing Witnesses also ignore evidence that incorporating an adjustment to recognize FPL's superior performance in the allowed ROE is an accepted regulatory practice that follows free market principles.

Q. Please summarize your specific findings regarding the capital structure and ROE recommendations of the Opposing Witnesses.

A. The capital structure and ROE recommendations of the Opposing Witnesses are flawed and should be rejected. It is important to note that the similarity and consistency of their recommendations is not due to any convergence based on sound reasoning, but instead reflects a common aim of reducing the Company's revenues and a shared willingness to ignore the realities faced by the Company, the requirements of real-world investors, and the broader long-term implications for FPL's customers. My rebuttal testimony demonstrates that:

- The conclusions of the Opposing Witnesses regarding FPL's capital structure ignore the specific circumstances faced by the Company and financial market realities;
- Adopting the recommendations of Opposing Witnesses would undermine investor confidence, impair FPL's financial integrity and ability to attract capital, and erode the Company's credit standing, which would ultimately lead to higher costs for customers;

With respect to Opposing Witnesses' ROE analyses, I conclude that:

- The recommendations of Opposing Witnesses are inadequate to compensate investors in FPL when evaluated against the earnings expected for the proxy utilities that they consider to be comparable;

- FPL must be granted an opportunity to earn a return that is competitive with other utilities. The allowed ROEs for the companies that Opposing Witnesses consider to be comparable in risk also demonstrate that their recommendations are too low to be credible;
- Cost of equity estimates for the Non-Utility Proxy Group presented in my direct testimony provide an important benchmark that is consistent with financial theory, how investors operate, and the guidelines underlying a fair ROE. Consistent with expected earnings and allowed ROEs for other utilities, this benchmark demonstrates that Opposing Witnesses' ROE recommendations are far too low;
- In applying quantitative methods to estimate the cost of equity, Opposing Witnesses incorporated data that does not reflect investors' expectations and failed to exclude illogical results, which imparts a downward bias to their conclusions;
- Many of the quantitative methods relied on by Opposing Witnesses are applied using data that violate the principles of their own methods, and contain computational errors and omissions that bias their results downward;
- If FPL is unable to offer a return similar to that available from other opportunities of comparable risk, investors will become unwilling to supply the capital on reasonable terms, and investors will be denied an opportunity to earn their opportunity cost of capital; and

- The failure of these witnesses to consider the impact of flotation costs contradicts past determinations of the FPSC Staff, the findings of the financial literature, and the economic requirements underlying a fair rate of return on equity.

In short, once the downward bias inherent in the analyses of the Opposing Witnesses is corrected and properly supplemented, the results demonstrate that their recommendations are far too low to be considered credible, and would deny FPL the opportunity to adequately compensate investors and maintain its financial integrity and access to capital on reasonable terms. Considered along with the evidence presented in my direct testimony, my evaluation confirms the reasonableness of the 11.5% ROE and the 59.62% common equity ratio requested by FPL.

In setting the ROE in this case, the FPSC has an opportunity to show that it recognizes the importance of financial strength and it will reward superior performance by a utility. A constructive outcome will confirm that the FPSC has returned to the regulatory policy of supportive regulation and that the investors should not expect that the 10% ROE in the last case signals a change in the regulatory climate in Florida. By allowing an ROE and capital structure in this case that reflects capital market realities and FPL's unique financial challenges while providing a justified ROE adder for superior performance, the FPSC will reassure investors that regulation in Florida has returned to its tradition of fairness and innovation.

III. THE FACTS

Q. What are the five facts ignored by the Opposing Witnesses?

A. The five obvious facts not addressed or disputed by the Opposing Witness are:

1. FPL's customers benefit from their utility's financial strength.
2. Because FPL's current credit ratings and investor expectations are based on current levels of earnings and the Company's actual capital structure, a radical reduction in earnings and increase in debt leverage would undermine credit ratings and investor confidence.
3. In 2010, when the FPSC departed from its long precedent of support for FPL's financial strength, investors and bond rating agencies reacted swiftly and negatively.
4. The subsequent Settlement Agreement that allowed FPL to earn an ROE of 11% and maintain its prudent use of debt restored investor confidence and insulated FPL's credit standing from further erosion.
5. Adjusting earnings to reflect utility performance is an inherent part of regulatory oversight and protects utility customers.

Taken together, these facts support FPL's requested 11.5% ROE and capital structure. If the FPSC were to follow the recommendations of Opposing Witnesses by radically reducing FPL's ROE and increasing the debt component of the Company's regulatory structure, the clear evidence from recent history demonstrates that FPL's financial standing would suffer. FPL's customers and

Florida would forgo the advantages of a strong utility with the financial wherewithal to invest in infrastructure and react to crises, both natural and financial.

Q. What is the evidence for Fact 1, that FPL's customers benefit from their utility's financial strength?

A. As explained in my direct testimony and that of Mr. Dewhurst, FPL has protected customers from the adverse consequences of devastating storms in recent years. When hurricanes obliterated vast parts of South Florida, FPL has been able to marshal resources to restore power due to its financial strength. When financial storms raged through the global economy, FPL was able to access capital markets on reasonable terms. FPL's low cost of debt and the ability to negotiate from a position of financial strength have saved customers money. The low cost of debt achieved by FPL's financial strength will continue to moderate the electric rates paid by customers for years to come. Those who are considering starting businesses or moving existing operations to South Florida can be confident that electric service is secure and economical, and that FPL will be able to maintain quality service through all storms, whether natural or man-made. The Opposing Witnesses have presented no evidence to counter the benefits that customers receive from FPL's financial strength.

Q. What is the evidence for Fact 2, that a radical reduction in earnings and a radical increase in debt would undermine bond rating and investor confidence?

A. As documented by Mr. Dewhurst, FPL has a bond rating in the lower single-A range. FPL is no longer among the most highly rated utilities due to the downgrade that followed the outcome of the last rate case, but the Company's financial strength is above average. FPL enjoys access to capital on more reasonable terms than most utilities, which as explained above, is a good thing for customers and the economy. The current credit ratings and investor confidence are based on FPL's ability to earn an 11% ROE under the Settlement Agreement, and an expectation that the Company's prudent capital structure will be maintained. It is not credible for the Opposing Witnesses to speculate that the investment community would ignore any dramatic reduction in allowed earnings and the addition of more debt to FPL's regulatory capital structure.[1] This is particularly true when our economy and financial markets are buffeted daily by concerns about excess debt around the globe.

Q. Is the sensitivity of investors to lower returns borne out by Fact 3, that investors and the rating agencies reacted swiftly and negatively to evidence of waning regulatory support?

A. Yes. FPL's recent experience confirms that investors react decisively to changes in financial prospects caused by adverse regulatory decisions.[2] The reaction to the FPSC's initial decision in FPL's last rate case is clear evidence that disappointing regulatory decisions have immediate consequences. As explained in my testimony and that of Mr. Dewhurst, investors and bond rating agencies reacted within weeks to what they viewed as a dramatic shift in FPSC's traditional policy of regulatory support. The Value Line Investment Survey ("Value Line") informed investors that "FPL was hit by a harsh rate order," and noting that the decision "came as a shock," Value Line cut the Company's Financial Strength rating and Safety rank.[3] Had the negative impact of that decision not been mitigated by the Settlement Agreement, FPL would have continued to suffer a loss of investor confidence that would have harmed customers. But despite this clear evidence, the Opposing Witnesses are now proposing ROEs and capital structures in this case that would go further down the same road that led to the downgrade in 2010.

Q. Did customers benefit from the restoration of the FPSC's supportive policies referenced in Fact 4, concerning approval of the subsequent settlement?

A. Yes indeed. The Settlement Agreement allowed FPL to earn higher returns than the original decision and restored a measure of investor confidence. While FPL's bond ratings were not returned to their previous higher levels, further deterioration was prevented. As Mr. Dewhurst demonstrates in his direct and rebuttal testimony, FPL has been able to issue debt on reasonable terms and negotiate from strength with lenders and other vendors. It is truly amazing that the Opposing Witnesses would ignore FPL's recent experience and lead the FPSC back down the path of draconian cuts in FPL's allowed earnings, combined with a regulatory capital structure that ignores financial realities and implies significantly higher financial risk. Their only justification is to save customers money in the short-run by mortgaging their long-term interest, which is better served by maintaining FPL's financial strength. The end result is that FPL's customers will become exposed to more uncertainties in an increasingly precarious world.

Q. Does adjusting the allowed earnings to reflect utility performance, as referenced in Fact 5, benefit customers?

A. Absolutely. As discussed above, customers benefit when served by a healthy utility, and these benefits become increasingly important as customers are exposed to greater potential for natural disasters and financial dislocations. The role of the FPSC is to balance the interests of customers and utilities where free markets don't operate effectively. In the free market economy, businesses that can't deliver quality products at a competitive price suffer reduced earnings. Similarly, businesses that provide superior services at reasonable prices enjoy superior profits.

The FPSC should serve as a substitute for the "invisible hand" and use the same carrot and stick approach that operates in competitive markets. When the FPSC finds that a utility has spent money imprudently, it prevents that unwise spending from being reflected in the rates customers pay. In so doing, the FPSC is effectively reducing the utility's opportunity to earn a profit. While recommended disallowances are a routine part of rate cases, the direct adjustment of ROEs is also employed at the FPSC, as discussed in my direct testimony and further documented later in my rebuttal testimony. When a utility has low rates because it has managed its business well and avoided costs or increased efficiencies, the allowed ROE offers the only mechanism to reflect the superior profits that would naturally occur under free markets. The Opposing Witnesses would have the FPSC believe that adjusting the ROE is an unusual application of regulatory principles,[4] when in fact the FPSC's rulings regarding operating expenses, investment, and rate of return all impact the utility's profitability. It is disingenuous for the Opposing Witnesses to claim shock over FPL's proposal to consider superior performance when the same parties are recommending a multitude of disallowances and negative adjustments to FPL's rate request in this very case.

IV. CAPITAL STRUCTURE RECOMMENDATIONS IGNORE FINANCIAL REALITIES

Q. Please summarize the recommendations of the intervenor witnesses with respect to FPL's capital structure.

A. Mr. O'Donnell recommends that the FPSC ignore FPL's capital structure based on investor sources, in favor of a fictitious capitalization composed of 50% debt and 50% common equity. For his part, Dr. Woolridge argues that, should the FPSC reject Mr. O'Donnell's fabricated capital structure and adopt FPL's 2013 Test Year capitalization, then an ROE at the bottom of his 8.5% to 9.0% range would be warranted.

Meanwhile, Mr. Gorman characterizes FPL's requested 59.62% common equity ratio as "excessive."[5] While he does not propose any adjustment to FPL's capital structure, Mr. Gorman suggests that his ROE recommendation reflects a downward adjustment to account for financial risk differences between FPL and his proxy group. Similarly, Mr. Baudino recommends that the FPSC adopt FPL's requested capital structure, but only if the Commission accepts his recommended 9.0% ROE.[6] Mr. Baudino argues that if the Commission elects to approve an ROE that exceeds his recommendation, the common equity ratio should be reduced.[7] What they all fail to note is that equity ratio is just one of several risk factors that must be considered.

Q. What is the shared misconception underlying all of the intervenors' positions regarding FPL's capital structure?

A. The intervenors' position regarding FPL's capital structure is schizophrenic. On the one hand, the Opposing Witnesses all recognize FPL's current credit standing, as reflected in its "A-" rating, and reference comparable measures of investment risk in attempting to tailor their proxy groups to reflect the Company's risk profile. And as all these parties recognize, the degree of financial leverage is one component that impacts investors' risk perceptions, with investors' current assessment of FPL's risks – including the Company's credit ratings – being contingent on its actual capitalization. Nevertheless, intervenors are operating under the shared delusion that FPL could somehow reduce its equity ratio significantly from present levels without any ill effects on its credit standing.

Q. Is there any logical connection between this position and what takes place in real-world capital markets?

A. No. This line of reasoning is totally disconnected from the financial realities faced by FPL. As Mr. O'Donnell recognized, "Prudent management practices attempt to ameliorate higher business risk with offsetting, lower financial risk."[8] In fact, FPL's prudent and conservative financial policies and the temporary effects of the current Settlement Agreement have allowed the Company to retain a single-A rating and ensured access to capital, even in the face of significant exposures, including the heightened regulatory and political uncertainties that accompanied its last rate proceeding.

As discussed in my direct testimony, and in the direct and rebuttal testimony of Mr. Dewhurst, financial strength is a good thing for customers and is necessary to offset the inherent risks of FPL's geographic location, energy mix, and exposure to hurricanes. The Opposing Witnesses leap to the conclusion that FPL is a "low risk utility" based only on financial risk measures and without consideration of the business risk of FPL's operations. To make matters worse, Mr. O'Donnell recommends adjustments to FPL's regulatory capital structure that would increase leverage by substituting debt for equity.

Q. Mr. O'Donnell claims (p. 21) that adopting his recommended capital structure would not cause a downgrade in FPL's credit rating. Should the FPSC accept his representation?

A. No. It is illogical to presume that FPL's equity ratio is "excessive" to maintain its current bond rating. First, if FPL's financial parameters exceed those necessary for a single-A rating, then the rating agencies would have already upgraded FPL. Second, the rating agencies clearly state that they look beyond the numbers to consider the individual risk profile of each issuer. In my contact with rating agency personnel, they jealously guard their ability to depart from guidelines to reflect the risk of individual issuers. The fact is that FPL's present ratings are conditional on the existing level of financial leverage and the ratemaking capital structure currently approved for the Company, coupled with the investment community's continued hopeful perception of stabilizing regulatory risk. Any suggestion that FPL's equity ratio can be materially reduced without an impact on the Company's credit standing is simply not credible.

Similarly, the exercise that Mr. Gorman, Mr. Baudino, and Mr. Lawton conduct is both unreliable and speculative, as it is nothing more than an attempt to second-guess the rating agencies based on their broad guidelines. As S&P reiterated:

> The ratings matrix indicative outcomes are what we typically observe -- but are not meant to be precise indications or guarantees of future rating opinions. ... Moreover, our assessment of financial risk is not as simplistic as looking at a few ratios.[9]

Mr. Baudino noted that, "the Commission declined to accept my recommendation to reduce the Company's common equity ratio in the last base rate case."[10] But even without imposing a fictitious capital structure, the investment community reacted decisively to the harsh outcome in that proceeding. In light of this recent experience, it is simply disingenuous to claim that the punitive recommendations proposed by the Opposing Witnesses would have no impact on FPL's credit ratings or the Company's standing with investors.

Q. Is there any basis to reduce FPL's ROE if its requested capital structure is approved?

A. No. Again, the argument advanced by Dr. Woolridge, Mr. Gorman, and Mr. Baudino is contrary to financial logic and their own methods. Investors' required rate of return is a function of the firm's overall risks, not a single financial statistic such as the equity ratio. The fact that FPL's equity ratio may be higher than industry averages provides no basis to conclude that the Company's overall risks are lower, because it does not account for the myriad of other factors considered by investors, including the impact of purchased power commitments and the other exposures unique to FPL.

Once again, these witnesses violate the premise underlying their own ROE analysis, which is that the proxy groups of utilities they selected reflect comparable investment risks. All of these witnesses reviewed key indicators of investment risk for FPL and their comparable firms, including credit ratings. For example, all of the firms in Mr. Baudino's proxy group had ratings equal to or *higher* than the "A-" rating assigned to FPL. This objective comparison of overall investment risks – which considers differences in financial leverage – contradicts his position that approving FPL's capital structure would warrant a downward adjustment to the Company's ROE.

Similarly, Mr. Gorman explicitly acknowledged that, "FPL's existing investment risk[s] … are reflected in FPL's existing bond rating and other risk factors used to select a comparable risk proxy group."[11] Mr. Gorman then argued that any "risk reduction should be considered in determining a fair risk-adjusted return on equity for FPL."[12] The corollary, which Mr. Gorman and the other Opposing Witnesses choose to ignore, is that the significantly higher risk implied by their capital structure recommendations will negatively impact FPL's financial standing and investors' risk perceptions.

V. FAILED TO CONSIDER *HOPE* AND *BLUEFIELD*

Q. Is it widely accepted that a utility's ability to attract capital must be considered in establishing a fair rate of return?

A. Yes. This is a fundamental standard underlying the regulation of public utilities. The Supreme Court's *Bluefield* and *Hope* decisions established that a regulated utility's authorized returns on capital must be sufficient to assure investors' confidence and that, if the utility is efficient and prudent on a prospective basis, it will be able to maintain and support its credit and have the opportunity to raise necessary capital.

Q. Opposing Witnesses recognized that the allowed ROE must meet certain standards to be considered reasonable. Do you agree?

A. Yes. Opposing Witnesses clearly recognized,[13] but then ignored, this fundamental standard, which underlies the regulation of public utilities and a determination of a fair rate of return, pursuant to the Supreme Court's *Bluefield* and *Hope* decisions. These decisions established that a regulated utility's authorized returns on capital must be commensurate with those expected for other investments involving comparable risk.

While the details underlying a determination of the cost of equity are all significant to a rate of return analyst, there is one fundamental requirement that any ROE recommendation must satisfy before it can be considered reasonable. Competition for capital is intense, and utilities such as FPL must be granted the opportunity to earn an ROE comparable to contemporaneous returns available from alternative investments if they are to maintain their financial flexibility and ability to attract capital. As noted earlier, Opposing Witnesses specifically cited the *Bluefield* and *Hope* decisions in their testimony.

Q. What role does regulation play in ensuring the Company's access to capital?

A. Considering investors' heightened awareness of the risks associated with the utility industry, and the implications of ongoing volatility in the markets for long-term capital, supportive regulation remains crucial in preserving the Company's access to capital. Capital markets recognize that constructive regulation is a key ingredient in supporting utility credit ratings and financial integrity, particularly during times of adverse conditions. Moreover, considering the ongoing turmoil faced by investors, sensitivity to market and regulatory uncertainties has increased dramatically.

Q. Did Opposing Witnesses test their ROE recommendations against these fundamental regulatory requirements?

A. No. Expected earned rates of return for other utilities provide one useful benchmark to gauge the reasonableness of ROE recommendations, but none of the Opposing Witnesses performed this test. The expected earnings approach is predicated on the comparable earnings test, which developed as a direct result of the Supreme Court decisions in *Bluefield* and *Hope*. From my understanding as a regulatory economist, not as a legal interpretation, these cases require that a utility be allowed an opportunity to earn the same return as companies of comparable risk. That is, the cases recognize that a utility must compete with other companies, including non-utilities, for capital.

Q. Did Mr. Baudino recognize the economic premise underlying the expected earnings approach?

A. Yes. The simple but powerful concept underlying the expected earnings approach is that investors compare each investment alternative with the next best opportunity. As Mr. Baudino recognized, economists refer to the returns that an investor must forego by not being invested in the next best alternative as "opportunity cost". Mr. Baudino explained the logic underlying this approach as follows:

> From an economist's perspective, the notion of "opportunity cost" plays a vital role in estimating the return on equity. One measures the opportunity cost of an investment equal to what one would have obtained in the next best alternative. ... That alternative could have been another utility stock, a bond, a mutual fund, a money-market fund, or any number of other comparable investment vehicles.[14]

But despite recognizing this standard, he ignored this test in evaluating his recommendation. Similarly, while Dr. Woolridge reported an average return on common equity benchmark of 10.6% for the companies in his proxy group,[15] he failed to evaluate the implications of this result.

Q. What are the implications of setting an allowed ROE below the returns available from other investments of comparable risk?

A. If the utility is unable to offer a return similar to that available from other opportunities of comparable risk, investors will become unwilling to supply the capital on reasonable terms. For existing investors, denying the utility an opportunity to earn what is available from other similar risk alternatives prevents them from earning their opportunity cost of capital.

Q. How is the comparison of opportunity costs typically implemented?

A. The traditional comparable earnings test identifies a group of companies that are believed to be comparable in risk to the utility. The actual earnings of those companies on the book value of their investment are then compared to the allowed return of the utility. While the traditional comparable earnings test is implemented using historical data taken from the accounting records, it is also common to use projections of returns on book investment, such as those published by Value Line, which is a recognized investment advisory publication. Because these returns on book value equity are analogous to the allowed return on a utility's rate base, this measure of opportunity costs results in a direct, "apples to apples" comparison.

Q. Opposing Witnesses are critical of your reference to earnings on book value. Has the expected earnings approach been recognized as a valid ROE benchmark?

A. Yes. While this method predominated before the Discounted Cash Flow ("DCF") model became fashionable with academic experts, I continue to encounter it around the country. Indeed, the Virginia State Corporation Commission ("VSCC") is required by statute (Virginia Code § 56-585.1.A.2.a) to consider the earned returns on book value of electric utilities in its region. In an order issued on July 15, 2010 in Docket PUE-2009-00030, the VSCC established the allowed ROE for Appalachian Power Company based solely on the earned returns on book value for a peer group of other electric utilities. Another example is the approach taken by Ms. Terri Carlock, the long-time financial analyst for the Idaho Public Utilities Commission. She has consistently presented evidence on book earnings for decades, and Idaho regulators continue to confirm the relevance of return on book equity evidence.

