1		BEFORE THE
2	FLORIDA PUE	BLIC SERVICE COMMISSION
3		DOCKET NO. 080009-EI
4	In the Matter of:	11(2) / (C)(1)
5	NUCLEAR COST RECOVERY	CLAUSE.
6		
7		VOLUME 3
8	Pages	s 370 through 612
9	11	IONS OF THIS TRANSCRIPT ARE CE COPY ONLY AND ARE NOT
10	THE OFFICIAL T	TRANSCRIPT OF THE HEARING. INCLUDES PREFILED TESTIMONY.
11		INCHODES TREETINES TESTIMONT.
12	PROCEEDINGS:	HEARING
13	PROCEEDINGS:	HEARING
	BEFORE:	CHAIRMAN MATTHEW M. CARTER, II
14		COMMISSIONER LISA POLAK EDGAR COMMISSIONER KATRINA J. McMURRIAN
15		COMMISSIONER NANCY ARGENZIANO COMMISSIONER NATHAN A. SKOP
16		
17	DATE:	Thursday, September 11, 2008
18	TIME:	Commenced at 9:30 p.m.
19		Concluded at 5:20 p.m.
20	PLACE:	Betty Easley Conference Center
21		Room 148 4075 Esplanade Way
22		Tallahassee, Florida
23	DEDODTED BY:	MADY ATTEM MEET DOD EDD
24	REPORTED BY:	MARY ALLEN NEEL, RPR, FPR
25	APPEARANCES:	(As heretofore noted.) 000UMENT NUMBER-DATE

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FPSC-COMMISSION CLERK

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FLORIDA PUBLIC SERVICE COMMISSION

1 PROCEEDINGS 2 (Transcript follows in sequence from Volume 2.) 3 CHAIRMAN CARTER: We are on the record. We'll 4 call this hearing to order, and we'll start at the 5 6 beginning. We've already had the staff read the notice, 7 and you read the notice for both cases when you did that; correct? 8 MS. BENNETT: Yes, Chairman. 9 10 CHAIRMAN CARTER: And we've completed phase 1, 11 so as we go to part 2 of our case -- let me get my notes 12 here. We'll begin -- I think we've done everything up 13 to the opening statements for this case; is that 14 correct? 15 MS. BENNETT: That's correct. We would be 16 hearing opening statements from FPL and the other 17 parties. CHAIRMAN CARTER: Okay. Well, let's get 18 19 going. 20 Mr. Anderson, you're recognized, sir. MR. ANDERSON: Before we begin, we have two 21 22 more witnesses who could be sworn if you want to do 23 that, if that streamlines things. CHAIRMAN CARTER: Brilliant. Outstanding. 24 Will the witnesses please stand. 25

I only see one. 1 MR. ANDERSON: Okay. Did everybody else --2 CHAIRMAN CARTER: Have we lost one? 3 MR. ANDERSON: We're good. 4 (Witness sworn.) 5 6 CHAIRMAN CARTER: Mr. Anderson, you're recognized. 7 Thank you, Chairman Carter. 8 MR. ANDERSON: Good afternoon, Chairman and Commissioners. 9 FPL appreciates the opportunity to appear before you 10 today in this first nuclear cost recovery rule 11 proceeding for FPL's Turkey Point 6 and 7 and nuclear 12 13 uprate projects. Let's recall the scope and expected benefits 14 of those projects for FPL's customers. FPL's Turkey 15 Point 6 and 7 project is expected to provide two new 16 17 nuclear generating units on existing company property. These units will provide large amounts of base load 18 generation with zero greenhouse gas emissions without 19 20 using fossil fuel. FPL expects that the project will 21 save customers more than \$1 billion per year in fuel 22 costs when the units are in operation. FPL's updated feasibility analyses, which are 23 before you today -- Dr. Sim will tell you about those --24

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confirm these or even greater economic benefits for

FPL's customers, and improved benefits for from the uprates as well. FPL's director of this project, Steve Scroggs, is here today, and he's here to answer your questions about any aspect of the Turkey Point 6 and 7 project.

Let's think about the uprate projects for a moment. Those projects will add more than 400 megawatts of new nuclear capacity to existing units. They'll come online in 2011 and 2012. They're going to deliver round-the-clock, zero-emission capacity and energy, again without using fossil fuel. These uprates will also provide major fuel cost savings for customers, and the updated economics show at least another \$100 million cumulative present value revenue requirement benefit to customers in the update before you today. We have the director of FPL's uprate projects, Bill Labbe, here to answer any questions you have about the project.

With the projects in mind, let's focus on the issues before us for consideration. These projects are structured like other clause proceedings, in the sense that prior year actuals get filed in March, current year actual/estimated and projected costs in May.

For Turkey Point 6 and 7, of course, all of us were working together on the need determination case, and the order didn't come out until March. That's why

the first Turkey Point 6 and 7 filings were in May and why we're really in the position of reasonableness determinations for the new nuclear plants, which is different than uprates, because you approved those last December. The order came out in January. You've got the March filing with 2007 actuals. You've got the 2008-2009 projections of things. So this case is ripe for a prudence determination for the 2007 uprate costs.

I would like to call the Commission's attention to a recent change to our 2008 actual/estimated costs. It's set forth in the revised prehearing order now. It will be explained by FPL's director of the Turkey Point 6 and 7 project,
Mr. Scroggs, also mentioned by our controller, Kim Ousdahl.

approach to project development and risk management.

The company recently determined that at this time, it's not necessary to incur certain long lead procurement costs during the fourth quarter of 2008. FPL has therefore reduced its 2008 actual/estimated costs and decreased by 14 percent the total amount sought by FPL for 2009 recovery. This amounts to a 35 million nominal reduction. When carrying costs are added in, it reduces the amount requested from about 258 million to about

221 million.

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Turning to the uprate projects, in this case, FPL is seeking a prudence determination concerning its approximate \$8.6 million in 2007 actual costs. About 8.2 million of that is FPSC jurisdictional. We're also seeking reasonableness determinations for '08 and '09 costs for this, and the new nuclear plants, of course, as well.

I want to talk a little bit about where that uprate work went and what those dollars were spent for in looking forward to providing service to our customers. In 2007, FPL focused on nuclear engineering and design that must be performed in order to submit these projects on schedule to the Nuclear Regulatory They have to do their safety review. Commission. have to do their license amendments of our plant licenses, and meeting this NRC filing is essential for the company to be able to complete the uprates during scheduled refueling outages. Those are the slots we're looking at down the road to do the work, not special outages, regular scheduled outages at FPL's nuclear stations during 2011 and 2012.

You'll hear that the evidence in this case shows that FPL hired uniquely qualified vendors for this limited scope of engineering and design work in 2007.

OPC has submitted some criticisms that FPL entered into these contracts without competitive bidding.

To be clear, single and sole source contracts are an important and useful tool for nuclear projects and are expressly provided for under FPL's procurement procedures. For nuclear plant work, there are few qualified vendors generally, sometimes only one qualified vendor at all. This is because not just any company is qualified to do work on a nuclear plant. It's especially true when we're speaking of nuclear safety related work, such as fuel design, safety analyses for reactor internals, that type of thing, all of which was done during 2007 by these vendors.

That said, FPL competitively bids work wherever it reasonably can. For the uprate projects, the large majority of costs ultimately are expected to be competitively bid, probably more than a billion dollars of those costs.

For the essential uprate nuclear steam supply engineering and design work during 2007, you'll be hearing about work done by Westinghouse Electric Company and the Areva company. These are some of the contracts criticized by OPC. You'll hear that these companies were uniquely qualified to do this work. Concerning design information, it's design information which only

they own. Only they have the right to use the design information. It's work they've successfully performed

before for FPL and others in the nuclear industry.

Webster makes perfect sense as a good use of single or sole source contracting. Shaw Stone & Webster has performed engineering and design and other work on 46 prior nuclear uprate projects in the United States, including at FPL's plants. This is a vendor we know very well. It's the right vendor selection at the right price. Our witnesses, Mr. Labbe and Mr. Reed, will speak to these points.

In addition, there are similar solid business reasons for where we used single and sole source contracting for Turkey Point 6 and 7. Our witnesses, Mr. Scroggs and Mr. Reed, will speak to those points.

It's worth remembering that your Commission staff spent a great deal of effort this year performing detailed management audits which reviewed FPL's management and accounting practices in place for Turkey Point 6 and 7 and the uprate projects. Among many other positive findings, the staff audit found that FPL's practices and procedures are reasonable and confirmed that these practices were followed for the single and sole source procurements.

This proceeding provides the Commission, the 1 parties, and the public a window into FPL's uprate and 2 new nuclear projects. It's a different way of doing 3 regulation a little bit. A great deal of information 4 has been provided to staff and the parties. FPL looks 5 6 forward to further enhancing public understanding and Commission understanding and that of the parties about 7 these important projects. Our goal is that the 8 9 Commission, the parties, and our customers have comfort and confidence that these major projects undertaken to 10 provide clean, zero-emitting base load electric 11 generation for FPL customers are being managed in a 12 13 cost-effective and safe way. In conclusion, FPL requests that the 14 Commission's order in this proceeding enter prudence and 15 reasonableness findings, as stated in FPL's positions in 16 the prehearing order, and approve FPL's requested 2009 17 18 nuclear cost recovery. 19 Thank you. 20 CHAIRMAN CARTER: Thank you, Mr. Anderson. 21 Mr. McWhirter? 22 MR. McWHIRTER: No comments, sir. 23 CHAIRMAN CARTER: Mr. Twomey. No, sir. 24 MR. TWOMEY: 25 CHAIRMAN CARTER: Mr. McGlothlin.

FLORIDA PUBLIC SERVICE COMMISSION

1 2 of Public Counsel.

MR. McGLOTHLIN: Joe McGlothlin for the Office

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Commissioners, as I was thinking about what the Commission and the parties are about today, it occurred to me that this proceeding probably satisfies the definition of test case better than any other proceeding in recent memory. Consider that, like many other cases that come before you, this case involves requests by utilities for authority to collect hundreds of millions of dollars from customers, and you certainly have the traditional role of reviewing those requests and making a decision.

But this is also an instance in which we are implementing the nuclear cost recovery rule for the first time. It's a proceeding in which the so-called Nuclear Filing Requirements, the NFRs, are being tested for adequacy for the first time. And another novel feature of this proceeding, soon to be no longer novel, but it is in this case, is that you're called on to review the beginnings of a nuclear project as opposed to being called on to review a plant that's about to enter commercial service. All these aspects make this case very different from most that come before you.

In the evidence you're about to hear, you will learn that our office has initiated issues and pursued

issues that are related to each of those aspects that I enumerated. With respect to money, we have identified an issue that pertains to Florida Power & Company which in our view does warrant consideration of an adjustment to the company's request. With respect to the application of the new rule, we initiated and pursued with parties our view as to the proper limits that should be imposed on the application of the rule as it relates to uprate projects so that non-uprate project costs will not be borne through the cost recovery rule.

With respect to the Nuclear Filing

Requirements, which have been the product of basically
an informal collaboration to this point, we have
recommended an addition to those requirements which will
enable the utilities to understand what's expected of
them next year and will give the Commission and parties
more information up front when we go through this
exercise in the next cycle.

Our witness with respect to all these contentions is Dr. William Jacobs. As you heard, he holds a Ph.D. in nuclear engineering and has worked on projects at numerous nuclear power plants across the country and across the globe. He will testify on three issues, and the first is common to both Progress Energy and Florida Power & Light. And you've heard something

about it before, but I think I will summarize it very briefly here.

Dr. Jacobs -- and it's also specific to uprate projects. Dr. Jacobs will testify that a utility should be made to perform and show an analysis designed to differentiate between those costs that are incurred and are essential to an uprate project on the one hand and those costs that do not qualify for the clause because they are in the nature of operation and maintenance costs that the utility would incur to maintain service from its unit even in the absence of an uprate project.

As it develops, we have learned that Florida

Power & Light Company and Progress Energy Corporation do

not disagree with our view of the scope of the rule, and
that has led to something of a workout that you've heard

about already with respect to the agreement to develop

an additional Nuclear Filing Requirement specific to the

type of analysis that will be required of the utilities

in the next cycle.

Dr. Jacobs will also testify that while
Florida Power & Light Company's management processes
appropriately stress the desirability of competitive
bidding as the standard for choosing contractors, FPL
too often has awarded contracts without competitive
bidding and without sufficient justification.

He will testify that FP&L has fallen short of its own internal requirements that FPL first justify the decision to forgo competitive bidding, and a related and equally important requirement that in that instance, FPL demonstrate that the costs of a contract entered into without the benefit of competitive bids is reasonable in amount.

He will show that the justification memoranda that serve as the basis for the decision to depart from the otherwise applicable standard of competitive bidding too often consists of standardized, perfunctory, conclusory language instead of a rationale or an analysis that is specific to the contract in question.

He will testify that FPL's practice of referring to past experience, and in the case of one major contract, a "back of the envelope" type of analysis, are insufficient to enable this Commission to gauge that the costs of the single source and sole source contracts that have been entered into to this point are reasonable in amount.

Dr. Jacobs will offer three suggestions, three alternative regulatory actions designed to communicate the Commission's insistence that FPL adhere to its own standard of competitive bidding and demonstrate adequate justification when it departs from that standard.

First, he identifies a very large contract related to one of the uprate projects and suggests that the Commission use that large contract as a proxy for the general shortcoming in terms of competitive bidding and disallow a portion of the return on investment that FPL is seeking with respect to the investments called for in that contract.

In order of decreasing severity, recognizing that this is a test case and we're perhaps all of us finding our way through this process, he suggests that the Commission could withhold a portion of the revenue requirements or carrying charges associated with that contract and tell FPL that it cannot collect that portion unless and until it is able to demonstrate the reasonableness of the decision to enter a single source contract in the next cycle.

And the final alternative, if the Commission declines to undertake a financial adjustment, would be, at a minimum, to admonish Florida Power & Light Company that the Commission expects the utility to adhere to its practice of competitive bidding and to be prepared to fully justify any departure from that standard in the future.

Thank you.

CHAIRMAN CARTER: Thank you, Mr. McGlothlin.

FLORIDA PUBLIC SERVICE COMMISSION

1 Just procedurally, we did it in our other 2 case, and just to dot the I's and cross the T's, staff's 3 composite exhibit list is entered into the record without objections. I believe the other -- 41 and --4 5 wait a minute. Let me see. Forty-one is -- we did 42 6 in the prior case, but 41, we need to add this to our 7 list. 8 MS. BENNETT: We've entered 41 into the record 9 previously. We entered all of the exhibits, the 10 comprehensive exhibit list, the composite exhibits, and 11 FPL's composite exhibits. 12 CHAIRMAN CARTER: FPL's composite exhibit, 13 that's 41. And, Mr. Anderson, at the appropriate time, we can move to enter that into evidence. 14 15 MR. TWOMEY: Mr. Chairman. CHAIRMAN CARTER: Hang on one second. 16 I'11 17 get right back to you. 18 MR. TWOMEY: Yes, sir. 19 CHAIRMAN CARTER: We did that already? Did we 20 enter FPL's exhibit already? 21 MS. BENNETT: We did. At the very beginning 22 of the proceeding, at the opening of the record, we 23 entered all of the composites in, a little bit fast. CHAIRMAN CARTER: Well, let's re-enter, then. 24 Since we've already entered it, I know there's no 25

1 objection, so let's show it done for Exhibit 41, just to dot the I's and cross all the T's. 2 3 Mr. Twomey. 4 MR. TWOMEY: Mr. Chairman, thank you. While I 5 didn't want to make a formal opening statement as I did 6 in the Progress case, I want to reiterate that AARP is 7 here supportive fully of the work of the Office of Public Counsel, and to that end, as reflected in the 8 9 prehearing order, we have supported all their positions 10 on all issues. Thank you. 11 CHAIRMAN CARTER: Thank you. For the record, 12 AARP has adopted and supports the positions of OPC in 13 toto; correct? 14 MR. TWOMEY: Yes, sir. 15 CHAIRMAN CARTER: Thank you, sir. Okay. Now, let's see here. All preliminary 16 17 matters taken care of, staff? MS. BENNETT: All that staff is aware of. 18 19 CHAIRMAN CARTER: Any more from the parties before we begin? 20 Mr. Anderson, you're recognized, sir. 21 22 MR. ANDERSON: Thank you, Chairman Carter. FPL would call as its first witness its controller, Kim 23 Ousdahl. 24 CHAIRMAN CARTER: Kim Ousdahl. 25

FLORIDA PUBLIC SERVICE COMMISSION

1 Thereupon, 2 KIM OUSDAHL was called as a witness on behalf of Florida Power & 3 4 Light Company and, having been first duly sworn, was 5 examined and testified as follows: 6 DIRECT EXAMINATION 7 BY MR. ANDERSON: 8 Q. Good afternoon, Ms. Ousdahl. 9 Α. Good afternoon. 10 Q. Have you been sworn? 11 Α. Yes, I have. 12 Q. Would you tell us your name and business 13 address? 14 Α. My name is Kim Ousdahl. My business address 15 is 700 Universe Boulevard, Juno Beach, Florida. 16 Q. By whom are you employed, and in what 17 capacity? By Florida Power & Light Company as 18 Α. controller. 19 20 Q. Have you prepared and caused to be filed seven 21 pages of prefiled direct testimony in this proceeding on March 3, 2008? 22 Α. I have. 23 24 Q. Did you also prepare and cause to be filed 17 files of prefiled direct testimony on May 1, 2008? 25

1	A. I have.
2	Q. Did you submit an errata, I believe it was
3	yesterday, in relation to your testimony?
4	A. I did.
5	MR. ANDERSON: Chairman Carter, I would note
6	that the copy of the errata is being distributed. It
7	basically calls out each figure which would change in
8	her testimony, principally to implement this \$35 million
9	reduction we've talked about. There has also been one
10	other small financial adjustment between here and there,
11	but the main purpose was to implement the reduction that
12	we talked about. And Ms. Ousdahl, of course, can answer
13	any
14	CHAIRMAN CARTER: Do we need to admit this?
15	Let's mark it as 43.
16	MR. ANDERSON: Ms. Ousdahl I'm sorry.
17	CHAIRMAN CARTER: Excuse me, Ms. Ousdahl. One
18	second here. You want to call it the Ousdahl errata
19	sheet?
20	MR. ANDERSON: Yes, sir.
21	CHAIRMAN CARTER: Sounds nice that way.
22	(Exhibit Number 43 was marked for
23	identification.)
24	CHAIRMAN CARTER: Okay. You may proceed.
25	BY MR. ANDERSON:

FLORIDA PUBLIC SERVICE COMMISSION

	Q. Other than your errata, do you have any
2	changes or revisions to your prefiled direct testimony?
3	A. I do not.
4	Q. If I asked you the same questions contained in
5	your prefiled direct testimony with your errata, would
6	your answers be the same?
7	A. They would.
8	MR. ANDERSON: Chairman Carter, FPL asks that
9	Ms. Ousdahl's prefiled direct testimony be inserted into
10	the record as though read.
11	CHAIRMAN CARTER: The prefiled testimony of
12	the witness will be inserted into the record as though
13	read.
14	BY MR. ANDERSON:
15	Q. Are you co-sponsoring any exhibits to your
16	direct testimony?
17	A. I am.
18	Q. Are those portions of Exhibits STH-1, STH-2,
19	SDS-1, and SDS-2?
20	A. They are.
21	MR. ANDERSON: Mr. Chairman, I would note
22	these exhibits have been premarked for identification in
23	staff's list as Numbers 20 through 23.
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1		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
2		FLORIDA POWER & LIGHT COMPANY
3		DIRECT TESTIMONY OF KIM OUSDAHL
4		DOCKET NO. 080009-EI
5		May 1, 2008
6		
7	Q.	Please state your name and business address.
8	A.	My name is Kim Ousdahl. My business address is 700 Universe Boulevard,
9		Juno Beach, Florida 33408.
10	Q.	By whom are you employed and what is your position?
11	A.	I am employed by Florida Power & Light Company (FPL or the Company) as
12		Controller.
13	Q.	Have you previously filed testimony in this docket?
14	A.	Yes.
15	Q.	What is the purpose of your testimony?
16	A.	The purpose of my testimony is to provide an overview of FPL's filing and
17		demonstrate that the filing complies with Florida Administrative Code Rule
18		25-6.0423, Nuclear Power Plant Cost Recovery (the Rule). Consistent with
19		the Rule, my testimony requests that the Commission approve a Nuclear
20		Power Plant Cost Recovery ("NPPCR") amount of \$258,979,772 on a
21		jurisdictional adjusted basis to be recovered through the 2009 Capacity Cost
22		Recovery Clause ("CCRC"). In conjunction with approval of the NPPCR
23		amount, FPL requests that the Commission do the following:

- Review and approve recovery of carrying charges associated with the
 2 2008 Actual/Estimated and 2009 Projected construction costs for the
 3 Uprate Project, as presented in the testimony of FPL witness Stephen
 4 Hale.
 5 Review and approve recovery of the 2007 Actual, 2008
 6 Actual/Estimated and 2009 Projected pre-construction costs and
 - Actual/Estimated and 2009 Projected pre-construction costs and associated carrying charges for Turkey Point 6 & 7, as presented in the testimony of FPL witness Steven Scroggs.
 - Determine that FPL's 2007 pre-construction costs for Turkey Point 6 &
 7 were prudently incurred, for the reasons presented in the testimony of
 Mr. Scroggs.
 - Approve FPL's proposal to recover FPL's 2006-2007 Site Selection costs and associated carrying costs through the CCRC effective January 1, 2009 as part of FPL's NPPCR amount. Consistent with approving FPL's proposal, FPL further requests that the Commission determine FPL's 2006-2007 Site Selection costs for the Turkey Point 6 & 7 project were prudently incurred, for the reasons presented in Mr. Scroggs' testimony.
- 19 Q. Have you prepared or caused to be prepared under your direction,
 20 supervision or control any exhibits in this proceeding?
- 21 A. Yes. I am sponsoring portions of the following exhibits:

• STH-2, which consists of 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 Mr. Hale,
- 2 Dr. Sim and me, respectively.
- SDS-1, which consists of Appendix II containing the NFRs for Turkey Point 6
- 4 & 7 pre-construction costs. Page 2 of Appendix II contains a table of contents
- listing the NFRs that are sponsored by Mr. Scroggs, Dr. Sim and me,
- 6 respectively.
- SDS-2, which consists of Appendix III containing the NFRs for Turkey Point
- 8 6 & 7 Site Selection costs. Page 2 of Appendix III contains a table of contents
- 9 listing the NFRS that are sponsored by Mr. Scroggs and me, respectively.

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NUCLEAR COST RECOVERY RULE

12 Q. Please describe the purpose of the Rule.

13 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.

3 Q. Have these schedules been formally adopted?

- A. 4 Although the schedules have not been formally adopted by the Commission. 5 FPL understands that all parties agree to the use of the latest draft of the NFRs for filing purposes. The Company has been collaborating with Progress 6 7 Energy in order to provide as much consistency as possible in the current 8 draft. However, the forms are still evolving and deviations from specific details of the forms may be appropriate. The NFRs provide an overview of 10 the financial and construction aspects of nuclear plant projects, outline the 11 categories of costs represented and provide a roadmap to the calculation of 12 detailed project revenue requirements.
- Q. Does the Rule describe the annual filing requirements that a utility is to make in support of a final true-up of prior year costs and a prudence determination for those costs?
- 16 A. Yes. Subsection (5) (c) of the Rule states:

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- "1. Each year, a utility shall submit, for Commission review and approval, as
 part of its Capacity Cost Recovery Clause filings:
 - a. True-Up for Previous Years. By March 1, a utility shall submit its final true-up of pre-construction expenditures, based on actual pre-construction expenditures for the prior year and previously filed expenditures for such prior year and a description of the pre-construction work actually performed during such year; or, once construction begins, its final true-up of

1		carrying costs on its construction expenditures, based on actual carrying costs
2		on construction expenditures for the prior year and previously filed carrying
3		costs on construction expenditures for such prior year and a description of the
4		construction work actually performed during such year."
5	Q.	Is FPL complying with these requirements with respect to its 2007 Uprate
6		and Turkey Point 6 & 7 Project Costs?
7	A.	Yes. FPL filed the T (Final True-up) Schedules containing the 2007 cost
8		information for the Uprate Project on March 3, 2008. Because the final order
9		regarding the need for Turkey Point 6 & 7 was not issued until after the March
10		3, 2008 filing, FPL has included its 2007 Turkey Point 6 & 7 costs on the A/E
11		(Actual/ Estimated True-up) of Appendix II to this filing. As this is the first
12		opportunity to seek recovery under the Rule, FPL believes it is appropriate to
13		use the final true-up process contemplated by the Rule as the basis for
14		determining the prudence of its 2007 expenditures.
15	Q.	Does the Rule describe the annual filing requirements that a utility is to
16		make for the Commission review and approval for the current year
17		expenditures?
18	A.	Yes. The Rule states:
19		"1. Each year, a utility shall submit, for Commission review and approval, as
20		part of its Capacity Cost Recovery Clause filings:
21		b. True-Up and Projections for Current Year. By May 1, a utility shall
22		submit for Commission review and approval its actual/estimated true-up of
23		projected pre-construction expenditures based on a comparison of current year

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."

- 9 Q. Is FPL complying with these requirements with respect to its 2008

 10 Actual/Estimated Uprate Project and Turkey Point 6 & 7 costs?
- 11 A. Yes. FPL has included the AE (Actual/ Estimated True-up) Schedules in
 12 Appendix I for the Uprate Project and Appendix II for Turkey Point 6 & 7 of
 13 this filing. Although there were no previous projections to "true-up" and
 14 compare to the 2008 actual/estimated expenditures, FPL believes it is
 15 appropriate to use the actual/estimated true-up process contemplated by the
 16 Rule as the basis for determining the reasonableness of its 2008 actual
 17 expenditures and projections in its initial filing.
- Q. Does the Rule describe the annual filing requirements that a utility is to make for the Commission review and approval for the projected year expenditures?
- 21 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: ...

3	Q.	Is FPL complying with these requirements with respect to its 2009
7		year."
5		description of the construction work projected to be performed during such
5		begins, its projected construction expenditures for the subsequent year and a
4		work projected to be performed during such year; or, once construction
3		expenditures for the subsequent year and a description of the pre-construction
2		submit, for Commission review and approval, its projected pre-construction
1		c. Projected Costs for Subsequent Years. By May 1, a utility shall

- Q. Is FPL complying with these requirements with respect to its 2009
 projected Uprate Project and Turkey Point 6 & 7 Project costs?
- Yes. FPL has included the P (Projection) Schedules in Appendix I for the
 Uprate Project and Appendix II for Turkey Point 6 & 7 of this filing. As
 contemplated by the Rule, these P schedules provide the basis for determining
 the reasonableness of FPL's 2009 projections.
- 14 Q. How is FPL providing an update to the original Uprate Project and
 15 Turkey Point Unit 6 & 7 Project costs, respectively?
- 16 A. FPL has included the TOR (True up to Original) Schedules in Appendix I for
 17 the Uprate Project and Appendix II for Turkey Point 6 & 7 of this filing. As
 18 this is the first filing of projections under the Rule, the TOR schedules cannot
 19 provide a comparison to originally filed project costs, but are necessary in
 20 order to summarize the revenue requirements for the first recovery period
 21 beginning 2009.
- Q. Please delineate the Nuclear Project Costs for which FPL is requesting a prudence determination under the Rule.

A. FPL is requesting that the Commission determine that FPL's actual 2006 and 1 2007 expenditures for the Uprate construction costs and Turkey Point 6&7 2 Site Selection and pre-construction costs were prudently incurred. 3 4 5 **COST RECOVERY FOR THE UPRATE PROJECT** 6 Q. What are FPL's actual/estimated Uprate Project costs for the period 7 January 2008 through December 2009 for which FPL is requesting recovery? 8 FPL is requesting recovery of \$20,494,432 in carrying charges for A. 9 construction costs for the Uprate project through the CCRC in 2009. This 10 amount is made up of carrying charges of \$3,746,283 for the 2008 11 actual/estimated period and \$16,748,149 projected for 2009. 12 13 As presented in Mr. Hale's testimony and provided on Schedule AE-6 of 14 Appendix I, FPL's actual/estimated Uprate Project expenditures for the period 15 January 2008 through December 2008 are \$79,030,565. Schedule AE-6 of 16 Appendix I deducts the projected portion of this total for which the St. Lucie 17 18 Unit 2 participants may be responsible and then applies the retail jurisdictional factor to the remainder. Although the St. Lucie participants are entitled to 19 elect participation in the uprate project as provided in the participation 20 agreement, that election has not yet been formally made. Should the 21

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participants decline participation in the Uprate Project benefits, the Company

will reflect these changes in a later true-up filing. For actuals, adjustments

1 are made to present the costs on a cash basis (i.e., excluding accruals and pension and welfare benefit credits) for the calculation of carrying costs. This 2 adjustment is necessary in order to comply with the Commission's current 3 practice regarding AFUDC accruals. After making these adjustments, the net 2008 uprate expenditures are \$74,566,687. The calculation of the carrying 5 charges for these expenditures is provided on schedules AE-3. 6 7 Additionally, as presented in Mr. Hale's testimony and provided on Schedule 8 9 P-6 of Appendix I, FPL's projected Uprate Project expenditures for the period January 2009 through December 2009 are \$240,845,910. Schedule P-6 of 10 Appendix I deducts the portion of this total for which the St. Lucie Unit 2 11 participants may be responsible and then applies the retail jurisdictional factor 12 to the remainder. FPL did not project future noncash accruals. The amounts 13 of any such accruals are impractical to project accurately and will be trued-up, 14 with interest. After making those two adjustments, the net 2009 uprate 15 expenditures are \$233,294,413. The calculation of the carrying charges for 16 these expenditures is provided on schedules P-3. 17 18 For the reasons stated in Mr. Hale's testimony, FPL respectfully requests that 19 the Commission approve FPL's projected 2009 Uprate Project expenditures as 20 21 reasonable for cost recovery consistent with the Rule beginning in January 2009. 22

23

2	Q.	What are FPL's Turkey Point 6 & 7 expenditures for 2006 and 2007 for
3		which FPL is requesting a determination of prudence?

COST RECOVERY FOR TURKEY POINT 6 & 7

- As presented in Mr. Scroggs' testimony and provided on Schedule AE-1 of

 Appendix II, FPL's actual pre-construction costs and associated carrying

 charges are \$2,543,239 for 2007. FPL is making adjustments to actuals to

 present the costs on a cash basis (i.e., excluding accruals and pension and

 welfare benefit credits) for the calculation of carrying costs.
- For the reasons stated in Mr. Scroggs' testimony, FPL respectfully requests
 that the Commission approve these pre-construction costs and associated
 carrying costs as prudent consistent with the Rule.
- Q. What are FPL's actual/estimated Turkey Point 6 & 7 pre-construction costs and associated carrying costs for the period January 2008 through December 2009 for which FPL is requesting recovery?

