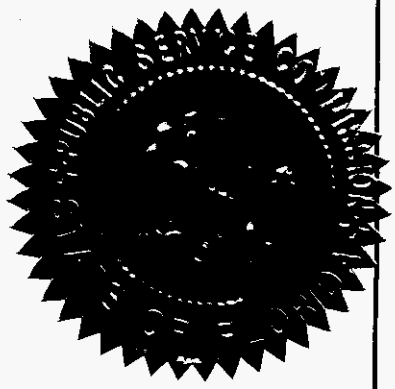
BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 090009-EI

In the Matter of:

NUCLEAR COST RECOVERY CLAUSE.
_____/



VOLUME 2

Pages 174 through 448

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PROCEEDINGS:	HEARING
COMMISSIONERS PARTICIPATING:	CHAIRMAN MATTHEW M. CARTER, II COMMISSIONER LISA POLAK EDGAR COMMISSIONER KATRINA J. McMURRIAN COMMISSIONER NANCY ARGENZIANO COMMISSIONER NATHAN A. SKOP
DATE:	Tuesday, September 8, 2009
PLACE:	Betty Easley Conference Center Room 148 4075 Esplanade Way Tallahassee, Florida
REPORTED BY:	LINDA BOLES, RPR, CRR Official FPSC Reporter (850) 413-6732
APPEARANCES:	(As heretofore noted.)

I N D E X

WITNESSES

EXHIBITS

NUMBER:		ID.	ADMTD.
4			203
5			203
6			203
7			203
8			203
9			203
10			203
11			203
12			203
13			203
14			203
15			203
16			203
17	RSK-1 3/09	209	270
18	RSK-2 3/09	209	270
19	RSK-3 3/09	209	270
20	RSK-4 3/09	209	270
21	RSK-5 3/09	209	270
22	RSK-1 5/09	209	270
23	RSK-2 5/09	209	270
24	RSK-3&4 5/09	209	270
25	RSK-5 5/09	209	270
26	RSK-6 5/09	209	270

EXHIBITS

NUMBER:	ID.	ADMTD.
27 RSK-7 5/09	209	270
28 RSK-8 5/09	209	270
29 RSK-9 5/09	209	270
30 SRS-1	272	300
31 SRS-2	272	300
32 SRS-3	272	300
33 SRS-4	272	300
34 SRS-5	272	300
35 WP-1 3/09	304	355
36 WP-2 3/09	304	355
37 WP-3 3/09	304	355
38 WP-1 5/09	304	355
39 WP-2 5/09	304	355
40 JJR-1 3/09	357	
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P R O C E E D I N G S

(Transcript follows in sequence from Volume 1.)

CROSS EXAMINATION CONTINUED

BY MR. MOYLE:

Q. Could these other entities, Shaw and Bechtel, have provided the preliminary engineering drawings that you sole sourced to Black & Veatch?

A. They were qualified to do so. Bechtel is engaged in our project assisting with the combined operating license, and Shaw is engaged with us in concert with Westinghouse doing specific detailed engineering work around the nuclear reactor and, and power island. So all three entities are being engaged to some level on the project and gaining familiarity.

Q. Don't you think that with respect to the preliminary engineering work that you would have gotten a better price if you had said to the three firms that are eligible and capable of providing that and say, okay, here's what we want, everybody sharpen your pencil, as compared to sole sourcing it to Black & Veatch?

A. No. In fact, our sole source justification goes through a process where we look at the rate sheet for Black & Veatch/Zachry and compare that to the rate

sheet for, I believe it's Bechtel. And in doing so, we saw that a properly weighted comparison would show Black & Veatch/Zachry to be about 14.5 percent more competitive on their standard rate sheet than Bechtel. So in doing so, we've accomplished the critical analysis that we need to to demonstrate that Black & Veatch is providing market, you know, qualified services at market rates.

Q. Isn't it true that when, you have seen historically when competitive bidding is used that there are deviations from standard rate sheets that companies will submit?

A. That's a possibility.

Q. Who, who approved the sole source of the preliminary engineering?

A. I believe it was approved by Martin Gettler.

Q. And what position does he hold?

A. He's a Vice President of New Nuclear Projects.

Q. I want to ask you a couple of questions about this exhibit. It's Exhibit 131. It's the confidential exhibit. I don't want to tread into anything that you all consider confidential.

CHAIRMAN CARTER: I think that there were a couple of pages that Mr. Anderson said that they were, agreed they were not confidential. Mr. Anderson, would

you, as a quick reminder?

MR. ANDERSON: Page 9 was indicated by counsel for SACE as subject of interrogation. We had no objection to use of that page or even public use of that one page.

CHAIRMAN CARTER: Page 9?

MR. ANDERSON: Yes, sir.

CHAIRMAN CARTER: Mr. Moyle.

MR. MOYLE: I'm -- what I would like to do, Mr. Chairman, is just ask him, and I'll refer him to something, and if he considers it confidential, he can answer the question without revealing the content. If he considers it not confidential, then he can, you know, read it into the record, if that's okay.

BY MR. MOYLE:

Q. Page 12, which is the -- tell me, tell me when you're there, if you would.

A. It's in front of me.

Q. Okay. Do you see the bold language at the, at the top of the sheet before the cost estimate status?

A. Yes.

Q. Is that confidential?

A. No.

Q. Okay. So the -- before you can get capital cost estimates, you must complete ongoing negotiations;

that's correct?

A. That's correct.

Q. Okay. You would agree that feasibility determinations are difficult, not knowing the, you know, the capital cost estimates; correct?

A. What we have done is through the course of negotiations prepared -- or continued to compare preliminary cost estimates provided during these negotiations to our estimates and found those to be well in line. So while we would not revise our cost estimate until completing a new contract negotiation, we're still maintaining a view to verify that we haven't deviated from our existing cost estimate.

Q. The, on the same page, the bold at the, the bottom, that's not confidential, is it?

A. The third bullet, is that what you're --

Q. Yes, sir.

A. No, it's not.

Q. Okay. So I wanted to explore for a minute the notion of fixed, firm and float with respect to your, your agreements.

As we sit here today, you say at the end the intent is to lock down known costs, material and labor quantities. What percentage of the costs are, are fixed or firm or locked down as we sit here today?

A. That would be a subject of ongoing negotiations and is not something I can speak to right now.

Q. You can't give me a ballpark of it?

A. It's ongoing negotiations, sir.

Q. So is any, is any of the cost locked down as we sit here today?

A. Again, that'd be the topic of ongoing negotiations.

Q. Let me refer you to Page 31 of this exhibit and ask you if you consider this page confidential and the information contained herein?

A. Yes, I do.

Q. That is confidential?

A. Yes.

Q. Okay. The, the caption at the top, is that confidential, or can we talk about that?

A. We can talk about that caption.

Q. Okay. So it says, "Cost comparison of recent AP 1000 project announcements is difficult due to lack of detail." You would agree with that statement?

A. That's correct.

Q. Where, where did you get the information that is reflected on this exhibit?

A. Most of the information is gleaned from

publicly -- or all the information is gleaned from publicly available data with certain estimates that I've made based on my knowledge of the process and my estimate of trying to fill in the gaps between public information that may provide us an overnight cost but doesn't provide us a total project cost or costs associated with transmission for a certain project. Not all media reports are apples to apples. Many media reports kind of mix and match different components of costs and don't provide a complete understanding.

Q. The -- and I presume the numbers are what you consider confidential, not the, not the descriptions to the left; is that right?

A. That would be correct.

Q. Okay. So when it says "total overnight cost," the first bold line there, what does that represent?

A. An overnight cost is a cost estimating tool to indicate what the cost would be in certain year dollars if all the components were able to be purchased at one time. So all materials, all labor and services presented at one point in time and that, that's the case.

In reality, we experience over a long period, over a period of time for design and construction escalation and the accrual of interest charged on the

construction balance.

Q. I want to draw your attention to the third column and ask you to compare that number in the third column to the number found in the first column under "total overnight cost." Do you see that?

A. Yes.

Q. You would agree that that's a pretty wide difference in those two numbers with respect to cost, would you not?

A. And, again, there's a wide difference, but there are three question marks in the column that leads up to the sum of that third column, and that's where there's insufficient information for us to provide a very detailed breakdown of what's causing those charges.

Q. Would, would in your mind the number shown on that third column lead you to question project feasibility?

A. No.

Q. I'm sorry?

A. No.

Q. Do you have an opinion about project feasibility with respect to the third column?

A. No. I'm here to testify about FPL's project feasibility.

Q. Let me ask you, this presentation was given to

the Risk Committee. Who sits on the Risk Committee?

A. The Risk Committee is again an ad hoc group of directors, senior managers in FPL. It's generally run by the finance department as the business, as the coordinating business unit, and then individuals are chosen as topics arise. I would not sit on the Risk Committee for a project that I managed or that I was involved in. It sets up an independent review board that isn't intimately involved in an individual project.

Q. You would agree that with respect to nuclear projects, the disposal of the nuclear fuel is also a risk that's presented; correct?

A. I believe -- I would say it's a, it's a challenge. But we have approved methods for the existing plants, and those approved methods would apply to new plants.

Q. And the methods are to store the spent fuel rods onsite; is that correct?

A. That's one option. Yes, sir.

Q. Are there any other, other options at this point in time?

A. There are a number of different options being pursued by Department of Energy.

Q. How about with respect to FP&L? Is it pursuing any other options other than storing the spent

nuclear fuel rods onsite?

A. No. The responsibility for that lies with the Department of Energy.

Q. And they have had a fuel difficulties; correct?

A. They've had their challenges.

Q. There has not been any other construction of a nuclear power plant in the United States that has implemented the strategy that you are pursuing, which is to separate the C from the E and P; correct? And just so the record is clear, to separate the construction from the engineering and procurement.

A. I believe in the Generation 2 plants, their existing plants, it was not uncommon to have a separate constructor from the engineering and procurement provider.

Q. And, but they were not done by the utility signing a separate contract. Weren't they part of the overall contract that was signed between a utility and an EPC contractor, and then the EPC contractor would go out and sub the construction work? Isn't that correct?

A. I believe that's a generalization that I couldn't attest to over the 100 projects that are currently operating in the United States.

Q. You talked with counsel about an offramp

strategy. FPL has not yet made a determination as to whether or not to build this nuclear power plant, Turkey Point 6 and 7, has it?

A. We're -- no, we have not made a definitive decision to go to construction, but we have made and are committed to obtaining a license, and then at the appropriate time committing to construction.

Q. When you sign an EPC contract, typically doesn't that take care of, of most of the major components that would be needed with respect to constructing a nuclear power plant?

A. An EPC contract could take many forms, and that's one of the things that we've learned as we've talked with Westinghouse/Shaw that, for example, as we've used EPC contracts to build West County Energy Center 1 and 2 and Turkey Point 5, those are fairly well-known technologies, very competitive environments for services and equipment, and we're able to use that EPC contract to provide a high level of risk management.

But in the nuclear world, in the market that we're in right now, as you mentioned before, the terms firm, fixed and float, it's really critical to understand what's firm and what's not and what's floating and what is not. And what we're finding is that the distinction between EPC contracts that we have

been offered and EPC contracts that we are familiar with is dramatically different in nuclear, that the risk mitigation offered by, historically offered by EPC contracts in other forms of generation are not translating to the EPC contracts that we're seeing for new nuclear.

Q. You don't have an EPC contract in place as we sit here today; correct?

A. That's correct.

Q. Okay. And I -- you've been involved in developing power plants previously; correct?

A. Yes, sir.

Q. And even in the, what they used to call the merchant world or the competitive plant, you had some experience in that arena, did you not?

A. Yes, sir.

Q. Wouldn't you agree that as a general rule of thumb that there are a lot more projects that are announced than are actually built?

A. Yes.

Q. And counsel for SACE showed you a chart about the falloff in nuclear projects following Three Mile Island. Don't you expect that there's going to be a similar, maybe not as dramatic, but a falloff in nuclear projects from the numbers announced as to those that

will actually be built in this wave?

A. I think that's a very real possibility. I think our project approach has been designed to make sure we're not one of those for a bad reason that we got overexposed or for a decision that we weren't in control of.

Q. And given the fact that you're keeping your options open, it's an offramp that projects fall out, you would agree that, that paying cash, 10 million plus dollars to secure a part of the nuclear power plant at this point, that that probably was premature; correct?

A. No. I don't agree with that at all. In fact --

Q. And just so the record is --

A. -- we carefully evaluated that and it was heavily scrutinized. The reasons that we entered into a reservation agreement through Westinghouse with Japan Steel Works is because of their unique position as the sole provider of those heavy, ultra heavy forgings, and that condition has not changed.

Q. So, so there's one supplier in the whole world of these heavy nuclear forgings; is that right?

A. That's correct.

Q. And, and you had to pay $10 million to reserve that, notwithstanding the fact that the expectation is

there will probably be less nuclear projects going forward than currently announced?

A. When we made the reservation in early 2008, we looked at the best information available, made that decision. We still stand by that decision. And in order to remove the likelihood of the project schedule being held up on that one singular item, we felt it wise to invest the 11 million in a reservation fee. Other areas, long-lead procurement, we were able to defer those costs.

Q. And you were asked to pay another 30 million for certain long-lead item and you elected not to do that; correct?

A. No, sir. We were not asked. We went --

Q. Or you considered it?

A. We worked with, we worked with Westinghouse/Shaw to monitor the market and determine if it was necessary. We determined it was not necessary.

Q. Just a question, I omitted to ask you this, with respect to your EP strategy as compared to the EPC strategy, have you quantified the amount of money that you think you might be able to ultimately save by enabling another engineering firm to become familiar with the AP 1000?

A. We have not done a quantitative analysis. But

in competitive environments, as we talked about earlier, looking at the rates between Black & Veatch/Zachry and Bechtel showing a 10 percent difference in rates, if you apply that to the large scale of the construction scope of the contract, 10 percent could be a dramatic savings.

Q. A few more, a few more questions and I think we'll be close to wrapping up. You're familiar with the testimony of Mr., Mr. Sim; correct? And you referenced an exhibit that he had put together previously in answering one of my questions; isn't that right?

A. That's correct.

Q. Okay. In Mr. Sim's testimony, May 1, 2009, he's asked, "What were the results of the 2009 feasibility analysis for Turkey Point 6 and 7?" And he says, "The results of the analysis are presented in Exhibit SRS-5." That was the exhibit you were referring to; is that right?

A. That sounds correct, subject to check.

Q. Would it help if I showed you a copy of it?

MR. MOYLE: Could I approach?

CHAIRMAN CARTER: Yes, you may approach. You're just going to use it for cross-examination purposes; correct?

MR. MOYLE: That's right.

CHAIRMAN CARTER: You may proceed.

BY MR. MOYLE:

Q. Now in reviewing the testimony, I noted that Mr. Sim says this is the feasibility analysis results. Is, is that the extent of the, of the detailed analysis that has been done with respect to the feasibility of this project on a going-forward basis, the information that's reflected on the one-page document, Exhibit 5 to Mr. Sim's testimony?

A. Exhibit 5 is a summary of the economic analysis results. These results are done in the same deliberate manner as our Ten-Year Site Planning process and require a number of computer models and other simulations to develop. Yes, sir.

Q. Do you, do you see how -- do you think with respect to a detailed, detailed analysis of the long-term feasibility that a one-pager may not be viewed as significant or sufficient?

A. The -- I think Mr. Sim's testimony, Witness Sim's testimony is pretty complete. It leverages an analytical process that was vetted before this Commission in 2008 and resulted in an affirmative need determination and maintains the same annual feasibility analysis we conducted last year. I think it's quite complete.

Q. The -- you're aware that the rating agencies

have expressed some concerns about the development of nuclear projects?

A. Yes, sir.

Q. Okay. And you're also aware that one of the things that they have suggested to companies pursuing that is to explore strategic partnerships; isn't that right?

A. I understand. Yes, sir.

Q. And there are five applications currently involving the technology, the 1000 technology in the country pending before the NRC; is that right?

A. I believe that's correct. Yes, sir.

Q. Okay. And two of them are out of the State of Florida; correct?

A. Correct.

Q. Given the, given the -- you've also heard the rating agencies refer to this as a bet-the-farm or bet-the-company proposition with respect to the magnitude of a nuclear plant investment?

A. I've heard the term.

Q. Okay. Wouldn't you believe that it would be prudent to explore in earnest strategic partnerships to joint venture a nuclear project in the State of Florida?

A. Yes. Actually I think there's a couple of things there. You know, we are currently involved in

discussions with other municipalities or municipal utilities and co-ops in the state. I personally have hosted two workshops with these utilities to discuss what the form of partnership would be, and more importantly to discuss what value is brought to the table from a partner with FPL.

As you may know, our need determination demonstrated that FPL's customers have the capacity and need for 100 percent of the generation output. So to dilute that 100 percent output away from our customers to another entity that would be a partner, we'd want to make sure that we carefully and objectively evaluate what the true benefit brought to the partnership by the other party.

Q. You're aware that the population projections for the State of Florida have fallen off recently?

A. Yes.

Q. And if those projections continue, that they could have an impact on your, your needed generation; correct?

A. Yes. And that's a subject of our annual feasibility review. And our experience has indicated that those can be temporary. They're important to watch, but it is not our long-term expectation.

Q. You talked about exploring strategic

partnerships with some municipalities and co-ops. Have you explored any strategic partnerships with any other investor-owned utilities in the state?

A. I have not personally been involved in those. But I understand from our management's perspective that those would be entertained and everything is still on the table.

Q. Would, would it be -- to the extent that this Commission found that there was a lack of detailed information with respect to prudency, would a, would a docket which examined the needs of the State of Florida as a whole with respect to nuclear power plants make sense in your mind?

A. I believe that the -- my understanding of the Ten-Year Site Planning process that the Public Service Commission sponsors is one of those areas where both the utilities, or all the investor-owned utilities provide an annual Ten-Year Site Plan that's rolled up by Public Service Commission staff to look at from a statewide view, and that even some commentary from Florida Reliability Coordinating Council on the appropriateness of those issues are provided. So I think that's being covered.

Q. From a consumer's perspective, you would agree that the costs incurred -- let's say that consumers take

service from both Florida Power & Light and Progress Energy. To the extent that you have two utility companies heading down the same track with respect to the same technology, that there potentially could be economies of scale that could be realized to the consumers if a strategic partnership were to be forged; correct?

A. I think those are the very types of benefits that we're looking to identify in our discussions with potential partners.

Q. Okay. But those discussions have not taken place in any serious manner at this point that you're aware of?

A. I'm serious about everything I do, sir.

MR. MOYLE: Okay. Thank you, Mr. Chairman. That's all I have.

CHAIRMAN CARTER: Thank you. Commissioners, I'm going to go to staff, unless you have any questions right now. Then I'll come back to the bench.

Staff?

MR. YOUNG: No questions. No questions.

CHAIRMAN CARTER: Commissioners? Commissioner Skop, you're recognized.

COMMISSIONER SKOP: Thank you, Mr. Chairman.

Good morning, Mr. Scroggs.

THE WITNESS: Good morning, sir.

COMMISSIONER SKOP: Just a quick question on Page 14 of your prefiled testimony, beginning at Line 9. You discuss the internal and external audit of project management controls. And I think also in your opening summary you mentioned adaptive project management. Can you briefly explain what deficiencies, if any, or best practices have been implemented as a result of these audits?

THE WITNESS: Yes, sir. I'm assuming this is the March 2nd filed testimony?

COMMISSIONER SKOP: Yes. Your direct prefiled testimony on, beginning on --

THE WITNESS: Let me find my place, please.

COMMISSIONER SKOP: Okay. All right. That's fine. And I'll just repeat the question. It's Page 14, beginning at Line 9.

THE WITNESS: Yes, sir. It's in front of me. Thank you.

COMMISSIONER SKOP: Okay. All right.

THE WITNESS: Yes. We have a number of internal and external audits that really I see them as helping management make sure that we're doing everything that we need to be doing to demonstrate the prudent and responsible management of the project. Some of the

things that we have identified in these processes is documentation of our decision-making process and documentation of some of the more mundane things that could be turned into -- like a checklist for travel, a checklist for certain decisions that are made routinely so that we know and can demonstrate that we're doing things by the book every time instead of relying on, you know, my testimony or some other individual's testimony that, you know, we do it. Some of the suggestions from these audits have been to increase the documentation.

COMMISSIONER SKOP: All right. Thank you. And if I could also turn your attention to Page 17 of your prefiled testimony, generally Lines 15 through 23.

THE WITNESS: Yes.

COMMISSIONER SKOP: Okay. And you discuss the improved processes for sole source procurement. And, again, I think the Commission last year during this proceeding, some issues arose with respect to the amount of documentation that was resultant from sole source or single source selection. Can you just briefly discuss the process improvements that FPL has undertaken on a year-to-year basis?

THE WITNESS: Yes, sir. Following our reviews last year, we took back and kind of debriefed, you know, what can we do better? I think one of the presumptions

that we made in the process of doing sole source justifications was that it was a discussion between a knowledgeable presenter and a knowledgeable receiver. And that was okay for the process, but it didn't leave a good trail to demonstrate all the information that go into decisions like that. So we decided that we would be more extensive in our description so that a third party could pick up the sole source justification, understand what it meant, understand through plain English the decision process and what was considered to come to that decision. So we took that on as a, as an effort and an initiative. We had training with all the project management staff, the process control staff, and then we implemented those changes. As new sole source or single source justifications came up, we, I think you will see a marked improvement in detail for those justifications this year.

COMMISSIONER SKOP: Thank you.

CHAIRMAN CARTER: Anything further from the bench?

Ms. Cano, redirect? Or Mr. Anderson, redirect?

MR. ANDERSON: Just a few questions, thank you.

REDIRECT EXAMINATION

BY MR. ANDERSON:

Q. Mr. Scroggs, Mr. Davis used the word slippage in reference to FPL's schedule changes for filing the combined operating license application and FPL's estimate of when it would enter into or not enter into an EPC contract. Do you remember those questions?

A. Yes, sir, I do.

Q. Focusing on the word slippage, were FPL's actions an accident or the result of management decisions?

A. The result of specific management decision vetted with senior management and determined to be of benefit to our customers to revise the schedule.

Q. Mr. Davis also asked you some questions about NRC schedule changes. Do you recall those?

A. Yes, sir.

Q. Are NRC schedule changes unexpected in the context of new nuclear plant development?

A. No, they're not.

Q. Please describe FPL's management approach to NRC's schedule changes in those considerations.

A. Our management approach is to maintain a very strong dialogue with the NRC to understand the issues that they have. They have resource issues from time to time, as well as the technical issues and specific

issues associated with our application may require them to reallocate. So an open and detailed communication with the NRC is the best opportunity we have for making sure we understand as early as possible what any schedule changes might be.

Q. Mr. Moyle asked you some questions about the selection of BVZ to perform a scope of work for Turkey Point 6 and 7. Do you recall that?

A. Yes, sir.

Q. Could you just give us a quick overview about why FPL selected BVZ and how that selection benefited customers?

A. First off, FPL selected BVZ because they're a qualified engineering service provider and a well respected national and international engineering firm. They could provide and have provided excellent value for the work that they've accomplished.

In addition, we look forward to trying to develop the option to save the customers even more money through competitive bidding on some or all of the construction scope of this project. To the extent that a small amount of construction could be carved out and independently contracted for away from the power plant main body contract, there'd be small benefits. To the extent that that can be more extensive, they could be

much larger.

Q. And following up on what Commissioner Skop asked about, did you follow your improved processes and procedures for single source justification for that BVZ retention?

A. Yes, sir, we have.

Q. And did that assessment include quantitative analysis as well as descriptions of qualifications and all those kinds of things?

A. Yes.

Q. And did FPL fully comply with the single and sole source procedures?

A. Yes, we have.

Q. Was it properly approved within the company pursuant to those procedures?

A. Yes, it was.

MR. ANDERSON: We have no further questions. Thanks.

CHAIRMAN CARTER: Exhibits?

MR. ANDERSON: I'm just turning to that page, Commissioner.

CHAIRMAN CARTER: Okay. Start on Page 4 of the Comprehensive Exhibit List.

MR. ANDERSON: Thank you. FPL offers Exhibits on staff's exhibit list 4 through 12 and 13, 16 -- 13

through 16 into evidence.

CHAIRMAN CARTER: Are there any objections? Without objection, show it done.

(Exhibits 4 through 16 admitted into the record.)

Let's go to the back pages. Exhibit Number 130.

MR. DAVIS: 131.

MS. HELTON: I think 130, Mr. Chairman, was the exhibit that Ms. Triplett had mentioned that had been somehow not listed properly. So maybe when Progress comes up, that would be the appropriate time to address 130.

CHAIRMAN CARTER: Oh, okay. We'll put a hold on that. That's --

MR. YOUNG: Yes, sir.

CHAIRMAN CARTER: That's out of sequence. Okay.

131, Mr. Davis.

MR. DAVIS: Yes. SACE offers 131 into evidence.

CHAIRMAN CARTER: Are there any objections?

MR. ANDERSON: FPL asks that, with counsel's permission, perhaps we would put Page 9 of that exhibit into evidence. We're willing to do that on a public

basis.

MR. DAVIS: Since that's all we asked about, that's fine. And the cover sheet, too, I guess.

MR. ANDERSON: We'd be fine with that.

CHAIRMAN CARTER: Okay. So let's do that. Without objection, Exhibit 131 with the modification, there's the cover page and --

MR. DAVIS: Although I believe -- I'm sorry. I believe that Mr. Moyle has some questions about other pages.

MR. MOYLE: Yeah. If we could have the whole exhibit go in. I asked him questions on the confidential piece.

CHAIRMAN CARTER: No. No. You asked him on the, you asked him about some of the headings.

MR. MOYLE: No. I asked him on Page 31 --

CHAIRMAN CARTER: On Page 12, you asked him on Page 12.

MR. MOYLE: My copy says 31.

MS. HELTON: Mr. Chairman, I think Mr. Moyle did also ask some questions on Page 31 of the exhibit, what's in the left-hand corner of Page 31.

CHAIRMAN CARTER: I was trying to go in order.

MS. HELTON: Oh, I'm sorry.

CHAIRMAN CARTER: You did ask about Page 12;

right?

MR. DAVIS: Mr. Chair, if I could retract my agreement to just carve out the two pages and suggest that we do place the whole --

CHAIRMAN CARTER: I'm going to withhold admission on this. You guys get with staff during the break on it.

MR. ANDERSON: Yes, sir.

CHAIRMAN CARTER: Not entered at this point in time.

MR. DAVIS: And, Mr. Chair --

CHAIRMAN CARTER: 132.

MR. DAVIS: -- SACE would offer 132 into evidence.

CHAIRMAN CARTER: Are there any objections?

MR. ANDERSON: No.

CHAIRMAN CARTER: Without objection, show it done.

(Exhibit 132 admitted into the record.)

133.

MR. DAVIS: SACE offers 133 into evidence.

CHAIRMAN CARTER: Any objections?

MR. ANDERSON: No.

CHAIRMAN CARTER: Without objection, show it done.

(Exhibit 133 admitted into the record.)

134.

MR. DAVIS: SACE offers 134 into evidence.

CHAIRMAN CARTER: Are there any objections?

MR. ANDERSON: No.

CHAIRMAN CARTER: Without objection, show it done.

(Exhibit 134 admitted into the record.)

Okay. At the break I would suggest the parties get together with staff on this confidential Exhibit Number 131 and we'll deal with that when we come back.

Call your next witness. Thank you.

MR. ANDERSON: FPL calls Mr. Rajiv Kundalkar as its next witness.

CHAIRMAN CARTER: Okay. Commissioners, for planning purposes, and also to the parties, we're going to get back, we'll get back on our schedule where we do lunch from 1:00 to 2:15. I was hoping that we'd have, we would have done more than one witness by now. So we'll probably go tonight until at least 7:00, and we'll see where we are tomorrow and we'll probably go a little longer than that. So we've only got four days and we've got two cases and we're going to get it done.

Mr. Anderson.

MR. ANDERSON: Thank you.

RAJIV S. KUNDALKAR

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

DIRECT EXAMINATION

BY MR. ANDERSON:

Q. Good afternoon, Mr. Kundalkar.

A. Good afternoon.

Q. You've been sworn as a witness, sir?

A. Yes, sir.

Q. Please tell us your name and your business address.

A. My name is Rajiv S. Kundalkar. I'm employed with Florida Power & Light Company. My business address is 700 Universe Boulevard, Juno Beach, Florida.

Q. What's your position with the company?

A. I'm Vice President in the nuclear division responsible for organizational (phonetic) support.

Q. Have you prepared and caused to be filed 32 pages of prefiled direct testimony in this proceeding on March 3, 2009?

A. Yes, I have.

Q. And 24 pages of prefiled direct testimony on May 1, 2009?

A. Yes, I have.

Q. There have been some errata filed also?

A. That is correct.

Q. Other than the errata, do you have any other changes to your testimony?

A. Yes, I do have two changes. In my March testimony on Page 1, on Line 12, my new title is Vice President, Organizational Support. And on Line 15 some of my responsibilities are nuclear fleet licensing, nuclear fleet performance improvement and nuclear fuel procurement and core design.

Q. Any other changes?

A. I have a similar change in my March (sic.) testimony on Page 1, Line 12. And my title is Vice President, Organizational Support. Those are the only two changes --

CHAIRMAN CARTER: You mean in your May; is that right? You just did March, so you're into the May testimony now; correct?

THE WITNESS: Pardon me. The second change was in the May testimony on Page 1, Line 12, Vice President, Organizational Support.

BY MR. ANDERSON:

Q. If I asked you the same questions contained in your prefiled direct testimony, would your answers be

the same?

A. Yes, they would be.

MR. ANDERSON: FPL asks that the prefiled direct testimony be inserted into the record as though read.

CHAIRMAN CARTER: The prefiled testimony of the witness will be inserted into the record as though read.

BY MR. ANDERSON:

Q. You are sponsoring some exhibits?

A. Yes, I am.

Q. For March, this is RSK-1 to RSK-5; right?

A. That is correct.

Q. For May, it's RSK-1 to RSK-9; correct?

A. That is correct.

MR. ANDERSON: Mr. Chairman, I would note that these have been premarked as Exhibits 17 to 21 and 22 to 29 on staff's Comprehensive Exhibit List.

CHAIRMAN CARTER: For the record, show it done.

MR. ANDERSON: Thank you.

(Exhibits 17 through 29 marked for identification.)

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION FLORIDA

POWER & LIGHT COMPANY

DIRECT TESTIMONY OF RAJIV S. KUNDALKAR

DOCKET NO. 090009 -EI

MARCH 2, 2009

Q. Please state your name and business address.

A. My name is Rajiv S. Kundalkar, and my business address is 700 Universe Boulevard, Juno Beach, FL 33408.

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

A. I am employed with Florida Power & Light Company (FPL) as Vice President, ~~Nuclear Power Uprates~~ Organizational Support.

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

A. In my current role, I report directly to the Chief Nuclear Officer. I am responsible for the management and execution of the Nuclear Uprate Project and other capital projects, as well as Nuclear Fuel Procurement and Core Design, and the Spent Fuel Management Program, nuclear fleet licensing, nuclear fleet performance improvement and nuclear fuel procurement and core design.

Q. Please describe your educational background and professional experience.

A. I joined FPL in 1989 and have held positions of increasing responsibility within the nuclear division. From 1992 to February 1996, I was the Site Engineering Manager of the Turkey Point Nuclear Facility. From 1996 through January 2000, I was the Engineering Vice President for the Nuclear

Division. Between January 2000 and June 2001, I completed a rotational assignment as the Vice President of the St. Lucie Nuclear Power Plant. Subsequently I have also worked as Vice President of Nuclear Technical Services, responsible for FPL Nuclear Division's fleet responsibilities for engineering fuels and major capital projects. I also led FPL's license renewal team, which successfully extended the Turkey Point and St. Lucie operating licenses by 20 years.

In previous assignments, I was the Site Engineering Manager at Exelon's Dresden Nuclear Plant. Additionally, I have worked in engineering positions of increasing responsibility at Sequoyah Nuclear Power Plant and San Onofre Nuclear Power Plant while an employee of Bechtel Power Corporation.

I am a Registered Professional Engineer and a Certified Senior Reactor Operator at the Turkey Point nuclear power plant. I graduated from the Indian Institute of Technology in Bombay, India, earned a Master's Degree in Civil Engineering from the University of New Hampshire, and have completed coursework for a Doctor of Philosophy Degree in Civil Engineering from Northwestern University.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to present and explain key management decisions and uprate project activities that occurred in 2008, FPL's 2008

uprate construction expenditures, and the procedures, processes and controls which help ensure that those expenditures are the result of prudent decision making. My testimony also explains the careful engineering-based process employed by FPL to ensure that it is including only nuclear uprate costs that are "separate and apart" from other costs, such as those for base rate nuclear operations and maintenance or capital projects that are unrelated to the nuclear uprates. Additionally, I provide an update on FPL's use of competitive bidding and single and sole source contracts for the EPU projects.

Q. Please provide a brief overview of the status of the project.

A. The EPU projects are progressing on schedule and within budget, to deliver the substantial benefits of additional nuclear generating capacity to customers from FPL's existing St. Lucie Units 1 & 2 (PSL) and Turkey Point Units 3 & 4 (PTN) nuclear power plants, as planned by FPL and approved by the Commission. Several key activities occurred in 2008, including: (i) engineering evaluation and analyses in support of license amendment preparation for Nuclear Regulatory Commission (NRC) approval; (ii) the progress of activities related to the forging of two main generator rotors; (iii) the selection of vendors and execution of contracts for long lead procurement; (iv) the selection of the Engineering, Procurement; and Construction (EPC) vendor and execution of the EPC contract; and v) the finalization of project plans and procedures and continuation of project staffing. During this process, certain savings were achieved through

strategic, successful negotiations with vendors and by capitalizing on the effect of falling commodity prices. In total, FPL spent approximately $100 million in 2008 to carry out these key activities and otherwise proceeded with the development of the uprate projects, all of which were subject to the robust project planning, management, and cost control processes that FPL has in place and continuously works to improve. FPL's EPU activities and expenditures, as well as its internal processes and controls, are described in more detail below.

Q. Have you prepared, or caused to be prepared under your direction, supervision or control, an exhibit in this proceeding?

A. Yes. Exhibit RSK-1 consists of Appendix 1, containing schedules T-1 through T-10. Page 2 of Appendix 1 contains a table of contents listing the schedules that are sponsored by FPL Witness Powers and myself, respectively. Also attached hereto are Exhibits RSK-2 through RSK-5. Those schedules and exhibits are incorporated herein by reference.

PROJECT MANAGEMENT INTERNAL CONTROLS

Q. Please describe the EPU project management and organization.

A. As described below, FPL has robust project planning, management, and execution processes in place. Of equal importance is the fact that these efforts are spearheaded by personnel with significant experience in project management within the nuclear industry. FPL has a separate Uprate

Organization within the Nuclear Division, responsible for monitoring and managing the uprate project, schedule, and costs. Through the beginning of December 2008, the EPU Project Director and EPU Engineering Director shared oversight responsibility for both the PSL and PTN uprate projects. Both reported directly to me as Vice President of Nuclear Power Uprates. Separate PSL and PTN EPU Project Managers directed the uprate work at each plant site, and reported to the Uprate Project Director, while separate PSL and PTN Project Engineers reported to the EPU Engineering Director. Teams are located on-site to support the projects at each plant. This framework provided appropriate oversight through 2008. As would be expected, FPL thoughtfully considers and implements the appropriate project management structure for the various stages of the project. The organizational structure was modified in December 2008 as the projects entered a new stage of execution. The new 2009 management structure will be discussed in more detail in the testimony I provide in May for 2009 actual/estimated costs.