A textbook prepared for the Society of Utility and Regulatory Analysts labels the comparable earnings approach the "granddaddy of cost of equity methods" and points out that the amount of subjective judgment required to implement this method is "minimal", particularly when compared to the DCF method and Capital Asset Pricing Model ("CAPM").[16] The *Practitioner's Guide* notes that the comparable earnings test method is "easily understood" and firmly anchored in the regulatory tradition of the *Bluefield* and *Hope* cases,[17] as well as sound regulatory economics.

Similarly, *New Regulatory Finance* noted that this approach, "is easily understood, and is firmly anchored in regulatory tradition,"[18] and concluded that, "because the investment base for ratemaking purposes is expressed in book value terms, a rate of return on book value, as is the case with Comparable Earnings, is highly meaningful."[19] I have used the comparable earnings approach in my consulting, teaching, and testimony for 35 years, and it has been widely referenced in regulatory decision-making.[20]

Q. What is the relevance of Dr. Woolridge's discussion of market-to-book ratios (pp. 21-23) to the deviation between his recommended ROE and the earnings of comparable utilities?

A. Based on his testimony here and in previous cases, I understand that Dr. Woolridge is trying to argue that utility earnings are generally too high because the market-to-book ratios generally exceed one. He wants the FPSC to sacrifice

FPL's financial strength to favor a theoretical ideal of market-to-book ratios equaling unity. The FPSC does not regulate utility stock market prices, and as discussed subsequently, there are many leaps between his economic theory and reality. But if the theory is correct, then Dr. Woolridge is asking the FPSC to order a return that would almost certainly lead to a capital loss on the value of FPL's investment.

Q. Do you agree with the Opposing Witnesses that a methodology has to depend on market data to be useful in evaluating investors' opportunity costs?[21]

A. No. While I agree that market-based models are certainly important tools in estimating investors' required rate of return, this in no way invalidates the usefulness of the expected earnings approach. In fact, this is one of its advantages.

It is a very simple, conceptual principle that when evaluating two investments of comparable risk, investors will choose the alternative with the higher expected return. If FPL is only allowed the opportunity to earn a 9.0% return on the book value of its equity investment, while other electric utilities are expected to earn an average of 10.5%,[22] the implications are clear – FPL's investors will be denied the ability to earn their opportunity cost.

Moreover, regulators do not set the returns that investors earn in the capital markets – they can only establish the allowed return on the value of a utility's investment, as reflected on its accounting records. As a result, the expected earnings approach provides a direct guide to ensure that the allowed ROE is similar to what other utilities of comparable risk will earn on invested capital. This opportunity cost test does not require theoretical models to indirectly infer investors' perceptions from stock prices or other market data. As long as the proxy companies are similar in risk, their expected earned returns on invested capital provide a direct benchmark for investors' opportunity costs that is independent of fluctuating stock prices, market-to-book ratios, debates over DCF growth rates, or the limitations inherent in any theoretical model of investor behavior.

Q. What ROE is implied by the expected earnings for the proxy groups used by the Opposing Witnesses?

A. As shown on page 1 of Exhibit WEA-19, reference to expected earnings implied an average cost of equity for the utilities in Dr. Woolridge's proxy group of 10.5%. Pages 2 and 3 of Exhibit WEA-19 show that the average expected book return on equity for the proxy groups used by Mr. Gorman and Mr. Baudino are 11.7% and 10.6%, respectively. The values presented on Exhibit WEA-19 do not reflect any consideration of flotation costs. Similar real world data that should have given these witnesses pause was present in their testimony.[23] These book return estimates are an "apples to apples" comparison to the ROE recommendations of the Opposing Witnesses, which range from 8.50% to 9.25%.

Q. What would be the effect of authorizing a book return that is so far below the average earnings of the utilities that Opposing Witnesses claim are comparable?

A. Plain and simple, FPL will find it difficult to compete for investors' capital and investors would not be earning up to the *Bluefield* standard of comparable earnings:

> A public utility is entitled to such rates as will permit it to earn on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties.[24]

Q. Can allowed ROEs also be used to evaluate whether the recommendations of Opposing Witnesses are sufficient to meet regulatory standards?

A. Yes. Reference to allowed rates of return for other utilities provides another useful guideline that can be used to assess the extent to which a 9.0% ROE recommendation is comparable and sufficient. As shown on page 1 of Exhibit WEA-20, data from the July 2012 *AUS Monthly Utility Report* (a source relied on by Dr. Woolridge, Mr. Gorman, and Mr. Baudino) indicates that the average authorized ROE for the firms in Dr. Woolridge's proxy group is 10.4%, or between 140 and 190 basis points higher than the ROEs he recommends for FPL.[25]

With respect to the group of electric utilities that Mr. Gorman and Mr. Baudino concluded were most comparable to FPL's jurisdictional utility operations, as shown on pages 2 and 3 of Exhibit WEA-20, these firms are presently authorized average rates of return on equity of 10.6% and 10.4%, respectively. It is unreasonable to suppose that investors would be attracted by an ROE in the range of 8.50% to 9.25% for FPL, which falls significantly below the allowed returns for other utilities the Opposing Witnesses consider to be comparable.

Q. What do these benchmarks imply with respect to the ROE recommendations of Opposing Witnesses?

A. Even if one were to accept the proxy groups selected by Opposing Witnesses, these benchmarks clearly demonstrate that their recommendations are far too low and violate the economic and regulatory standards underlying a fair ROE. My recommended 10.25% to 12.25% ROE range is consistent with the *Hope* and *Bluefield* standards, and an 11.50% ROE for FPL recognizes the unique financial challenges facing the Company, as well as its effective performance.

VI. DCF RESULTS ARE UNDERSTATED

Q. What are the fundamental problems with the DCF analyses conducted by the Opposing Witnesses?

A. There are numerous fundamental problems with the DCF analyses presented by the Opposing Witnesses that lead to biased end-results:

1. Reliance on dividend growth rates and historical growth measures do not reflect a meaningful guide to investors' expectations;
2. Dr. Woolridge discounts reliance on analysts' growth forecasts for earnings per share ("EPS") as somehow biased, and fails to recognize that it is investors' *perceptions and expectations* that must be considered in applying the DCF model;
3. There is no evidence to suggest that investors expect growth for electric utilities to converge to the rate of change in GDP, and because Mr. Gorman's implementation of the non-constant growth model assumes that investors receive dividend cash flows at the end of the year, the results are understated; and,
4. Because Opposing Witnesses failed to test the reasonableness of model inputs, they incorrectly include data that results in illogical cost of equity estimates;

As a result of these flaws and omissions, the resulting DCF cost of equity estimates are biased downward and fail to reflect investors' required rate of return.

Q. Do the growth rates referenced by Dr. Woolridge mirror investors' long-term expectations in the capital markets?

A. No. There is every indication that his growth rates, and resulting DCF cost of equity estimates, are biased downward and fail to reflect investors' required rate of return. If past trends in earnings, dividends, and book value are to be representative of investors' expectations for the future, then the historical conditions giving rise to these growth rates should be expected to continue. That is clearly not the case for utilities, where structural and industry changes have led to declining growth in dividends, earnings pressure, and, in many cases, significant write-offs. While these conditions serve to depress historical growth measures, they are not representative of long-term expectations for the utility industry or the expectations that investors have incorporated into current market prices.

Q. Dr. Woolridge argues (p. 36) that, "the appropriate growth rate in the DCF model is the dividend growth rate." Do you agree that this is what investors are most likely to consider in developing their long-term growth expectations?

A. No. While the DCF model is technically concerned with growth in dividend cash flows, implementation of this DCF model is solely concerned with replicating the forward-looking evaluation of real-world investors. In the case of utilities, growth rates in dividends per share ("DPS") are not likely to provide a meaningful guide to investors' current growth expectations. This is because utilities have significantly altered their dividend policies in response to more accentuated business risks in the industry.[26] As a result of this trend towards a more conservative payout ratio, dividend growth in the utility industry has remained largely stagnant as utilities conserve financial resources to provide a hedge against heightened uncertainties. While past conditions for utilities serve to depress DPS growth measures, they are not representative of long-term expectations for the utility industry.

As payout ratios for firms in the utility industry trended downward, investors' focus has increasingly shifted from DPS to earnings as a measure of long-term growth. Future trends in EPS, which provide the source for future dividends and ultimately support share prices, play a pivotal role in determining investors' long-term growth expectations. The importance of earnings in evaluating investors' expectations and requirements is well accepted in the investment community. As noted in *Finding Reality in Reported Earnings* published by the Association for Investment Management and Research:

> [E]arnings, presumably, are the basis for the investment benefits that we all seek. "Healthy earnings equal healthy investment benefits" seems a logical equation, but earnings are also a scorecard by which we compare companies, a filter through which we assess management, and a crystal ball in which we try to foretell future performance.[27]

Value Line's near-term projections and its Timeliness Rank, which is the principal investment rating assigned to each individual stock, are also based primarily on various quantitative analyses of earnings. As Value Line explained:

> The future earnings rank accounts for 65% in the determination of relative price change in the future; the other two variables (current earnings rank and current price rank) explain 35%.[28]

The fact that investment advisory services focus primarily on growth in EPS indicates that the investment community regards this as a superior indicator of future long-term growth. Indeed, "A Study of Financial Analysts: Practice and Theory," published in the *Financial Analysts Journal*, reported the results of a survey conducted to determine what analytical techniques investment analysts actually use.[29] Respondents were asked to rank the relative importance of earnings, dividends, cash flow, and book value in analyzing securities. Of the 297 analysts that responded, only 3 ranked dividends first while 276 ranked it last. The article concluded:

> Earnings and cash flow are considered far more important than book value and dividends.[30]

More recently, the *Financial Analysts Journal* reported the results of a study of the relationship between valuations based on alternative multiples and actual market prices, which concluded, "In all cases studied, earnings dominated operating cash flows and dividends."[31]

Q. Did Dr. Woolridge recognize the pitfalls associated with historical growth rates?

A. Yes. Dr. Woolridge noted that:

> [T]o best estimate the cost of common equity capital using the conventional DCF model, one must look to long-term growth rate expectations.[32]

But as he acknowledged, historical growth rates can differ significantly from the forward-looking growth rate required by the DCF model:

> [O]ne must use historical growth numbers as measures of investors' expectations with caution. In some cases, past growth may not reflect future growth potential. Also, employing a single growth rate number (for example, for five or ten years), is unlikely

> to accurately measure investors' expectations due to the sensitivity of a single growth rate to fluctuations in individual firm performance as well as overall economic fluctuations (i.e., business cycles).[33]

Moreover, to the extent historical trends for utilities are meaningful, they are already captured in projected growth rates, including those published by Value Line, First Call, Zacks, and Reuters, since securities analysts also routinely examine and assess the impact and continued relevance (if any) of historical trends.

Q. Is the downward bias in Dr. Woolridge's historical growth measures self-evident?

A. Yes, it is. As shown on page 3 of Exhibit JRW-10, more than one-third of the individual historical growth rates reported by Dr. Woolridge for the companies in his proxy group were essentially zero or *negative*, which implies a cost of equity less than the utility's dividend yield. The implication is that investors are willing to purchase the common stock of a utility in expectation of a *negative* ROE. Of course, investors are not masochistic -- these growth rates provide absolutely no meaningful information regarding their expectations. Indeed, Mr. Baudino recognized (Exhibit___(RAB-4), p. 1) that negative growth rates are properly excluded in applying the DCF model.

Similarly, over two-thirds of Dr. Woolridge's historical DPS growth rates are 1.0% or less. Combining a growth rate of 1.0% with Dr. Woolridge's dividend yield of 4.4% (Exhibit JRW-10, p. 1) implies a DCF cost of equity of approximately 5.4%. This implied cost of equity is not materially different than the yield from triple-B public utility bonds, which averaged 5.0% over the six-months ended June 2012.[34] Clearly, the risks associated with an investment in public utility common stocks exceed those of long-term bonds and Dr. Woolridge's historical and DPS growth measures provide no meaningful information regarding the expectations and requirements of investors.

Q. Did Dr. Woolridge make any effort to test the reasonableness of the individual growth estimates he relied on to apply the constant growth DCF model?

A. No. Despite recognizing that caution is warranted in using historical growth rates, Dr. Woolridge simply calculated the average and median of the individual growth rates with no consideration for the reasonableness of the underlying data. In fact, as demonstrated above, many of the cost of equity estimates implied by Dr. Woolridge's DCF application make no economic sense.

Q. Does reference to the median (fn. 1; pp. 35, 38-39) correct for any underlying bias in Dr. Woolridge's historical and DPS growth rates?

A. No. The median is simply the observation with an equal number of data values above and below. For odd-numbered samples, the median relies on only a <u>single number</u>, *e.g.*, the fifth number in a nine-number set. Reliance on the median value for a series of illogical values does not correct for the inability of individual cost of equity estimates to pass fundamental tests of economic logic.

Q. Has Dr. Woolridge recognized the importance of evaluating model inputs in other forums?

A. Yes. As Dr. Woolridge noted in his testimony (Appendix A, p. 1), he is a founder and managing director of *ValuePro*, which is an online valuation service largely based on application of the DCF model. *ValuePro* confirmed the importance of evaluating the reasonableness of inputs to the DCF model:

> Garbage in, Garbage out! Like any other computer program, if the inputs into our Online Valuation Service are garbage, the resulting valuation also will be garbage.[35]

Unlike his approach here, Dr. Woolridge advised investors to use common sense in interpreting the results of valuation models, such as the DCF:

> If a figure comes up for a certain input that is either highly implausible or looks wrong, indeed it may be. If a valuation is way out of line, figure out where the Service may have strayed on a valuation, and correct it.[36]

Given the fact that many of the growth rates relied on by Dr. Woolridge result in illogical cost of equity estimates, it is appropriate to take the same critical viewpoint when evaluating inputs to his DCF model.

Q. Did Mr. Gorman or Mr. Baudino make any effort to test the reasonableness of the individual growth estimates presented in their testimony?

A. No. Mr. Gorman's application of the constant growth DCF model based on analysts' growth projections (Exhibit MPG-5) simply averaged his growth rate sources and added the result to the utility's dividend yield, without any evaluation of the results. Unlike Dr. Woolridge, Mr. Baudino properly recognized that negative growth rates should be excluded, but he nevertheless simply averaged his individual growth rates with no consideration for the reasonableness of the underlying data. Consider the DPS growth rates reported on page 1 of Exhibit ___(RAB-4), for example. As shown there, Mr. Baudino calculated an average growth rate of 4.88% based on individual growth estimates ranging from 1.0% to 13.5%. Combined with Mr. Baudino's dividend yield, these individual DPS growth rates suggest a cost of equity range of 5.04% to 17.81%. Clearly, these values are illogical and provide no information regarding the expectations of investors.

Q. What approach should the Opposing Witnesses have used to evaluate low-end DCF estimates?

A. As explained in detail in my direct testimony,[37] it is a basic economic principle that investors can be induced to hold more risky assets only if they expect to earn a return to compensate them for their risk bearing. As a result, the rate of return that investors require from a utility's common stock, the most junior and riskiest of its securities, must be considerably higher than the yield offered by senior, long-term debt. Consistent with this principle, these witnesses should have eliminated growth rates that produce illogical DCF results for their proxy companies. Similar tests are applied by regulators, with FERC consistently recognizing that it is appropriate to eliminate estimates that do not sufficiently exceed observable yields on long-term public utility debt.

Q. Has Dr. Woolridge adopted this exact same test of low-end DCF estimates in recent testimony before FERC?

A. Yes. In testimony filed with FERC on September 30, 2011, Dr. Woolridge applied this test to the results of his DCF analysis.[38] As Dr. Woolridge concluded:

> These data suggest that the prospective yield on utility bonds with a rating similar to the proxy group (A-/BBB+) is in the 5.0% range. Given this figure, and FERC's bond yield plus 100 basis point threshold for the low-end outliers, the elimination [of] the low-end results for Entergy (5.6%) and Great Plains Energy (6.2%) is supported.[39]

Q. If Dr. Woolridge had eliminated low-end values, as he did in his recent FERC testimony, what cost of equity would have resulted from his DCF analysis based on historical growth rates?

A. As indicated above, Dr. Woolridge's DPS growth measures provide no meaningful information regarding the expectations and requirements of investors and should be entirely ignored. As shown on Exhibit WEA-21, screening Dr. Woolridge's DCF cost of equity estimates based on historical EPS and BVPS growth rates to eliminate illogical, low-end values, as well as high-end outliers, resulted in an implied cost of equity range of 9.8% to 10.8%, with the midpoint of this range being 10.3%. Similarly, the average cost of equity implied by Dr. Woolridge's corrected historical DCF analysis was also 10.3%. None of these values incorporate an adjustment to recognize flotation costs.

Q. Did you also apply this test of logic to Dr. Woolridge's DCF results based on projected EPS growth rates?

A. Yes. As shown on Exhibit WEA-22, combining the projected EPS growth rates referenced by Dr. Woolridge with the dividend yields for his proxy group companies resulted in a number of DCF cost of equity estimates that were below current and expected public utility bond yields. After eliminating these illogical values, the average DCF cost of equity estimates fell in a range of 9.5% to 10.1%, with a midpoint of 9.8%. The average cost of equity implied by Dr. Woolridge's corrected DCF analysis based on EPS growth projections was 9.7%. Again, these corrected results do not incorporate an adjustment to recognize flotation costs.

Q. What cost of equity estimates are implied by Mr. Gorman's and Mr. Baudino's constant growth DCF analysis after correcting this deficiency?

A. As shown on Exhibit WEA-23, screening Mr. Gorman's constant growth DCF results based on analyst growth rates to eliminate illogical, low-end values implies a revised DCF cost of equity estimate of approximately 9.7%, with Mr. Baudino's analysis yielding 9.4% (Exhibit WEA-24). Both of these values do not include any adjustment to recognize flotation costs.

Q. Dr. Woolridge (Exhibit JRW-10, p. 4) and Mr. Baudino (Exhibit___(RAB-4)) relied on internal, "br" growth rates. Should the Commission place any weight on these values?

A. No. The internal growth rates calculated by Dr. Woolridge and Mr. Baudino are downward biased because of computational errors and omissions. Dr. Woolridge and Mr. Baudino based their calculations of the internal, "br" retention growth rate on data from Value Line, which reports end-of-period results. If the rate of return, or "r" component of the internal growth rate, is based on end-of-year book values, such as those reported by Value Line, it will understate actual returns because of growth in common equity over the year. This downward bias, which has been recognized by regulators,[40] is illustrated in Exhibit WEA-25.

Consider a hypothetical firm that begins the year with a net book value of common equity of $100. During the year the firm earns $15 and pays out $5 in dividends, with the ending net book value being $110. Using the year-end book value of $110 to calculate the rate of return produces an "r" of 13.6%. As the FERC has recognized, however, this year-end return "must be adjusted by the growth in common equity for the period to derive an average yearly return."[41] In the example below, this can be accomplished by using the average net book value over the year ($105) to compute the rate of return, which results in a value for "r" of 14.3%. Use of the average rate of return over the year is consistent with the theory of this approach to estimating investors' growth expectations, and as illustrated on Exhibit WEA-25, it can have a significant impact on the calculated retention growth rate.

Because Dr. Woolridge and Mr. Baudino did not adjust to account for this reality in their analyses, the "internal" growth rates that they calculated are downward-biased.

Q. What other consideration leads to a downward bias in Dr. Woolridge's and Mr. Baudino's calculation of internal, "br" growth?

A. Dr. Woolridge and Mr. Baudino ignored the impact of additional issuances of common stock in their analysis of the sustainable growth rate. Under DCF theory, the "sv" factor is a component designed to capture the impact on growth of issuing new common stock at a price above, or below, book value. As noted by Myron J. Gordon in his 1974 study:

> When a new issue is sold at a price per share P = E, the equity of the new shareholders in the firm is equal to the funds they contribute, and the equity of the existing shareholders is not changed. However, if P > E, part of the funds raised accrues to the existing shareholders. Specifically…[v] is the fraction of the funds raised by the sale of stock that increases the book value of the existing shareholders' common equity. Also, "v" is the fraction of earnings and dividends generated by the new funds that accrues to the existing shareholders.[42]

In other words, the "sv" factor recognizes that when new stock is sold at a price above (below) book value, existing shareholders experience equity accretion (dilution). In the case of equity accretion, the increment of proceeds above book value (P > E in Professor Gordon's example) leads to higher growth because it increases the book value of the existing shareholders' equity. In short, the "sv" component is entirely consistent with DCF theory, and the fact that Dr. Woolridge and Mr. Baudino failed to consider the incremental impact on growth is yet another downward bias to their "internal" growth rates, which should be given no weight.

Q. Has Dr. Woolridge recognized these adjustments to the sustainable growth rate in testimony before other regulators?

A. Yes. In his recent testimony before FERC referenced earlier, Dr. Woolridge incorporated an adjustment to correct for the downward bias attributable to end-of-year book values, and recognized the additional growth from new share issues by incorporating the "sv" component discussed above.[43] Similarly, Mr. Gorman incorporated both of these adjustments in his calculation of sustainable, br+sv growth rates.[44]

Q. Does it make sense to "test" analysts' growth projections against sustainable, "br+sv" growth rates, as Mr. Gorman implies?