A. FPL is requesting recovery of \$228,137,689 in pre-construction costs and associated carrying charges for Turkey Point 6 & 7 through the CCRC in 2009. This amount is made up of pre-construction costs of \$104,561,783 and carrying charges of \$3,879,731 for the 2008 actual/estimated period and pre-construction costs of \$109,540,915 and carrying charges of \$10,155,260 projected for 2009.

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As presented in Mr. Scroggs' testimony and provided on Schedule AE-6 of
Appendix II, FPL's actual/estimated Turkey Point 6 & 7 pre-construction

1		costs for the period January 2008 through December 2008 are \$105,000,000.
2		The calculation of the carrying charges for these expenditures is provided on
3		schedules AE-2.
4		
5		Additionally, as presented in Mr. Scroggs' testimony and provided on
6		Schedule P-6 of Appendix II, FPL's projected Turkey Point 6 & 7
7		expenditures for the period January 2009 through December 2009 are
8		\$110,000,000. (The expenditures presented in the testimony of Steven
9		Scroggs found on AE-6 and P-6, are total project expenditures, which differ
10		from jurisdictional recoverable amounts described further herein.) The
11		calculation of the carrying charges for these expenditures is provided on
12		schedules P-2.
13		
14		For the reasons stated in Mr. Scroggs' testimony, FPL respectfully requests
15		that the Commission approve these expenditures as reasonable for cost
16		recovery consistent with the Rule.
17		
18	PRO	POSED COST RECOVERY APPROACH FOR SITE SELECTION
19	COST	<u>rs</u>
20	Q.	Does the Rule address recovery of Site Selection Costs?
21	A.	Yes, section (4) states:
22		"Site Selection Costs. After the Commission has issued a final order granting
23		a determination of need for a power plant pursuant to Section 403.519, F.S., a

1	utility may file a petition for a separate proceeding, to recover prudently
2	incurred site selection costs. This separate proceeding will be limited to only
3	those issues necessary for the determination of prudence and alternative
4	method for recovery of site selection costs of a power plant."

5 Q. What site selection costs were expended in 2006 and 2007?

- A. As described in Mr. Scroggs' testimony, Schedule AE-6 of Appendix III provides the 2006 and 2007 actual site selection costs of \$6,424,121 million.
- Q. How does FPL propose to recover the site selection costs for the TurkeyPoint 6 & 7 Project?
- 10 A. FPL proposes to recover the Turkey Point 6 & 7 site selection costs through
 11 the 2009 CCRC as part of FPL's approved NPPCR amount. FPL believes the
 12 Turkey Point 6 & 7 site selection costs should be reviewed in this docket and
 13 approved for recovery as part of the NPPCR amount that is to be included in
 14 the CCRC for 2009 for the following reasons:

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The early stage of the project has involved both site selection and preconstruction costs which have been managed consistently within the same overall project development process. Therefore, although the Commission rules afford the opportunity for a separate review and alternative methods of recovery for site selection costs as opposed to preconstruction and construction, this separation is arbitrary from the standpoint of project development, project cost planning and controls and ultimately the determination of prudence. Separation of the review of cost flows and activities with two separate proceedings would only serve to impede and

- obscure comprehensive review of the early stage project activities and costs.
 - This docket affords the earliest opportunity for review and approval of the Turkey Point 6 & 7 site selection costs. Prompt review and approval of the site selection costs is in FPL's and its customers' interests. It will reduce the period of regulatory uncertainty as to recovery of those costs, which is important as FPL embarks upon this lengthy, complex and costly project. It will also minimize the period over which carrying charges will accumulate on the site selection costs, resulting in a lower overall amount to be recovered from customers than would be the case if recovery of the costs were deferred to a later proceeding.
 - The NPPCR is the most appropriate vehicle for recovery of the Turkey Point 6 & 7 site selection costs. Site selection is an integral part of that project, and the NPPCR is the recognized mechanism for recovery of nuclear project costs. If the site selection costs are included in the amount that the Commission approves for recovery under the NPPCR, there will be a well-defined mechanism for implementing that recovery (*i.e.*, through the CCRC). Otherwise, the Commission will have to address separately the issue of how to implement recovery of the site selection costs, which would result in duplication of effort and a potentially inconsistent recovery approach.

1		Consistent with accounting practices in the Commission's existing adjustment
2		clause proceedings and with the treatment of pre-construction costs in
3		subsection (5)(a) of the Rule, FPL proposes to accrue and recover carrying
4		charges on the unrecovered balance of site selection costs until they are fully
5		recovered through the CCRC at the end of 2009.
6		
7	ACC	COUNTING CONTROLS
8	Q.	Please describe the accounting controls that FPL has in place to ensure
9		proper cost capture and reporting for the duration of these projects.
10	A.	The Company relies on its comprehensive and overlapping controls for
11		incurring costs and recording transactions associated with any of its capital
12		projects including that of nuclear uprates and Turkey Point 6&7. These
13		comprehensive and overlapping controls include:
14		• FPL's Accounting Policies and Procedures
15		• Financial systems and related controls including its general ledger and
16		construction asset tracking system (CATS)
17		Sarbanes-Oxley processes and testing
18		Annual budgeting and planning process and reporting and monitoring of
19		plan costs to actual costs incurred as discussed in the testimony of Steven
20		Scroggs and Stephen Hale.
21	Q.	Are these controls documented, assessed and audited and/or tested on an
22		ongoing basis?

A. The FPL accounting policies and procedures are documented and Yes. published on the Company's internal web site, 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-Oxlev processes are identified, documented, tested and maintained, including specific processes for planning and executing capital work orders and acquiring and developing fixed assets. Certain of those key financial processes are tested during the Company's annual test cycle. In addition, Deloitte & Touche LLP, as a part of its annual external audit, will assess the Company's internal controls over financial reporting and express 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.

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Q. Are there any additional controls being implemented and relied on for this particular project and the related reporting?

20 A. Yes. First, the Company has issued specific guidelines for charging costs to
21 the project work orders. Those guidelines describe the need for particular care
22 in charging only incremental labor to these particular projects due to the
23 CCRC recovery approach and are intended to ensure careful attention to the

incremental recovery guidelines during the duration of these projects. The need for this care is most acute in the initial stages of the project as existing resources are typically utilized until such time that the project requires a greater complement of personnel resources specifically devoted to the project. Secondly, the Company has initiated specific project related internal audits. The initial review being performed is related to the Uprate Project. The objective of this audit is to test the process of recording and capturing costs related to the Uprate project in the pre established work orders to ensure compliance with the Commission's Rule. That audit has just begun and a final audit report is expected in June, 2008. The audit of the Turkey Point 6&7 project will commence this summer and a final report is expected in fall 2008.

SUMMARY

- What is the total amount of nuclear project costs that FPL is requesting to recover through the 2009 CCRC?
- 17 A. FPL is requesting to recover a total of \$258,979,772 through the CCRC in
 18 2009 for the Uprate Project and Turkey Point 6&7. This is made up of:
 - For Turkey Point 6&7 \$9,082,737 for 2006-2007 actual jurisdictional costs (\$6,397,310 for site selection, \$2,522,692 for pre-construction and \$142,188 in carrying costs for site selection and \$20,547 in carrying costs for pre-construction for Turkey Point 6&7).

- \$112,917,360 for 2008 actual/estimated jurisdictional costs

 (\$104,561,783 for pre-construction costs and \$729,563 in carrying

 costs for site selection and \$3,879,731 in carrying costs for Turkey

 Point 6&7, plus \$3,746,283 in carrying costs for the Uprate Project).
 - \$136,979,675 for 2009 projected jurisdictional costs (\$109,540,915 for pre-construction costs and \$10,155,260 in carrying costs for pre-construction and \$535,351 of site selection carrying costs for Turkey Point 6&7 plus \$16,748,149 in carrying costs for the Uprate Project.

9 Q. Does this conclude your testimony?

10 A. Yes.

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1		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
2		FLORIDA POWER & LIGHT COMPANY
3		DIRECT TESTIMONY OF KIM OUSDAHL
4		DOCKET NO. 08 <u>0009</u> -EI
5		March 3, 2008
6		
7	Q.	Please state your name and business address.
8	A.	My name is Kim Ousdahl. My business address is 700 Universe Boulevard,
9		Juno Beach, Florida 33408.
10	Q.	By whom are you employed and what is your position?
11	A.	I am employed by Florida Power & Light Company (FPL or the Company) as
12		Controller.
13	Q.	Please describe your duties and responsibilities in that position.
14	A.	I am responsible for financial accounting and internal reporting for FPL,
15		including property accounting and management of the regulatory accounting
16		function. In this role I have responsibility for managing the accounting and
17		financial and regulatory reporting of the nuclear capital project costs.
18	Q.	Please describe your educational background and professional
19		experience.
20	A.	I graduated from Kansas State University in 1979 with a Bachelor of Science
21		Degree in Business Administration, majoring in Accounting. That same year,
22		I was employed by Houston Lighting & Power Company in Houston, Texas.
23		During my tenure there, I held various accounting and regulatory management

1		positions. Most recently, prior to joining FPL in June 2004, I was the Vice
2		President and Controller of Reliant Energy.
3		
4		I am a certified public accountant (CPA) licensed in the State of Texas and a
5		member of the American Institute of CPAs, the Texas Society of CPAs and
6		the Florida Institute of CPAs.
7	Q.	What is the purpose of your testimony?
8	A.	The purpose of my testimony is to provide an overview of FPL's filing and
9		demonstrate that the filing complies with Florida Administrative Code Rule
10		25-6.0423, Nuclear Power Plant Cost Recovery (the Rule). Consistent with
11		the Rule, my testimony requests that the Commission make a prudence
12		determination on FPL's 2007 power uprate costs for the Turkey Point and St.
13		Lucie nuclear power plants, as presented in the testimony of FPL witness
14		Stephen Hale.
15	Q.	Have you prepared or caused to be prepared under your direction,
16		supervision or control any exhibits in this preceding?
17	A.	Yes, I have. Exhibit STH-1, sponsored by Mr. Hale, consists of Appendix 1
18		containing schedules T-1 through T-10. Page 2 of Appendix 1 contains a table
19		of contents which lists the T Schedules that are sponsored by Mr. Hale and
20		me, respectively.
21	Q.	Please describe the purpose of the Rule and the Nuclear Filing
22		Requirements (NFRs).

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 implements this mechanism and provides for the annual recovery of these 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 schedules setting forth construction and cost information on a nuclear project.

A.

Those schedules are referred to as "Nuclear Filing Requirements" or "NFRs". Although not finalized, FPL understands that all parties agree to use the latest draft of the NFRs for filing purposes. The NFRs provide an overview of nuclear plant projects and a roadmap to the detailed project costs. The NFRs 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. In May, there are three sets of schedules to be filed: the AE Schedules provide the actual/estimated cost information for the current year, the P Schedules provide the projected expenditures for the subsequent year and the TOR Schedules provide the project summary. The NFRs form a framework for the Commission to review

1		the costs projected to be incurred and the actual costs incurred during each
2		year so as to facilitate a prudence determination.
3	Q.	Does the Rule describe the annual filing requirements that a utility is to
4		make in support of a prudence determination?
5	A.	Yes. Section 5(c) of the Rule outlines the annual filing requirements necessary
6		to support a determination of prudence. It states:
7		"(c) Capacity Cost Recovery Clause for Nuclear or Integrated Gasification
8		Combined Cycle Power Plant Costs.
9		1. Each year, a utility shall submit, for Commission review and
10		approval, as part of its Capacity Cost Recovery Clause filings:
11		a. True-Up for Previous Years. By March 1, a utility shall submit its
12		final true-up of pre-construction expenditures, based on actual preconstruction
13		expenditures for the prior year and previously filed expenditures for such prior
14		year and a description of the pre-construction work actually performed during
15		such year; or, once construction begins, its final true-up of carrying costs on
16		its construction expenditures, based on actual carrying costs on construction
17		expenditures for the prior year and previously filed carrying costs on
18		construction expenditures for such prior year and a description of the
19		construction work actually performed during such year
20		2. The Commission shall, prior to October 1 of each year, conduct a
21		hearing and determine the reasonableness of projected pre-construction
22		expenditures and the prudence of actual pre-construction expenditures
23		expended by the utility; or, once construction begins, to determine the

reasonableness of projected construction expenditures and the prudence of actual construction expenditures expended by the utility, and the associated carrying costs. Within 15 days of the Commission's vote, the Commission shall enter its order. Annually, the Commission shall make a prudence determination of the prior year's actual construction costs and associated carrying costs. To facilitate this determination, the Commission shall conduct an on-going auditing and monitoring program of construction costs and related contracts pursuant to Section 366.08, F.S. In making its determination of reasonableness and prudence the Commission shall apply the standard provided pursuant to Section 403.519(4)(e), F.S.

A.

3. The Commission shall include those costs it determines, pursuant to this subsection, to be reasonable or prudent in setting the Capacity Cost Recovery Clause factor in the annual Fuel and Purchased Power Cost Recovery proceedings. Such prior year actual costs associated with power plant construction subject to the annual proceeding shall not be subject to disallowance or further prudence review."

Q. Is FPL complying with these requirements with respect to its 2007 nuclear uprate costs?

Yes. FPL has included the T (Final True-up) Schedules in Appendix 1 of this filing. Although there were no previous projections to "true up" and compare to the 2007 actual expenditures because this is the first cycle of proceedings under the Rule, FPL believes it is appropriate to use the final true-up process

1 contemplated by the Rule as the basis for determining the prudence of its 2007 2 expenditures.

- Q. What are FPL's uprate expenditures for the period January 2007 through December 2007 for which FPL is requesting a determination of prudence?
- As presented in Mr. Hale's testimony and provided on Schedule T-6, FPL's Α. actual uprate expenditures for the period January 2007 through December 7 2007 are \$8,624,516. Schedule T-6 goes on to deduct the portion of this total 8 for which the St. Lucie Unit 2 participants are responsible and then applies the 9 retail jurisdictional factor to the remainder. After making those two 10 adjustments, the net 2007 uprate expenditures for which retail customers are 11 responsible are \$8,236,652. For the reasons stated in Mr. Hale's testimony, 12 FPL respectfully requests that the Commission review and approve these 13 14 expenditures as prudent consistent with the Rule.
- 15 Q. Is FPL seeking to recover any carrying charges for 2007 with respect to these 2007 expenditures?
- FPL recorded the 2007 actual uprate expenditures in FERC Account A. No. 17 183.705, "Preliminary Survey & Investigation charges". These expenditures 18 were transferred into Construction Work In Progress (CWIP) in 2008. 19 Consistent with FPL's accounting practices, the calculation of carrying 20 charges did not commence until this transfer occurred, so carrying charges 21 will first be recorded on the 2007 expenditures in 2008. Because of this 22 starting point/transition period, Schedules T-1 through T-3b covering the 23

- period 2007 reflect zero carrying charges but Schedule T-6 nonetheless
- provides the actual 2007 monthly uprate expenditures and Schedules T-8, T-
- 8a and T-8b provide the contract information underlying these expenditures.
- FPL's May 2008 cost recovery filing is expected to include carrying charges
- for 2008 with respect to the 2007 expenditures.
- 6 Q. Does this conclude your testimony?
- 7 A. Yes.

1 BY MR. ANDERSON:

- Q. Ms. Ousdahl, have you prepared a summary of your testimony?
 - A. I have.
- Q. Would you please provide your summary to the Commission?
- A. Good afternoon Commissioners. The purpose of my testimony is to provide an overview of FPL's filing and to demonstrate that it complies with the nuclear power plant cost recovery rule and the related statute. I present the Nuclear Filing Requirements, these documents we call the NFRs that quantify the request for the Commission determination as to the prudence and reasonableness or our costs.

Specifically, the company requests the Commission find FPL's 2007 uprate costs were prudently incurred and the revenue requirement related to the total cost incurred and projected for new nuclear and uprate projects of 220.5 million is reasonable and eligible for recovery effective January 1, 2009, through the capacity cost recovery clause.

The Commission adopted the rule on March 20, 2007, to implement Section 366.93 of the Florida Statutes enacted by the legislation specifically to promote investments in nuclear power plants. The

statute directed the Commission to establish these alternative mechanisms for cost recovery with stepwise periodic prudence determinations. The rule provides those mechanisms and the annual recovery of these costs through the CCRC.

FPL filed the final true-up schedules containing the 2007 cost information for its uprate project on March 3rd and is requesting the Commission determine these costs to be prudently incurred.

On May 1st, FPL filed its '08 and '09 NFRs for the uprate project in Appendix I of the filing, its 2007 through 2009 NFRs for Turkey Point 6 and 7 pre-construction costs in Appendix II of the filing, and its 2006 through 2009 NFRs for Turkey Point 6 and 7 site selection in Appendix III. We revised these NFRs on August 6, 2008, to provide for a correction resulting in a small reduction in the overall request.

More recently, as we've discussed this morning and as will be provided by FPL witness Scroggs, we recalculated the revenue requirements for 2008 Turkey Point 6 and 7 pre-construction costs to reflect this reduction in the estimate required in that year, 2008, of 35 million, which has resulted in a decrease to revenue requirements of 37.9 million.

In order to ensure reasonable and prudent

costs are properly incurred and reported for the uprate and Turkey Point 6 and 7 projects, the company has relied on its comprehensive and overlapping accounting and business unit controls for incurring costs and recording transactions. The above-mentioned controls are documented, assessed, audited, and tested on an ongoing basis by both FPL's internal and external auditors.

FPL's internal audit department finalized its initial audit of the uprate costs and controls, and for the adjustments that were found, we've either committed -- we've either made those or committed to making those adjustments. The summary finding in this first initial audit is that the controls over the uprate project are adequate. The internal audit department is currently in the process of conducting its audit, initial audit of Turkey Point 6 and 7 costs and controls, and the company will provide those results when finalized.

In summary, we request that the Commission confirm that our filing complies with the requirements of the rule and the statute, determine that our '07 uprate costs were prudently incurred, and determine that our revenue requirements related to costs incurred for the Turkey Point 6 and 7 and uprate projects totaling 220.5 million are reasonable and eligible for recovery

1	effective January 1, 2009, through the CCRC.
2	This concludes my summary.
3	MR. ANDERSON: Ms. Ousdahl is available for
4	cross-examination.
5	CHAIRMAN CARTER: Thank you. Mr. McGlothlin.
6	MR. McGLOTHLIN: No questions.
7	CHAIRMAN CARTER: Mr. Twomey.
8	MR. TWOMEY: No, sir.
9	CHAIRMAN CARTER: Mr
10	MR. McWHIRTER: No questions.
11	CHAIRMAN CARTER: Very good. You anticipated,
12	grasshopper.
13	Any questions, staff?
14	MR. YOUNG: No questions, sir.
15	CHAIRMAN CARTER: From the bench?
16	You wowed us.
17	Okay. Mr. Anderson?
18	MR. ANDERSON: FPL would call as its next
19	witness
20	CHAIRMAN CARTER: Wait.
21	MR. ANDERSON: I'm sorry.
22	CHAIRMAN CARTER: Exhibits 20
23	MR. ANDERSON: These are co-sponsored
24	exhibits, and my thought was we could offer them now or
25	we could offer them after the other co-sponsors,

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1	whatever your pleasure is.
2	CHAIRMAN CARTER: Efficiency is always
3	appreciated, so let's take care of them now.
4	MR. ANDERSON: Okay. May I offer Exhibits 20,
5	21, 22, and 23 into evidence.
6	CHAIRMAN CARTER: Any objections? Without
7	objection, show it done. Exhibits 21, 22, and 23, and
8	24 20, 21, 22, and 23.
9	MS. BENNETT: That's correct.
10	CHAIRMAN CARTER: Okay. Show it done.
11	(Exhibit Numbers 20, 21, 22, and 23 were
12	admitted into the record.)
13	CHAIRMAN CARTER: Mr. Anderson.
14	MR. ANDERSON: Thank you. FPL would call as
15	its next witness Mr. Bill Labbe. And may Ms. Ousdahl be
16	excused?
17	CHAIRMAN CARTER: Let me look at the list.
18	Absolutely.
19	MR. ANDERSON: Thank you.
20	CHAIRMAN CARTER: Stay dry.
21	MR. ANDERSON: Could we also show the errata
22	admitted evidence?
23	CHAIRMAN CARTER: That would be Exhibit 43, if
24	my memory serves me correctly.
25	MR. ANDERSON: That's right.

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1	CHAIRMAN CARTER: Without objection, show it
2	done.
3	MR. ANDERSON: Thank you.
4	(Exhibit Number 43 was admitted into the
5	record.)
6	CHAIRMAN CARTER: Give me one second to get my
7	notes together here.
8	Witness Labbe. You may proceed.
9	MR. ANDERSON: Thank you.
10	Thereupon,
11	WILLIAM P. LABBE, JR.
12	was called as a witness on behalf of Florida Power &
13	Light Company and, having been first duly sworn, was
14	examined and testified as follows:
15	DIRECT EXAMINATION
16	BY MR. ANDERSON:
L7	Q. Good afternoon, Mr. Labbe.
L8	A. Good afternoon.
L9	Q. Have you been sworn?
20	A. Yes, I have.
21	Q. Would you tell us your full name and business
22	address?
23	A. Bill Labbe, 700 Universe Boulevard, Juno
24	Beach, Florida.
25	Q. By whom are you employed, and in what

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1 capacity? Florida Power & Light Company, Director of EPU Α. 2 Projects. 3 And when you say EPU, what does that mean? 4 Q. Extended power uprate. 5 Α. Thanks. Have you adopted the prefiled 6 Q. testimony of Mr. Hale, one of your colleagues in the 7 Nuclear Division? 8 9 Yes, I have. And that consisted of a March 3rd filing and a Q. 10 May 1 filing, ten pages and eight pages; is that right? 11 A. That's correct. 12 Do you have any changes or revisions to that 13 prefiled direct testimony that you're adopting? 14 No, I do not. 15 If I asked you the same questions contained in 16 your prefiled direct testimony, would your answers be 17 18 the same? Yes, they would. 19 MR. ANDERSON: FPL asks that the prefiled 20 21 direct testimony be inserted into the record as though 22 read. CHAIRMAN CARTER: The prefiled testimony will 23 be entered into the record as though read. 24 25 BY MR. ANDERSON:

1	Q. Are you also sponsoring or co-sponsoring any
2	exhibits to your direct testimony?
3	A. Not at this time.
4	MR. ANDERSON: Okay. We've already admitted
5	into the record 20, 21, and those things.
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1		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
2		FLORIDA POWER & LIGHT COMPANY
3		DIRECT TESTIMONY OF STEPHEN T. HALE
4		DOCKET NO. 08 <u>0009</u> -EI
5		MARCH 3, 2008
6 7	Q.	Please state your name and business address.
8	A.	My name is Stephen T. Hale, and my business address is 700 Universe
9		Boulevard, Juno Beach, FL 33408.
10	Q.	By whom are you employed and what position do you hold?
11	A.	I am employed by Florida Power & Light Company (FPL) as Engineering
12		Director in the Nuclear Division.
13	Q.	Please describe your duties and responsibilities in that position.
14	A.	I am responsible for the power uprates and license renewal activities for the
15		FPL nuclear fleet as well as the nuclear fleet of FPL's affiliate, FPL Energy,
16		LLC (FPL Energy).
17	Q.	Please describe your education and professional experience.
18	A.	I graduated from the University of Tennessee in 1973 with a Bachelors of
19		Science degree in Nuclear Engineering. I obtained Professional Engineering
20		Registration for the State of Florida in 1988. Since my graduation, I have
21		worked for FPL in numerous capacities, including Engineering Manager for
22		the Turkey Point Plant, License Renewal Project Manager for the St. Lucie
23		Plant, and Manager of the uprate project for FPL Energy's Seabrook Nuclear

1		Station. I am also directing the license renewal efforts for FPL Energy's
2		Duane Arnold plant.
3	Q.	Have you prepared or caused to be prepared under your direction,
4		supervision or control an exhibit in this preceding?
5	A.	Yes, I have. My exhibit STH-1, which consists of Appendix 1 containing
6		schedules T-1 through T-10. Page 2 of Appendix 1 contains a table of contents
7		listing the T schedules that are sponsored by me and FPL witness Kim
8		Ousdahl, respectively.
9	Q.	What is the purpose of your testimony?
10	A.	My testimony presents and explains FPL's 2007 power uprate costs for the
11		Turkey Point and St. Lucie nuclear power plants for purposes of a prudence
12		review.
13	Q.	Has FPL established a project management system to help ensure that
14		the Uprate Project is completed on a reasonable schedule and at a
15		reasonable cost?
16	A.	Yes, we have.
17	Q.	Please describe FPL's project management system and the key personnel
18		responsible for implementing it.
19	A.	Several years ago, the Nuclear Division established a project management
20		system for the management of major projects at St. Lucie Units 1 and 2, and
21		Turkey Point Units 3 and 4, as well as FPL Energy nuclear assets. The project
22		management system is implemented through a series of Nuclear Policies and
23		Procedures. The effectiveness of the system has been demonstrated through

the successful completion of several major projects including reactor vessel head replacements at Turkey Point, and reactor vessel head, pressurizer, and steam generator replacements at St. Lucie. The personnel assigned to key positions for the management of the uprate project have a proven track record of success managing large projects including license renewal for Turkey Point and St. Lucie, and the uprate project at FPL Energy's Seabrook. These projects were completed on schedule and under budget.

Q. Did FPL begin incurring costs for the Uprate Project in 2007?

A. Yes, we did. As shown on Schedule T-6, FPL incurred a total of \$8,624,516 in 2007 for the Uprate Project. As explained by Ms. Ousdahl and as shown on Schedule T-6, the net retail jurisdictional portion of this total is \$8,236,652.

Q. Were those costs prudently incurred?

13 A. Yes, they were. All of the costs were for activities that are necessary to the
14 Uprate Project and were appropriately undertaken in 2007 in order to maintain
15 the Uprate Project's schedule. Furthermore, FPL has used its project
16 management system to ensure that the costs incurred for those activities were
17 reasonable.

Q. What types of costs did FPL incur for the Uprate Project in 2007?

A. Schedule T-6 breaks the 2007 costs down into the following categories:

License Application (\$357,150); Engineering and Design (\$5,700,529);

Permitting (\$356,485); Project Management (\$578,428); and Power Block

Engineering (\$1,631,924). These costs were initially recorded in FERC

Account 183.705, "Preliminary Survey & Investigation charges" and no

1 AFUDC was recorded. These costs were transferred into Construction Work
2 In Progress (CWIP) in 2008. Carrying charges will begin to be reflected on
3 them in the AE-6 schedule that will be filed in this docket in May 2008.

Α.

- Q. Please describe the activities for which FPL incurred 2007 costs in the License Application category, the need for those activities, and the controls used by FPL's project management system to ensure that the costs were reasonable.
 - \$357,150 as shown on Line 3 of Schedule T-6. This amount consists primarily of employee and contractor labor and consulting services in preparation of the license application. The personnel involved have a proven record of success with projects of this magnitude and their labor rates are competitive. The work included development of a division of responsibility document for all parties involved with preparation of the License Amendments, preparation of detailed schedules, meetings with the NRC, and resolution of a number of scoping issues related to the design and safety analyses to be performed. It is important that this work be completed now because it is required to support the NRC licensing and overall implementation schedule.
- Q. Please describe the activities for which FPL incurred 2007 costs in the Engineering and Design category, the need for those activities, and the controls used by FPL's project management system to ensure that the costs were reasonable.

For the period ending December 31, 2007, Engineering & Design costs total \$5,700,529 as shown on Line 4 of Schedule T-6. The engineering and design activities were initiated in 2007 in order to support the overall uprate implementation schedule. This amount consists primarily of \$4,100,000 to Westinghouse for engineering and safety analyses in support of the NRC uprate license amendments and preparation of long lead equipment specification and procurement activities. As listed on line 2 of Schedule T-8, the Westinghouse contract is for \$5,600,000. This contract is for the initial Nuclear Steam Supply System (NSSS) engineering support for the nuclear fuel parameters, fuel burn-up rates, primary system pressure and temperature operating parameters for the four units, St. Lucie Units 1 and 2 and Turkey Point Units 3 and 4. The specific work activities involved in this engineering support include critical path scoping studies and nuclear safety analyses. Because the duration of license amendment preparation activities together with the NRC review period could exceed three years, it is important that this work be completed now to ensure the license amendments are issued prior to the final uprate implementation refueling outages.

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Westinghouse was selected as the sole source for this work since they are the original equipment manufacturer of the Nuclear Steam Supply System. Furthermore, Westinghouse has a proven track record with FPL Group, having completed successful uprates at the Turkey Point and Seabrook plants on schedule and within budget. The costs for this work were benchmarked

with costs for similar uprate work at Turkey Point, Seabrook and other nuclear plants, and the costs were determined to be reasonable based on the work scope to be performed.

Also in the Engineering & Design category is \$1,180,000 of expenses for Shaw Stone & Webster. As listed on Line 1 of Schedule T-8, the overall Shaw Stone & Webster contract totals \$2,290,000. This contract is for initial plant engineering support including preparation of long lead equipment specifications, hydraulic analyses, and heat balance calculations associated with secondary plant systems and the turbine generators for the four units, St. Lucie Units 1 and 2 and Turkey Point Units 3 and 4. It is important that this work be completed now because it is required to support the NRC licensing and overall implementation schedule. Shaw Stone & Webster was selected as the sole source for this work since they are the leading engineering firm in performing power uprate work in the industry. Furthermore, Shaw Stone & Webster has a proven track record with FPL Group, having completed successful uprates at the Turkey Point and Seabrook plants on schedule and within budget.

Additionally, \$382,000 of expenses related to Areva for fuel design and licensing are included in the Engineering and Design category. This work is for the initial engineering support for the nuclear fuel parameters, fuel burn-up rates, and fuel design. Areva was selected as the sole source for this work

because they are the original equipment manufacturer for St. Lucie Unit 1 fuel and as such would provide the most cost effective analysis and evaluation of the fuel. It is important that this work be completed now because it is required to support the NRC licensing and overall implementation schedule.

- Q. Please describe the activities for which FPL incurred 2007 costs in the Permitting category, the need for those activities, and the controls used by FPL's project management system to ensure that the costs were reasonable.
- A. For the period ending December 31, 2007, Permitting costs total \$356,485 as shown on Line 5 of Schedule T-6. This amount consists primarily of a \$200,000 payment to the State of Florida for a Site Certification Application Fee for St. Lucie. Also, an expense of \$122,250 is for consulting services of Golder Associates, Inc. related to environmental work for site certification. This expense is part of the contract with Golder for \$218,400 as shown on Line 1 of Schedule T-8B. Golder was the contractor on the Turkey Point Unit 5 site certification application. FPL has used their services in the past with good success. The remaining amount of Permitting costs relate to numerous expenses for site certification support services. It is important that this work be completed now because site certification is an essential step in the licensing process and hence must be completed promptly to maintain the overall implementation schedule.
 - Q. Please describe the activities for which FPL incurred 2007 costs in the Project Management category, and how those activities help to ensure

that the Uprate Project is completed on a reasonable schedule and at a reasonable cost.