Q. Please describe the overall project planning process as applicable to the EPU projects.

A. As planned, FPL completed its "Level 1" project budget and schedule in 2008. The schedule identifies the procurement, receipt, and installation timing for each major piece of equipment as well as the planned completion timing of required engineering modifications, all of which are being tracked step-by-step through to their completion. As would be expected, the

current schedule includes a greater level of detail than the initial plan, with the details of additional activities being tracked in FPL's automated project schedule. In total, the project schedule includes approximately 150 EPU modifications for FPL's four nuclear units to be performed in two successive outages for each unit. The last outage for the last unit is scheduled to be completed in the fall of 2012. The licensing schedule for NRC approval is planned based upon when each unit will be in a ready condition to operate at the higher power level.

Q. What schedule and cost monitoring controls are currently in place?

A. FPL utilizes a variety of mutually reinforcing schedules and cost controls, used in an iterative fashion, and draws upon the expertise provided by employees within the project team, employees within the separate Nuclear Business Operations (NBO) group, and executive management. Within the Project Director's organization is a Project Controls Group. The Project Controls Manager records schedule changes, project delays, project costs, and supports project management and contract administration. FPL's efforts to meet the desired completion date of each uprate is being tracked through the use of Primavera P-6 scheduling software, enabling FPL to track the schedule daily and update the schedule weekly. This allows management to monitor and report on the schedule status. Updates to the schedule and scope of project work can be made as such changes are approved by management. FPL's use of this system allows management to examine the project status at any time as well as request the development

and generation of specialized reports. When FPL identifies a risk that a scheduled milestone date may be missed, a mitigation plan is prepared, reviewed, approved, and implemented with increased management attention to restore the scheduled milestone date or reduce any impact of missing the scheduled date. FPL also employs an Uprate Cost Engineer at each site to monitor and report project costs associated with the uprate projects. The Cost Engineer receives contractor invoices and forwards them to technical representatives to ensure the scope of work has been completed and the deliverables have been accepted. For fixed-price contracts, the Cost Engineer matches up the invoice amount and the deliverable work received from the subject matter expert, which is then sent to the appropriate personnel for approval and payment. Accruals and variance reports are prepared monthly for each of the sites to monitor and document expenditures and commitments to the approved budget.

NBO provides accounting and regulatory oversight for the EPU Project. This organization is independent of the EPU Project team and reports to the Nuclear Controller. NBO's primary responsibilities include:

- Review, approval, and recording of monthly accruals prepared by the Site Cost Engineers;
- Conducting monthly detail transaction reviews to ensure that internal labor costs recorded to the EPU Project are only for those FPL personnel authorized to charge time to the EPU Project;

- Creating monthly variance reports that include cost figures used in the EPU Monthly Operating Performance Report;
- Performing analyses of the costs being incurred by the project to ensure that those costs are appropriately allocated to the correct Capital Expenditure Requisitions established for each nuclear units' outages;
- Assisting in the classification of Property Retirement Units;
- Setup and maintenance of the EPU Project account coding structure;
- Providing accounting guidance and training to the EPU Team;
- Working closely with FPL's Accounting and Regulatory Departments to determine which costs related to the EPU Project are capital and which are O&M;
- Managing all internal and external audit requests and ensuring that findings and recommendations are dispositioned, as deemed necessary; and
- Providing oversight and guidance to the EPU Project Team in development and maintenance of accounting related project instructions to ensure compliance with corporate policies and procedures and Sarbanes Oxley processes.

Q. What other periodic reviews are conducted to ensure that the project and key decisions are appropriately analyzed and vetted?

A. Regularly scheduled meetings are held to help effectively manage the uprate project and communicate the performance of the project in terms of quality, schedule and costs. These include the following:

- Daily morning meetings to share information from each of the projects and to coordinate project activities;
- Weekly project management, project controls, and risk meetings to review the status of the schedule and of project costs, and to identify areas needing attention;
- Biweekly meetings with the Chief Nuclear Officer, Project Vice Presidents, Project Directors and Leads to review project progress and work through any identified risks to schedule or costs;
- Routine, usually monthly, FPL Executive Steering Committee meetings where project management presents the status of the project schedule and costs. Strategy discussions take place to help improve management of risk areas;
- Monthly Project Meetings involving FPL and individual major vendors during which the project schedules and challenges are discussed; and
- Quarterly Project Meetings involving FPL and its major vendors during which strategy discussions take place to help improve management of risk areas.

Additionally, the project is annually reviewed to assess its continued economic feasibility. This analysis is conducted in the same manner as the analysis that supported the affirmative need determination by the Commission, but it is updated to reflect what is currently known regarding project cost, project schedule, and the cost and viability of alternative generation technologies. The 2008 analysis determined that the uprates

project continued to present a significant economic advantage over other resource options in a majority of fuel and environmental compliance cost scenarios.

Q. Please describe the risk management process for the uprates project.

A. FPL's risk assessment process, in addition to the schedule and budget controls described above, is used to identify and control potential risks associated with the uprates. A Project Risk Committee, consisting of site project directors and subject matter experts reviews and evaluates initial cost and schedule projections and any significant variances. This committee enables senior managers to critically assess and discuss risks faced by the EPU projects from different departmental perspectives. The committee also ensures that actions are taken to manage or eliminate identified risks. Project risks have also been mitigated by contracting with experienced uprate contractors and hiring experienced uprate personnel and including the risk of potential licensing delays in its schedule preparation. An EPU Project Risk Management report is presented to senior management in bi-weekly and monthly meetings, identifying potential risks by site, unit, priority, probability, impact, economic cost, and the unit or persons responsible for mitigating or eliminating the risk. These steps ensure continuous, vigilant identification of and response to potential project risks that could cause schedule delay or increased costs.

PROCUREMENT PROCESSES

Q. Please describe the contractor selection and contractor management procedures that apply to the EPU projects.

A. The contractor selection procedures applicable to the uprate project are found in General Operating Procedure 705 and Nuclear Policy NP-1100, Procurement Control. As explained in those policies, the standard approach for the procurement of materials or services with a value in excess of $25,000 is to use competitive bidding. However, the use of single source, sole source, and Original Equipment Manufacturer providers is also necessary in certain situations. These policies require proper documentation of justifications and senior-level approval of single or sole source procurements. Over the course of 2008, and in response to considerations raised by the Commission in last year's NCRC proceedings, FPL identified opportunities to improve upon its performance and documentation of its procurement practices and began implementing enhanced measures late in 2008. During 2008, a majority of the equipment and work contracted out for the EPU project was competitively bid, as was expected to occur, as the project moved out of the feasibility and initial design stage and into the detailed design and major equipment and service procurement stage. These contracts are discussed in greater detail below.

With respect to contractor management, Senior Directors at each site assure vendor oversight is provided by the Site Project Manager, the Site Technical Representative, and Contract Coordinators. Together, these representatives provide management direction and coordinate vendor performance reviews while the vendors are on site. The Site Technical Representative verifies that the vendor has met all obligations and determines whether any outstanding deliverable issues exist using a Contract Compliance Matrix. In addition to assisting with the development and administration of contracts, Nuclear Sourcing and Integrated Supply Chain (ISC) groups complete weekly updates to a Project Contract Log and report the status of contracts to project management.

FPL structures its contracts and purchase orders to include specific scope, deliverables, completion dates, terms of payment, commercial terms and conditions, reports from the vendor, and work quality specifications. Fixed price or lump sum contracts are used where possible. In other cases, target price contracts are used to control costs and provide performance incentives. Subject to certain limitations, a "target price contract" is one in which a target price is agreed upon after some initial portion of the work has been performed. If the vendor completes the work for less than the target price, the vendor and FPL will split the difference between the target price and the actual cost such that both parties benefit from the cost savings achieved. If the actual cost of the modification exceeds the target price, the

vendor only gets half of the difference between the target and the overrun. These and other contract provisions help ensure that the contractors perform the right work at the right time for the right price.

Q. Are there additional measures that currently support prudent decision making?

A. Yes. The project team capitalizes on the experience and information that can be provided by other corporate divisions and affiliates, as well as industry-wide working groups. For example, other FPL divisions like Transmission & Distribution and Power Generation have participated as subject matter experts in technical specification development, bid reviews and vendor selection. With respect to affiliates, FPL can utilize lessons learned and compare contract terms, rates, and conditions with those executed for an affiliated nuclear power uprate project. Such comparisons provide further assurance that the contract terms are reasonable, especially in the case of single and sole source procurements. In some circumstances, FPL can also leverage corporate relationships with vendors in contract negotiation.

In addition, FPL project team members participate in Nuclear Industry working groups organized by Institute of Nuclear Plant Operators (INPO) and Nuclear Energy Institute (NEI) and benefit from lessons learned. This is supplemented with direct engagement with our industry peers through benchmarking trips to other nuclear sites which have performed similar

scopes of work to incorporate best practices. These sources helps ensure that project decisions are supported by the best information currently available.

Q. Are FPL's financial controls and management controls audited?

A. Yes. FPL is in the process of performing audits of 2008 project costs to ensure that costs are appropriately recorded. FPL has also engaged Concentric Energy Advisors to conduct a review and to report on compliance with the project management controls I have described above. These audits and management review reports will be provided for Commission review and inclusion in the record in this proceeding upon completion. Additionally, the Commission Staff audited FPL's financial and management controls in 2008, and determined that FPL's controls were adequate at that time.

2008 PROJECT SUMMARY

Q. What types of regulatory approvals were received or sought in 2008?

A. In addition to the Nuclear Cost Recovery submittals to the Commission, FPL sought approval of Site Certification Applications (SCAs) from the Florida Department of Environmental Protection (FDEP). The SCA for St. Lucie was submitted to the FDEP December 11, 2007, and the SCA for the Turkey Point Units was submitted January 14, 2008. The FDEP approval

orders were received for the St. Lucie Units and Turkey Point units on September 17, 2008, and October 29, 2008, respectively.

Q. What types of licensing or permitting activity took place in 2008?

A. The main licensing activity for both St. Lucie and Turkey Point was the engineering analyses and preparations for submittal of the License Amendment Request (LAR) to the NRC. There will be two LAR submittals for Turkey Point, for Alternate Source Term (AST) and for EPU. Two are required for St. Lucie (one for each unit), due to the differences in the units and fuel vendors. FPL plans to submit its LARs in the third quarter of 2009 for PSL. The LAR submittals for PTN are planned for the third and fourth quarters of 2009, for the AST and the EPU respectively.

Q. What key activities occurred in 2008 in execution of the uprate projects?

A. Several key activities occurred in 2008, including: (i) engineering evaluation and analyses in support of license amendment preparation for NRC approval; (ii) the progress of activities related to the forging of two main generator rotors; (iii) the selection of vendors and execution of contracts for long lead procurement; (iv) the selection of the EPC vendor and execution of the EPC contract; and (v) the finalization of project plans and procedures and continuation of project staffing.

With respect to major component forgings, Siemens – which is contracted to provide turbine generator equipment and components – completed the

forging of one of the Turkey Point main generator rotors. This rotor is being shipped to the Siemens facility in North Carolina from the Japan Steel Works foundry in Japan. The second main generator rotor forging began in September 2008. Exhibit RSK-2 consists of a picture of such a generator rotor, to give an idea of the size and nature of these major forgings. Regarding long lead procurement, the engineering analysis was completed for major equipment and components, leading to procurement of feedwater heaters, Moisture Separator Reheaters (MSR), main condensers, heat exchangers, and main Generator Step-Up (GSU) transformers. A picture of a feedwater heater, similar to the ones procured for the uprate projects, is attached as Exhibit RSK-3. Additionally, the EPC contract was competitively bid and awarded to Bechtel Power Corporation (Bechtel). Bechtel began staffing their project personnel at St. Lucie and Turkey Point in December 2008. The EPC contracting process is described in detail later in my testimony.

In 2008, FPL completed the development of its Extended Power Uprate Project Instructions (EPPI). These instructions provide desk top instructions and guidance for project personnel. The purpose of these instructions is to help ensure appropriate consistency in performance of EPU Project tasks. I have attached a copy of the EPPI Index to my testimony as Exhibit RSK-4, listing the various instructions that have been implemented. The Project Management Plan was also completed which

provides overall project information. In turn, each site has developed its own specific EPU Project Plan which provides information specific to the respective site. Additionally, task plans have been prepared for the first outage for each of the major activities or projects needed to implement the EPU Project. Finally, the project staffing continued to the point where the project has a staff of 136 personnel. This includes 52 people on site at St. Lucie and 53 people on site at Turkey Point.

Q. Please describe the long lead procurement activity that has taken place in more detail.

A. Contracts for the procurement of long lead equipment and components were competitively bid and awarded in 2008. The bidding and negotiation process for these major procurements was extensive, and ultimately yielded excellent terms for FPL and savings for FPL customers.

First, the engineering analysis for the equipment was completed, resulting in required design specifications for the proposed equipment. These design specifications were placed into the bid packages for each prospective vendor to prepare a proposal for manufacture and delivery within the project schedule. Requests for proposals (RFPs) initially were sent to vendors for each different type of equipment. Where appropriate, vendors were asked to provide "best and final" offers which were evaluated by the project team. Vendors were then asked if there would be additional savings if similar equipment needed at both sites, such as feedwater heaters, were awarded to a

single vendor. The response was that there would be additional savings if a single vendor was awarded a bundled contract for similar equipment. Again, where appropriate, "best and final" offers were solicited from the vendors for all of the various equipment needs, and those offers indicated that savings would be achieved by bundling contracts for similar components through a single vendor. This process provided the optimal benefit of competitively bidding similar types of equipment.

It is worth describing the bid evaluation process in some detail as well. After the bid specifications and requests for proposals were prepared, the technical and commercial evaluation criteria were developed. The technical evaluation included a direct comparison of the engineering specifications to each vendor's proposal, and an evaluation of the ability of each vendor to meet the project schedule and technical requirements. ISC personnel then communicated with the vendors to request additional information and obtain proposal clarifications. When all the technical evaluation information was compiled, the technical review team prepared a scoring matrix, scoring attributes against each vendor's proposal. A few of the attributes included in the scoring were performance, dimension/weight requirements, materials of construction, scope of work exceptions and deliverables, schedule/delivery/storage, and experience and history. The commercial evaluation included a comparison of the costs from each vendor for the equipment and services, any exceptions taken by the

vendors, and the completeness of each proposal. The commercial evaluation also included a corporate financial risk evaluation of each vendor to ensure they were financially sound and had the means to be successful if they won the bid award.

As described above, the competitive bid process, the technical and commercial evaluations, and extended negotiations resulted in a contract award to one vendor for a significant portion of the equipment, which provided excellent value to FPL and its customers. In addition to a reduced contract price for the equipment, FPL was able to lock in favorable costs for materials that existed in late 2008. FPL will also realize cost savings from managing only one vendor as opposed to several.

FPL's initial 2008 EPU project budget had anticipated a contract award for only a portion of the equipment and services ultimately procured through this process. The annual project budget was increased in 2008 to account for this advantageous contract award, while keeping the overall total project budget unchanged. The costs incurred during 2008 that relate to these procurements are reflected in the Power Block Engineering, Procurement, Etc. category discussed below.

Q. Please describe the execution of the EPC contract in more detail.

A. The contract for Modification Engineering, Procurement, and Construction (EPC) was competitively bid and awarded to Bechtel. The combined value

of the PSL and PTN contracts is expected to be approximately 25% of the total cost of the Uprate Project. It includes such services as design, engineering, licensing support, procurement and material handling, construction/implementation, project controls, quality assurance, quality control, radiation protection and safety. This contract award was the result of many months of RFP refinement and contract term negotiations to achieve the best terms for FPL's customers, which includes a very minimal mark-up on labor rates and incorporates performance-based incentives.

The FPL EPU Management team, which is made up of senior project managers each with 20 plus years of experience in managing large power plant projects, provided the expertise for assessing the capabilities of companies to perform the engineering for the plant equipment modifications, the procurement of some of the project materials and the construction portion where equipment will be removed, modified, or replaced to support the power uprate conditions for each facility.

Many weeks were spent developing the bid specifications and the method for performing the technical and commercial evaluations to ensure the greatest opportunity for success along with ensuring value for the cost of this procurement. Presentations were made to FPL executive management on the progress of the preparations of the specifications and potential vendors through the "best and final" negotiations and contract award. At

these meetings with executives, strategies were discussed and directions formulated for the best commercial and technical outcome.

In May of 2008, six major vendors were invited to submit proposals to meet the requirements of the RFP. One vendor declined to bid and another vendor removed itself from consideration early in the evaluation process. Each member of the team performed independent technical evaluations of the remaining vendor proposals. This was accomplished using a matrix where each attribute was numerically rated. The results of each team member's evaluation were then compiled. The results indicated that the remaining four vendors were technically qualified to perform the work.

The four vendors were presented with a risk template which was developed by the management team and questions specific to their proposals. This was completed in the July 2008 time frame. During August, the EPU management team met separately with each of the vendors to discuss and review their responses to the risk template and questions. Following these meetings each team member independently completed another evaluation and rescore of the vendors' proposals based on original and newly provided information. Concurrent with the technical evaluations, the commercial evaluations were completed by the ISC team. They evaluated Terms and Conditions (T&C), cost and the financial condition of each vendor. They

also prepared a numerical score for each of these categories for inclusion with the technical evaluation to provide an overall score for each vendor.

The weighted scores consisted of the technical evaluation, the commercial terms and conditions and costs. Using the results, two of the vendors were eliminated. Some reasons for eliminating these vendors included overall low score, unfavorable responses to terms and conditions, reliance on a third party, and historical performance issues experienced by FPL on other projects. The evaluation team recommended proceeding with negotiating the best possible overall solution with the remaining vendors. In September 2008, the two remaining vendors were told they were on the "short list" and were asked additional questions directed at specific issues in their respective proposals and were asked to provide their "best and final" offers. Bechtel was then determined to be the most favorable in terms of overall cost, contract terms and conditions and in meeting the project's technical issues.

Contract negotiations were completed and the contract was signed in November. Bechtel began project management and engineering personnel mobilization in December and will continue staffing in 2009. During outages, local labor will be used to support the craft work activities for the project. The costs incurred during 2008 that relate to this contract are

reflected in the Power Block Engineering, Procurement, etc. category discussed below.

Q. Please explain FPL's use of single or sole source contracts for the power uprate projects in 2008.

A. As described above, an overwhelming amount of work for the EPU projects was competitively bid in 2008. In excess of 90% of the total value of contracts entered into during 2008 was competitively bid, after accounting for contract costs associated with Original Equipment Manufacturers and nuclear fuel, which cannot be competitively bid. Where single or sole source procurements are used, Nuclear Policy NP-1100, Procurement Control, requires proper documentation of justifications and senior-level management approval of the procurement. FPL has continued to improve the process of documenting and approving single and sole source procurements, to ensure compliance with NP-1100 and to facilitate review by third parties who are not directly involved in the nuclear procurement process. These improvements were implemented beginning in late 2008, and will be discussed in the testimony that will be filed addressing 2009 actual/estimated costs.

2008 EPU COSTS – TRUE UP

Q. What type of costs did FPL incur for the uprate projects in 2008?

A. As demonstrated in Schedule T-6, costs were incurred in the following categories: License Application; Engineering and Design; Permitting; Project Management; Power Block Engineering, Procurement, Etc.; Non Power Block Engineering, Procurement, Etc.; and recoverable O&M. These costs were the direct result of the prudent project management and decision making described in detail above. Each category reflects some variance against what was originally estimated and budgeted, which is to be expected, particularly given the relatively early stage of the project. Nonetheless, based on all available information, the total project remains within budget.

Q. Please describe the costs incurred in the License Application category and the variance, if any, from the 2008 actual/estimated costs in this category.

A. License Application costs consists primarily of charges for FPL employee, consulting and contractor services rendered in support of preparing the NRC License Amendment Request (LAR). The LAR contains the nuclear fuels, mechanical, electrical, chemical and material engineering evaluations of the units for NRC review and approval of the uprated condition. This process for requesting and approving a change to a plant's power level is governed by the Code of Federal Regulations. FPL incurred $29.5 million

in this category in 2008, with a positive variance (underspend) of $4.5 million from the actual/estimated amount, primarily attributable to lower than expected Nuclear Steam Supply System (NSSS)/Fuel Engineering costs.

Q. Please describe the costs incurred in the Engineering and Design category and the variance if any from the actual/estimated costs in this category.

A. Engineering & Design services were provided by Westinghouse and Areva, and were related to NSSS and associated fuel and licensing design parameters. Additional Engineering & Design services were provided by Shaw Stone & Webster, and were related to BOP system design, which included specifications for components and equipment for procurement. Engineering services were also provided by Numerical Applications, Inc. and were related to the radiological analysis supporting the AST LAR. The Commission determined that FPL's decisions to enter into these contracts were prudent in last year's NCRC proceeding (Order No. PSC-08-0749-FOF-EI). FPL incurred $5.1 million in this category in 2008, which represents a positive variance of $2.6 million, primarily attributable to the fact that the ramp up of staff was behind the original projection.

Q. Please describe the costs incurred in the Permitting category and the variance, if any, from the actual/estimated costs in this category.

A. Permitting costs are primarily attributable to the State of Florida Site Certification Application Fee for the St. Lucie and Turkey Point sites,

consulting services related to environmental work for site certification and compliance certification, and FPL employee support. FPL incurred $1.1 in this category in 2008, representing a positive variance of $0.6 million. This underspend was primarily attributable to lower than expected cost to complete the certification work.

Q. Please describe the costs incurred in the Project Management category and the variance, if any, from the actual/estimated costs in this category.

A. Project Management costs relate to project oversight and contractor services in support of feasibility study activities, including but not limited to scope definition, cost estimates, contract negotiations and project execution. FPL incurred $12.2 million in this category in 2008. This results in a positive variance of $0.8 million, primarily attributable to the fact that the ramp up of staff was behind the original projection.

Q. Please describe the costs incurred in the Power Block Engineering, Procurement, Etc. category and the variance, if any, from the actual/estimated costs in this category.

A. The majority of Power Block costs are for Siemens services for forging of Low Pressure Turbines at St. Lucie (Units 1 & 2), forging of the Turbine Generator Rotor at Turkey Point (Unit 3), studies to evaluate which main generator modifications are required to support implementation of the EPU, the procurement of long lead equipment, and costs associated with the EPC

contract, as described above. FPL incurred $51.8 million in this category in 2008. This represents a negative variance of $29.3 million when compared to FPL's 2008 actual/estimated costs presented last year in this category. The majority of the variance is attributable to the one to two-month acceleration of the long lead procurement activity cash flow and the decision to award one bundled equipment contract as explained earlier in my testimony. This variance has no negative impact on the total budget for the EPU projects because it reflects an acceleration of an anticipated cost, not an increase in a particular cost. Moreover, the contract amount is lower than the total amount FPL would have paid for the same equipment and services pursuant to multiple, separate contracts. This procurement also took advantage of favorable material costs then existing and is expected to offer savings from managing fewer vendors, as described above.

Q. Please describe the costs incurred in the Non-Power Block Engineering, Procurement, Etc. category and the variance, if any, from the actual/estimated costs in this category.

A. Non-Power Block Engineering costs consist primarily of costs for facilities for engineering and project staff at site locations. FPL incurred $18,314 in this category in 2008. There was a nominal positive variance of $137,743 in this category. This savings was due to the fact that the project did not have to obtain additional facilities as previously planned.

Q. Please describe the costs incurred as Recoverable O&M.

A. The T-4 schedule presents the Recoverable O&M being submitted for 2008, in the amount of approximately $269,200. This represents a negative variance of approximately $269,200 from FPL's actual/estimated amount filed in Docket 080009-EI. At the time of that filing, the project budget and spending plans were in very early stages, and it was not clear that recoverable O&M would be incurred. Consistent with FPL's capitalization policy, the commodities that make up these expenditures consist of non-capitalizable computers and peripheral hardware, software, general store purchases and office supplies, and office fixtures needed for new project-bound hires, incremental staff, and augmented contract staff. The supplies are segregated for EPU Project personnel use only. One of the software products purchased was Adobe Acobat for project personnel use to electronically communicate with vendors and freely exchange information. Another is the Primavera P-6 scheduling software discussed above. This software was set up on an independent server. Security access is maintained to ensure only authorized project personnel can work on the scheduling of approximately 45,000 activities for the EPU Project. All of these expenses were reasonable and necessarily incurred in support the EPU Project.

"SEPARATE AND APART" CONSIDERATIONS

Q. Would any of the above costs that you described have been incurred if the FPL nuclear generating units were not being uprated?

A. No. The construction costs and associated carrying charges and recoverable O&M expenses for which FPL is requesting recovery through the NCRC process were caused only by activities necessary for the uprate projects, and would not have been incurred otherwise. I note that as explained in FPL Witness Powers's testimony and schedules, only carrying costs and recoverable O&M expenses are requested for recovery at this time for the EPU Projects, consistent with the Commission's NCRC rule and procedures.

Q. Please explain the processes utilized by FPL to ensure that only those costs necessary for the implementation of the uprates are included for NCRC purposes.

A. FPL conducted engineering analyses to identify major components that must be modified or replaced in order to enable the units to function properly and reliably in the uprated condition. A list of those components and an explanation of why each modification or replacement is necessary is attached to my testimony as Exhibit RSK-5. It is important to note, however, that as inspections and other engineering evaluations are performed, the need for additional modifications or replacements necessary for the uprate could be identified. Likewise, it could be determined that

certain components previously identified as necessary to the uprate project may be determined, upon physical and technical inspection, to be sufficient in their present condition. FPL expects that such final determinations with respect to each component will occur prior to the time that associated cost recovery is sought through the NCRC.

To provide a check on the activities identified by the engineering analysis, FPL conducted reviews of historical site planning documents to determine if any of the activities planned for the EPU Project were previously scheduled to be performed as regular maintenance. Those historical planning documents covered the time 2005 through 2009. As a result of this review, FPL determined that each of the activities that occurred in 2008 – and their associated costs – were "separate and apart" and properly included for NCRC purposes.

Finally, FPL considered whether any of the major component modifications or replacements was already required as a condition of receiving its NRC license renewals. FPL reviewed the "License Renewal Action Items" issued by the NRC and compiled by FPL in conjunction with the approval of FPL's requested license renewals. In doing so, it verified that none of the major component modifications or replacements identified by FPL as necessary for the EPU project was duplicative of the activities required by the NRC for license extension.

Q. Has FPL considered OPC's proposed approach for identifying "separate and apart" expenditures?

A. Yes. OPC's suggestion that FPL should perform a separate study to identify each component that may need to be replaced during the 20 years of each unit's extended license was considered. This approach however, is inherently inconsistent with the true manner in which nuclear plants are maintained – which requires constant and real-time monitoring, surveillance, and maintenance decisions – and it was determined that such a study would not yield meaningful or useful results. Such a predictive study is not required by the NRC for the license renewal for a nuclear plant. They rely on FPL's continued vigilance in performance monitoring and inspection and maintenance programs for early identification with appropriate actions to ensure each facility will operate as designed.

It is also important to note that, even assuming OPC's approach could be used and applied, and even if certain costs were identified as candidates for removal from clause recovery, the shift in accounting for those costs would offer no substantial economic advantage to FPL's customers. Such capital expenditures, if moved out of the clause, would simply be moved into Construction Work in Progress, where they would accrue AFUDC until the uprated units enter commercial operation. This would result in a higher total cost of plant ultimately placed into service. This concept is explained in greater detail in the testimony of FPL Witness Powers.

CONCLUSION

Q. Were FPL's 2008 EPU expenditures prudently incurred?

A. Yes. FPL incurred capital expenditures totaling approximately $100 million and recoverable O&M totaling approximately $269,200 in 2008. Approximately 8% of FPL's 2008 expenditures flow from decisions made and activities conducted in 2007 which were previously determined to be prudent by this Commission, while the remainder is attributable to decisions made based on available information and activities conducted in 2008. With respect to the expenditures attributable to new activities in 2008, those expenditures were either reasonably necessary to remain on schedule so that the uprate work can be performed during the identified planned outages or, in the case of certain long lead procurement items, were incurred to take advantage of cost savings opportunities. Through experienced personnel's application of the robust internal schedule and cost controls and use of the internal management processes, FPL is confident that its EPU management decisions are well-founded and prudent. All of the costs incurred in 2008 were the product of such decisions and should be approved.

Q. Does this conclude your direct testimony?

A. Yes.

BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

In re: Nuclear Power Plant)	DOCKET NO. 090009-EI
Cost Recovery Clause)	FILED: September 4, 2009

ERRATA SHEET

TESTIMONY OF RAJIV S. KUNDALKAR, MARCH 2, 2009

PAGE#	LINE #	COL	CHANGE
8	14	N/A	(3) to (4)

EXHIBIT RSK-1 (MAY)

PAGE#	LINE #	COL	CHANGE
22	33	N/A	Line 33 to Line 32
22	34	N/A	Line 34 to Line 33
67	8	E	$94,578,089 to $88,503,043
74	"Dollar Value"		N/A $94,578,089 to $88,503,043

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

DIRECT TESTIMONY OF RAJIV S. KUNDALKAR

DOCKET NO. 090009-EI

May 1, 2009

Q. Please state your name and business address.

A. My name is Rajiv S. Kundalkar, and my business address is 700 Universe Boulevard, Juno Beach, FL 33408.

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

A. I am employed with Florida Power & Light Company (FPL) as Vice President, ~~Nuclear Power Uprate~~ Organizational Support.

Q. Have you previously filed testimony in this docket?

A. Yes.

Q. Are you sponsoring any exhibits to this testimony?

A. Yes. Exhibit RSK-1 consists of Appendix 1, containing schedules AE-1 through AE-10, P-1 through P-10, and TOR-1 through TOR-8. Page 2 of Appendix 1 contains a table of contents listing the schedules that are sponsored by FPL witness Powers and myself, respectively. Also attached hereto are Exhibits RSK- 2 through RSK-8. Those schedules and exhibits are incorporated herein by reference.

Q. What is the purpose of your testimony?

A. My testimony presents and explains FPL's 2009 actual/estimated and 2010 projected costs for the Turkey Point and St. Lucie nuclear power plant

extended power uprate project ("the uprate" or "EPU"), to be included for recovery in FPL's Capacity Cost Recovery Clause for the period January 2010 through December 2010. Because the activities planned and expenditures budgeted for 2009 and for 2010 are so different from one another, the activities and expenditures for 2009 and those for 2010 are described separately below. My testimony also presents the True-up to Original (TOR) Projections for the uprate project for the years 2008 through 2010. Further, I will support the reasonableness of these actual/estimated and projected costs.

Q. Please summarize your testimony.

A. The EPU projects are progressing on schedule and within budget, to deliver the substantial benefits of additional nuclear generating capacity to customers from FPL's existing St. Lucie (PSL) Units 1 & 2 and Turkey Point (PTN) Units 3 & 4 nuclear power plants. As the engineering analyses and designs are finalized and construction plans are developed, FPL will optimize capacity output, outage durations and implementation resource requirements. Additionally, FPL is making adjustments to the organizational structure and certain internal processes to continue to ensure that prudent management decisions are made and expenditures are reasonable.

FPL plans to spend approximately $260 million in 2009 and approximately $375 million in 2010. FPL also plans to place certain systems associated with the project into service. The equipment in-service amounts for 2009 and 2010 are approximately $307 million. There are no changes at this time to the total

non-binding cost estimate provided in May 2008 in Docket 080009-EI. And, as demonstrated by FPL witness Sim, the uprate project continues to be cost-effective when compared to the addition of other generation alternatives. FPL's EPU activities and the reasonableness of its expenditures, as well as its internal processes and controls, are described in more detail below.

PROJECT STATUS

Q. Please provide an overview of the current status of the uprate project.

A. In 2009, FPL is in the final design phase and will begin the planning stage for implementation of the engineered modification packages. Additionally, FPL will prepare its License Amendment Requests (LARs) which are required to be submitted to and approved by the Nuclear Regulatory Commission (NRC). Certain equipment installations will also take place during outages in 2009 at St. Lucie and Turkey Point. Further, the Engineering, Construction, Procurement (EPC) vendor Bechtel has begun the process of performing constructability reviews by performing field walkdowns at each of the units for the needed equipment removal, modification or replacement.

Q. Please describe the systems associated with the uprate project that are being placed in service in 2009 and 2010.

A. FPL will place several systems associated with the Uprate Project into service during 2009 and 2010. Exhibit RSK-2 includes, among other items, the equipment being placed in-service during 2009 and 2010. Exhibit RSK-9

provides a more detailed description of those items being placed into service and why they are needed to support the EPU Project or the power uprate conditions.

PROJECT MANAGEMENT INTERNAL CONTROLS

Q. Please describe the project management internal controls that FPL has in place to ensure that the project is effectively managed.

A. As described in detail in my March 2, 2009 testimony, FPL has robust project planning, management, and execution processes in place. FPL utilizes a variety of mutually reinforcing schedules and cost controls, and draws upon the expertise provided by employees within the project team, employees within the separate Nuclear Business Operations (NBO) group, and executive management. The project team has developed a set of guidance documents and instructions specifically for the EPU project. Additionally, periodic presentations are made to executive management on the state of the project where risks, costs, and schedules are discussed.

Q. Have there been any changes in the project management system FPL is using to ensure that the 2009 actual/estimated and 2010 projected costs are reasonable?

A. Yes. Consistent with the project environment of continuous self-examination and improvement, certain adjustments have been made to the project management system and specific internal controls. Those adjustments are

reflected in (i) a revised organizational structure for the project team; (ii) additional emphasis on the single and sole source justification documentation requirements; and (iii) integration of NBO specialists at the project sites.

Q. Please describe the changes to the organizational structure.

A. Through the beginning of December 2008, the EPU Project Director and EPU Engineering Director shared oversight responsibility for both the PSL and PTN uprate projects. Both reported directly to me as Vice President of Nuclear Power Uprates. Separate PSL and PTN EPU Project Managers directed the uprate work at each plant site, and reported to the EPU Project Director, while separate PSL and PTN Project Engineers reported to the EPU Engineering Director. This framework provided appropriate oversight during this phase through 2008.

As would be expected, FPL thoughtfully considers and implements the appropriate project management structure for the various phases of the project. The organizational structure was modified in December 2008 as the project entered a new phase of execution. The 2009 management structure places senior FPL Directors experienced in project management at each site to provide an appropriate level of oversight during the modification engineering and implementation phases dedicated to the individual plant sites. These senior FPL Directors employ management resources efficiently to manage the project and minimize or mitigate identified issues and associated risks

applicable to the PSL or PTN sites. They engage the necessary level of existing plant management to accomplish project goals and objectives.

The engineering efforts are now being led by FPL Engineering Directors, one for licensing activities and one for modifications. Each of these directors has a direct report engineering manager at each site. Providing director level leadership for the engineering areas of licensing and modifications provides for early identification of issues and associated risks where appropriate levels of management can be engaged to minimize or mitigate any impact to the project schedule or cost.

FPL has also added to the organization a senior FPL Director, Operations Interface. This senior level position has responsibility for development and implementation of the start up test program in collaboration with the plant operations group. Responsibilities include operations training and simulator modifications. With the many modifications required on each unit and the increase in power to the uprate conditions, coordination with the operating staff of the units with efficient management and excellent execution is a requirement. The majority of the modifications are scheduled for implementation during refueling outages. In preparation for post-outage operation, operators require training and completed modifications need to be tested to ensure the equipment operates as designed.

Q. Please describe the improvements related to single and sole source justification documentation.

A. Several improvements have been made to the Single and Sole Source Justification (SSJ) documentation process. Responsibility for the adequacy of SSJ documentation has been consolidated into one position. Training has been provided to existing personnel responsible for having SSJs prepared, to help ensure compliance with Nuclear Policy NP-1100 and to assist with the review and understanding of SSJ documentation by a third party. The SSJ expectations have also been included in appropriate project instructions, and all new applicable personnel assigned to the EPU Project are required to review the SSJ expectations.