A. No. Mr. Gorman suggests (p. 29) that "sustainable," br+sv growth rates provide a benchmark to evaluate analysts' current three- to five-year EPS growth projections. I do agree that the sustainable growth rates referenced by Mr. Gorman, and which I considered in my application of the DCF model, provide one guide to investors' expectations that is consistent with the theory underlying the DCF approach. But there is no basis for Mr. Gorman's suggestion that this alternative measure can be used to test the veracity of analysts' estimates. As indicated earlier, Mr. Gorman correctly concluded that investors' expectations are the guide to the growth rate required to apply the DCF model, and that analysts' projections provide the more accurate estimate. Sustainable br+sv growth rates provide no basis to "test" these independent estimates.

Q. Does the multi-stage form of the DCF model used by Mr. Gorman (p. 30) provide a better guide to investors' requirements?

A. No. While multi-stage analyses, such as that used by Mr. Gorman, can be used to estimate the cost of equity, these approaches increase the number of inputs that must be estimated and add to the computational difficulties. This makes the results of non-constant growth DCF applications sensitive to changes in assumptions, and therefore subject to greater controversy in a rate case setting. Just as importantly, to the extent that each of these time-specific suppositions about future cash flows do not reflect what real-world investors actually anticipate, the resulting cost of equity estimate will be biased.

Mr. Gorman uses the following argument to support use of his two-stage model:

> The limitation on the constant growth DCF model is that it cannot reflect a rational expectation that a period of high/low short-term growth can be followed by a change in growth to a rate that is more reflective of long-term sustainable growth.[45]

But despite acknowledging that "one must attempt to estimate investors' consensus about what the dividend or earnings growth rate will be, and not what an individual investors or analyst may use,"[46] there is no demonstrable link between the assumptions of his multi-stage DCF application and the consensus expectations of investors. The only relevant growth rate is the growth rate used by investors. Investors do not have clarity to see far into the future, and Mr.

Gorman presents no evidence that investors evaluate the future based on the assumptions and data sources that were required to apply his two-stage model.

While multi-stage analyses, such as that used by Mr. Gorman, can be used to estimate the cost of equity, these approaches increase the number of inputs that must be estimated and add to the computational difficulties. This makes the results of non-constant growth DCF applications sensitive to changes in assumptions, and therefore subject to greater controversy in a rate case setting. Just as importantly, to the extent that each of these time-specific suppositions about future cash flows do not reflect what real-world investors actually anticipate, the resulting cost of equity estimate will be biased. As Mr. Gorman recognized, the benchmark for growth in a DCF model is <u>what investors expect</u> when they purchase stock. Unless we replicate investors' thinking, we cannot uncover their required returns and thus the market cost of equity. In practice, applying a non-constant model, such as the multi-stage DCF approach used by Mr. Gorman, would lead to error if it ignores the views of real-world investors.

Q. Are there times when a two-stage model could fit investors' expectations?

A. Yes. For example, in the 1990s when investors thought the electric utility was transitioning to non-regulated markets, two-stage models did fit investors' expectations. The first stage was based on expectations of growth rates under regulation and the second stage would be more akin to non-utility growth rates. A number of experts, including me, presented two-stage models based on investors' expectations of a transition and a number of regulatory agencies found these models to be reasonable, including FERC. As industry restructuring was implemented and expectations of widespread deregulation waned, the two-stage model no longer fit the expectations that investors built into electric utility stock prices, and FERC abandoned the two-stage DCF model to a constant growth model using earnings per share projections and sustainable growth, just as I have presented in my direct testimony. While Mr. Gorman asserts that his multi-stage rendition of the DCF model is "more reflective of long-term sustainable growth,"[47] he has not shown that investors view the future the way he has constructed it in his model. That is, Mr. Gorman's DCF analysis is a mechanistic approach that ignores the expectations and requirements of capital markets.

Q. Is there any evidence to conclude that investors currently agree with or use the multi-state DCF approach outlined by Mr. Gorman?

A. No. On the contrary, in the financial media one observes many references to 3-5 year EPS growth forecasts for individual companies and very few references to long-term GDP forecasts. Long-term GDP growth rates are simply not discussed within the context of establishing investors' expectations for individual firms. Few investors are likely to adopt such a theoretical approach, and growth in excess of the economy as a whole is consistent with investors' expectations. Indeed, Multex Investor, a publisher of financial research and investment information that is now an arm of Thomson Reuters, advised that, "all equity investors ... should look for growth rates that are at least as strong as growth of Real GDP and Inflation."[48] And to the extent economic trends are influential, they are already captured in analysts' growth estimates for electric utilities.

Meanwhile, Mr. Gorman and Dr. Woolridge suggest that it would be illogical for investors to expect long-term growth for an electric utility that exceeds the rate of growth of the economy.[49] Based on this subjective assertion, Mr. Gorman assumed that each company's growth rate would begin to converge to that of the economy as a whole after 5 years, and then extended his analysis for an additional 195 years.[50] While few investors are likely to consider Mr. Gorman's projected cash flows in the year 2212 to be within their foreseeable horizon, it is entirely logical for investors to recognize the potential for certain companies to grow faster than the overall economy.

But as Mr. Gorman himself has testified, "Analysts' growth rate forecasts generally are the best reflection of investors' outlook, and three- to five-year analysts' growth rate forecasts are reasonable estimates of long-term sustainable growth."[51] While the complexity of multi-stage DCF models may impart an aura of accuracy, the fact remains that the investment community does not look to GDP growth over the next 200 years when evaluating an investment in one of Mr. Gorman's comparable utilities, and investors' current view of electric utilities does not anticipate a series of discrete, clearly defined stages. As a result, there is no discernible transition that would support use of the multi-stage DCF approach relied on by Mr. Gorman.

If Mr. Gorman was seeking to be absolutely true to the theory underlying the DCF model, the proper growth rate would be in perpetuity. Of course, perpetual growth rates do not exist, but from a more practical standpoint, they do not matter. As a practical matter, investors do not look to that distant horizon where all companies must grow at the rate of the economy. Not only is it impossible to predict the distant future, it simply doesn't matter. The present value of cash flows in the far distant future is so small as to be largely irrelevant to investors, who are more rationally concerned with company-specific performance in the next several years than with GDP growth in some future decade.

Q. Are the GDP growth rates referenced by Mr. Gorman supported by expectations for the utility industry?

A. No. As Mr. Gorman recognized, growth is in part created by "additional rate base investment."[52] Contrary to Mr. Gorman's assertion that trends in utility investment will somehow mirror GDP, investors recognize that the electric utility industry has entered a long-term cycle of significant capital spending on utility infrastructure. As noted in my direct testimony, the investment community understands that utilities are facing the prospect of a long-term commitment to infrastructure investment associated with meeting environmental mandates, enhancing the transmission grid, and otherwise meeting reliability needs.

Standard & Poor's Corporation ("S&P") recently noted that despite slow economic growth, capital spending in the electric utility industry is rising significantly,[53] with Mr. Gorman's own source noting that the electric utility industry "may boost capex spending by 30% in the years ahead."[54] This long-term cycle of capital investment and its implications for investors' growth expectations contradicts Mr. Gorman's supposition regarding GDP growth and supports the reasonableness of the analysts' growth estimates referenced in my direct testimony.

Q. Does the example that Mr. Gorman presents in Table 4 to his direct testimony provide any link between GDP growth rates and investors' expectations?

A. No. There is no relationship between Mr. Gorman's mathematical exercise and real-world expectations, just as there is no evidence that investors view GDP growth as a ceiling when evaluating common stocks. Beyond the first year of Mr. Gorman's example, he assumes that utility plant additions will grow at the rate of inflation, which clearly is not in-line with what the investment community is anticipating. As shown in Exhibit WEA-26, assuming a 5-year cycle of capital spending identical to the initial year of Mr. Gorman's example produces growth rates that are consistently higher than GDP.

Q. Is there a computational error that also biases Mr. Gorman's multi-stage DCF cost of equity estimates downward?

A. Yes. Under his multi-stage DCF approach, Mr. Gorman predicted the cash flows that would accrue to investors over the next 200 years. To arrive at his cost of equity estimates, Mr. Gorman used the internal rate of return ("IRR") function available in Microsoft's Excel spreadsheet program to determine the discount rate (*i.e.*, investors' required rate of return) that would equate these cash flows with the current market price of the stock. This IRR calculation, however, assumes that annual cash flows are received at the end of each year, which is inconsistent with the periodic dividend payments that investors receive and results in a downward bias in the implied cost of equity.

Q. What cost of equity estimates are implied by Mr. Gorman's multi-stage model if this error is corrected?

A. As noted above, there is no support for the key assumption underlying Mr. Gorman's multi-stage DCF model; namely, that investors expect growth rates for electric utilities to converge to GDP growth in five years. Nevertheless, I have corrected his analysis to reflect mid-year discounting. As shown on Exhibit WEA-27, this resulted in an average DCF cost of equity estimate of approximately 9.4% for Mr. Gorman's proxy group, instead of the 9.18% reported on Exhibit MPG-10. Neither of these values includes any recognition of flotation costs.

Q. What do you conclude based on your review of Opposing Witnesses' DCF analyses?

A. Historical growth measures do not reflect investors forward-looking expectations, trends in DPS are distorted by fundamental changes in industry financial policies, and Opposing Witnesses failed to evaluate the underlying reasonableness of individual growth rates. In addition, the calculations used to arrive at Dr. Woolridge's internal growth rates are flawed and incomplete, and Mr. Gorman's multi-stage DCF analysis lacks any demonstrable connection to investors' expectations and contains a computational error. As a result, the DCF cost of equity estimates presented by Dr. Woolridge, Mr. Gorman, and Mr. Baudino are biased downward and fail to reflect investors' required rate of return.

VII. MISGUIDED CRITICISMS OF ANALYSTS' GROWTH RATES

Q. Should the Commission give any credence to Dr. Woolridge's allegations that projected EPS growth rates are biased?

A. No. Despite the fact that he relied on analysts' projections in applying the DCF model, Dr. Woolridge devoted over ten pages of his testimony to argue the misguided notion that analysts' EPS growth rates are "overly optimistic and upwardly biased."[55] But in applying the DCF model to estimate the cost of equity, the only relevant growth rate is the forward-looking expectations of investors that are captured in current stock prices. Any claim that analysts' estimates are not relied upon by investors is illogical given the reality of a competitive market for investment advice. If financial analysts' forecasts do not add value to investors' decision making, it would be irrational for investors to pay for these estimates. Similarly, those financial analysts who fail to provide credible forecasts will lose out in competitive markets relative to those analysts whose forecasts are favored by investors. The reality that analyst estimates are routinely referenced in the financial media and in investment advisory publications implies that investors *do* use them as a basis for their expectations.

The continued success of investment services such as IBES and Value Line, and the fact that projected growth rates from such sources are widely referenced, provides strong evidence that investors give *considerable* weight to analysts' earnings projections in forming their expectations for future growth. Earnings growth projections of security analysts provide the most frequently referenced guide to investors' views and are widely accepted in applying the DCF model. As explained in *New Regulatory Finance*:

> Because of the dominance of institutional investors and their influence on individual investors, analysts' forecasts of long-run growth rates provide a sound basis for estimating required returns. Financial analysts exert a strong influence on the expectations of many investors who do not possess the resources to make their own forecasts, that is, they are a cause of *g* [growth].[56]

Similarly, Mr. Baudino noted that analysts' growth rates are "widely available to investors and one can reasonably assume that they influence investor expectations."[57]

Q. Does the fact that analysts' EPS projections may deviate from actual results hamper their use in applying the DCF model, as Dr. Woolridge contends?[58]

A. No. Investors, just like securities analysts and others in the investment community, do not know how the future will actually turn out. They can only make investment decisions based on their best estimate of what the future holds in the way of long-term growth for a particular stock, and securities prices are constantly adjusting to reflect their assessment of available information. While the projections of securities analysts may be proven optimistic or pessimistic in hindsight, this is irrelevant in assessing the expected growth that investors have incorporated into current stock prices, and any bias in analysts' forecasts -- whether pessimistic or optimistic -- is irrelevant if investors share analysts' views. As *New Regulatory Finance* concluded, "The accuracy of these forecasts in the sense of whether they turn out to be correct is not an issue here, as long as they reflect widely held expectations."[59] Moreover, as discussed earlier, there is every indication that expectations for earnings growth are instrumental in investors' evaluation and the fact that analysts' projections deviate from actual results provides no basis to ignore this relationship.

Comparisons between forecasts of future growth expectations and the historical trend in actual earnings are largely irrelevant in evaluating the use of analysts' projections in the DCF model. For example, Dr. Woolridge references a study he conducted based on just such a historical comparison.[60] But as noted above, the investment community can only make decisions based on their best estimate of what the future holds in the way of long-term growth for a particular stock, and the fact that projections deviate from actual results says nothing about whether investors rely on analysts' estimates. In using the DCF model to estimate investors' required returns, the purpose is not to prejudge the accuracy or rationality of investors' growth expectations. Instead, to accurately estimate the cost of equity we must base our analyses on the growth expectations investors actually used in determining the price they are willing to pay for common stocks --

even if we do not agree with their assumptions. Indeed, despite the findings of his research, Dr. Woolridge reportedly "remains somewhat puzzled that so many continue to put great weight in what [analysts] have to say."[61] As Robert Harris and Felicia Marston noted in their article in *Journal of Applied Finance*:

> …Analysts' optimism, if any, is not necessarily a problem for the analysis in this paper. If investors share analysts' views, our procedures will still yield unbiased estimates of required returns and risk premia.[62]

Similarly, there is no logical foundation for criticisms such as those raised by Dr. Woolridge that the purported upward bias of analysts' growth rates limits their usefulness in applying the DCF model. If investors base their expectations on these growth rates, then they are useful in inferring investors' required returns – even if the analysts' forecasts prove to be wrong in hindsight.[63]

Q. Do the selected articles referenced by Dr. Woolridge in support of his contention that analysts are overly optimistic paint a complete picture of the financial research in this area?

A. No. In contrast to Dr. Woolridge's assertions, peer-reviewed empirical studies do not uniformly support his contention that analysts' earnings projections are optimistically biased. For example, a study reported in "Analyst Forecasting Errors: Additional Evidence" found no optimistic bias in earnings projections for large firms (market capitalization of $500-$3,000 million), with data for the largest firms (market capitalization > $3,000 million) demonstrating a *pessimistic* bias.[64] Similarly, a 2005 article that examined analyst growth forecasts over the period 1990 through 2001 illustrated that Wall Street's forecasting is not inherently optimistic. Other research on this topic also concludes that there is no clear support for the contention that analyst forecasts contain upside bias.[65]

Q Did Dr. Woolridge provide any meaningful support for his allegation that Value Line forecasts are "overly optimistic"?

A. No. Dr. Woolridge asserted his belief (p. B-14) that Value Line projections have "a decidedly positive bias," based only on his personal belief that Value Line does not report a sufficient number of negative growth rates. But a negative long-term growth rate implies a DCF cost of equity below the firm's dividend yield and is hardly representative of investors' expectations. As noted earlier, Mr. Baudino recognized that negative growth rates should be excluded in applying the DCF model.

Contrary to Dr. Woolridge's conclusion, Value Line is a well-recognized source in the investment and regulatory communities. For example, *Cost of Capital – A Practitioners' Guide*, published by the Society of Utility and Financial Analysts, noted that:

> [A] number of studies have commented on the relative accuracy of various analysts' forecasts. Brown and Rozeff (1978) found that Value Line was superior to other forecasts. Chatfield, Hein and Moyer (1990, 438) found, further "Value Line to be more accurate than alternative forecasting methods" and that "investors place the greatest weight on the forecasts provided by Value Line".[66]

Given the fact that Value Line is perhaps the most widely available source of information on common stocks, the projections of Value Line analysts provide an important guide to investors' expectations.

Moreover, in contrast to Dr. Woolridge's unsupported assertion, the fact that Value Line is not engaged in investment banking or other relationships with the companies that it follows reinforces its impartiality in the minds of investors. Indeed, Value Line was among the providers of "independent research" that benefited from the Global Settlement cited by Dr. Woolridge (p. B-3).[67]

VIII. CORRECTIONS TO CAPM RESULTS

Q. What is the fundamental problem associated with the approach that Dr. Woolridge and Mr. Gorman used to apply the CAPM?

A. Like the DCF model, the CAPM is an *ex-ante,* or forward-looking model based on expectations of the future. As a result, in order to produce a meaningful estimate of investors' required rate of return, the CAPM must be applied using data that reflects the expectations of actual investors in the market. Despite recognizing the inherent limitations of historical data, and rejecting historical information as unreliable,[68] Mr. Gorman's application of the CAPM – and that of Dr. Woolridge – was based entirely on *historical* rates of return, not current projections. *Morningstar* (formerly Ibbotson Associates) recognized the primacy of current expectations:

> The cost of capital is always an expectational or forward-looking concept. While the past performance of an investment and other historical information can be good guides and are often used to estimate the required rate of return on capital, the expectations of future events are the only factors that actually determine cost of capital.[69]

Because they failed to look directly at the returns investors are currently requiring in the capital markets, the CAPM estimates developed by these witnesses fall woefully short of investors' current required rate of return.

Q. Dr. Woolridge (p. 48) characterizes his risk premium as *ex ante*. Is this an accurate assessment?

A. No. In order to be considered a forward-looking, *ex ante* estimate of the current market risk premium, the analysis must be predicated on investors' current expectations. Dr. Woolridge did not attempt to develop a market risk premium using current capital market information. Rather, he simply presented the results of various studies and surveys conducted in the past. Certain of these studies may have attempted to infer the equity risk premium using expected data at the time they were developed, but expectations at some point in the past are not equivalent to investors *ex ante* requirements in capital markets today.

Q. Is there good reason to entirely disregard the results of historical CAPM analyses such as those presented by Dr. Woolridge and Mr. Gorman?

A. Yes. As explained in my direct testimony, applying the CAPM is complicated by the impact of the recent capital market turmoil and recession on investors' risk perceptions and required returns.[70] The CAPM cost of common equity estimate is calibrated from investors' required risk premium between Treasury bonds and common stocks. In response to heightened uncertainties, investors have repeatedly sought a safe haven in U.S. government bonds and this "flight to safety" has pushed Treasury yields significantly lower while yield spreads for corporate debt widened. This distortion not only impacts the absolute level of the CAPM cost of equity estimate, but it also affects estimated risk premiums. Economic logic would suggest that investors' required risk premium for common stocks over Treasury bonds has also increased.

Meanwhile, the backward-looking approaches used by Dr. Woolridge and Mr. Gorman incorrectly assume that investors' assessment of the relative risk differences, and their required risk premium, between Treasury bonds and common stocks is constant and equal to some historical average. At no time in recent history has the fallacy of this assumption been demonstrated more concretely. This incongruity between investors' current expectations and requirements and historical risk premiums is particularly relevant during periods of heightened uncertainty and rapidly changing capital market conditions, such as those experienced recently.

As a result, there is every indication that the historical CAPM approach fails to fully reflect the risk perceptions of real-world investors in today's capital markets, which would violate the standards underlying a fair rate of return by failing to provide an opportunity to earn a return commensurate with other investments of comparable risk. As the FPSC Staff concluded:

> [R]ecognizing the impact the Federal Government's unprecedented intervention in the capital markets has had on the yields on long-term Treasury bonds, staff believes models that relate the investor-required return on equity to the yield on government securities, such as the CAPM approach, produce less reliable estimates of the ROE at this time.[71]

Q. Did Dr. Woolridge also recognize the frailties of the historical CAPM approach?

A. Yes. Dr. Woolridge noted that *ex-post*, historical rates of return "are not the same as *ex-ante* expectations," and observed that, "The use of historical returns as market expectations has been criticized in numerous academic studies."[72] Dr. Woolridge granted that "risk premiums can change over time … such that *ex post* historical returns are poor estimates of *ex ante* expectations."[73] Finally, Dr. Woolridge concluded, that his historical CAPM approach provides "a less reliable indication of equity cost rates for public utilities."[74]

Q. Is there evidence that the studies referenced by Dr. Woolridge do not reflect investors' expectations?

A. Yes. The vast majority of the results of the equity risk premium studies reported by Dr. Woolridge do not make economic sense and contradict his own testimony. For example, page 5 of Dr. Woolridge's Exhibit JRW-11 reveals that almost two-thirds of the historical studies included in Dr. Woolridge's review found market equity risk premiums of approximately 5.0% or below.[75] This was also true for over one-half of the individual risk premium studies that Dr. Woolridge relied on directly to apply the CAPM.[76] But combining a market equity risk premium of 5.0% with Dr. Woolridge's 4.0% risk-free rate results in an indicated cost of equity for the market as a whole of 9.0%, which is equal to or greater than Dr. Woolridge's ROE recommendations for FPL in this case. Many of his other benchmarks for the market rate of return fall *below* the anemic cost of equity he recommends for FPL. For example, Dr. Woolridge conjures a market rate of return of 7.9% based on his "building blocks" approach,[77] which falls 110 basis points *below* his recommended ROE in this case.