A.

- For the period ending December 31, 2007, Project Management costs total \$578,428 as shown on Line 6 of Schedule T-6. This category includes FPL employee and contractor services in support of feasibility study activities, including but not limited to, scope definition, cost estimates, contract negotiations and project execution. These activities are needed to ensure effective management of the uprate project consistent with FPL nuclear project management policies and procedures as discussed earlier. Contractor services include payments to FPL affiliate personnel who were available with immediately transferable expertise and provided an appropriate interim solution to meet personnel needs. FPL employee and contracted personnel involved have a proven record of success with projects of this magnitude and their labor rates are competitive.
- Q. Please describe the activities for which FPL incurred 2007 costs in the Power Block Engineering category, the need for those activities, and the controls used by FPL's project management system to ensure that the costs were reasonable.
- A. For the period ending December 31, 2007, Power Block Engineering and Procurement costs total \$1,631,924 as shown on Line 9 of Schedule T-6. This amount consists primarily of a \$1,100,000 payment to Siemens to reserve equipment manufacturing space at Siemens' facilities for the Low Pressure Turbine Rotors for St. Lucie Units 1 and 2. The contract with Siemens is

listed on Line 3 of Schedule T-8. It is important that this manufacturing space reservation be entered into now because it is required to ensure that Siemens can deliver the rotors in time to support the St. Lucie uprate implementation schedule. Siemens was selected as the sole source for this work since they are the original turbine generator equipment supplier, and the only vendor that could manufacture the equipment needed to support the project schedule. Further, the costs for this equipment were benchmarked with costs of similar equipment at FPL and other plants and determined to be reasonable.

A.

Additionally, there were payments to Siemens totaling \$475,000 under two contracts. As noted on Line 2 and Line 4 of Schedule T-8B, one Siemens contract is for \$400,000 to perform generator rotor rewind analyses for the four units and one is for \$275,000 to reserve equipment manufacturing space at Siemens' facilities for a Turbine Generator rotor for Turkey Point Unit 3. The generator rewind analyses are required in order to complete the transmission system stability evaluations to establish the scope of any modifications which may be required. The manufacturing space reservation for the turbine generator rotor is required for the same reasons I just discussed with respect to the low pressure turbine rotor.

Q. Would you please summarize your testimony?

FPL began the initial work to implement the Uprate Project in 2007, in order to help maintain an aggressive schedule for delivering the project's benefits to customers. The 2007 costs were reasonable and necessary, and the

- 1 Commission should determine that they were prudently incurred "prior year"
- 2 construction costs as contemplated by Rule 25-6.0423 Nuclear Power Plant
- Cost Recovery.
- 4 Q. Does this conclude your testimony?
- 5 A. Yes, it does.

1		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
2		FLORIDA POWER & LIGHT COMPANY
3		DIRECT TESTIMONY OF STEPHEN T. HALE
4		DOCKET NO. 080009-EI
5		May 1, 2008
6 7	Q.	Please state your name and business address.
8	A.	My name is Stephen T. Hale, and my business address is 700 Universe
9		Boulevard, Juno Beach, FL 33408.
10	Q.	By whom are you employed and what position do you hold?
11	A.	I am employed by Florida Power & Light Company (FPL) as Engineering
12		Director in the Nuclear Division.
13	Q.	Have you previously filed testimony in this docket?
14	A.	Yes.
15	Q.	Have you prepared or caused to be prepared under your direction,
16		supervision or control an exhibit in this preceding?
17	A.	Yes, I am sponsoring the following exhibits:
18		• STH-2, which consists of Appendix 1 containing the Nuclear Filing
19		Requirements Schedules (NFRs) for FPL's power uprate project at the
20		St. Lucie and Turkey Point Nuclear Units (the "Uprate Project"). Page
21		2 of Appendix 1 contains a table of contents listing the NFRs that are
22		sponsored by Ms.Ousdahl, Dr. Sim and me, respectively.

1	Q.	What is the purpose of your testimony?
2	A.	My testimony presents and explains FPL's 2008 actual/estimated and 2009
3		projected power uprate costs for the Turkey Point and St. Lucie nuclear power
4		plants to be included for recovery in FPL's Capacity Cost Recovery Factors
5		for the period January 2009 through December 2009. My testimony also
6		presents the True-up to Original (TOR) Projections for the uprate project for
7		the years 2007 through 2012.
8		
9	2008	ACTUAL/ESTIMATED AND 2009 PROJECTED PERIODS
10	Q.	What types of costs does FPL project to incur for the Uprate Project in
11		2008 and 2009?
12	A.	Schedule AE-6 of Appendix 1 breaks the 2008 actual/estimated costs down
13		into the following categories: License Application \$34,012,730; Engineering
14		and Design \$7,665,628; Permitting \$1,694,907; Project Management
15		\$12,966,855; Power Block Engineering, Procurement, etc. \$22,534,388; and
16		Non-power Block Engineering, Procurement, etc. \$156,057.
17		
18		Schedule P-6 of Appendix 1 breaks the 2009 projected costs down into the
19		following categories: License Application \$37,865,177; Engineering and
20		Design \$9,064,184; Permitting \$1,690,981; Project Management \$13,164,445;
21		and Power Block Engineering, Procurement, etc. \$179,061,123.
22	Q.	Please describe the activities in the License Application category and the
23		need for those activities.

1	A.	For the period ending December 31, 2008, License Application costs are
2		projected to be \$34,012,730 as shown on Line 3 of Schedule AE-6 of
3		Appendix 1. For the period ending December 31, 2009, License Application
4		costs are projected to be \$37,865,177 as shown on Line 3 of Schedule P-6 of
5		Appendix 1. These amounts consist primarily of contracted services used in
6		preparation of the license application. The contractors will be selected based
7		on their proven record of success with projects of this magnitude. The work
8		includes system and component safety analyses and evaluations in support of
9		the preparation of the License Amendments to be submitted to the Nuclear
10		Regulatory Commission (NRC). It is important that this work be completed in
11		2008 and 2009 because it is required to support the NRC licensing and overall
12		implementation schedule.
13	Q.	Please describe the activities in the Engineering and Design category and
	Q.	Please describe the activities in the Engineering and Design category and the need for those activities.
13	Q. A.	
13 14		the need for those activities.
13 14 15		the need for those activities. The engineering and design activities continue in 2008 and 2009 in order to
13 14 15 16		the need for those activities. The engineering and design activities continue in 2008 and 2009 in order to support the overall uprate implementation schedule.
13 14 15 16 17		the need for those activities. The engineering and design activities continue in 2008 and 2009 in order to support the overall uprate implementation schedule. For the period ending December 31, 2008, Engineering & Design costs are
13 14 15 16 17		the need for those activities. The engineering and design activities continue in 2008 and 2009 in order to support the overall uprate implementation schedule. For the period ending December 31, 2008, Engineering & Design costs are projected to be \$7,665,628 as shown on Line 4 of Schedule AE-6 of Appendix
13 14 15 16 17 18		the need for those activities. The engineering and design activities continue in 2008 and 2009 in order to support the overall uprate implementation schedule. For the period ending December 31, 2008, Engineering & Design costs are projected to be \$7,665,628 as shown on Line 4 of Schedule AE-6 of Appendix
13 14 15 16 17 18 19		the need for those activities. The engineering and design activities continue in 2008 and 2009 in order to support the overall uprate implementation schedule. For the period ending December 31, 2008, Engineering & Design costs are projected to be \$7,665,628 as shown on Line 4 of Schedule AE-6 of Appendix 1.

owner oversight, review and approval of contracted engineering activities.

1		The personnel will be selected based on their proven record of success with
2		projects of this magnitude. The amount also includes third party reviews of
3		key evaluations and decisions.
4	Q.	Please describe the activities in the Permitting category and the need for
5		those activities.
6	A.	For the period ending December 31, 2008, Permitting costs are projected to be
7		\$1,694,907 as shown on Line 5 of Schedule AE-6 of Appendix 1. For the
8		period ending December 31, 2009, Permitting costs are projected to be
9		\$1,690,981 as shown on Line 5 of Schedule P-6 of Appendix 1.
10		
11		These amounts consist primarily of work to be completed on site certification,
12		an essential step in the uprate approval process, and hence must be completed
13		promptly to maintain the overall implementation schedule. The remainder of
14		the amounts in the Permitting category are allocated to the community
15		outreach programs.
16	Q.	Please describe the activities in the Project Management category for the
17		2008 actual/estimated and 2009 projected periods and the need for those
18		activities to help ensure that the Uprate Project is completed on a
19		reasonable schedule and at a reasonable cost.
20	A.	For the period ending December 31, 2008, Project Management costs are
21		projected to be \$12,966,855 as shown on Line 6 of Schedule AE-6 of
22		Appendix 1. For the period ending December 31, 2009, Project Management
23		costs are projected to be \$13,164,445 as shown on Line 6 of Schedule P-6 of

Appendix 1. This category includes FPL employee and contractor services including but not limited to, scope definition, cost estimates, contract negotiations and project execution. These activities are needed to ensure effective management of the uprate project consistent with FPL nuclear project management policies and procedures as discussed earlier. Each of the mentioned activities is an essential part of FPL's project management process that, when executed in accordance with FPL's project management manual, provides reasonable assurance on schedule and cost adherence. FPL employee and contracted personnel involved have a proven record of success with projects of this magnitude and their labor rates are competitive. Where FPL has utilized FPL affiliate personnel, it has done so because those personnel were available with immediately transferable expertise, and they provided an appropriate interim solution to meet personnel needs.

- Q. Please describe the activities in the Power Block Engineering,

 Procurement etc. category for the 2008 actual/estimated and 2009

 projected periods and the need for those activities.
- A. For the period ending December 31, 2008, Power Block Engineering and Procurement costs are projected to be \$22,534,388 as shown on Line 9 of Schedule AE-6 of Appendix 1. For the period ending December 31, 2009, Power Block Engineering and Procurement costs are projected to be \$179,061,123 as shown on Line 9 of Schedule P-6 of Appendix 1. This amount consists primarily of engineering, material, fabrication, and installation costs associated with uprate plant modifications.

1	Q.	Please	describe	the	activities	in	the	Non-Power	Block	Engineering,
2		Procur	ement etc	. cate	egory for 2	008	and	the need for	those ac	ctivities.

A. For the period ending December 31, 2008, Non-Power Block Engineering and
Procurement costs are projected to be \$156,057 as shown on Line 10 of
Schedule AE-6 of Appendix 1. This amount consists primarily of facilities for
engineering and project staff at site locations. There are no Non-Power Block
Engineering and Procurement costs for 2009.

Q. Are the cost projections presented in your testimony reasonable?

A.

A. Yes, they are. All of the 2008 actual/estimated and 2009 projected costs are for activities that are necessary to the Uprate Project and are appropriately undertaken in 2008 and 2009 in order to maintain the Uprate Project's schedule.

Q. Please describe the project management system FPL has used to ensure that the 2008 actual/estimated and 2009 projected costs are reasonable.

FPL has continued to utilize the project management system described in my March 3, 2008 testimony to ensure that the costs projected for those activities are reasonable and necessary. In addition, the project begins with a budget development process that collects input from internal and external subject matter experts and benchmarks those costs to FPL's experience in other capital intensive power generation projects. The proposed budget was independently reviewed by a senior management team from Shaw Stone and Webster (SSW). SSW provided a summary report to FPL senior management. In addition, the proposed budget was presented to the FPL corporate executive

management for critical review prior to approval. Once constructed, the project budget is continually managed to maintain overall project objectives and milestones. Periodic meetings are held with representatives of contributing business units and principal contractors to identify upcoming expenditures and ensure budgets are maintained or changes are identified and approved in advance. Monthly business reports are generated, reviewed and approved as a part of FPL's overall project management practices. Variances are noted and explained in senior level reporting documents. Finally, Concentric Energy Advisors, Inc. has reviewed and evaluated the project management and budgeting processes for the Uprate Project. FPL witness John Reed of Concentric, testifies as an FPL witness concerning the results of that evaluation.

15.

TRUE-UP TO ORIGINAL PROJECTIONS

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 2009. FPL has revised its non-binding cost estimate for the following: 1) to remove AFUDC that was originally projected beyond 2009 but is unnecessary now that FPL has approval to recover the Uprate Project costs through the NPPCR; and 2) to reflect reductions primarily related to reimbursement of the share of costs for which the St. Lucie 2 participants are responsible. (While

10	Q.	Does this conclude your testimony?
9		2009.
8		the best information currently available for the cost recovery period through
7		necessary revisions to the original cost estimate. The TOR schedules provide
6		project. As activities are more clearly defined the Company will make any
5		interest). The Company continues to evaluate the costs associated with this
4		adjust these amounts to obtain recovery as part of the true-up including
3		election. If the participants decide not to take their respective shares, FPL will
2		respective shares of the Uprate Project output, they have not yet made a final
1		the participants have indicated informally that they intend to take their

Yes, it does. A.

BY MR. ANDERSON:

- Q. Have you prepared a summary of your testimony, Mr. Labbe?
 - A. Yes, I have.
- Q. Would you please provide your summary to the Commission?
- A. Good afternoon, Chairman Carter and Commissioners. My name is Bill Labbe. I'm responsible for leading FPL's nuclear power plant uprate. Our team is safely and cost-effectively implementing the major power plant uprates at FPL's St. Lucie and Turkey Point nuclear plants.

When complete, the uprates will provide FPL's customers more than 400 megawatts of additional clean, zero-emission electric generation without expanding the footprint of these existing plants. FPL requests that the Commission find the 2007 actual costs for the uprate projects totaling about 8.6 million be found prudent, and the FPSC jurisdictional amount of these, which total about 8.2 million, are prudent. FPL requests that the Commission find that the 2008 actual/estimated and 2009 projected uprate costs are reasonable.

Let me describe the 2007 work that resulted in the 2007 costs. FPL's 2007 work focused on nuclear engineering and design supporting all four uprate

projects. This engineering and design work had to be performed in 2007 in order for FPL to stay on schedule and submit each project to the Nuclear Regulatory

Commission for safety reviews and nuclear plant license amendments. These NRC reviews and amendments must occur well in advance of the nuclear unit outages, during which uprate component installation and plant modifications will be performed.

Other 2007 costs include reservation payments for long lead procurement of specially designed and manufactured plant equipment, such as unique turbine rotors that must be delivered prior to the planned outages during which this equipment will be installed.

As described in my testimony, a substantial portion of FPL's 2007 actual costs are for procurement of goods and services for several uniquely well qualified vendors that FPL had entered into single and sole source contracts at a reasonable cost and in compliance with FPL's policies and procedures. Detailed reasons for these procurements are in my testimony and FPL's procurement documentation.

Retaining these vendors was the right decision and in the best interests of the customers. For example, 5.6 million of FPL's 2007 total costs was for engineering and design work from Westinghouse. FPL

selected Westinghouse to perform initial engineering and design work related to the nuclear steam supply system because Westinghouse is the original equipment manufacturer that designed and made those systems which are unique, proprietary, and safety related.

In addition to Westinghouse having access to its own proprietary engineering and design information, FPL had successful uprate experience with Westinghouse, and the costs were benchmarked by FPL to be found reasonable. As can be seen from my testimony, in FPL's procurement documentation, FPL has similar compelling reasons for contracting with Areva, Shaw Stone & Webster, and Siemens, together with Westinghouse, to make up the bulk of 2007 actual uprate costs.

Let me provide some additional information concerning the business processes underlying all the uprate costs and information provided in this proceeding which supports the prudence of FPL's costs and reasonableness of these projections. At this point in the process, FPL has identified with a high degree of certainty each component that needs to be procured and installed and each process that needs to be followed in order to successfully each uprate of the four nuclear units. Only the work needed to increase the uprate of each unit is included in the project scope and the costs

presented by it FPL.

2.0

All of FPL's 2007 uprate work was performed and the costs incurred using FPL's well-established, highly effective project management system. FPL's project management system is implemented through a series of nuclear policies and procedures that govern our business practice. The effectiveness of the system has been demonstrated through successful completion of major projects at FPL's nuclear plants.

All of FPL's planning and budgeting for 2008 actual uprate costs and 2009 projected were conducted under the requirements of FPL's project management system, which were audited in detail by your staff this year. In short, FPL has the right scope being implemented with the right resources and the right sequence of time.

In addition, the personnel assigned to key positions of the uprate project have a proven track record of success managing large projects, including NRC license renewal for the St. Lucie and Turkey Point and uprate project at FPL Energy's Seabrook Station. These projects were completed on schedule and under budget.

This concludes my summary.

MR. ANDERSON: Mr. Labbe is available for cross-examination.

1	CHAIRMAN CARTER: Thank you. Mr. McGlothlin.	
2	MR. McGLOTHLIN: I need some clarification	
3	from counsel. Is Mr. Labbe here only on direct and only	
4	on Mr. Hale, or is he being offered on rebuttal as well?	
5	MR. ANDERSON: This is the two pieces of	
6	direct. Mr. Labbe will return after Dr. Jacobs	
7	testifies on rebuttal.	
8	MR. McGLOTHLIN: I'll reserve my questions	
9	until he returns on rebuttal.	
10	CHAIRMAN CARTER: Okay. Thank you.	
11	Mr. Twomey.	
12	MR. TWOMEY: No, sir.	
13	CHAIRMAN CARTER: Mr. McWhirter.	
14	MR. McWHIRTER: No questions.	
15	CHAIRMAN CARTER: Staff.	
16	MR. YOUNG: No questions.	
17	CHAIRMAN CARTER: Commissioner Edgar, you're	
18	recognized.	
19	COMMISSIONER EDGAR: Thank you. I would like	
20	to ask you just a couple of questions about the issue of	
21	the sole source for the uprates. Can you describe	
22	briefly for me what steps FPL has taken to ensure that	
23	those sole source contracts are cost-effective or lowest	
24	cost?	
25	THE WITNESS: Certainly. Those contracts were	

FLORIDA PUBLIC SERVICE COMMISSION

entered into with the engineering firms and those companies to do the engineering analysis work for the license amendment, and that information, that engineering analysis is proprietary information with those companies. We have done previous uprates. We have experience at St. Lucie and Turkey Point and our FPL Energy units. And we looked at -- we understand the scope of the work. We understand the appropriate billing rates that that work has required, and we can do an internal comparison of those costs as it relates to the analysis that needs to be performed.

COMMISSIONER EDGAR: And when you say that some of that is proprietary to those companies, does that mean that it's your understanding, or I guess my understanding, that there aren't other vendors out there that have that same skill set or knowledge?

THE WITNESS: They may have that same skill set, but they wouldn't have that knowledge. That information is proprietary to the company.

COMMISSIONER EDGAR: Give me just a second to think here.

So when you say that FPL has done other uprates, have the similar necessary steps been done through sole source for those previous uprates, or were they put out for bid?

THE WITNESS: That is correct. It was done 1 under sole source. 2 COMMISSIONER EDGAR: They were done under sole 3 4 source as well? THE WITNESS: Yes. 5 6 COMMISSIONER EDGAR: Okay. Thank you. 7 CHAIRMAN CARTER: Commissioners, anything further? Commissioner Skop, you're recognized. 8 9 COMMISSIONER SKOP: Thank you, Mr. Chairman. 10 Just a quick question. The original manufacturer of the 11 reactor that's being operated would be also 12 Westinghouse? 13 THE WITNESS: That's correct. The st. Lucie 14 unit was originally Combustion Engineering, but that is 15 now owned by Westinghouse. 16 COMMISSIONER SKOP: Okay. And with respect to 17 the turbine deck, the existing turbines at the St. Lucie 18 facility are also Westinghouse? THE WITNESS: It's a Siemens. 19 20 COMMISSIONER SKOP: Siemens? All right. 21 And just briefly, I think Mr. Anderson 22 mentioned that in relation to some of the costs being 23 considered that some of the long lead materials FPL had 24 chosen not to go forward with at this time, through

ordering those. Can you just briefly describe what

25

1	those long lead items would be?	
2	THE WITNESS: I think the long lead items that	
3	you're referring to are for the new units, Turkey Point	
4	6 and 7.	
5	COMMISSIONER SKOP: Okay. I'll direct my	
6	question to the appropriate witness, then. Thank you.	
7	MR. ANDERSON: That would be Mr. Scroggs,	
8	Commissioner.	
9	COMMISSIONER SKOP: Thank you.	
10	CHAIRMAN CARTER: Thank you. Commissioners,	
11	anything further? Thank you. I think we've already	
12	entered the exhibits for this witness.	
13	MR. ANDERSON: Yes, sir, we have.	
14	CHAIRMAN CARTER: And he'll be back on	
15	rebuttal.	
16	MR. ANDERSON: Yes.	
17	CHAIRMAN CARTER: Okay. Thank you, sir.	
18	Mr. Anderson.	
19	MR. ANDERSON: FPL would call Steven Scroggs	
20	as its next witness, please.	
21	CHAIRMAN CARTER: Steven Scroggs.	
22	Thereupon,	
23	STEVEN D. SCROGGS	
24	was called as a witness on behalf of Florida Power &	
25	Light Company and, having been first duly sworn, was	

FLORIDA PUBLIC SERVICE COMMISSION

1 examined and testified as follows: 2 DIRECT EXAMINATION 3 BY MR. ANDERSON: Q. Good afternoon, Mr. Scroggs. 4 5 Α. Good afternoon. 6 Q. Have you been sworn? Yes, I have. 7 Α. 8 Q. Please tell us your name and business address. 9 Α. My name is Steven Scroggs. My business address is 700 Universe Boulevard, Juno Beach, Florida. 10 By whom are you employed, and in what 11 12 capacity? I'm employed by Florida Power & Light Company 13 Α. as the Director of New Nuclear Development. 14 15 Have you prepared 30 pages of prefiled direct Q. 16 testimony in this proceeding? 17 Α. Yes, I have. 18 Do you have any changes, revisions, additions, Q. 19 or deletions to your prefiled direct testimony? Yes, I do. 20 Α. Would you please provide that at this time? 21 Q. 22 Yes. On page 23 at line 16, please insert the Α. 23 following additional testimony: "As a result of recent 24 developments, FPL is able to lower its 2008 25 actual/estimated pre-construction expenditure, reducing

the overall recovery request in this docket by 1 approximately 14 percent. Based on the most current 2 market information available, FPL has determined that it 3 will not be necessary to make the identified long lead 4 purchases during 2008 and that they can be deferred to 5 2010 or beyond. While the market for nuclear equipment 6 remains dynamic and negotiations with vendors are not 7 complete, FPL does have sufficient information to make a 8 9 singular adjustment in its 2008 actual/estimated The revision results in pre-construction costs. 10 eliminating a long lead procurement line item from the 11 October, November, and December 2008 estimate, more 12 specifically, the entries in the 2008 pre-construction 13 cost Schedule AE-6 at line 6, columns K, L, and M. 14 revision reduces to total requested recovery amount in 15 this proceeding from 258 million to approximately 16

- Q. Any other changes or additions to your testimony?
 - A. No, sir.

221 million."

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- Q. If you were to be asked the same questions, would your answers be the same today with the addition that you just provided us?
 - A. Yes, sir.

MR. ANDERSON: FPL would ask that Mr. Scroggs'

testimony be admitted into the record as though read. CHAIRMAN CARTER: The testimony of the witness will be entered into the record as though read. BY MR. ANDERSON: Are you also sponsoring some exhibits to your direct testimony? A. Yes. Those are Exhibits SDS-1 and SDS-2, as well as SDS-3 and SDS-4. These have been premarked as 22, 23, 24, and 25. I would note that 24 and 25 have not been moved. Α. That's correct.

1		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
2		FLORIDA POWER & LIGHT COMPANY
3		DIRECT TESTIMONY OF STEVEN D. SCROGGS
4		DOCKET NO. 080009-EI
5		MAY 1, 2008
6		
7	Q.	Please state your name and business address.
8	A.	My name is Steven D. Scroggs. My business address is 700 Universe
9		Boulevard, Juno Beach, Florida 33408.
10	Q.	By whom are you employed and what is your position?
11	A.	I am employed by Florida Power & Light Company (FPL or the Company) as
12		Senior Director, Project Development. In this position I have responsibility
13		for the development of power generation projects to meet the needs of FPL's
14		customers.
15	Q.	Please describe your duties and responsibilities with regard to the
16		development of new nuclear generation to meet FPL customer needs.
17	A.	Commencing in the summer of 2006, I was assigned the responsibility for
18		leading the investigation into the potential of adding new nuclear generation
19		to FPL's system, and the subsequent development of new nuclear generation
20		additions to FPL's power generation fleet. I lead the development and
21		permitting team for FPL's Turkey Point Nuclear Units 6 and 7 (Turkey Point
22		6 & 7).

Q. Please describe your education and professional experience.

Α.

A. I graduated from the University of Missouri - Columbia in 1984 with a Bachelor of Science Degree in Mechanical Engineering. From 1984 until 1994, I served in the United States Navy as a Nuclear Submarine Officer. From 1994 to 1996, I was a research associate at The Pennsylvania State University, where I earned a Masters Degree in Mechanical Engineering. I provided consulting and management services to the power generation industry through a number of positions until 2003, when I joined FPL as Manager, Resource Assessment and Planning. In July 2006, I was assigned to my current role as a Senior Director, Project Development.

11 Q. What is the purpose of your testimony in this proceeding?

The purpose of my testimony is to provide an understanding of how the Turkey Point 6 & 7 project is being developed, managed and controlled to meet the objective of delivering reliable, cost-effective and fuel diverse generation to FPL customers under the earliest practical deployment schedule. Several key decisions have been made in recent months, and a number of critical information gathering activities are planned over the next two years that will lead to important decisions materially affecting the nature, cost and pace of the project. My testimony will provide insight into how those activities are managed and the issues affecting those decisions. I will describe the projected expenditures for 2008 and 2009 that will allow FPL to produce applications for the required licenses and permits and otherwise enable steps necessary to maintain the project schedule.

Q. Please summarize your testimony.

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A.

the preferred technology. I then describe the approach taken by FPL for developing the Turkey Point 6 & 7 project and introduce the project controls and risk management processes for the project. My testimony then describes the Site Selection costs incurred from April 2006 to October 16, 2007 (the date of the Need Determination Filing, or "Need Filing") and Pre-construction

My testimony begins by describing the progress FPL has made in identifying

- 8 costs that have been or are estimated to be incurred in the period from October
- 9 16, 2007 through December 31, 2009. Moreover, I will discuss the rationale
- for these costs or projections and how expenditures will be managed going
- forward to meet the project objectives.
- 12 Q. Have you prepared or caused to be prepared under your direction,
- supervision or control any exhibits in this preceding?
- 14 A. Yes, I am sponsoring the following exhibits:
- SDS-1, which consists of Appendix II containing the Nuclear Filing
- Requirements Schedules (NFRs) for Turkey Point 6 & 7 Pre-Construction
- 17 costs. Page 2 of Appendix II contains a table of contents listing the NFRs that
- are sponsored by me, Ms. Kim Ousdahl, and Dr. Steve Sim, respectively.
- SDS-2, which consists of Appendix III containing the NFRs that provide the
- Site Selection costs for Turkey Point 6 & 7 Project. Page 2 of Appendix III
- contains a table of contents listing the NFRs that are sponsored by me and Ms.
- 22 Kim Ousdahl, respectively.

- SDS-3, which consists of two reports by MPR Associates, Inc. that review and
 assess the technology selection process employed by FPL.
- SDS-4, which consists of the Engineering Evaluation conducted to evaluate
 the technical aspects of candidate nuclear design technologies considered for

5 Turkey Point 6 & 7.

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TECHNOLOGY

Q. What reactor technology/design decisions has FPL made regarding
 Turkey Point 6 & 7?

- 10 A. FPL has identified the Westinghouse AP1000 design as our preferred technology. The AP1000 technology provides for a nominal net output of 11 1,100 MW for each of the two units planned, resulting in a total project 12 The AP1000 technology has achieved design capacity of 2,200 MW. 13 certification from the Nuclear Regulatory Commission ("NRC") and employs 14 15 a proven pressurized water reactor design with an improved passive safety 16 system.
- Q. Why is it important FPL identify a preferred technology at this stage of the Turkey Point 6 & 7 project?
- PPL is currently in the Licensing phase of the project. Applications are being prepared for submission to state and federal authorities to obtain the approvals for the project. Those applications require detailed information related to the specific technology FPL will use for Turkey Point 6 & 7. In order to maintain the earliest practical deployment schedule, while balancing cost and risk, FPL

must identify a preferred technology now as a basis for its applications and licenses.

3 Q. What was the process by which FPL arrived at its decision?

The process involved a technical evaluation, followed by a review of commercial and project execution aspects. The Engineering Evaluation, provided as exhibit SDS-4, was conducted by a team of FPL engineers using accepted industry practices for the collection, rating and evaluation of technical design information. The process resulted in a ranking of designs, where the Westinghouse AP1000 and GE ESBWR technologies were the top two of five considered. Additionally, FPL's participation in the NuStart Consortium ("NuStart") was also considered. As a member of NuStart, FPL will have access to information and documentation that will likely reduce the costs and risks associated with licensing and constructing the AP1000 technology.

A.

Three principal commercial issues were considered in the choice of the AP1000. The first two issues are the estimated capital cost of the total construction project and the ability of the vendor to contribute to managing cost and schedule risk throughout the project. Westinghouse has successfully achieved design certification and, in partnership with Shaw Group, has been selected as the technology for many new nuclear projects currently under consideration in the U.S. These two facts provide an advantage to Westinghouse/Shaw as they establish the engineering and supply chain

partners necessary to execute future projects. This position also provides significant confidence the AP1000 technology offers FPL the opportunity to leverage information developed by other projects to manage cost and schedule risk as Turkey Point 6 & 7 proceeds.

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The last issue is the execution capability of the Technology Vendor, Engineer and Constructor team that would be assembled to implement the Turkey Point 6 & 7 project. FPL, in discussions with Westinghouse/Shaw, has developed a strategy that will result in selection of the most capable provider to conduct specific portions of the project and to be able to make those selections as the project proceeds. For example, instead of entering into an all-encompassing Engineering, Procurement and Construction contract at the beginning of the project, FPL will work with Westinghouse/Shaw to develop a contract limited to Engineering and Procurement or "EP." The EP contract would define the scope of project management, engineering and procurement services that are required from an outside vendor to maintain the project schedule, leaving the contractual arrangements for the construction component to be defined at a later time. This approach is expected to provide several advantages applicable to new nuclear construction. By completing the engineering efforts a better definition of the scope of construction work will be developed, allowing a more informed bid for construction services. Additionally, the project will benefit from information and competition that will emerge in the next several years that can be incorporated into FPL's approach. FPL views this

contracting approach as a conservative means to engender competition for project services and has employed this approach successfully in its Engineering and Construction program over the past ten years.