Q. Please describe the integration of a NBO analyst at each project site.

A. The NBO organization, as described in my March 2, 2009 testimony, provides independent oversight of the project costs, establishes and maintains project accounting code structure, and reviews and prepares monthly cost reports. In furtherance of this role, NBO has created two analyst positions, one for each site, to perform these functions at the project locations. These analysts report directly to a NBO manager located in the Juno Beach offices. Integration of the NBO organization in this manner will enhance the first-hand knowledge of the analyst personnel and enable them to perform their oversight function more efficiently.

Q. Are any internal audit activities are underway?

A. Yes. The standard annual financial audits of the EPU project is currently being conducted, which provides a review of project expenditures. FPL anticipates that the internal audit of 2008 costs will be completed this summer.

2009 ACTUAL/ESTIMATED CONSTRUCTION ACTIVITIES AND COSTS

Q. Please summarize the construction activity planned for 2009.

A. In 2009, FPL will be in the final design and planning stage for implementation of the engineered modification packages for outages scheduled for 2010. Additionally, FPL will continue preparation of its LARs for submittal to the NRC. Certain equipment installations will also take place during outages at Turkey Point and one item will be transferred to plant in service. Specifically, the primary activities to be accomplished in 2009 are as follows:

- Complete the engineering analyses, prepare the four (3) LARs (one for PSL1, one for PSL2, and two for PTN 3&4), and submit the PSL1 LAR to the NRC in the 4th quarter of 2009;
- Quality monitoring of the components that will be fabricated and manufactured;
- Install turbine testing pressure taps needed to furnish design information for the new turbine rotors during the PTN3 outage (March 2009) and during the PTN4 outage (October 2009);
- Complete and place into service the PSL2 Gantry Crane modifications needed to support the EPU project;

- Perform minor construction and conduct field walkdowns for engineering modification packages; and
- Prepare engineering modification packages to support the PSL1 April 2010 outage, PSL2 November 2010 outage, PTN3 September 2010 outage and the PTN4 March 2011 outage. The modifications to be implemented during the respective outages are listed on Exhibit RSK-2.

Q. Please describe how FPL developed its 2009 Actual/Estimated costs.

A. The actual costs were determined from January through March 2009 using the vendor invoices that have been paid or accrued. The estimated costs for the remainder of 2009 were developed using actuals for engineering and project management and forecasting them through the end of the year 2009 and adding long lead material milestone or scheduled payments and any planned procurements.

Q. What types of costs does FPL plan to incur for the Uprate Project in 2009?

A. Schedule AE-6 of Appendix 1 breaks the 2009 actual/estimated costs down into the following categories: License Application $58,997,472; Engineering and Design $10,665,567; Permitting $102,430; Project Management $20,247,828; Power Block Engineering, Procurement, etc. $167,795,201; and Non-power Block Engineering, Procurement, etc. $90,150.

Q. Please describe the activities in the License Application category.

A. For the period ending December 31, 2009, License Application costs are estimated to be $58,997,472 as shown on Line 3 of Schedule AE-6 of

Appendix 1. These license application costs consist primarily of payments to vendors for the preparation of four NRC LARs, one for PSL1, one for PSL2, and two for PTN 3&4 (Alternate Source Term LAR and Extended Power Uprate LAR). These are scheduled for submittal by the 4th quarter of 2009, 1st quarter of 2010 and 2nd quarter of 2010 respectively. Evaluation of the license application process has resulted in FPL adjusting its internal milestones for the PSL2 and PTN submittal dates. FPL has moved its planned PSL2 LAR submittal date from the 4th quarter of 2009 to the 1st quarter of 2010, to enable more efficient utilization of Westinghouse, Shaw, and internal resources in 2009 without impacting cost or the project implementation schedule. Additionally, recent NRC feedback based on a newly implemented NRC process is resulting in a schedule adjustment for the submittal of the PTN EPU LAR, moving its planned submittal from the 4th quarter 2009 to the 2nd quarter of 2010, because it now must follow NRC approval of the PTN Alternate Source Term LAR. In 2009, the PTN LAR engineering and analysis work will be completed and the PTN LAR will be prepared, as previously planned. These adjustments do not impact the overall project implementation schedule or costs.

Q. Please describe the activities in the Engineering and Design category.

A. For the period ending December 31, 2009, Engineering & Design costs are estimated to be $10,665,567 as shown on Line 4 of Schedule AE-6 of Appendix 1. The amounts consist primarily of FPL's engineering and design

work in support of the NRC LARs and review and approval of the engineered modification packages prepared for the PSL and PTN sites.

Q. Please describe the activities in the Permitting category.

A. For the period ending December 31, 2009, Permitting costs are estimated to be $102,430 as shown on Line 5 of Schedule AE-6 of Appendix 1. These amounts consist primarily of the Conditions of Certification (CoC) requirements resulting from the Site Certification Application approval for PSL and PTN. For the Turkey Point units, this requires FPL, the South Florida Water Management District (SFWMD), Miami Dade County, and the Florida Department of Environmental Protection (FDEP) to have an agreed-upon plan for the conditions of certification. Activity required for the St. Lucie units is anticipated to be minimal.

Q. Please describe the activities in the Project Management category and how those activities to help ensure that the Uprate Project is completed on a reasonable schedule and at a reasonable cost.

A. For the period ending December 31, 2009, Project Management costs are estimated to be $20,247,828 as shown on Line 6 of Schedule AE-6 of Appendix 1. This category includes the FPL and contractor management personnel at each of the sites and those in the Jupiter West and Juno Beach Offices. These personnel are required to ensure the uprate project is managed in an efficient and cost-effective manner.

Q. Please describe the activities in the Power Block Engineering, Procurement etc. category.

A. For the period ending December 31, 2009, Power Block Engineering and Procurement costs are estimated to be $167,795,201 as shown on Line 9 of Schedule AE-6 of Appendix 1. This amount consists primarily of engineering design packages for the implementation of scheduled work shown on Exhibit RSK-2. This work includes preparation of the modification packages which provides comprehensive direction for the removal, replacement and/or modification of components, equipment, systems or structures as needed to support the uprate condition and performing field walkdowns by FPL's EPC vendor.

Some needed modifications can be performed when the units are operating, reducing outage duration times. FPL is evaluating the risk to the continued operation of the unit and if determined to be an acceptable risk, the modifications will be performed. Two such modifications are those to the PSL 1 and 2 Gantry Cranes. The needed modifications to these cranes will be performed while the respective units are operating. PSL2 gantry crane modifications will be completed in 2009 and PSL 1 in 2010. The in-service dates for these cranes will be when they are completed in the respective years.

Procurement costs include the purchase of long lead equipment items and progress payments to manufacturing vendors. FPL plans to purchase feedwater pumps and motors, condensate pump motor rewinds, and isolated phase bus duct systems for the PSL uprates. For PTN, FPL plans to purchase

feed pumps and motors, condensate pumps and motors, the spent fuel cooling system, turbine plant closed cooling water heater exchangers, and various system valves. Progress payments will be made for other components, such as main turbine and generator components, feedwater heaters, moisture separators reheaters, and flow measurement devices for both PSL and PTN, and main condensers for PTN. Exhibit RSK-3 shows the Leading Edge Flow Measurement (LEFM), also referred to an Ultrasonic Flow Measurement System (UFM), which will be installed in PSL1. Exhibit RSK-4 shows the hydrostatic test being performed on the UFM, which was witnessed by FPL Quality Assurance.

Additionally, engineering, permitting and construction of a fabrication and warehouse facility that will be located in the protected area of the Turkey Point Site will begin in 2009 and finish in 2010. The fabrication area will be used to pre-fabricate piping and valves that are needed to complete modifications in the PTN Units 3 and 4. Pre-fabrication of piping and valves reduces the outage time because work can be performed prior to the outage as well as in parallel instead of in series with field activities during the outage. The warehouse will be used to store delivered materials for the EPU project prior to installation and to provide an area for the training and qualification of craft labor which will include pipe fitting and welding. This is necessary to ensure PTN has the needed qualified craft labor support to perform the many tasks needed to remove, install or modify plant equipment. As an example,

there are several hundred small and large bore piping welds that are necessary for the installation of just one set of the many feedwater heaters that will be replaced during the project. It is necessary to qualify welders to ensure the quality of the welding. Additionally, some of the small bore piping can be prefabricated in the shop area which will improve component installation efficiency and outage durations.

Q. Please describe the activities in the Non-Power Block Engineering, Procurement etc. category.

A. For the period ending December 31, 2009, Non-Power Block Engineering costs are estimated to be $90,150 as shown on Line 10 of Schedule AE-6 of Appendix 1. This amount is required primarily for training and simulator modifications.

Q. Please describe the activities in the Transmission category.

A. For the period ending December 31, 2009, Transmission costs are estimated to be $1,028,124 as shown on Line 33 of Schedule AE-6 of Appendix 1. This amount is required primarily for the following:

PTN 3 and 4: FPL must begin installing phase conductor spacers on the Unit 3 and Unit 4 string busses and upgrade the Over Head Ground Wire (OHGW) between the 230 kV system switchyard and each Generator Step Up (GSU) transformer. This is being done during unit outages in 2009 in order to reduce the amount of time that transmission construction equipment competes for

limited space with plant construction equipment in the power block areas during the subsequent unit outages.

PSL Units 1 and 2: FPL must install phase conductor spacers on the St. Lucie – Midway #2 230 kV line. This requires clearances which will be obtained during the Spring 2009 PSL Unit 2 outage. Doing so will facilitate the ability to obtain transmission line and substation equipment clearances during the scheduled 2010, 2011, and 2012 unit outages to meet the required completion dates for the increase of the PSL Units 1 and 2 ratings. Additionally, a transformer thermal loading design study for the spare GSU transformer at the St. Lucie Nuclear Plant is being conducted to determine the requirements to increase the GSU transformer's rating. Each of these items (except the thermal loading design study) will be transferred to plant in service in 2010.

Q. Please describe the 2009 actual/estimated recoverable O&M costs.

A. Actual/Estimated recoverable O&M costs for the EPU project in 2009 total $568,000. Projected recoverable O&M consists of purchased software which is classified as O&M expense in accordance with FPL Accounting Guidelines, and purchased computer hardware and office furniture/ equipment that does not meet the criteria for capitalization under FPL Accounting Guidelines.

Q. Are the 2009 actual/estimated costs presented in your testimony reasonable and "separate and apart" from other nuclear plant expenditures?

A. Yes, the 2009 actual/estimated costs presented are reasonable and "separate and apart" from other nuclear plant expenditures. With respect to the LAR work, the project team continues to monitor very closely the nuclear design vendors, the tasks they are assigned, the quality of the product they produce and the costs associated with producing the necessary reports for the NRC LARs. FPL is also closely monitoring the progress of, and payments made to, the major Original Equipment Manufacturer (OEM), Siemens. Siemens was contracted to engineer and design the High Pressure and Low Pressure main turbines for the St. Lucie units, the High Pressure main turbines for the Turkey Point Units, and the main generator rotors and the rewinding of the main generator stators for all units. This vendor is on schedule for the manufacture of these large long lead components. This contract was entered into and approved as reasonable in 2008.

FPL's extensive use of competitive bidding also supports the reasonableness of its expenditures. The majority of major equipment procurements (other than the OEM contract described above) were competitively bid and awarded to Thermal Engineering International, Incorporated. This work includes engineering and manufacture of the moisture separators and feedwater heaters for all units and the main condensers for Turkey Point. The EPC vendor contract was also competitively bid and awarded to the Bechtel Corporation. This vendor began mobilizing its management and engineering staff at both sites and at Jupiter West in December 2008. They have begun the process of

construction walkdowns, planning and developing an implementation schedule for the modification packages that will be used to remove, install or modify the structures, systems or components that are needed for the power uprate. In sum, careful vendor oversight, use of competitive bidding when appropriate, and the application of the robust internal schedule and cost controls and internal management processes, all demonstrate that FPL's actual/estimated 2009 expenditures are reasonable.

Additionally, the construction costs and associated carrying charges and recoverable O&M expenses for which FPL is requesting recovery through this proceeding were caused only by activities necessary for the uprate projects, and would not have been incurred otherwise. As explained in my testimony submitted in this docket on March 2, 2009, FPL's identification of the major components that must be modified or replaced to enable the units to function properly and reliably in the uprated condition is based on engineering analyses. A review of historical site planning documents and the License Renewal Action Items compiled in conjunction with the NRC's approval of FPL's requested license renewals confirmed that the uprate costs were "separate and apart" from other planned nuclear activities and expenditures.

2010 PROJECTED CONSTRUCTION ACTIVITY AND COSTS

Q. Please summarize the construction activity projected for 2010.

A. In 2010, implementation of the engineered modification packages will begin. Specifically, the primary activities projected for 2010 are as follows:

- Implement the EPU modifications for St. Lucie Unit 1 during the April 2010 outage, for St. Lucie Unit 2 during the November 2010 outage, and for Turkey Point Unit 3 during the September 2010 outage. The current schedule of modifications to be implemented during the respective outages are listed on Exhibit RSK-2;
- Complete and place into service systems (as identified on RSK-9) needed to support the EPU project;
- Prepare engineering modification packages to support the St. Lucie Unit 1 October 2011 outage and Turkey Point Unit 4 March 2011 outage.

Q. Please describe how FPL developed its 2010 Projected costs.

A. The 2010 projected costs were developed from the vendor contracts that have scheduled payments and estimates for the modification package engineering and implementation being performed by the EPC vendor for the outages that are scheduled for 2010 and beyond.

Q. What types of costs does FPL project to incur for the Uprate Project in 2010?

A. Schedule P-6 of Appendix 1 breaks the 2010 projected costs down into the following categories: License Application $13,997,070; Engineering and

Design $12,356,079; Permitting $0; Project Management $36,286,869; and Power Block Engineering, Procurement, etc. $308,782,995.

Q. Please describe the activities in the License Application category.

A. For the period ending December 31, 2010, License Application costs are projected to be $13,997,070 as shown on Line 3 of Schedule P-6 of Appendix 1. These amounts consist primarily of vendor payments necessary for responding to NRC Requests for Additional Information (RAIs) on the LAR submittals made to the NRC.

Q. Please describe the activities in the Engineering and Design category.

A. For the period ending December 31, 2010, Engineering & Design costs are projected to be $12,356,070 as shown on Line 4 of Schedule P-6 of Appendix 1. The amounts consist primarily of FPL engineering activities in support of responding to NRC RAIs on the LAR submittal and the review and approval of engineered modification packages.

Q. Please describe the activities in the Project Management category and how those activities to help ensure that the Uprate Project is completed on a reasonable schedule and at a reasonable cost.

A. For the period ending December 31, 2010, Project Management costs are projected to be $36,286,869 as shown on Line 6 of Schedule P-6 of Appendix 1. This category includes the project management costs associated with the oversight and management of the EPU engineering of modification packages, implementation of modifications for the planned outages occurring in 2010 and the future outages in 2011 and 2012, and implementation of the

Conditions of Certification as a result of the Site Certification Application approval at Turkey Point. These personnel are required to ensure the uprate project is managed in an efficient and cost-effective manner.

Q. Please describe the 2010 activities in the Power Block Engineering, Procurement etc. category.

A. For the period ending December 31, 2010, Power Block Engineering and Procurement costs are projected to be $308,782,995 as shown on Line 9 of Schedule P-6 of Appendix 1. This amount consists of milestone payments made to manufacturers of long lead materials and payments made to the EPC vendor for the vast work associated with the implementation of the engineered modification packages in the 2010 outages and for the preparation of engineering modification packages for planned outage implementation in 2011 and 2012. Attached to my testimony as exhibits are pictures of examples of some of the large components that have to be replaced. Exhibit RSK-5 is a picture of a High Pressure (HP) Turbine being removed and Exhibit RSK-6 shows the new HP Turbine rotor being installed. This installation will take place at PSL Unit 2 in 2010. One can see the tight tolerances and the need for control of these large, heavy components. Exhibit RSK-7 shows the early stages of the removal of a Moisture Separator Reheater (MSR) tube sheet, which was removed onto temporary rollers to facilitate the removal, and Exhibit RSK-8 is a picture of the MSR tube sheet that will be installed into the shell of the MSR shown in Exhibit RSK-7.

Q. Please describe the 2010 activities in the Transmission category.

A. For the period ending December 31, 2010, Transmission costs are projected to be $20,191,235 as shown on Line 33 of Schedule P-6 of Appendix 1. This amount is required primarily for the following:

PTN Units 3 and 4: FPL must upgrade eight disconnect switches, which requires clearances only available during a fossil or nuclear unit outage, and is scheduled during the Fall 2010 PTN Unit 3 outage and the 2010 Turkey Point fossil unit outage. Additionally, the installation of 5 ohm series phase inductors with shunt capacitors must begin in 2010 in order to meet the schedule to be in service by the end of the Spring 2011 PTN Unit 4 outage. Finally, relay panels are to be installed at Flagami Substation and the upgrade of the OHGW between the 230 kV system switchyard and each GSU transformer will be completed during the Fall 2010 PTN 3 outage. Each of these items, except the eight upgraded disconnect switches, are planned to be transferred to plant in service in 2010.

PSL Units 1 and 2: FPL must perform work that requires line clearances which can only be obtained when at least one PSL unit is off line. This includes: (i) the installation of phase conductor spacers on the St. Lucie – Midway #1 & #3 230kV lines; (ii) the installation of fiber optic OHGW on the St. Lucie – Midway #2 & #3 230kV lines; (iii) the installation of 18 new 3000 amp switches in the St. Lucie 230kV Switchyard along with associated connectors and installation of fiber optic relay panels; (iv) the installation of

11 new 3000 amp switches in the Midway 230kV Switchyard along with associated connectors and installation of fiber optic relay panels. All this work will be coordinated and is scheduled for the Spring 2010 outage on PSL Unit 1 and the Fall 2010 outage on PSL Unit 2. FPL must also upgrade the coolers and low side bushings of the existing PSL Unit #1B GSU transformer, after it has been removed during the Spring 2010 PSL Unit 1 outage, in order for it to become the new PSL spare GSU transformer for the uprated units. Each of these items are planned to be transferred to plant in service in 2010.

Q. Please describe the 2010 projected recoverable O&M costs.

A. Projected recoverable O&M costs consist of the items described for 2009 plus two additional items. First, the Nuclear amount of $2,059,376 shown on Line 13 of Schedule P-4 of Appendix I includes an estimate of write-offs of inventory that will be rendered obsolete by the EPU modifications implemented in 2010. Second, transmission O&M recoverable costs are estimated to be $150,000 as shown on Line 14 of Schedule P-4 of Appendix 1. This amount consists of work to uprate non-capital facilities within the St. Lucie and Midway switchyards associated with increasing the amperage ratings of the switchyards to 3000 amps. These activities are classified as O&M expense in accordance with FPL Accounting Guidelines.

Q. Are the 2010 cost projections presented in your testimony reasonable and "separate and apart" from other nuclear plant expenditures?

A. Yes, The 2010 costs projections presented are reasonable and "separate and apart" from other nuclear plant expenditures. In 2010, approximately half of

FPL's expenditures are projected to represent payments on the competitively bid EPC contract and payments for the competitively bid procurement of long lead items. The reasonableness of such costs is strongly supported by the competitive bidding process. With continued diligence and attention to detail in the budgeting process, and through experienced personnel's application of the robust internal schedule and cost controls and use of internal management processes, FPL is confident that its projected 2010 expenditures are reasonable.

Additionally, the projected construction costs and associated carrying charges and recoverable O&M expenses for which FPL is requesting recovery through this proceeding are only for activities that are necessary for the uprate projects, and would not have been incurred otherwise. As explained in my testimony submitted in this docket on March 2, 2009, FPL's identification of the major components that must be modified or replaced to enable the units to function properly and reliably in the uprated condition is based on engineering analyses. A review of historical site planning documents and the License Renewal Action Items compiled in conjunction with the NRC's approval of FPL's requested license renewals confirmed that the uprate costs were "separate and apart" from other planned nuclear activities and expenditures.

TRUE-UP TO ORIGINAL PROJECT COST AND LONG-TERM FEASIBILITY

Q. Have you prepared an update to the original uprate project costs?

A. Yes. Appendix 1 includes the TOR schedules that compare the current projections to FPL's originally filed St. Lucie and Turkey Point Project costs. The TOR schedules provide information on the project costs through the end of 2010. At this time, FPL has not identified any need to revise the total non-binding cost estimate provided last May in Docket 080009-EI. As would be expected, the Company continues to evaluate the costs associated with this project. As activities such as final engineering analyses and design, associated NRC requirements and reviews, and construction planning are more clearly defined, the Company will make any necessary revisions to the original cost estimate. The TOR schedules provide the best information currently available for the cost recovery period through 2010.

Q. What are the most current EPU economic analysis results?

A. As discussed by FPL witness Sim, the most current feasibility analysis affirms the cost effectiveness and benefits associated with the uprate project, using the same approach applied in the Need Determination proceeding for the project. The nuclear uprates project is still projected to be a cost-effective generation addition for FPL's customers.

Q. Does this conclude your testimony?

A. Yes.

BY MR. ANDERSON:

Q. You've prepared a summary?

A. Yes, I have.

Q. Please provide your summary to the Commission.

A. Thank you. And good afternoon, Chairman Carter, Commissioners. My testimony describes how FPL's team is safely and cost-effectively implementing power uprates at St. Lucie and Turkey Point power plants. When completed, the uprates will provide Florida's customers with more than 400 megawatts of additional clean and zero emission energy without expanding the footprint of these power plants.

As planned, FPL's 2008 work focused on nuclear engineering analyses and design supporting these uprates at the nuclear units. This work was performed in 2008 in order for FPL to meet its schedules for the required submission (phonetic) of the Nuclear Regulatory Commission, NRC, and to prepare the designs of equipment upgrades for the upcoming planned outages.

Much of FPL's 2008 actual costs of approximately $100 million were incurred for competitive procurement of goods, services and long, long-lead equipment from well qualified vendors at reasonable costs. Some of the examples of these are shown in pictures behind me. They show pictures of a high

pressure turbine rotor and a moisture separator reheater, some of the types of components we would be changing in our power plants. The pictures also list the scope and magnitude of the equipment being changed out in our power plants.

All of the 2008 uprate work as well as the actual and estimated costs for the '09 and 2010 projected costs and the planning that was performed used FPL's well established and highly effective project management processes. These are made up of nuclear policies and procedures that govern our day-to-day business. The effectiveness of these processes has been demonstrated through successful completion of a number of major projects at our, at our nuclear power plants.

In short, FPL is implementing the appropriate project scope in the required sequence using the right resources to meet the project goals of generating approximately greater than 400 megawatts of clean, reliable electricity by year 2012 for the benefit of Florida's customers. And this concludes my summary, Chairman Carter.

CHAIRMAN CARTER: Thank you.

Mr. McGlothlin.

MR. McGLOTHLIN: I'll have some questions when the witness returns for rebuttal. I have no questions

right now.

CHAIRMAN CARTER: Okay. Mr. Jacobs.

MR. JACOBS: Mr. Chairman, no questions from SACE at this time.

CHAIRMAN CARTER: Mr. Moyle.

MR. MOYLE: No questions.

CHAIRMAN CARTER: Staff.

MR. YOUNG: No questions.

CHAIRMAN CARTER: Commissioners? Commissioner Skop, you're recognized.

COMMISSIONER SKOP: Just a quick question. Even with my glasses -- my eyes must not be working too well -- but what does the one exhibit on the far left represent? I can't even read that title from here.

THE WITNESS: The exhibit on the far left shows the new moisture separator reheater, the two bundle (phonetic) portion of the moisture separator reheater. And there will be a larger enclosure in which this moisture -- the two bundle will be inserted. This is one of the components on the secondary side of the plant so that the turbine cycle operates more efficiently.

COMMISSIONER SKOP: Okay. Thank you.

CHAIRMAN CARTER: Anything further from the bench. I assume there's no redirect.

MR. ANDERSON: That's correct. That's correct. We'd offer the exhibits.

CHAIRMAN CARTER: Exhibits?

MR. ANDERSON: We offer 17 to 21 and 22 to 29.

CHAIRMAN CARTER: Are there any objections? Without objection, show it done.

(Exhibits 17 through 29 admitted into the record.)

Call your next witness.

MS. CANO: FPL calls Dr. Steven Sim.

CHAIRMAN CARTER: Steven Sim.

STEVEN R. SIM

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

DIRECT EXAMINATION

BY MS. CANO:

Q. Good afternoon, Dr. Sim.

A. Good afternoon.

Q. Have you been sworn?

A. Yes, I have.

Q. Would you please state your name and business address for the record?

A. My name is Steve Sim. I work at 9250 West Flagler Street, Miami, Florida Power & Light.

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

A. By Florida Power & Light as a Senior Manager in Integrated Resource Planning.

Q. Did you prepare and cause to be filed on May 1st 15 pages of prefiled direct testimony in this proceeding?

A. Yes, I did.

Q. And did you also prepare and cause to be filed an errata to your direct testimony?

A. Yes.

Q. Do you have any other changes or revisions to make to your testimony?

A. No, I do not.

Q. With the errata, if I were to ask you the same questions contained in your prefiled direct testimony today, would your answers be the same?

A. Yes, they would.

MS. CANO: Chairman Carter, I ask that the prefiled direct testimony of Dr. Sim be inserted into the record as though read.

CHAIRMAN CARTER: The prefiled testimony of the witness will be inserted into the record as though read.

BY MS. CANO:

Q. Are you also sponsoring exhibits to your

testimony?

A. Yes, I am.

Q. And do those consist of SRS-1 to SRS-5?

A. Yes.

MS. CANO: Mr. Chairman, I would note that these have been premarked for identification as Numbers 30 to 34 on staff's Comprehensive Exhibit List.

CHAIRMAN CARTER: 30 to 34. Thank you.

(Exhibits 30 to 34 marked for identification.)

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

DIRECT TESTIMONY OF STEVEN R. SIM

DOCKET NO. 090009 - EI

May 1, 2009

Q. Please state your name and business address.

A. My name is Steven R. Sim, and my business address is 9250 West Flagler Street, Miami, Florida 33174.

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

A. I am employed by Florida Power & Light Company (FPL) as Senior Manager of Integrated Resource Planning in the Resource Assessment & Planning department.

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

A. I supervise and coordinate analyses that are designed to determine the magnitude and timing of FPL's resource needs and then develop the integrated resource plan with which FPL will meet those resource needs.

Q. Please describe your education and professional experience.

A. I graduated from the University of Miami (Florida) with a Bachelor's degree in Mathematics in 1973. I subsequently earned a Master's degree in Mathematics from the University of Miami (Florida) in 1975 and a Doctorate in Environmental Science and Engineering from the University of California at Los Angeles (UCLA) in 1979.

While completing my degree program at UCLA, I was also employed full-time as a Research Associate at the Florida Solar Energy Center during 1977 - 1979. My responsibilities at the Florida Solar Energy Center included an evaluation of Florida consumers' experiences with solar water heaters and an analysis of potential renewable resources including photovoltaics, biomass, wind power, etc., applicable in the Southeastern United States.

In 1979 I joined FPL. From 1979 until 1991 I worked in various departments including Marketing, Energy Management Research, and Load Management, where my responsibilities concerned the development, monitoring, and cost-effectiveness of demand side management (DSM) programs. In 1991 I joined my current department, then named the System Planning Department, where I held different supervisory positions dealing with integrated resource planning. In late 2007 I assumed my present position.

Q. Are you sponsoring any exhibits in this case?

A. Yes, I am sponsoring the following five exhibits:

- Exhibit SRS – 1: Comparison of Key Assumptions Utilized in the 2008 and 2009 Economic Analyses of FPL Nuclear Projects;
- Exhibit SRS – 2: The Two Resource Plans Utilized in the 2009 Feasibility Analyses of the Nuclear Uprates;
- Exhibit SRS – 3: 2009 Feasibility Analyses Results for the Nuclear Uprates: Total Costs and Total Cost Differentials for All Fuel and Environmental Compliance Cost Scenarios in 2009$;

- Exhibit SRS – 4: The Two Resource Plans Utilized in the 2009 Feasibility Analyses of Turkey Point 6 & 7; and,
- Exhibit SRS – 5: 2009 Feasibility Analyses Results for Turkey Point 6 & 7: Total Costs, Total Cost Differentials, and Breakeven Costs for All Fuel and Environmental Compliance Cost Scenarios in 2009$, and Breakeven Costs in 2007$.

Q. What is the purpose of your testimony?

A. My testimony provides the results of the 2009 economic analyses for both the uprates of FPL's existing nuclear units and the new FPL nuclear units, Turkey Point 6 & 7. In my testimony I will refer to these analyses as the 2009 feasibility analyses for both projects. The 2009 feasibility analyses are presented to satisfy the requirement of Subsection 5(c)5 of the Florida Administrative Code Rule 25-6.0423, Nuclear Power Plant Cost Recovery which states "By May 1 of each year, along with the filings required by this paragraph, a utility shall submit for Commission review and approval a detailed analysis of the long-term feasibility of completing the power plant."

Q. What is the scope of your testimony?

A. My testimony addresses three main points:

(1) I briefly discuss the analytical approach used in the 2009 feasibility analyses provided in this filing compared to prior economic analyses of these projects. I also identify certain key assumptions used in the 2009 feasibility analyses and compare them to the assumptions used in

the 2008 analyses. The likely effects that these changes in assumptions had on the 2009 feasibility analyses results are also discussed.

(2) I provide the results of the 2009 feasibility analyses of the nuclear uprates.

(3) I provide the results of the 2009 feasibility analyses of Turkey Point 6 & 7.

2009 FEASIBILITY ANALYSES - APPROACH & ASSUMPTIONS

Q. Were the analytical approaches used in the 2009 feasibility analyses of the nuclear uprates and Turkey Point 6 & 7 similar to those used in the Determination of Need filings for these projects and in the 2008 feasibility analyses of these projects?

A. Yes. The analytical approaches that were used in the 2009 feasibility analyses for each project were virtually identical to the approaches used in the 2007 Determination of Need filings and the 2008 feasibility analyses.

In regard to the nuclear uprates project, FPL believes that the analytical approach used currently, and that was used in both the 2007 Determination of Need filing and the 2008 feasibility analyses; i.e., the direct comparison of resource plans with and without the nuclear uprates, is the appropriate approach for analyzing this project.

In regard to the Turkey Point 6 & 7 project, FPL believes that the analytical approach used currently, and that was used in both the 2007 Determination of Need filing and the 2008 feasibility analyses, i.e., the calculation of breakeven overnight capital costs for the new nuclear units, remains the appropriate approach to use at this time. In later years, as more information becomes available regarding the cost and other aspects of the new nuclear units, another analytical approach may emerge as more appropriate.

Q. Have the assumptions in the 2009 feasibility analyses changed from the assumptions that were used in the 2008 feasibility analyses?

A. Yes. As one would expect with economic analyses performed in different years, a number of assumptions have changed.

Exhibit SRS - 1 provides an overview of certain assumptions used in FPL's 2008 and 2009 feasibility analyses that allows one to see how the assumptions used in the 2009 analyses have changed from the assumptions used in the 2008 analyses. This exhibit provides a look at five forecasts that are key assumptions: (1) forecasted Summer peak load, (2) forecasted natural gas costs, (3) forecasted oil costs, (4) forecasted uranium costs, and (5) forecasted environmental compliance costs for carbon dioxide (CO_2). Exhibit SRS – 1 provides the forecasted values for each of these assumptions for selected years starting with 2010 and every five years thereafter through 2040.

In addition, Exhibit SRS - 1 provides 2008 and 2009 values for four additional inputs to the analyses: the amount of additional capacity (MW) that will serve FPL's customers from the nuclear uprates project; the projected cost of a Greenfield 3x1 G combined cycle (CC) unit assumed to be in-service in 2018 ($/kw); the projected cost of firm gas transportation for a new CC unit in 2018 ($/mmBTU), and the projected average annual planned outage days for FPL's existing nuclear units for 2009 through 2012.

The intent of Exhibit SRS – 1 is to show how these assumptions have changed from those used in the 2008 analyses and to provide some insight into what effects these changes have had on the results of the 2009 feasibility analyses.

Q. Would you please briefly discuss the five forecasts presented in Exhibit SRS – 1, including the likely impact that changes in these values would likely have in relation to the 2009 feasibility analyses?

A. Yes. I'll discuss these forecast values and their likely impact by first comparing the changes in the 2009 assumptions from the 2008 assumptions. Then I'll discuss the directional effect that these changes would likely have (i.e., whether additional nuclear capacity should be more economic or less economic due to the assumption changes). Unless otherwise stated, the directional effect should be the same for both the nuclear uprates and Turkey Point 6 & 7 (although the magnitude of the effect may be somewhat different).

I'd summarize this information as follows:

(1) Forecasted Summer Peak Load:

The 2009 forecasted Summer peaks, compared to the 2008 forecasted values, are lower for all years shown. This change will tend to lower the projected economic benefits of additional nuclear capacity, at least in the near term.

(2) Forecasted Natural Gas Costs:

A comparison of forecasted natural gas costs utilized in the 2009 feasibility analyses with those used in the 2008 analyses shows a general trend of: (i) lower natural gas costs in 2010, (ii) higher natural gas costs in the near-term years of 2015 through 2025, then (iii) lower natural gas costs in the later years of 2030 through 2040.

The effect(s) of these changes in forecasted natural gas costs on the projected economic benefits of additional nuclear capacity is a bit more difficult to judge. However, because the nuclear uprates are in service during all of the near-term years (because of their 2011/2012 in-service dates), while Turkey Point 6 & 7 are only in service during about half of these near-term years, the uprates should benefit more from the near-term increase in natural gas costs than will Turkey Point 6 & 7. In addition, because the operating licenses for FPL's existing nuclear units are currently set to expire approximately 20 years earlier

than will the projected operating licenses for Turkey Point 6 & 7, the projected economic benefits of the nuclear uprates will be less negatively affected by the lowering of forecasted natural gas costs in the later years than will the benefits of Turkey Point 6 & 7.

(3) Forecasted Oil Costs:

The forecasted oil costs utilized in the 2009 feasibility analyses compared to the forecasted costs used in the 2008 analyses showed a similar pattern to that discussed above for natural gas. Similar to the effects discussed above regarding these changes in forecasted natural gas costs, the changes in forecasted oil costs would be more beneficial (or less negative) for the nuclear uprates than for Turkey Point 6 & 7. (However, any impact of the projected economic benefits will be relatively small due to the fact that FPL's system burns relatively little oil.)

(4) Forecasted Uranium Costs:

The forecasted uranium costs utilized in the 2009 feasibility analyses are higher than those in the 2008 analyses. This assumption change will lower the projected economic benefits of additional nuclear capacity. Because of the larger size of the additional nuclear capacity of Turkey Point 6 & 7 compared to the nuclear uprates, this assumption change will tend to lower the projected economic benefits

of Turkey Point 6 & 7 more than the projected economic benefits of the nuclear uprates would be lowered. (However, the increase in the forecasted uranium costs is a relatively small increase on cost values that are small to begin with. Therefore, this change would have little effect on the projected economic benefits.)

(5) Forecasted CO_2 Compliance Costs:

The 2009 forecasted CO_2 compliance costs are unchanged from those utilized in the 2008 analyses. Because there is no change in this assumption, there is no effect on the projected economic benefits of additional nuclear capacity when comparing the results of the 2009 and 2008 feasibility analyses.

Q. Would you summarize the likely net effects of these changes in the forecasts of load, fuel costs, and CO_2 costs between the 2008 and 2009 analyses?