Meanwhile, after noting that beta is the only relevant measure of investment risk under modern capital market theory, Dr. Woolridge concluded that his comparison of beta values (Exhibit JRW-8) indicates that investors' required return on the market as a whole should exceed the cost of equity for electric utilities.[78] Based on Dr. Woolridge's own logic, it follows that a market rate of return that does not exceed his own downward biased ROE recommendation has no relation to the current expectations of real-world investors. The fact that much of his CAPM "evidence" violates the risk-return tradeoff that is fundamental to finance clearly illustrates the frailty of Dr. Woolridge's analyses.

Q. Dr. Avera, are you in any way alleging that all these studies and surveys cited by Dr. Woolridge are incorrect?

A. No, not at all. I am challenging the inferences that Dr. Woolridge draws from them, and the particular use being made of the cited studies. The point that I am making is that there is more than one way to define and calculate an equity risk premium. The problem with the approach used by Dr. Woolridge is that, instead of looking directly at an equity risk premium based on current expectations – which is what is required in order to properly apply the CAPM – he undertakes an unrelated exercise of compiling a list of selected computations culled from the historical record. Average realized risk premiums computed over some selected time period may be an accurate representation of what was actually earned in the past, but they do not answer the question as to what risk premium investors were actually expecting to earn on a forward-looking basis during these same time periods. Similarly, calculations of the equity risk premium developed at a point in history – whether based on actual returns in prior periods or contemporaneous projections – are not the same as the forward-looking expectations of today's investors, which are premised on an entirely different set of capital market and economic expectations.

Likewise, surveys of selected corporate executives or economists, or building blocks based on academic research, are not equivalent to investors' required returns in the coming period. Since the benchmark for a fair ROE requires that the utility be able to compete for capital in the current capital market, the relevant inquiry is to determine the return that real world investors in today's markets require from FPL in order to compete for capital with other comparable risk alternatives. In short, while there are many potential definitions of the equity risk premium, the only relevant issue for application of the CAPM in a regulatory context is the return investors currently expect to earn on money invested today in the risky market portfolio versus the risk-free U.S. Treasury alternative.

Q. Was Dr. Woolridge (Exhibit JRW-11, p. 5-6) justified in relying on geometric means as a measure of average rate of return when applying the historical CAPM?

A. No. While both the arithmetic and geometric means are legitimate measures of average return, they provide different information. Each may be used correctly, or misused, depending upon the inferences being drawn from the numbers. The geometric mean of a series of returns measures the constant rate of return that would yield the same change in the value of an investment over time. The arithmetic mean measures what the expected return would have to be each period to achieve the realized change in value over time.

In estimating the cost of equity, the goal is to replicate what investors expect going forward, not to measure the average performance of an investment over an assumed holding period. When referencing realized rates of return in the past, investors consider the equity risk premiums in each year independently, with the arithmetic average of these annual results providing the best estimate of what investors might expect in future periods. *New Regulatory Finance* had this to say:

> The best estimate of expected returns over a given future holding period is the arithmetic average. *Only arithmetic means are correct for forecasting purposes and for estimating the cost of capital.* There is no theoretical or empirical justification for the use of geometric mean rates of returns as a measure of the appropriate discount rate in computing the cost of capital or in computing present values.[79]

Similarly, *Morningstar* concluded that:

> For use as the expected equity risk premium in either the CAPM or the building block approach, the arithmetic mean or the simple difference of the arithmetic means of stock market returns and riskless rates is the relevant number. ... The geometric average is more appropriate for reporting past performance, since it represents the compound average return.[80]

I certainly agree that both geometric and arithmetic means are useful, since my Ph.D. dissertation was on the usefulness of the geometric mean.[81] But the issue is not whether both measures can be useful; it is which one best fits the use for a forward-looking CAPM in this case. One does not have to get deeply into finance theory to see why the arithmetic mean is more consistent with the facts of this case. The FPSC is not setting a constant return that FPL is guaranteed to earn over a long period. Rather, the exercise is to set an expected return based on test year data. In the real world, FPL's yearly return will be volatile, depending on a variety of economic and industry factors, and investors do not expect to earn the same return each year.

The usefulness of the arithmetic mean for making forward-looking estimates was confirmed in *Quantitative Investment Analysis* (2007), one of the textbooks included in the study curriculum for the Chartered Financial Analyst designation. The authors of this text concluded that the arithmetic mean is the appropriate measure when calculating an expected equity risk premium in a forward-looking context.[82] Just as importantly, by relying directly on expectations and estimates of investors' required rate of return, as incorporated in the CAPM analysis presented in my direct testimony, there is no need to debate the merits of geometric versus arithmetic means, because neither is required to apply this forward-looking approach.

Q. What does this imply with respect to Dr. Woolridge's CAPM analysis?

A. For a variable series, such as stock returns, the geometric average will <u>always</u> be less than the arithmetic average. Accordingly, Dr. Woolridge's reference to geometric average rates of return provides yet another element of built-in downward bias.

Q. Does the risk premium that Dr. Woolridge (Exhibit JRW-11, p. 6) and Mr. Gorman (Exhibit MPG-17, fn. 2) derive from *Morningstar* data comport to what this publication reports?

A. No. *Morningstar* computes the equity risk premium by subtracting the arithmetic mean income return (not the total return) on long-term Treasury bonds from the arithmetic average return on common stocks. As *Morningstar* explained:

> Price changes in bonds due to unanticipated changes in yields introduce price risk into the total return. Therefore, the total return on the bond series does not represent the riskless rate of return. The income return better represents the unbiased estimate of the purely riskless rate of return, since an investor can hold a bond to maturity and be entitled to the income return with no capital loss.[83]

In other words, *Morningstar* concluded that using only the income component of the long-term government bond return provides a more reliable estimate of the expected risk premium because investors do not anticipate capital losses for a risk-free security. Dr. Woolridge and Mr. Gorman, however, calculated their equity risk premium using the *total* return for *Morningstar's* long-term government bond series. As a result, the equity risk premium falls far below what his own data source reports and the resulting CAPM cost of equity estimate is understated.

Q. What equity risk premium does *Morningstar* report?

A. The most recent edition of this source of historical realized rate of return data relied on by Dr. Woolridge and Mr. Gorman calculates the long-horizon equity risk premium by subtracting the arithmetic mean average income return on long-term Treasury bonds of 5.15% from the arithmetic mean average return on the S&P 500 of 11.77%, resulting in an equity risk premium of 6.62%.[84] This exceeds the 5.7% value that Dr. Woolridge and Mr. Gorman averaged into their CAPM analyses by 92 basis points.

Q. What is the primary difference between Mr. Gorman's "forward-looking" CAPM analysis and the approach described in your direct testimony?

A. As Mr. Gorman observed, the appropriate "R_m" to use in applying the CAPM is the "[e]xpected return for the market portfolio."[85] The fundamental difference between my approach and that of Mr. Gorman is that, while my analysis actually looked to the future return expectations of investors in the capital markets, Mr. Gorman's "forward-looking" CAPM was actually based almost entirely on historical data. Mr. Gorman averaged the flawed 5.7% historical risk premium discussed above with an alternative estimate of the market return. Mr. Gorman explained:

> I estimated the expected return on the S&P 500 by adding an expected inflation rate to the long-term historical arithmetic average real return on the market.[86]

In other words, the relatively small portion of Mr. Gorman's "forward-looking" market return constituting inflation was based on projected data, but the actual return on the market itself was completely backward looking. Thus, Mr. Gorman essentially predicated his CAPM analysis on two risk premiums based on historical data. Neither one of these approaches is consistent with the assumptions of the CAPM because as noted above, the CAPM seeks to determine the expected return, and is predicated on the forward-looking expectations of investors. Therefore, Mr. Gorman's use of historical returns in the CAPM is inconsistent with the underlying presumptions of the model.

Q. What about the criticisms of the Opposing Witnesses that your forward-looking estimate of the market rate of return is too high?

A. The use of forward-looking expectations in estimating the market risk premium is well accepted in the financial literature. For example, in "The Market Risk Premium: Expectational Estimates Using Analysts' Forecasts" [*Journal of Applied Finance*, Vol. 11 No. 1, 2001], Robert S. Harris and Felicia C. Marston employed the DCF model and earnings growth projections from IBES – just as I did in my direct testimony. The Opposing Witnesses' criticisms of my forward-looking CAPM approach seem to hinge on the fact that this method produces an equity risk premium for the S&P 500 that is considerably higher than the historical benchmarks cited by the Opposing Witnesses.

But estimating investors' required rate of return by reference to current, forward-looking data, as I have done, is entirely consistent with the theory underlying the CAPM methodology. As noted above, the CAPM is an *ex-ante*, or forward-looking model based on expectations of the future. As a result, in order to produce a meaningful estimate of required rates of return, the CAPM is best-applied using data that reflects the expectations of actual investors in the market. Rather than look backwards to a risk premium based largely on historical data, as the Opposing Witnesses suggest, my analysis appropriately focused on the expectations of actual investors in today's capital markets.

All quantitative methods used to estimate the cost of equity have their own strengths and weakness. The Opposing Witnesses do not suggest that the CAPM model is "wrong" to focus on forward-looking projections instead of backward, historical results, nor do they claim that looking to the future, as I have done, is a misapplication of the CAPM. Instead, they simply believe that the result of applying the CAPM in a manner that is consistent with the underlying assumptions produces a result that they view as being too high. But the application of alternative methods is not a process of deviating from the underlying assumptions of the model until the results are consistent with those produced using an alternative approach.

Q. Have other regulators relied on a forward-looking CAPM approach similar to the one presented in your direct testimony?

A. Yes. I based my CAPM approach on the methods used by the Staff at the Illinois Commerce Commission, whose witnesses have routinely relied on a forward-looking market rate of return estimate to apply the CAPM. For example, Illinois Staff witness Rochelle Langfeldt employed an expected market return of 15.31% based on an analysis analogous to the approach described in my direct testimony:

> Q. How was the expected rate of return on the market portfolio estimated?
>
> A. The expected rate of return on the market was estimated by conducting a DCF analysis on the firms composing the S&P 500 Index ("S&P 500"). … Firms not paying a dividend as of June 28, 2001, or for which neither Zacks nor IBES growth

rates were available were eliminated from the analysis. The resulting company-specific estimates of the expected rate of return on common equity were then weighted using market value data from Salomon Smith Barney, *Performance and Weights of the S&P 500: Second Quarter 2001*. The estimated weighted averaged expected rate of return for the remaining 365 firms composing 78.31% of the market capitalization of the S&P 500 equals 15.31%.[87]

Q. Does correcting the historical CAPM applications of the Opposing Witnesses confirm that their market risk premiums are far too low?

A. Yes. Application of the CAPM to the firms in Dr. Woolridge's, Mr. Gorman's, and Mr. Baudino's proxy groups based on a forward-looking estimate for investors' required rate of return from common stocks is presented on Exhibit WEA-28. In order to capture the expectations of today's investors in current capital markets, the expected market rate of return was estimated by conducting a DCF analysis on the dividend paying firms in the S&P 500.

The dividend yield for each firm was based on the year-ahead projections obtained from Value Line. The growth rate was equal to the earnings growth projections for each firm published by IBES, with each firm's dividend yield and growth rate being weighted by its proportionate share of total market value. Based on the weighted average of the projections for the individual firms, current estimates imply an average growth rate over the next five years of 10.8%.

Combining this average growth rate with the average Value Line dividend yield of 2.5% results in a current cost of common equity estimate for the market as a whole (R_m) of approximately 13.3%. Subtracting a 2.7% risk-free rate based on the average yield on 30-year Treasury bonds produced a market equity risk premium of 10.6%.

Q. Did the Opposing Witnesses fail to consider other important factors in evaluating the CAPM?

A. Yes. As noted in my direct testimony,[88] empirical research indicates that the CAPM does not fully account for observed differences in rates of return attributable to firm size. To account for this, *Morningstar* – a source relied on by Dr. Woolridge, and Mr. Baudino – has developed size premiums that need to be added to the theoretical CAPM cost of equity estimates to account for the level of a firm's market capitalization in determining the CAPM cost of equity. Accordingly, my revisions to the CAPM analyses of Dr. Woolridge, Mr. Gorman, and Mr. Baudino incorporated an adjustment to recognize the impact of size distinctions, as measured by the average market capitalization.

Q. Do the arguments advanced by Opposing Witnesses undermine the need for this adjustment?

A. No. Mr. Gorman and Mr. Baudino simply observe that the average beta associated with the lower size deciles examined by *Morningstar* is greater than 1.00.[89] While I don't dispute the observation, this fact has no relevance whatsoever to the implications of *Morningstar's* findings regarding the impact of firm size. The fact that the average beta for smaller size deciles is greater than

1.00 says nothing about the range of individual beta values underlying this average. While the size premiums reported by *Morningstar* were not estimated on an industry-by-industry basis, this provides no basis to ignore this relationship in estimating the cost of equity for utilities. Utilities are included in the companies used by *Morningstar* to quantify the size premium, and firm size has important practical implications with respect to the risks faced by investors in the utility industry.

Similarly, Dr. Woolridge's arguments concerning the implications of "survivor bias" are equally misplaced.[90] The expected returns of failed companies that are in decline or go out of business are irrelevant to the question of whether or not the CAPM fully accounts for investors' risk perceptions when applied to companies included in broad market indices, such as those reflected in *Morningstar's* analysis. The companies in the proxy groups used by all of the witnesses are not start-ups – they are seasoned utilities that have been publicly traded for many years, just like the listed companies in the *Morningstar* data base. The arguments relative to survivor bias may have been relevant to the studies in the 1980's and 1990's, but they do not take away from the solid empirical basis of the size adjustment reported by *Morningstar* that are all based on surviving companies.

Further, it is not necessary to use the historical market risk premium from *Morningstar* to correctly apply the size adjustment. As noted in the reference in my direct testimony, *Morningstar's* size adjustment is based on empirical research using their return data and betas.[91] There is no reason the size differential could not be properly applied to a CAPM using forward-looking risk premiums, as I have done. Moreover, the fact that the impact of firm size may be more pronounced in certain months during the year or may vary over time provides no basis to ignore a well-established market phenomenon, since returns are calculated on an annual basis for the ROE used in regulation and in the CAPM.

Q. Does this size adjustment apply to utilities?

A. Yes. I grant that there are any number of specific factors that distinguish a utility's risks from other firms in the non-regulated sector, just as there are important distinctions between the circumstances faced by airlines and drug manufacturers. But under the assumptions of modern capital market theory on which the CAPM rests, these considerations are reduced to a single risk measure – beta – which captures stock price volatility relative to the market.[92] Within the CAPM paradigm, the degree of regulation, the nature of competition in the industry, the competence of management, and every other firm-specific consideration is boiled down to a single question; namely, how much does the stock's price fluctuate in relation to the market as a whole? Beta is the measure of that variability, and research demonstrates that beta does not fully account for the impact of firm size.

Q. What cost of equity estimates were indicated by correcting the CAPM applications of Opposing Witnesses?

A. As shown on page 1 of Exhibit WEA-28, application of the forward-looking CAPM approach resulted in an unadjusted ROE of 10.4% for the firms in Dr.

Woolridge's proxy group, or 11.2% after adjusting for the impact of firm size. As shown on page 2 of Exhibit WEA-28, this CAPM approach implied an unadjusted CAPM result of 10.1% for Mr. Gorman's proxy group, and an adjusted ROE of 10.4%. Finally, correcting Mr. Baudino's CAPM analysis resulted in cost of equity estimates of 9.9% and 10.7% (Exhibit WEA-28, page 3). None of these corrected CAPM values incorporate an adjustment for flotation costs.

Q. Is it appropriate to consider anticipated capital market changes in applying the CAPM?

A. Yes. As discussed in my direct testimony,[93] there is widespread consensus that interest rates will increase materially as the economy strengthens. Accordingly, in addition to the use of current bond yields, I also applied the CAPM based on the forecasted long-term Treasury bond yields developed based on projections published by Value Line, IHS Global Insight and Blue Chip.

Q. What cost of equity was produced by the CAPM after incorporating forecasted bond yields?

A. As shown on page 1 of Exhibit WEA-29, incorporating a forecasted Treasury bond yield for 2013-2017 implied an unadjusted cost of equity of approximately 10.9% for the utilities in Dr. Woolridge's proxy group, or 11.8% after accounting for firm size. As shown on pages 2 and 3 of Exhibit WEA-29, incorporating projected bond yields implied unadjusted cost of equity estimates of approximately 10.7% and 10.6% for Mr. Gorman's and Mr. Baudino's proxy group, and adjusted ROEs of 11.5% and 11.3%, respectively. Again, these are "bare bones" estimates that do not include any recognition of flotation costs.

Q. Is there any merit to Mr. Baudino's argument (p. 56) that your analysis of the market rate of return should not have been limited solely to the dividend paying firms in the S&P 500?

A. No. As Mr. Baudino recognized (p. 22-23), under the constant growth form of the DCF model, investors' required rate of return is computed as the sum of the dividend yield over the coming year plus investors' long-term growth expectations. Because the dividend yield is a key component in applying the DCF model, its usefulness is hampered for firms that do not pay common dividends. Accordingly, my DCF analysis of the market rate of return properly focused on the dividend paying firms included in the S&P 500.

Meanwhile, Mr. Baudino (p. 32) predicated his DCF analysis of the market rate of return on the companies followed by Value Line. Of these approximately 7,000 companies, the vast majority do not pay common dividends. In other words, most of the companies that underpin Mr. Baudino's DCF analysis do not have the data necessary to implement this approach. Further, many of these firms are extremely small and lack a meaningful operating history. As a result, there is also greater uncertainty associated with estimating the future growth expectations that are central to the application of the DCF method. Taken together, these factors impugn the reliability of Mr. Baudino's market risk premium and confirm my decision to restrict my analysis to the established, dividend paying firms in the S&P 500.

Q. What other problems are associated with Mr. Baudino's market rate of return based on Value Line data?

A. As detailed in my direct testimony and explained earlier here, expected growth in earnings is far more likely to be representative of investors' forward-looking expectations. As Mr. Baudino noted, "I agree to some extent with Dr. Avera that earnings growth is the primary factor considered by investors…"[94] The evidence presented in my direct testimony supports the fact that investors give book value growth rates little weight in their evaluation, particularly for non-utility firms where earnings are not tied to historical investment.[95] But despite Mr. Baudino's admission, and the fact that he ignored book value in applying the DCF method to his group of electric utilities, Mr. Baudino nevertheless included book value growth in estimating the expected market rate of return. This had the effect of understating the resulting CAPM cost of equity estimates.

Q. Do the yields on 5-year Treasury bills referenced in Mr. Baudino's analysis (Exhibit___(RAB-5)) provide an appropriate basis to estimate the cost of equity using the CAPM?

A. No. Unlike debt instruments, common equity extends to perpetuity. As a result, any application of the CAPM to estimate the return that investors require must be predicated on their expectations for the firm's long-term risks and prospects. This does not mean that every investor will buy and hold a particular common stock into perpetuity. Rather, it recognizes that even an investor with a relatively short holding period will consider the long-term, because of its influence on the price that he or she ultimately receives from the stock when it is sold. This is also the basic assumption underpinning the DCF model, which in theory considers the present value of all future dividends expected to be received by a share of stock. In applying the CAPM, *Morningstar*, the source of Mr. Baudino's historical return data, recognized that the cost of equity is a long-term cost of capital and the appropriate interest rate to use is a long-term bond yield:

> The horizon of the chosen Treasury security should match the horizon of whatever is being valued. ... Note that the horizon is a function of the investment, not the investor. If an investor plans to hold a stock in a company for only five years, the yield on a five-year Treasury note would not be appropriate since the company will continue to exist beyond those five years.[96]

Accordingly, proper application of the CAPM should focus on long-term government bonds.

Q. What cost of equity is produced by Mr. Baudino's CAPM analysis once these deficiencies are corrected?

A. As shown on Exhibit WEA-30, correcting Mr. Baudino's CAPM analysis to remove book value growth and incorporate a 30-year Treasury bond yield resulted in an estimated cost of equity for his group of electric utilities of 10.27%, before consideration of flotation costs.

IX. RISK PREMIUM APPLICATION IS INCOMPLETE

Q. Do the results of Mr. Gorman's risk premium approach based on authorized returns provide a reliable guide to a fair ROE for FPL?

A. No. Mr. Gorman subjectively chose to truncate the data available to apply his risk premium approach by ignoring all observations prior to 1986. Mr. Gorman explained that this period was selected "because public utility stocks consistently traded at a premium to book value over that period,"[97] but such manipulation of this data runs counter to the assumptions underlying the study of historical risk premiums. Ibbotson Associates (now *Morningstar*) noted the pitfalls of such a subjective approach:

> Some analysts estimate the expected risk premium using a shorter, more recent time period on the basis that recent events are more likely to be repeated in the near future … This view is suspect …[98]

By choosing a truncated time period for his risk premium study, Mr. Gorman unnecessarily introduces a subjective bias that taints his analyses and artificially lowers his results.