4 Q. Has FPL made an irreversible commitment to the AP1000 technology?

A.

Α.

No. However, a change of preferred technologies at this stage would create a cost and schedule impact to the Turkey Point 6 & 7 project. If FPL were to recommend a change, it would be based on an assessment that the benefits of doing so outweigh the incremental costs and schedule delays. Obviously, this situation could be presented regardless of which technology was chosen. For the reasons stated above, FPL is confident that the need to change the preferred technology at some future point is unlikely and is less likely with the choice of the AP1000 than with other technologies.

Q. What processes were employed by FPL to monitor its decision process and evaluate the process?

FPL engaged MPR Associates, Inc. (MPR) a well known independent engineering firm with over 40 years of experience in the commercial nuclear power industry. MPR was directed to review FPL's technology selection process and recommend areas where the process could be made more robust. Reviews were conducted at interim points throughout the process, allowing for feedback to be incorporated and the selection process to be improved. MPR provided two reports documenting its conclusions that are included as Exhibit SDS-3 to this direct testimony. MPR concluded "the FPL assessments and considerations are appropriate and support the decisions to date".

Q.

A.

A.

PROJECT APPROACH

3 Q. What is FPL's overall approach to developing Turkey Point 6 & 7?

FPL intends to pursue the timely development of Turkey Point 6 & 7 through a deliberate, stepwise decision making process. This involves monitoring the issues affecting the pace and feasibility of the Turkey Point 6 & 7 project. In the event feasibility is in question, or delays present risk to timely execution, FPL would have the option of slowing the project down or taking an "off ramp" where the project expenditures would be halted. In short, FPL will work to achieve the earliest practical deployment schedule, while monitoring the project feasibility and key decision points.

Please expand on the concept of "off-ramps" and how the pace of the Turkey Point 6 & 7 project is determined based on the assessment of risks.

The project team is managing a host of issues at local, state and federal levels and across technical, commercial and regulatory areas of concern. As these issues incorporated into the project plan the impact on cost, schedule and resources will be assessed. If that assessment indicates there will be a considerable cost or schedule impact, mitigation actions are identified that may help manage or reduce the impact. If the magnitude of the impact is such that the cost or schedule impact materially changes the feasibility of the project or significantly increases risk, a decision could be made. The options would be to continue with modifying budget and schedule as needed and

taking available mitigation actions, or halt the project temporarily while the impact issue is further assessed or resolved. This allows the pace of the project to be controlled based on the best information available. The option of slowing or halting the project in response to significant events, although it would postpone delivery of Turkey Point 6 & 7's benefits, offers a high level of exposure control for FPL and its customers. Such decisions would also need to address how FPL system capacity and reliability needs would be satisfied if delivery were to be delayed.

9 Q. How is the management of the Turkey Point 6 & 7 project structured and how does this structure assist in maintaining a risk management focus?

The management structure relies on a working combination of two key groups: Project Development and New Nuclear Projects. The organization of the project into these two key groups helps maintain a consistent management and reporting structure, while allowing the project the flexibility to grow and adapt over time. Project Development, which I lead, has the overall responsibility for the management and organization of the project, utilizing matrix relationships with key business units in the company to provide essential support. For example, legal services and environmental services are provided by those business units through dedicated personnel. The Project Development team is focused on overall project management, state regulatory and all non-NRC licenses and approvals.

A.

FPL established the New Nuclear Project team within the Engineering,
Construction and Corporate Services group to manage the complex and
specialized nature of the Combined Operating License Application (COLA)
process and the engineering, procurement and construction activities. This
team is managed by Martin Gettler, Vice President of New Nuclear Projects.
The New Nuclear Project team has direct responsibility for the development
of the COLA and manages the engineering, procurement, site preparation and
construction aspects of the project.

9 Q. How does FPL intend to contract for services associated with the Turkey 10 Point 6 & 7 project?

FPL utilizes proven corporate processes to solicit, qualify, negotiate, select and manage service providers for capital projects such as Turkey Point 6 & 7. Leveraging our many years of successful power project development and construction, FPL approaches the process with an understanding of the key players in each specialty field. Where it is appropriate to assign a comprehensive scope to a specific contractor, FPL clearly specifies the deliverables, budget and schedule and then monitors the contractors' progress closely to obtain compliance. Often it is more efficient to divide the scope among multiple contractors to obtain an appropriate level of competition and maintain the "best athlete" approach of assigning appropriate scope to the most capable provider. In such cases FPL acts as the overall coordinator of the function to obtain integration of the various sub-portions of the work.

A.

1		PROCESS AND RISK MANAGEMENT		
2	Q.	What process and risk management tools does FPL apply to obtain cost,		
3		risk and schedule objectives?		
4	A.	FPL uses industry accepted project controls, systems and practices to obtain a		
5		high level of fidelity in the expenditures incurred and projected for all		
6		projects. The primary means of control are 1) the project budgeting and		
7		reporting process, 2) project schedule and activity reporting processes, 3) the		
8		contract management process for external service providers, and 4) internal		
9		and external oversight processes.		
10	Q.	Please describe the budgeting and reporting processes for the Turkey		
11		Point 6 & 7 project.		
12	A.	The project begins with a budget development process that collects input from		
13		internal and external subject matter experts and benchmarks those costs to		
14		FPL's experience in other capital intensive power generation projects. Once		
15		constructed, the project budget is managed to maintain overall project		
16		objectives and milestones. Regular meetings are held with representatives of		
17		all contributing business units to identify upcoming expenditures, maintain		
18		budgets and identify changes. Monthly business reports are generated,		
19		reviewed and approved as a part of FPL's overall project management		
20		practices. Variances are noted and explained.		
21				
22		Due to the size, complexity, duration and unique nature of the Turkey Point 6		
23		& 7 project, the budget was developed in stages and is refined as additional		

information is obtained. The initial project budget, developed in 2006, focused on project licensing and permitting activities to support the local, state and federal permit applications through 2012. Costs associated with engineering, design and long lead procurement were being investigated at that time. In 2007, FPL completed its non-binding cost estimate range provided in the Need filing. This estimate provided a cost estimate range for all phases of the project through completion of construction. In late 2007 and early 2008, FPL conducted an additional review and refinement of near term cost estimates in all areas through 2009 in support of this filing. This routine process of review and refinement will continue throughout the project.

Please describe the project schedule and activity reporting processes for the Turkey Point 6 & 7 project.

FPL project management teams establish reporting processes, both internal and external to the project team, to track and communicate status. These processes may be periodic reports or scheduled meetings. Internal reporting mechanisms focus on work execution, issue identification and resolution. An example of an internal reporting process is the routine production of a six week look-ahead schedule monitoring the development of the COLA. This schedule is used in periodic meetings by the FPL project team and all contractors to determine work organization and coordination. The process allows for management of the process and allocation of resources to maintain schedule.

Q.

A.

Reports external to the project team allow for project activities to be summarized and communicated. For example, periodic reports are provided to Miami-Dade County regarding compliance with conditions of approval associated with site zoning.

Q. Please describe the contract management processes for the Turkey Point 6 & 7 project.

A.

FPL's Integrated Supply Chain team provides procurement and contract management support services to the project to apply and monitor corporate policies. Contractual arrangements are supported by detailed scope of work descriptions and specific terms and conditions that define the content and schedule of products and services needed by the project. Daily contract oversight is provided by the initiating business unit, such as Environmental or New Nuclear Projects. These managers are responsible to review the contracted products or services satisfy the agreements and meet FPL's quality and documentation requirements. Supporting and executing these project controls programs are an experienced team of personnel with a record of success with large licensing and construction projects.

Q. Please describe the internal and external oversight processes for Turkey Point 6 & 7.

A. FPL conducts a number of self-auditing functions throughout the course of each business year. Projects are audited for general financial and accounting practices, tax related issues and regulatory obligations such as Sarbanes-Oxley compliance. Additionally, project management may request specific reviews

by third party subject matter experts to validate FPL processes and obtain 1 2 additional perspectives to be applied to critical project decisions. An example 3 of this is the engagement of MPR to review our technology selection process. 4 Q. How is the effectiveness of these tools reviewed over time? 5 A. Effectiveness measures are included within some mechanisms and provided 6 by external review processes for all. As an example, the Engineering & 7 Construction Division Project Dashboard presents issues and the current 8 trends for those issues. Over time, if a problematic issue continues to trend down or remains neutral, the effectiveness of the project management controls are investigated to determine if modifications are needed to affect 10 11 improvement. Effectiveness of project control processes is also reviewed as a 12 part of the higher level organization reviews and audits, described above. 13 14 PROJECT SCHEDULE How does the current project schedule compare to the Milestone 15 Q. 16 Schedule provided as Exhibit SDS-5 to your testimony in FPL's Need 17 **Determination Filing?** 18 A. The current project schedule for Turkey Point 6 & 7 is unchanged from the 19 Milestone Schedule. What planning activities were undertaken related to the licensing and 20 Q. preparation phases of the Turkey Point 6 & 7 project, and what were the

results of those activities?

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A. One of the first tasks conducted was the development of a comprehensive COLA schedule. This is the primary driver of the 2008 and early 2009 project schedule. With the COLA schedule established and underway, the schedule for development of the other licenses and permits began and are currently being completed. Likewise, other supporting activities such as conceptual engineering were defined and are being pursued. Procurement of these services is currently underway.

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SITE SELECTION ACTIVITIES

Q. What costs has FPL incurred for Turkey Point 6 & 7 that would be classified as Site Selection costs in accordance with the Nuclear Power Plant Cost Recovery Rule (NPPCR Rule, FAC 25-6.0423)?

- 13 A. Schedule AE-6 of Appendix III provides a summary of Site Selection costs 14 totaling \$6,424,121.
- 15 Q. What period of time was covered by the Site Selection costs, and what
 16 major activities were undertaken during that period?
- 17 A. The project accounts were established in April 2006 and the Site Selection
 18 period ended with the submittal of the Need Filing on October 16, 2007.
 19 During the summer of 2006, a core project team was formed and several key
 20 investigations were initiated. Primary among these early studies were the Site
 21 Analysis Study and the Engineering Review of candidate technologies.
 22 Project planning activities also addressed major issues, such as transmission
 23 integration, project organization, project schedule and budget. At the end of

2006, the Site Analysis Study, combined with site specific investigations, identified the Turkey Point site as the location for the project. In 2007 the project team pursued the development and defense of the Public Hearing Application in Miami-Dade County, continued investigations of design alternatives, project issues and the Need Determination filing.

6 Q. Please describe the major cost categories for the Site Selection costs.

A.

The major cost categories of Site Selection costs included project Staffing, Engineering, environmental licensing and legal expenditures. Project Staffing included project management and controls and support from matrix organizations such as Environmental, Power Supply, Marketing and Communications, Nuclear Engineering, and Legal. Engineering was provided to support technical activities associated with the engineering review of candidate technologies, site investigations and the establishment of schedule and processes that would eventually form the current New Nuclear Projects team. Environmental licensing encompassed the studies, investigations and preparation of the Public Hearing Application in Miami-Dade County that resulted in the necessary zoning approvals supporting the project. Legal services were primarily associated with the development and review of the Public Hearing Application. The following summarizes the Site Selection expenditures by major cost category.

1		Category	<u>Total</u>	
2		Project Staffing	\$1,068,856	
3		Engineering	\$3,351,744	
4		Environmental	\$1,220,290	
5		Legal	\$ 783,231	
6		TOTAL	\$6,424,121	
7				
8		PRE-CONSTRUCTION ACTIVITIES		
9	Q.	What costs has FPL included in this filing for Turkey Point 6&7 Pre-		
10		Construction activities?		
11	A.	FPL has actual 2007, actual/estimated 2008 and projected 2009 Pre-		
12		Construction costs for Turkey Point 6 & 7. Schedule AE-6 of Appendix II		
13		presents the 2007 actual and 2008 actual/estimated costs in the following		
14		categories: Licensing (\$48,039,775); Permitting (\$2,833,949); Engineering &		
15		Design (\$7,910,661); Long Lead Procurement (\$45,860,960) and Power		
16		Block Engineering and Procurement (\$2,887,920).		
17				
18		Schedule P-6 of Appendix II breaks the 2009 projected costs down into the		
19		following categories: Licensing (\$26,668,968); Permitting (\$2,422,095);		
20		Engineering & Design (\$10,121,791); and Power Block Engineering &		
21		Procurement (\$70,787,145).		

Q. Please describe the activities for the Licensing category, the need for those activities and the process used to develop estimates for 2008 and 2009 expenditures.

For the period ended December 31, 2007, Licensing costs are \$2,017,181 as shown on Line 4 of Schedule AE-6 of Appendix II. For the period ending December 31, 2008, Licensing costs are projected to be \$46,022,594 as shown on Line 3 of Schedule AE-6 of Appendix II. For the period ending December 31, 2009, Licensing costs are projected to be \$26,668,968 as shown on Line 3 of Schedule P-6 of Appendix II.

A.

These Licensing costs consist primarily of employee and contractor labor and consulting services necessary to develop the various license and permit applications required by the Turkey Point 6 & 7 project. The federal COLA requires the majority of expenditures, followed by the Site Certification Application, Army Corps of Engineers permits and delegated programs such as Air and Underground Injection Control. These permit and license applications contain project specific information, assessments and studies that are required by various regulatory authorities to support the reviews leading to decisions on the technical, environmental and social acceptability of the project. Some activities are common between applications, and therefore offer opportunities to coordinate efforts and manage costs. However each application analyzes each issue from a unique perspective and may require differing levels of detail.

The COLA development costs were estimated based on the Bechtel proposal, obtained through a Request for Proposals process. The proposal was reviewed to verify the scope adequately described the activities necessary and that reasonable labor rates and resource costs were utilized. Other licensing and permitting costs were developed in accordance with FPL's budget and accounting guidelines and policies. Further, these cost estimates were compared to FPL's recent extensive experience with the development and permitting of new generation projects in Florida and found to be reasonable.

FPL, as a member of the NuStart Consortium, pays annual membership fees of \$1 million. These costs are necessary to obtain the benefits of membership that are specifically relevant to the Westinghouse AP1000 design.

A.

Q. Please describe the activities in the Permitting category, the need for those activities and the process used to develop estimates for 2008 and 2009 expenditures.

For the period ending December 31, 2007, Permitting costs are \$516,084 as shown on Line 4 of Schedule AE-6 of Appendix II. For the period ending December 31, 2008, Permitting costs are projected to be \$2,317,865 as shown on Line 4 of Schedule AE-6 of Appendix II. For the period ending December 31, 2009, Permitting costs are projected to be \$2,422,095 as shown on Line 4 of Schedule P-6 of Appendix II.

Permitting fees consist of expenditures for Project Development management and public outreach/education. Additionally, there are legal support costs not specifically associated with the federal or state licensing and permit activities included in Permitting costs. These costs are necessary for the effective management and execution of the project. Outreach is a vital process to inform stakeholders of the project and educate the public with regard to the many processes where they can be involved. The outreach activity involves hosting informational events and providing information on the project through a variety of media platforms. FPL has found that a pro-active outreach approach facilitates a sharing of concerns and perspectives improving the overall project. Legal support expenditures are necessary to support the timely preparation, submission, and review of issues associated with the project at the local, state and federal agency levels.

The estimates for Permitting costs were completed in accordance with FPL's budget and accounting guidelines and policies. The costs were compared to other costs being incurred by the company for similar activities and found to be reasonable.

Q. Please describe the activities in the Engineering & Design category, the need for those activities and the process used to develop estimates for 2008 and 2009 expenditures.

The Engineering & Design activities performed in 2008 and 2009 are required to support the overall Turkey Point 6&7 schedule. For the period ending December 31, 2008, Engineering & Design costs are projected to be \$7,910,661 as shown on Line 5 of Schedule AE-6 of Appendix II. For the period ending December 31, 2009, Engineering & Design costs are projected to be \$10,121,791 as shown on Line 5 of Schedule P-6 of Appendix II. These expenditures consist primarily of anticipated payments to qualified engineering firms supporting preliminary engineering and detailed site specific design of the project. The contract(s) supporting this scope of work are currently being developed through a Request for Proposal process.

A.

Conceptual level engineering and design services are necessary to define the project to the level of detail necessary to support the content requirements of the license and permit applications. The activities will include site layout, balance of plant design, and integration with existing site utilities and new infrastructure services required by the project. These include water supply, wastewater, transmission and support facilities. Additionally, detailed engineering and design services will provide the basis for construction planning and procurement activities that will begin in 2009 and 2010.

The estimates for these costs were completed in accordance with FPL's budget and accounting guidelines and policies. The costs were compared to other costs being incurred by the company in similar activities and found to be

reasonable. Where contracted, rate sheets are provided by the contractor and reviewed to verify rates being charged are consistent with FPL experience in the broader industry.

Please describe the activities in the Long Lead Procurement category for the 2008 actual/estimated and 2009 projected periods, the need for those activities and the process used to develop estimates for these expenditures.

For the period ending December 31, 2008, Long Lead Procurement costs are projected to be \$45,860,960 as shown on Line 6 of Schedule AE-6 of Appendix II. This amount consists of two components: an estimated \$10,860,960 payment by June 2008 to Westinghouse for a forging reservation fee and an estimate for three potential long lead procurement payments in October, November and December of 2008 with a cumulative value of \$35 million. Costs for long lead procurement items in future years are anticipated to be a part of the Engineering and Procurement contract payments and are included as part of the Power Block Engineering and Procurement cost line item for 2009.

Ο.

A.

The Reservation Agreement for the \$10,860,960 forging reservation fee is currently under negotiation. The specific terms and payments are expected to be finalized by June 2008. The fee provides for reservation of the manufacturing capacity necessary to produce 23 specific forgings for each of two AP1000 units, or 46 forgings in total. The reservation slots are made

based on a fabrication schedule that supports Unit 6 commercial operation in mid-2018 and Unit 7 commercial operation in mid-2020. It is necessary to secure the manufacturing space for the forgings at this time based on competition for the limited manufacturing capacity for these forgings and the pending queue of international heavy industrial projects.

The additional \$35 million of funds estimated for long lead procurement in 2008 is based on the anticipated need to respond to dynamic market conditions that may require early purchase of components or materials that have supply system constraints or are in high demand. This would include procurement of Reactor Coolant Pump components and specialty metal such as containment vessel steel or stainless steel tubing. If it turns out not to be necessary to procure these materials in 2008, the procurement will be deferred to 2009 or later, and become a part of the larger Engineering and Procurement contract being negotiated with Westinghouse/Shaw.

The estimates for these Long Lead Procurement costs were completed in accordance with FPL's budget and accounting guidelines and policies. The estimates rely on information from Westinghouse/Shaw due to the unique features, limited market and early stage nature of these procurement activities. The costs have been compared to other costs being incurred by the company in similar activities and available comparable market information and found to be reasonable.

Q. Please describe the activities in the Power Block Engineering and Procurement category for the 2008 actual/estimated and 2009 projected periods, the need for those activities and the process used to develop estimates for these expenditures.

For the period ending December 31, 2008, Power Block Engineering and Procurement costs are projected to be \$2,887,920 as shown on Line 7 of Schedule AE-6 of Appendix II. This amount consists primarily of anticipated payments to Westinghouse/Shaw necessary to support the development of site specific adaptations of the standard AP1000 plant technology needed for the license and permit applications. Additionally, these payments will support specific Westinghouse project management activities and design certification support.

A.

FPL is currently negotiating the scope, terms and conditions associated with an EP contract with Westinghouse/Shaw that will be one of the defining commercial documents for the project. As discussed earlier, the EP contract would describe the scope of equipment, materials and services provided by Westinghouse/Shaw for the project management, engineering and procurement of the nuclear power island. It is anticipated FPL will be in a position to execute the EP contract in March 2009. The scheduled payments estimated to be required to support the EP contract are listed on the Power Block Engineering and Procurement line item of Schedule P-6. Payments

may be made monthly or quarterly depending on the final terms of the EP contract.

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For the period ending December 31, 2009, Power Block Engineering and Procurement costs are projected to be \$70,787,145 as shown on Line 7 of Schedule P-6 of Appendix II. This amount consists primarily of payments to Westinghouse/Shaw under the anticipated EP contract. The initial scheduled payment of \$29,347,145 would be due in May 2009 and periodic progress payments thereafter. These expenditures would allow for Westinghouse/Shaw to assemble and mobilize its full project team for Turkey Point 6 & 7. The Westinghouse/Shaw project team will consist of dedicated Project Management, Engineering and Procurement resources. This level of support is necessary at this stage of the project to maintain the earliest practical deployment schedule. Project Management functions provided by the Westinghouse/Shaw project team includes establishing required programs such as Quality Assurance, Environmental Compliance, and Health and Safety. Engineering activities would undertake the site specific design of Nuclear Power Island systems and safety related civil engineering design to support the standard AP1000 technology at the Turkey Point site. integrated procurement function would be established to begin the commercial and logistical activities necessary to establish a project specific supply chain for equipment and materials. These functions are critical to be in place by

2009 to support the needed Preparation phase activities to prepare for nuclear system construction as early as 2013.

The cost estimates developed for these cost categories are based on continued negotiations and consultation with Westinghouse/Shaw to evaluate the necessary engineering and procurement activities to maintain FPL's project schedule, and eliminate any costs not needed at this time. The activities being considered and the associated costs are consistent in timing and magnitude with FPL's experience for other capital construction projects and Westinghouse/Shaw's experience in similar AP1000 projects currently underway internationally and in the United States. The EP contract will identify rates to be charged and these rate sheets will be reviewed to verify rates being charged are consistent with FPL experience in the broader industry.

A.

COST RECOVERY REQUEST

Q. Are the actual costs incurred for Site Selection and Preconstruction in 2006 and 2007 prudent?

Yes, they are. The activities were necessary and the costs were incurred under a full range of project controls and procedures to verify they were appropriate and priced consistent with FPL's extensive experience in power generation development activities in Florida.

- 1 Q. What processes were applied to verify the expenditures were prudently
- 2 incurred?
- 3 A. The Site Selection and Pre-Construction activities for the Turkey Point 6 & 7
- 4 project were executed in accordance with FPL's budget and accounting
- guidelines and policies. All procurement decisions were documented through
- approved procedures and authorized after appropriate management review to
- determine that (1) the activities were necessary to maintaining the project
- schedule, and (2) the costs incurred for the activities were consistent with
- 9 applicable contract terms and were reasonable. The budgeting and oversight
- of the project have evolved as additional information is obtained.
- 11 Q. Are the actual/estimated and projected costs presented in your testimony
- reasonable?
- 13 A. Yes, they are. The costs represent Site Selection costs incurred in 2006 and
- 2007, actual/estimated Pre-Construction costs incurred in 2007 and 2008 and
- projected Pre-Construction costs in 2009. All costs are the result of activities
- necessary to accomplish Turkey Point 6&7 and are appropriately undertaken
- in order to maintain the Turkey Point 6&7 Project schedule.
- 18 Q. What project control and risk management tools will be used by FPL's
- project management team to verify the 2008 actual/estimated and 2009
- 20 projected costs are reasonable and prudent?
- 21 A. All the project management tools described earlier in my testimony will be
- applied, as appropriate to verify the project costs are reasonable and prudent.

1	Further, risk factors will be identified and actively managed to reduce impact
2	to cost and/or schedule.

- Q. What issues might arise in 2008 and 2009 that could affect the timing or magnitude of the costs estimated for that period?
 - As I discussed earlier, there is uncertainty regarding the timing and magnitude of payments associated with long lead procurement activities and the pending EP contract with Westinghouse/Shaw. Most directly, this could result in a reduction in expenditures of up to \$35 million in 2008. If such long lead procurement expenditures are not made in 2008, some or all of these expenditures may be required in 2009 in addition to the \$70,787,145 of EP payments anticipated in 2009 or in 2010. The timing and magnitude of the long lead procurement and EP contract payments necessary to maintain the project schedule are affected by the number of U.S. and international projects currently being pursued. If a majority of the announced projects are actively pursued, this will increase market demand for these items. Again, as issues are identified, FPL will consider the impact on project cost, risk and schedule.

A.

TRUE-UP TO ORIGINAL PROJECTIONS

- 19 Q. Have you prepared a true up of FPL's current cost projections to the
 20 original projections of Turkey Point Unit 6 & 7 costs that were presented
 21 in the Need Filing?
- Yes. Appendix II provides the TOR schedules that compare the current projections to FPL's originally filed Turkey Point Unit 6 & 7 project costs.

The TOR schedules provide information on the project costs through the end of 2009. FPL has not revised its non-binding cost estimate provided in the Need Filing as we have no additional information that would warrant such a revision. The TOR schedules provide the information currently available for the cost recovery period through 2009.

6 Q. Has FPL revised its cost estimate for project expenses beyond 2009?

No. The existing non-binding cost estimate range provides the best information available. When analyzed on a comparable basis, the cost range is consistent with those provided by Progress Energy Florida for their Levy project and other projects described in the industry press. Several significant steps will be required before FPL can effectively assess the need for a revision of the cost estimate range. FPL will undertake actions in 2008 and 2009 that will result in a refined project schedule and a defined commercial arrangement that will cover the Power Island engineering design and equipment costs. Further work will allow FPL to revise Owner's scope, material estimates and projected construction costs associated with the project. A review and integration of this information will allow FPL to revise the overall project cost estimate range.

A.

20 SUMMARY

21 Q. Please summarize your testimony.

22 A. FPL has taken significant positive steps in developing Turkey Point 6 & 7
23 since 2006. These steps have been taken with the guidance of strong,

1	effective project controls and risk management tools. FPL has identified the
2	Westinghouse AP1000 technology as the preferred technology for the Turkey
3	Point 6 & 7 Project. Site Selection costs incurred in 2006 and 2007 and Pre-
4	Construction costs incurred in 2007 are prudent. FPL's actual/estimated costs
5	for 2008 and projected costs for 2009 are reasonable. There has been no
6	additional information developed since the Need Filing to revise the cost
7	estimate range, however significant activities will be undertaken in the next
8	two years that are expected to provide further information.

9 Q. Does this conclude your direct testimony?

10 A. Yes.

BY MR. ANDERSON:

- Q. Have you prepared a summary of your direct testimony?
 - A. I do.
- Q. Would you please provide your summary to the Commission?
- A. Thank you. Mr. Chairman and Commissioners, I appreciate the opportunity to come before you today.

The purpose of my testimony is to provide an understanding of how the Turkey Point 6 and 7 project is being developed, managed, and controlled to meet the objective of delivering reliable, cost-effective, and fuel-diverse generation to FPL customers. My testimony describes how project activities are being actively managed in a deliberate, transparent, and stepwise process crafted to manage project risk in the face of challenges and uncertainties that are unique to new nuclear deployment.

My testimony lays out the approach taken by

FPL for managing the Turkey Point 6 and 7 project to

meet these objectives. This includes monitoring

regulatory and commercial issues in the industry and

adapting the project plan as needed to maintain schedule

and manage risk. Further, I describe the project

controls and risk management processes that the project

team uses, combine the adaptive management style and 1 proven project controls, provide a firm basis for the 2 responsible and prudent management of the project. 3 The balance of my testimony then describes the 4 site selection costs incurred from April 2006 to October 5 6 16, 2007, and pre-construction costs that have been or are estimated to be incurred in the period from October 16, 2007, through December 31, 2009. Moreover, 8 I discuss the rationale for these costs or projections 9 and how expenditures will be managed going forward to 10 11 meet the project objectives. 12 This concludes my summary. MR. ANDERSON: Mr. Scroggs is available for 13 cross-examination. 14 15 CHAIRMAN CARTER: Thank you. Mr. McGlothlin. 16 MR. McGLOTHLIN: I'll reserve my questions for 17 the rebuttal phase. CHAIRMAN CARTER: Mr. McWhirter. 18 19 MR. McWHIRTER: FIPUG has no questions, Mr. Chairman. 20 21 CHAIRMAN CARTER: Staff? No questions. 22 MS. BENNETT: CHAIRMAN CARTER: Commissioner Argenziano. 23 24 COMMISSIONER ARGENZIANO: Thank you, Mr. Chairman. And I'm not sure if it's more appropriate 25

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to ask the next witness, and just feel free to tell me if it is.

Just out of curiosity, a couple of things.

Why is it not necessary to ask for the long lead

procurements now? What was that change? And if you
said it, I just didn't focus in on it.

THE WITNESS: It's kind of two factors. One, we're in the process of watching the market. And essentially, there's a small group of companies that can produce these specific items in an advance time that they're in time for our schedule. We're watching our schedule. That hasn't changed.

But the market, we were prepared for a market that was very dynamic and where a lot of orders were being placed. There are several other similar AP1000 projects ahead of us, including the Progress Levy project. So we were watching the market, and we were ready to respond to secure it if it were necessary. The market hasn't developed to be that dynamic, so that is not going to be necessary in 2008.

As we look into 2009, we'll be entering a contract with Westinghouse/Shaw associated with the engineering and procurement. Some of those activities will be incorporated in that contract. The moneys that we've already forecasted for that activity in 2009 seem

to be a sufficient amount to cover that right now. So again, we're able to cover with what we've already budgeted and defer these costs until a later time in the project.

COMMISSIONER ARGENZIANO: And part of that is because you feel there are companies out there who can meet the need when you get to them?

THE WITNESS: Yes.

COMMISSIONER ARGENZIANO: And you wouldn't need that long a period of time, which, of course, then would save the current customers money?

THE WITNESS: Yes, ma'am.

COMMISSIONER ARGENZIANO: Okay. And what makes it more cost-effective than previously thought to build now?

THE WITNESS: Again, we haven't taken that \$35 million out of the project. It has been deferred to a later point in time in the project. There will be savings to the customer by not having to pay the interest on that now. They won't feel the effects of that on their bill in the early years. But that money, again, hasn't gone away. It hasn't changed our assessment of cost. It's just moved later.

COMMISSIONER ARGENZIANO: Moved to a later date. Okay. Thank you very much.

CHAIRMAN CARTER: Thank you. Commissioner Skop.

COMMISSIONER SKOP: Thank you, Mr. Chairman.

I have to navigate around the caffeine here that's blocking the button.

Just a quick question with respect to the witness's testimony. On page 22 of the prefiled testimony, I guess they discuss some of the long lead procurement, and I guess it was my understanding, and I just wanted to get some brief clarification. With respect to the long lead items and the reductions and the magnitude of those reductions, at least on 22, it seems that FPL has gone forward with the reservation or is in the process of finalizing the reservation agreement for the ultraheavy forgings with Japan Steel Works that we previously addressed in the need determination. Would that be correct?

THE WITNESS: That's correct. In fact, we have entered into that agreement through Westinghouse Corporation, and that money has been expended in the project.

COMMISSIONER SKOP: Okay. And I think on page 23, they address an additional amount of 35 million of funds for long lead procurement, the reactor coolant pump and some of the other containment vessel materials.