A. Yes. The changes in the assumptions in 2009 compared to those in 2008 are a mixed bag in regard to the direction of the changes. A comparison of these assumptions shows the following changes: lower forecasted load; a pattern of natural gas and oil costs that starts lower, is higher in the near-term, then is lower in later years; higher uranium costs; and no change in CO_2 compliance costs. The net effect of these changes will likely tend to lower the projected economic benefits of Turkey Point 6 & 7 because the units have a in-service date that near the end of the period of higher forecasted natural gas and oil

costs in the near-term, and have a long term of service during years of forecasted lower natural gas and oil costs. Conversely, the projected economic benefits of the nuclear uprates will be improved due to a better chronological "fit" with the near-term years of higher natural gas and oil costs.

Q. Would you also briefly discuss the other four inputs that appear in Exhibit SRS – 1?

A. Yes. The first of these four inputs is the projected amount of additional capacity from the nuclear uprates that will serve FPL's customers. In FPL's 2008 analyses, the assumption was that FPL would receive all of the 414 MW of additional capacity from the nuclear uprates. Since that time, the St. Lucie Unit 2 co-owners have indicated that they plan to pay for, and receive, their portion of the additional output associated with the St. Lucie Unit 2 uprate. Accordingly, FPL now assumes that it will receive only its ownership share of the increased capacity at St. Lucie Unit 2. (There is no change in the additional capacity that will serve FPL's customers from the other three nuclear units.) This change results in the amount of total additional capacity that will serve FPL's customers being lowered slightly to 399 MW. However, the nuclear uprates costs that FPL's customers will pay will be reduced commensurately. Therefore, by itself, this assumption change does not significantly alter the projected economic benefits from the nuclear uprates project in the 2009 feasibility analyses.

The second of these inputs is the projected cost of a greenfield 3x1 G CC unit. Such a unit was assumed to come in-service in 2018 and 2020 if Turkey Point 6 & 7 are not built as shown in the Resource Plan without Turkey Point 6 & 7 presented in Exhibit SRS – 4. The installed cost of a CC generator installed in 2018 was projected to be $1,000.18/kw and $817.23/kw in the 2008 and 2009 analyses, respectively. The cost projection for new CC units, with annual escalation, is also used for the 2020 CC unit mentioned above in the Turkey Point 6 & 7 analyses, and for the filler units in both the uprates and Turkey Point 6 & 7 analyses. By itself, this change lowers the projected economic benefits from the nuclear projects in the 2009 feasibility analyses.

The third of these inputs is the projected cost of firm gas transportation for new CC units. The projected firm gas transportation cost for a 2018 CC unit was $1.60/mmBTU and $2.21/mmBTU in the 2008 and 2009 analyses, respectively. The projected firm gas transportation cost, with annual escalation, is also used for the 2020 CC unit mentioned above in the Turkey Point 6 & 7 analyses, and for the filler units in both the uprates and Turkey Point 6 & 7 analyses. By itself, this change increases the projected economic benefits from the nuclear projects in the 2009 feasibility analyses.

The fourth input is the projected average annual planned outage days for FPL's four existing nuclear units for the years 2009 through 2012. It is during these planned outages that the necessary work to accomplish the capacity

uprates will be performed. The projected average annual duration for these planned outages was 44 days in the 2008 analyses and is 55 days in the 2009 analyses. By itself, this change lowers the projected economic benefits from the nuclear uprates project in the 2009 feasibility analyses.

2009 FEASIBILITY ANALYSES RESULTS FOR THE NUCLEAR UPRATES PROJECT

Q. What resource plans were used to perform the 2009 feasibility analyses of the nuclear uprates project?

A. The two resource plans that were utilized in the 2009 feasibility analyses are presented in Exhibit SRS – 2. As shown in these exhibits, the new generating unit additions in the two resource plans are identical through 2020 except for the addition of the nuclear uprates. The approximately 400 MW of capacity added by introduction of the nuclear uprates in the Plan with Nuclear Uprates does defer additions of new generation, but only after 2020. (The additional capacity supplied by the nuclear uprates also slightly alters the schedule for the return to active service of FPL's existing generating units that will have been temporarily placed on Inactive Reserve status.)

This result differs from the 2008 feasibility analyses of the nuclear uprates. In the 2008 analyses, the nuclear uprates' additional capacity deferred the addition of new generation much earlier (in 2015 and 2017).

The reason for this change is the much lower projection of load growth based on the January 2009 load forecast used in the 2009 feasibility analyses.

Q. What were the results of the 2009 feasibility analyses for the nuclear uprates project?

A. The results of the analyses are presented in Exhibit SRS – 3. As shown in Column (5) of Exhibit SRS - 3, the Resource Plan with Nuclear Uprates is projected to have a lower cumulative present value of revenue requirements (CPVRR) cost in 2009$ compared to the Resource Plan without Nuclear Uprates in 9 of 9 scenarios of fuel cost and environmental compliance cost forecasts utilized in the analyses.

Q. What conclusion do you draw from the results of the 2009 feasibility analyses of the nuclear uprates?

A. These results indicate that the nuclear uprates project is still projected to be a solidly cost-effective capacity and energy addition for FPL's customers. These results fully support the feasibility of continuing the nuclear uprates project.

2009 FEASIBILITY ANALYSES RESULTS FOR THE TURKEY POINT 6 & 7 PROJECT

Q. What resource plans were used to perform the 2009 feasibility analyses of Turkey Point 6 & 7?

A. The two resource plans that were utilized in the 2009 feasibility analyses are presented in Exhibit SRS – 4. As shown in these exhibits, the two resource plans are identical through 2017. The resource plans differ in 2018 and 2020 with the Resource Plan with Turkey Point 6 & 7 adding the two 1,100 MW nuclear units, one in 2018 and one in 2020. The Resource Plan without Turkey Point 6 & 7 adds two 1,219 MW CC units, one in 2018 and one in 2020. The resource plans then differ slightly after 2020 in the timing and number of filler units due to the 238 MW greater amount of capacity added in the Resource Plan without Turkey Point 6 & 7. (1,219 MW – 1,100 MW = 119 MW x 2 units = 238 MW.)

The differences in these two resource plans are similar to the differences seen in the 2008 economic analyses of the Turkey Point 6 & 7 project. In the 2008 analyses, the same differential in long-term capacity added to FPL's system in 2018 through 2020 was projected. Also, the impact of this differential in long-term capacity added during 2018 – 2020 resulted in relatively small differences in the timing and number of filler units after 2020.

Q. What were the results of the 2009 feasibility analyses for Turkey Point 6 & 7?

A. The results of the analyses are presented in Exhibit SRS – 5. The breakeven nuclear capital costs in $/kw in 2009$ are presented in Column (6) of this exhibit and are presented in $/kw in 2007$ in Column (7). The results in Column (7), when compared to FPL's non-binding estimated range of capital

costs in 2007$ of $3,108/kw to $4,540/kw, shows that the projected breakeven capital costs for Turkey Point 6 & 7 are above this range in 8 of the 9 scenarios of fuel cost and environmental compliance cost. In the 9th scenario that consists of low fuel costs and low environmental compliance costs, the projected breakeven capital costs are at the upper end of this range.

Q. What conclusion do you draw from the results of the 2009 feasibility analyses of Turkey Point 6 & 7?

A. These results indicate that the Turkey Point 6 & 7 project is still projected to be a solidly cost-effective addition for FPL's customers. These results fully support the feasibility of continuing the Turkey Point 6 & 7 project.

Q. Does this conclude your testimony?

A. Yes.

BY MS. CANO:

Q. Have you prepared a summary of your direct testimony?

A. Yes, I have.

Q. Would you please provide that at this time?

A. Yes, I will.

Good afternoon, Chairman Carter and Commissioners. FPL's 2009 economic analyses for both the nuclear uprates in Turkey Point 6 and 7 are based on a scenario approach that includes a number of updated assumptions, including but not limited to the load forecast, the fuel cost forecast and environmental compliance cost forecast.

As is usually the case, some annual changes in the assumptions will favor new nuclear capacity and other assumption changes do not. And, as in prior economic analyses of these new nuclear capacity options, FPL's 2009 analyses directly under (phonetic) uncertainty by utilizing three fuel cost forecasts and four environmental compliance cost forecasts, to examine in total nine scenarios of fuel and environmental compliance costs.

In regard to the nuclear uprates, the 2009 economic analysis approach for the nuclear uprates is unchanged. We compared a resource plan with nuclear

uprates to a resource plan without the nuclear uprates. The two resource plans were compared on the basis of cumulative present value of revenue requirements or CPVRR that identifies the resource plan with the lowest cost to FPL's customers. The resource plan with nuclear uprates is projected to result in lower CPVRR costs than the resource plan without nuclear uprates in all of nine scenarios.

In regard to Turkey Point 6 and 7, the 2009 economic analysis approach for Turkey Point 6 and 7 is also unchanged. This approach is to first compare a resource plan with Turkey Point 6 and 7 but with no capital costs for new nuclear units versus a resource plan without Turkey Point 6 and 7 and with a comparable amount of combined cycle capacity. The two plans are then compared on a CPVRR basis.

FPL then determines the breakeven capital costs for Turkey Point 6 and 7 that would allow the CPVRR cost for the two resource plans to be identical for each of the nine scenarios. These breakeven capital costs are then compared to FPL's nonbinding estimated capital cost range of $3,108 per kW to $4,540 per kW in 2007 dollars.

The calculated breakeven capital costs for Turkey Point 6 and 7 are projected to be above this

estimated capital cost range in eight of the nine scenarios, meaning that the cost of Turkey Point 6 and 7 could be above and, in many cases, well above this nonbinding capital cost range and Turkey Point 6 and 7 would still be cost effective.

In the ninth scenario that consists of low fuel and low environmental compliance costs the calculated breakeven capital costs are projected to be within this estimated capital cost range and near the upper end of the range.

In conclusion, Commissioners, both the nuclear uprates in Turkey Point 6 and 7 are still projected to be solidly cost-effective resource additions for FPL's customers. Therefore, the results of the 2009 economic analyses support the feasibility of continuing both nuclear projects. Thank you.

MS. CANO: We tender the witness for cross examination.

CHAIRMAN CARTER: Mr. McGlothlin.

CROSS EXAMINATION

BY MR. McGLOTHLIN:

Q. Sir, during your summary you indicated that the range of something like 3,100 to 4,000 plus dollars was expressed in 2007 dollars; correct?

A. That's correct.

Q. Is that because the estimate was prepared in 2007?

A. Essentially, yes.

MR. McGLOTHLIN: No further questions.

CHAIRMAN CARTER: Thank you, Mr. McGlothlin. Mr. Davis.

MR. DAVIS: Mr. Chair, we'd like to reserve our cross examination for rebuttal for this witness.

CHAIRMAN CARTER: Okay. Mr. Moyle, you're recognized.

MR. MOYLE: Thank you. I have a few questions.

CROSS EXAMINATION

BY MR. MOYLE:

Q. Good afternoon. Good to see you again.

A. Good afternoon.

Q. In your direct testimony you looked at a number of conditions that, that are changing, and I know in some testimony at some point FPL took the position that we're not going to let changes and assumptions, you know, drive the ultimate decision. But you would agree that they are important to review; correct? Natural gas assumptions, growth assumptions, things like that.

A. Well, I think I would have to first disagree with your premise that FPL has decided that assumptions

won't change our decision. I think we continually update assumptions and, in our analyses, and utilize them to the fullest extent possible in trying to determine the long-term feasibility analysis of both nuclear projects.

Q. Okay. And I -- maybe I wasn't clear in that. I thought there was testimony that said, you know, we're not going to make a no-go -- no-go or go decision based on, you know, an assumption that may have altered from one year as compared to another. This is a long-range project, we're taking a long-range view on it. We'll be mindful of them, but it's not going to dictate a decision. Is that generally accurate?

A. Again, I'm not quite sure I can agree with that. We're not at a point of whether -- where we are ready to make a decision in regard to construction of these units. We are taking into account fully updated assumptions for a wide variety of forecasts and other assumptions that we utilize in our economic analyses.

Q. Okay. Let's talk about, for a minute about some of these assumptions. Your forecast summer peak load, that is lower compared to 2008. Your 2009 forecast is lower as compared to 2008; correct?

A. That's correct.

Q. Okay. And that would lower the economic

benefits for additional nuclear capacity; correct?

A. If that were the sole change to the assumptions from 2008, then generally, yes, the cost-effectiveness of the new nuclear projects would be diminished to some degree.

Q. Okay. And the forecast uranium costs, those have gone up from 2008 as compared to 2009; correct?

A. That is correct.

Q. Okay. And that would also work against the cost-effectiveness of the Turkey Point 6 and 7 projects, that forecast; correct?

A. To a small degree because the uranium cost is relatively small to begin with and the cost increase on an already small cost number is also almost negligible. But, yes, the direction would be towards it being less cost-effective.

Q. Okay.

A. Again, if it were the only assumption in question, which it is not.

Q. You also forecast natural gas prices, and there's lower natural gas prices forecast in years 2030 to 2040 than was utilized in the 2008 analysis; correct?

A. Yes. They were higher in certain years, the mid-term years. They were lower in the, some of the beginning years and lower in the latter years, as you've

indicated.

Q. Okay. And with respect to Turkey Point 6 and 7, those are going to be operational in the years 2030 through 2040; correct?

A. Actually they will become operational according to the schedule in 2018 and 2020 and will therefore be operating in the years in which the nearer term projection of natural gas costs are higher. They will also be operating in these latter years when the projected natural gas costs are lower.

Q. Okay. And my question simply was to focus on 2030 to 2040 and confirm that the Turkey Point 6 and 7 will be operating in that time frame. Could you confirm that, please?

A. Can you break the question down a bit, please?

Q. Sure. Turkey Point 6, is it going to, is it projected to be operating from the years 2030 to 2040?

A. Yes.

Q. Okay. Turkey Point 7, is it projected to be operating in the years 2030 to 2040?

A. Yes. Both units will be operating within that ten-year time frame, but they will also be operating in years prior and years after that ten-year time frame.

Q. We hope so, if they're, if they're built.

The question I wanted to ask you is with

respect to the natural gas price forecast for those years, the price forecast is for lower natural gas prices in the 2030 to 2040 time range; correct?

A. In regard to natural gas commodity costs, that would be true.

Q. Okay.

A. In regard to natural gas firm transportation costs, the costs will be higher than what was projected in either our '07 analysis or our '08 analysis.

Q. Right. And I asked you about gas, natural gas prices, not the, not the transportation component. So let's just focus on the natural gas prices at this point, if we can.

A. Fine. I was trying to give a complete answer for both components of natural gas prices. You had not indicated commodity or gas transportation costs.

Q. Okay. You don't contract out for firm transportation 20 years out in advance, do you?

A. On occasion I believe that we have.

Q. Isn't it true that with respect to the forecast for natural gas prices trending downward from 2008 to 2009 that that has an incremental admittedly but an incremental negative effect on the proposed Turkey Point 6 and 7 project?

A. I would disagree. The units will not be built

until, or will not go into operation until 2018 or 2020. The fact that natural gas prices would have gone down from '08 to '09 or whether they would have gone up from '08 to '09 really is, has no direct impact on what natural gas prices will be starting in 2018.

Q. Part of your testimony talks about the feasibility for Turkey Point 6 and 7; correct?

A. That's correct.

Q. Okay. You're familiar with the Commission rule that indicates by May 1st of each year a utility must submit for Commission review and approval a detailed analysis of the long-term feasibility of completing the power plant; correct?

A. I'm generally aware of it. Yes.

Q. Okay. Can you show me in your testimony where that long -- where that detailed analysis can be found?

A. The summary of the results of the detailed feasibility analysis are found on SRS-5.

Q. And that's the document that shows nine scenarios; is that correct?

A. That is correct.

Q. And it's your testimony and your belief that this one-page document you believe is sufficient for meeting the requirements of the rule to provide a detailed analysis of the long-term feasibility of

completing the power plant?

A. I believe that this page accurately summarizes a very detailed analysis of nine different scenarios covering a period from 2009 through 2060 of a resource plan with the new nuclear units and a resource plan without the nuclear units with competing combined cycle capacity. Yes.

Q. And the capital costs used in this were not current capital costs; correct?

A. I disagree. The capital costs for the combined cycle unit were the most up-to-date capital costs that we had for that type of capacity. And the capital cost we used for the nonbinding capital cost estimate for new nuclear units was, was considered at the time to be still applicable for this analysis. We had no better numbers --

Q. And what year were --

A. -- as Mr. Scroggs had testified a bit earlier this morning.

Q. And what year were your capital costs for the nuclear projections?

A. I believe that those costs were developed around 2007. They've been reviewed each year since in our 2008 feasibility analysis. And I personally called Mr. Scroggs this year to discuss whether or not they

still remain viable and the best estimates possible, and he assured me that they were. Therefore, I consider them to be the most up-to-date capital cost estimates that we have for the new units.

Q. You would agree that in trying to ascertain market prices it's better to test a market at a point in time closer to, say, providing testimony than relying on data that's two years old, would you not?

A. Not if the cost estimate from two years ago was still suitable or adequate today for purposes of the analysis. And that's what FPL believes those numbers represent, the best up-to-date estimates of the capital cost to the new nuclear units.

Q. You would agree that the market for nuclear components, nuclear construction, EPC contracts, that given the passage of time, that that market changes; correct?

A. I think you're running a bit out of my range of experience here in regard to components, cost components for nuclear units. I believe either Mr. Scroggs and perhaps Mr. Reed would be a better one to address those questions to.

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

COMMISSIONER EDGAR: Are there questions from

staff for this witness?

MR. YOUNG: No questions.

COMMISSIONER EDGAR: No questions.

Commissioners? No questions.

Redirect.

MS. CANO: Just one redirect. Thank you.

REDIRECT EXAMINATION

BY MS. CANO:

Q. Dr. Sim, Mr. Moyle asked you to point to where the detailed analyses was in your testimony, and you said that SRS-5 contained the summary of the results of that analysis. Do you remember that question?

A. Yes, I do.

Q. Would you please briefly describe the analyses and the process that lead up to the results shown in SRS-5?

A. Yes, I'll be happy to.

Commissioners, the actual analysis looks at a very lengthy time period from 2009 through 2060 of two resource plans in which we analyze the costs over all of those years. It involves a variety of computer models, a variety of assumptions and forecasts, and involves first a step in which we calculate the cumulative present value revenue requirement cost for both of the resource plans, but assuming zero capital cost for

nuclear units. We then go into those differentials in CPVRR between the two plans for each one of the nine scenarios of fuel and environmental compliance costs and calculate separately a breakeven capital cost so that the cost of, the CPVRR cost of the two plants will be identical.

So what we're looking at for each one of the nine scenarios is a very detailed analysis essentially along the same lines as the analysis that we come before you with when we are seeking a need determination for a, an individual power plant.

MS. CANO: Thank you. No further questions.

COMMISSIONER EDGAR: Okay. Let's take up the exhibits. Can you point me to the numbers?

MR. YOUNG: Madam Chair, it would be starting with Number 30 on Page 7.

COMMISSIONER EDGAR: Thank you. So we are looking for this witness at exhibits previously marked 30 through 34.

MS. CANO: 34. FPL moves those. Thank you.

COMMISSIONER EDGAR: Okay. Any objection? Hearing none, Exhibits 30 through 34 are entered into the record.

(Exhibits 30 through 34 admitted into the record.)

Thank you very much. You're excused for the time being.

THE WITNESS: Thank you.

COMMISSIONER EDGAR: And we can move to the next witness.

MR. ANDERSON: FPL calls Winnie Powers as its next witness.

CHAIRMAN CARTER: You may proceed.

MR. RUBIN: Thank you, Chairman Carter.

WINNIE POWERS

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

DIRECT EXAMINATION

BY MR. RUBIN:

Q. You've been sworn as a witness earlier today?

A. Yes, I have.

Q. Would you please state your name and business address?

A. My name is Winnie Powers, and my address --

CHAIRMAN CARTER: You need to pull the microphone a little closer to you and please start over.

THE WITNESS: Okay. My name is Winnie Powers.

CHAIRMAN CARTER: Chris, can you give her some volume? Please start over.

THE WITNESS: My name is Winnie Powers. My business --

CHAIRMAN CARTER: I'm not feeling it. Try again.

THE WITNESS: My name is Winnie Powers. My -- no.

CHAIRMAN CARTER: Hang on one second. Hang on a second.

COMMISSIONER ARGENZIANO: Mr. Chair, I can't hear her.

CHAIRMAN CARTER: Can you hear her, Commissioner?

COMMISSIONER EDGAR: No. It's very low.

CHAIRMAN CARTER: Chris is working on her microphone now. We're going to try to -- I was wondering about that because we're having trouble hearing her here.

COMMISSIONER ARGENZIANO: Okay. Thank you.

CHAIRMAN CARTER: Okay. Let's try it again.

THE WITNESS: Okay. My name is Winnie Powers. My business address is 9250 West Flagler Street, Miami, Florida.

CHAIRMAN CARTER: Commissioner Argenziano, is that better?

COMMISSIONER ARGENZIANO: Yes. That's much

better. Thank you.

CHAIRMAN CARTER: Okay. You may proceed.

MR. RUBIN: Thank you, sir.

BY MR. RUBIN:

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

A. I'm employed by Florida Power & Light Company, and I am the New Nuclear Accounting Project Manager.

Q. Have you prepared and caused to be filed 23 pages of prefiled direct testimony in this proceeding on March 2, 2009?

A. Yes, I have.

Q. And did you also cause, cause to be filed errata to your March 2 testimony on August 21, 2009?

A. Yes, I did.

Q. Have you also prepared and caused to be filed 19 pages of prefiled direct testimony in this proceeding on May 1, 2009?

A. Yes.

Q. And did you also cause to be filed errata to your May 1 testimony on August 21, 2009?

A. Yes.

Q. Do you have any further changes or revisions to your prefiled direct testimony?

A. No, I do not.

Q. If I asked you the same questions contained in

your prefiled direct testimony, would your answers be the same?

A. Yes.

MR. RUBIN: FPL asks that Ms. Powers' prefiled direct testimony of March 2, 2009, and May 1, 2009, with errata be inserted into the record as though read.

CHAIRMAN CARTER: Let's try it again. The prefiled testimony of the witness will be inserted into the record as though read.

BY MR. RUBIN:

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

A. Yes I am.

Q. And do those exhibits consist of revised Exhibit WP-1 along with Exhibits WP-2 and 3 to your March 2, 2009, testimony, and revised Exhibits WP-1 and WP-2 to your May 1, 2009, testimony, also shown as Exhibits 35 through 39 on staff's exhibit list?

A. Yes.

MR. RUBIN: Mr. Chairman, I would note that Ms. Powers' exhibits have been premarked for identification as Exhibits 35 through 39.

CHAIRMAN CARTER: 35 through 39. Thank you.

(Exhibits 35 through 39 marked for identification.)

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

DIRECT TESTIMONY OF WINNIE POWERS

DOCKET NO. 090009-EI

MARCH 2, 2009

Q. Please state your name and business address.

A. My name is Winnie Powers. My business address is 9250 West Flagler Street, Miami, FL 33174.

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

A. I am employed by Florida Power & Light Company (FPL or the Company) as New Nuclear Accounting Project Manager.

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

A. I am responsible for the accounting related to our new nuclear projects, Turkey Point 6 & 7 and the Uprate Project at Turkey Point and St. Lucie. My responsibilities are to ensure the costs projected and expended for these projects are accurately reflected in the Nuclear Cost Recovery Filing Requirements (NFR) schedules. In addition, I am responsible to ensure the Company's assets associated with these projects are appropriately recorded and reflected in FPL's financial statements.

Q. Please describe your educational background and professional experience.

A. I graduated from the University of Florida in 1976 with a Bachelor of Science Degree in Business Administration, majoring in Accounting. After college, I was employed as an accountant by RCA Corporation in New York. In 1983 I was hired by Southeastern Public Service Company in Miami and attained the position of manager of corporate accounting. In 1985 I joined FPL and have held a variety of positions in the regulatory and accounting areas during my 24 years with the Company. I obtained my Masters of Accounting from Florida International University in 1994, I am a Certified Public Accountant (CPA) licensed in the State of Florida, and I am a member of the American Institute of CPAs.

Q. Are you sponsoring any exhibits in this case?

A. Yes, I am sponsoring the following exhibits:

- Exhibit WP-1 details the components of the revenue requirements reflected in the True-Up Schedules by project, by year and by category of costs being recovered (e.g. site selection costs, preconstruction costs, carrying costs on unrecovered balances and on the deferred tax asset, and for uprates, carrying costs on construction costs and on the deferred tax asset.)
- Exhibit WP-2 details the total company costs and jurisdictional costs for which FPL is seeking a prudence determination by project, by year and by cost categories. These total company costs, variances from the

actual/estimated costs and the necessity for them are further described in the testimonies of FPL Witness Kundalkar and FPL Witness Scroggs.

- Exhibit WP-3 flowcharts the process used to determine incremental payroll costs chargeable to the projects.
- Exhibit RSK-1, sponsored by FPL Witness Kundalkar, consists of Appendix I containing 2008 Uprate schedules T-1 through T-10. Page 2 of Appendix I contains a table of contents which lists the T schedules sponsored by FPL Witness Kundalkar and by me, respectively.
- Exhibit SDS-1, sponsored by FPL Witness Scroggs, consists of Appendix II containing 2007 and 2008 Turkey Point 6 & 7 Pre-Construction schedules T-1 through T-10. Page 2 of Appendix II contains a table of contents which lists the T schedules sponsored by FPL Witness Scroggs and by me, respectively.
- Exhibit SDS-2, sponsored by FPL Witness Scroggs, consists of Appendix III containing 2006, 2007 and 2008 Turkey Point 6 & 7 Site Selection schedules T-1 through T-10. Page 2 of Appendix III contains a table of contents which lists the T schedules sponsored by FPL Witness Scroggs and by me, respectively.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to present:

(1) NFR True-Up Schedules for Turkey Point 6 & 7 site selection costs for 2006, 2007 and 2008;

(2) NFR True-Up Schedules for Turkey Point 6 & 7 preconstruction costs for 2007 and 2008; and

(3) NFR True-Up Schedules for the 2008 Uprate costs.

I also describe how these Schedules comply with the Commission's Rule 25-6.0423, Nuclear or Integrated Gasification Combined Cycle Power Plant Cost Recovery (Nuclear Cost Recovery Rule), explain how carrying costs are provided for under this Rule, and discuss the Accounting controls FPL relies upon to ensure costs are appropriately charged to the projects.

Q. Please summarize your testimony.

A. My testimony addresses the Nuclear Cost Recovery Rule passed by the Florida Legislature in 2006 to promote utility investment in nuclear power plants. In addition, my testimony refers to exhibits and True-up schedules detailing the uprate expenditures incurred in 2008, the Turkey Point 6 & 7 site selection expenditures incurred in 2006, 2007, and 2008, and the Turkey Point 6 & 7 preconstruction expenditures incurred in 2007 and 2008 for which FPL is requesting a determination of prudence. FPL is also requesting a prudence determination of recoverable O&M expenses for its uprate project detailed on schedule T-4. My testimony describes the comprehensive corporate and overlapping business unit controls for incurring costs and recording transactions associated with any of FPL's capital projects such as Uprate and Turkey Point 6 & 7. My testimony lists these controls and outlines the

documentation, assessment, and auditing processes for these overlapping control activities.

NUCLEAR COST RECOVERY RULE

Q. Please describe the Commission's Nuclear Cost Recovery Rule and the NFR Schedules.

A. On March 20, 2007, in Order No. PSC-07-0240-FOF-EI, this Commission adopted the Nuclear Cost Recovery Rule to implement Section 366.93, Florida Statutes (the Statute), which was enacted by the Florida Legislature in 2006. The stated purpose of the Statute is to promote utility investment in nuclear power plants. The Statute directed the Commission to establish alternative mechanisms for cost recovery and step-wise, periodic prudence determinations with respect to costs incurred to both build and uprate nuclear power plants. The Nuclear Cost Recovery Rule implements this mechanism for cost recovery and provides for the annual recovery of eligible costs through the Capacity Cost Recovery Clause (CCRC). FPL has been working with Commission Staff, the Office of Public Counsel, Progress Energy Florida and others to develop a comprehensive set of NFR Schedules, setting forth construction and cost information on nuclear power plant projects.

The NFR Schedules provide an overview of nuclear power plant projects and a roadmap to the detailed project costs. The NFR Schedules consist of T, AE,

P and TOR Schedules. The T Schedules are to be filed each March and provide the True-Up for the prior year. The T schedules filed along with my testimony present the resulting revenue requirements based on actual costs compared to the projected revenue requirements through December 31, 2008, filed in Actual/Estimated Schedules in Docket No. 080009-EI that we are recovering pursuant to Order No. PSC-08-0749-FOF-EI. The comparison of the revenue requirements resulting from actual costs compared to the projected costs results in the overrecovery for the uprates of $1,118,917 and the overrecovery for the new nuclear projects of $23,829,703.

UPRATES

Q. What are FPL's uprate expenditures for the period January 2008 through December 2008 for which FPL is requesting a determination of prudence?

A. FPL's actual uprate expenditures for which it is requesting a prudence determination for the period January 2008 through December 2008 on a total system basis are $99,754,304. These costs are discussed throughout FPL Witness Kundalkar's testimony and are shown in Appendix I of Exhibit RSK-1, Schedule T-6, and Exhibit WP-2, page 2 of 2. Schedule T-6 in Appendix I deducts the portion for which the St. Lucie Unit 2 participants are responsible and then applies the retail jurisdictional factor to the remainder. After these adjustments, the net 2008 uprate expenditures for which retail customers are

responsible are $95,097,049. FPL is also requesting a prudence determination for $269,184 ($256,091 jurisdictional, net of participants) of recoverable O&M expenses shown on Schedule T-4 and further described in FPL Witness Kundalkar's testimony. FPL respectfully requests the Commission review and approve these expenditures together with related carrying charges of $2,357,995 as shown on the T Schedules and summarized on my Exhibit WP-1, as prudently incurred and the jurisdictional O&M expenses and carrying charges as recoverable consistent with the Nuclear Cost Recovery Rule.

Q. Please describe the NFR Schedules included in this filing for the recovery of 2008 nuclear uprate costs.

A. FPL has included the Final True-up (T Schedules) in Appendix I of this filing as Exhibit RSK-1. These T Schedules calculate the revenue requirements associated with 2008 actual costs compared to the revenue requirements being recovered as a result of last year's Actual/Estimated (A/E) filing in the AE Schedules in Docket No. 080009-EI. The difference produced an overrecovery amount of $1,118,917 in revenue requirements.

Q. Please explain Schedule T-4, Recoverable O&M Monthly Expenditures.

A. FPL is filing Schedule T-4, Recoverable O&M Monthly Expenditures as part of the true-up of 2008 costs. In FPL's prior filings in Docket 080009-EI, FPL did not project to incur recoverable O&M expenses associated with the uprates. In reviewing actual costs incurred in 2008, it was determined the Company incurred O&M expenses directly related to the Uprate Project. FPL is requesting recovery of these O&M expenses on T-4. A description of these

costs and the necessity for them is covered in FPL Witness Kundalkar's testimony.

Q. What accounting and regulatory treatment would be provided for costs that would have been incurred regardless of uprate projects during an outage?

A. Expenditures that are not "separate and apart" from the nuclear Uprate Project will be treated similarly to other capital expenditures and will accrue AFUDC while in CWIP until the system or component is placed into service. Only costs incurred for activities necessary for the Uprate Projects are charged to the uprate work orders and included in the calculation of carrying charges in the NFR Schedules. This method ensures that FPL only receives the appropriate cash return currently under the Nuclear Cost Recovery Rule and accrues a return that will be recovered in the future when the project is placed into service and recovered through base rates.

TURKEY POINT 6 & 7

Q. What are FPL's Turkey Point 6 & 7 Site Selection expenditures and related carrying charges for the period January 1, 2006 through December 31, 2008?

A. FPL's actual Turkey Point 6 & 7 site selection total company expenditures, jurisdictional expenditures and related carrying charges for 2006 – 2008 are as follows:

	Total Company Expenditures	Jurisdictional Expenditures	Carrying Charges
2006	$2,656,186		
2007	$3,461,920	$6,092,571	$134,642
2008	$ 0	$ 0	$686,727
Total	$6,118,106	$6,092,571	$821,369

Note: 2006 Total Company Site Selection costs were transferred at the 2007 jurisdictional separation factor of .9958265 effective with the filing of our need petition on October 16, 2007.

These expenditures are discussed in FPL Witness Scroggs' testimony, SDS-2, Appendix III Schedule T-6 for 2006-2008, Exhibit WP-1 and Exhibit WP-2, page 1 of 2. Carrying costs were not incurred until 2007 when FPL filed its Need Determination and no site selection costs were incurred after 2007. For the reasons stated in FPL Witness Scroggs' testimony, FPL respectfully requests the Commission review and approve these Turkey Point 6 & 7 site selection expenditures as prudently incurred and the jurisdictional expenditures and carrying charges as recoverable consistent with the Nuclear Cost Recovery Rule.

Q. What are FPL's Turkey Point 6 & 7 Preconstruction expenditures and related carrying charges for the period January 1, 2007 through December 31, 2008?

A. FPL's actual Turkey Point 6 & 7 preconstuction expenditures, jurisdictional expenditures and related carrying charges for 2007 – 2008 are as follows:

	Total Company Expenditures	Jurisdictional Expenditures	Carrying Charges
2007	$ 2,533,265	$ 2,522,692	$ 20,547
2008	$47,215,633	$47,049,854	$2,199,754
Total	$49,748,898	$49,572,546	$2,220,301

These expenditures are discussed in FPL Witness Scroggs' testimony and are shown on SDS-1, Appendix II, Schedule T-6 for 2007-2008, Exhibit WP-1 and Exhibit WP-2, page 1 of 2. No preconstruction costs were incurred prior to 2007. For the reasons stated in FPL Witness Scroggs' testimony, FPL respectfully requests the Commission review and approve these Turkey Point 6 & 7 preconstruction expenditures as prudently incurred and jurisdictional expenditures and carrying charges as recoverable consistent with the Nuclear Cost Recovery Rule.

Q. Please describe the NFR Schedules included in this filing for the recovery of 2008 Turkey Point 6 & 7 costs.

A. FPL has included the Final True-up (T Schedules) in Appendix II of this filing as SDS-1. For Site Selection costs, FPL has included T Schedules for 2006 through 2008 in SDS-2, Appendix III. For Preconstruction costs, FPL has included T schedules for 2007 and 2008 in SDS-1, Appendix II. These T Schedules calculate the revenue requirements using 2007 and 2008 actual costs compared to the revenue requirements currently being recovered as a result of Actual/Estimated costs filed in the AE Schedules in Docket No. 080009-EI. The result is the over recovery of $36,758 for Site Selection and $23,792,946 for Pre-Construction shown on the NFR Schedules and in Exhibit

WP-1.

ACCOUNTING CONTROLS

Q. Please describe the accounting controls FPL relies on to ensure proper cost recording and reporting for these projects.

A. FPL relies on its comprehensive corporate and overlapping business unit controls for recording and reporting transactions associated with any of its capital projects including the Uprate Project and Turkey Point 6 & 7. These comprehensive and overlapping controls include:

- FPL's Accounting Policies and Procedures;
- Financial systems and related controls including FPL's general ledger and construction asset tracking system (CATS);
- FPL's annual budgeting and planning process and reporting and monitoring of plan costs to actual costs incurred; and
- Business Unit specific controls and processes.

The project controls are further discussed in the testimony of FPL Witnesses Scroggs and Kundalkar.

Q. Are these controls documented, assessed and audited and/or tested on an ongoing basis?

A. Yes. The FPL corporate accounting policies and procedures are documented and published on the Company's internal website, INFPL. In addition, accounting management provides formal representation as to the continued

compliance with those policies and procedures each year. The Company's external auditors, Deloitte & Touche, LLP conduct an annual assessment of the Company's internal controls over financial reporting. Sarbanes-Oxley processes are identified, documented, tested and maintained, including specific processes for planning and executing capital work orders and acquiring and developing fixed assets. Certain key financial processes are tested during the Company's annual test cycle. In addition, Deloitte & Touche, LLP, as a part of its annual audit, assesses the Company's internal controls over financial reporting and expresses an opinion as to the effectiveness of those controls. The audit procedures performed by Deloitte & Touche, LLP include tests of general computer controls and of those policies and procedures that pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company.