Q. What other flaws are associated with Mr. Gorman's risk premium application?

A. Mr. Gorman failed to incorporate the inverse relationship between interest rates and equity risk premiums in his analysis of historical authorized rates of return. There is considerable empirical evidence that when interest rates are relatively high, equity risk premiums narrow, and when interest rates are relatively low, equity risk premiums are greater. This inverse relationship between equity risk premiums and interest rates has been widely reported in the financial literature. As summarized in *New Regulatory Finance*:

> Published studies by Brigham, Shome, and Vinson (1985), Harris (1986), Harris and Marston (1992, 1993), Carelton, Chambers, and Lakonishok (1983), Morin (2005), and McShane (2005), and others demonstrate that, beginning in 1980, risk premiums varied inversely with the level of interest rates – rising when rates fell and declining when rates rose.[99]

New Regulatory Finance noted that, taken together, studies in the financial literature imply that a 100 basis point change in bond yields would imply a 50 basis point increase in the equity risk premium.[100]

As shown on Mr. Gorman's Exhibit MPG-14, current interest rates are significantly less than those prevailing in the late 1980s and early 1990s. Given that interest rates are currently lower than the average over his study period, current equity risk premiums should be relatively higher, which Mr. Gorman's analysis entirely ignores.

Q. What cost of equity estimate is indicated if Mr. Gorman's risk premium approach is corrected to account for these factors?

A. As shown on page 1 of Exhibit WEA-31, adjusting Mr. Gorman's risk premium analysis to include all available data and account for the inverse relationship between bond yields and equity risk premiums results in a current cost of equity estimate for FPL of 9.6%, or 10.80% after incorporating projected bond yields. Neither of these values includes an adjustment to recognize flotation costs, which are properly considered in setting a fair ROE for FPL.

X. NO BASIS TO DISREGARD NON-UTILITY PROXY GROUP

Q. Opposing Witnesses reject any reference to non-utility companies in evaluating a fair ROE for FPL. Please respond.

A. These witnesses dismiss out of hand my analysis of the cost of equity for non-utility firms based only on the faulty premise that these companies have higher risk. The implication that an estimate of the required return for firms in the competitive sector of the economy is not useful in determining the appropriate return to be allowed for rate-setting purposes is wrong and inconsistent with investor behavior, and the *Bluefield* and *Hope* decisions.

The idea that investors evaluate utilities against the returns available from other investment alternatives – including the low-risk companies in my Non-Utility Proxy Group – is a fundamental cornerstone of modern financial theory. Aside from this theoretical underpinning, any casual observer of stock market commentary and the investment media quickly comes to the realization that investors' choices are almost limitless, and simple common sense supports the notion that utilities must offer a return that can compete with other risk-comparable alternatives, or capital will simply go elsewhere.

In fact, returns in the competitive sector of the economy form the very underpinning for utility ROEs because regulation purports to serve as a substitute for the actions of competitive markets. True enough, utilities are sheltered from competition, but they undertake other obligations and lose the ability to set their own prices and decide when to exit a market. The Supreme Court has recognized that it is the degree of risk, not the nature of the business, which is relevant in evaluating an allowed ROE for a utility.[101] Consistent with this view, Mr. Gorman noted the opportunity cost principle that underlies the Supreme Court's economic standards, and also recognized that returns should be commensurate with "returns investors could earn by investing in other enterprises of comparable risk."[102] Similarly, Mr. Baudino concluded that:

> From an economist's perspective, the notion of "opportunity cost" plays a vital role in estimating the return on equity. One measures the opportunity cost of an investment equal to what one would have obtained in the next best alternative. ... That alternative could have been another utility stock, a utility bond, a mutual fund, a money market fund, or any number of comparable investment vehicles.[103]

My reference to a low-risk group of non-utility companies is entirely consistent with the guidance of the Supreme Court and the principles outlined in Mr. Gorman's and Mr. Baudino's testimony.

Q. You stated above that Mr. Gorman and Mr. Baudino both acknowledge "opportunity cost" underlies the economic standards reflected in the supreme courts' *Bluefield* and *Hope* decisions. Are non-regulated firms important to the consideration of opportunity costs?

A. Absolutely. The cost of capital is an opportunity cost based on the returns that investors could realize by putting their money in other alternatives. Clearly the total capital invested in utility stocks is only the tip of the iceberg of total common stock investment and there are a plethora of "other firms with corresponding risk" available to investors beyond those in the utility industry. Mr. Baudino specifically acknowledged that the allowed ROE should be comparable to returns investors would expect "in any number of comparable investment vehicles," including non-utility firms owned by a mutual fund.[104]

Q. Does Dr. Woolridge apparently consider non-utility stock returns relevant to determining the cost of capital?

A. Indeed he does. Dr. Woolridge cites many studies of past and expected stock market returns in his testimony, including a list of over 30 studies included on Exhibit JRW-11. *Not one* of these studies is limited to utilities, and all include a predominance of non-utility common stocks, *e.g.*, Standard & Poor's 500 Index. Moreover, while Dr. Woolridge references a study of industry betas done at New York University (p. 24) that suggests utilities have lower risks than the average firm in the non-regulated sector, this establishes nothing more than the obvious; while some unregulated firms have higher risks than utilities, others have lower risks. As documented in my direct testimony and discussed further in my rebuttal testimony, the firms in my Non-Utility Proxy Group are also in the lower ranges of risk as measured by objective, widely referenced benchmarks.

Q. Do Dr. Woolridge, Mr. Gorman, or Mr. Baudino raise any meaningful criticisms regarding the use of your Non-Utility Proxy Group?

A. No. The Opposing Witnesses inappropriately dismiss my analysis of the cost of equity for non-utility firms based only on the misguided notion that my Non-Utility Proxy Group "is much riskier than the utility industry."[105] Dr. Woolridge simply observes that the "lines of business are vastly different from the electric utility business and they do not operate in a highly regulated environment."[106] Dr. Woolridge, Mr. Gorman, and Mr. Baudino ignored any comparison of accepted measures of investment risks, and instead simply noted that there are distinctions in the operating circumstances and degree of regulation between utilities and firms in the competitive sector.

My direct testimony did not contend that the operations of the companies in the Non-Utility Proxy Group are comparable to those of electric utilities. Clearly, operating a worldwide enterprise in the restaurant, beverage, computer software, retail, or transportation industry involves unique circumstances that are as distinct from one another as they are from an electric utility. But as the Supreme Court recognized, investors consider the expected returns available from all these opportunities in evaluating where to commit their scarce capital. So long as the risks associated with my Non-Utility Group are comparable to FPL and other utilities – and my direct testimony demonstrates conclusively that they are lower –

the resulting DCF estimates provide a meaningful benchmark for the cost of equity.

My Non-Utility Proxy Group is comprised of 13 of the best-known and most stable corporations in America *and has risk measures that are comparable to, or less than the proxy group of utilities referenced in my analyses.* While these companies are not regulated they do not bear the burdens of losing control over their prices, undertaking the obligation to serve, and having to invest in infrastructure even in unfavorable market conditions. FPL cannot relocate its facilities to an area with a more attractive business climate or higher prospects for economic growth, or abandon customers when turmoil roils energy or capital markets. Investors are quite aware that utilities are not guaranteed recovery of reasonable and necessary costs incurred to provide service and that there are many instances in which utilities are unable to increase rates to fully recoup reasonable and necessary costs, resulting in an inability to earn the allowed rate of return on invested capital. The simple observation that a firm operates in non-utility businesses says nothing at all about the overall investment risks perceived by investors, which is the very basis for a fair rate of return.

Q. **Did Dr. Woolridge, Mr. Gorman, or Mr. Baudino present any objective evidence to support their contention that your Non-Utility Proxy Group is riskier than FPL or your proxy group of electric utilities?**

A. No. It is telling to recognize that these witnesses all acknowledged the relevance of the objective risk measure afforded by published credit ratings in evaluating the relative risk of other utilities.[107] But when it came time to assess the comparable risks of my Non-Utility Group, they failed to consider this commonly referenced benchmark.

Exhibit WEA-3 to my direct testimony compares the Utility Proxy Group with the Non-Utility Proxy Group and FPL across four key indicators of investment risk. As shown there, , the average corporate credit rating for the Non-Utility Proxy Group of "A" is <u>higher</u> than the "A-" average for FPL and the triple-B ratings assigned to the Utility Proxy Group. This analysis contradicts the unsupported assertions of Dr. Woolridge, Mr. Gorman, and Mr. Baudino that the companies in my Non-Utility Proxy Group are not comparable.

Given that Value Line is a widely available source of investment advisory information, its Safety Rank also provides useful guidance regarding the risk perceptions of investors. As discussed in my direct testimony, all of the firms in my Non-Utility Proxy Group have a Safety Rank of "1", which classifies them among the least risky stocks covered by Value Line. Meanwhile, the Safety Rank corresponding to FPL and the firms in the Utility Proxy Group is "2". In other words, according to the key risk indicator from one of the principle sources relied on by all of these witnesses, my Non-Utility Proxy Group is less risky in the minds of investors. Similarly, the average beta value of 0.58 for the Non-Utility Proxy Group is less that the 0.70 average for Utility Proxy Group and the 0.75 value corresponding to FPL. This review of objective indicators of investment risk demonstrates that, if anything, the Non-Utility Proxy Group could be considered somewhat <u>less</u> risky in the minds of investors than FPL or the common stocks of the proxy utilities.

Q. Is there any merit to Mr. Gorman's contention (pp. 56-57) that differences across industries undermine comparisons of bond ratings between firms?

A. No. In fact, the very purpose of credit ratings is to provide investors with a uniform, well-understood indicator of investment risks that accounts for firm and industry-specific characteristics. If Mr. Gorman's assertions were true, credit ratings would be virtually useless to investors, since there would be no way to evaluate distinctions between an "A" rating in, say the airline industry, versus drug manufacturers, home builders, conglomerates, or utilities. While Mr. Gorman premises his flawed argument on yield differentials between U.S. government bonds and corporate bonds, such yield spreads are impacted by a host of considerations, including Federal Reserve actions, that do not bear on comparisons between utilities and other corporate issuers.

In fact, comparisons between credit ratings for utilities and non-utility firms are reinforced by the fact that S&P ceased publishing separate ratings guidelines for regulated utilities in 2007, and now applies the same matrix of business and financial risks used to evaluate non-regulated companies. As S&P concluded, "This is designed to present our rating conclusions in a clear and standardized manner across all corporate sectors."[108] Mr. Gorman recognized that:

S&P ranks the business risk of a utility company as part of its corporate credit rating review. S&P considers total investment risk in assigning bond ratings to issuers, including utility companies. In analyzing total investment risk, S&P considers both the business risk and the financial risk of a corporate entity, including a utility company.[109]

Q. Does the fact that utilities are regulated somehow invalidate this comparison of objective risk indicators?

A. Absolutely not. Mr. Gorman and Dr. Woolridge argue that regulatory protections make utilities less risky than firms operating in competitive markets.[110] First, it is important to note that my analysis did not focus on the average firm in the competitive sector. Rather, it was restricted to a low-risk group of companies that represent the pinnacle of corporate America. In addition, while I don't disagree that utilities operate under a regulatory regime that differs from firms in the competitive sector, any risk-reducing benefit of regulation is already incorporated in the overall indicators of investment risk presented above.

The impact of regulation on a utility's investment risks is one of the key elements considered by credit rating agencies and investment advisory services, such as S&P and Value Line, when establishing corporate credit ratings and other risk measures. As a result, the impact of regulatory protections is already reflected in my risk analysis presented in Exhibit WEA-3 to my direct testimony. Meanwhile, the beta values supported by modern financial theory are premised on stock price volatility relative to the market as a whole, and are not dependent on an assessment of firm-specific considerations. As a result, the impact of regulatory differences on investment risk is accounted for in the published risk indicators relied on by investors and cited in my direct testimony.

Q. Do the higher DCF estimates for the non-utility proxy group demonstrate higher risk?

A. No. I addressed the fallacies of this argument advanced by Mr. Baudino (p. 50) in my direct testimony.[111] While we are accustomed to associating higher risk with higher returns, DCF estimates of investors' required rate of return do not always produce that result. Performing the DCF calculations for the Non-Utility Proxy Group produced ROE estimates that are higher than the DCF estimates for the Utility Proxy Group, even though the risks that investors associate with the group of non-utility firms – as measured by S&P's credit ratings and Value Line's Safety Rank, Financial Strength, and Beta – are lower than the risks investors associate with the Utility Proxy Group. The actual cost of equity is unobservable, and DCF estimates may depart from these values because investors' expectations may not be captured by the inputs to the ROE model, particularly the assumed growth rate. The divergence between the DCF estimates for the Utility and Non-Utility Proxy Groups suggests that both should be considered to ensure a balanced end-result.

XI. FLOTATION COSTS SHOULD BE CONSIDERED

Q. Please address Mr. Gorman's position (p. 55) that the flotation cost adjustment must be based on "actual and verifiable" flotation costs for FPL?

A. Like Mr. Gorman, Dr. Woolridge also suggests that flotation costs should be ignored because my adjustment was not predicated on a precise accounting for FPL. This argument belies the entire point of the adjustment. FPL does not issue common stock, and will never incur flotation costs directly. The approach outlined in my direct testimony is supported by recognized regulatory textbooks and based on research reported in the academic literature, and the fact that FPL does not incur issuance expenses directly provides no basis to ignore a flotation cost adjustment.

What we have here is a "catch 22" to prevent regulatory recovery of these costs. FPL's ultimate parent, NextEra, is the source of investor-supplied common equity capital, and the FPSC has recognized the need to recoup flotation costs in establishing allowed returns for the Company.[112] I used the accepted approach of increasing the dividend yield by the flotation cost by this known and measurable percentage to estimate the costs. FPL has been and will continue to invest massive amounts of equity capital to serve the public, and the earnings base of this equity is permanently reduced by the amount of flotation costs. Without a flotation adjustment, these legitimate costs of providing utility service will be excluded for ratemaking purposes and will undercut FPL's ability to earn its authorized ROE.

Q. Is there "actual and verifiable" evidence that NextEra has incurred flotation costs associated with the sale of common stock?

A. Yes. In response to Interrogatory No. 78 to OPC's Third Set of Interrogatories, FPL provided Opposing Witnesses with information concerning flotation costs on all public offerings of common stock since 2000. As shown there, NextEra incurred underwriting discounts totaling approximately $65.1 million on a total offering of approximately $2,158 million, which results in a flotation cost percentage of approximately 3.0%. Applying this expense percentage to a representative dividend yield of 4% implies a flotation cost adjustment of 12 basis points. Because the 3.0% expense percentage incorporates only underwriting discounts and fails to reflect other expenses such as legal, printing, and transfer agent fees, this understates the actual issuance costs incurred by NextEra. Nevertheless, it provides evidence specific to FPL that contradicts the position of the Opposing Witnesses and confirms the reasonableness of my recommended flotation cost adjustment of 15 basis points.

Q. Please respond to other specific criticisms of your flotation cost adjustment.

A. Dr. Woolridge also mistakenly claims that a flotation cost adjustment "is necessary to prevent dilution of the existing shareholders."[113] In fact, a flotation cost adjustment is required in order to allow the utility the opportunity to recover the issuance costs associated with selling common stock. Dr. Woolridge's observation about the level of market-to-book ratios (p. 72) may be factually correct, but it has nothing to do with flotation costs. The fact that market prices may be above book value does not alter the fact that a portion of the capital contributed by equity investors is not available to earn a return because it is paid out as flotation costs. Even if the utility is not expected to issue additional common stock, a flotation cost adjustment is necessary to compensate for flotation costs incurred in connection with past issues of common stock.

Dr. Woolridge's argument (p. 73) that flotation costs are "not out-of-pocket expenses" is simply wrong. Dr. Woolridge apparently believes that if investors in past common stock issues had paid the full issuance price directly to the utility and the utility had then paid underwriters' fees by issuing a check to its investment bankers, that flotation cost would be a legitimate expense. Dr. Woolridge's observation merely highlights the absence of an accounting convention to properly accumulate and recover these legitimate and necessary costs.

With respect to the contention of Dr. Woolridge (p. 73) and Mr. Baudino (p. 59) that flotation costs are somehow accounted for in current stock prices, *Regulatory Finance: Utilities' Cost of Capital* has this to say:

> A third controversy centers around the argument that the omission of flotation cost is justified on the grounds that, in an efficient market, the stock price already reflects any accretion or dilution resulting from new issuances of securities and that a flotation cost

> adjustment results in a double counting effect. The simple fact of the matter is that whatever stock price is set by the market, the company issuing stock will always net an amount less than the stock price due to the presence of intermediation and flotation costs. As a result, the company must earn slightly more on its reduced rate base in order to produce a return equal to that required by shareholders.[114]

Similarly, the need to consider past flotation costs has been recognized in the financial literature, including sources that Dr. Woolridge relied on in his testimony. Specifically, Ibbotson Associates concluded that:

> Although the cost of capital estimation techniques set forth later in this book are applicable to rate setting, certain adjustments may be necessary. One such adjustment is for flotation costs (amounts that must be paid to underwriters by the issuer to attract and retain capital).[115]

Q. Can you provide a simple numerical example illustrating why a flotation cost adjustment is necessary to account for past flotation costs?

A. Yes. The example presented in Exhibit WEA-32 demonstrates that investors will not have the opportunity to earn their required rate of return (*i.e.*, dividend yield plus expected growth) unless an allowance for past flotation costs is included in the allowed rate of return on equity. Assume a utility sells $10 worth of common stock at the beginning of year 1. If the utility incurs flotation costs of $0.48 (5 percent of the net proceeds), then only $9.52 is available to invest in rate base.

Assume that common shareholders' required rate of return is 11.5%, the expected dividend in year 1 is \$0.50 (*i.e.*, a dividend yield of 5 percent), and that growth is expected to be 6.5% annually. As developed in Panel A of Exhibit WEA-32, if the allowed rate of return on common equity is only equal to the utility's 11.5% "bare bones" cost of equity, common stockholders will not earn their required rate of return on their \$10 investment, since growth will really only be 6.25%, instead of 6.5%.

The reason that investors never really earn 11.5% on their investment in the above example is that the \$0.48 in flotation costs initially incurred to raise the common stock is not treated like debt issuance costs (*i.e.*, amortized into interest expense and therefore increasing the embedded cost of debt), nor is it included as an asset in rate base.

Q. Can you illustrate how the flotation cost adjustment allows investors to be fully compensated for the impact of past issuance costs?

A. Yes. One commonly referenced method for calculating the flotation cost adjustment is to multiply the dividend yield by a flotation cost percentage. Thus, with a 5% dividend yield and a 5% flotation cost percentage, the flotation cost adjustment in the above example would be approximately 25 basis points. As shown on Panel B of Exhibit WEA-32, by allowing a rate of return on common equity of 11.75% (an 11.5% cost of equity plus a 25 basis point flotation cost adjustment), investors earn their 11.5% required rate of return, since actual growth is now equal to 6.5%.

As shown in Exhibit WEA-32, the only way for investors to be fully compensated for issuance costs is to include an ongoing adjustment to account for past flotation costs when setting the return on common equity. This is the case regardless of whether or not the utility is expected to issue additional shares of common stock in the future.

XII. FPL'S PERFORMANCE SHOULD BE CONSIDERED

Q. In evaluating the fair rate of return for FPL, is it appropriate to consider a performance adder?

A. Yes. As discussed in greater detail in the testimony of FPL's witnesses, FPL has distinguished itself in numerous measures of operating efficiency and effectiveness while maintaining rates at relatively low levels. As a result, consumers and the service area economy have benefited from a climate of efficient and cost-effective operations, excellent customer service, and moderate cost. Considering these results in establishing an ROE recognizes that FPL's management continues to be instrumental in achieving these results.

Q. Do you agree with Mr. Gorman (pp. 67-68), or Mr. Baudino (pp. 60-61) that considering exemplary performance would harm customers or violate regulatory standards?

A. No. Considering exemplary management performance in establishing FPL's ROE is entirely consistent with fostering an environment in which customers are assured reliable service at reasonable rates and stockholders are fairly treated. Moreover, an ROE that recognizes the success of FPL's management is entirely consistent with the economic rational underlying traditional rate of return / rate base regulation.

The goal of regulation is to achieve the same result that would prevail in a competitive market, where the actions of buyers and sellers serve to effectively regulate price and quality of service. In competitive markets, high-performing companies that combine outstanding service with reasonable prices are able to benefit from efficient operations by realizing higher rates of return for their shareholders. However, traditional regulation departs from this competitive market ideal if the prices charged by well-managed, efficient utilities that improve operations through productivity and other programs are lowered during rate proceedings, thereby lessening the incentive for exceptional performance. As FPL's witnesses document, the Company has provided customer benefits in the form of reliability, safe and efficient operations, customer satisfaction, and below-average rates. In keeping with these results, it is consistent with sound regulatory policy to allow FPL the opportunity to earn a rate of return above that of the average electric utility.

Q. Is Mr. Chriss correct that considering FPL's performance in the ROE would be a new regulatory policy that should only be adopted after the participation of other Florida utilities?