Can you just briefly explain which long lead items are 1 being deferred at this time and the magnitude of those 2 deferrals? 3 4 THE WITNESS: Yes, sir. In the prefiled testimony, page 23, lines 7 through 15, all the long 5 6 lead items involved in that paragraph make up the 7 \$35 million that is being deferred to 2010 or beyond. COMMISSIONER SKOP: Okay. Thank you. I guess 8 that matches up. That would result -- that 35 million 9 10 would be the reduction from the 258 million down to the 11 221 million for long lead procurement. 12 THE WITNESS: Yes, sir. 13 COMMISSIONER SKOP: Thank you. 14 CHAIRMAN CARTER: Thank you. Commissioner 15 Argenziano. 16 COMMISSIONER ARGENZIANO: Yes. I forgot 17 something, Mr. Chair. As I asked before with Progress, is there a way you can break down for me by statutory 18 categories, you know, the costs, the site selection, 19 pre-construction, carrying charges? Can you do that? 20 21 THE WITNESS: Yes, ma'am. COMMISSIONER ARGENZIANO: Okay. Great. 22 THE WITNESS: With the exception of carrying 23 24 charges, I'm afraid. 25 COMMISSIONER ARGENZIANO: Okay.

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THE WITNESS: With respect to site selection costs, those were costs that were incurred up to our filing for need determination in October of last year. Those costs were incurred in 2006 and 2007 and total \$6,424,121, again, without AFUDC.

In the pre-construction, beginning in October 2007, for the balance of 2007, we incurred approximately \$2,533,000 in pre-construction costs. In 2008, we expect to incur approximately \$70 million in pre-construction costs. And in 2009, we're projecting \$110 million in pre-construction costs, for a total of 182,500,000 pre-construction costs.

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

CHAIRMAN CARTER: Thank you. Commissioner Skop.

Just one final question. Page 19 of the prefiled testimony mentions that FPL is a member of the NuStart Consortium and pays the annual membership fee. Can you briefly just further elaborate on the benefits of that membership? Is that a recoverable cost? And then also the expected benefit to the extent of lessons learned that would mitigate the cost of membership if that is in fact a recoverable cost.

THE WITNESS: Yes, sir. The NuStart

Consortium, of course, is a group of industry -potential owners of new nuclear plants as well as

vendors that are involved in the production, including

General Electric and Westinghouse Corporation.

This group was formed essentially to provide a private industry response or pairing with the federal regulators to develop the combined operating license process, to test it, and to help work the bugs out of system. Without this organization, no individual utility would have taken on the task and considerable effort to get to the point where we are today.

extremely valuable for our customers to spread the cost over multiple industry participants, to kick-start the new nuclear deployment process in the United States. So that has really been the right thing for us to do, is to be involved with a group of other interested potential owners for power and to work together to solve these early problems so that at the time that Progress and ourselves submit our license application, a lot of these bugs have already been worked out, a lot of the path has been well paved, and everybody understands their roles and responsibilities as we're going forward.

So our participation in NuStart at present is

approximately a million dollars a year and has been a real bargain in terms of allowing the national level licensing and industry support to be ready and mature enough to take on the challenges of new nuclear deployment.

COMMISSIONER SKOP: Mr. Chairman, just two follow-ups.

So essentially, that should serve to streamline the licensing process to avoid cost delays resulting from -- to streamline the regulatory process and avoid cost increases resulting from regulatory delays in siting and permitting and licensing and all the above?

THE WITNESS: Absolutely. A good portion of our combined operating license application will be directly adopted from the Tennessee Valley Authority Bellefonte application, which is determined to be the reference application for this technology. So in a sense, we'll just be taking the sections out of their application and adopting it in total. It will be something that the NRC has already seen and reviewed and should greatly facilitate our process.

COMMISSIONER SKOP: So in a sense, it's like bootstrapping based on lessons learned such that the first one that's the straw horse, if you will, the next

1 one goes through smoother and assures a continual 2 approval process. THE WITNESS: Absolutely. 3 COMMISSIONER SKOP: And also, too, in relation 4 to the consortium, at least from my knowledge, many 5 members of the consortium have picked the AP1000 as 6 7 their reactor, and certainly those that come online 8 sooner than later should be able to share their lessons 9 learned throughout the consortium to avoid any 10 additional increases and lessons learned. Would that be 11 also correct? 12 THE WITNESS: That's correct. In fact, maybe 13 not through the NuStart Consortium, but through a group 14 called the AP Owners Group that has been developed specifically with an eye towards those pre-operational 15 16 and operational issues to share procedures, to share the 17 best practices in the company and the industry so that everybody is operating from the same manual and 18 19 benefiting from the same streamlining. 20 COMMISSIONER SKOP: Thank you. Thank you, Commissioner. 21 CHAIRMAN CARTER: 22 Commissioners, anything further from the bench? 23 Okay. Hearing none, Mr. Anderson. 24 25 MR. ANDERSON: We have no questions for

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1	Mr. Scroggs.
2	CHAIRMAN CARTER: Will Mr. Scroggs be coming
3	back for rebuttal?
4	MR. ANDERSON: Yes, sir, he will. We would
5	like to offer his Exhibits 23 and 24.
6	CHAIRMAN CARTER: Exhibits 23 and 24. I think
7	23 is in; right?
8	MS. BENNETT: It's 24 and 25.
9	MR. ANDERSON: Thank you. My notes are wrong.
10	Twenty-four and 25.
11	CHAIRMAN CARTER: Twenty-four and 25, any
12	objections? Without objection, show it done.
13	(Exhibit Numbers 24 and 25 were admitted into
14	the record.)
15	CHAIRMAN CARTER: Call your next witness.
16	MR. ANDERSON: FPL would call as its next
17	witness Dr. Steven Sim.
18	CHAIRMAN CARTER: You're recognized.
19	MR. ANDERSON: Thank you.
20	Thereupon,
21	STEVEN R. SIM
22	was called as a witness on behalf of Florida Power &
23	Light Company and, having been first duly sworn, was
24	examined and testified as follows:

1	DIRECT EXAMINATION
2	BY MR. ANDERSON:
3	Q. Good afternoon, Dr. Sim.
4	A. Good afternoon.
5	Q. Have you been sworn?
6	A. Yes, I have.
7	Q. Please state your name and business address.
8	A. My name is Steve Sim. My business address is
9	9250 West Flagler Street, Miami.
10	Q. By whom are you employed, and in what
11	capacity?
12	A. By Florida Power & Light Company as a senior
13	manager in the Integrated Resource Planning Group.
14	Q. Have you prepared and caused to be filed 11
15	pages of prefiled direct testimony in this proceeding?
16	A. Yes, I have.
17	Q. Do you have any changes or revisions to your
18	prefiled direct testimony?
19	A. No, I don't.
20	Q. If I asked you the same questions contained in
21	your prefiled direct testimony, would your answers be
22	the same?
23	A. Yes, they would.
24	MR. ANDERSON: FPL asks that Dr. Sim's
25	prefiled direct be inserted into the record as though

1	read.
2	CHAIRMAN CARTER: The prefiled testimony will
3	be adopted into the testimony as though read.
4	BY MR. ANDERSON:
5	Q. I think you co-sponsored some exhibits already
6	in evidence, Numbers 21 and 22?
7	A. Yes.
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1		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
2		FLORIDA POWER & LIGHT COMPANY
3		DIRECT TESTIMONY OF STEVEN R. SIM
4		DOCKET NO. 080009 - EI
5		May 1, 2008
6		
7	Q.	Please state your name and business address.
8	A.	My name is Steven R. Sim, and my business address is 9250 West Flagler
9		Street, Miami, Florida 33174.
10	Q.	By whom are you employed and what position do you hold?
11	A.	I am employed by Florida Power & Light Company (FPL) as Senior Manager
12		of Integrated Resource Planning in the Resource Assessment & Planning
13		Business Unit.
14	Q.	Please describe your duties and responsibilities in that position.
15	A.	I supervise and coordinate analyses that are designed to determine the
16		magnitude and timing of FPL's resource needs and then develop the
17		integrated resource plan with which FPL will meet those resource needs.
18	Q.	Please describe your education and professional experience.
19	A.	I graduated from the University of Miami (Florida) with a Bachelor's degree
20		in Mathematics in 1973. I subsequently earned a Master's degree in
21		Mathematics from the University of Miami (Florida) in 1975 and a Doctorate
22		in Environmental Science and Engineering from the University of California
23		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.

A.

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. What is the purpose of your testimony?

My testimony provides an update to the long-term economic analyses filed in the Nuclear Uprate Need Docket No. 070062-EI and in the Turkey Point 6 & 7 Need Docket No. 070650-EI. These updates 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." The updated long-term economic

1		analyses will generally be referred to as the "detailed feasibility analysis" in
2		the remainder of my testimony.
3	Q.	Are you sponsoring or co-sponsoring any exhibits in this case?
4	A.	Yes, I am co-sponsoring portions of the following exhibits:
5		- STH-2, an exhibit of FPL witness Stephen Hale, which consists of
6		Appendix I containing the Nuclear Filing Requirements Schedules
7		(NFRs) for the nuclear uprates Project. Page 2 of Appendix I contains
8		a table of contents listing the NFRs that are sponsored by Mr. Hale,
9		Ms. Ousdahl, and me, respectively. I am sponsoring all portions of
10		Schedule P9 of Appendix I except for the Section B portion discussing
11		the nuclear uprate capital cost amounts and schedule that is being
12		sponsored by FPL witness Hale.
13		- SDS-1, an exhibit of FPL witness Steve Scroggs, which consists of
14		Appendix II containing the NFRs for the Turkey Point 6 & 7 project.
15		Page 2 of Appendix II contains a table of contents listing the NFRs
16		that are sponsored by Mr. Scroggs, Ms. Ousdahl, and me, respectively.
17		I am sponsoring Schedule P9 of Appendix II.
18	Q.	What is the scope of your testimony?
19	A.	My testimony addresses three main points:
20		(1) I briefly discuss changes in the analytical approach and assumptions
21		used in the detailed feasibility analysis provided in this filing
22		compared to the economic analyses that were provided in FPL's

1		determination of need filings for the nuclear uprates and for Turkey
2		Point 6 & 7.
3		(2) I provide the results of the detailed feasibility analysis of the nuclear
4		uprates.
5		(3) I provide the results of the detailed feasibility analysis of Turkey Point
6		6 & 7.
7		
8		Detailed Feasibility Analysis - Approach & Assumptions
9		
10	Q.	Were the analytical approaches used in the detailed feasibility analyses of
11		the nuclear uprates and Turkey Point 6 & 7 similar to those used in the
12		determination of need filings for these projects?
13	A.	Yes. The analytical approaches that were used in the detailed feasibility
14		analysis for each project were virtually identical to the approaches used in the
15		determination of need filings.
16		
17		In regard to the nuclear uprates project, FPL believes that the analytical
18		approach used currently, and that was used in the determination of need filing;
19		i.e., the direct comparison of resource plans with and without the uprates, is
20		the appropriate approach for analyzing this project.
21		
22		In regard to the Turkey Point 6 & 7 project, FPL believes that the analytical
23		approach used currently, and in the determination of need filing, i.e., the

calculation of breakeven 2007\$ overnight capital costs for the new nuclear 1 units, remains the appropriate approach to use at this time for the detailed 2 feasibility analysis of this project. (In later years, as more information 3 becomes available regarding the cost and other aspects of the new nuclear units, another analytical approach may emerge as more appropriate.) 5 6 Q. What differences exist between these detailed feasibility analyses and the analyses used in the determination of need filings? 7 When comparing the analyses, there are only four meaningful differences. Α. 8 One of these differences is in regard to the scope of the detailed feasibility 9 analysis of Turkey Point 6 & 7. In the economic analyses supporting the 10 determination of need filing analyses, a Resource Plan with Nuclear that 11 included Turkey Point 6 & 7 was compared to two alternative resource plans. 12 One of these resource plans included a comparable amount of combined cycle 13 (CC) capacity added in the same years the two new nuclear units are projected 14 to come in-service. This resource plan was labeled as the Resource Plan 15 without Nuclear - CC. The other resource plan included a comparable amount 16 of integrated gasification combined cycle (IGCC) capacity in the same years 17 the two new nuclear units are projected to come in-service. This resource plan 18 was labeled as the Resource Plan without Nuclear – ICGG. 19 20 As shown in the determination of need filing analyses, the Resource Plan

without Nuclear - CC was superior economically to the Resource Plan

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1	without Nuclear - IGCC and, therefore, the former was the alternative
2	resource plan that was closer economically to the Resource Plan with Nuclear.
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4	Due to this previous result, FPL decided it was unnecessary to perform further
5	analysis of the Resource Plan without Nuclear - IGCC. Therefore, FPL has
6	focused its detailed feasibility analysis on the Resource Plan with Nuclear and
7	the more competitive alternative Resource Plan without Nuclear - CC.
8	
9	The second meaningful difference was a decision to focus solely on analyzing
10	the economics of the resource plans for both the nuclear uprates and Turkey
11	Point 6 & 7 projects. The determination of need filings for the two projects
12	clearly demonstrated that the new nuclear capacity from the two projects
13	would significantly increase FPL's system fuel diversity and decrease system
14	carbon dioxide (CO ₂) emissions. The changes in assumptions used in the
15	analysis, discussed below, will have very little effect on projections of system
16	fuel diversity and emissions. The previous projections of increased FPL
17	system fuel diversity and decreased system CO2 emission from both nuclear
18	projects is expected to remain essentially unchanged, thus leaving these
19	impacts as very beneficial attributes of the nuclear projects.
20	ਹਨ ਹੈ। 3.
21	In contrast, the assumption changes will have more significant impacts on the
22	projected economics of the projects. Consequently, EPL's analytical focus is
23	the relative economics of the two projects.

The third meaningful difference is in regard to the schedules for capital costs 1 for the two nuclear projects. The detailed feasibility analyses use updated 2 capital cost expenditure schedules for both projects compared to the schedules 3 used in the determination of need filings. The fourth meaningful difference between the detailed feasibility analysis and the analyses conducted for the determination of need filings was that certain assumptions were revised based on more current information. 8 What assumptions were revised for the detailed feasibility analyses? Q. Several assumptions were revised for the current analyses based on more A. 10 current information that was available to FPL in the first quarter of 2008. 11 These updated assumptions include: 12 FPL's load forecast that includes the Lee County Electric Cooperative 13 (Lee County) load. The revised load forecast resulted in changes to 14 FPL's projected capacity needs (and, subsequently, resulted in minor 15 changes in the resource plans being analyzed compared to those used 16 in the determination of need filings); 17 The forecast for environmental compliance costs. This updated 18 forecast is based on ICF's most recent forecast of environmental 19 compliance costs; 20 The forecasts for fuel costs: 21 The forecasted capital costs of non-nuclear combined cycle (CC) 22 generation units; and, 23

1		- The cost of debt and the discount rate used for both generation and
2		transmission costs.
3		
4		These updated assumptions are identical to those used in the analyses for, and
5		presented in, FPL's recent determination of need filing for the conversions of
6		FPL's existing Cape Canaveral and Riviera plants.
7		
8	Det	ailed Feasibility Analysis Results for the Nuclear Uprates Project
9		
10	Q.	What were the results of the detailed feasibility analysis for the nuclear
11		uprates project?
12	A.	The results of this analysis are presented in section C of Schedule P-9 of
13		Exhibit STH-2. As shown in this Schedule, the Resource Plan with Nuclear
14		Uprates is projected to have a lower cumulative present value of revenue
15		requirements (CPVRR) cost, compared to the Resource Plan without Nuclear
16		Uprates, in 8 of 9 scenarios of fuel cost and environmental compliance cost
17		forecasts utilized in the analyses.
18	Q.	How do the results of the detailed feasibility analyses compare with the
19		results of the economic analyses provided in the determination of need
20		filing for the nuclear uprates?
21	A.	In the determination of need filing, the Resource Plan with Nuclear Uprates
22		was also projected to have a lower CPVRR cost in 8 of the 9 scenarios of fuel
23		cost and environmental compliance cost forecasts. In these 8 scenarios, the

1	economic advantage of the Resource Plan with Nuclear Uprates ranged from
2	\$222 million CPVRR to \$963 million CPVRR.
3	
4	In the detailed feasibility analysis for these same 8 scenarios, the economic
5	advantage of the Resource Plan with Nuclear Uprates now ranges from \$346
6	million CPVRR to \$1,109 million CPVRR.
7	
8	Also, for the remaining scenario in the determination of need filing, one that
9	features low natural gas costs and low environmental compliance costs, the
10	Resource Plan with Nuclear Uprates was projected to have a higher cost of
11	\$214 million CPVRR. The detailed feasibility analysis for this same scenario
12	shows that the Resource Plan with Nuclear Uprates is now projected to result
13	in a higher cost of \$127 million CPVRR.
14	
15	Consequently, the already significant economic advantage of the nuclear
16	uprates previously presented in the determination of need filing has further
17	increased. These results fully support the feasibility of continuing the nuclear
18	uprates project.
19	
20	
21	
22	

Detailed Feasibilty Analysis Results for the Turkey Point

&	7	<u>Project</u>
	<u>&</u>	<u>& 7</u>

A.

Q. What were the results of the detailed feasibility analysis for the Turkey

Point 6 & 7 project?

- The results of this analysis are presented in section C of Schedule P-9 of Exhibit SDS-1. As shown in this Schedule, the Resource Plan with Nuclear is projected to have a higher breakeven cost (in terms of \$/kw in 2007\$) for Turkey Point 6 & 7 than the range of non-binding capital costs for new nuclear units of \$3,108/kw to \$4,540/kw in 8 of 9 scenarios of fuel cost and environmental compliance cost forecasts. In these 8 scenarios, the updated breakeven costs range from \$5,994/kw to \$8,835/kw. For the remaining scenario, one that features low natural gas costs and low environmental compliance costs, the projected breakeven cost of \$4,408/kw is in the upper range of the non-binding capital cost estimate for new nuclear units.
- Q. How do the results of the detailed feasibility analyses compare with the results of the economic analyses provided in the determination of need filing?
- A. In the determination of need filing, the Resource Plan with Nuclear was also projected to have a higher breakeven cost (\$/kw in 2007\$) for Turkey Point 6 & 7 than the range of non-binding capital costs for new nuclear units of \$3,108/kw to \$4,540/kw in the same 8 of 9 scenarios of fuel cost and environmental compliance cost forecasts. In these 8 scenarios, the range of

1		breakeven costs was \$4,543/kw to \$7,281/kw. For the remaining scenario, the
2		projected breakeven cost of \$3,206/kw was in the lower range of the non-
3		binding capital cost estimate for new nuclear units.
4		
5		Consequently, the already promising breakeven capital costs for Turkey Poin
6		6 & 7 previously presented in the determination of need filing have become
7		even more promising in the detailed feasibility analysis. These results fully
8		support the feasibility of continuing the Turkey Point 6 & 7 project.
9	Q.	Does this conclude your testimony?
10	A.	Yes.

BY MR. ANDERSON:

- Q. Do you have a summary for the Commission?
- A. Yes, I do.
- Q. Would you please present your summary?

A. Certainly. Good afternoon, Chairman Carter and Commissioners. My testimony discusses the detailed feasibility analysis conducted for FPL's nuclear uprates and Turkey Point 6 and 7 projects and presents the results of those analyses.

First, in regard to the analytical approach and the assumptions, let me start by going back to the analytical approach that we used in the determination of need filings for both projects. Essentially, we looked at one resource plan that had the nuclear capacity addition in question versus one or more resource plans that did not have the new nuclear capacity, and we analyzed both resource plans in regard to nine different scenarios of fuel cost forecasts and environmental compliance cost forecasts.

We utilized the same basic analytical approach in the detailed feasibility analysis presented in this docket. However, there were a few changes in regard to what I'll call tightening the scope of the analysis as well as a few assumption changes. In regard to tightening the scope, one of those was in regard to the

Turkey Point 6 and 7 project. We originally in the determination of need filing had compared that to competing combined cycle capacity as well as competing integrated gasification combined cycle capacity. In that, the IGCC turned out to be a distant third in the economic analysis, and for that reason, we chose not to continue that comparison in the updated analysis that is before you today.

Also, in both the uprates and in the Turkey
Point 6 and 7, we chose in this analysis to focus solely
on the economics of the projects. We felt that it was
clearly developed in the determination of need analyses
that both projects would supply significant increases in
fuel diversity, as well as result in significant
decreases in system emissions.

In regard to the assumptions, there were a number of assumption changes that were made this go-round. We updated the capital cost expenditure schedules for both of the nuclear projects, and we also used updated forecasts for fuel costs, environmental compliance costs, load forecasts, the combined cycle unit cost, and updated cost of debt and discount rate values.

Let me turn to the results of the analyses. First let me tackle the nuclear uprates. In the

determination of need filings, our results were that the nuclear uprates were projected to have a significantly lower cumulative present value of revenue requirements costs in eight of the nine scenarios that we examined, and in the one scenario in which it was not projected to be the most economic option, that was in a scenario of low gas costs and low environmental compliance costs, which we felt was a fairly unlikely occurrence.

In the updated analysis, we saw essentially the same thing. The uprates are still projected to be the cost-effective addition in eight of the nine scenarios. However, the projected economics for the nuclear uprates has improved in seven of those scenarios to the tune of roughly 70 million to 300 million cumulative present value revenue requirements of cost savings for FPL's customers. Therefore, for the uprates, the economics have definitely improved in the updated analysis.

In regard to the Turkey Point 6 and 7 project, in the determination of need filing, we had compared the breakeven cost of new nuclear capacity to a nonbinding cost range for new nuclear units of roughly \$3,100 a kW to \$4,500 a kW in 2007 dollars. And what we found is that the projected breakeven costs for the new nuclear units were above that cost range in eight of the nine

scenarios, and it was within that range in the ninth scenario.

In the updated analysis, what we see now is that we have essentially the same result in terms of higher breakeven costs in eight of the nine scenarios and within the range in the ninth. However, we see improvement, significant improvement economically in all nine scenarios for the new nuclear units, and the breakeven costs have increased from a range from \$900 a kW to about \$2,100 a kW in 2007 dollars.

In conclusion, for both projects, the already significant projected economic advantage of the nuclear uprates and the projected breakeven costs for Turkey Point 6 and 7 are even now more promising in the updated analysis than in the need filings, and these results fully support the feasibility of continuing both projects.

And that concludes my summary.

MR. ANDERSON: Dr. Sim is available for cross-examination.

CHAIRMAN CARTER: Thank you. Dr. Sim, you said that the uprate saved how much? And I'm going to ask you the same on Turkey Point, too, in terms of your projections.

THE WITNESS: In regard to the uprates, we saw

FLORIDA PUBLIC SERVICE COMMISSION

the economics had improved in seven of the nine scenarios, and the range of that improvement in cumulative present value of revenue requirements was from 70 million to 300 million.

CHAIRMAN CARTER: Okay.

THE WITNESS: And in regard to Turkey Point 6 and 7, in regard to breakeven costs, the breakeven costs increased in all nine scenarios, and that range was from \$900 a kW to \$2,100 a kW in 2007 dollars.

CHAIRMAN CARTER: How much is that in American money?

THE WITNESS: Well, to give you an example, a brand new combined cycle would cost you approximate \$1,000 a kW.

CHAIRMAN CARTER: So \$1,000 at --

THE WITNESS: It would depend upon the number of kW you're --

CHAIRMAN CARTER: I don't have my solar powered calculator. Have you got a bottom line number for me? I think -- and I'm sure you were here today as Commissioner Argenziano was asking questions that really relate to the folks out there at home trying to -- they don't know a kW from a megawatt, so I'm really just trying to get a bottom line number. That's all we're really trying to find, so can you just kind of break it

down? I do read Greek, but don't put it in Greek. Just put it in English for us today.

THE WITNESS: Yes, sir. Perhaps the easiest way to convert this is to look at this in terms of the increase in the breakeven cost as if we were talking about a combined cycle, since the Commission has seen those most recently from FPL. The \$1,000 a kW is roughly the cost of, say, the West County 3 unit and the conversions that we had, and those were on the order of, again, in very round numbers, about a billion dollars.

CHAIRMAN CARTER: Okay. Thank you. I know that you're getting ready for cross-examination, but I wanted to ask that, Commissioners, before I lost my train of thought.

Commissioner Skop.

COMMISSIONER SKOP: Thank, Mr. Chairman. Just one quick question with respect to the ongoing feasibility analysis and studies that have been conducted and the more beneficial economic advantage.

Was that analysis rerun in correlation to, you know, gas has recently run up, and then over the last month or so, the price of natural gas has kind of receded back to, thank God, \$7 per MMBtu, around there. But I'm just trying to get some perspective on the influence of gas prices in terms of the numbers that you just presented.

THE WITNESS: Yes, sir. The analysis used 1 assumptions that were virtually identical to those used 2 in the recent West County 3 and conversion filing, which 3 were looked into place in roughly the February-March 4 time frame. So it would not reflect any changes in 5 6 assumptions that occurred since the filing for this 7 docket. COMMISSIONER SKOP: Okay. Thank you. 8 9 CHAIRMAN CARTER: Okay. Commissioners, 10 anything further at this time? 11 Mr. McGlothlin. 12 MR. McGLOTHLIN: No questions. 13 CHAIRMAN CARTER: Mr. Twomey. 14 MR. TWOMEY: No, sir. CHAIRMAN CARTER: Mr. McWhirter. 15 16 CROSS-EXAMINATION BY MR. McWHIRTER: 17 You indicated that a combined cycle would cost 18 a thousand per kW. My recollection of the need 19 20 proceeding was that this would cost -- the nuclear plants would cost between 4,500 and 7,500 per kW. 21 I'm sorry. Could you rephrase or repeat the 22 23 question, please, sir? What will be the cost of these nuclear plants 24 Q. that you're building based on the kilowatt of capacity? 25

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- A. I think it's safe to say that we don't know with a great deal of accuracy at this point what the units will cost. For our original determination in the need filing, we used a nonbinding capital cost estimate of, in 2007 dollars, between roughly \$3,100 a kW and \$4,500 a kW.
- Q. And if you compare the fixed costs of the capacity to the fixed costs of the combined cycle, it sounds like the nuclear plant costs considerably more than a combined cycle. Can you explain why it is that these savings come into play in your economic analysis?
- A. Yes, sir. Commissioner, as we indicated in the determination of need filing for Turkey Point 6 and 7, and I believe as Mr. Anderson alluded to earlier this afternoon, we were projecting at that time, using the fuel cost forecasts that were somewhat lower than what we are currently projecting, that once both nuclear units come into service, we are projecting or were projecting at that time \$1 billion a year for the first year of fuel savings on our system from the nuclear units, growing a bit every year, to where at the end of the 40-year projected life, our projection at that time was about \$93 billion nominal in fuel savings for our customers, and with higher fuel cost forecasts, that

does not count the environmental compliance cost savings that are also higher today than what we projected in the determination of need filing.

- Q. And what year do those cost savings begin?
- A. The cost savings would begin -- the \$1 billion number I mentioned would be the first year in which both units were in service for the full year, and that would be in 2021, assuming a 2018 and 2020 in-service date, midyear, for both units. We would begin to see fuel savings in 2018 as the first nuclear unit went in service, but the full \$1 billion number is based upon both units being in service nor a full year.
- Q. Are you using 2007 dollars in those savings calculations, or are you using some other --
- A. The 1 billion and \$93 billion are not discounted to 2007. Those are nominal, in that year dollars for each year.
- Q. And how much do you anticipate that 2007 dollars will depreciate in value between now and 2021?
- A. I'm not sure I would think of it in terms of depreciation, but I don't have that number in front of me, sir.

MR. McWHIRTER: I have no further questions.

CHAIRMAN CARTER: Thank you, Mr. McWhirter.

Staff.

1	MR. YOUNG: No questions.
2	CHAIRMAN CARTER: Commissioners.
3	Okay. Mr. Anderson.
4	MR. ANDERSON: We have no questions. He had
5	no exhibits also.
6	CHAIRMAN CARTER: No exhibits? Okay. Good.
7	Thank you. Dr. Sim, thank you. You may be excused.
8	He's not a rebuttal witness, so
9	MR. ANDERSON: We would ask that he be
10	excused, yes.
11	CHAIRMAN CARTER: Hasta la bye-bye.
12	Mr. Anderson.
13	MR. ANDERSON: FPL would call as its next
14	witness John Reed.
15	CHAIRMAN CARTER: Mr. John Reed.
16	Thereupon,
17	JOHN J. REED
18	was called as a witness on behalf of Florida Power &
19	Light Company and, having been first duly sworn, was
20	examined and testified as follows:
21	DIRECT EXAMINATION
22	BY MR. ANDERSON:
23	Q. Good afternoon, Mr. Reed.
24	A. Good afternoon.
25	Q. Have you been sworn?

FLORIDA PUBLIC SERVICE COMMISSION

1	A. Yes, I have.
2	Q. Would you tell us your full name and business
3	address?
4	A. My name is John J. Reed. My business address
5	is 293 Boston Post Road, Marlborough, Massachusetts.
6	Q. By whom are you employed, and in what
7	capacity?
8	A. I am the chief executive officer of Concentric
9	Energy Advisors.
10	Q. Have you prepared and caused to be filed 38
11	pages of prefiled direct testimony in this proceeding?
12	A. Yes, I have.
13	Q. Do you have any changes or revision to your
14	prefiled direct testimony?
15	A. No, I do not.
16	Q. If I asked you the same questions contained in
17	your prefiled direct testimony, would your answers be
18	the same?
19	A. Yes, they would.
20	MR. ANDERSON: FPL asks that the prefiled
21	direct testimony of Mr. Reed be inserted into the record
22	as though read.
23	COMMISSIONER EDGAR: The prefiled direct
24	testimony will be entered into the record as though
25	read.

1	BY MR. ANDERSON:
2	Q. You are sponsoring two exhibits?
3	A. Yes.
4	Q. Those are JJR-1 and JJR-2?
5	A. That is correct.
6	MR. ANDERSON: These have been premarked in
7	staff's list as Exhibits 26 and 27.
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1		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
2		FLORIDA POWER & LIGHT COMPANY
3		DIRECT TESTIMONY OF JOHN J. REED
4		DOCKET NO. 080009-EI
5		MAY 1, 2008
6		
7	Q.	Please state your name and business address.
8	A.	My name is John J. Reed. My business address is 293 Boston Post Road
9		West, Marlborough, Massachusetts 01752.
10	Q.	By whom are you employed and what is your position?
11	A.	I am the Chairman and Chief Executive Officer of Concentric Energy
12		Advisors, Inc. ("Concentric").
13	Q.	Please describe Concentric.
14	Α.	Concentric is an economic advisory and management consulting firm,
15		headquartered in Marlborough, Massachusetts, which provides consulting
16		services relating to energy industry transactions, energy market analysis,
17		litigation, and regulatory support.
18	Q.	Please describe your educational background and professional
19		experience.
20	Α.	I have more than 30 years of experience in the energy industry, having served
21		as an executive in energy consulting firms, including the position of Co-Chief
22		Executive Officer of the largest publicly-traded management consulting firm
23		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.