Q. Describe the responsibilities and accounting controls of the New Nuclear Accounting Project Group.

A. The primary responsibility of the New Nuclear Accounting Project Group is to determine the financial accounting for the recovery of costs under the Nuclear Cost Recovery Rule, to prepare and maintain NFR schedules, (e.g. True Up, Actual/Estimated, and Projection schedules) and on a monthly basis, ensure the costs included in the NFR Schedules agree with the amounts recorded on the books and records of the Company. The Nuclear Cost Recovery projects utilize unique work orders to capture only the costs directly

related to these projects. After ensuring the costs are accurately recorded, adjustments are made to reflect participants' credits, jurisdictionalize the costs and make other adjustments for the calculations required in the NFR Schedules. Monthly journal entries are prepared to reflect the effects of the recovery of these costs and monthly reconciliations of the NFR accounts are performed.

The Nuclear Cost Recovery team works closely with the Nuclear, Engineering and Construction, and Transmission business units to address issues surrounding the costs related to the projects. The team is involved in researching, providing direction and resolving project accounting issues that arise as the new nuclear projects develop. The New Nuclear Accounting Project group also actively participates in the continued development and enhancement of FPL's asset tracking system to plan for the automation of processes surrounding the nuclear filing requirements at the appropriate time.

UPRATE SPECIFIC CONTROLS

Q. Describe the Nuclear Business Unit accounting controls which ensure costs are appropriately incurred and charged to the Uprate Projects.

A. The Nuclear Business Operations Group (NBO) is independent of the EPU Project Team and provides oversight of the costs charged to the Uprate Project. The NBO Group is primarily responsible for the work order

maintenance function, reviewing payroll to ensure only appropriate payroll is charged to the uprates, determining appropriate accounting for costs, raising potential issues to the Property Accounting Group when necessary, providing accounting guidance and training to the uprate team, assisting with internal and external audit-related matters, reviewing project projections and producing monthly variance reports. The NBO Manager is a licensed CPA with extensive public and private accounting experience who leads a team staffed by employees with business and accounting degrees. The NBO Manager reports to the Nuclear Division Controller.

Cost Capture and Tracking

The Nuclear Business Unit identifies the activities necessary to perform the uprates at the four nuclear units, Turkey Point Units 3 and 4 and St. Lucie Units 1 and 2. The uprate activities will be completed over the course of two consecutive outages at each of the four units. Costs associated with the work performed for each outage will be transferred from CWIP to plant in service at the end of each outage. In order to facilitate this process, a separate budget activity was set up for each unit and 2 different capital work orders were set up within each budget activity to capture costs related to each outage (8 capital work orders in total). As purchase orders (PO) are issued in the Procurement Control and Inventory Management System (PASSPORT) for work to be performed at each unit, the work is identified by outage and the PO

is coded to charge the appropriate work order. This structure facilitates cost analysis to track discrete projects and tasks.

Invoice Processing

Invoices are routed to the St. Lucie or Turkey Point site budget analyst, as appropriate. The analyst checks the invoices for accuracy and for agreement to the PO terms and conditions. Once the invoice has been appropriately verified, the analyst records invoice information on an Invoice Tracking Log and attaches the Invoice Approval Form to the invoice, which gets routed for verification of receipt of goods/services and all required approvals. In accordance with the EPU Project Authorization Matrix, any invoice greater than $1 million requires the approval of the Vice President, Nuclear Power Uprates before payment may be made. Once all necessary approvals have been obtained, the Analyst processes the invoice for payment in PASSPORT against the respective purchase order. Extended Power Uprate Project Instruction Number EPPI-230, *Project Invoice*, details the flow of the invoice through the approval, receipt and payment process at the sites and establishes responsibilities at each stage of the process.

Detail Transactions Reviews

Throughout the month, general ledger detail transactions are monitored by the EPU Project Controls Team and NBO to ensure that costs charged to the uprates are appropriate and are accurately classified as capital or O&M. Site cost engineers perform reviews to ensure invoices are accurately coded to the appropriate activity/scope work order. NBO reviews internal labor costs to ensure that only appropriate payroll is charged to the uprates. In addition, all steps in this process are subject to internal and external audits and reviews.

Variance Reporting

The NBO group drafts monthly variance reports that compare actual expenditures incurred to the originally estimated budget and report year end forecast estimates. The draft reports are sent to the St. Lucie and Turkey Point Uprate Project Controls Teams responsible for providing variance explanations and forecast updates to NBO. The reports are reviewed by uprate project control supervisors and management prior to the submission to NBO. NBO reviews the variance explanations and forecast numbers for reasonableness and accuracy prior to compilation and inclusion in the Nuclear Business Unit corporate variance report. NBO is also responsible for reviewing numbers reported to the FPL Executive Steering Committee to ensure consistency with corporate variance reports and for providing the

Accounting Department with project numbers for inclusion in the NFR schedules.

NEW NUCLEAR SPECIFIC CONTROLS

Q. Describe the Engineering and Construction business unit accounting controls to ensure costs are appropriately incurred and charged to the Turkey Point 6 & 7 project.

A. The Project Controls Group reports through the Director of Construction and provides structural leadership, governance and oversight for the project. On a monthly basis, the group completes a thorough review of all costs to ensure they are appropriately charged to the project. Additionally, monthly variance reports are generated against budgeted information and meetings are held with team members and project management to review and understand existing budget variances and any projected variances. The Group consists of a Business Manager with an economics degree and 27 years experience at FPL, 20 years in the Nuclear Business Unit and 7 years in the Auditing, Property and Financial Accounting Groups. He is supported by business, finance and accounting degreed staff with nuclear and construction experience.

Cost Capture and Tracking

When the project was determined to be viable and FPL filed its Need Determination in October 2007, costs related to the project that had been recorded in a deferred debit account were transferred to CWIP. A separate work order was set up for Site Selection costs and Preconstruction costs. As stated in the Rule, a site is deemed to be selected upon the filing of a petition for a determination of need; therefore, all costs expended prior to the Need Filing are categorized as site selection costs. Costs incurred up to the filing were captured in a unique work order and are included in the Site Selection 2006, 2007 and 2008 T Schedules. Preconstruction costs are costs that are expended after a site has been selected and are also captured in a unique work order and are included in the Preconstruction 2007 and 2008 T Schedules.

Invoice Processing

When a potential expenditure greater than $5,000 is identified, project personnel input the expenditure request detailing the need, justification, estimated cost and documentation in the Engineering and Construction Development Electronic Approval Database (EAD). The request is sent to the Project Controls Group which inputs all pertinent budget information, verifies appropriate accounts charged and verifies the budgeted resources for the proposed transaction are available. This information is sent through the EAD

to the Project Manager of the functional area who verifies the expense is applicable to the project. The Project Manager then routes the EAD to the appropriate approvers based on authorization levels, to the Integrated Supply Chain (ISC) department and to the Project Controls Group. Once the expenditure is approved, ISC completes the requisition. After the goods have been received or services rendered, and an invoice is received by the functional area, it is reviewed, determined appropriate, approved and input into the SAP payment processing system. In SAP, online approvals based on authorization levels are required for any expenditure greater than $250 prior to the invoice being paid. For items less than $250, the monthly SAP transaction register detailing the document number, work order, account, amount, description, purchase order and the total dollar amount of the transaction must be reviewed and approved monthly by the approver designated in SAP as appropriate for charging the project.

At the present time, the majority of expenditures are for two vendors, Bechtel which is handling the Combined Operating License Application (COLA), and Black & Veatch/Zachary (BVZ) which is providing preliminary construction planning. The invoices from these vendors are voluminous and are received electronically by the Project Controls Group. They are loaded into a SharePoint database and routed to the appropriate business unit contacts to access, review and approve. The Contract Administrator ensures that all parties have signed off on their appropriate section of the invoice prior to

payment. The charges on the invoices are also reviewed for compliance with the purchase order and/or contract and differences with vendors are resolved. The remaining invoices relate to charges incurred by groups such as Legal, Marketing and Communications, Transmission, Environmental Services and long lead procurement items.

Variance Reporting

The Project Controls organization is responsible for preparing, analyzing and clearly and concisely explaining variances against planned budgets for current month, year-to-date and year end. Monthly meetings are held with team members and project management to review and understand existing budget variances and any projected variances. The resulting expenditures are then transmitted to Accounting for inclusion in the NFR schedules.

ADDITIONAL NEW NUCLEAR AND UPRATE OVERSIGHT

Q. Are there any additional controls being implemented and relied on for these projects and the related reporting?

A. Yes. The Company has again issued specific guidelines for charging costs to the project work orders. These guidelines reemphasize the need for particular care in charging only incremental labor to the project work orders included for nuclear cost recovery and ensure consistent application of the Company's

capitalization policy. The implementation of these guidelines will continue to provide for the exclusion of non-incremental labor from current recovery while providing full capitilization of all appropriate labor costs through the maintenance of separate project capital work orders that will be included in future base rate recovery. Exhibit WP-3 provides a flowchart depicting this process.

The Company continues to undergo specific project related internal audits. The objective of these audits is to test the process of recording and capturing costs related to the Uprate and Turkey Point 6 & 7 projects in the pre-established work orders to ensure compliance with the Commission's Rule. FPL will continue to ensure these projects are audited on an ongoing basis. The 2008 costs and controls related to the Turkey Point 6 & 7 and Uprate Projects will have been audited prior to the start of the hearing in this docket. Their audits, findings and follow-ups will provide additional assurance that the internal controls surrounding transactions and processes are established, maintained and communicated to employees and provide reasonable assurance that the financial and operating information generated within the Company is accurate and reliable.

Q. What other unique control or oversight exists in the Company's conduct of these processes?

A. By virtue of the Commission Rule and the process being conducted herein, the Company and all parties have an even higher degree of transparency and

oversight into the costs being incurred in these projects than would be provided under the traditional base ratemaking process.

The ongoing cycles of cost collection, aggregation, analysis and review which lead to the NFR filings provides for a level of detailed review that is unprecedented. For example, in the preparation of the NFR Schedules transactional expenditures are projected by activity and, subsequent to the conduct of that activity and the incurrence of the cost, an immediate review of projection to actual, in many cases at the transactional level, is conducted. In addition, we cannot immediately automate the NFR preparation process, so the manual nature of the data collection and aggregation process, along with the manual calculation of carrying charges and construction period interest, provides for a level of detailed review that is not typically performed. The requirements of the Rule have, by design, increased significantly the review, effort and transparency of the costs themselves.

Q. How are carrying charges provided for under the Nuclear Cost Recovery Rule?

A. The Nuclear Cost Recovery Rule allows current cash recovery through the Capacity Cost Recovery Clause of a carrying charge at a fixed rate in effect at June 12, 2007. For FPL this fixed rate is 7.42% (11.04% on a pretax basis), consistent with the provisions of the Nuclear Cost Recovery Rule. The Company's AFUDC rate is calculated in accordance with the FPSC Rule No. 25-6.0141, Allowance for Funds Used During Construction (AFUDC Rule)

and is applied to all eligible CWIP charges. When the Commission approves a change in the AFUDC rate in accordance with the AFUDC Rule during construction of the nuclear projects, all eligible costs including those associated with the new nuclear projects will accrue AFUDC at the approved rate. In April 2008, the FPSC approved the change in the AFUDC rate from 7.42% to 7.65% effective January 1, 2008. As FPL is only allowed to recover a carrying charge through the Capacity Cost Recovery Clause at the fixed rate specified in the Nuclear Cost Recovery Rule, any resulting incremental/decremental AFUDC amounts will remain in CWIP on the Company's books and records until the projects are placed into service, at which time any increment or decrement will be transferred to plant in service.

Q. Does this conclude your testimony?

A. Yes.

BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

In re: Nuclear Power Plant)	DOCKET NO. 090009-EI
Cost Recovery Clause)	FILED: August 21, 2009

ERRATA SHEET

MARCH 2, 2009 DIRECT TESTIMONY OF WINNIE POWERS

PAGE#	LINE #	CHANGE
6	9	"$23,829,703" to "24,141,656"
10	19	"$36,758" to "$348,711"
4	11	"Rule" to "Statute"
21	3	"capitilization" to "capitalization"

PAGE#	LINE #	Addition
2	19	After "uprates," add "recoverable Operations and Maintenance expense,"
10	11	Before "2008" add "2006, 2007, and"

MARCH 2, 2009 EXHIBIT WP-1 OF WINNIE POWERS

Revised Exhibit WP-1, attached.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

DIRECT TESTIMONY OF WINNIE POWERS

DOCKET NO. 090009-EI

May 1, 2009

Q. Please state your name and business address.

A. My name is Winnie Powers. My business address is 9250 W. Flagler St, Miami, Florida 33174.

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

A. I am employed by Florida Power & Light Company (FPL or the Company) as New Nuclear Accounting Project Manager.

Q. Have you previously filed testimony in this docket?

A. Yes.

Q. Are you sponsoring any exhibits in this case?

A. Yes. I am sponsoring portions of the following exhibits:

- Appendix I containing the Nuclear Filing Requirements Schedules (NFRs) for the Uprate project. Page 2 of Appendix I contains a table of contents listing the NFRs that are sponsored by FPL witness Kundalkar, FPL witness Sim and me, respectively.
- Appendix II containing the NFRs for Turkey Point 6 & 7 pre-construction costs. Page 2 of Appendix II contains a table of contents

listing the NFRs that are sponsored by FPL witness Scroggs, FPL witness Sim and me, respectively.

- Appendix III containing the NFRs for Turkey Point 6 & 7 Site Selection costs. Page 2 of Appendix III contains a table of contents listing the NFRS that are sponsored by FPL witness Scroggs and me, respectively.

Additionally, I am sponsoring the following exhibits:

- Exhibit WP-1 which summarizes the costs, carrying charges and base rate revenue requirements for which FPL requests a prudence/reasonableness determination from this Commission.
- Exhibit WP-2 which details the in service dates and amounts of plant going into service in 2009 and 2010, the reasonableness, necessity and timing of which is discussed in the testimony of FPL witness Kundalkar.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to provide an overview of FPL's filing and demonstrate that the filing complies with Florida Administrative Code Rule 25-6.0423, Nuclear or Integrated Gasification Combined Cycle Power Plant Cost Recovery (the Rule). Consistent with the Rule, my testimony requests that the Commission approve a Nuclear Power Plant Cost Recovery ("NPPCR") amount of $62,792,990 on a jurisdictional adjusted basis to be recovered through the 2010 Capacity Cost Recovery Clause ("CCRC"). In

conjunction with approval of the NPPCR amount, FPL requests that the Commission review and approve as reasonable for the Uprate Project:

- 2009 Actual/Estimated and 2010 Projected construction expenditures of $258,926,772 ($252,317,529 on a jurisdictional, net of participants basis) for 2009 and $391,614,248 ($376,703,895 on a jurisdictional, net of participants basis) for 2010. Additionally, FPL requests the Commission approve the related carrying charges of $20,297,390 for 2009 and $41,594,197 for 2010 as a result of truing up of actual and estimated expenditures and carrying charges compared to carrying charges we are currently collecting of $20,286,022. This amount is then included with the 2010 Projected carrying charges and will be recovered effective January 1, 2010 as presented in the testimony and NFR schedules of FPL witness Kundalkar and me.
- Recoverable O&M of $544,467 for 2009 and $2,147,983 for 2010 as presented in the testimony and NFR schedules sponsored by FPL witness Kundalkar.
- The base rate revenue requirements of $70,566 related to the Gantry Crane going into plant in service at St. Lucie Unit 2 in October 2009 and $16,007,584 related to St. Lucie Unit 1, Turkey Point Unit 3 and transmission plant going into service in 2010 for recovery through the Capacity Clause in 2010. The reasonableness, necessity and timing of these expenditures is supported by the testimony and exhibits of FPL witness Kundalkar. The calculation of the base rate revenue

requirements related to the plant going into service in 2009 and 2010 can be found on Exhibit WP-2.

FPL also requests the Commission review and approve as reasonable for the Turkey Point 6 & 7 Project:

- Preconstruction Costs - The 2009 Actual/Estimated Preconstruction expenditures of $45,640,661 ($45,444,468 on a jurisdictional basis) and related carrying charges of $3,560,771 and 2010 Projected Preconstruction expenditures of $91,730,615 ($90,654,124 on a jurisdictional basis) and related carrying charges of $973,735, as a result of truing up actual and updating estimated expenditures compared to costs and carrying charges we are currently collecting to be collected effective January 1, 2010, as presented in the testimony and NFR schedules of FPL witness Scroggs and me.
- Site Selection Costs - The 2009 Actual/Estimated and 2010 Projected carrying charges on Site Selection expenditures of $472,938 for 2009, and $233,136 for 2010, as a result of truing up of actual and estimated expenditures and carrying charges compared to costs and carrying charges we are currently collecting. This amount is then included with the 2010 Projected carrying charges and will be recovered effective January 1, 2010, as presented in the testimony and NFR schedules of FPL witness Scroggs and me.

NUCLEAR COST RECOVERY RULE

Q. Please describe the purpose of the Rule.

A. On March 20, 2007, in Order No. PSC-07-0240-FOF-EI, this Commission adopted the Rule to implement Section 366.93, Florida Statutes (the Statute), which was enacted by the Florida Legislature in 2006. The stated purpose of the Statute is to promote utility investment in nuclear power plants, and it directed the Commission to establish alternative mechanisms for cost recovery and step-wise, periodic prudence determinations with respect to costs incurred to build nuclear power plants. The Rule provides the mechanism and the annual recovery of these costs through the CCRC. FPL has been working with Commission Staff, the Office of Public Counsel, Progress Energy Florida and others to develop a comprehensive set of schedules, Nuclear Filing Requirements, setting forth construction and cost information on a nuclear project.

Q. Have these schedules been formally adopted?

A. Although the schedules have not been formally adopted by the Commission, the Company has been trying to make them as transparent as possible by including the information necessary to facilitate an understanding of the schedules and calculations. However, the forms are still evolving and deviations from specific details of the forms may be appropriate. The NFRs provide an overview of the financial and construction aspects of nuclear plant

projects, outline the categories of costs represented, and provide a roadmap to the calculation of detailed project revenue requirements.

Q. Does the Rule describe the annual filing requirements that a utility is to make in support of its current year expenditures for Commission review and approval?

A. Yes. The Rule states:

" 1. Each year, a utility shall submit, for Commission review and approval, as part of its Capacity Cost Recovery Clause filings: ...

b. True-Up and Projections for Current Year. By May 1, a utility shall submit for Commission review and approval its Actual/Estimated true-up of Projected pre-construction expenditures based on a comparison of current year Actual/Estimated expenditures and the previously-filed estimated expenditures for such current year and a description of the pre-construction work projected to be performed during such year; or, once construction begins, its Actual/Estimated true-up of Projected carrying costs on construction expenditures based on a comparison of current year Actual/Estimated carrying costs on construction expenditures and the previously filed estimated carrying costs on construction expenditures for such current year and a description of the construction work projected to be performed during such year."

Q. Is FPL complying with these requirements with respect to its 2009 Actual/Estimated Uprate and Turkey Point 6 & 7 project costs?

A. Yes. FPL has included the Actual/Estimated True-up (AE) Schedules in Appendix I for the Uprate Project, Appendix II for Turkey Point 6 & 7 Preconstruction costs and Appendix III for Turkey Point 6 & 7 Site Selection costs in this filing. Included in these schedules is the impact of the 2008 T Schedule True-Up amounts as reflected in FPL's March 2, 2009 filing. As contemplated by the Rule, these AE schedules provide the basis for determining the reasonableness of FPL's 2009 Actual/Estimated costs. In their testimony, FPL witness Kundalkar for the Uprate project and FPL witness Scroggs for the Turkey Point 6 & 7 project provide the reasons why these Actual/Estimated costs are reasonable.

Q. Does the Rule describe the annual filing requirements that a utility is to make for the projected year expenditures for Commission review and approval?

A. Yes. The Rule states:

" 1. Each year, a utility shall submit, for Commission review and approval, as part of its Capacity Cost Recovery Clause filings: ...

c. Projected Costs for Subsequent Years. By May 1, a utility shall submit, for Commission review and approval, its Projected pre-construction expenditures for the subsequent year and a description of the pre-construction work projected to be performed during such year; or, once construction begins, its Projected construction expenditures for the subsequent year and a description of the construction work projected to be performed during such year."

Q. Is FPL complying with these requirements with respect to its 2010 Projected Uprate and Turkey Point 6 & 7 project costs?

A. Yes. FPL has included the Projection (P) Schedules in Appendix I for the Uprate project, Appendix II for Turkey Point 6 & 7 Preconstruction costs and Appendix III for Turkey Point 6 & 7 Site Selection costs of this filing. As contemplated by the Rule, these P schedules provide the basis for determining the reasonableness of FPL's 2010 Projections. These schedules also flow through any (over)/under recovery of 2008 actual costs and 2009 Actual/Estimated costs to costs that we are currently collecting. In their testimony, FPL witness Kundalkar for the Uprate project and FPL witness Scroggs for the Turkey Point 6 & 7 project provide the reasons why these projections are reasonable.

Q. Please explain the costs that FPL is requesting to include for recovery effective January 1, 2010.

A. The costs FPL is requesting to recover in 2010 reflect our projections of 2010 Preconstruction costs, carrying costs on construction costs, recoverable O&M and the base rate revenue requirements for plant going into service in 2009 and 2010. Included in the costs we are requesting to recover are the (over)/under recoveries due to costs we are currently collecting being different than the 2008 Actual costs in our March 2, 2009 filing and our updated 2009 Actual/Estimated costs that we are filing now. Any resulting (over)/under recoveries of costs are included in the calculation of carrying charges in the month they occur and will be recovered, along with the 2010 projected costs

and related carrying costs, over a twelve month period beginning January 1, 2010.

Q. How is FPL providing an update to the original Uprate and Turkey Point Unit 6 & 7 project costs, respectively?

A. FPL has included the True up to Original (TOR) Schedules in Appendix I for the Uprate Project, Appendix II for Turkey Point 6 & 7 Preconstruction costs and Appendix III for Turkey Point 6 & 7 Site Selection costs of this filing. The TOR schedules provide a comparison to originally filed project costs and summarize the revenue requirements for the recovery period beginning January 1, 2010.

COST RECOVERY FOR THE UPRATE PROJECT

Q. What are FPL's Actual/Estimated Uprate project expenditures and associated carrying charges for the period January 2009 through December 2009, the amount that FPL is currently collecting, and the resulting (over)/under recovery of costs?

A. As presented in FPL witness Kundalkar's testimony and provided on Schedule AE-6 of Appendix I, FPL's Actual/Estimated Uprate project expenditures for the period January 2009 through December 2009 are $258,926,772. Schedule AE-6 of Appendix I deducts the portion of this total for which the St. Lucie Unit 2 participants are responsible and then applies the retail jurisdictional factor to the remainder. (In 2008, the St. Lucie Unit 2 participants, Orlando

Utilities Commission and Florida Municipal Power Agency, confirmed that they intend to maintain their participation percentages in the uprate projects). For actuals, adjustments are made to present the expenditures on a cash basis (i.e., excluding accruals and pension and welfare benefit credits) for the calculation of carrying costs. This adjustment is necessary in order to comply with the Commission's current practice regarding AFUDC accruals. After making these adjustments, the net 2009 Actual/Estimated uprate expenditures are $256,521,483. FPL's previously Projected 2009 uprate expenditures as filed in Docket No. 080009-EI were $233,294,413 on a jurisdictional basis net of participants' share. The calculations of the carrying charges on these expenditures are provided on schedules AE-3 and AE-3A and result in a carrying charge of $20,297,390 for 2009. As a result of the Commission's decision in Docket No. 080009-EI that FPL's Actual/Estimated 2008 and projected 2009 costs were reasonable, FPL is currently recovering $20,286,022 in carrying charges on its construction expenditures for the Uprate Project through the CCRC in 2009. As a result of the True-Up of 2008 costs as filed in the March 2, 2009 filing and the updates to the 2009 expenditures in this May 1, 2009 AE filing, FPL should have recovered $22,655,386 resulting in an underrecovery of $2,369,363 in 2009. As shown on schedule AE-4 and as discussed in FPL witness Kundalkar's testimony, there is $544,467 of O&M for which FPL is requesting recovery in 2009. Additionally, as shown on Exhibit WP-1, there is $70,566 of base rate revenue requirements for plant going into service in 2009.

Q. What are FPL's Projected Uprate project costs for the period January 2010 through December 2010 and what is the impact of prior year's (over)/under recoveries on the recovery of these costs in 2010?

A. As presented in FPL witness Kundalkar's testimony and provided on Schedule P-6 of Appendix I, FPL's Projected Uprate Project expenditures for the period January 2010 through December 2010 are $391,614,248. Schedule P-6 of Appendix I deducts the portion of this total for which the St. Lucie Unit 2 participants are responsible and then applies the retail jurisdictional factor to the remainder. Since FPL's projections are on a cash basis, it is not necessary to project any non-cash accruals. After making the above two adjustments, the net 2010 Projected Uprate expenditures are $376,703,895. The calculations of the carrying charges on these expenditures which reflect the true-up of 2008 and Actual/Estimated 2009 expenditures are provided on schedules P-3 and P-3A and result in carrying charges of $41,594,197 in 2010. As shown on schedule AE-4 and as discussed in FPL witness Kundalkar's testimony, there is $2,147,983 of O&M for which FPL is requesting recovery in 2010. Additionally, as shown on Exhibit WP-1, there is $16,007,584 of base rate revenue requirements for plant going into service in 2010.

As shown on Exhibit WP-1, the costs, carrying costs, and base rate revenue requirements FPL is requesting to recover in 2010 reflect the effect, along with related carrying charges on any (over)/under recovered balances, of 2008

Actual and 2009 Actual/Estimated costs being different than the costs we are currently collecting. As a result, FPL is requesting to recover $62,990,252 in 2010.

For the reasons stated in FPL witness Kundalkar's testimony, FPL respectfully requests that the Commission approve FPL's Actual/Estimated 2009 and Projected 2010 Uprate Project expenditures as reasonable. FPL additionally requests the Commission approve for recovery effective January 1, 2010 the carrying charges on these expenditures, including the flow through of the related true-ups of 2008 costs and Actual/Estimated 2009 costs and recoverable O&M as reflected on T-1, A/E-1 and schedule P-1 for cost recovery beginning in January 2010 consistent with the Rule.

Q. Please describe the transfers to plant in service for the uprate projects in 2009?

A. As shown on Exhibit WP-2, FPL will place the Gantry Crane at St. Lucie Unit 2 into service in October 2009. Until the plant goes into service, FPL will continue to recover the carrying charges on the construction costs. Effective October 2009, FPL will transfer out $2,449,426 of CWIP to plant in service and the carrying charges will cease. FPL's computations reflect the inclusion of the 2009 base rate revenue requirements related to the Gantry Crane at St. Lucie Unit 2 of $70,566 as of October 15, 2009 for recovery through the Clause. FPL will file a separate petition for a base rate revenue requirement increase pursuant to the Rule.

Q. Please describe the transfers to plant in service for the uprate projects in 2010?

A. There are nine transfers to plant in service for the uprate projects in 2010 as shown in Exhibit WP-2. Until the plant goes into service, FPL proposes to recover the carrying charge on the construction costs. FPL's computations reflect that when the plant goes into service FPL recovers the base rate revenue requirement through the end of that year. Exhibit WP-2 shows the effect on base rates as these nine transfers get placed into service. In 2010, FPL expects to place $307,405,281 of plant into service. From April to December, Exhibit WP-2 shows the base rate revenue effect as the assets are placed into service. The total amount proposed to be recovered through base rate revenue recovery through the Clause in 2010 is $16,007,584. Included in the base rate revenue requirement impact is the incremental/decremental AFUDC and any non-incremental labor related to the uprate project. Non-incremental labor is due to the fact that the labor was included in base rates. While FPL is not requesting recovery of carrying charges on this amount through the Clause, these capital costs should be included in our base rate calculation.

COST RECOVERY FOR TURKEY POINT 6 & 7

Q. What are FPL's Turkey Point 6 & 7 Actual/Estimated preconstruction expenditures and associated carrying charges for the period January

2009 through December 2009, the amount that FPL is currently collecting, and any resulting (over)/under recoveries of costs?

A. As presented in FPL witness Scroggs' testimony and provided on Schedule AE-6 of Appendix II, FPL's Actual/Estimated Turkey Point 6 & 7 Pre-construction expenditures for the period January 2009 through December 2009 are $45,640,661 ($45,444,468 on a jurisdictional basis). The carrying charges for the period January 2009 through December 2009 are $3,560,771 for a total of $49,005,239 jurisdictional in Actual/Estimated Preconstruction expenditures and carrying charges.

FPL is currently collecting $192,471,520 in Preconstruction costs and associated carrying charges for Turkey Point 6 & 7 through the CCRC in 2009. This amount consists of Pre-construction costs of $2,522,692 and carrying charges of $20,547 for the 2007 Actual/Estimated period, Pre-construction expenditures of $69,707,855 and carrying charges of $3,334,698 for the 2008 Actual/Estimated period and Preconstruction expenditures of $109,540,915 and carrying charges of $7,344,813 projected for 2009 as filed in Docket No. 080009-EI.

The true-up of 2007 and 2008 costs can be found in FPL's March 2, 2009 testimony and NFRs. For 2009, the Preconstruction expenditures and carrying charges that FPL is currently collecting total $116,885,727. This compares to $49,005,239 in FPL's 2009 A/E schedule and results in an overrecovery of

$67,880,488 of 2009 Preconstruction costs and carrying costs as shown on Exhibit WP-1. This overrecovery includes a carrying charge on the 2008 and 2009 overrecovery at the rate approved in Rule 25-6.0423 (11.04%) until recovered in rates effective January 1, 2010.

Q. What are FPL's Projected Turkey Point 6 & 7 Preconstruction expenditures for the period January 2010 through December 2010 and what is the impact of the prior year's (over)/under recoveries on the recovery of these costs in 2010.

As presented in FPL witness Scroggs' testimony and provided on Schedule P-6 of Appendix II, FPL's Projected Turkey Point 6 & 7 Preconstruction expenditures for the period January 2010 through December 2010 are $91,730,615 ($90,654,124 on a jurisdictional basis).

Shown on Exhibit WP-1, are the Preconstruction costs, and the carrying charges FPL is requesting to recover in 2010. Included in these costs are the related carrying charges on unrecovered Preconstruction costs, on construction costs, and on any (over)/under recovered balances, due to 2008 Actual and 2009 Actual/Estimated costs being different than costs we are currently collecting. As a result, FPL is requesting to refund $45,574 in 2010.

For the reasons stated in FPL witness Scroggs' testimony, FPL respectfully requests the Commission approve FPL's Actual/Estimated 2009 and 2010 Projected Turkey Point 6 & 7 expenditures as shown on A/E-6 and P-6 of this

filing as reasonable and the jurisdictional amounts on A/E-1 and P-1 as eligible for recovery effective January 1, 2010. FPL additionally requests the Commission approve for recovery the flow-through of the true-ups of 2008 Actual costs as reflected on T-1 in our March 2, 2009 filing, 2009 Actual/Estimated costs as reflected on A/E-1, and 2010 Projected costs as reflected on P-1 of this filing and the related carrying charges on these expenditures.

Q. What are FPL's Turkey Point 6 & 7 Actual/Estimated Site Selection expenditures and associated carrying charges for the period January 2009 through December 2009, the amount that FPL is currently collecting, and the resulting over or under recovery costs?

A. FPL is currently collecting $7,771,701 in site selection costs and associated carrying charges for Turkey Point 6 & 7 through the CCRC in 2009. This amount is made up of site selection costs of $6,397,310 and carrying charges of $141,857 for the 2007 actuals, carrying charges of $723,484 for 2008 Actual/Estimated and carrying charges of $509,050 projected for 2009.

As provided in the Rule, site selection costs ceased with the filing of the Need Determination petition in October 2007. However, FPL's 2007 site selection costs, as presented in FPL witness Scroggs' testimony and provided on Schedule T-6 of Appendix II, in FPL's March filing, were adjusted to reflect payroll costs that should not have been charged to the project. Along with the true-up of actual site selection costs and carrying costs reflected in FPL's

March 2, 2009 filing, and as presented in FPL witness Scroggs' testimony, this filing shows the carrying costs for 2009 of $472,938 on Schedule AE-2 and AE-3A of Appendix II, for the period January 2009 through December 2009.

Q. What are FPL's Turkey Point 6 & 7 Actual/Estimated Site Selection expenditures and associated carrying charges for the period January 2010 through December 2010, the amount that FPL is currently collecting, and the resulting over or under recovery costs?

A. FPL has no additional site selection expenditures in 2010 but does have additional carrying charges as reflected on P-2 and P-3A of Appendix II of $233,136.

For the reasons stated in FPL witness Scroggs' testimony, FPL respectfully requests that the Commission approve the resulting true-up of expenditures and the related carrying charges on unrecovered balances as reasonable for cost recovery beginning January 1, 2010 consistent with the Rule. FPL also requests the Commission approve the inclusion of the deferred tax asset and related return as a result of the recovery of site selection costs on the preconstruction schedules to be filed in the future.

ACCOUNTING CONTROLS

Q. Please describe the accounting controls that provide you reasonable assurance that the costs included in the filing are correct.

A. FPL has a robust system of corporate accounting controls. The Company relies on its comprehensive and overlapping controls for incurring costs and recording transactions associated with any of its capital projects including the nuclear uprates and Turkey Point 6 & 7 projects. These comprehensive and overlapping controls include:

- FPL's Accounting Polices and Procedures
- Financial systems and related controls including its general ledger and Construction Asset Tracking System (CATS)
- Sarbanes-Oxley processes and testing
- Annual budgeting and planning process and reporting and monitoring of plan costs to actual costs incurred as discussed in the testimony of FPL witnesses Kundalkar and Scroggs.

Included on our internal website database are the corporate procedures regarding cash disbursements, accounts payable, contract administration, and financial closing schedules which provide the business units guidance as to the processing and recording of transactions. The business units then build their more specific procedures around these corporate procedures. FPL's internal audit department continues to audit the Uprate and Turkey Point 6 & 7 projects and witness Reed from Concentric provides testimony regarding his Company's review of FPL's System of Internal Control. The FPSC staff also is continuing its audits. Additionally, by virtue of the schedules themselves the high level of transparency allows all parties to review and determine the

prudence and reasonableness of our filing. My March 2, 2009 testimony on pages 13-22 provides a more detailed discussion of these interrelated controls.

SUMMARY

Q. What is the total amount of nuclear project costs that FPL is requesting to recover through the 2010 CCRC?

A. FPL is requesting to recover $62,792,990 over a 12 month period in 2010 as detailed in the 2010 P Schedules included in Appendix I for the Uprate project, Appendix II for Turkey Point 6 & 7 preconstruction costs and in Appendix III for Turkey Point 6 & 7 site selection costs. A summary of these items is included in Exhibit WP-1.

Q. Does this conclude your testimony?

A. Yes.

BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

In re: Nuclear Power Plant)	DOCKET NO. 090009-EI
Cost Recovery Clause)	FILED: August 21, 2009

ERRATA SHEET

MAY 1, 2009 DIRECT TESTIMONY OF WINNIE POWERS

PAGE#	LINE #	CHANGE
2	21	"62,792,990" to "62,789,984"
3	8	"41,594,197" to "41,594,586"
3	17	"70,566" to "83,651"
3	19	"16,007,584" to "15,991,104"
10	22	"70,566" to "83,651"
11	14	"41,594,197" to "41,594,586"
11	18	"16,007,584" to "15,991,104"
12	2	"62,990,252" to "62,987,246"
12	21	"70,566" to "83,651"
13	9	"307,405,281" to "307,285,097"
13	12	"16,007,584" to "15,991,104"
19	8	"62,792,990" to "62,789,984"

MAY 1, 2009 EXHIBIT WP-1 OF WINNIE POWERS

See Revised Exhibit WP-1, attached.