A. Of course not. As I have documented, adjustments to the ROE to reflect regulatory policy goals have been a feature of the regulatory landscape in Florida and the rest of the U.S. for decades. As I also noted, Florida has led the way in using rate signals to incent utilities to better serve the public since I was on the PUCT staff in the 1970's. While some states have embarked on comprehensive programs that have been termed "performance-based ratemaking," those programs involve more elaborate (and sometimes controversial) features than the simple adjustment to the ROE that FPL has proposed in this case. Further, Mr. Chriss acknowledges that my direct testimony is correct in citing explicit statutory authority for the FPSC to consider non-cost factors in setting rates.[116] As explained earlier, the standard regulatory practice of making disallowances to investments and expenses, adjustments to capital costs, and penalties for inferior service is now routine in Florida and other jurisdictions across the nation. All of these serve to restrict a utility's profits its opportunity to earn its allowed ROE. If Mr. Chriss is concerned about a "level playing field," as he claims,[117] then fairness, symmetry, and enhanced regulatory effectiveness require that the ROE should be increased when a utility is performing well to serve its customers.

Q. Mr. Chriss and other Opposing Witnesses are concerned that the ROE adjustment is not cost-based. Is that a problem?

A. Not at all. First, the contention that a performance adder is not cost-based misses the point. FPL's proposed ROE adjustment is entirely supported by the principles underlying regulation, which seeks to mimic the results of competitive markets, and recognition of effective performance is consistent with regulatory policy goals. In addition, FPL's requested ROE falls well within my zone of reasonableness for the cost of equity capital.

Moreover, as cited above, Mr. Chriss grants that the FPSC has the explicit regulatory authority to consider non-cost factors in rates. Second, FPL's claim is based on the costs that have been saved through its financial strength and management effectiveness. Mr. Dewhurst has documented that the favorable impact on customers' rates far exceeds the rate effect of the ROE adjustment. In contrast, the draconian cuts in FPL's ROE proposed by the Opposition Witness to 9.25% or below from the current settlement ROE of 11% are many times greater than the requested 0.25% adjustment for superior performance. Of course the proposed adjustments to capital structure would also reduce the effective ROE FPL can earn, until and unless it can radically adjust its debt ratio by adding more debt. The Opposition Witness justify these huge reductions in FPL's opportunity to profit with arcane academic theories and baseless speculation that the investment community will not react negatively if FPL is forces into a weaker financial posture. Clearly, the objective evidence presented in my direct and rebuttal testimony and borne out by recent historical experience demonstrates the disparity between the Opposition Witnesses' punitive reductions in ROE and their fictitious capital structure recommendations, as compared with FPL's modest request for a 25 basis point adder that is tied to actual rate levels and performance measures.

Q. Is Mr. Lawton correct in asserting (p. 7) that FPL has a "duty" to provide superior performance and needs no incentives because the utility enjoys a monopoly privilege granted by the state?

A. No. FPL has undertaken many obligations and responsibilities as the utility provider of electric service, including making all necessary investments to provide and maintain service, even in times of natural or financial market disruptions. FPL cannot abandon its customers as companies in the free market can do when the going gets tough. FPL is constrained to only charge rates approved by the FPSC, even when those rates do not produce adequate profits commensurate with the risk and uncertainties. Just as regulators can take away profit with disallowances and penalties when the utility falls short of its duties to provide adequate service, they should increase profits when utilities provide service that is superior to its peers. For the regulator to forgo any positive reinforcement to utilities and only focus on the negative is like asking a football coach to focus only on defense and ignore the quality of the offense. I have documented that the tradition and statutory authority of this even-handed approach to regulatory incentives in Florida is long-standing, and certainly does not represent a proposal to "change the regulatory structure that has existed for many years," as claimed by Mr. Lawton.[118] The belief that business should be guided by duty to the state is more consistent with the failed model of the Soviet Union rather than the free enterprise model of profit incentives adopted in Florida.

Q. What did you conclude with respect to the ROE recommendations of the Opposing Witnesses?

A. The ROE recommendations of the Opposing Witnesses are flawed, inadequate to compensate investors in FPL, are not in the long run best interest of FPL's customers or the state of Florida, and therefore should be rejected. Considered along with the evidence presented in my direct testimony, correcting and supplementing their analyses confirms the downward bias inherent in their recommendations and supports my recommended ROE range of 10.25% to 12.25%, and the 11.50% ROE requested by FPL, which is required to support the Company's financial integrity, access to capital, and best serve its customers.

Q. Does this conclude your rebuttal testimony?

A. Yes.

BY MR. GUYTON:

Q Dr. Avera, are you sponsoring Exhibit WEA-19 through 33 which have been identified as Exhibits 436 through 450?

A Yes.

Q And do you have any changes other than the one that you've just made to Exhibit 33?

A No.

Q And is the information contained in those exhibits true and correct to the best of your knowledge?

A Yes.

Q Would you, please, summarize your rebuttal testimony for the Commission.

A Good afternoon, Commissioners. It's good to be here in prime time. My rebuttal testimony responds to Witnesses Woolridge, Lawton, O'Donnell, Gorman, Baudino, and Chriss. And I will refer to all of these witnesses collectively as opposing witnesses.

My rebuttal presents five simple facts that prove that weakening FPL's financial strength as proposed by the opposition witnesses would harm customers. I also rebut the misconceptions, flawed reasoning, data distortions, and arithmetic mistakes of the opposing witnesses.

The opposing witnesses' ROE recommendations are well below what is currently authorized by the FPSC. Mr. O'Donnell also advocates a capital structure that would undermine FPL's financial strength.

To support these departures from FPSC policies, the opposing witnesses offer speculations about how investors and bond-rating agencies might fail to react. The opposing witnesses ignore the lessons of historical experience.

In this case, this Commission has the opportunity to show that it recognizes the importance of financial strength and that it will reward superior performance.

By allowing an ROE and capital structure in the case that reflects FPL's unique business risk, the FPSC will reassure investors that regulation in Florida has returned to its tradition of fairness and innovation.

The five facts ignored by the opposition witnesses are: Number one, FPL's customers benefit from their utility's financial strength; number two, FPL's current credit ratings and investor expectations are based on the current level of earning, an 11 percent ROE, and the company's actual capital structure of 59.6 percent equity. A reduction in earnings or an increase in debt leverage would undermine investor confidence and credit ratings.

Fact three, in 2010 when the FPSC departed from its long precedent of balance regulations, investors and bond ratings reacted swiftly and negatively. Fact four, the settlement agreement that allowed FPL to earn an ROE of 11 percent and maintain its prudent capital structure restored investor confidence and insulated FPL's credit ratings from further erosion. And Number five, adjusting earnings to reflect utility performance is an inherent part of FPSC regulation and it protects utility customers.

These facts support FPL's requested 11.5 percent ROE and actual capital structure. They show that the recommendations of opposing witnesses would weaken FPL's financial strength. FPL's customers and Florida would forego the advantages of a strong utility with the financial wherewithal to invest in infrastructure and react to crises; natural and financial.

Mr. O'Donnell recognized prudent management practices, attempt to ameliorate higher business risk with offsetting lower financial risk. In fact, FPL's conservative financial policies have allowed the company to retain its single A rating and ensured access to capital even in the face of FPL's relatively high business risk.

Financial strength is a good thing for customers, and it is necessary to offset the risk of FPL's geographic location, energy mix, and exposure to hurricanes.

The opposing witnesses claim that FPL is a low-risk utility based on bond ratings. Yet, those bond ratings are a direct result of the financial strength. The low financial risk offsets the high business risk to make FPL financially stable and comparable to the other utilities. If this Commission were to destroy that balance, customers would ultimately pay higher bills.

CHAIRMAN BRISE: Thank you, Dr. Avera.

MR. GUYTON: We tender the witness for cross.

CHAIRMAN BRISE: Okay. We will begin with FIPUG. But before we do that, I'm going to pass the gavel off to Commissioner Graham. I've got to go deal with some administrative issues. I'll be back shortly.

But before I go, I just want to admonish that we want responses that are to the question and as succinct as possible.

THE WITNESS: Yes, Commissioner Brisé.

CHAIRMAN BRISE: Thank you, sir.

COMMISSIONER GRAHAM: Thank you, Chairman Brisé.

FIPUG.

MR. MOYLE: Thank you.

CROSS-EXAMINATION

BY MR. MOYLE:

Q My first question was going to be we're still good with yes/no?

A I'm good with it, sir.

Q Okay. Are you aware that the parent of FPL -- and we'll call it NextEra Energy or NEER -- are you aware that they have -- if they've previously provided information to investors when they're representing their footprint in this country that touts geographic diversity as one of the advantages of the company?

A Yes.

Q Okay. So do you disagree with that, that geographic diversity is a bad thing?

A No. Geographic diversity is a good thing. The rating agencies say it's a good thing. FPL does not have geographic diversity; that's a bad thing.

Q Okay. And there was a big chart up here, I guess with the last witness it went away. But do you

know how many counties FPL provides service in?
A Thirty-five, I believe.
Q And Florida's peninsula, do you believe that with respect to the counties that are served, that there's an element of geographic diversity within FPL's service territory?
A No.
Q And that's fine. I'm good with that.
You're from Texas, right?
A Yes. We have diversity.
Q There was a statement by an earlier witness that I wanted to convey to you and ask you if you agree with this or not. Average yields on utility bonds are approximately 200 basis points below what they were during the last FPL rate case; yes or no?
A They're lower. I haven't checked the number.
Q So you're not sure whether that may be close or in the neighborhood or you just don't have any frame of reference?
A I know they've gone down -- I know they've gone up since the rebuttal was filed -- but I can't testify to 200 basis points.
Q Okay. And I guess relative to -- well, what is your understanding -- and I'll ask the what question -- what is your understanding with respect to

what the average yields on utility bonds have done since the last FPL rate case in terms of basis points?

A They have gone down. And I don't know exactly how many basis points they have gone down since the last rate case.

As you may remember, Mr. Moyle, the last rate case extended over a long period of time. So at what point do we want to measure? They had gone down between when I filed my testimony and when the case was decided.

Q Yeah. Can you measure it from any point in time, either when you filed your testimony or the date the order came out?

A I can't measure it with precision. They've gone down. I expect they've gone down 100 basis points. But exactly how much, I would want to see the data.

Q Let me direct you to page 6, line 8.

A Yes, sir, I'm there.

Q You say that it's important to note that -- you're talking about opposing witnesses that you say that "Important to note the similarity and consistency of their recommendations is not due to any convergence based on sound reasoning, but instead reflects a common aim of reducing the company's revenues."

Do you see that?

A Yes.

Q Are you suggesting that these witnesses got together and talked about their testimony before they filed it?

A I don't know if they did or not. I know that we're all on the same circuit. I'm going to be seeing four of them in California next month. So we talk, they talk, but I don't know that they talked about their decisions in this case or their recommendations.

Q You don't question the expertise of any of them, do you?

A No. They are misguided in this case, but they're experts.

Q Okay. And you don't -- you're not suggesting anything improper, I guess, is my question, my more pointed question?

A No, not at all. But I don't think the Commission ought to count noses and say, you know, four people are here and Mr. Dewhurst and I are up here, they must be right because there are more of them.

Q That's kind of what you do when you're doing your proxy group, isn't it, you take the outliers and get rid of them, both high and low?

A We take out the outliers when their

recommendations do not make sense, not whether they are higher or lower than the others. It is by reference to an objective benchmark. In that case, we use FERC's objective benchmark.

Q And you would agree that you're on a -- at least in this docket, in this case, you're a little bit on an island in terms of your ROE recommendation, vis-a-vis, the other professional experts who have appeared?

A No, I don't agree I'm on an island. They have different opinions. My rebuttal explains why they're wrong and I'm right.

Q Okay. So what is your understanding of the ROE recommendation of each of them?

A Well, Dr. Woolridge recommends 9 percent if they're -- if the balance sheets are not -- Mr. McDonnell's balance sheet recommendations are 8.5 -- excuse me -- 9 percent if they are accepted, 8.5 if they're not. Mr. Gorman recommends 9.25. Mr. Baudino recommends 9. But, again, if there is a change in capital structure, that number might change. Let's see, Baudino, Gorman, Dr. Woolridge. I think those are the ones that specifically propose an ROE.

Q So you got four experts that are in the 9's, and your recommendation is --

A There's Gorman, Woolridge, Baudino, I think that's three.

Q I'm sorry, three. Three in the 9's, and your recommendation is 11.25; is that right?

A Right, for a bare range. And then the 25 percent adder, if the Commission chooses to add it.

Q All right. Give me just one minute, if you would.

Page 11, you state on line 2 that, quote, FPL is no longer among the highest rated utilities due to the downgrade that followed the outcome of the last rate case, but the company's financial strength is above average?

A Yes.

Q Okay. And then are you referring to the holding company in this comment?

A No. I'm referring to FPL, the utility.

Q Okay. And when you do your analysis with respect to the proxy group, you use the publicly traded companies; isn't that right?

A That is correct, as the other witnesses do.

Q All right. So I want to ask you a couple of questions about an exhibit.

MR. MOYLE: Mr. Chairman, if I could get a little help passing it out.

COMMISSIONER GRAHAM: Sure. I think we're at Number 617.

MR. MOYLE: Actually, this is already in. It's an excerpt of something that's already in, so I don't think we need to mark it.

COMMISSIONER GRAHAM: All right. We'll hold off on that.

So it's already labeled 571?

MR. MOYLE: Yes, sir.

COMMISSIONER GRAHAM: Thank you.

BY MR. MOYLE:

Q Just take a minute and review.

A Yes, sir.

Q So I'll represent to you that this was an exhibit -- this is an excerpt of an exhibit that has already been introduced into this case as Exhibit 571. It was introduced by Florida Power & Light.

And you and I spoke a lot about the Moody's bond ratings in your direct, and I just want you, if you would, to confirm that out of all of the companies that are listed on these two pages as electric companies or combination electric, gas companies, that the highest rated entity using the Moody's ratings is NextEra Energy?

A I would note that these are senior security bond ratings; these are not the corporate ratings that I'm referring to. And I don't believe this is NextEra's bond rating; I think it's FPL's, for senior mortgage bonds.

Q So over to the left, are you familiar with AUS Utility Reports?

A Yes. And they report senior mortgage yields -- or ratings, not the corporate credit rating. If we look on the document that Mr. Gorman used in his exhibit --

Q That's all right. Let's stick with this.

So you're saying you believe this is, what, average corporate yields?

A No. I believe this is a senior mortgage secured bond rating; not corporate credit ratings.

Q Okay. So senior mortgage secured bond; that's debt that gets issued, correct?

A That is right. But it has specific characteristics, and the rating is based on how those characteristics are evaluated for risk as opposed to the underlying company credit.

Q Okay. And over to the left, it doesn't say about -- on the first page, about two-thirds of the way down, it doesn't say FPL does it; it says NextEra Energy, New York Stock Exchange, NEE?

A Yes. But this is from the AUS Utilities Report. And if we look at Mr. Gorman's references, we'll see different ratings.

Q And so the original question was based on this portion of this Exhibit 571, would you just confirm that the ratings of NextEra Energy are the highest of any company reflected herein?

A No. Those are not the ratings of NextEra Energy; they are the first mortgage bonds, which I believe are FPL.

Q Okay. Well, would you --

A You can ask Mr. Dewhurst about that, but that's my belief.

Q Would you confirm that the information contained on this page reflects that NextEra Energy has the highest Moody's bond rating of any of the companies depicted?

A Yes. It's not the highest in the utility universe, but of these companies.

Q Do you know what Gulf Power or its parent, Southern, is rated on this a similar comparison senior debt?

A Well, if you go to the S&P ratings that Mr. Gorman referred to --

Q No.

A -- it's higher than FPL.

COMMISSIONER GRAHAM: Dr. Avera, he's talking about on this sheet.

THE WITNESS: Southern Company, according to this, has the same S&P rating and it has a lower Moody's rating on its first mortgage bonds.

BY MR. MOYLE:

Q And how about Tampa Electric Company?

A By the way, I need to correct my last answer. This is Southern Company generally, which includes a number of operating companies, one of which the smallest is Gulf.

Q Okay. How about Tampa Electric Company, what's it rated under Moody's?

A Let's see. Are they on this sheet or are they over in the --

Q The second page.

A -- combination?

Q Combination.

A TECO by Moody's is A3.

Q Okay. And so if I understand your previous -- the testimony on the bond ratings, Tampa Electric Company is -- there's three notches of separation under Moody's between where Tampa Electric Company is currently rated, which is A3, then you have

A2, then you have A1, then you have AA3, correct?

A Right, as to the first mortgage bonds.

Q Okay. And so there would be, in effect, four notches between NextEra and TECO?

A Between FPL and Tampa Electric.

Q And there would be, I guess, three notches between the Southern Company -- you see the Southern Company there, it says, "A2, A3"?

A Yes. And those, I suppose, are the utility subsidiaries, and they have different ratings because they have multiple subsidiaries. See, the entry has two different ratings, and that's because the utilities have first mortgage bonds and Southern has a portfolio of utilities.

Q And when you had provided testimony about the risk of downgrading, were you referencing the downgrading of bonds, the credit rating, all of the above?

A Well, I think the down ratings of bonds affects the risk that investors perceive of the stock, the risk that vendors perceive when they do business with FPL, the risk that you can take on when you hedge your field contracts, so I think bond ratings are significant in many areas that affect customers.

Q All right. And I don't want to make light or

not take it seriously because I understand that financial matters are important, but, you know, worse case scenario, if this Commission said, you know, you're going to get 20 percent of your ask, hypothetically, if that were to occur and there was a risk of these bonds being downgraded, they would have four notches to get downgraded to to be comparable to TECO; is that right?

A That's right. And it would be a bad thing for customers if this utility, with all of the challenges it faces, were in the average with TECO as opposed to its current position of financial strength, which Mr. Dewhurst and I explained, inures to the benefit of customers.

Q Have you ever seen a four-notch downgrade of a utility company at once?

A I've seen a four-notch over a period of time. Remember Enron and El Paso Electric.

Q Okay. So I guess at once you've never seen a four-notch downgrade?

A They have downgraded two notches.

Q Yes/no, please.

A Yes, I have seen downgrades. I can't remember a four. I have seen multiple-notch downgrades.

Q What's the most -- I'm sorry -- what's the most you've ever seen; two?

A Greese might have been downgraded three at one time.

Q Who?

A Greece, the country.

Q Okay. And they're not regularly showing up on electric utility reports, right?

A No. They have a sovereign debt rating like the United States.

MR. MOYLE: I have another exhibit I would like to use with this witness.

COMMISSIONER GRAHAM: Sure. Does this one need an exhibit number?

MR. MOYLE: Yes, sir.

COMMISSIONER GRAHAM: I'll go with 617 this time.

MR. MOYLE: Thank you.

MR. HARRIS: Mr. Chairman.

COMMISSIONER GRAHAM: Yes, sir.

MR. HARRIS: I believe 617 has already been assigned. That was the full ten-year site plan that we handed out earlier.

COMMISSIONER GRAHAM: Okay. So 618.

MR. HARRIS: 618, yes, thank you.

COMMISSIONER GRAHAM: Thank you.

(Exhibit No. 618 was marked for identification.)

COMMISSIONER GRAHAM: Mr. Moyle.

MR. MOYLE: Thank you.

BY MR. MOYLE:

Q Dr. Avera, are you familiar with Merchant Bond Record?

A Yes. That's Moody's -- another brand of Moody's.

Q Do you consider them to be a reliable source of information?

A Yes.

Q Okay. And I've provided you a document that is a Merchant Bond record that shows corporate bond yield averages from 2005 to 2010; is that right?

A Yes.

Q Do those spreads within those bond ratings look to be consistent with your knowledge of such information?

A Well, I don't think it shows spreads; I think it shows the yields.

Q And you have to calculate the spreads; is that right?

A Yes.

Q Okay. So like for -- just take, for example, January of 2005, the very first entry under the middle heading "Public Utility Bonds."

A Yes.

Q The triple A, nobody's ranked there, correct?

A Correct. There used to be a lot, but they're gone.

Q Okay. And then double A in January of 2005, it was 5.68, right?

A Yes.

Q And then the single A was 5.78?

A Yes.

Q So there was a ten-basis-point difference between double A and single A?

A Yes.

Q And then BAA was 595?

A Yes.

Q And you could just do the math to determine the spread, right?

A Yes.

Q Okay. And do these -- you don't have any reason to question this information, do you?

A No.

Q And to harken back on our conversation that we had previously. In an exhibit that I used with you

and a whole bunch of other witnesses that had the ROE, what 100 basis points of an ROE in this case represent. Do you remember what that was?

A I remember the exhibit. I thought you represented that it was the effect of the ROE on revenue requirement.

Q I'm sorry, what's 100 basis points worth in this case?

A I believe it's somewhere around $160 million.

Q All right. And so you're aware -- or I can represent to you that the amount of debt that Mr. Dewhurst testified to that they have planned for the test year is a billion dollars. Do you agree with that?

A I remember his testimony. He is the expert on the amount of debt; not me.

Q Okay. So would you accept a billion with respect to the amount of debt that the company is planning to go out into market for in the test year?

A If that is his testimony, I will accept it, of course.

Q Okay.

MR. MOYLE: I don't -- I'm not going to, Mr. Chairman, pass the exhibit out, but try to make the point without it.

COMMISSIONER GRAHAM: Sure.

MR. MOYLE: I haven't had a lot of success thus far with it.