5 Q. Have you previously provided expert testimony?

6 A. Yes. I have been accepted as an expert in dozens of jurisdictions located in
7 the United States and Canada.

8 Q. Are you sponsoring any exhibits in this case?

9 A. Yes. I am sponsoring Exhibits JJR-1 and JJR-2, which are attached to my direct testimony.

11 Exhibit JJR-1 Curriculum Vitae

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Exhibit JJR- 2 Testimony of John J. Reed 1997 – 2008

13 Q. What is the purpose of your testimony in this proceeding?

The purpose of my testimony is to review the processes and procedures used by Florida Power and Light ("FPL" or the "Company") 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) 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, collectively the "Projects"). Specifically, I have reviewed FPL's policies and procedures governing their development of the Projects and will offer an opinion as to the reasonableness of these policies and procedures relative to other nuclear generating facilities currently being

1		developed in the United States. I have	e not reviewed and do not offer an
2		opinion as to the reasonableness of the s	specific costs of which FPL requests
3		recovery in this proceeding. My review i	s solely related to the processes used
4		to develop such costs and the risk ma	nagement and project development
5		practices utilized by FPL to administer the	e Projects.
6	Q.	Please describe your experience w	ith nuclear power plants, and
7		specifically your experience with major	or construction programs at these
8		plants.	
9	A.	My consulting experience with nuclear	power plants spans more than 25
10		years. My clients have retained me	for assignments relating to the
11		construction of nuclear plants, the purcha	se and sale of nuclear plants, power
12		uprates and major capital improvement	projects at nuclear plants, and the
13		decommissioning of nuclear plants. I h	ave had significant experience with
14		these activities at the following plants:	
15		Pilgrim	Ginna
16		Oyster Creek	Duane Arnold
17		Seabrook	Palisades
18		Hope Creek	Point Beach 1 and 2
19		Peach Bottom	Big Rock Point
20		Salem	Wolf Creek
21		Nine Mile Pt. 1 and 2	Callaway

1		I was also extensively involved in nuclear construction audits and prudence
2		reviews for nuclear plants built in the 1980s, including Vogtle, Limerick,
3		Susquehanna, Wolf Creek and Callaway.
4		
5		I am currently active on behalf of a number of clients in pre-construction
6		activities for new nuclear plants across the U.S., including state and federal
7		regulatory processes, raising debt and equity financing for new projects, and
8		evaluating the costs schedules and economics of new nuclear facilities. These
9		activities have included detailed reviews of cost estimation and construction
10		project management activities of other nuclear project developers.
11	Q.	Please describe how the remainder of your testimony is organized.
12	A.	The remainder of my testimony is organized into the following three (3)
13		sections listed below.
14		Section 1: The framework of my review
15		Section 2: A description of each of the FPL processes I
16		reviewed
17		Section 3: My conclusions and opinions of FPL's project
18		development, risk management and cost
19		estimation practices.
20	Q.	Please generally describe how, in your experience, the FPL project
21		management processes compare with other EPU projects and new
22		nuclear development projects around the country.

1 A. Based on my review of FPL's practices used to manage the Projects, I find
2 that the FPL EPU and new nuclear development projects compare favorably
3 with other similar nuclear projects in the United States. The project
4 management, cost estimation and risk management attributes of FPL are
5 highly developed, well documented, and conscientiously adhered to, and are
6 well positioned to meet FPL's needs as these projects continue to develop.

A.

Section 1 Framework of Review

9 Q. Please describe the process by which you reviewed FPL's project development capabilities.

- In order to assess FPL's project development, risk management and cost estimation capabilities, my staff and I reviewed numerous documents provided to us by FPL. These documents included FPL's general corporate procedures, the Company's nuclear procedures and instructions, various status reports prepared by the Company to monitor the progress of the Projects, contracts executed by the Company for materials and services related to the Projects, and the Company's cost estimates for the Projects for the calendar years 2008 and 2009. In addition, our team interviewed several members of FPL's project teams at FPL's corporate offices in Juno Beach, Florida.
- Q. Prior to commencing your review of FPL's capabilities was there a framework you used to organize your review?
- 22 A. Yes. My review was developed based on a framework that Concentric
 23 developed in a recent evaluation of another new nuclear power development

1		project. This framework was established to specifically address an investor's
2		evaluation of a multi-billion dollar investment in that facility.
3	Q.	Please describe that framework.
4	A.	My review was focused on six (6) primary elements. Each of these elements
5		is necessary to promote proper communication among the project team,
6		interested stakeholders and the Company's vendors. In addition, these
7		elements represent best practices that I have observed throughout my career.
8		These six elements are listed below.
9		Defined corporate procedures
10		Written project execution plans
11		Involvement of key internal stakeholders
12		Reporting and oversight requirements
13		Corrective action mechanisms
14		Reliance on a viable technology
15		I have attempted to review each of these elements for the five processes
16		described below and later in my testimony. In addition, I have attempted to
17		provide examples from both projects in each case. The five processes are:
18		Project Estimating and Budgeting Process
19		Project Schedule and Management
20		Contract Management and Administration
21		Internal Oversight Mechanisms
22		External Oversight Mechanisms

1	Q.	Please describe why you believe it is important for FPL to have defined
2		corporate procedures in place prior to commencing development of the
3		Projects.
4	A.	Defined corporate procedures are critical to any project development process
5		as they explicitly define the steps required to successfully complete the project
6		in the most prudent and cost effective manner. These procedures detail the
7		methodology in which certain aspects of the project, such as the cost
8		estimation and execution of key contracts, will be completed and to make
9		certain that processes are consistently applied to the projects. To be effective,
10		these procedures should be documented with sufficient detail to allow the
11		project teams to implement the procedures, and they should be clear enough to
12		allow the project teams to easily comprehend the procedures. Similarly, the
13		most recent version of the procedures should be readily accessible by
14		members of the project teams.
15		
16		It is also important to assess whether the procedures are known by the project
17		teams and adopted into the company's culture. This includes a process that
18		allows staff to openly challenge and seek to improve the existing procedures
19		and to incorporate lessons learned from other projects into the company's

22 Q. Please explain the importance of written project execution plans.

FPL's corporate procedures are applied correctly.

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procedures. Within FPL, the Project Controls staff is responsible for ensuring

A. Written project execution plans are necessary to establish a framework for executing the project development plans. 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 the vendor's approach to achieving key project milestones is consistent with the project sponsor's needs.

A.

Q. Why is it important that key internal stakeholders are involved in the project development process?

One of the most difficult aspects of developing a large project is the ability to balance the needs of all stakeholders. 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 can be successfully implemented in a timely manner to avoid interfering with the project sponsor's ability to provide safe and reliable electric service to its customers. By including these customers as stakeholders in a transparent project development process, the project sponsor will be better able to deliver on these high-value projects.

Q. Why is it important to have established reporting and oversight requirements?

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. The purpose of a well informed senior management team is two-fold. First, reporting requirements give senior management the information they need in order to leverage their background and previous experience on an as-needed basis. Second, established reporting requirements are critical to make certain 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 appropriate considering the large expenditures that will be required to complete the Projects.

A.

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:

"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 areas¹."

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Lastly, these reports should include a mechanism to identify problem areas and document lessons learned for future project enhancements.

Q. What is the purpose of corrective action mechanisms and why is it important for robust project management processes?

Corrective action mechanisms are a defined process by which a learning culture is implemented across an organization to eliminate reoccurring concerns that can interfere with the successful completion of the project. Specifically, 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 to mitigate the negative impact from these issues. A robust corrective action mechanism should assign responsibility for implementing the corrective actions and a means by which these activities are managed.

Q. Please explain why you believe it is important for a project sponsor to rely on viable technologies.

22 A. Nuclear projects are inherently subjected to several significant risks. One of 23 the largest of these risks, particularly when developing a new nuclear power 24 generating facility, is selecting the type of technology to be used at the

Sears, Keoki S., Glenn A. Sears, and Richard H. Clough, <u>Construction Project Management: A Practical Guide to Field Construction Management.</u> 5th Edition, John Wiley & Sons, Hoboken, NJ, 2008, Pg. 20.

facility. Similar to the corrective action mechanisms described above, relying upon a viable technology allows the project sponsor to implement lessons learned from other projects and avoid the costly mistakes or delays that they may have experienced.

5 Q. Are there any other categories that were included in your review?

No, there were no other categories included in this general framework of 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.

A.

A.

Project Estimating and Budgeting Process

Q. Please explain why the project estimating and budgeting process are important to FPL's project development capabilities.

The project estimating and budgeting process is one of the most important processes for assessing FPL's project development capabilities for a number of reasons. Foremost is that the project budgets are used to determine the feasibility of the Projects (i.e., is the project cost-effective and worth pursuing from an economic point of view). If the project budgets are estimated unrealistically low FPL might pursue a project that, in the end, will not benefit FPL's customers and other stakeholders. In the alternative, FPL might not pursue a project that would benefit FPL's customers and other stakeholders in the long-term due to an unrealistically high budget. Additionally, the project budget is a useful tool for continuous monitoring of the project's performance.

In the context of the Public Service Commission's Nuclear Power Plant Cost
Recovery Rule, the budgets will also be used as initial levels of costs to be
recovered by FPL.

- Q. Does FPL have corporate guidelines that dictate how a cost estimate should be prepared?
- A. 6 Yes, FPL has a set of corporate procedures that are broken down further into a 7 set of department procedures and instructions that explicitly document the process for developing a cost estimate. The PTN 6 & 7 is not covered by a 8 specific set of department procedures and instructions at this time, but appears to follow a process similar to that put in place by the Nuclear Project 10 Department and is consistent with corporate procedures. Nuclear Project 11 Department Instruction 304 Revision 0 covers the preparation of cost 12 estimates. 13
- Q. In general terms, please describe FPL's corporate procedures and their
 purpose.

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FPL Group maintains a set of corporate procedures known as General Operating Procedures ("GOs") that dictate how the Company's policies and objectives are implemented across FPL Group's various business lines. The procedures are relatively detailed and help to make certain that the same high standards of excellence are demonstrated within each department. In addition to the corporate GOs, each department can develop and maintain its own set of procedures and instructions. The additional procedures are developed to cover aspects of the division's business lines that may not be applicable to the

entire Company. For example, the Nuclear Division relies on several 1 additional procedures known as Nuclear Administrative Procedures ("NAP") 2 that incorporate NRC regulatory requirements and nuclear industry best 3 practices in the Nuclear Division's practices. Further, various departments then establish more detailed instructions for implementing the GOs and NAPs 5 6 in their groups' daily activities. The department-specific procedures and instructions are maintained on an 8 FPL internal database that is accessible by each employee for whom they are 9 applicable. These procedures and instructions include highly detailed 10 descriptions that guide the employee through a step-wise process for 11 completing these activities. The activities covered by the GOs, NAPs or 12 department instructions include, but are not limited to: 13 14 Cost estimation or budgeting Contract negotiations 15 Contract administration 16 17 Project governance 18 Q. What is the process utilized by FPL to develop their budgets for each 19 project? 20 A. FPL utilizes a robust, bottoms-up approach to develop their cost estimates and budgets. In general, there are two accepted methods for developing a project 21 cost estimate. A top-down estimate is a process where the Project Estimator 22 develops a budget for the entire project based on their experience building 23

similar plants, and then allocates portions of this budget total to each task or activity. While this typically results in a cost estimate that compares similarly to other projects, it does not necessarily result in the most accurate estimate for individual activities or site-specific changes to the project's design. FPL has chosen the alternative of a bottoms-up cost estimating procedure.

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FPL begins this process by defining the project using scoping documents, system walk-downs, as-built drawings, project plans and plant modification packages. The project is then broken into the various discrete activities required to complete each stage of the project. A Project Estimator then quantifies the material required to complete each activity. For instance, the Project Estimator determines the number of cubic yards of concrete that must be poured, or the length of 3-inch pipe that must be fitted. Project Estimators then estimate the labor requirements using the crew method to identify the number of craft personnel that are required to process the material quantities determined for each activity. The Project Estimator identifies the applicable wage rates by researching contracts and seeking quotes if available and applies the applicable wage rates to the man-hour estimates along with uncertainty or contingency factors. These labor cost adjustments account for productivity losses for activities that involve more complex work including above-grade work or work conducted in a radiological environment. For equipment and materials pricing, the Nuclear Materials Management and Integrated Supply Chain Organizations obtain equipment costs including the

1 cost of mobilization, fuel and demobilization. Materials prices are determined 2 using the FPL materials management system and by obtaining vendor budgetary quotes for engineered materials or materials for which an existing 3 purchase order does not exist. The instructions then direct the Project 4 5 Estimator to determine and apply a contingency factor based on the level of 6 risk in the project at that time. In general, FPL guidelines for this contingency factor are as follows: 7 8 • 25-30 percent for conceptual estimates 9 • 15-20 percent for Level 1 or preliminary estimates • 5-10 percent for Level 2 or definitive estimates 10 11 These contingencies are applied on a case-by-case basis, and are generally consistent with my prior experience, as well as with direction from the United 12 States Department of Energy². The final steps in the cost estimation 13 instruction are to review the estimate for accuracy and to assemble the 14 documentation for each assumption. These final two steps are necessary to 15 16 promote accuracy and credibility of the estimates³. 17 Q. Is FPL's cost estimation procedure consistent with general industry 18 practices? 19 Α. Yes. FPL's cost estimation procedure is known as a partial takeoff estimate.

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While several authors note that this method is difficult to undertake at an early

United States Department of Energy, Cost Estimating Guide DOE G 430.1-1, March 28, 1997, Chapter 11.

Oberlender, Garold D., Project Mangement for Engineering and Construction, Mcgraw-Hill, 2000, Pg. 49.

Oberlender, Garold D., Project Mangement for Engineering and Construction, Mcgraw-Hill, 2000, Pg. 64-65.

1		stage in a project's development, it is recognized that this type of estimate
2		provides the most accurate preliminary cost estimate ⁴ .
3	Q.	Does FPL appear to have followed this procedure in developing the cost
4		estimates for the EPU and PTN 6 & 7 projects?
5	A.	Yes. FPL has implemented the procedure as described. It is important to note
6		that while the Nuclear Projects Department Instruction currently applies only
7		to the Nuclear Projects Department, which is responsible for the Extended
8		Power Uprate, the methodology for developing the cost estimate for both
9		projects appears to be similar.
10		
11		Further, estimating the cost of the Projects produced a substantial volume of
12		supporting documentation that serves as evidence of this process being
13		thoroughly implemented. Both Projects maintain multiple large volumes that
14		document each of the activities' cost estimate assumptions and their source.
15	Q.	What processes are in place to track actual expenditures relative the
16		budget?
17	A.	Actual expenditures relative to the budget are tracked on a weekly, monthly,
18		and annual basis to determine if the project is meeting its goals. On a weekly
19		basis the EPU project produce status reports that includes budget
20		performance. These reports are distributed to the Company's Chief Nuclear
21		Officer, who is responsible for overseeing the EPU project.
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Sears, Keoki S., Glenn A. Sears, and Richard H. Clough, <u>Construction Project Management: A Practical Guide to Field Construction Management.</u> 5th Edition, John Wiley & Sons, Hoboken, NJ,

Monthly reports also monitor budget performance. For the EPU project, these take the form of a Key Project Indicator report that tracks overall project performance over time. The PTN 6 & 7 project produces similar reports, known as Project Dashboard Reports which use a green, yellow and red color code system to visually indicate the status of several performance indicators including the development budget⁵. Within both Projects, the Project Controls Manager is responsible for preparing a monthly variance report that tracks deviations from the project budget as a method to monitor expenditures. This document also includes a section known as a "Risk Tracker" which requires a description of each project risk as it becomes known and a determination of its status. The variances are tracked within this document until such time as money has been allocated in the project budgets to account for the risks or when the risk no longer exists.

On an annual basis, or at major project milestones, the project teams update their respective budgets to reflect a better-defined scope of work, executed contracts, and performance to-date. Through this process they are able to maintain a relatively current estimate of the Projects' ultimate costs.

Additionally, staff from the Project Controls and Integrated Supply Chain Management organizations are assigned to monitor the activities of outside contractors to make certain that they are delivering the agreed upon scope and

^{2008,} Pg. 33.

⁵ "Dashboard tab – Guidelines," <u>Project Dashboard Template 2-14-2008 – Guidelines & Definitions.</u>

terms. At times both projects are periodically asked to report their status to
FPL's senior executive team. These reports typically include the Projects'
ability to meet their budget projections.

- 4 Q. What processes does FPL have in place to manage higher than expected costs?
- A. In the event actual expenditures significantly exceed the Projects' budgets, the 6 project teams are responsible for immediately identifying the root cause of 7 these increases and for developing a strategy to mitigate future increases. 8 9 Once identified, the mitigation strategy or corrective action is maintained on a consolidated list of corrective actions for each project that is maintained by 10 the respective project managers. In each case, the corrective action cannot be 11 removed from this list until the employee responsible for its implementation 12 signs-off on the corrective action. The EPU Key Performance Indicators and 13 PTN 6 & 7 Project Dashboards are also tracked over time to establish trends 14 that monitor performance and make certain the corrective actions are 15 16 implemented appropriately.
- Q. Are there any other tools utilized by FPL to make certain that robust cost estimates are developed or to control the project's projected costs?
- Yes, FPL has selected a relatively viable technology in the Westinghouse AP

 1000 reactor design and developed project execution plans from which to

 effectively manage the projects. As noted in the testimony of FPL witness

 Scroggs⁶, the AP 1000 has been selected by many of the companies who are

 currently seeking to develop new nuclear power facilities. Thus, FPL should

be able to leverage the experience of those companies in developing its own cost estimates. FPL's project execution plans for the Projects are also important for developing the scope of work and resource needs. With regard to the PTN 6 & 7 project, FPL has required Bechtel to develop a similar plan for their completion of the project's COLA⁷. Ultimately these plans will serve as a benchmark with which to measure performance.

A.

Project Schedule and Management

9 Q. What mechanism governs the process for establishing project schedules?

10 A. Similar to the cost estimation procedure, the method for establishing project
11 schedules is governed by corporate procedures that define the process for
12 developing each schedule⁸.

Q. Please describe the process for establishing project schedules as defined in the corporate procedures.

While each project team or business unit may develop its own specific procedures or instructions, the method for developing the Projects' schedules is similar to that employed when developing the Projects' budget. The process begins by defining the projects' scope as best as possible given the development status of the projects. The scope is then broken into individual activities and productivity and man-hour estimates are used to develop an

⁶ Direct Testimony of Steven D. Scroggs, Docket No. 080009-EI, Pg 6.

⁷ Bechtel Project Execution Plan For the Florida Power and Light Turkey Point Combined License Application Project, Bechtel Job No 25409.

FPL Extended Power Uprate Project Instruction – 310, Rev 0.

estimated schedule for each activity. Each activity schedule is then consolidated into an overall project schedule.

3 Q. What tools does FPL use to develop and manage the Projects' schedules?

A. FPL relies upon an industry standard software application developed by 4 Primavera Systems Inc. Specifically, Primavera "provides Critical Path 5 Method Scheduling ("CPM"), which uses the activity duration, relationships 6 7 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 8 9 project or an intermediate deadline, and how these activity schedules may affect the completion of the project⁹." This software is used throughout the 10 nuclear power industry to schedule refueling outages and major capital 11 projects. In addition, the CPM is a commonly cited scheduling methodology 12 for the civil engineering field as a whole¹⁰. 13

14 Q. Is it your opinion that the EPU and PTN 6 & 7 project teams have
15 followed this procedure and utilized the Primavera software to manage
16 their projects' schedules?

A. Yes, my review indicates the project teams have followed this procedure and moreover are appropriately relying on the Primavera software to manage their existing development schedules. Further, as the Projects are still very much in the development stage, it is my understanding that the schedulers assigned to

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www.primavera.com/products/p6/planning man.asp. April 19 2008.

Oberlender, Garold D., Project Mangement for Engineering and Construction, Mcgraw-Hill, 2000, Pg. 143.

Sears, S Keoki, Glenn A. Sears and Richard H. Clough, <u>Construction Project Management: A Practical Guide to Field Construction Management</u>, 5th Edition, John Wiley & Sons, Inc., Hoboken, NJ, 2008, Pg. 21.

	each project team are currently adjusting certain activities within the schedule
	to maximize the flexibility of the schedules.
Q.	How do the EPU and NTP 6 & 7 project teams monitor the performance
	of each activity that is currently underway?
A.	As discussed earlier in my testimony, the EPU project team is required to
	prepare weekly, monthly and annual reports, while the NTP 6 & 7 project
	team prepares monthly and annual reports. Included among those reports is a
	discussion of the project staffs' ability to meet their projected schedules. A
	six week look forward report is also used to identify key upcoming milestones
	and make certain the relevant project team members are focused on meeting
	their respective deadlines.
	Additionally, for the PTN 6 & 7 project, the Project Controls Manager
	prepares an activity-by-activity project performance indicator report that
	tracks the status of each of the COLA's sections and the vendor's ability to
	meet the project's schedule. This report uses the following color-coded
	system to indicate the sections status relative to the original schedule.
	• Green if the activity is less than or equal to 5 days behind
	schedule
	• Yellow if the activity is greater than 1 week but less than 2
	weeks behind schedule
	• Red if the activity is greater than or equal to two weeks behind
	schedule.

1	Q.	How does FPL respond when an activity is determined to be behind
2		schedule?
3	A.	In the event that an EPU activity falls behind schedule, the EPU project team
4		begins a corrective action program to identify the root cause of the delay and
5		to develop a mitigation strategy to bring the activity back on schedule. This
6		corrective action is added to a consolidated list of corrective actions
7		maintained by each project manager and a project team member is assigned to
8		implement the corrective action to bring the activity back on-schedule. A
9		corrective action cannot be removed from this list until the project team
10		member responsible for its implementation has indicated that the corrective
11		action has been satisfactorily implemented. The Project Manager is
12		responsible for administering the corrective action process.
13		
14		The PTN 6 & 7 project team includes a dedicated Integrated Supply Chain
15		Manager. This employee is responsible for working with the outside
16		contractors to meet deadlines and ensuring the vendors comply with the terms
17		of their contracts. In the event that an activity falls behind schedule, the
18		Integrated Supply Chain Manager and the Project Manager work with the
19		vendor to bring that activity back on-schedule.
20		
21		Contract Management and Administration
22	Q.	Please explain why it was important to review FPL's contract

management and administration procedures.

1	A.	rol large projects such as the EPO and PTN 0 & 7 projects, PPD will rely on a
2		large number of outside vendors to complete the work. Thus, a large portion
3		of the cost associated with developing and constructing the facilities will be
4		paid to parties outside of FPL. This represents a significant risk to both
5		Projects' cost estimates and schedules.
6	Q.	Do you believe FPL should avoid using outside vendors for the EPU and
7		PTN 6 & 7 projects to eliminate this risk?
8	A.	No, I do not. It is a standard industry practice to use outside vendors to
9		complete the activities associated with these types of projects. The use of
10		outside vendors allows FPL to retain the services of specialists who are
11		experts in their fields without having to invest the time and resources to
12		recruit these experts and maintain a sizeable workforce on FPL's payroll.
13		Instead, it is important that FPL have robust procedures in place for obtaining
14		services from, and managing relationships with, outside vendors.
15	Q.	Does FPL have specific corporate procedures and instructions in place to
16		adequately manage vendors' contracts?
17	A.	Yes, FPL has specific procedures or instructions that appear to cover every
18		stage of contract development including:
19		Selecting and auditing appropriate vendors
20		Maintaining and administering an approved vendor list
21		• The process for issuing a Request for Proposal ("RFP") to
22		prospective vendors

1		• Contract negotiations, including the process for making
2		certain that the appropriate legal, integrated supply chain
3		management and subject matter personnel are included in
4		the negotiations
5		• Issuing a purchase order to commence work under a
6		contract
7		The means for managing changes in scope and/or budget
8		• The inspection of certain deliverables under the contract
9		terms to make certain they are adequate.
10		
11	Q.	Please briefly describe the contract management process as implemented
12		by FPL.
13	A.	FPL's contract management process begins by approving or qualifying a
14		vendor onto an approved vendor list. In order to be qualified, the vendor
15		should demonstrate the ability to deliver on the terms of its contracts and to
16		deliver goods and services which are sufficient for their use within FPL's
17		facilities. This approved vendor list is maintained by the integrated supply
18		chain management organization.
19		
20		Once a need for an outside vendor is determined, FPL considers the various
21		suppliers who are capable of performing the services. If more than one
22		vendor is capable of providing the service, FPL will typically issue an RFP to
23		those vendors. The RFP contains sufficient detail for the bidder to submit its

qualifications and proposed pricing and terms and often offers an opportunity to meet with the Company. In the event that the RFP requires further clarification, FPL will amend the original RFP and provide this amendment to all potential vendors. This is done to preserve a level playing field throughout the vendor selection process. Once FPL has received proposals from each of the prospective vendors, FPL uses a scorecard approach to evaluate the proposals. This scorecard is completed by various groups from within FPL depending on the service being sought, but may include departments such as engineering, integrated supply chain management, legal, and/or site operations. Once the Company has completed its evaluation of the proposals, FPL will seek to negotiate a definitive agreement with the winning vendor. The process of negotiating a definitive agreement includes several functions from within FPL, such as the integrated supply chain management, legal and risk management functions, among others. Finally, in order for the vendor to proceed with the scope of work defined by the contract, FPL will issue a purchase order ("PO") allowing the contractor to proceed with either the entire scope of work or on a more limited basis as project needs dictate.

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In the event that FPL is unable to locate more than one vendor that is qualified to perform the work sought by the project team, the Company will seek a sole or single source contract with this vendor. A sole source contract refers to instances where only one provider is able to perform the work. A single source contract refers to instances where a provider is selected by FPL without

issuing a competitive solicitation. Prior to entering into a single source agreement however, the project team should first complete a Single or Sole Source Justification Memorandum that explains in sufficient detail why a single source contract is being pursued. Acceptable reasons for a single source contract may include the original equipment manufacturer is the only qualified vendor, or prior high quality service and competitive pricing from a specific vendor. In the event that a sole or single source contract is sought, additional approvals should be obtained before executing in the agreement.

A.

Q. What is your opinion regarding the use of sole or single source contracts in the nuclear industry?

In my experience, the use of sole or single source contracts is frequently unavoidable, but any risk from using such contracts can be effectively controlled. In general, the United States faces a shortage of qualified vendors for many nuclear-related or safety-related activities. This lack of vendors stems from the nearly 30 years that have passed since a new nuclear power facility has been ordered, and the aging, consolidation and contraction of industry participants. As a result, graduation rates in nuclear engineering programs have steadily declined since the 1970s. This has led to increased competition for qualified nuclear engineers and increased labor costs, which has led some vendors to give up their nuclear-related certifications. Further, the NRC requires vendors performing safety-related work to maintain or adopt quality assurance programs which must be maintained at a high cost. While these programs certainly are necessary to promote safe and reliable operation

of nuclear power facilities, their costs, along with an increasing number of reactors that have ceased commercial operations in the last 20 years, have caused some vendors to exit the nuclear service industry. As a point of comparison, in 1980 there were more than 500 companies certified to perform nuclear-related work; today there are approximately 100 companies with such certifications¹¹.

Q. Please provide an example of how contract review processes have been implemented for the PTN 6 & 7 project.

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The contract with Bechtel Corporation for the preparation of the PTN 6 & 7 COLA is currently the highest-value contract associated with the project. Work on this contract began in June, 2007 when FPL began evaluating potential vendors capable of completing this work. At that time, it was determined that Black & Veatch and Bechtel were the most qualified vendors based on their experience completing COLAs for other nuclear power project developers. FPL then began a process to develop an RFP based on feedback from other project developers that completed similar processes and from the NuStart Consortium. Specifically, the Company sought feedback from other utilities as to what should be included in the RFP to obtain timely and adequate vendor responses. Based upon this information, FPL issued a RFP to Black & Veatch and Bechtel on July 13, 2007. Two amendments were subsequently issued to the prospective vendors on July 13, 2007 and July 25, 2007. These amendments narrowed FPL's likely choice of reactor technologies to the ESBWR and the AP 1000, provided additional

¹¹ Hansen, Teresa. "The Nuclear Renaissance's Future," <u>Power Engineering.</u> September 2007.

1	documentation and extended the original bid submission deadline from
2	August 3, 2007 to August 17, 2007. On August 17, 2007 FPL received
3	detailed proposals from both Black & Veatch and Bechtel. FPL then
4	evaluated the proposal using evaluation "scorecards" that listed certain criteria
5	and were distributed to internal subject matter experts responsible for
6	reviewing the proposals. The criteria included in the evaluation scorecards
7	included:
8	• Quality and detail of the response
9	• Experience, including the specific experience of the proposed
10	project team
11	Proposed sub-contractors
12	• Pricing
13	Upon completion of this evaluation, FPL established a negotiation team that
14	negotiated with Bechtel, the winning vendor, to finalize a definitive
15	agreement. This agreement was executed on November 16, 2007 and a
16	purchase order to commence work was issued on that same day.
17	
18	Since issuing the purchase order, FPL has issued three modifications for
19	changes to the project's scope and budget. These changes have generally
20	been associated with a delayed start to the project (the original proposal had
21	anticipated work commencing in October 2007), site conditions that
22	necessitated the use of additional equipment and an FPL decision to have
23	Bechtel investigate multiple cooling water options. In each case, however,

1		FPL has used a process to review Bechtel's proposed budgets for these
2		changes. This process includes the Project Controls Manager who reviews the
3		proposed budget with the various subject matter experts to determine the
4		reasonableness of the budget. Once a final budget has been agreed upon, the
5		change of scope is submitted for approval and responsibility transfers to the
6		Integrated Supply Chain Manager who makes certain that proper authorization
7		for the changes are obtained and issues the appropriate purchase order.
8	Q.	Please provide an example of how contract review processes have been
9		implemented within the EPU project team.
10	A.	In contrast to the PTN 6 & 7 project, whose largest contract was the result of a
11		competitive bidding process, the EPU project has been forced to rely heavily
12		upon sole or single source contracts. This is a common issue with power
13		uprate projects because the work is being implemented at an existing facility.
14		In this case, the Original Equipment Manufacturer ("OEM") is often best
15		positioned or the only vendor capable of completing the work necessary to
16		execute the project, alternate vendors prior experience with the existing
17		nuclear facility.
18		
19		Consistent with FPL's GOs and the nuclear divisions NAPs, FPL provided me
20		with sole source or single source justifications for the following vendors:
21		Shaw Stone & Webster
22		 Westinghouse

• Siemens

Golder Associates 1 2 Areva In each case, these sole or single source justifications followed a review of the 3 prospective vendors, if any others were available, and were completed prior to 4 entering into any definitive agreements. In addition, each sole or single 5 source justification completed by the EPU project team required approval by 6 the Vice President of Technical Services prior to executing a definitive 7 agreement. 8 Are there other tools which FPL uses to manage and administer contracts 9 Q. and relationships with outside vendors? 10 A. Yes, first, FPL has employees assigned to each project team that previously 11 worked for the major vendors involved with each project. These employees 12 have unique insight into the vendors' processes and practices that will help 13 FPL better manage these vendor relationships. These employees are also able 14 to assist FPL in their negotiations with these vendors. 15 16 Second, for safety-related work completed by either project team, the NRC 17 requires that the vendors implement a Quality Assurance Program ("QAP") or 18 adopt FPL's OAP¹². Compliance with the QAP will make certain that the 19 materials and services provided by the vendor for use in FPL's nuclear power 20 facilities meet the standards required by the contracts and applicable 21 regulations. The programs also provide for an employee concerns program 22

¹² 10 CFR 50 10 CFR 52

that encourages Company and vendor employees to report concerns on a strictly confidential basis to the NRC. These programs also provide FPL an opportunity to inspect the vendor's record keeping procedures and work prior to delivery of the final product.