MAY 1, 2009 EXHIBIT WP-2 OF WINNIE POWERS

See Revised Exhibit WP-2, attached.

MAY 1, 2009 APPENDIX I CO- SPONSORED BY WINNIE POWERS

See Revised NFR Schedules, attached.

BY MR. RUBIN:

Q. Have you prepared a summary of your direct testimony?

A. Yes.

Q. Would you please provide your summary to the Commission?

A. I will.

CHAIRMAN CARTER: Chris, give me little more volume on her, please, on Ms. Powers. This is not taken against -- this is not against your time, Ms. Powers.

THE WITNESS: Okay. Thank you.

CHAIRMAN CARTER: Okay. Let's try it now.

THE WITNESS: Okay. Good afternoon, Mr. Chairman, Commissioners. The purpose of my testimony is to present FPL's nuclear filing requirements or NFRs that quantify our request for the Commission determination of the prudence and reasonableness of our costs. I provide an overview of FPL's filing and demonstrate that the filing complies with the nuclear power plant cost recovery rule, which I will refer to as the rule, and the related statute.

Additionally, I explain how carrying charges are provided for under this rule. I speak to the process of excluding costs that are not separate and apart from recovery under the rule, but confirm that FPL

will record AFUDC on these costs, as we do with other construction work in progress.

My testimony outlines the comprehensive and overlapping controls that we have in place which are documented, assessed, audited and tested on an ongoing basis by both FPL's internal and external auditors. Our internal controls and costs have also been audited by this Commission's audit staff.

These comprehensive corporate and overlapping business unit controls for incurring costs and recording transactions, along with the testimony provided by our witnesses, should give this Commission assurance that our total costs are prudent and that our projected costs are reasonable.

FPL filed the final NFR schedules containing information through 2008 for its St. Lucie and Turkey Point uprates and Turkey Point 6 and 7 preconstruction and site selection projects on March 2nd, 2009, and is requesting the Commission determine these costs as prudently incurred.

On May 1st, 2009, FPL filed its actual estimated and 2010 projected NFRs for the same projects, and is requesting the Commission determine these costs as reasonable.

Based on the Commission's determinations, FPL

requests this Commission approve for recovery effective January 1, 2010, FPL's total requested revenue requirement of $62,789,984 on a jurisdictional basis through the capacity cost recovery clause. This amount represents the true-up of actual costs incurred through 2008 and estimated and projected costs through 2010 for FPL's uprate and Turkey Point 6 and 7 projects. This concludes my summary.

CHAIRMAN CARTER: Mr. McGlothlin.

MR. McGLOTHLIN: OPC has no questions.

CHAIRMAN CARTER: Mr. Davis.

MR. DAVIS: None from SACE.

CHAIRMAN CARTER: Mr. Moyle, you're recognized.

MR. MOYLE: Thank you.

CROSS EXAMINATION

BY MR. MOYLE:

Q. You mentioned about the audits of the separate and apart issue and you said that there was an internal audit done and an external audit; is that correct?

A. I mentioned that our costs and internal controls have been audited by our internal auditors and external, and the PSC auditors as well.

Q. Okay. And just so, just so we're clear, there hasn't been an audit specifically done with respect to

the separate and apart issue where an outside auditing firm has been contracted and said please come in and review specifically whether these costs are properly allocated; is that correct?

A. No, it's not correct. Witness Reed reviewed -- it's not a true audit, but he did review our process of determining how costs are separate and apart and how we segregate them.

Q. And Witness Reed, he's not a CPA, is he?

A. I don't believe he is.

Q. I had one other question. On Page 3, Line 17, you talk about the base rate revenue requirements of 70,566 related to the Gantry Crane going into the plant-in-service at St. Lucie.

A. Based on the errata, that amount is $83,651.

Q. Okay. Thank you. Isn't, isn't this crane part of what is needed to construct the dry cask storage facility at St. Lucie?

A. I'm not aware of if it is, but let me clarify exactly what this amount represents. We have a Gantry Crane currently at our Port St. Lucie plant, and it's functioning well for the things that we need it to function for.

In order to do the uprate project, we need to make certain modifications to that crane, and this

amount represents the base rate revenue impact of those modifications going into plant-in-service.

Q. Okay. You don't have any information as to whether it's needed and necessary for the dry cask project?

A. I think the appropriate witness would be Witness Kundalkar for that.

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

CHAIRMAN CARTER: Staff.

CROSS EXAMINATION

BY MR. YOUNG:

Q. Good afternoon, Ms. Powers. How are you?

A. Good afternoon. I'm fine.

Q. I just have a few questions.

In your summary, and correct me if I'm wrong, in your summary you stated that your treatment of the AFUDC is appropriate; correct?

A. Yes.

Q. Okay. Has the Commission issued an order explicitly addressing recovery of carrying costs for FPL's projects that is greater or lesser than what, than what is stated in Section 366.97 of the *Florida Statutes?*

A. No.

Q. 93. Excuse me.

A. The Commission has not issued an order regarding that. However, the Commission does have a rule, which is the nuclear cost recovery rule, 25-6.0423, which describes how you recover carrying costs related to those projects. And the Commission also has an AFUDC rule, 25-6.0141, that tells you how to apply AFUDC to all of your construction work in progress.

Q. But the nuclear rule that you mentioned just now does not address the incremental or decremental difference in the AFUDC; correct?

A. Let me, if I may, go to the rule.

Okay. The Rule 25-6.0423 in Section 5(B), carrying costs on construction cost balance, states, "A utility is entitled to recover through the utility's capacity cost recovery clause the carrying costs on the utility's annual projected construction cost balance associated with the power plant." It goes on to say, "The actual carrying costs recovered through the capacity cost recovery clause shall reduce the allowance for funds used during construction that would otherwise have been recorded as a cost of construction eligible for future recovery as plant-in-service."

MR. YOUNG: No further questions.

CHAIRMAN CARTER: Commissioners?

Redirect?

MR. RUBIN: No, no redirect, sir.

CHAIRMAN CARTER: Exhibits?

MR. RUBIN: FPL moves Exhibits 35, 36, 37, 38 and 39.

CHAIRMAN CARTER: Are there any objections? Without objection, show it done.

(Exhibits 35 through 39 admitted into the record.)

Ms. Powers, you may be excused for now.

THE WITNESS: Thank you, Chairman.

CHAIRMAN CARTER: See you later at part two of the party.

Call your next witness.

MR. ANDERSON: FPL calls Mr. John Reed as its next witness.

CHAIRMAN CARTER: Mr. John Reed.

JOHN J. REED

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

DIRECT EXAMINATION

BY MS. CANO:

Q. Good afternoon, Mr. Reed.

A. Good afternoon.

Q. Have you been sworn?

A. Yes, I have.

Q. Would you please state your name and business address for the record?

A. My name is John J. Reed. My business address is 293 Boston Post Road, Marlborough, Massachusetts.

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

A. I am the Chairman and CEO of Concentric Energy Advisors.

Q. Did you prepare and cause to be filed on March 2nd, 2009, 54 pages of prefiled direct testimony and on May 1st, 2009, 21 pages of prefiled direct testimony in this proceeding?

A. Yes, I did.

Q. Did you also prepare and cause to be filed an errata sheet to your testimony?

A. Yes.

Q. Do you have any other changes or revisions to make to your testimony at this time?

A. No, nothing further.

Q. With the errata, if I were to ask you the same questions contained in your prefiled direct testimony, would your answers be the same?

A. Yes, they would.

MS. CANO: Chairman Carter, I ask that the prefiled direct testimony be inserted into the record as though read.

CHAIRMAN CARTER: The prefiled testimony of the witness will be inserted into the record as though read.

BY MS. CANO:

Q. Are you also sponsoring exhibits to your testimony?

A. Yes, I am.

Q. Do those consist of JJR-1 to JJR-3 for your March testimony and JJR-1 for your May testimony?

A. That's correct.

MS. CANO: Mr. Chairman, I would note that these have been premarked for identification as numbers 40 to 43 on staff's exhibit list.

CHAIRMAN CARTER: For the record, 40 through 43.

(Exhibits 40 through 43 marked for identification.)

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

DIRECT TESTIMONY OF JOHN J. REED

DOCKET NO. 090009-EI

March 2, 2009

Q. Please state your name and business address.

A. My name is John J. Reed. My business address is 293 Boston Post Road West, Marlborough, Massachusetts 01752.

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

A. I am the Chairman and Chief Executive Officer of Concentric Energy Advisors, Inc. ("Concentric").

Q. Please describe Concentric.

A. Concentric is an economic advisory and management consulting firm, headquartered in Marlborough, Massachusetts, which provides consulting services related to energy industry transactions, energy market analysis, litigation, and regulatory support.

Q. Please describe your educational background and professional experience.

A. I have more than 30 years of experience in the energy industry, having served as an executive in energy consulting firms, including the position of Co-Chief Executive Officer of the largest publicly-traded management consulting firm in the United States and as Chief Economist for the largest gas utility in the United States. I have provided expert testimony on a wide variety of economic and

financial issues related to the energy and utility industry on numerous occasions before administrative agencies, utility commissions, courts, arbitration panels and elected bodies across North America.

Q. Are you sponsoring any exhibits in this case?

A. Yes. I am sponsoring Exhibits JJR-1 through JJR-3, which are attached to my direct testimony.

Exhibit JJR-1	Curriculum Vitae
Exhibit JJR-2	Testimony of John J. Reed 1998 – 2009
Exhibit JJR-3	Comparison of Cost Estimates for New AP 1000

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

A. The purpose of my testimony is to review the appropriate prudence standard that should be applied in this Nuclear Cost Recovery Proceeding. In addition, my testimony provides a review of the processes and procedures used by Florida Power and Light ("FPL" or the "Company"), a subsidiary of the FPL Group, to manage the development and implementation of the Extended Power Uprate ("EPU") Projects at FPL's St. Lucie Units 1 & 2 and Turkey Point Units 3 & 4 ("PSL 1 & 2" and "PTN 3 & 4" respectively, and collectively the "EPU Project") in the 2011 to 2012 timeframe, and the development and construction of two new nuclear generating units at FPL's Turkey Point site ("PTN 6 & 7", and collectively with the EPU Project, the "Projects"). Specifically, I review FPL's internal controls governing the development of the Projects and how these internal controls have led to prudent decisions between the date when the projects were first initiated and the end of 2008.

Q. Please describe your experience with nuclear power plants, and specifically your experience with major construction programs at these plants.

A. My consulting experience with nuclear power plants spans more than 25 years. My clients have retained me for assignments relating to the construction of nuclear plants, the purchase, sale and valuation of nuclear plants, power uprates and major capital improvement projects at nuclear plants, and the decommissioning of nuclear plants. I have had significant experience with these activities at the following plants:

- Big Rock Point
- Callaway
- Duane Arnold
- Fermi
- Ginna
- Hope Creek
- Limerick
- Millstone
- Nine Mile Point
- Oyster Creek
- Palisades
- Peach Bottom
- Point Beach
- Saint Lucie
- Salem
- Seabrook
- Wolf Creek
- Vogtle

I am currently active on behalf of a number of clients in pre-construction activities for new nuclear plants across the U.S. and Canada. These activities include state and federal regulatory processes, raising debt and equity financing for new projects and evaluating the costs schedules and economics of new nuclear facilities. These activities have included detailed reviews of cost estimation and construction project management activities of other new nuclear project developers.

Q. Has Concentric made any recommendations or come to any conclusions regarding the Projects?

A. Yes. As a general matter, Concentric has first, and most importantly, determined that FPL has adequately followed its internal controls processes and procedures, and decisions that have been made consistent with these processes and procedures appear to be prudent. Further, Concentric has made several recommendations to the Company regarding ways to improve its internal controls on a going forward basis. These recommendations are fully discussed later in my testimony. It is important to note that none of Concentric's recommendations should raise a concern with the Company's 2008 and prior expenditures. Instead, Concentric's recommendations primarily provide enhancements to the Company's existing processes. It is Concentric's view that these enhancements will assist the Company in preventing future issues or concerns.

Q. Please describe how the remainder of your testimony is organized.

A. The remainder of my testimony is organized into five sections. In Section I, I describe the prudence standard as it was originally expressed in the 1920s by Justice Brandeis, how this standard has been applied by the Florida Public Service Commission ("Commission") and how I believe it should be applied in this proceeding. In Section II, I describe the framework Concentric used to review FPL's internal controls. Section III describes how these internal controls have been implemented for the EPU projects. Section IV of my testimony describes how these internal controls have been implemented with the new nuclear project. Finally, Section V of my testimony describes Concentric's recommendations and conclusions.

Section I: The Prudence Standard

Q. Please generally describe the prudence standard as you understand it.

A. The original standard of prudence was expressed by Supreme Court Justice Louis Brandeis in 1923 as a means of guiding regulators conducting reviews of utility capital investments. Since that time, a substantial amount of jurisprudence has been developed to refine the Prudent Investment Test. Much of this was developed in the 1980s following the nuclear construction programs of the previous two decades. As originally proffered, the test provides a basis for establishing a utility's investment or rate base based on the cost of such investment by stating the following:

> There should not be excluded from the finding of the base, investments which, under ordinary circumstances, would be deemed reasonable. The term is applied for the purpose of excluding what might be found to be dishonest or obviously wasteful or imprudent expenditures. Every investment may be assumed to have been made in the exercise of reasonable judgment, unless the contrary is shown... adoption of the amount prudently invested as the rate base and the amount of the capital charge as the measure of the rate of return ... [would provide] a basis for decision which is certain and stable. The rate base would be ascertained as a fact, not determined as a matter of opinion.[1]

Two key features of a prudence determination are captured in this language. First, prudence relates to actions and decisions; costs themselves are not prudent or imprudent. It is the decision or action that must be reviewed, not simply whether the costs are above or below expectations. The second feature is that the standard incorporates a presumption of prudence, which is often referred to as a rebuttable presumption. Thus, the burden of showing that a decision is

[1] Separate, concurring opinion of Justice Louis Brandeis, Missouri ex. Rel. Southwestern Bell Telephone Co. v. Public Service Commission, 262 U.S. 276 (1923).

outside of the reasonable bounds falls, at least initially, on the party challenging the utility's actions.

The position of Justice Brandeis was endorsed in 1935 when Supreme Court Justice Benjamin N. Cordozo stated:

> Good faith is to be presumed on the part of managers of a business. In the absence of a showing of inefficiency or improvidence, a court will not substitute its judgment for theirs as to the measure of a prudent outlay.[2]

The Prudent Investment Test offered by Justice Brandeis was applied sparingly for the first four decades following its pronouncement. It was not until the nuclear construction projects of the 1970s and 1980s that the Prudent Investment Test, at least in name, was applied frequently in various electric utility rate cases.

Q. Are there various interpretations of the Prudent Investment Test that have been proffered in other nuclear construction prudence reviews?

A. Yes, three interpretations of the Prudent Investment Test were offered by utilities, regulators and industry experts during the 1980s. Such interpretations, at times, were in violation of the strict standard first developed by Justice Brandeis. Despite this, these interpretations were often used to justify large disallowances, possibly as a rough means of mitigating the "rate shock" associated with placing a multi-billion dollar investment into rate base.

The first interpretation of the Prudent Investment Test developed during this time closely follows the traditional standard proffered by Justice Brandeis. Under this standard, regulators must utilize a balanced retrospective review based

[2] West Ohio Gas Co. v. Public Utilities Commission of Ohio (No.1), 249 U.S. 63, (1935), Opinion.

upon the information that was known or knowable at the time of the decision. In addition, this interpretation of the standard considers a range of reasonable behavior given the circumstances, rather than requiring perfection or even consistently above-average performance.

The National Regulatory Research Institute ("NRRI") advocated for similar principles in a research paper in 1984.[3] [4] In this paper the NRRI stated that the prudent investment standard should include the following four guidelines:

- "...a presumption that the investment decisions of the utilities are prudent..."
- "...the standard of reasonableness under the circumstances..."
- "...a proscription against the use of hindsight in determining prudence..."
- "...determine prudence in a retrospective, factual inquiry. Testimony must present facts, not merely opinion, about the elements that did or could have entered into the decision at the time."

Q. Please describe the two remaining interpretations of the prudence standard.

A. The two remaining interpretations of the prudence standard are related to the perfect execution of the project in one instance and the economic benefits or fair value of a project in the second instance. Both of these interpretations of the

[3] National Regulatory Research Institute, The Prudent Investment Test in the 1980's, April 1985.
[4] NRRI is the state commissions' research resource. Its primary funding comes from voluntary dues paid by state commissions. *NRRI website accessed on January 10, 2009.*

standard reflect the use of hindsight to second guess utility decision-makers based on circumstances that were clearly unknown or unknowable at the time the utility was required to make a decision.

In the first instance, the standard compares the performance of the project to the perfect execution of the project. This interpretation focuses purely on the mistakes or missed opportunities to lower specific costs of the project, and is solely results-based. This interpretation of the standard fails to understand the inherent trade-offs that occur in any large construction project, and fails to recognize that prudent behavior encompasses a range of reasonable and acceptable conduct. The application of a prudence standard must begin by defining the range of acceptable behavior and measuring the actual behavior against this range.

The third interpretation of the standard relies upon an economic benefits or fair value test used to compare the value of the project to other capacity resources that are available at the time of the prudence review, rather than at the time the decision to proceed with construction was made. In the 1980s, this interpretation of the standard almost always resulted in a very large disallowance for the utilities involved in such a review. As a result, utility managers were often left penalized for unforeseen changes in the economic or political climate associated with constructing a new nuclear facility.

Q. Which interpretation of the Prudence Standard has been adopted by the Commission?

A. The original interpretation of the Prudent Investment Test appears to be the interpretation used by the Commission in several orders:

> Prudence has been defined as "what a reasonable utility manager would have done in light of conditions and circumstances which were known or reasonably should have been known at the time the decision was made,"[5]

> A utility should not be charged with knowledge of facts which cannot be foreseen or be expected to comply with future regulatory policies. Expectations are not always borne out. The prudence of decision making should be viewed from the perspective of the decision maker at the time of the decision.

> Contract administration must be viewed at a point in time which takes into consideration the facts which were known or which should have been known at the time the contract is entered into or amended…

> We have not sought to retroactively apply new policies to Gulf's prior actions and we have recognized that a utility cannot foresee the future.[6]

> We must avoid impermissibly applying hindsight review, which is the application of facts that are known today to decisions made in the past (i.e., Monday morning quarterbacking). As we consider whether PEF acted prudently, we must ask ourselves, did PEF know or should PEF have known about a particular set of circumstances.[7]

As can be seen from these statements, the Commission has generally prohibited the use of hindsight when reviewing utility management decisions. Instead, the Commission has chosen to strictly follow the traditional standard by developing a range of reasonable behaviors based on the circumstances that were known at the time of the decision or action. Further, the Commission has noted a need to apply a consistent standard to reviewing utility decisions.

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[5] Staff recommendation in Docket no. 060658-EI – Petition on behalf of Citizens of the State of Florida to require Progress Energy Florida, Inc to refund customers $143 million, citing.

[6] Docket No. 820001-EU-A, In Re: Investigation of Fuel Cost Recovery Clauses of Electric Utilities (Gulf Power Company – Maxine Mine).

[7] FL PSC Order No. PSC-07-0816-FOF-EI, Pg. 4.

Q. Have other regulatory bodies adopted prudence standards that are similar to that which has been used in Florida?

A. Yes. For instance, the Federal Energy Regulatory Commission ("FERC") offered its view of the Prudent Investment Test in 1984 by stating the following:

> We note that while in hindsight it may be clear that a management decision was wrong, our task is to review the prudence of the utility's action and the cost resulting there from based on the particular circumstances existing either at the time the challenged costs were actually incurred, or the time the utility became committed to incur those expenses.[8]

The New York Public Service Commission shared similar observations when reviewing Consolidated Edison Company of New York's Indian Point 2 nuclear plant.

> The Company's conduct should be judged by asking whether the conduct was reasonable at the time, under all the circumstances, considering that the company had to solve its problems prospectively rather in reliance on hindsight. In effect, our responsibility is to determine how reasonable people would have performed the tasks that confronted the company.[9]

Q. Please describe how the Commission should treat costs that may have been imprudently incurred.

A. If a utility's decision-making process is found to be imprudent, the analysis used to quantify the cost of this imprudent decision must follow four basic guidelines. The first is to consider only those costs which are caused by the imprudent act. The second is to not penalize a utility for cost increases that were beyond the control of the utility. Third, the analysis should limit a utility's responsibility for consequential damages to those costs that were reasonably foreseeable at the

[8] Decision of the Federal Energy Regulatory Commission, In Re: New England Power Company, 31 FERC 61,047.

[9] Decision of the New York Public Service Commission, In Re: Consolidated Edison Company, Opinion 79-1, January 16, 1979, Case No. 27123.

time of the imprudent act. Lastly, the quantification of imprudence should base a disallowance on the incremental costs related to imprudence, that is, the present value of additional costs that ratepayers would have to bear. In order to correctly measure the incremental costs of imprudence, the commission must first define what a "minimally prudent" action would have been, and then measure the difference in costs between the minimally prudent action and the imprudent action.

Section II: Framework of Review

Q. Please describe the framework Concentric used to review the Company's internal controls.

A. In order to review the Company's internal controls, Concentric utilized a framework for reviewing the Company's policies and procedures that was very similar to that framework which was employed by Concentric in the 2008 Nuclear Cost Recovery proceeding. That framework was based on Concentric's experience advising prospective investors in new nuclear projects and Concentric's regulatory experience.

In summary, the framework has focused on six elements of the Company's internal controls, including:

- Defined corporate procedures
- Written project execution plans
- Involvement of key internal stakeholders
- Reporting and oversight requirements
- Corrective action mechanisms

- Reliance on a viable technology

Each of these elements was reviewed for five processes including:

- Project estimating and budgeting process
- Project schedule development and management process
- Contract management and administration process
- Internal oversight mechanisms
- External oversight mechanisms

Q. Please describe how Concentric performed this review.

A. Concentric began by reviewing the Company's policies, procedures and instructions with particular emphasis placed on those policies, procedures or instructions which may have been revised since the time of Concentric's review in the spring of 2008. Concentric then expended considerable effort reviewing documents and conducting interviews to ensure that these policies, procedures and instructions were being implemented by the projects and have resulted in prudent decisions based on the information that was available at the time of decision. Lastly, Concentric developed representative benchmarks of the PTN 6 & 7 budget that might serve as reference points, but not a determination of prudence or imprudence, when reviewing the project.

Q. Please describe why you believe it is important for FPL to have defined corporate procedures in place throughout the development of the Projects.

A. Defined corporate procedures are critical to any project development process as they detail the methodology in which the project will be completed and make

certain that processes are consistently applied to the projects. To be effective, these procedures should be documented with sufficient detail to allow the project teams to implement the procedures, and they should be clear enough to allow the project teams to comprehend the procedures easily. It is also important to assess whether the procedures are known by the project teams and adopted into the Company's culture, including a process that allows staff to openly challenge and seek to improve the existing procedures and to incorporate lessons learned from other projects into the Company's procedures. Within FPL, the Project Controls staff is primarily responsible for ensuring the Company's corporate procedures are applied correctly by the various FPL and contractor staff members who are working on the projects. However, it is well accepted that this is a shared responsibility held by all project team members, including the project managers.

Q. Please explain the importance of written project execution plans.

A. Written project execution plans are necessary to prudently develop the project. These plans lay out the resource needs of the project, the scope of the project, key project milestones or activities and the objectives of the project. These documents are critical as they provide a "roadmap" for completing the project as well as a "yardstick" by which overall performance can be monitored and managed. It is also important for the project sponsor to require its large-value contract vendors to provide similar execution plans. Such plans allow the project sponsor to accurately monitor the performance of these vendors and makes certain at an early stage of the project that each vendor's approach to achieving key project milestones is consistent with the project sponsor's needs.

Q. Why is it important that key internal stakeholders are involved in the project development process?

A. One of the most difficult aspects of prudently developing a large project is the ability to balance the needs of all stakeholders, including various Company representatives and the Company's customers. This balance is necessary to make certain that the maximum value of the project is realized. For example, it is important that an extended power uprate project be successfully implemented in a timely and efficient manner to avoid extending or unnecessarily interfering with each plant's existing refueling outage schedule. By including these stakeholders in a transparent project development process, the project sponsor will be better positioned to deliver on these high-value projects.

Q. Why is it important to have established reporting and oversight requirements?

A. By having an established reporting structure and periodic reporting requirements, the project sponsor's senior management will be well informed on the status of the project's various activities. Reporting requirements give senior management the information it needs in order to leverage their background and previous experience to direct the various aspects of the project prudently. Secondly, established reporting requirements ensure that senior management is fully aware of the activities of the respective project teams so management can effectively control the overall project risks. This level of project administration by senior management is prudent considering the large expenditures that will be required to complete the Projects, and the potential impact of these Projects on the Company overall.

In order to be considered robust, these reporting requirements should be frequent and periodic (i.e., established daily, weekly and/or monthly reporting requirements) and should include varying levels of detail based on the frequency of the report. For instance, a daily status report may not need as much detail as it will soon be reviewed by a project manager who is able to quickly address issues and concerns. In contrast, a monthly status report will require significantly more detail to discuss the status of the Projects, as well as plans for near-term activities. The need for timely and effective project reporting is well recognized in the industry, as demonstrated by the following statement:

> "Cost and time control information must be timely with little delay between field work and management review of performance. This timely information gives the project manager a chance to evaluate alternatives and take corrective action while an opportunity still exists to rectify the problem areas." [10]

Q. What is the purpose of corrective action mechanisms and why are they important to ensure the Company is prudently incurring costs?

A. A corrective action mechanism is a defined process whereby a learning culture is implemented and nurtured throughout an organization to help eliminate concerns that can interfere with the successful completion of the project. Corrective action mechanisms help to identify the root cause of issues such as an activity that is trending behind schedule, and provides the opportunity to adopt mechanisms that mitigate and correct the negative impact from these issues. A robust corrective action mechanism assigns responsibility for implementing the corrective actions and a means by which these activities are managed. In

[10] Sears, Keoki S., Glenn A. Sears, and Richard H. Clough, Construction Project Management: A Practical Guide to Field Construction Management. 5th Edition, John Wiley & Sons, Hoboken, NJ, 2008, Pg. 20.

addition, a corrective action mechanism educates the project team in such a manner as to ensure project risks are prudently managed in the future.

Q. Are there any other elements of the Company's internal controls included in your review?

A. No. There were no other elements of the Company's internal controls included in my review. While I have attempted to review the categories for each process, some processes require greater emphasis in certain categories than the others included in my review.

Section III: The EPU Project

Q. How did FPL develop the project budget for the EPU Project?

A. The Company used an industry standard means of creating a budget estimate for the EPU Projects. This process is known as a partial take-off estimate and is based on anticipated man-hours required to complete each task, as well as the amounts of various commodities and other resources required to complete these tasks.

Q. Does FPL have a specific mechanism in place to monitor the EPU Project's performance relative to the initial budget?

A. Yes. FPL has multiple mechanisms for monitoring the EPU Projects' performance relative to initial budget. This includes a comprehensive budget summary document that includes the appropriate level of detail for reporting. In addition, the EPU Project Team produces a monthly budget variance report. This report compares the actual expenditures incurred within the past month to the originally estimated budget on both a cumulative and a monthly basis. By

performing this comparison from both perspectives, FPL is able to track both project performance relative to the initial budget and the project's schedule of cash flows relative to the original budget.

Q. Are there any other activities used to monitor the EPU Project's performance relative to the initial budget?

A. Yes. Consistent with FPL's corporate philosophy of maintaining multiple overlapping layers of oversight for each of the projects, the EPU Project's periodic reports and status calls to various groups of stakeholders make certain project milestones and goals are being met.

Q. Please describe the status briefings and meetings that are currently being used within the EPU Project.

A. On a daily basis, key members of the EPU Project Team conduct a call to discuss the near term schedule, pending critical activities and any challenges they may face. This discussion may be used to identify potential budget issues as well as address other project team concerns. These meetings are memorialized in the Extended Power Uprate Daily Report. On a weekly basis, the project team members meet with project management to review key project risks and ensure that the project is tracking closely to the budget and schedule. A similar meeting is held on a bi-weekly basis with the Chief Nuclear Officer of FPL, the Project Vice Presidents and the Directors. Finally, the Company's Executive Steering Committee receives a monthly update of the project's schedule, budget and other critical matters which help them to make or review key strategic decisions that may be needed to proceed with the projects. In addition, this meeting allows the

project team to capitalize on the experience of these senior officers to help mitigate project risks.

Q. Please describe the separate and apart concept.

A. The separate and apart concept ensures that only costs that are "related to or resulting from" the uprate of PSL 1 & 2 and PTN 3 & 4 are recovered in Nuclear Cost Recovery proceedings, as required by Rule 25-6.0423. The separate and apart concept is not concerned with whether or not the costs were prudently incurred, but whether they are necessary to the uprate project as opposed to ongoing nuclear capital or maintenance activities.

Q. Please describe the results of the "separate and apart" review that FPL conducted for this case.

A. In order to confirm that none of the major components that are expected to be replaced during the EPU Project were previously scheduled for replacement, FPL conducted extensive reviews of the actual components, historical budgets and planning documents and the Nuclear Regulatory Commission ("NRC") license renewals for the PSL 1 & 2 and PTN 3 & 4 sites. The process began with an extensive technical evaluation that identified the major components which would need to replaced or modified in order to function safely in an uprated condition. Following this evaluation, the Company sought to make certain that the repair or replacement of these components was not previously scheduled as part of the ongoing upkeep of the plants by reviewing planning documents, such as the stations' capital budgets prepared between 2005 and 2009. This review included an evaluation of the Company's commitments to the NRC to determine

if any of the components slated for replacement or modification were required as a condition of the PSL 1 & 2 and PTN 3 & 4 license renewals. Each of these reviews confirmed that none of the major components that are scheduled for replacement during the EPU Project were previously scheduled to be replaced as part of the ongoing maintenance of the sites.

As part of our assessment, Concentric reviewed the process that the FPL used to make this determination as well as the information that was relied upon by the team to make their decisions. Based on our review of this information, Concentric believes the results are reasonable and that the appropriate costs have been included in this Nuclear Cost Recovery proceeding.

Q. Are there other considerations related to the separate and apart concept?

A. Yes. It is important to remember what will result from the type of analysis that is being conducted. In this instance, the prudence of FPL's decisions is not being addressed, nor is the reasonableness of its costs. Instead, the question solely relates to whether the costs should be included in this proceeding or one of the Company's future base rate proceedings. During the intervening time the cost of these components would be included in Construction Work in Progress and accrue an Allowance for Funds Used during Construction until such time as the components are placed into service.

Q. Did Concentric have any recommendations related to the company's budget estimating and tracking process as it has been implemented by FPL?

A. Yes. Concentric has recommended that FPL consider providing additional detail in the Monthly Budget Variance Reports published by the EPU Project. Currently this report identifies the line items which varied positively or negatively relative to the budget, but provides little explanation of the variance. Concentric has recommended that a concise explanation of why the variance occurred be included in the report. This explanation will allow the reader to quickly understand the basis for the variance without having to research the back-up documentation, and will assist the EPU Project Team in providing suggestions that would help to prevent future adverse variances.

Q. Please describe the process the EPU Project has employed to develop and manage the EPU Project's schedules.

A. The process for establishing the EPU Project schedule began with a detailed definition of the scope for the project. This information was then used in conjunction with an industry standard software package known as Primavera P6®. Primavera "provides Critical Path Method Scheduling ("CPM"), which uses the activity duration, relationships between activities, and calendars to calculate a schedule for the project. CPM identifies the critical path of activities that affect the completion date for the project or an intermediate deadline, and how these activity schedules may affect the completion of the project."[11] This software package is used throughout the nuclear power industry to schedule refueling outages and major capital projects. In addition, the CPM is a commonly cited

[11] www.primavera.com/products/p6/planning_man.asp. Accessed February 20, 2009.

scheduling methodology for construction projects as a whole.[12] Once this schedule has been established within the Primavera software, the addition of any new activities is automated. Interdependent relationships are established to understand the impact of such additions.

Within the past year, the EPU Project has expended considerable effort to develop this schedule further. This work included creating more detailed relationships between the various project activities and the resources that are required to complete them. In addition, this detailed "level one" schedule identifies when key equipment will be procured, received and installed at each of the sites.

Q. What internal controls are in place to monitor the EPU Project relative to the schedule?

A. As discussed above, the EPU Project Team has instituted several periodic reporting mechanisms including daily, weekly, bi-weekly and monthly conference calls. In addition, the EPU Project Team issues a variety of reports, including Project Dashboards, which are issued on a weekly basis, and Project Deviation Reports, which are issued on a monthly basis. Each of these reports includes a discussion of the EPU Project's schedule performance as compared to an initial targeted schedule. The Primavera software mentioned above also allows FPL to review the project schedule based on approved updates on an almost real-time basis. In other words, as soon as changes to this schedule are input into the

[12] Oberlender, Garold D., Project Management for Engineering and Construction, Mcgraw-Hill, 2000, Pg. 143.
Sears, S Keoki, Glenn A. Sears and Richard H. Clough, Construction Project Management: A Practical Guide to Field Construction Management, 5th Edition, John Wiley & Sons, Inc., Hoboken, NJ, 2008, Pg. 21.

software, the schedule automatically updates to show changes to the various activity start and end dates as applicable.

In addition to monitoring the EPU Project Team's efforts, the Company has also required that status reports be provided by its key vendors. At the beginning of each vendor's scope of work, FPL requires the vendors to provide a reasonable target schedule from which all future progress will be measured. The vendors are then responsible for providing monthly progress reports regarding this schedule. The Company also receives some insight regarding the vendors' progress by monitoring the number of work hours that have been included on each monthly invoice. This is done by comparing the number of work hours expended during the prior month with the target schedule's projection. Finally, the project also uses a Project Deviation Log which is used to track changes in the schedule and to provide a brief explanation of the reasons for the deviation.

Q. What internal controls are in place to ensure the EPU Project is prudently managing and administering the Company's procurement functions?

A. FPL has several corporate policies governing the procurement function. These policies are administered through the Integrated Supply Chain ("ISC") organization and include a wide breadth and depth of procurement processes, including a stated preference for competitive bidding wherever possible, the proper means for conducting a competitive solicitation, initial contract formation, and administration of the contract. Further, ISC has developed a desktop Procurement Process Manual that allows its staff to quickly reference the steps required to comply with FPL's corporate policies. The policies are then

further expanded within the Nuclear Division and within the EPU Project through a series of written procedures and instructions that detail how the corporate policies will be implemented at the project level.

Q. Are there examples of how these internal controls were implemented in 2008?

A. Yes. There were a number of instances in which these policies were implemented during the calendar year 2008. Two clear examples include the procurement of Engineering, Procurement and Construction ("EPC") services from Bechtel Power Corporation ("Bechtel") and of certain components from Thermal Engineering Incorporated.