BY MR. MOYLE:

Q But you would agree, would you not, that if you had a billion dollars in debt that you were going to finance that the spread between -- that in order for the spread to make financial sense -- or let me put it this way: If there was a 10 percent spread between a bond rating of FPL currently and then a downgraded FPL, if the spread was 10 percent, okay, 1000 basis points, that that would cost FPL $100 million in additional interest; isn't that right?

A That effect alone would. There would be many other deleterious effects that would impact the customer if there were such a downgrade.

Q Okay. So 1000-basis-point spread, there's nothing on the exhibit I just handed out that shows anywhere close to a 1000-basis-points spread, is there?

A No. If we look in the fall of 2008, the spreads were over 100 basis points, but not 1000.

Q Okay. And I just want to stick with the thousand for the purposes of making the point. 1000-basis-point spread or 10 percentage points is $100 million on a billion dollars in debt, correct?

A That is correct, if you can finance at a lower bond rate.

Q Okay. And so from just a pure economic perspective, wouldn't you agree that ratepayers would be better off by the tune of $60 million if there was a downgrade and even with 1000-basis-point increase, they would still have $60 million in their pocket if the ROE wasn't increased?

A No, because you're looking at one sliver of the impact on customers. The customers are benefited by the higher bond rating in many ways, not just the lower debt cost; although, the lower debt cost is significant, as the staff pointed out in the report in the last case.

Q All right. You have some in your rebuttal testimony, you have a little bit on capital structure, correct?

A Yes, sir.

Q Let me refer you to page 15. And a couple of points here, on 15, page 15, line 11, you say, quote, the intervenor's position regarding FPL's capital structure is schizophrenic, right?

A Right.

Q And then down on line 18 you say,

"Nevertheless, intervenors are operating under the

shared delusion that FPL could somehow reduce its equity ratio significantly from present levels without any ill effects on its credit standing," right?

A Right.

Q You don't really believe that, do you?

A Yes, sir, I do believe it.

Q You believe that the experts are delusional and schizophrenic?

A We talked about this in my deposition, Mr. Moyle. And I say the intervenor's position is schizophrenic. I don't say the intervenors are schizophrenic and I don't say the witnesses are schizophrenic. And I say the intervenors are operating under a delusion. I do not say any particular intervenor or any particular witness. So I think those are generic and accurate characterizations.

Q My understanding of schizophrenia is that it changes your mind and your point of view. The intervenors haven't changed their mind or point of view about the ROE, have they?

A No, I think if you go to DSM-III -- my wife is a therapist so I know these things -- if you go to the DSM-III -- not because I'm an expert, but I've lived with it for 35 years -- if you go to the definition of schizophrenia, one of the definitions is having different perceptions of reality, perceiving reality one way, one time, and a different way another time, even though those perceptions are inconsistent.

Q **Just a couple more points and we'll wrap up. You also provide testimony about the ROE adder, correct?**

A Yes.

Q **Are you aware that there's increasing unemployment in Florida from month to month, June to July of this year?**

A Yes, it has gone down significantly since the 11th of --

MR. MOYLE: If we could do yes or no, Mr. Chairman.

COMMISSIONER GRAHAM: Sure.

THE WITNESS: I think the month-to-month variation has been up.

BY MR. MOYLE:

Q **Okay. To repeat the question, if you could just answer yes or no, I don't need an explanation. Are you aware that the unemployment rate in Florida from June of 2012 to July of 2012, as reported by the Bureau of Labor Statistics, has gone up?**

A Yes.

MR. GUYTON: Asked and answered.

BY MR. MOYLE:

Q All right. Are you aware that the average salary of an FPL employee with benefits is more than $124,000?

MR. GUYTON: Objection. That is not in this witness's rebuttal testimony and it is not appropriate cross-examination of this witness.

COMMISSIONER GRAHAM: Mr. Moyle.

MR. MOYLE: I'm just asking him if he's aware of it.

MR. GUYTON: Whether he is or not, it's not relevant to his testimony.

COMMISSIONER GRAHAM: I agree.

BY MR. MOYLE:

Q Do you think this Commission should have a concern about sending the wrong message? I understand you talk about messages to Wall Street, but you would also agree there's an important message to be sent to Floridians as well, correct?

A Yes.

Q Okay. Do you have a concern -- and, again, you can just give me a yes or no, you don't need to tell me why -- but do you have a concern that providing an additional $40 million beyond whatever decision is made with respect to other matters, that that might

send the wrong message to Floridians in this tough economic time?

A No.

Q Okay. Witness Deason, I'll just represent this to you -- this is, again, on the ROE adder -- Witness Deason yesterday said that the ROE adder gave FPL an opportunity to put its money where its mouth is.

Do you understand what putting your money where your mouth is means?

A I do, but I don't recall -- I thought he might have been talking in reference to FPSC, not the FPL, but that was my memory. I watched his testimony, whatever, whatever the record reflects. It's different than you represented.

Q To the extent that he was suggesting that this provided FPL the opportunity to put its money where its mouth is -- and there may have been some confusion of it -- but wouldn't you agree that more accurately it's an opportunity for ratepayers to put their money where FPL's mouth is?

A No. It's in the ratepayers's interest, I believe.

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

CHAIRMAN BRISE: Thank you, Mr. Moyle.

South Florida.

CROSS-EXAMINATION

BY MR. SUNDBACK:

Q Good afternoon, Dr. Avera. Let's start with your summary of testimony. You asserted that, among others, investors responded swiftly and negatively to the Commission's actions in the 2010 orders.

Do you recall that?

A Yes.

Q Let's look at your rebuttal on page 11, if we could. At the bottom of the page, you have a question and an answer in there, you reference investors three different times.

Do you see that?

A Yes.

Q In your opinion, it's important we get the best read on investor sentiment; is that correct?

A You mean in what regard; how they would respond to a capital structure change or how they would respond to the ROE? Would you clarify a little for me, Mr. Sundback.

Q We want to get the best and most accurate understanding of investors' perceptions of risks and opportunities in the securities marketplace as we're making an assessment on the return on equity that should be awarded to FPL; would you agree?

A Yes.

Q Thank you.

Let's look at page 6, line 11. You use the phrase there "the requirements of real-world investors." Real-world investors are the source of capital, either potentially available to FPL or actually invested in that enterprise now, correct?

A Yes.

Q And they're the ones we should be concerned about when we're thinking about return on equity; is that correct?

A Yes, and changes to the capital structure as well.

Q All right. Now, let's look at page 50 of your rebuttal, line 8. You have a quote there, and it describes the dominance of institutional investors.

Do you see that?

A Yes.

Q Okay. Do you believe that institutional investors remain an important force in the securities markets?

A Yes.

Q Would you agree the single largest real-world investor in NextEra Energy, Inc. common stock is Wellington Management, Inc.?

A I don't know that for a fact. Wellington is a large fund group. But I don't have specific knowledge. Mr. Dewhurst would.

Q You didn't investigate that before filing your testimony; is that correct?

A No. This is a quote from Mr. Moran.

Q The answer to my question is no, you did not investigate that before filing your testimony; is that correct?

A That is correct.

Q Could you tell us who any of the five largest investors in NextEra Energy, Inc. are in terms of common stock? If you don't know, that's a fair --

A I did look for the last case, I think Fidelity was up there. And a lot of the stock is held in street names so you have somebody like Fidelity but you don't know who the actual beneficial owner is, whether it's a 401-K or an individual or an institution.

Q Are you speculating or have you actually investigated this issue with regard to sources of data?

A I've investigated with regards to sources of data, not specific to FPL or NextEra.

Q Actually, this information is publicly available, is it not?

A Yes.

Q Okay. If memory serves, we had discussed in your direct cross-examination that you testified roughly in 300 cases, usually about cost of capital issues?

A Yes. But I went back and checked; make that almost 400.

Q Congratulations, sir.

From time to time, you refer to and rely upon data from Yahoo Finance; is that correct?

A Yes.

Q Okay. And you realize that investors tend to look at that information from time to time as well?

A Yes.

Q Okay. You would agree that Yahoo Finance provides data that's specific to individual companies, right?

A Yes, they are generally a processor of data that they get from other sources. But when you're on Yahoo Finance, you can access lots of data specific to a company.

Q And one type of data that's available there is a listing of the major direct holders and institutional holders of common stock of an issuer; is that correct?

A To the extent that it is known -- I believe it is the case that the filings the companies make, investment companies make to the SEC don't differentiate the ultimate owner of the security. They differentiate how much of that security is held in their name.

Q Well, let's investigate that in a little more detail.

MR. SUNDBACK: Mr. Chairman, if we could ask to have marked a document with the next available exhibit number, if that's 619.

COMMISSIONER GRAHAM: It is 619.

(Exhibit No. 619 was marked for identification.)

MR. SUNDBACK: Thank you, sir.

BY MR. SUNDBACK:

Q Sir, do you have a copy of this document?

A Yes.

Q Okay. Does this look like what's available on Yahoo Finance based upon your experience?

A Yes.

Q And you'll see a little below halfway down the page, the top institutional holder for NextEra Energy in this list is Wellington Management Company, right?

A Yes.

Q Okay. Now, you'll see this report is dated -- where is the date -- August 28th, 2012 in the upper right-hand corner. Do you see that?

A Yes.

Q And that shows Wellington Holding about 20 million shares, right?

A Right, as it was reported in July 29th, 2012.

Q Okay. Now, the materials you generally rely upon, for instance, for DCF calculations, are derived from Value Line, Moody's, and S&P, right?

A No.

Q Don't you use, for instance, Value Line information in compiling your universe of DCF candidates?

A That is correct. But I think your question was DCF information. The inputs to the DCF do not come from Standard & Poor's and Moody's.

Q Fair enough. But you rely on information that's contained in reports from Value Line, Moody's, and S&P, right?

A We rely on bond ratings to choose a set of comparable risk companies in the view of S&P and Value Line. I don't think we used Moody's as a criteria in this case.

Q Well, for instance, if you look at your Exhibit WEA-28, you have what's listed as Footnote E to indicate you used Value Line data for a column in that exhibit, right?

A Yes.

Q Okay. And these data are derived in turn from, in large part, filings with the SEC; is that correct?

A Some is. The actual input that we use are some of the proprietary estimates that Value Line generates itself. Its statistical information on the company, its book value, its past earnings are from SEC reports. But there's more on a Value Line sheet than what is derived from the SEC.

Q And we'll get to some of that, sir. But certainly Value Line relies upon data taken from SEC filings, at least in part; isn't that right?

A Yes.

Q Okay. And in large part, that's because of the significant sanctions that are associated with misreporting data to the SEC and investors for publicly traded companies?

A Yes.

Q Okay. Now, an outfit like Wellington Management Company has to file disclosure statements

with the SEC; is that not correct?

A Yes, under the Investment Advisers Act of 1940.

Q Okay. Have you ever reviewed those?

A For Wellington specifically, no. I've reviewed them for other companies in the context of civil litigation, but not wellington.

Q Okay. But you're familiar with those types of filings generally?

A Yes, sir.

MR. SUNDBACK: Okay. Mr. Chairman, if we could have marked with the appropriate exhibit numbers two more documents.

COMMISSIONER GRAHAM: Sure. Just let me know which one you want for 620 and which for 621.

MR. SUNDBACK: The first is a December 31st, 2009 excerpt from Wellington Management's SEC filing. And if we could have that as 620. Is that the lowest number, Mr. Chairman?

COMMISSIONER GRAHAM: Yes.

MR. SUNDBACK: And the second is another Wellington filing. And in that case, we would ask that that be assigned 621.

COMMISSIONER GRAHAM: As soon as I get a copy, I can mark it appropriately.

MR. HARRIS: The pages appear identical. At the very last line of the documents thing, one is dated 2009 and one is dated 2010.

MR. SUNDBACK: That's correct.

BY MR. SUNDBACK:

Q Would you let us know, please, once you've received those and had a chance to look at it.

MR. WRIGHT: Mr. Chairman.

COMMISSIONER GRAHAM: Yes.

MR. WRIGHT: Just for clarification, is the one dated 2009 to be 621 and 2010 622?

COMMISSIONER GRAHAM: Actually, I was just going to ask that question. But it's 620 and 621.

MR. SUNDBACK: Right.

COMMISSIONER GRAHAM: And do you want the '09 to be 620, Mr. Sundback?

MR. SUNDBACK: I'm sorry, Mr. Chairman, I was distracted. Could I ask you to repeat that.

COMMISSIONER GRAHAM: If you would tell me again which one you want to be 620 and which 621.

MR. SUNDBACK: Just logically, perhaps 620 could be assigned to the 2009 report and 621 to the 2010 report.

COMMISSIONER GRAHAM: All right. Sounds good.

Mr. Wright, did you get that?

MR. WRIGHT: I did. Thank you, Mr. Chairman.

(Exhibit Nos. 620 and 621 were marked for identification.)

MR. SUNDBACK: Mr. Chairman, I understand that maybe some of the copies that were distributed only have two copies of the 2009 report, so if we could seek the assistance of staff to make more copies of the 2010, we would move on and come back to this. I apologize.

COMMISSIONER GRAHAM: Okay. Are you going to come back to both of them later?

MR. SUNDBACK: Yes, Mr. Chairman, if we could.

COMMISSIONER GRAHAM: Okay.

BY MR. SUNDBACK:

Q All right. Let's look for the time being at page 12 of your rebuttal testimony, lines 3 through 5, please.

A I'm there.

MR. SUNDBACK: All right, Mr. Chairman, I apologize, apparently there was a snafu in the distribution, and indeed everybody does have the two thousand -- let me ask this: Do each of the Commissioners have a copy of the 2009 and the 2010 reports? And once again, you can tell the difference by the last line under the "Documents" label on the cover page, one refers to August 27th, 2010 and one refers to March 31st, 2010.

COMMISSIONER GRAHAM: We do have a copy of --

COMMISSIONER BROWN: I don't.

COMMISSIONER GRAHAM: You don't have a 2010 -- the very last line, 2010 and 2009?

COMMISSIONER BROWN: No.

COMMISSIONER BALBIS: Mr. Chairman, I have both of them.

COMMISSIONER GRAHAM: She needs the 2010. That's the big thick one.

MR. GUYTON: Counselor, I think you may have misspoke. Did you say August instead of December of 2009?

MR. SUNDBACK: The easiest way for me to keep track of this, Mr. Chairman, is to go to the second page of the exhibit, and halfway down the page there is a line labeled "Signature, Place, and Date of Signing," and the next line there's a signature of a Mr. Toner and a date.

COMMISSIONER GRAHAM: Yes.

MR. SUNDBACK: The date for one is

February 12th, 2010, the date on the other is May 17th, 2010. If we have those two different documents, then we can proceed.

COMMISSIONER GRAHAM: We can proceed.

MR. SUNDBACK: Okay. I really apologize for that.

BY MR. SUNDBACK:

Q Okay. If we look at the report dated February 12th, 2010, you'll see at the bottom of the page in the -- it looks like fourth and fifth columns, there's a column labeled "Value Times 1000," and next to that is "Shares Divided PRN AMT."

Do you see that?

A Yes.

Q Okay. And is it your understanding that those columns represent the dollar value of the holdings of this enterprise and the shares that are held?

A Yes.

Q Okay. If you go to the next page, please, you'll see towards the bottom four different lines for FPL Group, Inc.?

A Yes.

Q Would you accept, subject to check, that the value of those lines added up is about 775 million?

A Yes.

Q And would you accept, subject to check, that the total shares are about 14 and a half million?

A Yes.

Q Okay. Let's look at the next report, which has been marked 621. You'll see at the bottom of the page again the same captions on the columns, "Value Times 1,000" and "Shares."

Do you see that?

A Yes.

Q Okay. If you turn to the next page, you'll see at the very bottom of the page two lines for FPL. And then if you turn to the last page of this document, you'll see at the top of the page two more lines for FPL.

Do you see that?

A Yes.

Q Would you accept, subject to check, that if we added the dollar values for FPL at this point, it would be $950 million?

A Yes, I'm trying to figure out why there are separate entries for the same stock with the same CUSIP. Does that mean different owners?

Q Do you think it could be related to different funds?

A Different --

Q Funds or ownership interests under the Wellington organization?

A It could be, or I think more likely it's different types of beneficial owners.

Q Okay. But you would agree, subject to check, that the total is about 950 million, right?

A Yes.

Q And you would agree, subject to check, that that's about 19,300,000 shares total, right?

A Yes.

Q Okay. So over this period of time, the share ownership has increased by about 175 million; is that right?

A If that's the arithmetic Mr. Sundback.

Q Okay. Now, I would just ask you to look back to the second page of both of these. And you'll recall we talked briefly about the dates that were shown in the middle of the page there?

A Yes.

Q Do you understand that the signature of Mr. Toner is an attestation for purposes of filing withing the SEC?

A Yes. Now, I will notice that Wellington appears on your Yahoo page twice as a mutual fund holder and an institutional holder, so I don't know which report this is.

Q Okay. And would you agree that the signatory is certifying of the correctness of the information to the SEC under this filing?

A Yes.

Q Okay. Now, if we could distribute and have marked another document.

MR. SUNDBACK: And if memory serves, we're at 622, Mr. Chairman?

COMMISSIONER GRAHAM: That is correct.

MR. SUNDBACK: And this constitutes a series of press releases, if we could.

(Exhibit No. 622 was marked for identification.)

BY MR. SUNDBACK:

Q I guess while we're waiting for that to be distributed, if you went back and looked at 620 and 621, you'll see at the top that they are for quarters ending respectively December 31, 2009 and March 31, 2010, do you not?

A Yes.

Q You have no reason to dispute the accuracy of that information; is that correct?

A No, I do not.

Q Thank you.

All right. Do you have a copy of what's been designated Exhibit 622?

A 622, the news release?

Q Yes.

A Yes, I have it.

Q Okay. Now, on page 12 of your rebuttal testimony, lines 3 through 5, you identify what you claim are negative impacts and harms, right?

A Yes.

Q Okay. And one of the harms you claim that occurred was that the previous Commission order, the first 2010 order, was that FPL was unable to issue debt on reasonable terms even with its A-minus rating from S&P, right?

A Yes.

Q Okay. Now, these press releases, why don't you take a look at the first one. You'll see that appears to be a 30-year debt issuance at 5.699 percent?

A I see that. Let's see, the date of the issue is February 3rd, which I believe is before the downgrade.

Q Okay. But it was after the Commission's vote on the -- what's referred to as the 2010 presettlement order, is it not?

A Yes. But at that time, FPL had been put on credit watch, but it hadn't actually been downgraded. The S&P downgrade was March 11th, 2010. Moody's downgrade was April 9th of 2010.

Q Okay. Well, let's turn the page, Dr. Avera. You'll see the next press release is dated May 13th, 2010, right?

A Yes.

Q And that represents an issuance of 250 million at 2.5 percent, right?

A Yes.

Q Okay. Now, admittedly, that's a shorter term issuance than the one we were just looking at, right?

A It is. And therefore you avoid some of the negative impact of a lower bond rating.

Q Uh-huh. On the other hand, it's after both of the dates of the downgrades you just provided to us, right?

A Yes. And we talked about this in my deposition, and I believe you talked with Mr. Dewhurst about this.

Q Thank you.

And if you turn to the next page, you'll see an August 7th press release showing that debt was issued at 2.607 percent in the face amount of

$400 million, right?

MR. GUYTON: Could we specify who the entity was?

MR. SUNDBACK: Mr. Chairman, the document speaks for itself. If Mr. Avera has difficulty reading or deciphering the document, I'm sure he can make that point without being prompted by his counsel.

COMMISSIONER GRAHAM: Let's just for the record go ahead and put it on there.

MR. SUNDBACK: For the record, this issuance was by the FPL Group Capital, Inc., the issuer.

COMMISSIONER GRAHAM: Thank you.

BY MR. SUNDBACK:

Q All right. You have no reason to doubt the accuracy of the information contained in these press releases, right?

A That's correct. That would have been after the settlement was announced on August 10th.

Q But before it was approved by the Commission; isn't that correct?

A Yes.

Q Okay. Very good.

Now, a significant part of your testimony, your rebuttal testimony, is described -- is devoted to

describing what you believe to be the shortcomings of other witnesses' proposals concerning computation of DCF results, right?

A As well as their other methods, yes.

Q And you devote something like 20 pages just to the opposing witnesses' treatment of growth rates, right?

A Yes.

Q And for our discussion today, can we shorthand, just as you did, I think, in your opening statement, witnesses who take positions adverse to your ROE position as capital O, Opposing, capital W, Witnesses?

A Yes.

Q Great.

Now, notwithstanding the fact that you have some differences of opinion with those witnesses about growth rates, growth rates are only one component of the DCF calculation, right?

A Yes.

Q Okay. So would you agree that it's far from the most important component?

A Far from the most important?

Q Yes. It's just one component?

A No. It is the most important and

controversial, generally.

Q Well, wouldn't you agree that even if the growth rate is off just a few basis points, that shouldn't disqualify the DCF result?

A Well, if it's off by a few basis points, your DCF estimate is off by a few basis points. And basis points here and there start adding up to real money.

Q So maybe we can go at this a different way. You think that just proportionally devoting this much attention and this much time to your dispute about the proper growth rates taken from analyst projections is an appropriate use of time and effort on your part?

A Yes. And I think the other opposing witnesses devoted an equal percentage of their testimony to this very important determination.