What corrective action mechanisms does FPL have in place to correct concerns that may arise with outside vendors?

FPL has included Project Controls and Integrated Supply Chain Management staff on both project teams. These employees are responsible for monitoring vendor performance to identify concerns before they affect the Projects' critical path schedules and budgets. Once issues are identified, these employees are tasked with working with the vendor to develop a corrective action plan that will help to mitigate any future impact on the project. In addition, when negotiating vendor agreements, FPL seeks a set of terms and conditions that will give the Company flexibility to terminate the contract should the vendor fail to perform as required.

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A.

Internal Oversight Mechanisms

18 Q. Please explain how the Projects are currently managed.

The EPU and PTN 6 & 7 projects are currently managed by different divisions of the Company. The EPU project is being developed by FPL's Nuclear Division, whereas the PTN 6 & 7 project is being developed by a combined team of FPL's Project Development group and it's Engineering Construction Services Division. FPL chose to separate these projects for two reasons.

First, this separation allows the organization best suited to developing each project to focus on their respective work. For instance, the EPU project involves coordinating work activities with the existing plants' operations and integrating the project schedule into the plants' previously scheduled refueling outages, therefore it is necessary to use project personnel that are well acquainted with site personnel and plant operations. The PTN 6 & 7 project requires a focus on new project development and construction management that is best handled by those who have recently been involved in large energyrelated construction projects. Second, by dividing the projects between FPL's Nuclear and Construction Divisions, FPL is responding to NRC recognition of the potential to distract employees at the existing facilities by diverting their attention to the new construction projects¹³. Nonetheless, there is some crossover between the two projects as certain of the employees working on the PTN 6 & 7 project have experience with the Nuclear Division and its procedures.

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Q. Please describe the reporting relationships of each of the EPU and PTN 6

& 7 project teams.

Ultimately both project teams report to James Robo, Chief Operating Officer of FPL Group. The reporting relationship below that level is quite different for the Projects. In the case of the EPU project, the project team reports to the Vice President – Technical Services and to FPL Group's Chief Nuclear Officer. The PTN 6 & 7 project team reports to the President of Florida

¹³ Remarks of NRC Commissioner Jeffrey S. Merrifield at the 2001 ANS Annual Meeting.

- 1 Power & Light and the Senior Vice President of Engineering Construction
- Services, who both report directly to James Robo. 2

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3 Q. What processes are in place to keep each level of the FPL organization up-to-date regarding the Projects' status?

5 A. Both the EPU and NTP 6 & 7 project teams are responsible for preparing periodic management updates. As discussed earlier in my testimony, the 6 7 project teams are responsible for preparing periodic status reports that convey 8 the Projects' progress to-date and their performance relative to their original

schedule and budget. These reports are presented to senior management for 9

their review. In addition, the project teams routinely provide senior 10

management with presentations that cover the Projects' progress and 11

performance as well as identifying crucial issues or decisions which require

13 the attention of the senior management team.

Q. Has either of the Projects completed an internal audit?

Since the Projects are at such an early stage in their development, neither project has completed an internal audit. The EPU project recently began an internal audit and a final audit report is expected in June 2008. The PTN 6 & 7 project is expected to begin an internal audit this summer and a final report is expected in fall 2008. These audits will help to make certain that the project teams are complying with established accounting practices and Sarbanes-Oxley reporting requirements. In the interim, the Projects will utilize Project Controls Managers to perform similar duties on an on-going basis. In the case of the PTN 6 & 7 project, this position has already been

1		filled. A similar position has been posted within the EPU project team and is
2		expected to be filled imminently.
3	Q.	What other internal oversight mechanisms are employed by FPL to
4		manage the Projects?
5	A.	In addition to the various mechanisms described above, the Projects should be
6		reviewed by FPL's Corporate Risk Committee. These reviews are expected to
7		take place just prior to the achievement of major project milestones. The
8		committee consists of employees who hold the title of director or above are
9		tasked with identifying key project risks while proposing mitigation strategies
10		based on the committee members' experience. At times, however, the
11		committee does not propose risk mitigation strategies, but may request that the
12		project teams perform further analysis to study options that may help to
13		mitigate identified risks.
14		
15		External Oversight Mechanisms
16	Q.	What is meant by external oversight mechanisms?
17	A.	An external oversight mechanism is a process by which the project teams
18		avail themselves of outside subject matters experts in order to introduce
19		lessons learned from other projects at the Company and to improve FPL's
20		project development program procedures.
21	Q.	Why are strong external oversight mechanisms important for successful
22		project development programs?

1 Α. While not critical to the success of a project development program, the application of select external oversight mechanisms shows that the Company 2 has a strong commitment to becoming a learning organization. In other 3 words, the organization is committed to implementing industry best practices to help prevent issues from reoccurring to mitigate the resultant cost increases and schedule delays. Project development of nuclear power facilities is a dynamic process that can change on a frequent basis, thus, it is important to seek constant improvement of the Company's procedures and to learn from the practical experience of others involved in the industry.

10 Q. Has FPL shown a commitment to external oversight?

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FPL has retained the services of outside expert advisors, where 11 A. 12 appropriate, to review their processes and provide recommendations for continuous improvement. FPL's commitment is also demonstrated by the 13 Company's membership in industry groups such as the Nuclear Energy 14 15 Institute and in the NuStart project development consortium. While these 16 groups do not provide oversight of the Projects, they give FPL access to the 17 experience of other nuclear power project developers.

18 Q. What outside experts has FPL retained to review its processes for the 19 Projects?

20 Α. FPL has retained the engineering firm MPR Associates and Concentric to 21 review their processes. Concentric's work is detailed in this testimony. MPR was retained to review FPL's reactor technology selection process and also 22

provided input on how the Company could improve the process over a period of several months beginning in the fall of 2007.

A.

Conclusions

- 5 Q. What have you concluded from your review of FPL's project
 6 management processes?
- A. I have found that the processes used by FPL to study the feasibility, estimate costs, and manage both the EPU and PTN 6 & 7 projects are reasonable, and meet or exceed the norms for these practices as used by other nuclear power industry participants. This opinion is based on my more than 30 years of experience in the utility industry and my recent experience assessing the project management capabilities of another major nuclear project developer in the United States.
- Q. What conclusions specific to the EPU project have you developed as result of your review?
 - I have found that the EPU practices are specifically focused on managing risk and cost, and include appropriate levels of senior management oversight. In addition, the practices have been applied in a manner that is generally consistent with FPL's policies and procedures. These practices are designed to benefit from lessons learned and to use actual experience to help prevent reoccurring issues from adversely affected the project through a corrective action program. More specifically, this corrective action program appropriately assigns responsibility for ensuring that the corrective actions are

- 1 implemented and it is applicable to contractors and FPL employees alike.
- 2 Further, the EPU projects use a cost estimating procedure that is robust and
- based upon obtaining budgetary quotes from vendors while leveraging FPL's
- 4 own very recent power plant construction experience.
- Q. Have you developed any specific recommendations for the EPU project 5
- team? 6

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- 7 A. No, I have not at this time.
- 8 Q. What conclusions specific to the PTN 6 & 7 project have you developed as
- 9 a result of your review?
- A. Similar to the EPU project, I have found that the PTN 6 & 7 project practices
- 11 are specifically designed to address project risks and costs. The PTN 6 & 7
- 12 project practices are also aimed most directly at utilizing a thoroughly
- 13 documented process that maintains the option to build new nuclear capacity,
- 14 but does not commit the Company to constructing a new nuclear power
- 15 facility if market conditions should change. I have also found that while the
- 16 current PTN 6 & 7 project cost estimation process is not yet as robust as that
- 17 developed for the EPU project, it is completely consistent with the extremely
- long interval between initial project planning and the beginning of 18
- construction, and meets or exceeds industry norms for a project at this stage of 19
- 20 development. Finally, the PTN 6 & 7 project appears to have appropriate
- 21 levels of senior management oversight.
- 22 Q. Do you have any specific recommendations for the PTN 6 & 7 project
- team? 23

- 1 A. No, I do not at this time.
- 2 Q. Does this conclude your direct testimony?
- 3 A. Yes, it does.

BY MR. ANDERSON:

- Q. Have you prepared a summary of your testimony, Mr. Reed?
 - A. Yes, I have.
- Q. Would you please provide your summary to the Commission?
- A. Certainly. Good afternoon. As I said, my name is John J. Reed, and I'm the chief executive officer of Concentric Energy Advisors. I have over 30 years of experience in the energy industry, and I've provided expert testimony on a wide variety of economic and financial issues related to the energy and utility industry, including nuclear construction projects. My prefiled testimony presents a list of 16 existing nuclear units that I provided consulting services to.

 As well, there are nine proposed nuclear units that I'm currently providing services for.

The purpose of my testimony is to review the processes and procedures used by FPL to manage the development and implementation of the EPU projects and the new nuclear projects at Turkey Point. My testimony presents my opinion as to the reasonableness of these policies and procedures relative to other nuclear generating facilities currently being developed in the United States. I have not reviewed and don't offer an

opinion as to the reasonableness of the specific costs of which FPL requests recovery in this proceeding.

As part of my firm's work on this matter, my staff and I reviewed thousands of documents and interviewed several FPL members in order to evaluate FPL's project management capabilities. Specifically, 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.

The six elements were reviewed for the following five processes: Cost estimation and budgeting, schedule management, contract management and administration, internal oversight, and external oversight.

Within the cost estimation and budgeting process, we have concluded that 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 in developing its estimates. These procedures outline the process for cost estimation on a basis that is well

within nuclear industry standards and viewed as being the most accurate means of developing a preliminary cost estimate. The FPL cost estimates have also included a reasonable contingency factor that is consistent with industry guidelines. Concentric has also confirmed the use of a process to track actual expenditures relative to budget on a weekly, monthly, and annual basis.

Within the schedule management function, FPL has specific corporate policies for developing project schedules and has complied with those procedures in developing the extended power uprate and new nuclear project schedules. These procedures use industry standard critical path scheduling methods, and FPL relies upon industry standard software to optimize each schedule and to define the relationship between activities. The EPU projects track their schedule performance on a weekly, monthly, and annual basis, while the Turkey Point new nuclear project currently tracks progress on a monthly and annual basis.

We have also concluded that FPL has a robust process for initiating corrective action mechanisms when a project falls behind schedule.

Within the contract management function, we noted that a large portion of the cost of both projects will be associated with contract management and the

administration of outside vendors. FPL also has very robust procedures that appear to cover every facet of contract development, and FPL has complied with those procedures.

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FPL has a preference for competitive bidding where that is possible and where it is in the best interest of the company and its ratepayers. For those instances where the company has not utilized competitive bidding, it has valid, documented reasons for doing so.

With regard to the internal and external oversight mechanisms, FPL has established both internal and external oversight mechanisms to gauge the project performance and to institute best practices on a going-forward basis. This includes the development of executive reporting requirements, internal audit requirements, and a corporate risk committee which are responsible for reviewing both projects. The company has also relied on outside resources to bolster its internal oversight, including two reviews of its project management practices.

My conclusions are, first, that I 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 senior level oversight of the

projects as well as including internal audits to ensure 1 2 compliance with all of the company's policies. That concludes my summary. 3 MR. ANDERSON: Mr. Reed is available for 4 cross-examination. 5 6 CHAIRMAN CARTER: Thank you. One moment. 7 did promise the court reporter a break. Do you feel 8 like you can go on for another hour? We've got a good 9 streak going here. 10 Okay. Let's continue. Mr. McGlothlin. 11 MR. McGLOTHLIN: I will reserve my questions 12 until he comes back on rebuttal. 13 CHAIRMAN CARTER: Mr. Twomey? 14 MR. TWOMEY: No questions. 15 MR. McWHIRTER: Just a couple. 16 CROSS-EXAMINATION BY MR. McWHIRTER: 17 Are you familiar with the cost of nuclear 18 plants around the world as opposed to around the United 19 20 States? 21 Α. In general terms, yes. 22 0. How do FP&L's nuclear costs compare to 23 building a nuclear plant in France? The nuclear plants that are built in France 24 Α. use a different technology. It uses what's called the 25

Areva EPR technology currently. That technology, which 1 2 is more of a passive safety system as opposed to active safety systems in the AP1000, results in it having a 3 4 different cost structure. In general, the most recent estimate for an 5 6 EPR is that it's about \$4,500 per kW for constructions 7 costs today in 2008 dollars. That compares of course, 8 to the most recent estimate for FPL of 3,100 to 4,500. 9 So the EPR is at the upper end of that range in France. 10 MR. McWHIRTER: Thank you. 11 CHAIRMAN CARTER: Thank you, Mr. McWhirter. 12 Staff? 13 MR. YOUNG: No questions. 14 CHAIRMAN CARTER: Commissioner Skop, you're 15 recognized. 16 COMMISSIONER SKOP: Thank you, Mr. Chairman. 17 Just one quick question, and this is in the witness's 18 professional opinion. Does he believe that FPL's 19 existing project management, risk management, and cost estimation capabilities are adequate to move forward at 20 this time? 21 THE WITNESS: Yes, I do. They are as good as 22 23 any we have seen in the industry for those companies that are currently pursuing new nuclear programs. 24

Thank you.

COMMISSIONER SKOP:

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CHAIRMAN CARTER: Commissioner Argenziano.

COMMISSIONER ARGENZIANO: Thank you. On the same line, did you find any areas that could be improved as far as being more extensive and detailed on the internal controls and project management controls that would better help in the adequacy and effectiveness of the report?

THE WITNESS: We have identified, and the company agrees with, the need for additional controls going forward. As the programs increase their level of funding and their level of activities, what has worked well in the past won't be adequate to cover what's happening in the future. So in terms of adding staff, and internal controls is one of the areas that we both recognize need to have staff added, the company is in agreement with us that they should add staff there and they should expand that function.

So, yes, we did identify the need for additional resources in that area on a going-forward basis. What has happened is fully adequate, but the company fully agrees with that assessment that additional resources are needed there, especially on Turkey Point as the project goes forward.

COMMISSIONER ARGENZIANO: Okay. Thank you. CHAIRMAN CARTER: Thank you. Commissioners,

1	anything further?
2	Mr. Anderson.
3	MR. ANDERSON: We have no questions.
4	CHAIRMAN CARTER: Okay. We have an exhibit
5	marked for identification, number is 26 and 27?
6	MR. ANDERSON: Yes, sir.
7	CHAIRMAN CARTER: Any objections? Without
8	objection, show it done. They're moved into evidence,
9	Exhibits 26 and 27.
10	(Exhibits Number 26 and 27 were admitted into
11	the record.)
12	CHAIRMAN CARTER: And this witness will be
13	available for rebuttal; correct?
14	MR. ANDERSON: Yes, sir.
15	CHAIRMAN CARTER: Thank you. You're excused,
16	Mr. Reed, at this point in time.
17	And now, Mr. McGlothlin, you're recognized,
18	sir.
19	MR. McGLOTHLIN: OPC calls Dr. Jacobs.
20	CHAIRMAN CARTER: Okay. Dr. Jacobs, William
21	Jacobs.
22	Okay.
23	MR. McGLOTHLIN: It appears he has stepped
24	away for, I'm sure, just for a moment.
25	CHAIRMAN CARTER: Okay. All right. Then I

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guess the court reporter gets her break after all. I'm looking at the clock on the wall to my right. We'll come back at 15 after.

(Short recess.)

MR. McGLOTHLIN: Before we ask Dr. Jacobs to

MR. McGLOTHLIN: Before we ask Dr. Jacobs to summarize his testimony, there's one housekeeping matter I would like to bring to the Commissioners' attention.

CHAIRMAN CARTER: You're recognized.

MR. McGLOTHLIN: When we submitted the prefiled testimony, most of it was redacted because FPL at the time was claiming confidentiality for many of the exhibits and the discussion of those exhibits. Very recently, FPL withdrew its claim, and I'm informed that staff has provided to the Commissioners somewhere in your packets a new version of that testimony and exhibits that is largely unredacted at this point, so it should be far more accessible to you than it was previously.

CHAIRMAN CARTER: Commissioners, it's the one that looks like this.

Thank you, Mr. McGlothlin. You may proceed. Thereupon,

WILLIAM R. JACOBS, JR., Ph.D.

was called as a witness for the citizens of the State of

Florida and, having been first duly sworn, was examined

and testified as follows: 1 DIRECT EXAMINATION 2 BY MR. McGLOTHLIN: 3 Q. Please state your name and business address. 4 5 Α. William R. Jacobs, 1850 Parkway Place, 6 Marietta, Georgia. Dr. Jacobs, do you have before you a document 7 Q. dated July 30, 2008, and captioned the revised direct 8 testimony and exhibits of William R. Jacobs, Jr.? 9 Yes, I do. 10 Did you prepare that prefiled testimony on 11 12 behalf of the Office of Public Counsel? 13 Α. Yes. With respect to the portions of testimony that 14 Q. 15 relate to your review and comments on FPL's pending 16 request, do you have any changes, additions or correction to make to that testimony? 17 18 No, I do not. 19 Do you accept the questions and answers Q. contained in this prefiled document as your testimony 20 21 today? 22 Α. Yes. 23 MR. McGLOTHLIN: Earlier Mr. Burgess asked 24 that the prefiled testimony be incorporated into the record as though read. It wasn't clear to me whether 25

there was effort to pull out only the PEF-related 1 2 portions, but in an abundance of caution, I request that the testimony be inserted at this point. 3 4 CHAIRMAN CARTER: I like your style. 5 testimony will be entered into the record as though 6 read. 7 BY MR. McGLOTHLIN: 8 Q. Dr. Jacobs, did you also prepare the exhibits 9 to the testimony that were marked as WRJ-2 through 8? 10 Α. Yes. 11 MR. McGLOTHLIN: Commissioners, those have now been identified as Exhibit Numbers 29 through 35. 12 13 CHAIRMAN CARTER: It will be 28 through 35. 14 MR. McGLOTHLIN: Twenty-eight, yes. 15 BY MR. McGLOTHLIN: 16 Q. Have you prepared a summary of your testimony as it relates to Florida Power & Light Company? 17 18 Yes, I have. 19 Q. Please provide that to the Commissioners. 20 A. Okay. Good afternoon again, Mr. Chairman and 21 Commissioners. I will now summarize my testimony as it relates to FPL's pending request. 22 23 Earlier I described my view of the analysis 24 needed to identify the incremental costs that requesting 25 utilities should be required to perform to demonstrate

they are adhering to the limited scope of the rule as it relates to uprate projects. That summary applies to FPL as well as PEF, and I will not repeat it here.

The second issue that relates to FPL's request involves FPL's frequent decisions to award contracts without first seeking competitive bids. Although FPL's management procedures stress a preference for competitive bidding, to date, FPL has used sole or single source contracts extensively in both the extended uprate and the Turkey Point 6 and 7 projects.

A sole source contract is one in which FPL regards the contractor as the only available provider of that service. A single source contract is one in which other providers are available, but the utility decides that a particular contractor should be selected without first soliciting competitive bids.

In several cases, FPL cited the need to meet a project schedule as justification for using the sole or single source contracts. The use of schedule pressure to justify using a single or sole source contract is not allowed per FPL's nuclear procedure, NP 1100.

Further, FPL adopted a casual approach to the preparation of the justification that is intended to serve as the principal basis for a decision to depart from the standard of competitive bidding. The language

in many of FPL's justification memoranda is so similar that it appears their preparation is a matter of rote rather than a specific individual analysis.

Specifically, the phrase, "Performing this work scope with another vendor would not be cost-effective or prudent from a schedule perspective," appears in memoranda time and again. Among others, this justification appears in the memorandum prepared by FPL to justify awarding the contract to Westinghouse without seeking competitive bids.

When we asked about the Westinghouse situation in discovery, FPL said it would be required to change fuel vendors if it used any contractor other than Westinghouse. That is a very different consideration than anything contained in the standardized language in the justification memo. The disconnect between the reason given in the required justification memorandum and the very different reason later given by FPL illustrates the casualness to which I refer.

Because the memoranda are the principal instruments on which senior management bases the decision to require or not require bids, they should be fully developed. The fact that they are not means FPL is not adhering to its own management procedures. At this early stage of a nuclear project, it is important

that management establish high expectations that procedures for procurement and project management be followed. If management does not set high standards in this area, the outlook for a successful project is diminished.

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Next, in my opinion, many of the justifications do not demonstrate that the costs of these single or sole source contracts are reasonable. In my testimony, I provide an example of a \$100 million contract to replace the low pressure turbine rotors at St. Lucie. This is part of the St. Lucie uprate project. The project was awarded to Siemens on a single source basis. When asked to provide documentation demonstrating that the costs of the project were reasonable, FPL provided a single page, "back of the envelope" type of analysis that used five-year-old bids to another company to demonstrate the reasonableness of In my opinion, the documentation offered by the costs. FPL is inadequate to prove that the costs of a contract of this magnitude entered into without bids are reasonable.

To emphasize the importance of following the requirements for single and sole source contracting and the need to demonstrate the reasonableness of the costs associated with these contracts, I recommend that the

Commission disallow FLP's return on the equity portion 1 of the investment associated with the low pressure rotor 2 3 contract. Alternatively, the Commission could withhold a portion of the requested carrying charges associated 4 with the low pressure turbine contract unless and until 5 6 FPL can demonstrate the costs are reasonable in the next 7 hearing cycle. 8 If the Commission does not wish to impose 9 financial penalties because this is the first round of 10 the NCRC hearings, at a minimum, the Commission should 11 place FPL on notice that it intends to require a 12 rigorous and detailed justification for any departure from the competitive bidding process in future 13 14 proceedings. 15 This concludes my opening statement. 16 MR. McGLOTHLIN: Dr. Jacobs is available for 17 cross. CHAIRMAN CARTER: Thank you, Mr. McGlothlin. 18 Mr. McWhirter? 19 MR. McWHIRTER: No questions, sir. 20 21 CHAIRMAN CARTER: Mr. Anderson. MR. ANDERSON: 22 Thank you. 23 CROSS-EXAMINATION 24 BY MR. ANDERSON:

Q. Good afternoon, Dr. Jacobs.

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Τ	A.	Good afternoon.
2	Q.	My name is Bryan Anderson. I'm an attorney
3	represent	ing Florida Power & Light company.
4		Your testimony discusses sole source and
5	single so	urce contracting; is that right?
6	Α.	Yes, sir.
7	Q.	Your firm, GDS, previously did work for the
8	Office of	Public Counsel?
9	Α.	Yes, sir.
10	Q.	That was back in the mid-1990s?
11	A.	That's correct.
12	Q.	For this project, you were telephoned by
13	Mr. McGlo	thlin; is that right?
14	A.	For this particular project?
15	Q.	Yes.
16	A.	Yes.
17	Q.	He described the nuclear cost recovery rule
18	project?	
19	A.	Is that a question?
20	Q.	Yes.
21	A.	Yes.
22	Q.	Did he ask you if GDS had the time and
23	expertise	needed to assist OPC?
24	Α.	Yes, he did.
25	Q.	Your firm did not respond to a competitive
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2	consulting firms, did you?
3	A. No, it did not.
4	Q. OPC hired GDS with a single source contract;
5	isn't that right?
6	A. I believe that's true. I don't know what
7	evaluation process OPC went through to reach that.
8	Q. Was it
9	A conclusion.
10	Q. Go ahead. I'm sorry.
11	A. To reach that conclusion, but as you've
12	described it, that is how we were hired.
13	Q. Was it cost-effective for OPC to hire your
14	firm?
15	A. I believe it was, yes.
16	Q. Is cost-effectiveness a reasonable factor to
17	consider in assessing a single or sole source contract?
18	A. Yes, it clearly is.
19	Q. Your firm has the right experience to be
20	retained for this project; is that right?
21	A. That's correct.
22	Q. Is a firm's experience a reasonable factor to
23	consider in assessing a single or sole source contract?
23 24	consider in assessing a single or sole source contract? A. Yes. There are a number of different factors.

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bidding request from OPC issued to an array of nuclear

familiar with OPC and working in Florida? 1 Α. 2 Yes. 3 Q. Are efficiencies from having previously 4 performed similar work a reasonable factor to consider in assessing a single or sole source contract? 5 That's one of many factors, yes. 6 7 And you've had success, in the sense that OPC Q. was satisfied with your work? They hired you again; is 8 9 that right? 10 A. I believe so, yes. Is past successful experience also a 11 12 reasonable factor to consider in assessing a single or sole source contract? 13 Yes, it is. 14 15 0. I've had distributed some documents entitled 16 "Summary of Reasons for Choosing Westinghouse", which contain direct quotations from an exhibit to your 17 testimony, which was the sole source justification for 18 19 Westinghouse. 20 Α. Yes. 21 Q. Do you see that, with the cost-effectiveness, experience, et cetera, words on there? 22 23 Α. Yes, I do. 24 Q. Okay. First, let me ask you to take a minute 25 and read the words contained in the summary of reasons

for choosing Westinghouse to yourself, and I'm going to ask you this question. Do you agree with me that all of the words on that summary exhibit appear in the single and sole source document?

A. Okay. Let's take a moment.

I believe they do. I haven't done a point-by-point check, but I will agree that these sound -- I recall them from reading the justification memo.

- Q. Good. Focusing on Westinghouse, you were employed by Westinghouse for a number of years; is that right?
 - A. That's correct.

- Q. And you told me at your deposition that
 Westinghouse was not in the habit of sharing proprietary
 information with competitors, it protected its
 information?
 - A. That's correct.
- Q. Okay. Isn't it a fact that the work that FPL hired Westinghouse for was to work on licensing and engineering for major nuclear steam supply system components for FPL's plant?
 - A. That's correct.
- Q. And you would agree with me that that is safety significant work as we think about those things

in NRC regulation?

- A. Yes.
- Q. You have to have credibility in the industry to be able to submit those engineering analyses and have them accepted for a license amendment?
 - A. Yes.
- Q. The fact that Westinghouse had performed all of the current licensing basis analyses for the major nuclear steam supply system components, that would be a relevant factor, wouldn't it be, in selecting a company like Westinghouse?
 - A. Yes, it would.
- Q. How about the fact that Westinghouse had done this scope of work in the past for numerous uprates, including the Turkey Point uprate, another FPL plant?
 - A. That would be a factor, yes.
- Q. Wouldn't you expect there would be efficiencies from Westinghouse using its own design and engineering analysis for its own design basis in performing this scope of work for FPL?
- A. Yes, you would expect this. But I think the point is that you don't know it for sure absent a competitive bidding process. I mean, you can -- Westinghouse certainly has advantages, and you've enumerated them here. And you would think due to these

advantages, Westinghouse would have a price advantage as well, but without doing competitive bidding, you don't really know that for sure.

- Q. Isn't it true that no other company in the world has the right to use Westinghouse's proprietary information, which FPL is asking be used for its project?
- A. That's correct, but other companies have similar processes.
- Q. Isn't it true that -- let me move on to another thing here. I think that's sufficient on Westinghouse here.

I would like to turn to Areva. There's an exhibit a couple of pages down.

- A. Yes.
- Q. I'll ask you to please take a look at that summary of reasons for choosing Areva. And if you wish, the sole source justification is right behind the attachment. I would like you to just agree with me that each of the reasons stated in this exhibit are stated in the sole source justification.
 - A. Okay. I agree with that.
- Q. Okay. And despite all these things stated in these summaries, you didn't see fit to mention them in your testimony, did you?

- A. Well, I included the justification memorandum in my testimony as an exhibit, so they're all included.
- Q. Right. You attached the exhibit, and I'm glad you did, because that's what we're talking about. But when you gave your opinion and provided your testimony asserting we had an insufficient basis, you didn't disclose any of this information which reveals the unique nature of these vendors and the information they have which we relied on in making our decisions.
- MR. McGLOTHLIN: I'm going to object to the form of the question in that it is inconsistent with the previous answer, which was that the witness attached the entire justification memorandum to his testimony as an exhibit. 100 percent of it was there attached to his testimony, so to say that he refused to disclose is a mischaracterization of his testimony.
- MR. ANDERSON: I'm happy to move on to another question.

BY MR. ANDERSON:

- Q. You used the word in your summary "back of the envelope" analysis. Do you remember that?
 - A. Yes, I do.
- Q. And this is a confidential exhibit that's going around, and I'm going to structure these questions in such a way as not divulge the information contained

in it. 1 2 Are you ready? Yes, sir. 3 Α. 4 Thank you very much. Please turn to your testimony, Exhibit WRJ-8. 5 6 A. I'm looking in it. 7 Q. This is the document you referred to as the 8 "back of the envelope" analysis; is that right? 9 That's correct. 10 Q. Okay. Do you see down towards the bottom of 11 the page there, there's a "W" for a Word document attachment to this e-mail? 12 13 Yes, I do. 14 Okay. Did you include that Word document 15 attachment as an exhibit to your testimony? No, I did not. 16 Α. 17 So this "back of the envelope" analysis Q. Okay. 18 you're talking about actually contained a Word document 19 attachment; is that right? 20 Α. Yes. 21 Okay. And then turning to that document, Q. 22 which has been distributed to the Commission and to you, 23 I'm just going to count the pages. I'm counting the 24 first page, which is an e-mail. And I'll just count. 25 One, two, three, four, five, six, seven, eight pages; is

1 | that right?

- A. Yes, that's correct.
- Q. And down at the bottom, it says Office of Public Counsel, Late-filed Exhibit Number 7, EPU Project; right?
 - A. Yes.
- Q. This is one of the documents you asked for when our witness's deposition was taken; is that right?
 - A. That's correct.
- Q. Okay. And you did not mention in your criticism of the "back of the envelope" analysis this multi-page, single-spaced, detailed analysis anywhere in your testimony. All you chose to do was include the e-mail transmittal; right?
- A. That's correct. That's because this multi -seven or eight pages are not related to a determination
 of the reasonableness of the costs. These pages are
 showing their analysis of which option to take. They
 talk about various options for repair and replacement of
 the rotors, and they ultimately choose one of these
 options, and the chosen option is then analyzed in this
 "back of the envelope" e-mail for cost reasonableness.
 So those attached pages aren't really a part of their
 determination of the reasonableness of cost of the
 option selected.