Q. Please describe how these internal controls were implemented for the procurement of EPC services from Bechtel.

A. The process of procuring EPC services began in May 2008. Consistent with FPL's policies, the EPU Project Team, in conjunction with the ISC managers assigned to the project and legal department representatives, collaborated to develop a detailed scope of work on which potential vendors would be asked to bid. ISC used this detailed scope of work to develop a request for proposals ("RFP"), including a request for vendor qualifications, and began contacting potential vendors to determine if the vendor might have an interest in participating in the bidding process. Based on this outreach, six vendors were identified as possibly meeting the technical requirements necessary to complete the work and as having a desire to be considered for this project. These six vendors were then issued a RFP that included the detailed scope of work and

proposed commercial terms that were designed to protect the Company and its customers from unnecessary risks. This RFP included an appropriate level of detail to allow the bidders to make a complete bid. FPL issued a deadline of June 30, 2008 for submitting proposals, and vendors were given the opportunity to ask questions related to the scope of work prior to the bid deadline. After receiving the RFP, two vendors elected to drop out of the process on their belief that they were either ill equipped to pursue the project or had commitments to other FPL projects that could divert their resources from the EPC services. FPL ultimately received bids from four bidders. These bid submissions were reviewed by several internal subject matter experts with expertise in legal, contract administration, engineering and project management to ensure that they were compliant with the RFP and technically correct. The bid review group then created a relative ranking of each of the proposals to narrow the number of respondents. The vendors were then asked a series of targeted questions to help clarify their proposals, and the vendors were allowed to refresh their bid submissions with their best and final offer. The Company received these revised bids on October 1, 2008. Based on these bid submissions, FPL identified two vendors with which it would enter into further, detailed discussions. As part of these discussions, FPL asked each bidder to refine its bid further from both a price and commercial terms standpoint. The results from these discussions were used to select Bechtel as the winning vendor on October 1, 2008 and a contract for each site was issued on November 3, 2008. When combined, these two contracts represent the largest contracts the EPU Project expects to execute. Since the time these contracts were issued, FPL has diligently reviewed the

invoices and communications submitted by Bechtel to ensure that the terms of this agreement are fully met.

Q. What processes or procedures are in place to ensure that the Company and its customers receive the full value of the goods and services that are being procured?

A. In order to make certain the Company and its customers receive the full value of the goods and service being procured for the projects, FPL has developed an "Invoice Checklist/Approval Form." This form is attached to each invoice that is received and includes a review by key project team members who have worked closely with the vendor on the goods and services for which payment has been requested. These reviewers are named on the form and are required to review the invoice to ensure that the costs being billed are correct and appropriate. In addition, the form requires approval by certain senior project team members. This approval is based on the individuals' corporate approval authority.

Q. Have these reviews found instances of incorrect charges?

A. Yes. The EPU Project Team's vigilance has caught instances of potentially incorrect charges being billed to the Company from the vendors. In these instances, the EPU Project Team has worked with the vendor to investigate the cause for the errant charges, to determine what the appropriate charges should be, and either to correct the invoice or to obtain a credit on a future invoice. As an example, in one invoice that Concentric reviewed, a vendor billed an amount that was deemed questionable by the EPU Project Team for the December 2008 time period. After the EPU Project Team reviewed this amount with the

vendor, a credit for these charges is expected on the Company's February 2009 invoice.

Q. What has the EPU Project done to address the concerns raised last year related to FPL's use of single and sole source procurement practices?

A. First, it is important to note that, consistent with FPL policies, Concentric found that the EPU Project continues to prefer competitive bidding. Second, the EPU Project has reached a point where there will be few additional large procurement items that will require a single or sole source procurement strategy. As discussed during last year's proceeding, however, certain instances in the EPU Project's development have and will require use of single or sole source procurement strategies. The reasons for this include the fact that there are very few suppliers that have retained their qualifications to work on nuclear, safety-related systems and components and the vast amount of proprietary technical information which must be relied upon when operating a nuclear power plant.

To respond to the Commission's concerns raised during last year's proceeding, the EPU Projects have undertaken a proactive process to ensure that all future sole or single source justifications are robust and transparent so that a third party is able to fully understand the need for and prudence of this procurement strategy. This process has included expanding the team that must review the content of the single and sole source justification memoranda and standardizing the template that is used when completing these memoranda. Additionally, FPL has held cross-functional training meetings for the EPU Project Team to ensure

that these team members understand the need to thoroughly document the prudent business reasons for the sole or single source procurement strategy.

Concentric was given the opportunity to review this training presentation, the standardized template, and completed single and sole source justifications. It is clear from this review that the EPU Project has adequately addressed these concerns by adding a sufficient amount of detail to allow a non-technical reviewer to understand the need for this procurement strategy.

Q. What options does the EPU Project retain to ensure that contractors and vendors maintain the EPU Project's schedules, budgets and quality assurance requirements?

A. Consistent with FPL's corporate procedures, the EPU Project has included contract language that incorporates the Company's standard quality assurance requirements and provides for corrective action mechanisms in the event of delay or other technical issue. When a vendor does fall behind schedule, the EPU Project has requested a written recovery plan from the vendor. These plans are designed to identify the root cause of the delay or technical issue and provide a stepwise plan for addressing the cause while implementing the necessary changes to get the project back on schedule.

Q. Has the EPU Project taken such steps with any of the vendors?

A. Yes. At least one instance has occurred whereby the EPU Project Team was required to issue a request for a recovery plan to one vendor related to a negative schedule trend and a potential misapplication of certain data.

Q. How does the EPU Project keep track of contractual deviations and changes?

A. The EPU Project maintains a Contract Deviation Log that tracks the various change orders that have been received from the EPU Projects' vendors. These change orders are monitored and documented as part of the Project Controls function. The deviation log provides a summary of contracts that are open, closed and cancelled with sufficient information to help determine if the contractual deviations are related to matters that were outside the initial scope of the contract. Additional documentation is maintained to support the summary view presented in the deviation log report.

Q. Are there certain contractors that hold contracts for similar scopes of work that are being performed at both the Company's regulated nuclear plants and its affiliate NextEra Energy's ("NextEra") non-regulated nuclear plants?

A. Yes. Four vendors were issued contracts that include similar scopes of work for the Company's PSL 1 & 2 and PTN 3 & 4 units, as well as for the work concurrently progressing at NextEra's unregulated Point Beach Nuclear Power Plant in Manitowoc, Wisconsin. This has occurred because these vendors were able to offer substantial savings to the Company and its customers if they were awarded the scope of work for all three projects.

Q. What has been done to make certain that the charges for the work being performed for the NextEra's Point Beach facility are kept separate from the regulated PSL 1 & 2 and PTN 3 & 4 units?

A. FPL has established a series of overlapping processes that are designed to ensure that these costs are separated. Foremost amongst these processes, is that each project was issued a separate contract and purchase order under which the vendor must bill time. The Company has then sought to educate these vendors of the need to bill employee time appropriately to the correct contract and purchase order. In addition, as described earlier, each invoice received by the Company is reviewed by subject matter experts to ensure the invoice costs are reasonable and relevant to the end product that has been produced for each site. This review includes capturing any clerical errors where a vendor employee has entered the wrong purchase order when billing time or materials to the project and testing the reasonableness of the costs for each of the projects. Lastly, the EPU Project is on an annual internal audit review cycle. These audits serve as a backstop to make certain that any Point Beach related costs that might have made it through the first two layers of internal controls are correctly charged to Point Beach. Internal Audit last reviewed the EPU Project in the summer of 2008 and is expected to perform a similar review during 2009.

Q. Did Concentric have any recommendations related to the EPU Project's Contract Management and Administration practices and internal controls?

A. Yes. Concentric has made two recommendations to FPL related to ways in which the Company can improve its oversight of the EPU Project's vendors. The first of these recommendations relates to the Contract Deviation Log mentioned earlier. Concentric has recommended that the Company include a field in this document that provides an explanation for the deviation. Concentric

has made this recommendation to allow the EPU Project to track the cause of the deviation, and to institute corrective actions.

Additionally, Concentric has recommended that the EPU Project develop a clear procedure for ensuring that the EPU Project's vendors with similar scopes of work at the Company's regulated and NextEra's unregulated plants are billed separately and appropriately for the work being performed. Concentric has recommended that this procedure be communicated to relevant project vendors on an annual basis through a training presentation, and that a record of this training be maintained for later reference. It is important to note that Concentric has not found evidence that this is a persistent problem that would affect the costs the Company is seeking to recover in this proceeding. Instead, Concentric is making this recommendation on a proactive basis to make certain that as spending with these vendors increases, the costs associated with Point Beach are kept separate from the work completed for the Company's regulated nuclear plants. Additionally, the EPU Project Team has noted that the Point Beach Uprate project is maintaining a schedule that is approximately one year ahead of the EPU Project. Thus, there is little potential overlap in the scopes of work that is being performed at a given time.

Q. What internal oversight mechanisms are in place to ensure the project costs are the result of prudent decision-making?

A. The EPU Project is subject to a number of internal oversight mechanisms which ensure that the costs the Company is seeking to recover in this proceeding are prudently incurred. These mechanisms start with a series of EPU Project

Instructions ("EPPI") that are used to implement the Company's general corporate policies and procedures. In addition, various reporting mechanisms by the EPU Project Team ensure that every level of the FPL management structure is kept up-to-date and involved in key decisions. Finally, the Company has instituted an internal audit procedure that is currently reviewing the EPU Project on an annual basis to make certain that the EPU Project is complying with the Company's accounting policies and procedures.

Q. Please further describe the EPPIs.

A. The EPPIs are used as a guidebook for the EPU Project Team and provide specific, stepwise processes for implementing the Company's general policies and procedures into the EPU Project on a daily basis. The EPPIs were initially developed by key project oversight staff and are updated on an as needed basis, including the addition of new EPPIs as may be warranted. In summary, the EPPIs are a valuable desktop reference guide used to manage the projects on a daily basis.

Q. Please describe the various reporting mechanisms which are used by FPL's corporate management to monitor various aspects of the EPU Project.

A. Several reporting mechanisms have been established to ensure that key decisions related to the EPU Project are prudent and made at the appropriate level of FPL's management structure. This allows the Company to leverage the experience of its executive team and to correct concerns at an early stage. These reporting mechanisms include presentations and status calls as well as periodic

reports. Concentric found evidence of the following presentations and status calls:

- On a daily basis, the EPU Project Team holds a status call to update the entire EPU Project Team, review the schedule and address emergent issues. These calls include the EPU Site Directors, the EPU Project Managers, the EPU Director and the Vice President in charge of the EPU Project. Minutes of these meetings are produced to memorialize them for later reference.
- On a weekly basis, the project management team meets to discuss larger strategy concerns and to address emerging issues.
- On a bi-weekly basis, the EPU Project Team produces a technical presentation for the Chief Nuclear Operating Officer. These presentations focus on the technical hurdles being faced by the EPU Project Team and provide the team with an opportunity to leverage this executive's extensive nuclear project experience.
- On an almost monthly basis, the EPU Project Management provides a status update to the FPL Group's Executive Steering Committee. These presentations focus on the EPU Project's schedule and budget performance and discuss key strategy issues which require this Committee's input.

In addition, Concentric reviewed the following periodic reports that were being issued by the project:

- On a weekly basis, the EPU Project produces a report entitled "Key Project Indicators," which is used to monitor trends in the project budget and schedule. This report is used to inform the entire EPU Project Team of the EPU Project's performance
- On a monthly basis, the EPU Project produces a "Budget Variance and Project and Contract Deviation" report. These reports are used to monitor longer term budget and schedule trends.

Q. Please describe some of the key decision-making processes that were completed in 2008.

A. Several key strategic decisions related to the EPU Project were made in 2008, including the decision to reorganize the project team from a project scoping and planning organization to one that is focused on executing the EPU Project. This planned shift occurred near the end of 2008 and was done to ensure that employees and contractors are focused on efficiently executing the EPU Project. Additionally, the EPU Project shifted from a strategy whereby FPL would be responsible for coordinating the various vendors utilized in the EPU Project to a strategy that employs an EPC vendor. In the last case, the decision to pursue the EPC strategy was made within the Executive Steering Committee, based on a recommendation of the EPU Project Team; following that team's recognition that potential cost savings could result from this strategy.

Q. Please describe the Internal Audit process used to monitor the EPU Project.

A. The Internal Audit process is used as a backstop to make certain the EPU Project is complying with the Company's internal policies and procedures. The projects are currently reviewed on an annual basis. This financial review ensures that costs are being appropriately charged to the project and that the EPU Project is complying with the Company's accounting policies. These reviews are completed by the Internal Audit Division which does not report to any of the EPU Project Team members to protect the Internal Audit employees' independence. Instead, Internal Audit reports to the FPL Group Chairman and CEO.

Q. [redacted]

A. [redacted]

Q. [redacted]

A. [redacted]

[redacted]

Q. Have the other recommendations of the internal audits been addressed by the EPU Project?

A. Yes. Concentric has reviewed a document produced by representatives assigned to the EPU Project from Nuclear Business Operations. This report documents the date that each Internal Audit finding was addressed, how they were addressed and who was responsible for implementing the actions.

Q. What other forms of internal oversight are in place to review the EPU Project?

A. FPL has also instituted a Corporate Risk Committee. This committee is responsible for periodically reviewing the EPU Project and identifying key project risks. The EPU Project then tracks these risks in a Risk Matrix to determine the potential impacts to the budget and schedule and identifies means to mitigate these risks as the EPU Project progresses. The Corporate Risk Committee is composed of directors from various divisions of the Company and allows the EPU Project to leverage the extensive experience of these individuals as the EPU Project is executed.

Q. Did Concentric have any recommendations related to the EPU Project's internal oversight mechanisms?

A. Yes. Concentric has provided several recommendations to FPL to help develop improved oversight mechanisms. These recommendations include a more robust and documented internal audit process to ensure that Internal Audit recommendations are corrected and that the processes in question are re-tested to ensure future compliance with the Company's policies. In addition, Concentric has recommended that Internal Audit require the EPU Project Team to submit documented evidence that indicates when and how each finding was corrected and who was responsible for making this correction. This documentation should then be stored as a single document package along with the report to simplify comparisons between each year's annual reviews. Finally, Internal Audit should schedule a follow-up review to selectively re-test its recommendations to make certain that each finding has not only been corrected on a retrospective basis, but also on a prospective basis. This ensures that the lessons learned from each annual review cycle are effectively implemented.

Similarly, Concentric has recommended that the Company begin documenting key project decisions that are made each year. These decisions should be published as "Key Decision Memoranda" and should include a discussion of the information that was known at the time of the decision, what decision was made and the basis for that decision. This process will allow the EPU Project and independent third parties to review more easily past decisions and to understand both the strategy and trade-offs that were considered at the time of the decision.

Q. What external oversight mechanisms has the Company put in place to ensure the EPU Project has adequate internal controls and is prudently incurring costs?

A. The primary external oversight mechanism put in place for the EPU Project relates to Concentric's review of the EPU Project's internal controls. As has been noted throughout my testimony, Concentric has conducted a thorough review of the EPU Project, its procedures and the various mechanisms in place to ensure compliance with these procedures. Concentric has focused on ensuring that these internal controls have been implemented, and as a result, that the EPU Project has been prudently managed.

The EPU Project Team members also maintain close relationships with their counterparts at other nuclear power plants around the country. These valuable relationships allow the EPU Project Team to monitor developments or challenges at other plants and leverage those experiences at PSL 1 & 2 and PTN 3 & 4.

Q. Based on Concentric's review are there additional recommendations that have been made to the Company?

A. Yes. Concentric has provided the Company with several additional recommendations related to project staffing. These recommendations include the development of a workforce contingency plan in the event that other infrastructure projects around the country divert resources from the EPU Project, undertaking a concerted effort to fill the currently vacant oversight positions, and a "Monthly Staffing Report" that identifies and explains the

reasons for the vacant positions that have been open for more than 30 days. These recommendations are being made to make certain that FPL has the right people in place to deliver the best possible results for the Company's customers.

With regard to the first recommendation, Concentric has seen in other projects that an exceedingly high demand for a highly skilled workforce, such as is required for the EPU Project, has led to project delays due to an inability to attract workers. This type of shortage could occur again if the economy begins to return to a period of growth during the project's implementation phase. As a result, the Company should be prepared for a possible decrease in the number of available workers.

Similarly, Concentric understands that certain key oversight positions within the project remain unfilled. Thus, Concentric has recommended that the Company undertake a concerted effort during 2009 to fill these positions. One means of monitoring the progress of this effort is the use of a Monthly Staffing Report that identifies positions that have been vacant for more than 30 days and provides explanation as to why the EPU Project Team has not filled the open positions.

Section IV: Turkey Point 6 & 7

Q. Please describe how the project budget was developed for PTN 6 & 7.

A. The PTN 6 & 7 project budget was developed in a similar manner as the EPU Projects' budget. In other words, the PTN 6 & 7 project has used the same bottom-up analysis needed to ensure a rigorous estimate has been developed.

Q. Has Concentric attempted to benchmark the project budget that was developed for PTN 6 & 7?

A. Yes. Although being consistent or inconsistent with an industry average cost estimate is not a demonstration of prudence or imprudence, Concentric has attempted to compare the Company's project budget with those of other developers of the AP 1000 reactor technology. This benchmarking analysis is presented as Exhibit JJR-3, Comparison of Cost Estimates for new AP 1000 Reactors. As can been seen from this exhibit, FPL's budget has been compared to estimates provided by Duke Energy, Progress Energy Carolinas, Progress Energy Florida, South Carolina Electric & Gas, Southern Company and the Tennessee Valley Authority. Based on this comparison it is clear that the Company's estimate is consistent with the estimates developed by other utilities around the country.

Q. What mechanisms does the PTN 6 & 7 Project Team use to monitor budget performance?

A. The PTN 6 & 7 Project Team uses at least seven (7) different reports to manage the PTN 6 & 7 project's budget performance. As an example, these reports include a weekly "Performance Indicator Report" that monitors the number of work hours incurred relative to those that were originally forecast. On a monthly basis, the PTN 6 & 7 Project Management receives several reports that detail budget variances by department and provide explanations of those variances. In addition, these reports include a description of all costs expended in the current month and quarter as well as year-to-date and total cumulative spending. Additionally, the PTN 6 & 7 Project Team publishes monthly Project Dashboard

and Corporate Variance reports for the Company's senior executives. These reports include a description and explanation of any budget variances.

Q. Did Concentric have recommendations related to the PTN 6 & 7 project budget processes?

A. Concentric has found that the PTN 6 & 7 Project Team has acted prudently when developing its initial budget and in tracking its performance relative to the initial estimate. The PTN 6 & 7 Project Team has developed multiple reports that track budget performance on a cumulative and periodic basis, along with a process for describing variances in actual expenditures relative to the budget. In addition, Concentric found that the PTN 6 & 7 project budget processes include multiple overlapping oversight mechanisms that help ensure that the project's management and the Company's senior management are well informed of the project's performance.

Q. Please describe how the PTN 6 & 7 Project Team produces and manages the PTN 6 & 7 project schedule.

A. Consistent with the discussion of the EPU Project, the PTN 6 & 7 project schedule is managed using an industry standard software package developed by Primavera Systems, Inc. This software package uses the CPM of scheduling to define activity relationships and resource loadings. The schedule that has been developed to date is continuously updated to reflect any new information that is received from the PTN 6 & 7 project's vendors. The method for updating this schedule, including the proper electronic format, is well documented and is being

communicated to vendors to make certain that the PTN 6 & 7 project's expectations are clear.

Q. What mechanisms are in place to ensure that the PTN 6 & 7 Project Team is prudently managing its schedule performance?

A. The PTN 6 & 7 Project Team has taken a number of steps to proactively monitor and manage its schedule performance. These steps include publishing a number of reports that detail the PTN 6 & 7 project's schedule performance on a weekly and monthly basis. These reports include Key Performance Indicators that provide a comparison of the number of activity starts and finishes in a given week to the number of activities that were expected to start and/or finish in the week. Additionally, a "Six Week Look-Ahead Report" is issued on a weekly basis to provide an update on the activities that are projected to start during the next six weeks. This report gives the PTN 6 & 7 Project Team adequate notice of upcoming activities and allows the team to plan their time accordingly. Lastly, the PTN 6 & 7 Project Team has incorporated similar reporting requirements into its contracts with key vendors such as Bechtel and Black & Veatch/Zachry ("BVZ"). As a result, both vendors are required to submit monthly progress reports detailing their progress to date, including any projected delays.

Q. How is the PTN 6 & 7 Project Team making certain that it is prudently managing and administering its procurement processes?

A. As described earlier in my testimony, FPL has a number of corporate policies and procedures related to the procurement function. These corporate policies, implemented within the ISC organization, are sufficiently detailed to ensure that

the ISC organization prudently manages the vast number of procurement activities that must take place to support an endeavor such as the PTN 6 & 7 project. Additionally, these procedures clearly state a preference for competitive bidding except in instances where no other supplier can be identified, in cases of emergencies or when a compelling business reason not to seek competitive bids exists.

Certain members of the ISC organization that maintain a matrix reporting relationship to the PTN 6 & 7 project are also members of the AP 1000 Owner's Group – Supply Chain Management Working Group. This is a collaborative group that is working to enhance the supply chain management for all developers of the AP 1000 through information sharing and possible joint procurement initiatives.

Q. Did Concentric review examples of how these processes were implemented throughout 2008?

A. Yes. Concentric reviewed how these processes were implemented for a number of procurements, including the competitively bid Bechtel Construction and Operating License Application ("COLA") contract as well as the single sourced contract for preliminary engineering, which was issued to BVZ.

Q. Please describe the competitive bidding process that resulted in the Bechtel COLA contract.

A. Beginning in the summer of 2007, ISC met with several members of the PTN 6 & 7 Project Team to develop a written scope of work that would encompass the preparation of a COLA for the PTN 6 & 7 project. Concurrently, ISC sought to

determine the universe of potential vendors who might be interested in receiving the RFP. This process identified two potential vendors, and an RFP was issued to these companies. Each company was then given an opportunity to submit clarifying questions. The answers to these questions were provided to both vendors to ensure that a level playing field was maintained. Responses to the RFP were obtained from both companies in August 2007, and ISC assembled a team of subject matter experts that were responsible for objectively evaluating the proposals based on the PTN 6 & 7 project's needs and the vendors' capabilities. FPL then entered into negotiations with both companies and ultimately awarded the contract to Bechtel in November 2007.

Q. How has the PTN 6 & 7 Project Team responded to the concerns raised last year related to the Company's use of single and sole source justifications?

A. The PTN 6 & 7 Project Team has responded to the Commission's concern by ensuring all sole or single source justification memoranda which are issued on a going forward basis include sufficient detail so as to make certain that a non-technical third party can understand the prudent business reason for this procurement strategy. This process was achieved by expanding the number of reviewers of the single and sole source justification memoranda and by conducting training to heighten the PTN 6 & 7 Project Team's awareness of the issue.

Q. Does the PTN 6 & 7 Project Team expect the number of goods and services procured on a single or sole source basis to grow or contract in the future?

A. In contrast to the EPU Projects, which are expected to see a decrease in the number of single and sole source procurements as the EPU Projects proceed, the PTN 6 & 7 project anticipates the number of goods and services procured on a single or sole source basis will grow as the PTN 6 & 7 project progresses. This results from the fact that many of the future goods and services that must be procured relate to proprietary information that is specific to a single reactor design. Thus, it will often be impossible to locate another vendor that is capable of providing these goods or services in a cost effective manner.

Q. What processes are in place to ensure that the PTN 6 & 7 project is receiving the full value for the goods and services that have been procured and that appropriate charges are being invoiced to the projects?

A. In order to ensure that the Company and its customers receive the full value of the goods and services that are procured, the PTN 6 & 7 Project Team includes a Project Controls Manager. This Project Controls Manager is responsible for reviewing the invoices received from each vendor and ensuring that the vendors are complying with the terms and conditions of their contracts. To do this, the Project Controls Manager receives the invoices from each vendor. Upon receipt, an Invoice Review and Verification Form that details who is responsible for reviewing each section of the invoice is attached to the invoice. This form is sent to each reviewer who must verify that the appropriate charges are included in the

bill and that the work product meets the PTN 6 & 7 project's needs prior to payment.

Q. Has Concentric developed any recommendations to improve the PTN 6 & 7 project's procurement and contract administration processes?

A. Yes. Concentric has provided the Company with recommendations concerning the PTN 6 & 7 project's procurement and contract administration processes. These recommendations include developing a process that documents why a contract change order does or does not exceed the original contract scope and an annual review process to make certain that Bechtel is billing the PTN 6 & 7 project for subcontractors in accordance with its contract.

Q. Please describe how the PTN 6 & 7 Project Team is organized.

A. The PTN 6 & 7 Project Team consists of two groups with the talent and skill sets required to make certain that the best resource is used to execute the project. These two groups are the Project Development and New Nuclear Projects personnel. The Project Development organization is responsible for executing all facets of the project that do not fall under the purview of the NRC. Conversely, the New Nuclear Projects organization is responsible for submitting the COLA and all aspects of engineering, procurement, construction and subsequent startup. Both organizations are led by senior members of FPL's management structure who have extensive experience. Additionally, both organizations have key employees from other business groups within FPL that maintain matrix organizational relationships with the project.

Q. What internal reporting mechanisms are used to inform the Company's senior management of the PTN 6 & 7 project's status and the key decisions?

A. The PTN 6 & 7 Project Team uses a number of periodic reports to inform the project management team and the Company's Executive Steering Committee. These reports are detailed in direct testimony of Company Witness Steven D. Scroggs[13] and are used to make certain that the costs the PTN 6 & 7 project is incurring are the result of prudent decision-making processes. These reports include both weekly and monthly reports that detail key performance indicators, budget and schedule performance and key project decisions.

Q. Please describe what key decisions related to the PTN 6 & 7 project were made between project inception and year-end 2008.

A. Several key decisions were made since the PTN 6 & 7 project's inception, including the Company's decision to site the new units at the Turkey Point site, the selection of the AP 1000 reactor technology, the decision to enter into a reservation agreement for the procurement of a manufacturing slot for certain heavy forgings, the decision to separate construction services from the engineering and procurement contract and certain decisions related to the water source for PTN 6 & 7.

Q. Please describe the process the Company used to select the AP 1000 reactor technology.

[13] Direct Testimony of Steven D. Scroggs, March 2, 2009, Exhibit SDS-5.

A. Beginning in 2006, the PTN 6 & 7 Project Team met to determine which reactor technologies should be considered for the PTN 6 & 7 project. Criteria for this review included the vendor's qualifications, the safety and reliability of the technology, as well as how far the technology had advanced relative to other technologies. Based on these criteria FPL invited four vendors to submit a response to the Company's request for information ("RFI"). The Company then invited each vendor to a meeting with FPL staff to discuss their respective technologies. These meetings took place in July 2006 and included an appropriate mix of subject matter experts to review and properly assess the presentations provided by the venders. Following these meetings, FPL submitted additional clarifying questions to the vendors. From the information received during the vendor presentations and the vendors' responses to the additional clarifying questions, FPL developed a comparison of the various reactor technologies to ultimately select the AP 1000 as the preferred technology. The selection criteria included such factors as first-of-a-kind engineering, the maturity of the technology, construction schedule and operating efficiency.

Q. Please describe how the Company decided to enter into a reservation agreement?

A. In early 2008, upon advice from the reactor vendor, FPL became aware that the global market for ultra heavy forging manufacturing slots was becoming increasingly constrained. This situation resulted from an unusually robust global demand for ultra heavy forgings that are used in the construction of new nuclear power plants and other heavy industrial processes such as chemical production and petroleum refining, as well as the limited number of global suppliers for

these components. As a result, FPL determined it was appropriate to enter into an agreement with the reactor vendor to procure the manufacturing slots for ultra heavy forgings necessary to maintain the PTN 6 & 7 project schedule.

Q. What evidence of a constrained global market for these components existed at the time of the Company's decision to enter the reservation agreement?

A. In 2008, it became clear, based on the number of nuclear reactors projected to be built before 2025, that demand for these components was likely to be quite robust. The World Nuclear Association noted in December 2008 that the International Atomic Energy Agency is now predicting that at least 70 new reactors will be constructed within the next fifteen years.[14] This number does not include several additional reactors that are under consideration in countries such as France, India, Italy and the United Kingdom. In addition, it was well known within the industry that there is currently a single supplier in the world that is capable of supplying these components, Japan Steel Works. While other manufacturers are investigating the possibility of investing in this capability, Japan Steel Works remains to this day the only supplier reasonably certain of being able to produce these components. As a result, it is clear that without significant expansion in the number of suppliers for these components or significant cancellation of new construction programs, the global supply chain for ultra heavy forgings will remain severely constrained. Thus, FPL prudently sought to secure the necessary manufacturing slots for these components in order to preserve the benefits of nuclear power for its customers.

[14] "Plans for New Reactors," World Nuclear Association, December 2008. http://www.world-nuclear.org/info/inf17.html

Q. Please describe why FPL chose to split the engineering and procurement scopes of work and the construction scope of work.

A. FPL held discussions with a consortium of Shaw-Stone & Webster and Westinghouse (the "Consortium") regarding an engineering, procurement and construction ("EPC") contract throughout 2008. Through these discussions, it became apparent that the structure of the agreement proposed by the Consortium did little to manage the risk of price escalation during the five-year construction and startup period. As a result, FPL made a strategic decision to split the EPC contract into two pieces; an engineering and procurement contract and a construction contract. By splitting the agreement into parts, FPL will continue to pursue the AP 1000 technology for use at PTN 6 & 7, but will preserve the option to competitively bid the construction of the project at a later date. In order to accomplish this strategy, FPL has retained BVZ to perform certain preliminary engineering and site layout activities. While there is a cost associated with this work, the opportunity exists to save substantially more for FPL's customers once the construction agreement is put out for bid. This opportunity will result from the completion of detailed design work that will better define the quantity of commodities required to construct the plant and from the sharing of lessons learned from the first wave of AP 1000 construction projects.

Q. Has the PTN 6 & 7 project undergone an internal audit since its inception?

A. Yes. The PTN 6 & 7 project was reviewed by the Company's Internal Audit organization in July 2008. The Internal Audit organization is separate from the

PTN 6 & 7 Project Team and tested the PTN 6 & 7 project's internal and financial controls to make certain that only appropriate charges were being billed to the project and that these charges were being accounted for correctly. [redacted]

Q. Does the Company maintain other internal oversight mechanisms for the PTN 6 & 7 project?

A. Yes. The Company maintains two other internal oversight mechanisms that ensure that the PTN 6 & 7 project is prudently incurring costs. The first of these mechanisms is a FPL Corporate Risk Committee. As discussed earlier in my testimony, this committee consists of FPL directors and other senior employees, and is tasked with periodically reviewing the project and its associated risks. The PTN 6 & 7 Project Team went before the FPL Corporate Risk Committee on June 25, 2008 to present initial details of the project, and to seek guidance on certain aspects of the project. The FPL Corporate Risk Committee then presented its recommendations in documented meeting minutes that were issued the same day.

The second internal oversight mechanism is the Licensing Review Board. This group is tasked with reviewing the COLA prior to its submission to the NRC. This review is done to ensure that the COLA is consistent with FPL's

requirements and of a high quality. By conducting this review, the PTN 6 & 7 Project Team is ensuring it receives the highest value from its COLA vendor and possibly preventing delays in the NRC review schedule.

Q. Did Concentric have any recommendations related to the PTN 6 & 7 project's internal oversight mechanisms?

A. Yes. Concentric has provided three recommendations to enhance the PTN 6 & 7 project's internal oversight mechanisms on a going forward basis. These recommendations are intended to help demonstrate that the costs being incurred by the PTN 6 & 7 project are the result of prudent decision making processes.

The first of these recommendations relates to the Company's Internal Audit organization. Concentric has recommended the Company institute a more robust and documented internal audit procedure to ensure that all recommendations of the internal audits are adequately corrected and that the processes in question are re-tested. Concentric has also recommended that Internal Audit maintain this documentation as a single document package along with the Internal Audit report.

Secondly, the PTN 6 & 7 Project Team should begin producing "Key Decision Memoranda" to memorialize critical project decisions. These memoranda should include a discussion of the information that was known at the time of the decision, what decision was made and the basis for that decision. These documents will allow management and third-parties to quickly review previous decision making processes.

Finally, Concentric has recommended that the PTN 6 & 7 Project Instruction "Quality Assurance for New Nuclear Projects - Project Instructions" ("QI-2-NNP-001") become a living document that is updated on a periodic (i.e., quarterly) basis.

Q. What external oversight mechanisms have been used by the PTN 6 & 7 Project Team to ensure that the Company is prudently incurring costs?

A. The PTN 6 & 7 Project Teams have relied on a number of external reviews to ensure that the project is making decisions based on the best information that is available at the time of those decisions. These reviews have included a review of the reactor technology selection process by MPR Associates, a nationally recognized engineering firm, to ensure that the process that was used to select a reactor vendor was thorough and fairly conducted.

Section V: Recommendations and Conclusions

Q. Please summarize your conclusion and recommendations regarding the EPU Project.

A. Concentric has determined that the EPU Project, as a general matter, has followed FPL's processes and procedures, and that the resultant decisions that were made consistent with these processes and procedures appear to be prudent. The EPU Project's progress has included several key decisions in 2008, including the Company's decision to pursue an EPC contracting strategy and to reorganize the project from an initial project scoping structure to a structure that is better suited to execute the project. Finally, Concentric has determined that the

appropriate level of oversight has been included to ensure that the project is making reasonable and prudent decisions.

With regard to Concentric's specific recommendations, Concentric has recommended that the EPU Project undertake certain enhancements to the Company's policies and procedures including adding additional detail to certain project reports, developing a time and expense billing training procedure for EPU Project vendors with similar scopes of work at NextEra's Point Beach facility and the Company's St. Lucie and Turkey Point Facilities, developing a more robust Internal Audit process that documents and retests corrective actions taken to address Internal Audit's recommendations, developing a process that documents key decisions, and working to staff key project oversight positions in 2009.

Q. Please summarize Concentric's finding and conclusions relative to the PTN 6 & 7 project.

A. Concentric has found that FPL has acted prudently while incurring certain costs related to the PTN 6 & 7 project from the beginning of the projects through year-end 2008. These actions were specifically designed to methodically preserve the option to pursue new nuclear generating capacity at the Company's Turkey Point site while delaying a commitment to build this capacity for as long as is reasonably feasible. By doing so, the Company is preserving its customers' ability to receive the substantial economic benefits of nuclear power at a future date while minimizing the near term expenditures required to maintain this option.

Additionally Concentric has proposed specific procedural recommendations to enhance the PTN 6 & 7 project's internal controls including developing a more robust Internal Audit process that documents and retests corrective actions taken to address Internal Audits recommendations, developing a process to document key decisions, developing a process to identify and verify with subject matter experts why contract change orders do or do not exceed the original contract scope, developing a process to ensure that Bechtel is passing along sub-contractor costs without mark-up, and periodically updating certain project instructions.

Finally, Concentric has determined that the project budget that has been developed by FPL is consistent with the budget forecasts of other developers of the AP 1000 who are pursuing two units on a schedule that is similar FPL's projected in-service dates.

Q. Does this conclude your testimony?

A. Yes, it does.

BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

In re: Nuclear Power Plant Cost Recovery Clause	)	DOCKET NO. 090009-EI FILED: September 4, 2009

ERRATA SHEET

TESTIMONY OF JOHN J. REED, MARCH 2, 2009

PAGE#	LINE #	CHANGE
9	Footnote 5	Merge footnote 6 into footnote 5, so that footnote 5 reads as follows: "Staff recommendation in Docket 060658-EI – Petition on behalf of Citizens of the State of Florida to require Progress Energy Florida, Inc to refund customers $143 million, citing Docket 820001-EU-A, In Re: Investigation of Fuel Cost Recovery Clauses of Electric Utilities (Gulf Power Company – Maxine Mine)."
9	Footnote 6	Delete
9	Footnote 7	Renumber as Footnote 6
10	Footnote 8	Renumber as Footnote 7
10	Footnote 9	Renumber as Footnote 8
15	Footnote 10	Renumber as Footnote 9
20	Footnote 11	Renumber as Footnote 10
21	Footnote 12	Renumber as Footnote 11
46	Footnote 13	Renumber as Footnote 12
48	Footnote 14	Renumber as Footnote 13

REBUTTAL TESTIMONY OF JOHN J. REED

PAGE#	LINE #	CHANGE
9	15	"notes the following" to "notes the following (Haarmeyer)"
		ADD TO BIBLIOGRAPHY
39		"Haarmeyer, David, "Nuclear New Build Precondition: Cost Visibility and Predictability: Owners must take a more active, informed and disciplined approach to managing contract and project execution", Power Engineering International. September 2008."