Q Okay. Well, let's -- just to move this along, let's look at your rebuttal page 38, lines 11 through 17 and see if this is an accurate understanding. I'm getting worn out and maybe I haven't gotten the gist of it.

But you are there describing what you believe to be, and you characterize, as illogical, low-end values, and that's regarding analyst growth rates that were utilized by, in this instance, Mr. Gorman and Mr. Baudino, right?

A Would you remind me the line numbers, please, Mr. Sundback.

Q I'm sorry. Page 38, lines 11 through 17 you have a Q and A there.

A Yes.

Q Okay. And so what you're proposing to do verbally there is exclude those low-end, illogical values, and you're describing you're going to go recompute DCF results as a consequence, right?

A Yes, I was going to use the FERC method that Dr. Woolridge used in his FERC testimony.

Q And you do that in your Exhibits WEA-23 and 24, right?

A Yes.

Q And by doing that, you're correcting for the impact of these, according to you, illogical and low-end values, right?

A Yes.

Q Okay. Let's just take a quick look at WEA-24 which involves Mr. Baudino. If you could look at that.

A Yes.

Q Okay. And judging by footnotes A and B, you believe the data there are the illogical, low -- some of the data there are the illogical, low-end growth rates that you referenced in your testimony, right?

A That Mr. Baudino actually used. These are his numbers.

Q For right now I would just like to focus -- well, that's fine. But can you help me understand how this exhibit works just a little bit more.

Let's look at the second line under "Value Line," so it's the third column. And you've got a -- there's a negative 2.7 there?

A Yes.

Q Do you see that?

Okay. And then because you characterized that or believe it to be an illogical, low-end value, when it comes time to actually compute the full DCF -- or as you're going through the DCF valuation, you then exclude that in the third to last column under "Value Line" for line 2 as well, right?

A Yes.

Q Okay. And, in fact, that's what those highlighted boxes are showing us on that exhibit is where you're -- let's call it strike thing growth estimates because they didn't make the cut?

A That's right. It wouldn't have been accepted by FERC and it isn't acceptable by me.

Q Okay. And just to get a ballpark sense here, the values that you're striking look like they're more

or less at 3 percent or below with the exception of PGE on line 8 which has 2.9 percent. Is that a fair kind of handle?

A Well, the criteria is 7 percent, I believe. Anything below 7 percent does not give you a margin over observable debt costs; therefore, they're illogical.

Q But you haven't actually struck all of the values in that case, have you?

A No, I didn't strike the values that were above 7 percent like Portland General Electric's Value Line, DTE's Value Line.

Q Okay. All right. But just to make sure I understand how you're computing this then, when we go over to the third from the right column for Value Line again, so we're just tracking the Value Line results, you've got an average at the bottom, the 9.19.

Do you see that?

A Yes.

Q Okay. And that's computed by excluding the values that are in those highlighted boxes, right?

A Well, the 933 excludes those highlighted boxes.

Q I'm sorry.

A Then we have a range for all of them.

Q Okay. But the ranges in the bold type at the bottom of the page are also derived by excluding the values that are shown in those highlighted boxes; is that not correct?

A That is correct, for each of the three methods --

Q Okay. Thank you. Thank you.

Now, just to recap the bidding then on this exhibit, you excluded under the Value Line column, the value on line 2, the negative 2.7, the value on line 5, the 3 percent, and the value on line 9 for SCANA of 1.39 percent, right?

A Well, you're referring to the growth rates.

Q I'm sorry. With that clarification, would you agree?

A Yes, because they produced illogical DCF estimates.

Q Okay. Thank you for the clarification on the growth rates. I appreciate that.

Would you agree that the exclusion of the boxed highlighted data, for instance, under the Value Line column, third from the right on that page, tended to, as a result, produce a higher average midpoint and -- well, mean and midpoint?

A Yes.

Q I'm sorry, mean and median?

A Yes, it did that.

Q Okay. Would you accept, subject to check, that, in fact, if we looked over at the line -- I'm sorry -- at the column under "Value Line" for just the growth rates, which is the one that has the "B" above it --

A Yes.

Q -- that excluding those three numbers we just talked about produces an average of about 5.22 percent?

A In terms of the growth rate?

Q Yes, sir.

A I don't know if it does or not. My exclusions were based on the DCF, not the growth rates.

Q Okay. But would you agree -- we don't actually see an average in that column computed -- and I understand your point on that -- but would you agree that by excluding -- would you accept, subject to check, that by excluding these three numbers from the Value Line column, it produced in essence an average of 5.22?

A Well, I can't agree or disagree, but I don't think we ought to slow down. If that's what your arithmetic says, I'll accept it as a hypothetical.

Q Okay. Now, let's look at your rebuttal

again, page 7, lines 11 through 18. And there you're outlining in bullet point fashion what you believe to be some of the shortcomings of the opposing witnesses, are you not?

A Yes.

Q And you criticize the, what you characterize as errors and omissions that affect outcomes that they engaged in; is that correct?

A Yes.

Q And that was an application of the DCF formula, right?

A Yes.

Q And implicit in your criticism is the notion that when we deal with data, we need to be pretty careful, right?

A That is correct. I think that's good research design is to eliminate spurious observations.

Q Well, it's not just spurious observations, is it; it's generally being careful with data?

A Well, being careful. But one of the characteristics of care is to eliminate those observations that are illogical or likely to not have valuable information.

Q Okay. Let's look at page 29 of your rebuttal, lines 12 through 14. There you criticize the

opposing witnesses because they fail to test the reasonableness of model inputs.

Is that a reference to, for instance, the use of negative growth data?

A That is one characteristic of failing to test. I think I also criticized the risk premium, market risk premiums that Dr. Woolridge used.

Q Fair enough. Fair enough.

But certainly within that language on that page, you do reference or you're intending to target, among other things, the use of negative growth rates?

A That's true. But the real test of a growth rate is what it produces in a DCF. That's the test that the FERC uses and it's the test that I use, not the -- because you can't evaluate the growth rate in isolation and --

Q Dr. Avera, we're going to get there. Please trust me, we're going to get there. But if you can just focus on my question, we might get out of here before 2014.

A Yes, sir.

Q Thank you.

You would agree with me that the care with which a witness's testimony is prepared should influence the weight it is given, wouldn't you?

A Yes.

COMMISSIONER GRAHAM: Mr. Sundback, can you pull that microphone down a little bit.

MR. SUNDBACK: I'm sorry.

COMMISSIONER GRAHAM: You tend to come in and out as you turn your head back and forth to the witness.

MR. SUNDBACK: Well, that might be a good thing from your perspective, I don't know.

BY MR. SUNDBACK:

Q You would agree sitting here today that you couldn't identify one part of your rebuttal testimony that you prepare with greater care or effort than another, could you?

A No.

Q Okay. Let's go back to your Exhibit WEA-24, if we could, where we were looking at the Value Line column.

A Yes.

Q Do you have that?

A Yes.

Q Okay. Let's start with this Footnote B. This Footnote B is a rate across the top of those three columns in the middle of the page, right?

A Yes.

Q And Footnote B is intended to alert us that you believe the data came from Exhibit REB-4, right?

A Yes.

Q Mr. Baudino didn't change his middle name because he's been placed in the witness protection program or anything, did he?

A No. Mr. Baudino --

Q So his exhibit is actually RAB-4, right?

A For B, yes.

Q For B. And his exhibit for A would be RAB-3, right?

A Yes.

Q Okay. All right. Now, do you have a copy of Exhibit RAB-4 handy?

A No, I don't. There's one in the room.

MR. SUNDBACK: We'll be happy to distribute copies, Mr. Chairman. Because this has been marked before, I don't think we need to assign it a number. It's just for ease of reference for everybody in the room.

COMMISSIONER GRAHAM: Sounds good.

MR. SUNDBACK: Thank you.

BY MR. SUNDBACK:

Q Now, when you get this, Dr. Avera, you'll see after the cover page the first page is a reproduction

of your Exhibit WEA-24. Do you see that?
A Yes.
Q And does that look like your exhibit again?
A Yes, it does.
Q Okay. Let's look at the next page. Do you recognize that as Mr. Baudino's Exhibit RAD-4?
A Yes.
Q Okay. Let's look at line 1 of your exhibit, the second page. And if you look just at the first growth rate for Alliant, the third column under V-Line under the B, you attribute a Value Line growth rate of 6.4 percent to Mr. Baudino, do you not?
A Yes.
Q Okay. If we look at Mr. Baudino's Exhibit RAB-4, we see under the second column, the column -- I'm sorry, the column with the Arabic 2 at the top, a 6 percent figure, do we not?
A Yes.
Q Okay. Where in the world did you get the 6.4 percent figure that you have erroneously attributed to Mr. Baudino in your Exhibit WEA-24?
A I don't know.
Q That's just wrong, isn't it? That number is wrong?
Maybe we could speed this up. Would you

agree that none of the figures that are reproduced in your Exhibit WEA-24 under the Value Line column under "B" which you've attributed to Mr. Baudino actually comes from Mr. Baudino's Exhibit RAB-4?

Not a one of them matches, does it?

A I haven't checked them all, but there is a difference, and it's very disturbing to me.

Q Have you checked any of them?

A Yes.

Q Did you check this exhibit before it was filed?

A Yes.

Q And is this typical of the care with which you prepare your evidence?

A I hope not. I'm sorry I made a mistake.

Q Well, let's keep going. Let's keep going. Let's look at the Zacks column in your WEA-24. Can we? That's the third column of data under the caption "B" again.

Would you agree none of those numbers match what's shown in Exhibit RAB-4 under the column headed "Arabic 4 for Zacks"?

A Yes.

Q Let's look at the column you have captioned "Thompson" under the note "B" again, which you

attribute to Mr. Baudino. And if you compare that to what Mr. Baudino reproduced in the far right-hand column of his Exhibit RAB-4, you have gotten exactly one of the numbers correct, the number for I believe -- is it SCANA; is that right?

A Yes.

Q So you've gotten one out of 36 growth rate estimates correct --

A Yes.

Q -- in your Exhibit WEA-30 -- 24?

A That is correct. I'm sorry.

Q Okay. Now, when you were criticizing Mr. Baudino, did you go back and actually look at the underlying reports of these services?

A No.

Q Well, why don't we --

A Some are the same.

Q Why don't we do that.

A Eight of his companies are the same as my companies.

Q Why don't we do that and see what we find. Would you recognize these reports if you saw them?

A Yes.

Q All right, sir.

MR. SUNDBACK: Mr. Chairman, could we have marked with the next identification numbers excerpts from Mr. Baudino's work papers.

COMMISSIONER GRAHAM: We'll call this 623.

(Exhibit No. 623 was marked for identification.)

BY MR. SUNDBACK:

Q Do you have a copy of what's been marked as 623, sir?

A Yes, I do.

Q Let's look at the -- let's turn the page, the cover page. The second and third pages represent a printout of information that's a summary of data that is sometimes characterized as Thompson Financial Data, is it not?

A Yes.

Q If you look at the third page, first line, you'll see in the first number on that page a 6.3 percent, right?

A Which page are we on, Mr. Sundback?

Q I'm sorry, the third page of what's been marked as Exhibit 623.

A 6.3.

Q Right. And that matches the Thompson Financial Data that's reported in Mr. Baudino's RAB-4 on the first line for Alliant under the column Thompson

Financial, does it not?

A Yes.

Q Let's look at the next page. Do you recognize that as a Zack's report?

A Yes.

Q Do you see in the left-hand side of the data at the top of the page, I think it's the fifth or sixth line down, "Expected Earnings Growth" of 6.15 percent?

A Yes.

Q That ties to the 6.15 percent in Mr. Baudino's Exhibit RAB-4 for Alliant on line 1 under column Arabic 4, correct?

A Yes.

Q Let's look at the last page. Do you recognize this as a Value Line report?

A Yes.

Q If you look on the left-hand side of that page, about 40 percent of the way from the bottom, you'll see a table that says, "Annual Rates," do you not?

A Yes.

Q And on the line in that little box labeled "Earnings," you'll see a 6 percent, do you not?

A Yes.

Q And that ties to the 6 percent in Exhibit

RAB-4 under column 2, does it not?

A Yes.

Q Okay. Thank you.

Let's look at your Exhibit WEA-23. There you purport to do the same thing with data you purport to have taken from Mr. Gorman that you did in WEA-24 with data you purported to take from Mr. Baudino; is that correct?

A Yes.

Q All right.

MR. SUNDBACK: Mr. Chairman, could we have distributed a compilation of documents already in the records, so it need not be marked with another exhibit number, but it consists of a replication of Exhibit WEA-23 and Exhibit MPG-4, which is Mr. Gorman's exhibit.

COMMISSIONER GRAHAM: Just when you're referring to it, if you could tell which exhibit number it is so we have it for the record.

MR. SUNDBACK: The hearing exhibit number?

COMMISSIONER GRAHAM: No. As you're -- you know, for example, the first one is WEA-23.

MR. SUNDBACK: Twenty-three. And the second -- I'm sorry, the third page is Exhibit MPG-4.

COMMISSIONER GRAHAM: No, but when you ask him questions, just make sure you refer back to it.

MR. SUNDBACK: Thank you. I appreciate it. I'm running out of steam very rapidly.

COMMISSIONER GRAHAM: You're doing fine. Thank you.

MR. SUNDBACK: Thank you, sir.

BY MR. SUNDBACK:

Q Do you have that before you, sir?

A Yes.

Q All right. And if we look at that exhibit, we also see, much like WEA-23, that you tribute in the middle of the page in columns headed with the Note B, growth data to Exhibit MPG-4, right?

A Yes.

Q All right. Now, let's start with the growth data that's attributed to ConEd, second line. Under the SNL column, you'll see, again, it's negative 2.7 percent, right?

A Yes.

Q And once again, just as was the case with your Exhibit WEA-24, you carry over to the calculation of the cost of equity, exclusions from the growth -- that you have made because the growth rate data in your

opinion doesn't qualify?

A That is correct, it gives illogical DCF estimates.

Q Okay. The data you have shown on WEA-23 produces illogical growth estimates, right?

A Yes.

Q Okay. Now, would you agree that in what's actually designated as MPG-4, Mr. Gorman shows a 3.6 percent growth rate for ConEd under the SNL column?

A Yes.

Q Just to kind of move things along, would you admit that aside from the numbers for Alliant and OGE, every one of the growth numbers that you attribute to Mr. Gorman under the SNL column is wrong?

A Well, there's a mystery here because some of the same -- some of these are the same as Mr. Baudino.

Q I'm sorry. Some of these are the same numbers you attributed to Baudino; isn't that right?

A No, I think some of them are the ones in RAB-4.

Q Well, are you contending that these data are correct?

A No. I made a mistake. I'm trying to figure out what I did wrong such that I would have these numbers reversed like this. But one thing that may have happened is since the proxy groups are approximately the same -- there is a great deal of overlap in all of the proxy groups -- that we started with a spreadsheet from one witness and didn't change it for the other.

Q Well, as we just have reviewed, for instance, the underlying data for -- well, let's follow up on that, Dr. Avera.

MR. SUNDBACK: We should identify this one, Mr. Chairman, with an exhibit number because I don't know that this is in the record. So if our note taking is correct, it would be 624.

COMMISSIONER GRAHAM: That is correct.

MR. SUNDBACK: Thank you.

(Exhibit No. 624 was marked for identification.)

BY MR. SUNDBACK:

Q Okay. Mr. Gorman, do you have a copy of what's been marked as hearing Exhibit 624?

A Was that addressed to me? I think you said, "Mr. Gorman."

Q I'm sorry, Dr. Avera. Yes. Do you have a copy?

A Yes, I have it.

Q Okay. And if you would turn to the second

page, you'll see this is an SNL publication?

A Yes.

Q And if you look in the upper right-hand corner, you'll see a growth rate of 3.6 percent?

A Yes.

Q That certainly doesn't correspond to the negative 2.7 percent that you replicate in Exhibit WEA-23 for SNL's estimate for ConEd, does it?

A No, it doesn't.

Q It ties to Mr. Gorman's MPG-4 estimate though for ConEd under "SNL," does it not?

A Yes.

Q You didn't bother to look at the work papers of either of these witnesses even though you were criticizing their work and their growth estimates, did you?

A Well, we got the work papers in electronic form, and that's what we used to redo their analysis. And I would want to go back and see if there's a deviation between the electronic form and what was printed out.

Q Dr. Avera, do you know -- did you bother to review the work papers to determine that these reports were included in Mr. Gorman's work papers that you could have referenced?

A Yes, I knew they were there.

Q Okay. All right. Just to move the ball along here, the computations basically in WEA-23 were done in the same fashion as WEA-24 so that when there was what you would characterize as an illogically low growth rate, you dropped that out of the computation under the "Cost of Equity" columns on the right-hand side of the exhibit; is that correct?

A Yes.

Q And you would agree again that by dropping those out, the averages, the mean and the median increased, all other things being equal, right?

A Yes.

Q Okay. Looking at, for instance, the column labeled "SNL" under "Growth Rates" under the heading "B," there you have eliminated three growth rates, the growth rate on line 2, negative 2.7 percent, the growth rate on 5 for NextEra Energy, and the growth rate on 9 for Sempra, right?

A Yes.

Q Would you accept, subject to check, that once you've eliminated those, the average growth rate that remains is 5.4 percent?

A If you've calculated it, I can accept it as a hypothetical.

Q Thank you.

If you would turn to Mr. Gorman's MPG-4 again.

A Yes.

Q Under the column SNL in the middle of the page, he's computed an average of 4.92 percent, right?

A Yes.

Q Okay. So you've gotten another 50 basis points of growth, if you will, by eliminating these three data points, right?

A Yes.

Q Okay. Let's just take a quick look at the column labeled "Reuters" in WEA-23, notwithstanding the note above it, the "B" note, the data on lines 2 through 13 did not in fact come from MPG-4, did they?

A They didn't come from the hard copy. I'm still perplexed because we worked off of the electronic copy that was supplied to us.

I will get to the bottom of this, but as I sit here, I can't tell you how it happened. It is perplexing. I mean, the numbers are in the same neighborhood, but they're not -- clearly not the same.

Q Well, if you look at the numbers that you've dropped out under the Reuters column and compare those to the numbers in MPG-4, you would agree that the

numbers in MPG-4 for the course -- for those companies are not illogically, low-end growth rates?

A Well, you can't evaluate a growth rate outside of the effect it has and when you use it in the DCF.

Q So you can't say to us now that if Mr. Gorman's data that were reflected in MPG-4 were actually used in this calculation, that it would have caused you to conclude that they should be dropped out because they are illogical, low-end values?

A No. I can look at the numbers, and you can see that some would not have produced a DCF that's above bond yields by 100 basis points.

Q Would you agree that if you calculated the average in the column labeled "Reuters" under the caption "B" in your Exhibit WEA-23 and excluded the three values we've been discussing that you eliminated on line 2, line 5, and line 9, you would end up again with a growth rate average of about 5.4 percent?

A Yes. And Mr. Gorman -- we're talking Reuters now right?

Q (Nodding head affirmatively.)

A If we look at MPG, it's 5.3. So what that tells me is even though the numbers are different in order of magnitude, they're almost the same.

Q Well, let's investigate that. Let's look at Zacks, under the Zacks column in your WEA-23.

A Yes.

Q And you show for SCANA a growth rate of .9 percent, .95 percent, right?

A Yes.

Q Mr. Gorman's MPG-4 actually shows the growth rate is five times higher for SCANA; is that not right --

A That's correct. But if we go up to --

Q -- for Zacks?

A -- PG&E, his growth rate is much lower than the one I use. So when you add them all up, you come out to approximately the same place.

Q Let's look at your rebuttal testimony, page 35, line 21 through page 36, line 4.

A That was on 35, 21?

Q Yes, sir. I'm sorry.

Well, you can start at 19 where the question begins, and you go over to page 36, let's end at line 4 for the time being.

A Yes.

Q You used Mr. Baudino's conduct and his exclusion of negative growth rates to criticize Mr. Gorman for not doing likewise, right?

A That's correct.

Q And, in fact, there are no negative growth rates on MPG-4, are there?

A No. But the point is that you need to check the logical consistency of the data you're using. And I used the method that FERC used.

Q Who at FPL supervised your work with regard to, for instance, WEA-23 and WEA-24?

A Mr. Velicity, Ms. Halk, I coordinated with them, and also with the attorneys.

Q Okay. Thank you.

MR. SUNDBACK: Mr. Chairman, no further questions. Thank you for your time, Dr. Avera.

THE WITNESS: Thank you.

(Whereupon, proceedings continued in Volume 31.)

CERTIFICATE OF REPORTER

STATE OF FLORIDA)
COUNTY OF LEON)

I, MICHELLE SUBIA, Registered Professional Reporter, certify that the foregoing proceedings were taken before me at the time and place therein designated; that my shorthand notes were thereafter translated under my supervision; and the foregoing pages, numbered 4388 through 4576, are a true and correct record of the aforesaid proceedings.

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

DATED this 4th day of September, 2012.

Michelle Subia

MICHELLE SUBIA
NOTARY PUBLIC
COMMISSION #DD987077
EXPIRES JUNE 7, 2014

MICHELLE SUBIA
MY COMMISSION # DD 987077
EXPIRES: June 7, 2014
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