Q. Well, that's your interpretation. You're
saying that FPL in justifying a very, very large capital
cost attached an irrelevant document to the e-mail. Is
that what you're saying?

A. It's not relevant to their attempt to demonstrate that the cost was reasonable. It demonstrates which option they chose, which was, I believe, Option 4. And then Option 4 is shown or attempted to be shown to be reasonable by this comparison to five-year-old data from another utility.

MR. ANDERSON: FPL has no more questions.

CHAIRMAN CARTER: Thank you, Mr. Anderson.

Commissioner Skop.

COMMISSIONER SKOP: Thank you, Mr. Chairman.

I just have a few questions for Mr. Jacobs.

I guess, just trying to get your opinion, I recognize the tensions and the issues before us, and generally when it comes to a competitive bid process, I'm in favor of one when it's in favor to do so. But, you know, a combined cycle plant that's readily available, commercial, off the shelf, is significantly different than a nuclear reactor plant that no one has built in 30 years.

But that being said, I wanted to go back to some points that you made in your testimony to try and

better understand from your perspective. I've heard FPL's. But with respect to the sole source issue that OPC is raising, could FPL's decision to sole source various contracts be justified in a sense as a business reality or a necessity resulting from the significant decline of the U.S. nuclear construction industrial base that we've seen? I mean, there's not a lot of suppliers out there, so I just wanted to just ask that straight up and get a straightforward answer.

THE WITNESS: Well, it depends on -- there are certainly certain of the tasks involved that would logically fall to one particular vendor. However, that's not to say that there aren't other vendors in the world that can perform that task. And so in my mind, the approach would be to put it out for competitive bid, see who wants to compete. You know, it's likely that the logical vendor should have a cost advantage and should win the project, but you don't really know that unless you do it.

COMMISSIONER SKOP: I understand. And to that point, I mean, I can understand that various vendors may have technical capability to do something, but how do you overcome the proprietary information argument?

Because there's many people that can build a house, but unless they have the blueprints, they're going to kind

of be hamstrung.

THE WITNESS: Well, that can be developed independently, or it can be transferred to one or the other under confidentiality agreements, you know, for a certain utility.

COMMISSIONER SKOP: But to develop it independently rather than transfer it would result in significant increased costs.

THE WITNESS: That's true, and that would be reflected in their bid.

COMMISSIONER SKOP: And on page 13 of your prefiled testimony, the confidential exhibit -- and I'm not going to go into confidential matters.

THE WITNESS: Okay.

COMMISSIONER SKOP: But you reference NP 1100, and I think that, at least from what I've heard in the summary of your testimony, that OPC is taking issue to the extent that apparently FPL in OPC's opinion is not adhering to its own internal procedures as well as some might like. Is that simply, in your opinion, maybe a matter of semantics or presenting the information or providing a better justification that would read better, or is that endemic of a larger problem?

THE WITNESS: Well, that's a good question.

COMMISSIONER SKOP: And just to put that in

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is so diminished, I mean, reactors not built -- I had the same reaction when we were building nuclear submarines, the industrial base. So if you could respond in the context of, are there --- if you don't have options, then what may be presented as nefarious may not be nefarious, to the extent that, you know, they're doing the best you can, and there's not a whole lot of options.

THE WITNESS: Well, there are several points I want to make here. We talked a lot about schedule and that the NP 1100 does not allow schedule pressure to enter into -- to be a requirement for a sole source or single source bid.

Now, obviously, every project has a schedule, and the schedule has to be met, and if you go out for competitive bids, one of the requirements would be that you can meet the schedule. That would be in your bid package. The schedule pressure that the NP 1100 is referring to is, "We don't have time to do competitive bidding, so we're going to issue a sole source contract." That is the type of schedule pressure that should not aloud as a justification.

Many of these sole source contracts that I looked at did in fact talk about schedule pressure. I'm

looking at the one -- it's my Exhibit WRJ-5, and it's for McNabb Hydrologic Consulting, and in the fourth paragraph it says, "Due to the project schedule, and considering the time required to obtain quotes and other schedule necessities" -- you have the complexity and so forth, that they want to issue this contract as a sole source. So, again, the time required to obtain quotes should not be a factor in determining if you use a sole source contract. You should be able to plan your work far enough in advance to have time for that.

COMMISSIONER SKOP: And I respect that, and I'll move on to -- I just have two more questions.

I noticed that there was some discussion made on what the appropriate remedy the Commission should adopt in response to what OPC is asserting on this issue with respect to perhaps deviating from internal procedure or what have you. But I guess where I'm coming from, would penalizing FPL as you suggest have a chilling effect on management discretion and their ability to make cost-effective decisions? I guess to me, we're talking about a procedural issue that's based somewhat on management discretion and somewhat on the realities of the situation, that there's not a whole lot of competition out there for these type of nuclear construction activities.

THE WITNESS: Yes, sir. I don't see that it would have a chilling effect on that. They have the burden, the company has the burden to demonstrate that their costs are reasonable. They have to demonstrate it their up upper management and ultimately to the Commission. And in this particular case we're talking about, I don't believe they did.

COMMISSIONER SKOP: Okay. And just in relation -- on page 9, you give an example, and I guess this is an ongoing discussion and tension that comes into -- I think the example you cited was that a reactor had been extended beyond its useful life, and there was the main generator, a step-up transformer that would need to be replaced.

THE WITNESS: Yes, sir.

COMMISSIONER SKOP: And I guess the issue that I'm struggling with is, I see both sides of the argument, as my colleagues probably do also. To me, if you look at it like an uprate situation, because I think a transformer is at issue in one of the uprates. But if you do nothing, there's an argument to be made, well, you would have to replace the generator at some point in the future later. But there's also an equally valid argument that but for uprate, you wouldn't have to replace the generator, you need the -- I mean the

transformer, you need the transformer for reliability and the additional incremental generation that it's going to be able to -- you know, the power that's produced.

so I guess I'm trying to understand -- and I appreciate the cost impact analysis, but the nexus relationship between, you know, improvements that are deemed supportive of adding additional nuclear generation, whether they be new nuclear units or whether they be uprates to existing units, versus the legislative mandate that basically states that nuclear related -- and I think as this Commission has construed in its need determination as well as its subsequent -- I'm having an over 40 moment here -- declaratory statement basically provided some guidance to the extent that the Legislature has expressly mandated that certain nuclear related costs be recoverable subject to prudency.

And I guess -- how do you distinguish between what has a logical -- where do you draw the line? I mean, there seems to be a logical nexus for having to add components, you know, factoring in reliability. So it's easy to nitpick, but I don't think there's an extremely bright line. And perhaps if you know of one other than, you know, just embracing both sides of the

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argument, but also relating those to the statutory direction that we've been given from our Legislature.

THE WITNESS: Yes, sir. Well, first of all, I think both PEF and FPL have agreed with this concept, and they've agreed to provide analyses in future filings that would show the relationship there between what's needed for the uprate and what's needed for ongoing maintenance. We're not saying that they wouldn't recover the cost. For example, if they need a new transformer, if it weren't for the uprate, they would buy a new transformer, and it would be recovered through the normal ratemaking mechanism. And what we're saying is, if they buy a transformer for the uprate that they would have had to buy anyway, but perhaps it has to be a bigger transformer because you're getting more power out of it, then the nuclear cost recovery clause would be used to recover the incremental costs between what they would have done in a normal maintenance situation and what they did to support the uprate. But they would -in any event, they would recover the full cost. It's just a matter of how they would recover them.

MR. ANDERSON: Commissioner Carter, I'm sorry. Just for clarification, for our case, we didn't put in any information on the separate and apart things. And I take it -- we, of course, have no objection to the

Commission getting whatever information it needs about the projects generally. But to be clear, our understanding is that this is a stipulated issue. We put on nothing in our summaries and things, and I just want to make sure that we're good relying on that.

COMMISSIONER SKOP: And I respect that. I'm not going down that direction. I guess what I'm saying is that there's such a breadth and volume of information, and some things tend to merge in. I'm looking at each individual witness's testimony, and sometimes those issues tend to blend in with themselves. So if it is pre-stipulated issue, I respect that. I remember that from earlier this morning.

But I guess just one final question in passing. You know, there's a lot of discussion over the sole source, but there's equally not a lot of industrial base. So taking that into account, what improvements would you state? I mean, what would be your solution for addressing such a situation where it implicates management discretion without unduly penalizing FPL for trying to do the right thing in accordance with the needs of its customers and the needs for Florida to bring on additional nuclear generation?

THE WITNESS: I guess one of the things I was concerned with was, as I mentioned in my testimony, it

seemed like the justifications were sort of being done The same language appeared in many of them. It didn't seem like it was given the importance that it should have been given. And perhaps -- one thing we asked for was all the material that the vice president who would be approving it would see, and we didn't receive any additional information. I think he's looking at this one-page justification.

So, you know, I would say they need to do a better job of using competitive bidding when it's available and don't just assume that, well, there's not anybody else here that can do it, because there may be other folks out there and they're want to get in the business of doing it. And ultimately, there would be a number of factors. That's just one of them. There would be a number of factors in selecting the contractor. But I would say they need to do a better job of following their own corporate guidance to use competitive bidding whenever possible.

COMMISSIONER SKOP: Thank you.

CHAIRMAN CARTER: Thank you. Commissioner Argenziano.

COMMISSIONER ARGENZIANO: Yes. On that line of questioning, I understand what OPC is indicating. I mean, I guess -- let me ask it this way. The way this

1 is done now, without competitive bidding or going out 2 and looking, do you know that -- is it known that there 3 could be a better price or cost someplace else? THE WITNESS: I think that's the whole point. 4 5 It's not known. There's no way of knowing that without 6 doing the competitive bidding. COMMISSIONER ARGENZIANO: 7 Thank you. 8 CHAIRMAN CARTER: Thank you. Commissioner 9 Edgar, is it on the same line here? If not, I'll follow 10 up, and then I'll come back to you, Commissioner. 11 COMMISSIONER EDGAR: I believe so, 12 Mr. Chairman. 13 CHAIRMAN CARTER: Commissioner Edgar, you're 14 recognized. 15 COMMISSIONER EDGAR: Thank you. Are you aware of vendors in the market that 16 17 provide the same service with the same expertise? 18 THE WITNESS: Anyone in particular that you're referring to, or just in general? 19 20 COMMISSIONER EDGAR: In general, in general. 21 THE WITNESS: Yes, there's a number of vendors 22 in the market. For example, they selected Shaw, Stone & Webster to do some design work. There's a company 23 24 called Bechtel, which is a large nuclear engineering company. It likely could have done the same work. 25

Whether it would be more expensive or less is unknown until you give them a chance to bid on it.

COMMISSIONER EDGAR: Okay. So with your answer there, are you telling me that it's your belief that there are other vendors that could provide the same level of management, contracting, oversight, control services as an outside vendor?

THE WITNESS: Yes.

COMMISSIONER EDGAR: But you're not aware as to whether that would be more or less cost-effective?

THE WITNESS: That's correct. We don't know.

COMMISSIONER EDGAR: Okay. And then following up I think on a comment or an answer that you gave in response a few moments ago, can you describe to me how you see this -- what has gone on here as a departure from their normal competitive bidding practice?

THE WITNESS: Well, they didn't -- I mean, the departure is that they didn't use competitive bidding.

They used sole source and single source contracting, which is a departure from their stated corporate preference and belief to use competitive bidding when possible.

COMMISSIONER EDGAR: Because I thought that I heard -- and I don't remember which witness. I apologize vice for that. But I think one of the FPL

witnesses just a little earlier this afternoon said that 1 2 for this -- excuse me. For this step in the process, 3 that they had sole source previously. 4 THE WITNESS: Yes, I recall hearing that, yes, 5 for another -- I believe it was for another uprate 6 project on a different plant, that they had used a sole 7 source. COMMISSIONER EDGAR: Okay. Then I quess I'm a 8 little confused as to why then you see this as a 9 10 departure from their general corporate practice or 11 policies. And if I've missed it or confused it, please 12 feel free to clarify for me. 13 THE WITNESS: Well, they departed in both 14 cases. COMMISSIONER EDGAR: Okay. All right. 15 16 you. 17 CHAIRMAN CARTER: Thank you. Before you, Commissioner McMurrian, I'm on that same line. 18 Dr. Jacobs, on the charts that were before 19 20 you, you agreed that the -- and I think it's from your 21 exhibits in terms of the parameters for doing sole 22 source, cost-effectiveness, experience, efficiency, 23 success; is that correct? 24 THE WITNESS: Yes.

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CHAIRMAN CARTER: Now, unlike my colleague,

I've not built nuclear submarines, but I've done a lot 1 2 of contracts, I mean, thousands of regular contracts, and maybe a couple hundred sole source. And you go with 3 the sole source contract for, as I can see it -- there 4 was some testimony given that was objected to, 5 6 cross-examination and whatever the case may be, credible 7 testimony given that this was a specific design by a specific manufacturer that had specific knowledge about 8 its equipment; is that correct?

> THE WITNESS: That's correct.

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CHAIRMAN CARTER: Secondly, and I think you said in response to a question from Commissioner Skop, in that context, that the sole source would probably be cheaper. That's my term, cheaper. You said less expensive.

> THE WITNESS: That's correct.

CHAIRMAN CARTER: Now, let me kind of stop there for a moment and back up. In the regular contracting process in those thousand or so contracts that I've handled, generally it's a very litigious process, even if you're not the success bidder, whether you could do the work or not, and a lot of that litigation goes on to drag the process out. Wouldn't you agree with that?

THE WITNESS: I'm sorry. I don't quite follow

1 | that.

CHAIRMAN CARTER: Okay. Contracting. We're talking about contracting, not single source, but just general contracting.

THE WITNESS: Okay.

CHAIRMAN CARTER: And I believe that you've examined more than just sole source contracts; right?

THE WITNESS: Yes.

CHAIRMAN CARTER: Wouldn't you agree that a lot of times in the process of going through the normal parameters that a lot of contractors, unsuccessful contractors, will go through a highly litigious process that will drag the process on, raise the cost, and then subject the process to sometimes going back and rebidding the whole process?

THE WITNESS: That may be. That has not been my experience, but as an attorney, you've probably been on that end of a lot of it.

CHAIRMAN CARTER: Yes, sir.

THE WITNESS: But I've been in a lot of contracts and bid on a lot of contracts and didn't win some of them, and that was, you know, the end of the story.

CHAIRMAN CARTER: And you would agree that time is of the essence in this contract in terms of this

1 || process?

THE WITNESS: There is a schedule that needs to be met.

CHAIRMAN CARTER: Yes, sir. And also I think with Commissioner Skop in you response that experience was I -- I think to Mr. Anderson you talked about the experience as well, about it being critical, particularly having subject matter knowledge of the equipment.

THE WITNESS: Yes. There's a number of factors that would be determinative.

CHAIRMAN CARTER: And I think initially on in the process, from cost-effectiveness, experience, efficiencies, and success, unless I misread you, you said those are the parameters that you would use in justifying a sole source or a single source contract; is that correct?

THE WITNESS: Or any contract.

CHAIRMAN CARTER: Or any contract.

THE WITNESS: I mean, those are all factors that would need to be considered in selecting the winning bidder.

CHAIRMAN CARTER: So my problem is, I'm at a loss trying to ascertain why, if that's appropriate, where did this not occur in the case at bar.

THE WITNESS: Well, the point is, I think 1 2 there may be other firms that also have these same qualifications. 3 4 CHAIRMAN CARTER: But they may be more expensive, or they may take longer time. 5 6 THE WITNESS: Or they may not, and you don't 7 know that until you put it out for bid. 8 CHAIRMAN CARTER: But the subject matter knowledge of the equipment is such that there's some 9 10 prior -- what's the word I'm looking for? 11 THE WITNESS: Proprietary. 12 CHAIRMAN CARTER: Proprietary knowledge about 13 the equipment. That's significant, isn't it? THE WITNESS: 14 Yes. CHAIRMAN CARTER: So you see, I'm just trying 15 to understand --16 I guess what we're -- you know, 17 THE WITNESS: we're not saying that they ended up with the wrong 18 contractor per se. It's probably the right contractor. 19 20 But they didn't follow their process, and because they 21 didn't follow the process, you don't really know for sure that it couldn't have been done by somebody else as 22 well for less cost. 23 CHAIRMAN CARTER: And in your response to 24

Commissioner Edgar, you said that in the prior time they

used the sole source, they didn't follow their process. 1 2 But they followed the same process in this sole source as they did in that sole source; is that correct? 3 THE WITNESS: Yes. I don't know what they did 4 the prior time it came up, but if they did a sole source 5 contract and the corporate preference was for 6 competitive bidding, you know, it appears they didn't 7 follow that. 8 CHAIRMAN CARTER: Commissioner Argenziano. 9 COMMISSIONER ARGENZIANO: I quess -- can I ask 10 staff a question at this point? 11 12 CHAIRMAN CARTER: You're recognized. COMMISSIONER ARGENZIANO: If we are -- let's 13 say this is -- somewhere down the line, the sole 14 15 sourcing is subject to prudency. How do you determine 16 prudency at that point if there are no other bids? 17 MS. BENNETT: That's a good question. 18 standard legal definition of prudency is what would a reasonable, in this situation, nuclear utility do in 19 this set of facts and circumstances. And you have to 20 21 weigh the facts and circumstances of what they present to you at that time to determine if they were reasonable 22 or not. 23

as -- because it's late and my brain is almost somewhere

COMMISSIONER ARGENZIANO: Let me just put it

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else. Let me ask it as bluntly as I can. Here's a dilemma we're trying to figure out. If you go to sole sourcing, how do you ever know that couldn't have gotten a better bid? How do you know you couldn't have saved the public money? And that's a concern. On the other hand, you have designs and proprietary information that are in there. Are there any rules or statutes that say that they have to go to competitive bidding? That's my first question.

MS. BENNETT: There are no rules or statutes. What I believe the witness is telling you is, in the testimony, they have some procedures that FPL established on how to sole source and single source, and I think the witness is telling you --

COMMISSIONER ARGENZIANO: Okay. So FPU&L is not following its own procedures is what the witness is probably saying, but yet FPL probably has a full -- a better understanding of what it really needs and how fast and all those things. My concern was, is there a rule or a statute. And if not, okay, then I go back to the original question, and we say, well, how do we know that, because you didn't go out for bid, you didn't save anybody any money. But then again, if there's no rule or statute -- but how do we get to prudency? And I guess what you're saying is you just take into

consideration the factors of maybe scheduling, of proprietary information, and that type of thing.

Okay. All right. Thank you.

CHAIRMAN CARTER: Thank you, Commissioner.

Commissioner McMurrian.

question is somewhat along those lines, but a little bit different too. I was looking over your recommendations, and I guess I was just trying to clear something up in my mind with respect to the positions in this case where the parties have agreed to defer a prudence determination on some aspects of the case, where we would have been if we had had the information perhaps sooner. Had those stipulations to defer a prudence determination on some of those costs in any way affected your recommendations?

THE WITNESS: No, not in this particular case.

On this one particular contract, we feel the company as imprudent in their demonstration or determination that the cost was reasonable.

COMMISSIONER McMURRIAN: And then to follow up on that, Mr. Chairman, I was looking kind of more specifically, I think, at number 2, where you're talking about withholding a portion of the carrying charges.

You suggested 10 percent, and only give it to them if

1 they can demonstrate the costs are reasonable in the 2 next hearing cycle. So you're saying that even with the 3 reasonableness determination that you would suggest, at 4 least with respect to number 2 -- and I realize you have 5 three different recommendations, and they are somewhat 6 varying in degree. You're saying you would not allow 7 10 percent of those costs as reasonable, and then they would be able to address that in the next hearing cycle 8 9 as reasonable or prudent, depending on whether or not 10 we're at that final stage with those dollars or still in 11 a reprojection phase. 12 THE WITNESS: Yes, yes. 13 COMMISSIONER McMURRIAN: Okay. Thank you. 14 CHAIRMAN CARTER: Thank you. Anything further from the bench? 15

Mr. McGlothlin.

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MR. McGLOTHLIN: Yes. Commissioners, I have some redirect, and because of the significance of some of the questions that have been put to the witness, I will need maybe 10 or 12 minutes. I know it's toward the end of the day. What's your preference in terms of --

CHAIRMAN CARTER: You have 10 or 12 minutes. Proceed.

REDIRECT EXAMINATION

BY MR. McGLOTHLIN:

Q. Dr. Jacobs, counsel for FPL asked you to agree that your firm did not submit a bid to an RFP type solicitation from our office. Do you recall that exchange?

A. Yes.

- Q. Now, a request for proposals where the RFP is disseminated to a universe of potential bidders and then everybody provides an answer by the deadline is one way to test the market. In your opinion, is that the only way that testing the market can be done?
- A. No. It could be done by using a benchmarking process for very similar projects in the same time frame. Another way would be, if the scope of the project is very well known, you could evaluate the man-hours and hourly rates and so forth to come up with a conclusion of the reasonableness of the cost.
- Q. Now, if hypothetically our office were to call you and say, "Dr. Jacobs, what are your qualifications and what would it cost to use you in this case?" and then without your knowledge we called consultants B and C and put the same question to them, would that be another way of testing the market in terms of ensuring that we've assessed the qualifications and chosen the most cost-effective?

competitive bidding process, it would seem to me. 2 not an open competitive bidding, but it is competitive 3 bidding. 4 Now, when you answered Mr. Anderson's question 5 Q. and as you're answering mine, do you know to whom we 6 7 talked other than yourself? No, I do not. A. 8 Now, counsel for FPL distributed the 9 confidential document that consists of the one-page 10 document that you had described as the "back of an 11 12 envelope" type of analysis; correct? That's correct. 13 And attached to that is the Word document that 14 0. 15 was the source of some questions? 16 A. Yes. And you recall that counsel for FPL counted 17 for everybody that there were eight pages attached to 18 19 that and made the point that you did not refer to them 20 in your testimony? 21 Α. That's correct. I think this is important. If you will, turn 22 Q. to the Word document, and look at the first page of 23 Is there anything on this first of eight pages 24 that adds anything to the treatment of the 25

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It certainly would. In fact, that almost is a

reasonableness of the contract that appears on the 1 one-pager that you characterized as "back of the 2 envelope"? 3 No, it does not. 4 Same question with page 2. Is there anything 5 **Q**. on page 2 of 8 that adds to the treatment of the 6 7 reasonableness of the cost of the contract that you referred to as "back of the envelope"? 8 This is an evaluation of one particular 9 Α. repair option that they were evaluating against other 10 options. 11 12 Q. Same question with respect to page 3 of 8. Is there anything on that page of the Word document that 13 contributes to the analysis of the reasonableness of the 14 contract? 15 16 Α. No. Page 4 of 8? 17 Q. No. 18 Α. 19 Q. Page 5 of 8? No, sir. 20 Α. 21 Q. Page 6 of 8? 22 Α. No. Page 7 of 8? 23 Q. 24 No. A. Page 8 of 8? 25 Q.

A. No.

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- Q. So this one-pager was before your cross, and it remains the only justification in terms of the reasonableness of the contract that has been offered by FPL in this case?
 - A. That's correct.
- Q. Now, during the questioning, reference was made to the idea that timing and scheduling may be an important consideration; is that correct?
 - A. That's correct.
- Q. Is there a way to conduct competitive bids in a way that incorporates and reflects the importance of the ability to maintain a schedule?
- A. Yes, and I thought I had addressed that. But as part of your request for a proposal, you would have a schedule requirement in the RFP, that you must be able to meet the schedule, and that would incorporate that requirement into your bidding process.
- Q. Now, reference was made to experience as an important consideration. Do you recall that?
 - A. That's correct.
- Q. Is there a way to structure a competitive bidding process that tests the market while incorporating and giving due weight to the importance of experience?

- A. Yes, of course. As part of your evaluation of the bids that you receive from the competitive bidding, one of the criteria would be the experience of the bidder in that area.
- Q. Reference was made to proprietary information.

 Do you recall those questions and answers?
 - A. Yes.
- Q. And in response to one question, you acknowledged that Westinghouse would have certain advantages by virtue of its experience and proprietary information. Do you recall that?
 - A. That's correct.
- Q. Is there a way to structure a competitive solicitation in a manner that would test the market while giving due consideration to any advantages such as proprietary information that the particular vendor may have as an advantage?
- A. Well, I think you would have to make them aware in the RFP that there was proprietary information that they would either have to re-create on their own or perhaps get from the original vendor.
- Q. On the same subject, in response to a question that made the point that Westinghouse uses proprietary information, you said other companies have similar -- may have similar processes. Would you explain further

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what you meant by that?

- A. Yes. There's a number of -- internationally, a number of companies that design and build nuclear power stations. There are Japanese companies, French companies. Some of them are actually bidding and getting their designs licensed in the U.S. So any of those companies would have the requisite skills and experience to be able to perform those designs.
- Q. If a vendor performs work for a utility such as FP&L, and in the course of doing that applies and uses proprietary information, does it follow necessarily that the vendor having proprietary information will always be the vendor of choice in future projects.
- A. No, not necessarily. I think an example of that would be in the supply and fabrication of nuclear fuel. That's under proprietary information, but that's a highly competitive market, and utilities bid out typically their contracts for nuclear fuel on a regular basis, and sometimes new vendors are chosen and use their own processes to conduct the design.
- Q. Let me refer you to the first document that counsel for FPL distributed captioned "Summary of Reasons for Choosing Westinghouse." Do you have that available to you?
 - A. Yes.

1	Q. And attached to that is the sole source
2	justification for the Westinghouse contract?
3	A. That's correct.
4	Q. Now, counsel for FPL asked you to agree that
5	each of the items enumerated in paragraphs 1 through 4,
6	with quotations from the justification memo, appear in
7	that memo. Do you recall that question and answer?
8	A. Yes.
9	Q. Have you read FPL's rebuttal testimony as it
10	relates to your criticism of the sole source contract
11	awarded to Westinghouse?
12	A. Yes.
13	Q. Is there anything in rebuttal testimony
14	offered in support of the contracting process that is
15	contained in their testimony, but does not appear in the
16	justification memo?
17	A. Not that I can recall.
18	Q. If you recall, does the justification memo
19	develop to the same extent the theme of the difficulty
20	of using contractors other than one who has the fuel
21	specifications that is contained in the rebuttal
22	testimony?
23	A. I'm sorry. Could you repeat that?
24	Q. I'll move on.

In one answer you referred to the decision of

the vice president.

- A. Yes.
- Q. Would you take a moment and explain for the Commissioners how the management procedure that you've identified as NP 1100 works with respect to the standard for competitive bidding, the preparation of a justification memo in support of a departure from that, and the role of the vice president to whom you referred in your answer?
- A. Yes. If the manager of the project decides that he wants to use a sole source bid, he is required to develop the reasons and the rationale in what's called a sole source justification memo. And in that memo, he puts down -- there are certain requirements that shows why it's needed, why it would be to the company's advantage, and how they have determined that the costs will be reasonable use being sole source. And then this is put together in a memo and submitted to a vice president, or even perhaps a higher level manager, depending on the value of the contract, for his signature and approval.
- Q. And when it's presented to the vice president, what decision, what choice does the vice president make based upon the justification memo offered?
 - A. Well, he either agrees that it can proceed as

1	a sole source contract, or if he rejects that, then they
2	would be forced to go back to bid it competitively.
3	MR. McGLOTHLIN: Those are all my questions on
4	redirect.
5	CHAIRMAN CARTER: Thank you, Mr. McGlothlin.
6	Let's look at the exhibits.
7	MR. McGLOTHLIN: We move Exhibits 29 through
8	35.
9	CHAIRMAN CARTER: Twenty-eight.
10	MR. McGLOTHLIN: Well, 28 through 35.
11	CHAIRMAN CARTER: Twenty-eight through 35?
12	MR. McGLOTHLIN: Twenty-eight through 35.
13	CHAIRMAN CARTER: Any objections?
14	MR. ANDERSON: No, but I just had a couple of
15	very, very short recross questions.
16	MR. McGLOTHLIN: That's very unusual. I'm not
17	sure that I've done anything by redirect should occasion
18	recross.
19	CHAIRMAN CARTER: Mr. Anderson, is it
20	absolutely, positively necessary?
21	MR. ANDERSON: I think it will be helpful to
22	you, because it will tell you who to ask about this.
23	CHAIRMAN CARTER: Mr. McGlothlin, I'll give
24	you leave after he asks further questions, I'll give
25	you leave for further redirect.

1 MR. McGLOTHLIN: All right. 2 CHAIRMAN CARTER: You're recognized. 3 MR. ANDERSON: Thank you. RECROSS-EXAMINATION 4 BY MR. ANDERSON: 5 At the top of the confidential document -- do 6 Q. you have that in front of you? A. I just put it away, but I'll dig it back 8 9 out. Do you see who that is to? 10 A. 11 Yes. 12 That's William Labbe, our witness and project Q. 13 director; is that right? That's correct. 14 15 Okay. Who do you think knows more about this Q. 16 document, this attachment, and this procurement, you or Mr. Labbe? 17 MR. McGLOTHLIN: Object. That's not anything 18 19 that flows from any question I posed to the witness 20 during redirect. 21 MR. ANDERSON: Well, he speculated about all 22 kinds of things, about how the document was not related to the decision. And in fact, this document is a 23 24 important element of the decision that Mr. Labbe knew

and relied on. And the right question there is, who

would know these facts, is it this witness who's 1 speculating, or is it our witness, Mr. Labbe, who will 2 be available to testify. The document, by the way, 3 already speaks for itself. That's was my only point. 4 MR. McGLOTHLIN: That's completely 5 argumentative and does not demonstrate any basis for 6 recross that stems from anything I asked the witness. CHAIRMAN CARTER: You know, I think this a 8 good point of -- you always have a point of beginning, 9 and you need to have a point of ending too. And we've 10 entered the -- without objection, the exhibits have been 11 12 entered in evidence. (Exhibits Number 28 through 35 were admitted 13 14 into the record.) 15 CHAIRMAN CARTER: We will pick up tomorrow 16 morning at 9:30. (Proceedings recessed at 5:20 p.m.) 17 18 19 20 21 22 23 24 25

1 CERTIFICATE OF REPORTER 2 3 STATE OF FLORIDA: COUNTY OF LEON: 4 5 I, MARY ALLEN NEEL, Registered Professional 6 Reporter, do hereby certify that the foregoing 7 proceedings were taken before me at the time and place 8 therein designated; that my shorthand notes were 9 thereafter translated under my supervision; and the 10 foregoing pages numbered 370 through 611 are a true and 11 correct record of the aforesaid proceedings. 12 I FURTHER CERTIFY that I am not a relative, 13 employee, attorney or counsel of any of the parties, nor 14 relative or employee of such attorney or counsel, or 15 financially interested in the foregoing action. 16 DATED THIS 12th day of September, 2008. 17 18 19 NEEL, RPR, FPR 2894-A Remington Green Lane 20 Tallahassee, Florida (850) 878-2221 21 22 23 24 25