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

DIRECT TESTIMONY OF JOHN J. REED

DOCKET NO. 090009-EI

MAY 1, 2009

Q. Please state your name and business address.

A. My name is John J. Reed. My business address is 293 Boston Post Road West, Marlborough, Massachusetts 01752.

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

A. I am the Chairman and Chief Executive Officer of Concentric Energy Advisors, Inc. ("Concentric").

Q. Please describe Concentric.

A. Concentric is an economic advisory and management consulting firm, headquartered in Marlborough, Massachusetts. Concentric provides consulting services relating to energy industry transactions, energy market analysis, litigation, and regulatory support.

Q. Please describe your educational background and professional experience.

A. I have more than 30 years of experience in the energy industry, having served as an executive in energy consulting firms, including the position of Co-Chief Executive Officer of the largest publicly-traded management consulting firm in the United States and as Chief Economist for the largest gas utility in the

United States. I have provided expert testimony on a wide variety of economic and financial issues related to the energy and utility industry on numerous occasions before administrative agencies, utility commissions, courts, arbitration panels, and elected bodies across North America.

Q. Have you previously provided expert testimony?

A. Yes. I have been accepted as an expert in dozens of jurisdictions located in the United States and Canada.

Q. Are you sponsoring any exhibits in this case?

A. Yes. I am sponsoring Exhibits JJR-1, which are attached to my direct testimony.

Exhibit JJR-1 A Review of Florida Power & Light's System of Internal Control

Q. Are you the same John J. Reed who filed testimony in this proceeding on March 2, 2009?

A. Yes, I am.

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

A. Concentric was retained by Florida Power & Light Company ("FPL" or the "Company") in December 2008 to review the Company's system of internal control as they relate to the Company's efforts to develop and implement Extended Power Uprate ("EPU") Projects at FPL's St. Lucie Units 1 & 2 and Turkey Point Units 3 & 4 ("PSL 1 & 2" and "PTN 3 & 4" respectively and collectively the "EPU Project") in the 2010 to 2012 timeframe, and development and construction of two new nuclear generating units at FPL's

Turkey Point site ("PTN 6 & 7" and collectively with the EPU Project, the "Projects"). The purpose of my testimony is to present and summarize Concentric's findings with respect to FPL's system of internal control and how compliance with this detailed system of internal control has resulted in reasonable costs and projections of the Company's expenditures for 2009 and 2010.

Q. Please describe your experience with nuclear power plants, and specifically your experience with major construction programs at these plants.

A. My consulting experience with nuclear power plants spans more than 25 years. My clients have retained me for assignments relating to the construction of nuclear plants, the purchase and sale of nuclear plants, power uprates and other major capital improvement projects at nuclear plants, and the decommissioning of nuclear plants. I have had significant experience with these activities at the following plants:

Pilgrim	Ginna
Oyster Creek	Duane Arnold
Seabrook	Palisades
Hope Creek	Point Beach 1 and 2
Peach Bottom	Big Rock Point
Salem	Wolf Creek
Nine Mile Pt. 1 and 2	Callaway

I was also extensively involved in nuclear construction audits and prudence reviews for nuclear plants built in the 1980s, including Vogtle, Limerick, Susquehanna, Wolf Creek, and Callaway.

I am currently active on behalf of a number of clients in pre-construction activities for new nuclear plants across the U.S., including state and federal regulatory processes, raising debt and equity financing for new projects, and evaluating the costs, schedules and economics of new nuclear facilities. These activities have included detailed reviews of cost estimation and construction project management activities of other nuclear project developers.

Q. Please describe how the remainder of your testimony is organized.

A. The remainder of my testimony is organized into the following four (4) sections listed below.

Section 1: Framework of Review

Section 2: The EPU Project

Section 3: The PTN 6 & 7 Project

Section 4: Conclusions

Q. Please generally describe how, in your experience, the FPL project management processes compare with other extended power uprate projects and new nuclear development projects around the country.

A. Based on Concentric's review of the practices used to manage the Projects, Concentric has found that the Projects compare favorably with other similar

nuclear projects in the United States. These practices include a series of documented, overlapping processes that ensure the Company's system of internal control is being implemented within the Projects and the appropriate levels of senior level oversight. The project management, cost estimation, and risk management attributes of FPL are highly developed, well documented, and adhered to by the project teams.

SECTION 1: FRAMEWORK OF REVIEW

Q. Please describe the process Concentric utilized to review FPL's system of internal control.

A. As described more fully in Section II of Exhibit JJR-1: A Review of FPL's System of Internal Control, Concentric's review of FPL's internal control began with an initial information request. This request included information from each of the following categories:

- Policies and procedures
- Project organization charts
- Staffing plans
- Internal audit reports
- General ledgers
- Periodic reporting mechanisms including any daily, weekly, monthly, or annual reports
- Major contracts, purchase orders, and change orders

- Any corrective action or recovery plans requested from key vendors
- Competitive bidding solicitations
- Single and sole source justifications
- Project execution plans

Following receipt of this information, Concentric conducted in-person interviews in February 2009. While on-site, Concentric focused its review on how the Company's policies and procedures, as well as each project, had changed since Concentric reviewed the Projects in 2008.

Concurrently, Concentric sought to gain an understanding of the Projects' objectives. With these objectives in mind, Concentric sought to understand the Company's system of internal control by reviewing the various documents that were provided in response to Concentric's initial information request. Concentric then discussed our understanding of the Company's system of internal control with FPL's employees and requested additional clarification as required.

Concentric also verified the Company's various policies and procedures to ensure that these policies and procedures were appropriately being implemented. This testing was done by requesting certain documents that could be used to verify that the Company's policies and procedures were

being implemented. The documents that Concentric requested included the following:

- Sample invoices
- Copies of all periodic project reports including any senior executive briefings
- Internal audit reports
- Single and sole source justifications
- Project related contracts
- Competitive bidding solicitations
- Project organization charts
- Project specific general ledgers

Additionally, during Concentric's February 2009 site visit, Concentric discussed the Company's policies and procedures with the various Company employees who were interviewed by Concentric. These discussions focused on confirming that the employees had an understanding of the system of internal control and on how this system was being implemented on a day-to-day basis.

SECTION II: THE EPU PROJECT

Q. Please generally describe the EPU Project.

A. The EPU Project is being pursued by FPL to make available approximately 415 MW of additional nuclear powered capacity. The EPU Project team is responsible for planning the required modifications, applying to the Nuclear Regulatory Commission for a revised operating license, applying to the state for a Site Certification, and bringing the projects online on time and on schedule.

Q. How is the EPU Project organized?

A. The EPU Project organization is headed by the Vice President, Nuclear Power Uprate who is supported by several project directors with experience in nuclear fuels, project implementation, licensing, and engineering. The EPU Project team includes two On-Site Project Directors which report to the Vice President of Implementation EPU/Projects. Employees from the Company's Legal, Nuclear Business Operations, Quality Assurance/Quality Control, and Integrated Supply Chain Management organizations maintain a matrix reporting relationship with the EPU Project. Section III.A of Exhibit JJR-1 contains a more complete description of the EPU Project team.

Q. What policies and procedures have been developed for the EPU Project?

A. As described in Section III.B of Exhibit JJR-1, FPL has developed a general set of procedures which are used to communicate and implement the Company's polices across the Company's various business units. The FPL

Nuclear Division has expanded upon the corporate policies by developing its own set of procedures that are specific to nuclear operations. Similarly, the project is responsible for developing its own project instructions which provide specific, stepwise processes for implementing the Company's general policies and procedures.

Q. What other internal oversight mechanisms have been implemented by the EPU Project?

A. The other internal oversight mechanisms implemented by the EPU Project are included in Section III.B of Exhibit JJR-1 and include the Nuclear Fleet Project Controls organization, several reporting mechanisms established to ensure that key decisions related to the EPU Project are prudent and made at the appropriate level of FPL's management structure and the EPU Project Risk Committee. The EPU Project Risk Committee periodically reviews the EPU Project and identifies key project risks. The EPU Project tracks these risks in a Risk Matrix to determine the potential impacts to the budget and schedule and identifies means to mitigate the risks as the EPU Project progresses.

Similarly, the EPU Project is reviewed by the Company's Internal Audit organization. The Internal Audit organization reports directly to the FPL Group Chairman and CEO through the Vice President of Internal Auditing. Internal Audit adopts a risk-based approach whereby Internal Audit reviews

activities within business units that present the greatest risk to meeting the Company's objectives.

[redacted]

Q. Please describe how the EPU Project procures goods and services for the EPU Project.

A. The EPU Project team includes several employees from the Integrated Supply Chain Management ("ISC") organization who are dedicated to the FPL procurement function and are responsible for implementing several corporate policies governing the procurement function. FPL procurement policies cover

topics such as managing an approved vendor list, conducting an RFP process, contract formation, issuing a purchase order, and managing a contract.

Q. Does the EPU Project continue to use single and sole source procurement strategies to procure goods and services?

A. Yes. When the Company pursues a single or sole source procurement strategy, the Company's procedures require the EPU Project team to produce a single or sole source justification memorandum which describes the reason for this procurement strategy, including why there is a compelling business reason for FPL to pursue such a strategy. The Company's procedures require each memorandum to be reviewed and approved at the executive level.

Q. Has the EPU Project addressed the Florida Public Service Commission's (the "FPSC" or the "Commission") single and sole source justification concerns which were noted in Docket 080009-EI?

A. Yes. The EPU Project Team has worked since the FPSC noted its concerns in October 2008 to ensure sole or single source justifications are robust and transparent to enable a third party to understand the appropriateness of the procurement strategy. This process includes expanding the team that must review the content of the single and sole source justification memoranda and standardizing the format for these memoranda. Additionally, FPL held cross-functional training sessions for the EPU Project team to ensure that these team members understand the need to thoroughly document the compelling business reasons for the sole or single source procurement strategy.

Q. Has Concentric reviewed the process the EPU Project used to address the FPSC's concerns?

A. Yes, Concentric reviewed the single and sole source justification training presentation, the standardized single and sole source justification format, and completed single and sole source justifications. The EPU Project has addressed the FPSC's concerns by adding sufficient detail to allow a non-technical reviewer to understand the need for this procurement strategy.

Q. Please describe the EPU Project's budgeting and cost estimating processes.

A. The process for creating the EPU Project's budget and cost estimates is included in Section III.C of Exhibit JJR-1. This process includes the use of a partial take-off estimate and is based on the anticipated man-hours required to complete each task, as well as the amounts of various commodities and other resources required to complete these tasks.

Q. How has this process been implemented by the EPU Project?

A. As discussed more fully in Section III.C of Exhibit JJR-1, FPL began the cost estimating process by first completing the initial scoping study. This scoping study was then reviewed and confirmed by Shaw – Stone & Webster. This initial estimate is subsequently used to develop the Project's annual budget which is further refined to reflect executed contracts and new project scope.

Q. What mechanisms are in place to monitor the EPU Project's budget performance?

A. The EPU Project uses multiple mechanisms to monitor the EPU Project's budget and spending. These mechanisms are discussed in Section III.C of the Exhibit JJR-1.

Q. Please describe the EPU Project's schedule estimating processes.

A. The process for establishing the EPU Project schedule began with the initial scoping studies and is described in Section III.D of Exhibit JJR-1. The detailed schedule identifies when key equipment will be procured, received, and installed at each of the sites and when certain activities, including vendor surveillance activities, must take place. To enable the vendors to communicate schedule information to the appropriate personnel, the EPU Project team has established a protocol, including the proper electronic format, which will aid incorporating this information into Primavera scheduling software. The Primavera scheduling software is used throughout the nuclear industry for the schedule a major capital projects.

Q. What mechanisms are used to monitor the EPU's schedule performance?

A. The EPU Project team has instituted several periodic reporting mechanisms which allow the EPU Project team to monitor its schedule performance. These reporting mechanisms are included in Section III.D of Exhibit JJR-1.

SECTION 2: PTN 6 & 7

Q. Please generally describe the PTN 6 & 7 Project.

A. FPL is seeking to methodically develop the option to deploy two new nuclear units at the Company's Turkey Point site in 2018 and 2020. This strategy will provide the likely substantial fuel cost savings provided by nuclear generation while pursuing a measured strategy to committing funds to the PTN 6 & 7 Project. The process includes extensive senior management oversight and appropriate reviews of the continued feasibility of the PTN 6 & 7 Project.

Q. How is the PTN 6 & 7 Project organized?

A. The PTN 6 & 7 Project team has been developed based on the concept of ensuring the "best athlete" is utilized to undertake each portion of the PTN 6 & 7 Project's development. The PTN 6 & 7 Project team consists of the Company's Project Development and New Nuclear Projects organizations which report up to the Chief Operating Officer of FPL Group. A complete description of each organization is included in Section IV.A of Exhibit JJR-1.

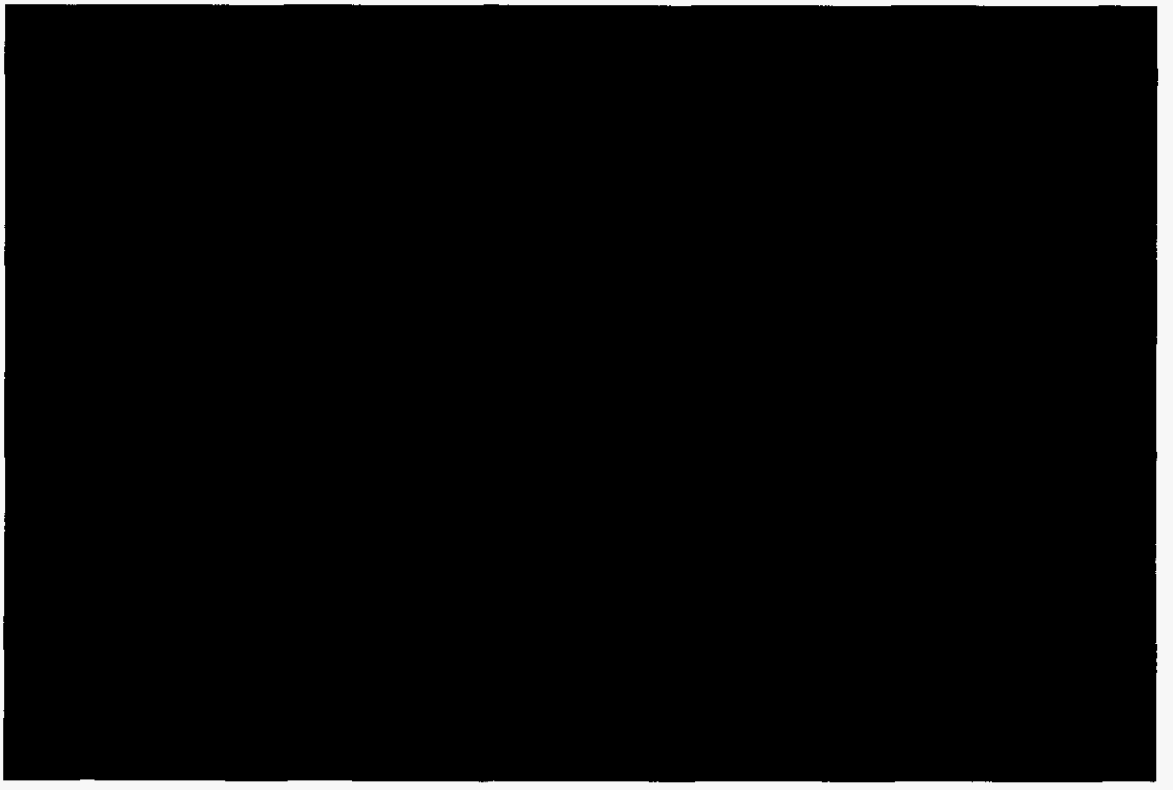
Q. Please describe how the Company has implemented internal oversight mechanisms into the PTN 6 & 7 Project.

A. The PTN 6 & 7 Project is subject to FPL's corporate GOs. However, the PTN 6 & 7 Project is being developed external to FPL's Nuclear Division and is not automatically subject to the Nuclear Division's policies. The FPL Quality Assurance/Quality Control organization has developed a project instruction ("Quality Assurance for New Nuclear Projects - Project Instructions," QI-2-

NNP-001") that identifies which nuclear division policies are applicable to the PTN 6 & 7 project. In addition, the PTN 6 & 7 Project has begun to develop its own set of project instructions known as New Nuclear Project Instructions ("NNP-PIs"). A complete description of these oversight mechanisms is provided in Section IV.B of Exhibit JJR-1.

Q. Is the PTN 6 & 7 Project subject to review by Internal Audit?

A. Yes. In keeping with the Company's policy of ensuring overlapping control mechanisms, the PTN 6 & 7 Project is subject to review by the Company's Internal Audit organization which reports directly to the FPL Group Chairman and CEO through a Vice President of Internal Auditing.



Q. Does the PTN 6 & 7 Project maintain any other processes which provide additional oversight to the PTN 6 & 7 Project?

A. Section IV.B of Exhibit JJR- 3 includes a description of two other oversight mechanisms that ensure the project's performance. The first of these mechanisms is a FPL Corporate Risk Committee which consists of FPL directors and other senior employees, and is tasked with periodically reviewing the project and its associated risks. The second is specialized review committees such as the Licensing Review Board which is tasked with reviewing the COLA prior to its submission to the NRC.

Q. Please describe the PTN 6 & 7 Project's budgeting and cost estimating processes.

A. The PTN 6 & 7 Project was initially scoped in 2006. At that time, FPL undertook a process to develop an estimate of the cost to construct two new nuclear units, based on a partial take off estimate produced by the NuStart consortium. The estimate from this study was adapted to account for the different reactor technologies being considered by FPL and for conditions specific to the State of Florida's geology and weather conditions. This cost estimate is used in conjunction with the Company's annual feasibility analysis which makes certain that the PTN 6 & 7 remains economically competitive.

The PTN 6 & 7 budget is developed based on input from key project team members and their respective resource, staffing, and procurement needs, and those team members' substantial project development experience. The budget is updated in August of each year and includes a two-year look ahead to allow

the Company to plan for its near term expenditures. The PTN 6 & 7 Projects progress is then measured against the updated budget.

Q. How does the PTN 6 & 7 Project team monitor its performance relative to the budget?

A. The PTN 6 & 7 Project team uses at least seven (7) reports to monitor the PTN 6 & 7 project's budget performance. These reports are issued on a weekly, monthly, and annual basis and are more fully described in Section IV.C of Exhibit JJR-1.

Q. Please describe how the PTN 6 & 7 Project develops and manages its target schedule.

A. The PTN 6 & 7 project schedule is managed using an often used software package developed by Primavera Systems, Inc. This software package uses the critical path method. The method for updating the PTN 6 & 7 schedule, including the proper electronic format, is well documented and is being communicated to vendors.

Q. What mechanisms are in place to monitor the PTN 6 & 7 Project's schedule performance?

A. The PTN 6 & 7 Project team has taken a number of steps to proactively monitor and manage its schedule performance. These steps include publishing a number of reports that detail the PTN 6 & 7 project's schedule performance on a weekly and monthly basis. A list of these reports can be found in Section IV.D Exhibit JJR-1.

Q. How has the PTN 6 & 7 Project procured goods and services for the project?

A. FPL has a number of corporate policies and procedures related to the procurement function. These corporate policies are implemented within the ISC organization and are sufficiently detailed to ensure that the ISC organization appropriately manages the vast number of procurement activities that support the PTN 6 & 7 project. Additionally, these procedures state a clear preference for competitive bidding except in instances where no other supplier can be identified or when a compelling business reason exists not to seek competitive bids.

Q. Has the PTN 6 & 7 Project Team responded to the FPSC's concerns relative to the level of detail included in the Company's single and sole source justification memoranda?

A. Yes, following the Commission's order in Docket No 080009-EI, the PTN 6 & 7 conducted cross functional training to review the need to include additional detail in the single and sole source justification memoranda issued by the PTN 6 & 7 Project.

Q. Please describe the external oversight mechanisms implemented at the PTN 6 & 7 Project level.

A. The PTN 6 & 7 Project teams have relied on a number of external reviews to ensure that the project is making decisions based on the best information that is available at the time of those decisions. A description of each of these reviews can be found in Section IV.F of Exhibit JJR-1.

SECTION IV: CONCLUSIONS

Q. Has Concentric developed any conclusions regarding the EPU Project?

A. Yes, Concentric has determined that the costs FPL is seeking to recover in this proceeding are reasonable, having been developed with the Company's robust set of corporate polices and division and project procedures. These policies and procedures have been adhered to throughout the process to develop the Company's cost estimates and target schedule. In addition, the EPU Project includes substantial senior executive oversight through frequent and detailed reporting mechanisms, project risk committee reviews, and the Company's Internal Audit organization.

Q. Has Concentric made any recommendations or observations related to the EPU Project?

A. Concentric's recommendations observations are more fully described in Section V.A of Exhibit JJR-1 to my testimony. These recommendations and observations include:

- Concentric notes that the use of "Key Decision Memoranda" would facilitate the upcoming prudence reviews before the FPSC
- Developing a workforce contingency plan to mitigate the risk of potential labor shortages.
- Presenting additional detail explaining the reasons for budget variances in the Monthly Budget Variance Reports
- Developing a process for ensuring that vendors with similar scopes of work at FPL Group's regulated and unregulated plants appropriately charge their costs to the correct site. This procedure should include an

annual notification to each vendor with scopes of work across multiple sites.

Q. Has Concentric developed any conclusions regarding the PTN 6 & 7 Project?

A. Yes, consistent with the EPU Project, the PTN 6 & 7 Project has strictly adhered to the Company's detailed set of policies and procedures. These policies and procedures are sufficiently detailed to allow their implementation and require the use of well accepted methodologies for developing cost estimates and schedules. In addition, the PTN 6 & 7 Project's budget has been developed through input from various project team members based on their resource and workforce needs. Finally, the PTN 6 & 7 Project is being developed by an extremely capable project management team which receives sufficient oversight by the Company's senior executive team and is reviewed on a reasonable basis by the Company's Internal Audit Division.

Q. What recommendations and observations is Concentric making regarding the PTN 6 & 7 Project?

A. Concentric's recommendations and observations relating the PTN 6 & 7 Project are more fully described in Section V.B of Exhibit JJR-1 and include the following:

- Concentric notes that "Key Decision Memoranda" would facilitate the upcoming prudence reviews before the FPSC.
- Developing a workforce contingency to mitigate the risk of potential labor shortages.

- Scheduling a periodic update of PTN 6 & 7 Project Instruction "Quality Assurance for New Nuclear Projects - Project Instructions" ("QI-2-NNP-001")
- Developing a process that documents why a contractual price change does or does not exceed the original contract scope
- Developing an annual review process to make certain Bechtel is billing the PTN 6 & 7 Project for subcontractors in accordance with the terms of its contract.

Q. Does this conclude your testimony?

A. Yes it does.

BY MS. CANO:

Q. Have you prepared a summary of your direct testimony?

A. Yes, I have.

Q. Would you please provide that at this time?

A. Certainly. Good afternoon. During the past 30 years I have provided expert testimony on a wide variety of economic and financial issues related to the energy and utility industry, including several nuclear construction projects.

My testimony here today presents my opinion as to the reasonableness of FPL's policies and procedures for its uprate and new nuclear programs and how these policies and procedures have resulted in prudently incurred costs for FPL and its customers.

As part of my firm's work on this matter my staff and I reviewed numerous documents and interviewed several FPL staff members in order to evaluate FPL's project management capabilities. As with Concentric's review in the 2008 nuclear cost recovery case, we reviewed six elements for each of five processes that are integral to the company's project management capabilities. These six elements included defined corporate procedures, written project execution plans, involvement of key internal stakeholders, reporting and

oversight mechanisms, corrective action mechanisms and reliance upon a viable technology.

Our review encompassed the five following processes. First, cost estimation and budgeting, schedule management, contract management and administration, internal oversight and external oversight.

Lastly, my direct testimony presents a comparison of FPL's cost estimate for its new nuclear project as compared to cost estimates for similar projects.

Let me first turn to the cost estimating and budgeting process. FPL has corporate procedures in place that explicitly document the process for developing a cost estimate, and Concentric has found that FPL has complied with those procedures. FPL uses a partial takeoff cost estimating process which is recognized within the nuclear energy industry as being the most accurate means of developing a preliminary cost estimate. The FPL cost estimates have included a reasonable contingency factor that is consistent with industry guidelines.

Finally, Concentric has found that FPL's cost estimate for the new nuclear project is reasonable and well within the range of similar cost estimates for

other projects.

Next, within the schedule and management function, FPL has specific corporate policies for developing and maintaining project schedules and has complied with those procedures in executing the uprate projects and the new nuclear project. These procedures utilize industry standard critical path scheduling methods and an often used software program to optimize these schedules and to define the relationships between activities. I've also noted that FPL has a well-documented process for initiating corrective action mechanisms if a project falls behind schedule.

Turning to the contract management function, FPL has robust procedures that appear to cover all facets of contract development and FPL has complied with those procedures. FPL has a preference for competitive bidding where possible and when it is in the best interest of the company and its customers. For those instances where the company has utilized, has decided not to utilize competitive bidding, it has documented its reasons for doing so.

Finally, for the external and internal oversight mechanisms, FPL has established appropriate internal and external mechanisms to gauge project performance and to institute best practices. This

includes the development of executive reporting requirements, internal audit requirements and a corporate Risk Committee which are responsible for reviewing both projects.

In conclusion, I have found that FPL's project management practices and procedures for both projects are reasonable and meet or exceed industry norms. These practices and procedures include an appropriate level of oversight of both the projects and include internal and external project reviews to ensure compliance with the company's policies.

I've also concluded that all of the costs for which FPL is seeking recovery in this case have been prudently incurred during 2007 and 2008, and that FPL has produced reasonable projections of expenditures for 2009 and 2010. Thank you. That concludes my summary.

MS. CANO: Thank you. We tender the witness for cross exam.

CHAIRMAN CARTER: Mr. McGlothlin.

MR. McGLOTHLIN: I'll have several questions when he returns on rebuttal, but no questions now.

CHAIRMAN CARTER: On rebuttal?

Mr. Davis.

MR. DAVIS: Mr. Chair, I have a few now and more later on rebuttal.

CHAIRMAN CARTER: You're recognized.

CROSS EXAMINATION

BY MR. DAVIS:

Q. Mr. Reed, if you'll turn, please, to JJR-1 and --

CHAIRMAN CARTER: Excuse me, Mr. Davis. Would you pull your mike a little closer to you?

MR. DAVIS: Yes, I'll be happy to.

CHAIRMAN CARTER: And what you just -- and say what you just said again.

MR. DAVIS: I will.

CHAIRMAN CARTER: Because I didn't get it.

BY MR. DAVIS:

Q. Mr. Reed, could you turn, please, to your Exhibit 1?

A. Yes.

Q. And if you will turn to Page 3 of 36.

A. You're referring to Exhibit 1 of the May testimony then?

Q. Yes, I am.

CHAIRMAN CARTER: What was the page again?

MR. DAVIS: It was the May testimony, and it was Exhibit 1, Page 3 of 36 as the pagination is at the top right hand of the page.

CHAIRMAN CARTER: Okay. Thank you. You may,

you may proceed.

THE WITNESS: I have that page.

BY MR. DAVIS:

Q. Okay. If you'll look at the -- first of all, the, the second set of bullets on that page, do you see those?

A. Yes.

Q. You developed a list of recommendations and observations which are captured in those bullets; is that right?

A. That's correct.

Q. And these were provided to FP&L when?

A. With the publication of this report actually just a few days slightly ahead of that. So April of 2009.

Q. So in April of 2009 that was, you know, roughly the time when the feasibility analysis was being presented to the Commission at the beginning of May 2009. These recommendations that you have here on this page with these bullets had not been enacted or implemented by FP&L at that time; correct?

A. As I understand your question, were they implemented by FPL by the time the feasibility analysis was submitted in the May 1st filing? I would say in general they were. We had provided these

recommendations to the company, as I said, several days in advance of the publication of this document. The company, as I understand it, is implementing or is in the process of implementing, was at that time all of the recommendations. There was no disagreement with regard to their implementation. So I would say they had been adopted and they were in the process of being implemented at that time.

Q. But probably not reflected in the May 1st filing with the Commission.

A. Other than being included in this report, I think that's accurate.

Q. Okay. Now look at the next paragraph, please. And you state in the second sentence of the next paragraph under these bullets, is -- and this is with regard to both the Turkey Point 6 and 7 as well as the EPU project, that it is important to note that as the projects continue to move forward, the risks faced by both projects will increase markedly.

What were you referring to, what risks?

A. The principal risk we're referring to there is the risk of delay or schedule slippage. The cost of a delay is a function of the accumulated costs expended to that point in time. And obviously if you've only spent $100 million, the cost of delay is just the carrying

cost on $100 million. Once you've spent billions of dollars, a slippage in the schedule, a slippage in the online date adds many, many millions of dollars in terms of additional carrying costs. So the consequences of a scheduled slippage, for example, become a much greater risk as you have moved further into the project.

Q. Now at the time that you prepared this report and even at present, FPL has not entered into an EP contract with Westinghouse/Shaw; correct?

A. That's correct.

Q. And that would be a milestone at which the risk would increase substantially?

A. Not necessarily. An EP contract or an EPC contract is really meant to address risk and to help quantify, to help capture it and assign who is going to bear that risk. So signing a contract is a way of defining those risks and quantifying them. I don't think it necessarily will increase the risks.

Q. Is it fair to say, based on your experience in the industry, that an EPC contractor like Westinghouse/Shaw seeks to put as much risk on FP&L as possible?

A. No, I don't think that's fair. In my experience, the contractor, the prime contractor in that example is willing to bear the risk at a price. The

negotiations for an EPC contract decide who is best able to handle that risk and who's best able to basically shoulder the costs associated with that risk. So the contractor is willing to absorb risk, but it all comes at a price.

Q. So the more risk then that Westinghouse/Shaw would be convinced to absorb, the higher the price once they enter this EP contract.

A. Generally, yes.

Q. And you don't know at this point in time whether the amount of money that FP&L is projecting for 2010 for the EP contract is sufficient for the amount of risk that Westinghouse/Shaw is going to be willing to bear.

A. As Mr. Scroggs indicated, those negotiations are currently ongoing, and the final terms and the balance of risks are to be determined. That will affect the cost in 2010. But, again, the benefit is waiting until many of those risks are better understood, better measured and better known and then negotiating the contract rather than doing it in advance.

Q. And as you understand this process of cost recovery, if Westinghouse/Shaw is able to enact a higher price for incurring certain risk than what's being projected today, then FP&L will just true those up later

on.

A. There will be a true-up in 2010 for the cost. Again, at that time the decision to enter into an EP contract or to not enter into it and the terms will be subject to review. That's when I would expect the review to occur with regard to whether that allocation of risks is appropriate.

Q. Now if you'll turn, please, to Exhibit 4, which is the last page of your JJR-1 from your May testimony. It, it's numbered 36 of 36.

A. Yes, I have that.

Q. This is your comparison of cost estimates for AP 1000 reactors that you referred to in your summary; is that correct?

A. Well, specifically Exhibit JJR-3 to my April, I'm sorry, to my March direct testimony is what I was referring to. I believe this is a similar document of a slightly different vintage.

Q. Is it a more recent vintage or a -- or not?

A. I think it's about a month and a half later than the version filed in March.

Q. Now the statement has been made that Progress, I'm sorry, that FP&L's high estimate is in the range of other nuclear power projects for the AP 1000 that are moving forward today.

First of all, the dollars per kilowatt that are referred to on the Florida Power & Light lines of this Exhibit 4 differ between overnight and all-in costs; is that right?

A. That's correct.

Q. A previous witness was asked about overnight costs. What do you mean by all-in costs?

A. Those include escalation and AFUDC.

Q. Now on the first line of this page dealing with Florida Power & Light with the October 2007 estimate, you have $3,643 per kilowatt, and that's the $8 billion project cost estimate. Now explain how you got an $8 billion project cost estimate there.

A. That's from the information the company published in October 2007 as the overnight costs excluding inflation and AFUDC.

Q. Okay. And that, would that be a, a low, medium or high cost?

A. This is the midrange figure.

Q. And when we look at the second line that we have, again, October 2007 date of estimate, this is the all-in cost and this shows a project cost of $14 billion; is that correct?

A. Yes. Again, that's the midrange estimate.

Q. So in -- just correct me if I'm wrong, but

between 12 billion and 18 billion, would 14 or 15 be the midrange?

A. Well, this was -- specifically 14.00 was the number identified as the midrange estimate out of the three.

Q. I see. So in both of these cases in comparing project costs for FP&L to other AP 1000 reactors, you were using the midrange in this table.

A. For FPL, yes.

Q. Okay.

A. We also used the midrange for the others that had a range published.

Q. And what is the high range for FP&L for the all-in cost?

A. The high number is the number referred to with Mr. Scroggs. I believe it's 17.7 or 17.8 billion.

Q. What is that per kilowatt? Do you have that on this table?

A. No, I don't have it on the table.

Q. Can you perform that calculation?

A. I don't have a calculator with me, but it would that be figure divided by 2,200 megawatts.

Q. Is that approximately $8,000 per megawatt?

A. Per kilowatt. Yes.

Q. Per kilowatt I mean.

A. Yes.

Q. Now you're aware, are you not, that FP&L is now saying that their cost estimate is more the high range than the midrange?

A. I think the company has stated that they expect the numbers to be between the midrange and the high range, so somewhere in the upper half of its range.

Q. Now these other costs that you have for other reactor projects are the midrange though, you said.

A. In all cases what we present here was the midrange to try and keep the comparison as straightforward as possible.

Q. And did you take the Progress Energy cost estimates for the Levy nuclear plant from the need determination documents?

A. No. From their January 2009 information.

Q. Now you're aware, are you not, that the Tennessee Valley Authority has now backed out of its AP 1000 project for the Bellefonte plant?

A. It has suspended development. I would not say it's backed out of it.

Q. And has there been an announcement by Duke recently about its project?

A. Not about this project that I'm aware of. It had an announcement about a separate project in Ohio.

Q. Okay. Was that an AP 1000 project?

A. No. That's an EPR project.

Q. Now how did you determine if the costs were comparable in comparing the FP&L project to Progress Energy, for instance?

A. We looked at the Progress Energy numbers with and without transmission costs, and those numbers are presented here between the line called Progress Energy and Progress Energy Florida. And what you see there of course is that on an all-in basis, the 17 billion cost estimate provided in January 2009 is consistent with the upper end of the range for FPL's cost estimate.

Q. So Progress's midpoint is consistent with FP&L's upper end. But do you know what Progress's upper end is?

A. I don't recall without going back and checking the source material.

CHAIRMAN CARTER: Mr. Davis, are you about to go down another line?

MR. DAVIS: No. I think I'm actually finished with this witness.

CHAIRMAN CARTER: Okay. If you're finished, that's a good time to finish because we're on lunch. See you guys at 2:15.

(Recess taken.)

STATE OF FLORIDA)
: CERTIFICATE OF REPORTER
COUNTY OF LEON)

I, LINDA BOLES, RPR, CRR, Official Commission Reporter, do hereby certify that the foregoing proceeding was heard at the time and place herein stated.

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

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

DATED THIS 9th day of September, 2009.

Linda Boles

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